

CONFIDENTIAL

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TNO-report**THE EFFECT OF 3 PERFLUORINATED ALKYL
SULPHONATED ON CHOLESTEROL/BILE ACID
METABOLISM IN 15 %-FAT FED E3-LEIDEN
TRANSGENIC MICE *IN VIVO* AND ON FATTY ACID
CONVERSION INTO CHOLESTEROL IN RAT
HEPATOCYTES *IN VITRO*.**

Project / study number: 031.10074 / 3M-02

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1. INTRODUCTION

3M has observed that the compounds of interest have strong cholesterol lowering effects in animal studies. In order to obtain more insight into the possible mechanism of action the effects of the compounds on cholesterol and bile acid synthesis in primary culture of rat hepatocytes and on bile acid uptake in hamster ileum pieces *in vitro* have been investigated in a previously performed study. From this study it was concluded that the compounds possibly increased hepatic bile acid synthesis, however indirect effect on sterol synthesis might be involved as well. In the present study the *in vivo* effect of the test compounds on cholesterol and bile acid metabolism have been investigated in ApoE3Leiden transgenic mice. This animal model shows a humanlike lipoprotein pattern and, unlike wild type mice, is sensitive for lipid lowering drugs like statins. Furthermore, the plasma cholesterol levels can be elevated by adjustment of the diet.

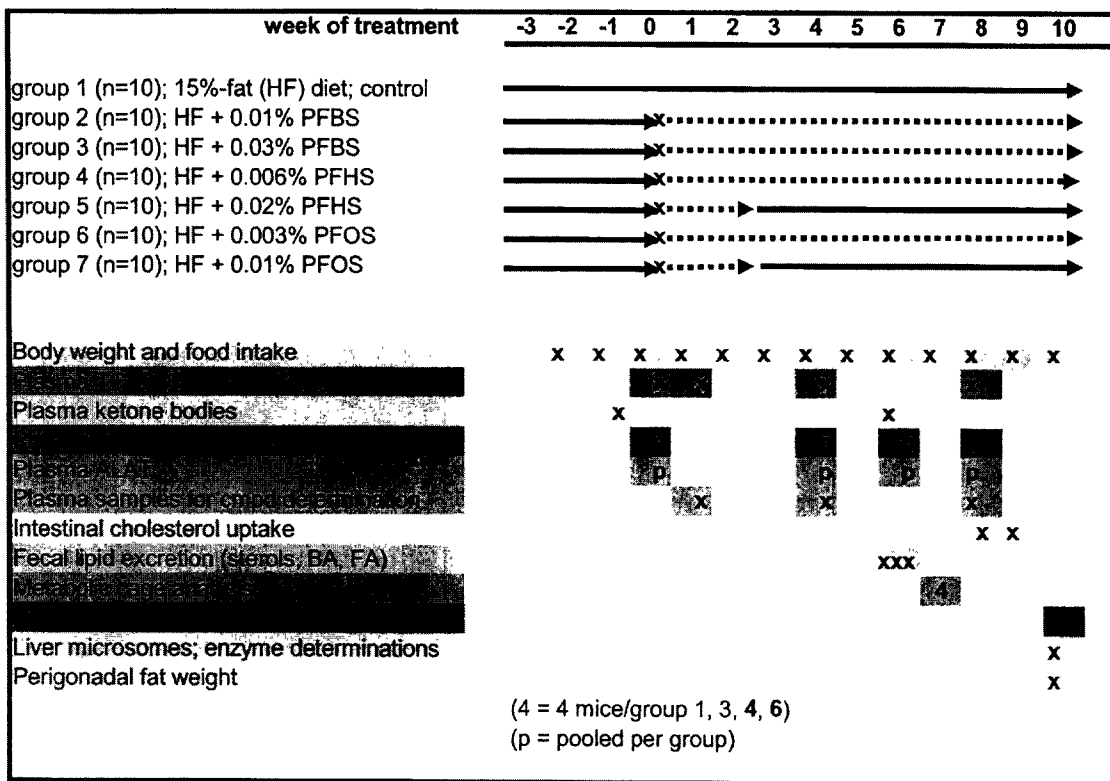
Additionally, in the present project information on the effects of the test compounds on hepatic cholesterol synthesis have been obtained via an *in vitro* study, in which the conversion of long and short chain fatty acids into cholesterol in the presence of the compounds have been investigated.

2. STUDY DESIGN

The design for the performance of this study has been described in the final study protocol of 08-05-2006. Deviations from this protocol have been mentioned below.

Approval for this study by the TNO Animal Experiment Committee has been obtained on 06-06-2006 under number DEC#2125.

The final study design and the concomitant measurement points have been depicted in scheme 1.



Scheme 1. Experimental design of the study

After a 3 weeks run-in period on a semi synthetic high-fat (HF; 14% lard, 1% corn oil and 0.25% cholesterol) diet, 75 male ApoE3Leiden mice (11-12 weeks of age at start of run-in) were randomized on basis of body weight, plasma cholesterol and triglycerides (measured after 4 h fasting). Then, the groups received respectively HF-diet (control group 1) and 0.01%, 0.03% of PFBS (groups 2 and 3), 0.006% PFHS (group 4) and 0.003% PFOS (group 6) in the HF- diet for the following 10 weeks. Groups 5 and 7 received respectively 0.02% PFHS and 0.01% PFOS in the diet, but after 2 weeks of treatment the mice lost on average 3 grams of bodyweight (see Fig. 3.1.1) and food intake has steadily decreased (see Fig. 3.1.2). For this reason it was decided to stop with these treatments and to return to the high fat control diet until the end of the study (this deviation of the protocol has been discussed with the study monitor by E-mail correspondence of 5, 6 and 18 July 2006).

A further deviation concerns the plasma ketone bodies determination. These compounds can only be detected in plasma in a proper way after an overnight fasting period (16 h). For this reason it could not be measured in the same plasma samples of weeks 0 and 8 (taken after 4h fasting) and therefore, it was decided to perform this determination in week -1 and week 6 of treatment (see E-mail correspondence 13 and 30 June 2006).

At weeks 0, 1, 4 and 8 plasma cholesterol and triglyceride levels after 4h-fasting have been measured. In weeks 1 (7 days of treatment), 4 and 8, 15µl-plasma samples have been sent to the 3M company for the determination of the test compound concentrations.

As originally planned, at weeks 0, 4 and 8, lipoprotein profiles were analyzed (at week 0, the average values of three subpools were determined, at week 4 and 8, one pooled sample per group was analyzed). Since the week 4-lipoprotein patterns, especially of groups 5 and 7, were different from expected, extra lipoprotein profiles have been analyzed in treatment-week 6 (see E-mail correspondence with study monitor of 24 July 2006). The latter plasma samples were obtained after overnight fasting (necessary for ketone body determination), which in our experience does not give different results compared to lipoprotein profiles of 4h-fasting samples. In weeks 0, 4, 6 (extra measure points; see E-mail correspondence of 24 July 2006) and 8, plasma ALAT values were determined in pooled samples per group.

In week 5-6 feces has been collected from 3 subgroups per treatment-group during 3 periods of 2-3 days, and fecal bile acids, fatty acids and sterol quantities and composition were determined. Initiated by the E-mail correspondence of 25 July 2006, feces has been collected in week 4 as well. However, up to now, we see no reason yet to investigate it further.

In week 7, the metabolic activity of 4 animals per group from groups 1, 3, 4 and 6 have been analyzed in metabolic cages. The following parameters have been measured: food intake, drink intake, feeding bouts, total physical activity, O₂-consumption and CO₂-production. From these parameters the respiratory exchange ratio (RER) and O₂-consumption-related body energy expenditure have been calculated. Because the food can only be supplied in powdered form in the metabolic cages, during this period (week 7 – 7.5), the other animals in this study also received powdered food. Hereafter all animals received food in chunks again.

In week 8-9 intestinal cholesterol uptake has been determined.

In week 10 the mice were sacrificed, plasma was collected by means of heart puncture, the liver and perigonadal fat were taken out and weighed, two small pieces of the liver were quickly frozen in liquid nitrogen for determination of lipids and eventual RNA analysis, and microsomes and mitochondria have been isolated from the remaining part of the liver. HMG-CoA reductase and cholesterol-7 α -hydroxylase activity have been determined in the microsomal preparations, sterol-27-hydroxylase activity has been measured in the mitochondrial fractions.

3. RESULTS OF *IN VIVO* EXPERIMENT (APOE3LEIDEN MICE)

The resulting individual primary data and subsequent calculated data are provided in a separate appendix to this report. The mean values per group are presented in the figures and tables below. Significance of differences was calculated using the non-parametric Mann-Whitney U test and the resulting p-values are given in the appendix.

In the figures, a colored asterisk at a separate measure point indicate a statistically significant difference ($p < 0.05$) between the value of the indicated group (of the same color) and that of the control group. In the tables, this difference has been indicated by a yellow background.

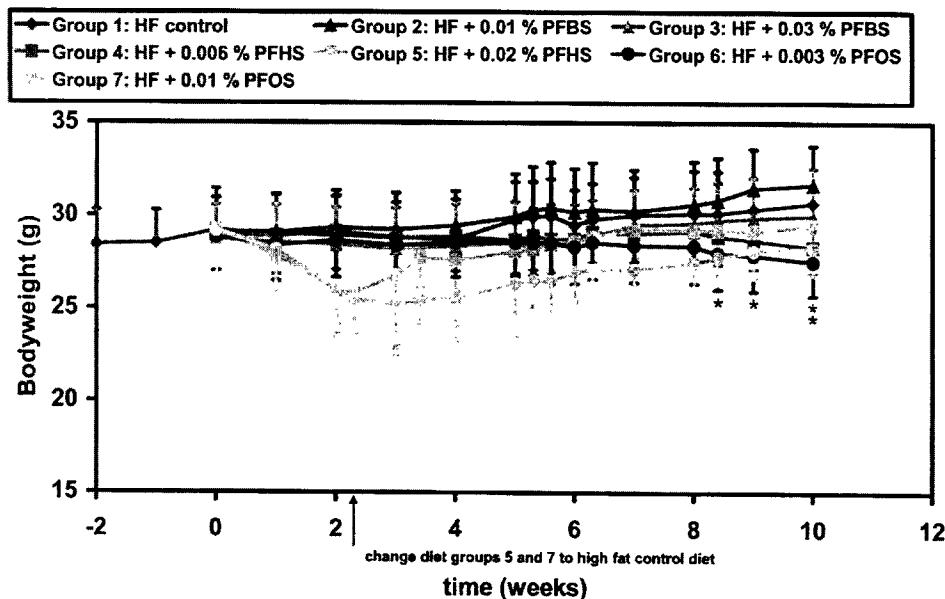
3.1. Body weight and food intake measurements

As shown in Figs. 3.1.1 and 3.1.2, the treatment with the high concentrations of PFHS and PFOS (groups 5 and 7) caused already from the start a remarkable decrease in body weight and food intake. After the change back to the control diet in week 2, these animals return to normal food intake, comparable to all other groups. Subsequently, group 5 animals gained weight again up to the control values, however, the body weight of the group 7 mice, although increasing again, stayed behind during the whole treatment period.

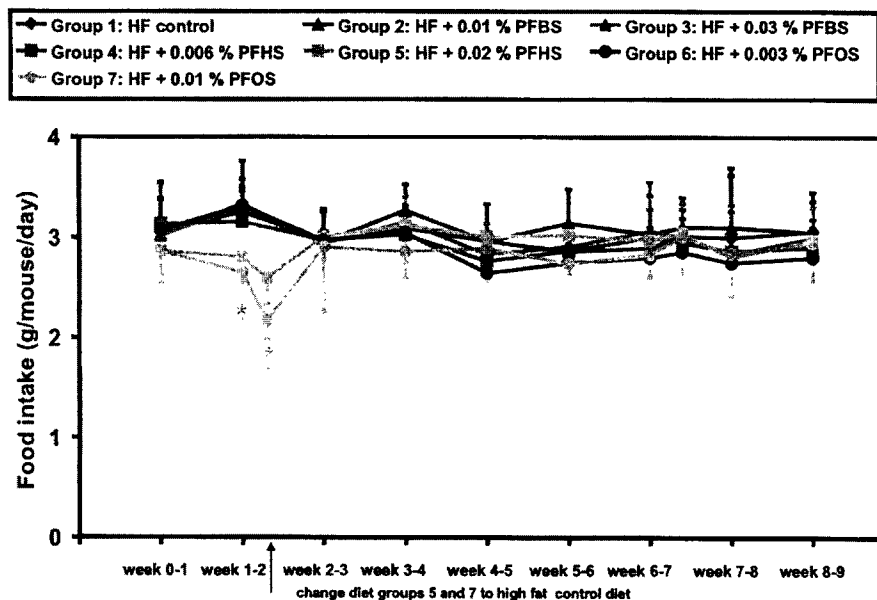
The PFBS treated mice showed the same body weight increase as the controls. The Groups 4 and 6 (low concentrations of PFHS and PFOS) lost weight significantly in the last weeks of the study when compared to control animals. This is in line with the loss of fat tissue as shown below.

Figure 3.1.1 Body weight

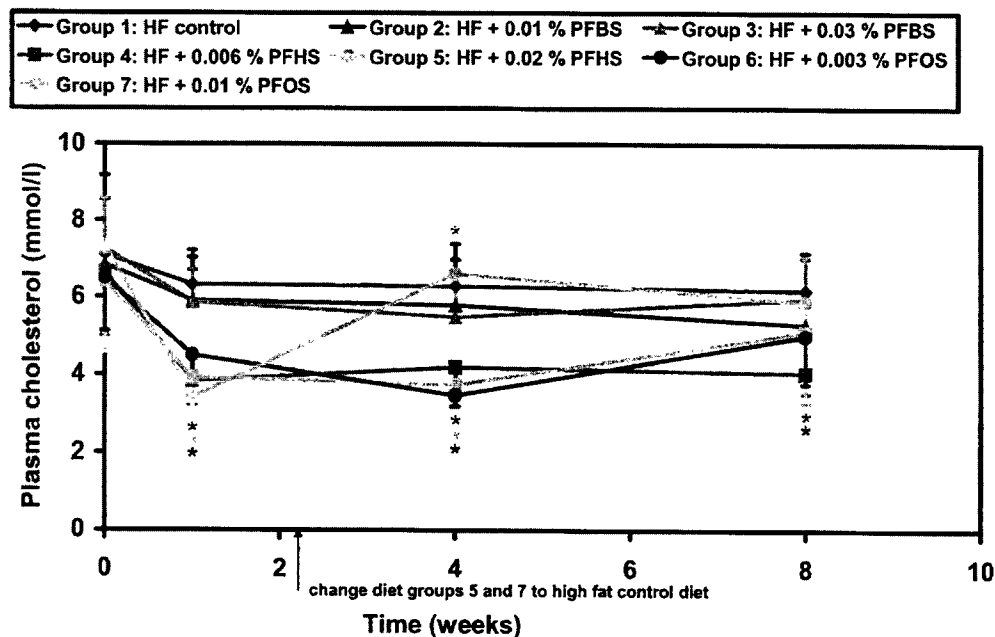
Values are means $\pm$ S.D.



Except for the deviations in food intake behavior of groups 5 and 7 (see above), all other animals ate about the same throughout the treatment period (Fig 3.1.2).

Figure 3.1.2 Food intakeValues are means $\pm$ S.D.**3.2. Plasma measurements**

The following parameters have been determined in plasma in the course of the study: cholesterol (Fig. 3.2.1), triglycerides (Fig. 3.2.2), lipoprotein profiles (Fig 3.2.3 – 3.2.5), ALAT (Fig. 3.2.6) and ketone bodies (Fig. 3.2.7).

Figure 3.2.1 Plasma cholesterolValues are means $\pm$ S.D.

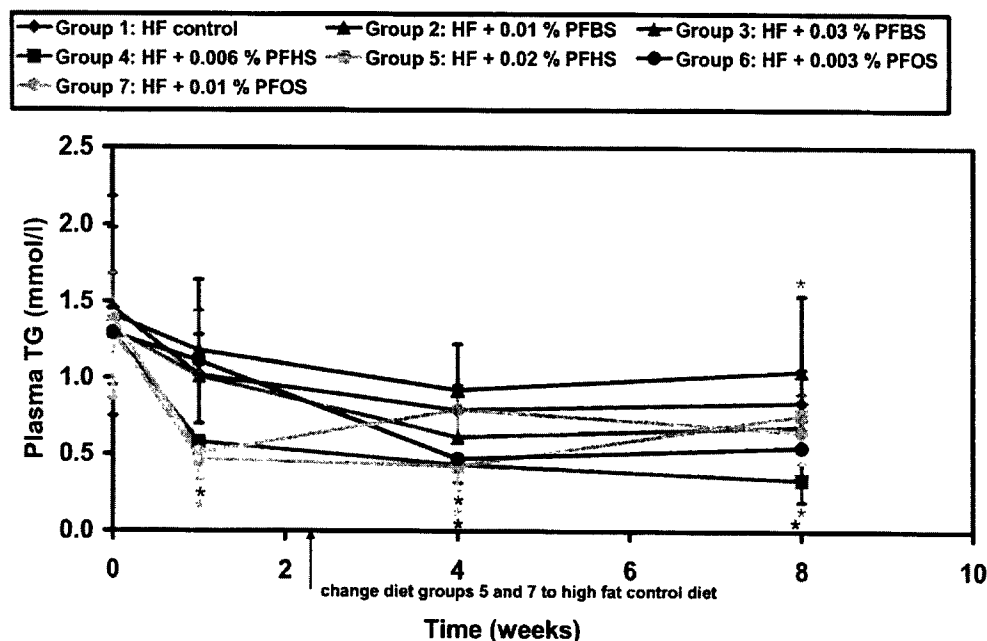
As seen in other animal studies, PFHS and PFOS strongly decreased plasma cholesterol. The reversal to control diet in the groups 5 and 7 resulted in a return to control values for

the PFOS group (7), however this return was delayed until week 8 for the PFHS group (5). The PFBS treatment did not decrease significantly the cholesterol levels.

More or less the same results have been obtained for the plasma triglyceride (TG) levels.

Figure 3.2.2 Plasma triglyceride

Values are means $\pm$ S.D.



PFHS and PFOS decreased TG levels, but also the highest concentration of PFBS (group 3) after 8 weeks of treatment; the lowest concentration of PFBS, group 2, was not different from control. TG levels rose again in the group 7 after return to the control diet, however it remained lower than the control TG level in week 8. Group 5 TG-levels turn back to control levels after the shift to control diet.

The differentiation into lipoproteins showed more differences than observed with the lipid levels alone. The patterns have been determined by measuring the cholesterol contents of the different column fractions, which indicate all lipoprotein fractions (Figs 3.2.3a, 3.2.4a, 3.2.5a), and by measuring the phospholipid content, which is major a constituent of the HDL fractions (Figs 3.2.3b, 3.2.4b, 3.2.5b).

The PFBS treatment resulted in only minor changes in the lipoprotein fractions in time. VLDL seems to be increased a little, but IDL/LDL and HDL are somewhat lower than these fractions in the control patterns.

The low concentration of PFHS (group 4) showed the appearance of a lipoprotein fraction which is located before the HDL fraction and half overlapping with the IDL/LDL fraction. Since phospholipids are a major constituent, this fraction has been designated as large, less-dense HDL. It might arise from an impaired clearance of smaller HDL by the liver. This fraction appeared to increase upon longer treatment with PFHS. Concomitantly, VLDL and IDL are strongly decreased, which might indicate a decrease in production/secretion of apoB-containing lipoproteins by the liver.

The 4-week pattern of the group 5 animals (high conc. PFHS; after 2 weeks on control diet again) resembled very much the group 4 pattern with a major increase in the large HDL. However, after 6 and 8 weeks, the lipoprotein profiles went back to the control patterns with again more VLDL, IDL and small HDL.

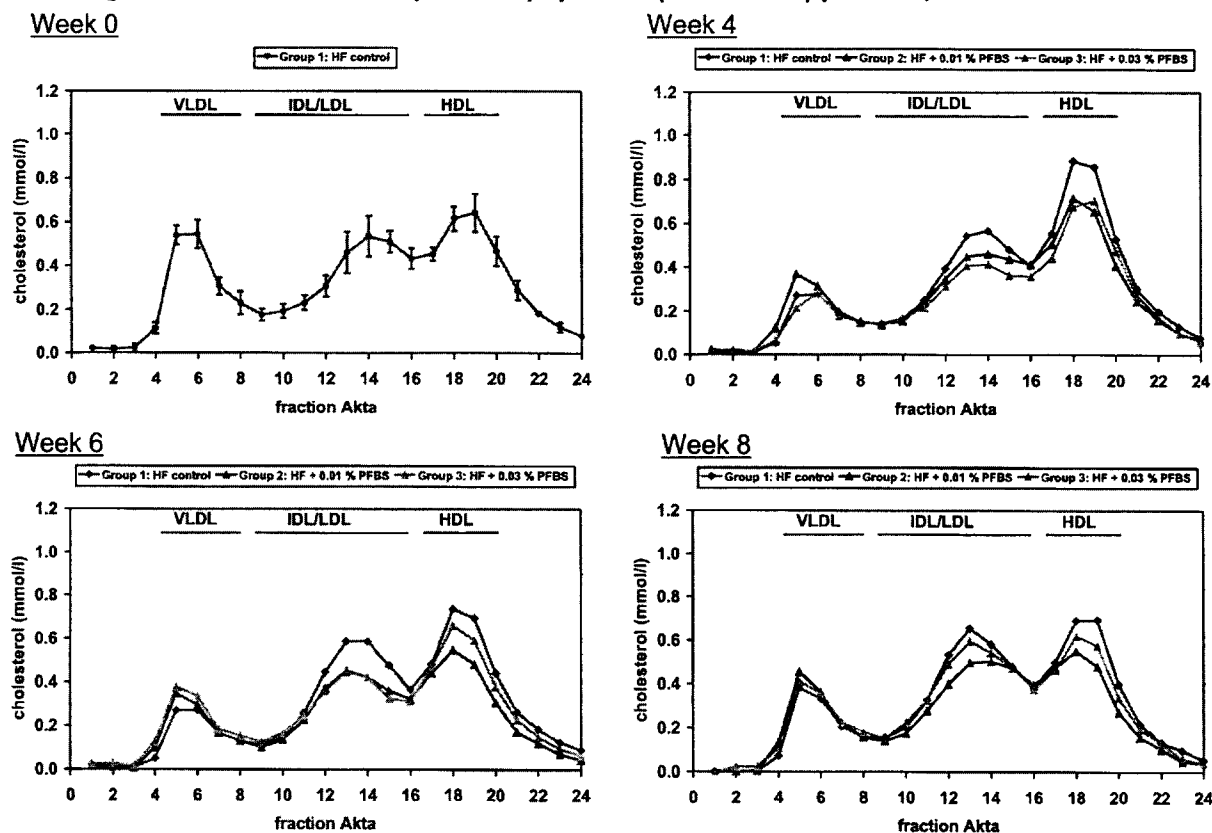
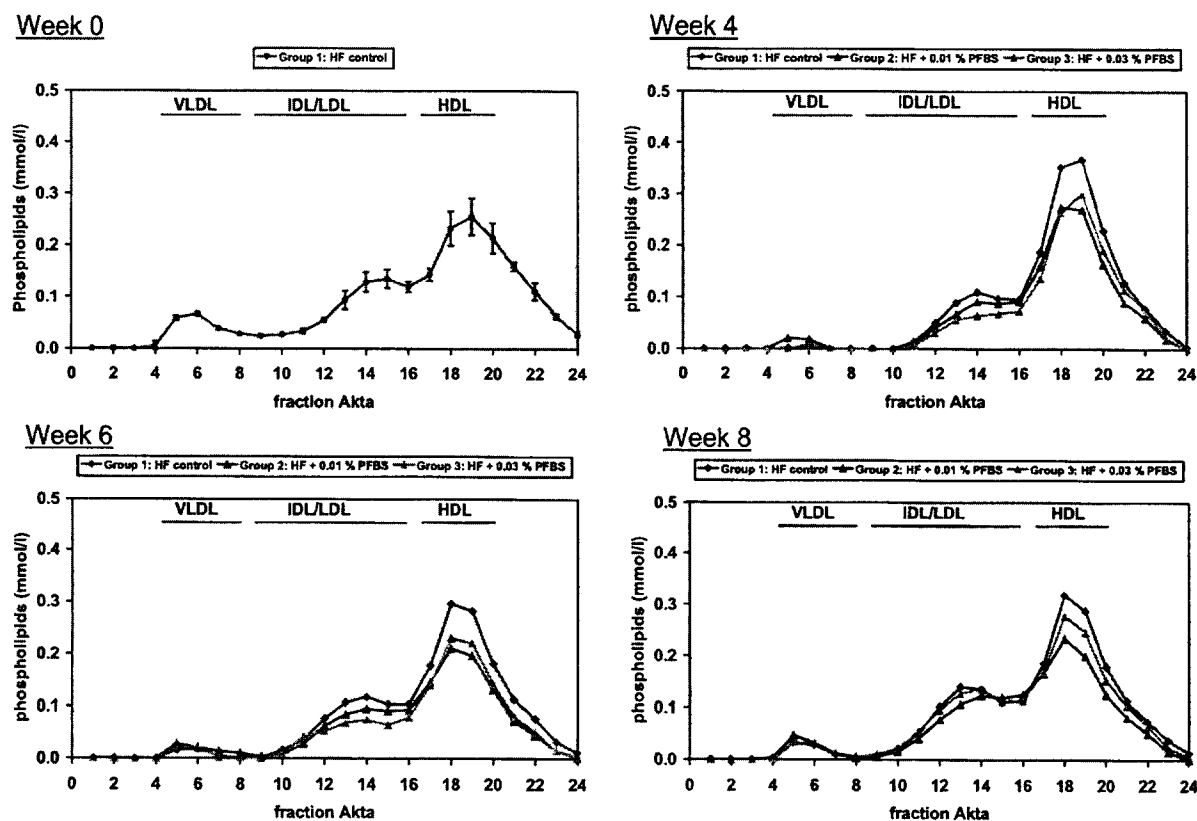
Figure 3.2.3a Pooled plasma lipoprotein (cholesterol) profiles ; PFBS treatment**Figure 3.2.3b Pooled plasma lipoprotein (phospholipid) profiles ; PFBS treatment**

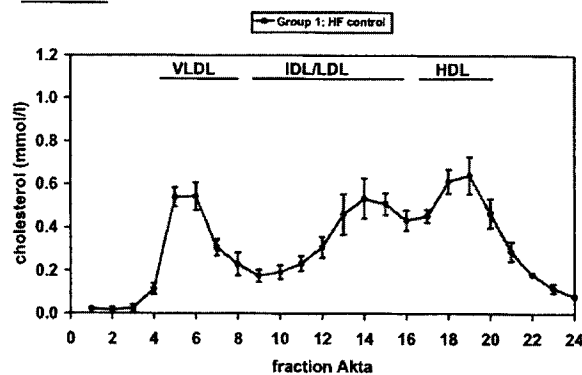
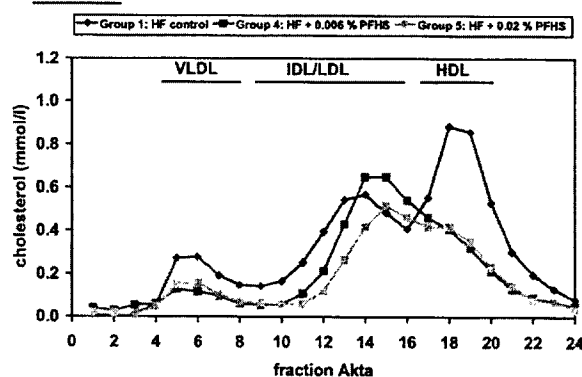
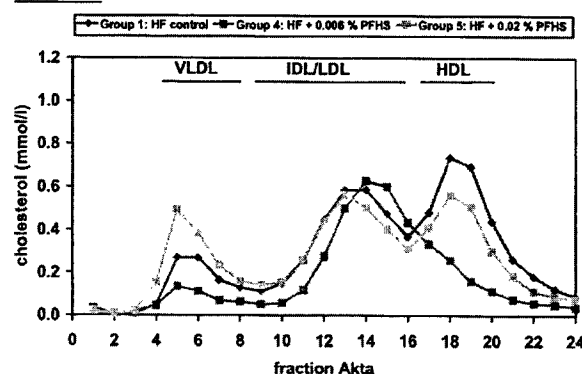
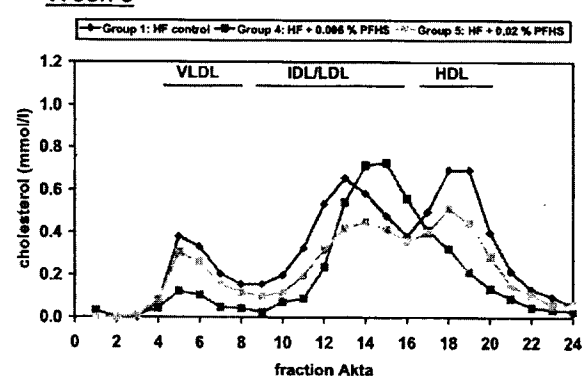
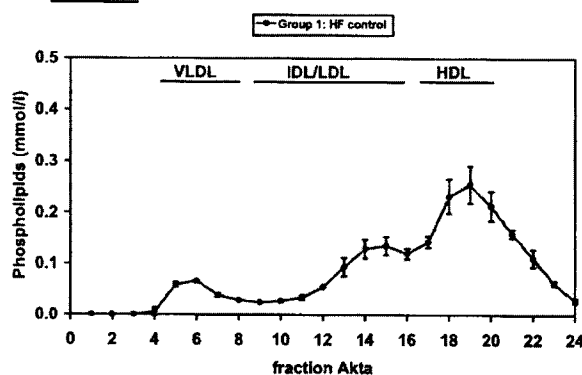
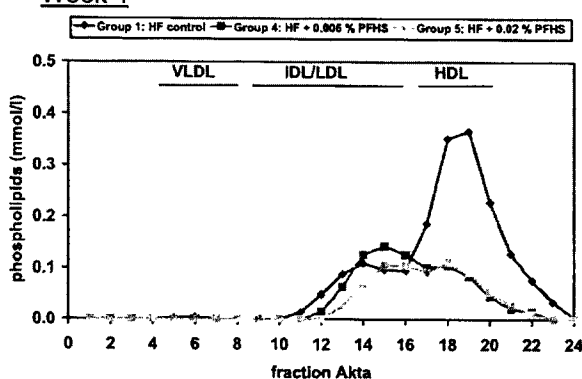
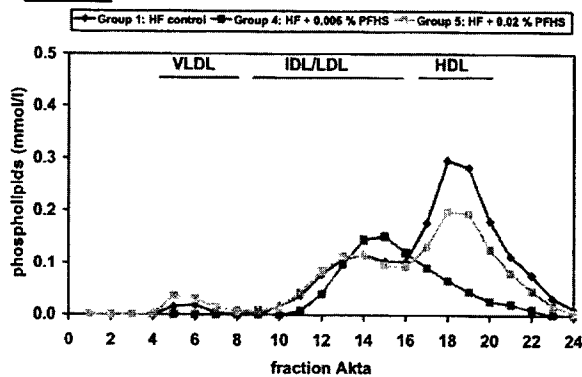
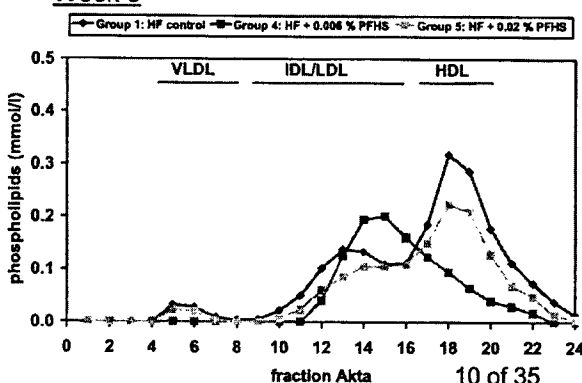
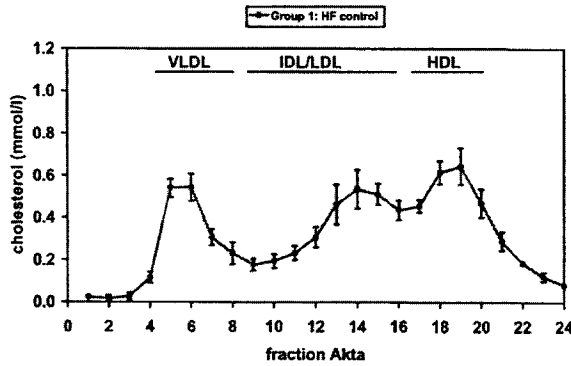
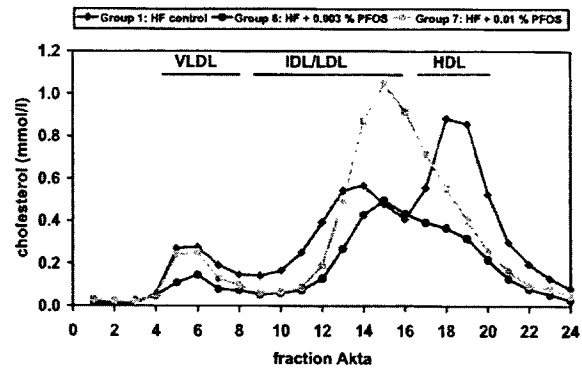
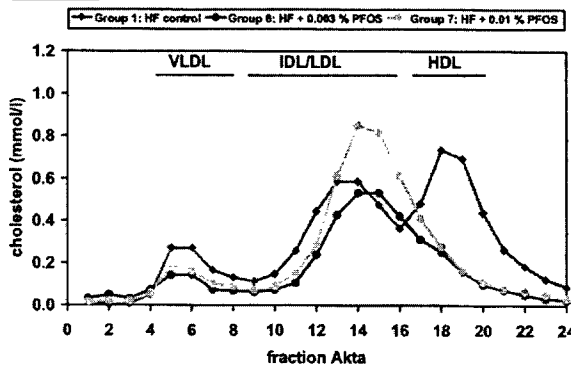
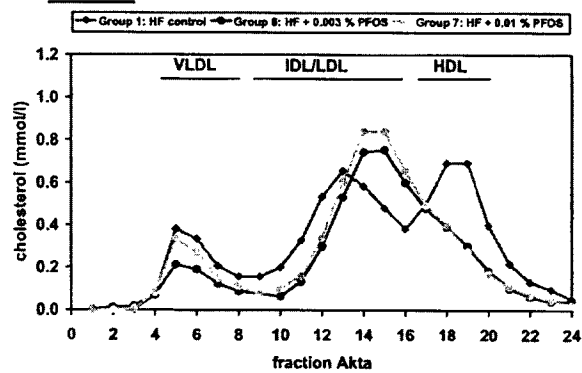
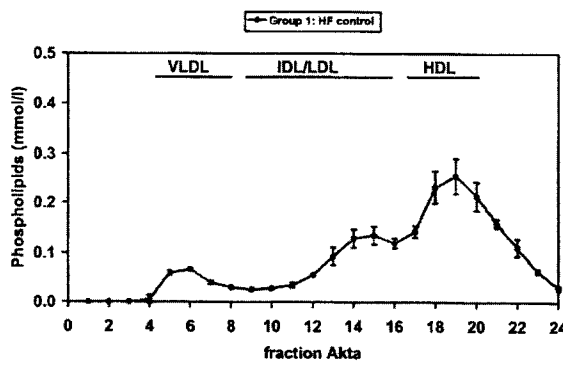
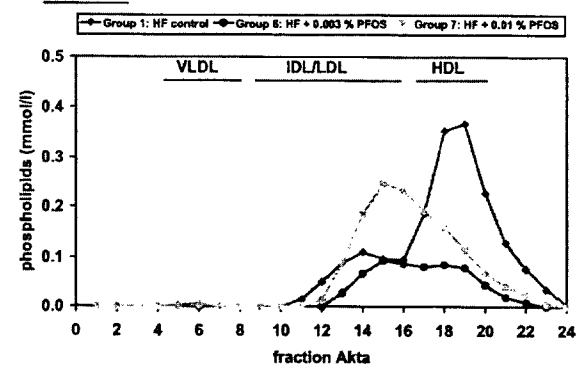
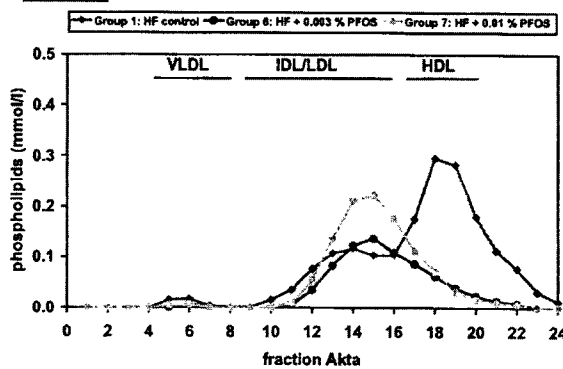
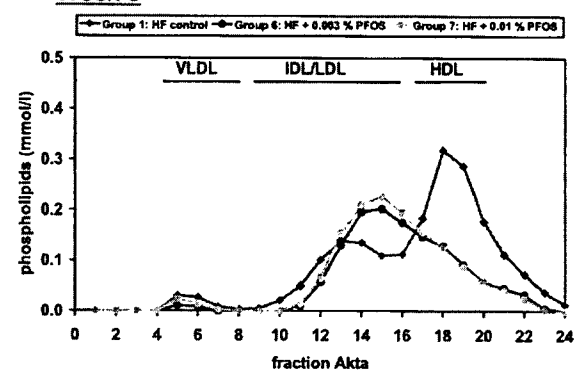
Figure 3.2.4a Pooled plasma lipoprotein (cholesterol) profiles ; PFHS treatment**Week 0****Week 4****Week 6****Week 8****Figure 3.2.4b Pooled plasma lipoprotein (phospholipid) profiles ; PFHS treatment****Week 0****Week 4****Week 6****Week 8**

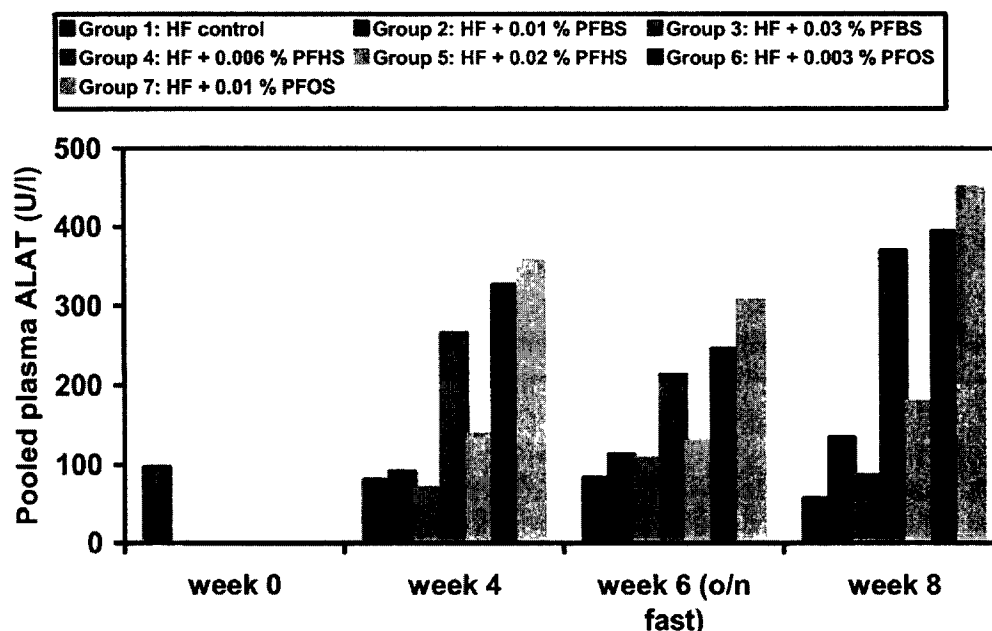
Figure 3.2.5a Pooled plasma lipoprotein (cholesterol) profiles ; PFOS treatmentWeek 0Week 4Week 6Week 8**Figure 3.2.5b Pooled plasma lipoprotein (phospholipid) profiles ; PFOS treatment**Week 0Week 4Week 6Week 8

The lipoprotein profiles of the PFOS treated animals are remarkable. The low concentration (group 6) showed major the large-HDL fraction which is steadily increasing during the treatment. ApoB-containing lipoproteins have been decreased. Similar as with PFHS, VLDL and IDL fractions have been decreased.

Group 7, which showed a recovery of plasma TC/TG levels after 2 weeks control diet, has VLDL levels similar to the control group again, but showed low IDL and a very large "large"-HDL peak, which remained the same over the rest of the treatment period. A possible explanation could be that liver VLDL production has recovered (or is enhanced), but lipoprotein clearance is still impaired. It all might be the result of the long half-life of PFOS in the body. This explains also the gradually increase of the "large"-HDL peak in time in the low concentration PFOS group 6, which in week 8 has become as large as this peak in the group 7 plasma.

Since the liver seems to be strongly involved in the mechanism of action of PFHS and PFOS, the liver enzyme alanine aminotransferase (ALAT) has been determined a few times more than originally planned (Fig. 3.2.6).

Figure 3.2.6 Pooled plasma ALAT activity



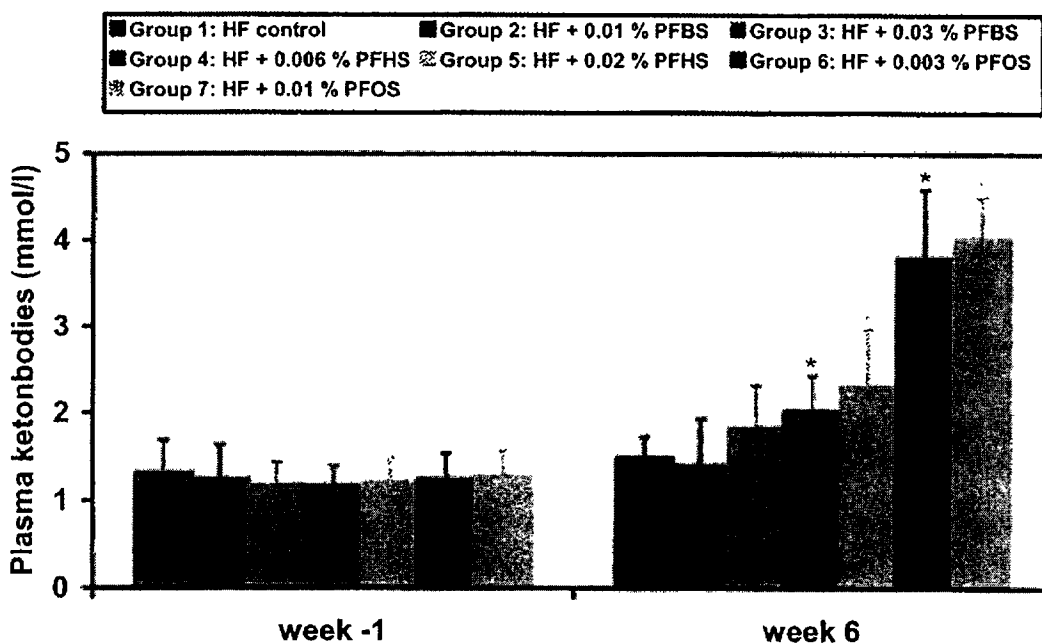
At all measure points ALAT has been increased in the PFOS-treated groups (groups 6 and 7), although from week 2 group 7 received the control diet again. PFHS increased ALAT as well (group 4), but here the return to control diet (group 5) caused a (partial) recovery of this activity. Although plasma ALAT activity is often used as a marker for liver damage, the increase in the plasma can be the result as well of an induction of the expression of the liver enzyme by the treatment, but can also result from the enlargement of the liver as seen in this study (see Fig. 3.7.1).

PFBS had no or only a minor effect on plasma ALAT levels.

Since it was expected that the test compounds might have an effect on fatty acid metabolism, plasma ketone bodies have been determined before and after 6 weeks of treatment. As shown in Fig. 3.2.7, PFHS and, even more so, PFOS increased significantly the plasma ketone body levels. The two weeks of treatment with the highest dose, followed by 4 weeks of control diet (groups 5 and 7) still resulted in increased levels in week 6. PFBS did not significantly increase the ketone bodies.

Figure 3.2.7 Plasma ketone bodies

Values are means $\pm$ S.D.



So, PFHS and PFOS induced fatty acid oxidation, which is supported by the results of the analysis in metabolic cages performed in week 7 of treatment.

3.3. Measurements in metabolic cages

After 7 weeks of treatment, 4 mice of the different treatment groups, the HF control group (group 1), the 0.03% PFBS group (group 3), the 0.006% PFHS group (group 4) and the 0.003% PFOS group (group 6) have been analyzed individually for 3 days in metabolic cages (after 1 day of acclimatization in the same cage). The following parameters have been measured: food and drink intake (Figs. 3.3.1.1 and 3.3.1.3), feeding size bouts (Fig. 3.3.1.2), moving activity (X activity; Fig. 3.3.2), O₂-consumption and CO₂-production (Figs. 3.3.3.1 and 3.3.3.2). From the latter parameters the respiratory exchange ratio (RER; Fig. 3.3.3.3), which gives information on the substrate that is used for energy generation, and additionally, the O₂-consumption-related energy expenditure (Fig. 3.3.4) have been calculated.

3.3.1 Food and drink intake

No significant differences have been observed between the groups in food intake, feeding bout size and drink intake, although the PFHS treated mice might have eaten somewhat more.

Figure 3.3.1.1 Food intake

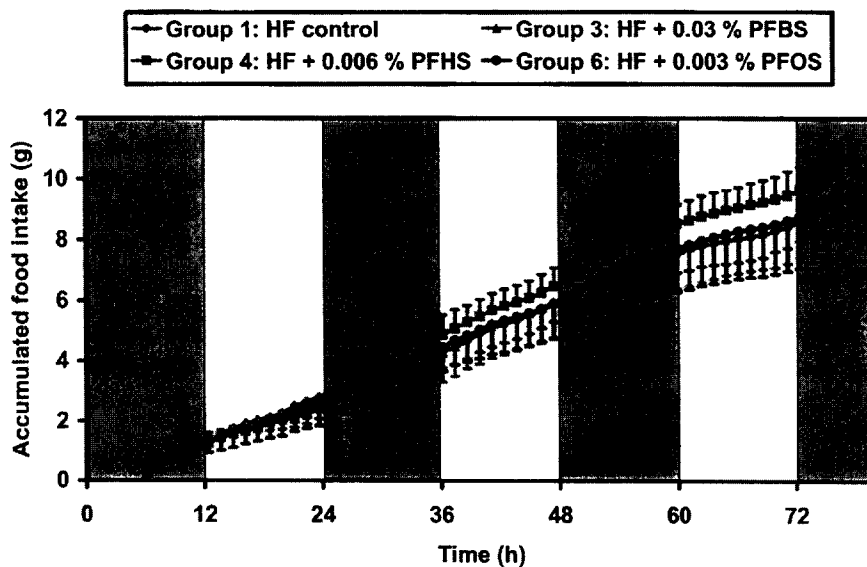


Figure 3.3.1.2 Feeding bout size

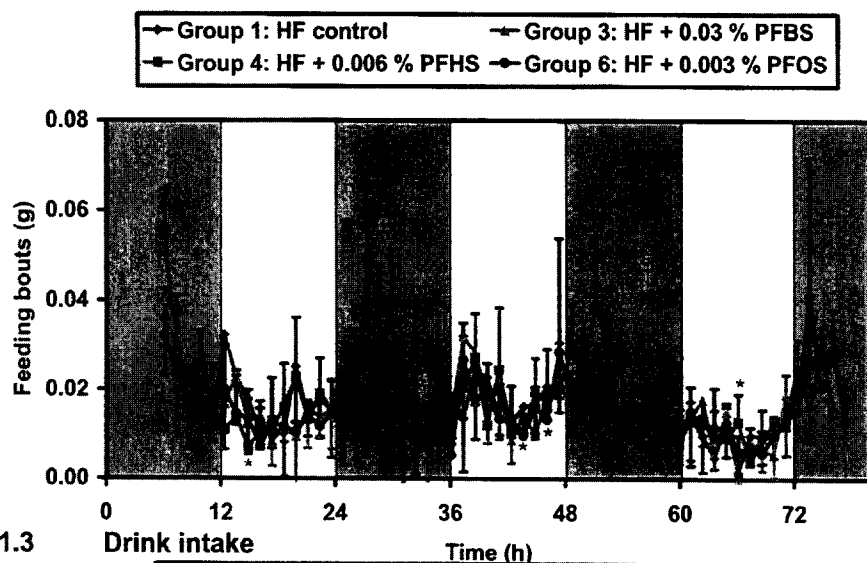
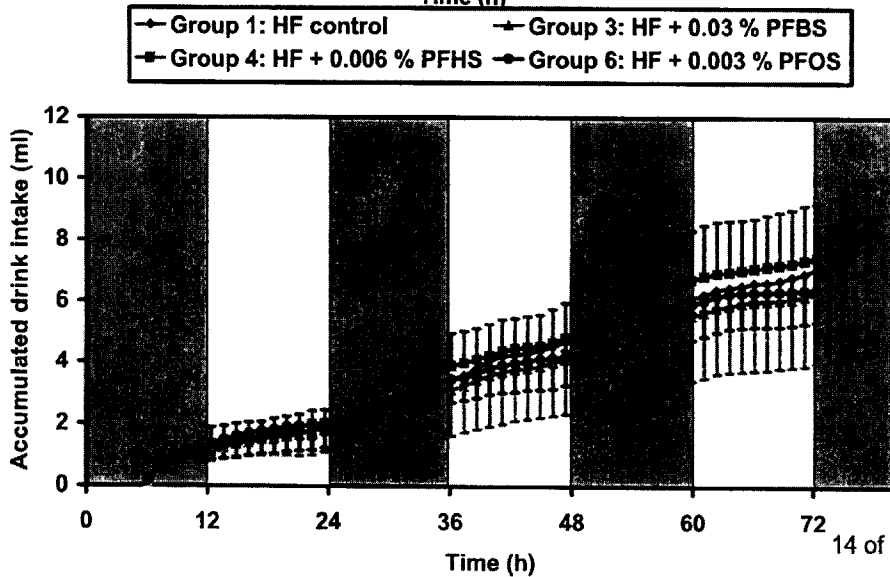
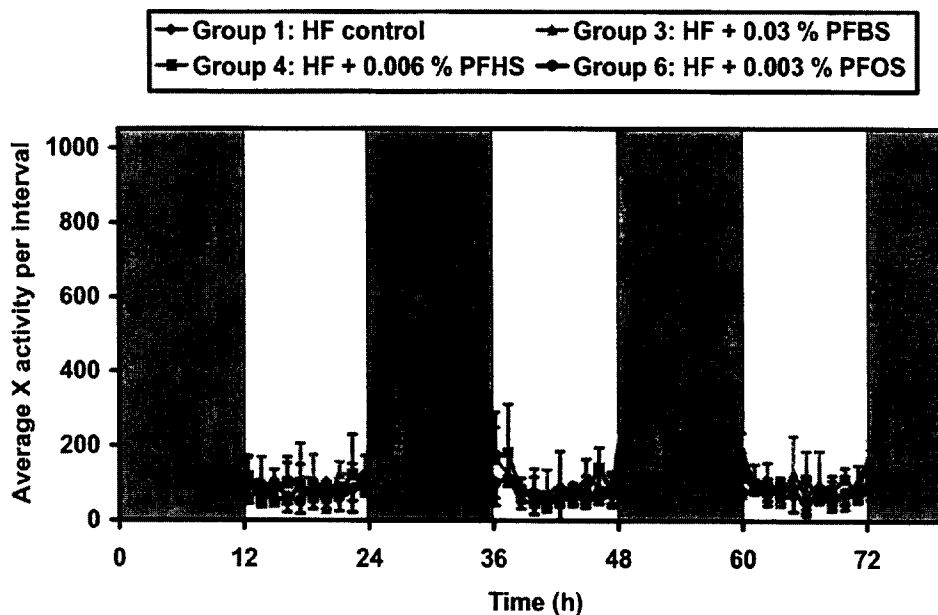


Figure 3.3.1.3 Drink intake

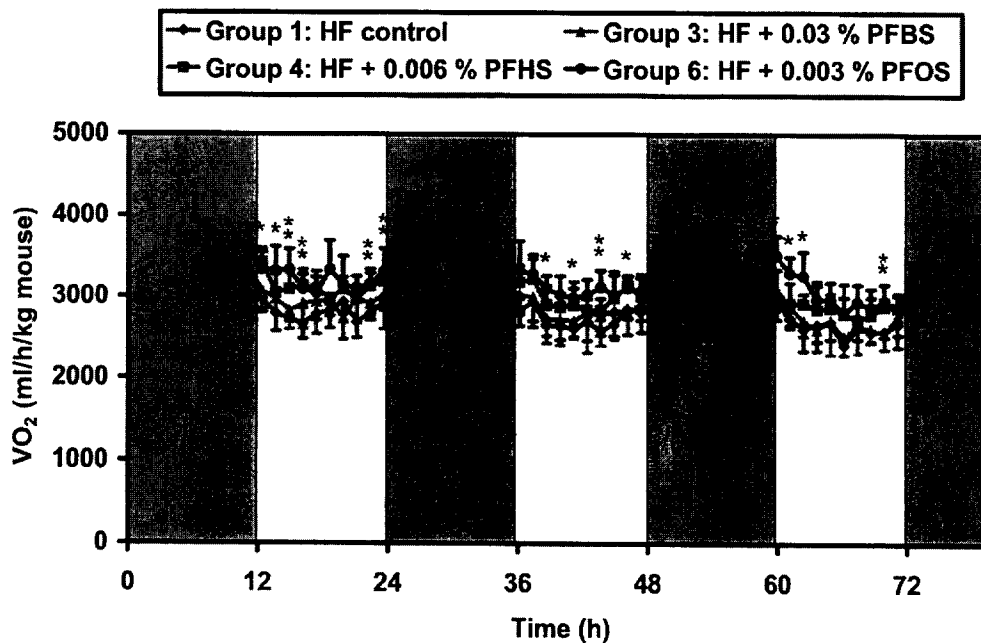


3.3.2 Moving (X) activity

No significant differences have been observed between the groups in moving activity.

Figure 3.3.2 X Activity**3.3.3 O₂-consumption, CO₂-production and respiratory exchange ratio (RER)**

It is remarkable to notice that differences in these parameters have been observed between the groups, while using rather small groups. O₂-consumption of the PFHS and PFOS treated animals was significantly increased, while no difference between control and PFBS-treated mice have been found.

Figure 3.3.3.1 O₂-consumption

CO₂-production of the PFHS and PFOS groups was found to be increased as well, although in much less time points compared to the increase in O₂-consumption. For this reason the RER for these groups are lower (significantly for PFOS, but not yet statistically significantly for PFHS) than the RER of the control and PFBS-treated group. This is an indication that fat is preferentially used for energy generation over the use of carbohydrates. This is in agreement with an increase in fatty acid oxidation as reflected by an increased plasma ketone body level in PFHS- and PFOS-treated mice and also for the decrease in fat tissue as found later in this study.

Figure 3.3.3.2 CO₂-production

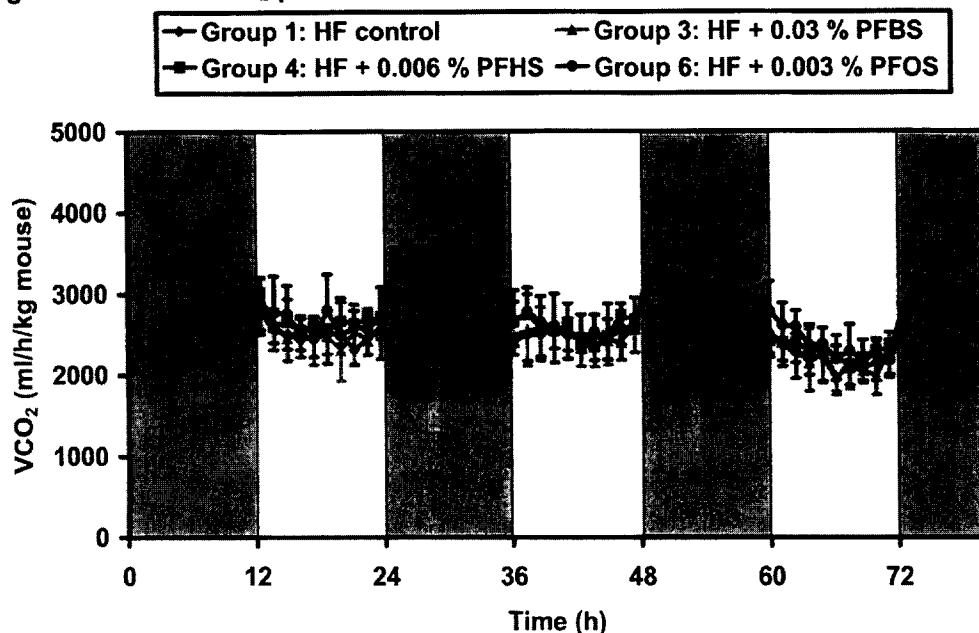
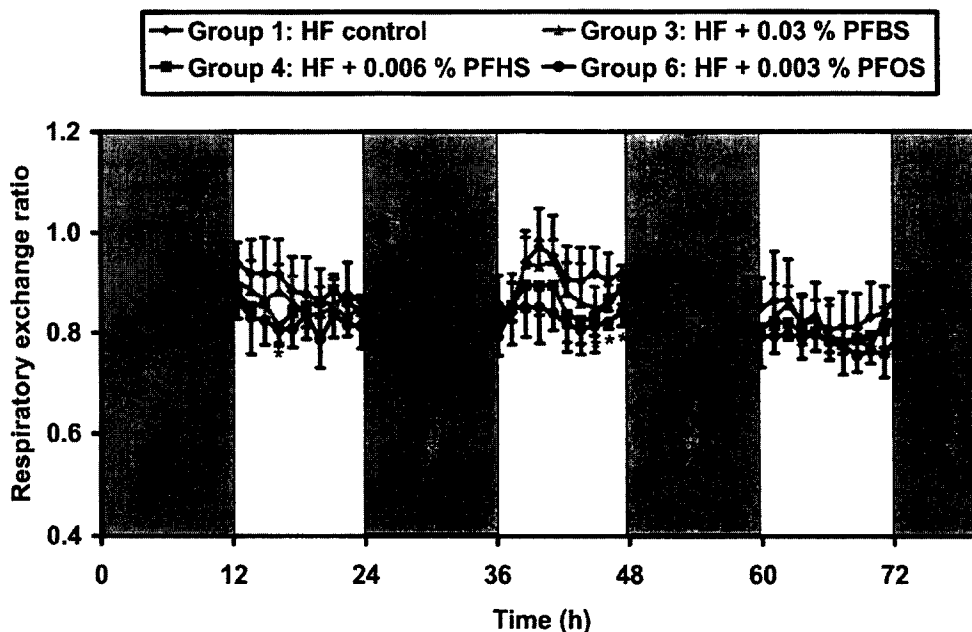


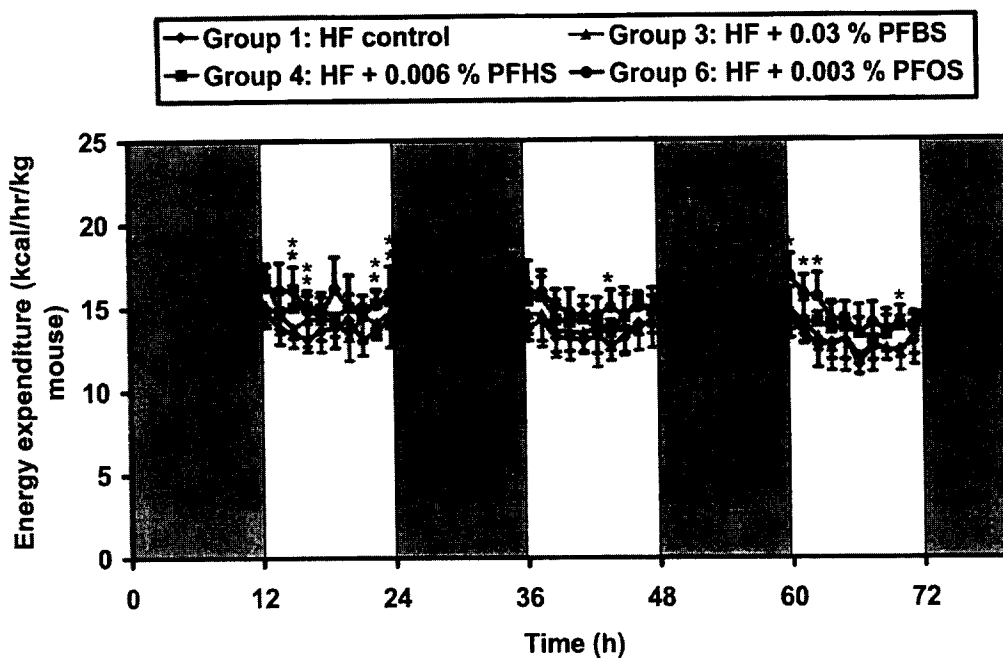
Figure 3.3.3.3 Respiratory exchange ratio (RER)



3.3.4 Energy expenditure

Congruent with these observations it has been calculated that the O₂-consumption-dependent energy expenditure has been increased as well by the PFHS and PFOS treatment.

Figure 3.3.4 Energy expenditure



The differences observed in the metabolic cage analysis might be more pronounced by using larger groups in eventual future studies (preferable n = 8).

3.4. Fecal bile acid, sterol and fatty acid measurements

In week 6 of treatment, feces have been collected and its lipid and bile acid contents determined.

Fecal bile acids have been decreased by PFHS (0.006%; group 4) and even more by PFOS (0.003%). Although groups 5 and 7 were back on control diet for 4 weeks, both these compounds have still kept the bile acid excretion below the control values.

PFBS-treatment seems to have increased the fecal bile acid excretion, which was even significantly different from the control group for group 2.

Figure 3.4.1 Bile acid excretion

Values are means $\pm$ S.D.

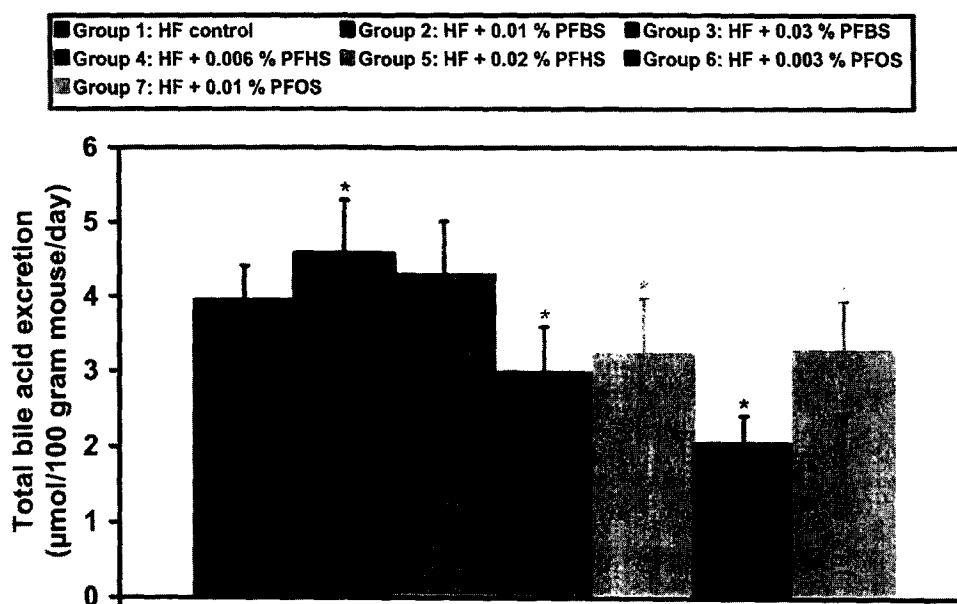


Table 3.4.1 Fecal bile acid composition

group	% of bile acids						
	α -muricholate	deoxycholate	cholate	lithocholate	β -muricholate	ω -muricholate	hyodeoxyurso
Group 1: HF control	6.1 $\pm$ 2.8	14.7 $\pm$ 5.7	7.9 $\pm$ 2.7	9.6 $\pm$ 4.1	20.4 $\pm$ 5.0	39.8 $\pm$ 8.8	1.5 $\pm$ 0.8
Group 2: HF + 0.01 % PFBS	4.8 $\pm$ 1.2	12.4 $\pm$ 2.1	8.4 $\pm$ 1.2	10.7 $\pm$ 2.4	19.6 $\pm$ 7.2	42.2 $\pm$ 4.4	1.9 $\pm$ 1.0
Group 3: HF + 0.03 % PFBS	4.2 $\pm$ 1.3	12.8 $\pm$ 1.2	7.6 $\pm$ 2.3	13.1 $\pm$ 4.5	19.9 $\pm$ 4.1	40.9 $\pm$ 3.4	1.4 $\pm$ 0.9
Group 4: HF + 0.006 % PFHS	7.1 $\pm$ 2.3	11.3 $\pm$ 1.8	10.2 $\pm$ 4.2	10.9 $\pm$ 3.3	17.2 $\pm$ 4.5	40.9 $\pm$ 3.8	2.3 $\pm$ 2.2
Group 5: HF + 0.02 % PFHS	5.3 $\pm$ 0.8	13.9 $\pm$ 2.4	8.5 $\pm$ 3.7	16.0 $\pm$ 5.2	16.8 $\pm$ 5.7	36.6 $\pm$ 7.0	2.8 $\pm$ 1.7
Group 6: HF + 0.003 % PFOS	6.8 $\pm$ 2.0	15.9 $\pm$ 5.5	14.3 $\pm$ 4.0	11.3 $\pm$ 3.2	12.5 $\pm$ 3.5	37.0 $\pm$ 5.7	2.3 $\pm$ 1.4
Group 7: HF + 0.01 % PFOS	10.8 $\pm$ 2.7	22.1 $\pm$ 5.5	16.4 $\pm$ 4.9	6.1 $\pm$ 2.4	16.8 $\pm$ 4.0	24.2 $\pm$ 4.0	3.5 $\pm$ 3.5

yellow indicates a significant difference from control ($p < 0.05$).

The latter increase with PFBS did not change the fecal bile acid composition. Concomitantly with the decrease by PFHS and PFOS, a change in composition of excreted bile acids has been observed as well, which can result from a change in bile acid synthesis pathways in the liver, but also from a change in intestinal bile acid conversion. The latter might also happen in the liver after reabsorption and return to the liver.

Only in group 4 (PFHS) was fecal neutral sterol excretion significantly increased. Fecal neutral sterols, which are primarily composed of cholesterol, are determined by food intake, intestinal absorption and liver production. Since the diet used contained 0.25% cholesterol, food intake plays a major role. This is more or less the same in all groups. Since intestinal cholesterol absorption is also the same or increased (see Fig.3.5.1), most probably the significantly increased fecal sterol excretion in group 4 (PFHS) is the result of an increased hepatic cholesterol synthesis. This is in agreement with the increased HMG-CoA reductase activity observed (see Fig. 3.8.2).

Although no differences have been seen in the quantity of excreted plant sterols, which originate from the diet, the composition was slightly changed in the PFHS and PFOS groups. It might be the result of a change in intestinal absorption/resecretion.

Figure 3.4.2 Sterol excretion

Values are means $\pm$ S.D.

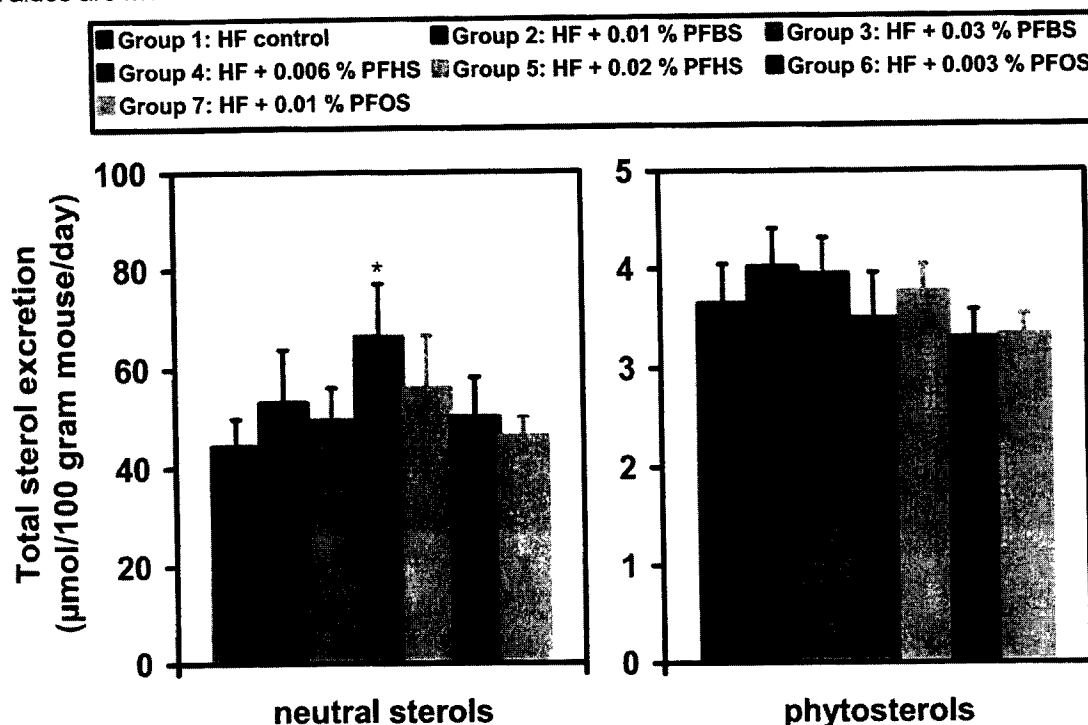
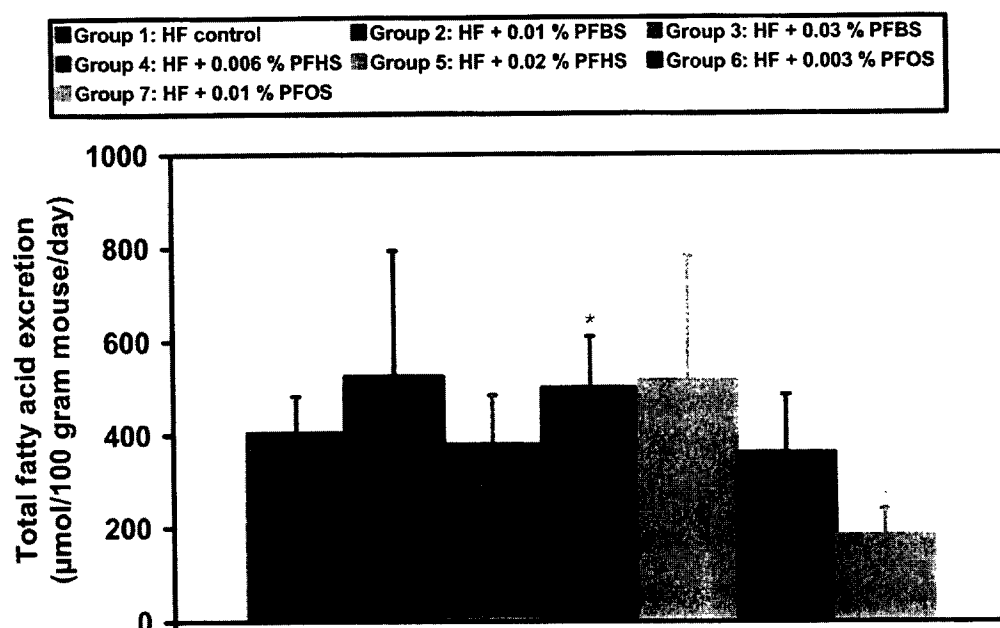


Table 3.4.2a Fecal neutral sterol composition

group	% of neutral sterols				
	coprostanol	coprostanon	cholesterol	cholestanol	lathosterol
Group 2: HF + 0.01 % PFBS	0.0 $\pm$ 0.0	0.0 $\pm$ 0.0	94.4 $\pm$ 0.4	2.7 $\pm$ 0.2	2.9 $\pm$ 0.3
	0.0 $\pm$ 0.0	0.0 $\pm$ 0.0	95.0 $\pm$ 0.6	2.3 $\pm$ 0.8	2.7 $\pm$ 0.3
	0.0 $\pm$ 0.0	0.0 $\pm$ 0.0	94.6 $\pm$ 0.7	2.7 $\pm$ 0.4	2.7 $\pm$ 0.6
Group 4: HF + 0.006 % PFHS	0.0 $\pm$ 0.0	0.0 $\pm$ 0.0	95.5 $\pm$ 0.3	2.4 $\pm$ 0.3	2.1 $\pm$ 0.1
	0.0 $\pm$ 0.0	0.0 $\pm$ 0.0	94.4 $\pm$ 1.4	3.1 $\pm$ 1.5	2.5 $\pm$ 0.2
Group 6: HF + 0.003 % PFOS	0.0 $\pm$ 0.0	0.0 $\pm$ 0.0	94.3 $\pm$ 0.7	3.4 $\pm$ 0.6	2.4 $\pm$ 0.2
Group 7: HF + 0.01 % PFOS	0.0 $\pm$ 0.0	0.0 $\pm$ 0.0	93.7 $\pm$ 0.7	4.6 $\pm$ 0.6	1.7 $\pm$ 0.1

Table 3.4.2b Fecal phytosterol composition

group	% of phytosterols			
	campesterol	stigmasterol	β -sitosterol	β -sitostanol
Group 2: HF + 0.01 % PFBS	26.2 $\pm$ 0.8	8.2 $\pm$ 1.1	65.6 $\pm$ 1.1	0.0 $\pm$ 0.0
	26.2 $\pm$ 1.0	8.1 $\pm$ 1.7	65.7 $\pm$ 1.5	0.0 $\pm$ 0.0
	26.5 $\pm$ 0.7	7.7 $\pm$ 1.9	65.9 $\pm$ 1.7	0.0 $\pm$ 0.0
Group 4: HF + 0.006 % PFHS	27.9 $\pm$ 1.1	4.3 $\pm$ 2.0	67.7 $\pm$ 1.3	0.0 $\pm$ 0.0
Group 5: HF + 0.02 % PFHS	26.6 $\pm$ 1.1	6.5 $\pm$ 2.7	66.9 $\pm$ 2.1	0.0 $\pm$ 0.0
Group 6: HF + 0.003 % PFOS	27.6 $\pm$ 0.8	3.6 $\pm$ 0.5	68.8 $\pm$ 0.8	0.0 $\pm$ 0.0
Group 7: HF + 0.01 % PFOS	27.9 $\pm$ 1.0	5.0 $\pm$ 3.5	67.1 $\pm$ 2.9	0.0 $\pm$ 0.0

Figure 3.4.3 Fatty acid excretionValues are means $\pm$ S.D.**Table 3.4.3 Fecal fatty acid composition**

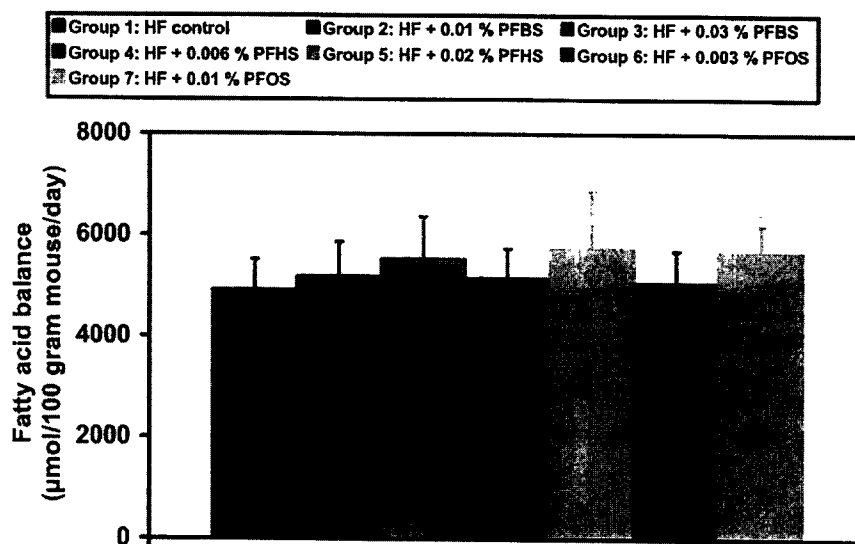
group	% of fatty acids						
	C14:0	C16:0	C16:1	C18:0	C18:1	C18:2	C18:3
Group 2: HF + 0.01 % PFBS	2.0 $\pm$ 0.4	46.0 $\pm$ 3.9	0.38 $\pm$ 0.04	46.0 $\pm$ 3.7	4.8 $\pm$ 0.5	0.30 $\pm$ 0.04	0.55 $\pm$ 0.21
	1.9 $\pm$ 0.5	44.1 $\pm$ 2.7	0.35 $\pm$ 0.13	47.5 $\pm$ 2.9	5.2 $\pm$ 0.6	0.30 $\pm$ 0.05	0.62 $\pm$ 0.10
	1.8 $\pm$ 0.3	45.1 $\pm$ 2.3	0.39 $\pm$ 0.04	47.0 $\pm$ 2.4	4.8 $\pm$ 0.3	0.31 $\pm$ 0.02	0.58 $\pm$ 0.08
Group 4: HF + 0.006 % PFHS	1.7 $\pm$ 0.3	43.6 $\pm$ 1.9	0.35 $\pm$ 0.02	48.6 $\pm$ 1.9	4.8 $\pm$ 0.4	0.31 $\pm$ 0.03	0.60 $\pm$ 0.07
Group 5: HF + 0.02 % PFHS	2.0 $\pm$ 0.5	45.5 $\pm$ 3.2	0.39 $\pm$ 0.04	46.2 $\pm$ 3.2	5.1 $\pm$ 0.7	0.29 $\pm$ 0.03	0.57 $\pm$ 0.10
Group 6: HF + 0.003 % PFOS	1.8 $\pm$ 0.4	45.6 $\pm$ 2.9	0.34 $\pm$ 0.03	46.6 $\pm$ 3.0	4.8 $\pm$ 0.3	0.29 $\pm$ 0.03	0.56 $\pm$ 0.09
Group 7: HF + 0.01 % PFOS	2.2 $\pm$ 0.4	48.2 $\pm$ 2.4	0.35 $\pm$ 0.03	43.5 $\pm$ 2.7	4.9 $\pm$ 0.5	0.38 $\pm$ 0.00	0.46 $\pm$ 0.06

Fecal fatty acids are derived from the fat from food intake (TG) and lipids produced by the liver (PL). Most of the groups (some have large SD) showed no significant difference from control. Group 4 (PFHS) had significantly increased fecal fatty acids, whereas group 7 (2 weeks PFOS and 4 weeks control) showed a strong decrease, with a concomitant small change in fatty acid composition.

From the difference between the total fatty acid (TG) intake per subgroup and total fatty acid excreted in the feces, the fatty acid balance has been calculated. The values are expressed as the difference between total fatty acid input and output in μmol fatty acid per 100 gram mouse per day. As shown in Fig. 3.4.5, all groups have more or less the same fat intake, except that in group 7 this is significantly higher. This is of interest in the light of the loss of fat tissue in the same group (see Fig. 3.6.1).

Figure 3.4.5 Fatty acid balance

Values are means $\pm$ S.D.

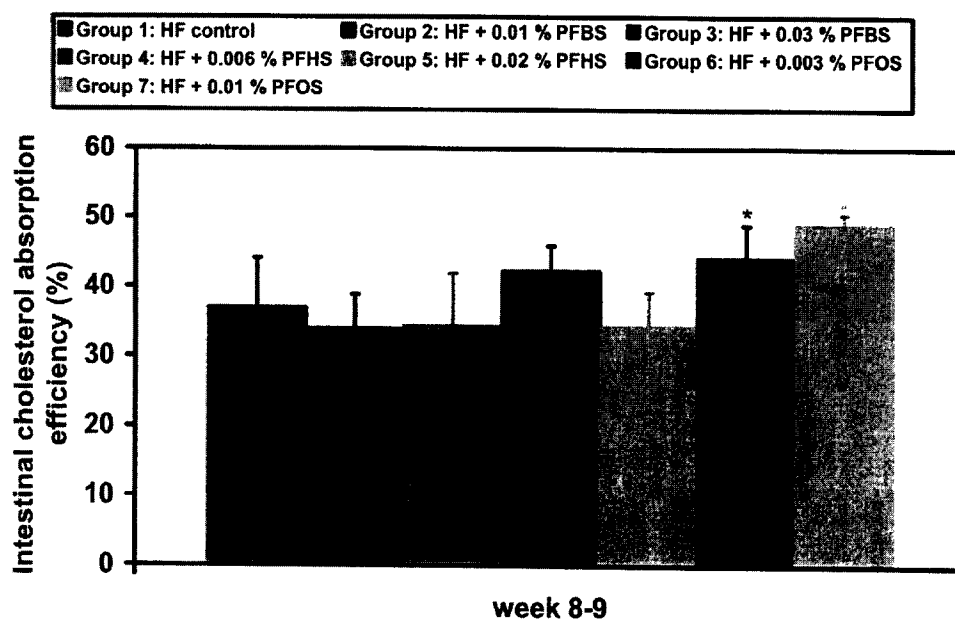


3.5. Intestinal cholesterol absorption

The intestinal cholesterol absorption was assessed by the fecal dual-isotope method. In week 8 all mice were individually housed and received an oral dose of 200 µl of olive oil, containing 1 µCi [¹⁴C]-cholesterol and 1 µCi [³H]-sitostanol, per mouse. Bodyweight and food intake were monitored, and feces were collected for the following 4 days. Feces were homogenized, pooled per mouse over the 4-day period, and dissolved in ethanolic potassium (3mol/l, 60% ethanol). Radioactivity was determined in the fecal samples to assess the ratio of [¹⁴C]-labeled cholesterol and [³H]-labeled sitostanol. Sitostanol was used as the reference compound since it is known to be poorly absorbed (< 3 %) in mice. The formula used to calculate cholesterol absorption was: % cholesterol absorption = ($[\text{14C}]/[\text{3H}]$ -dosing mixture - $[\text{14C}]/[\text{3H}]$ -feces) / $[\text{14C}]/[\text{3H}]$ -dosing mixture * 100.

Figure 3.5.1 Intestinal cholesterol absorption

Values are means ± S.D.



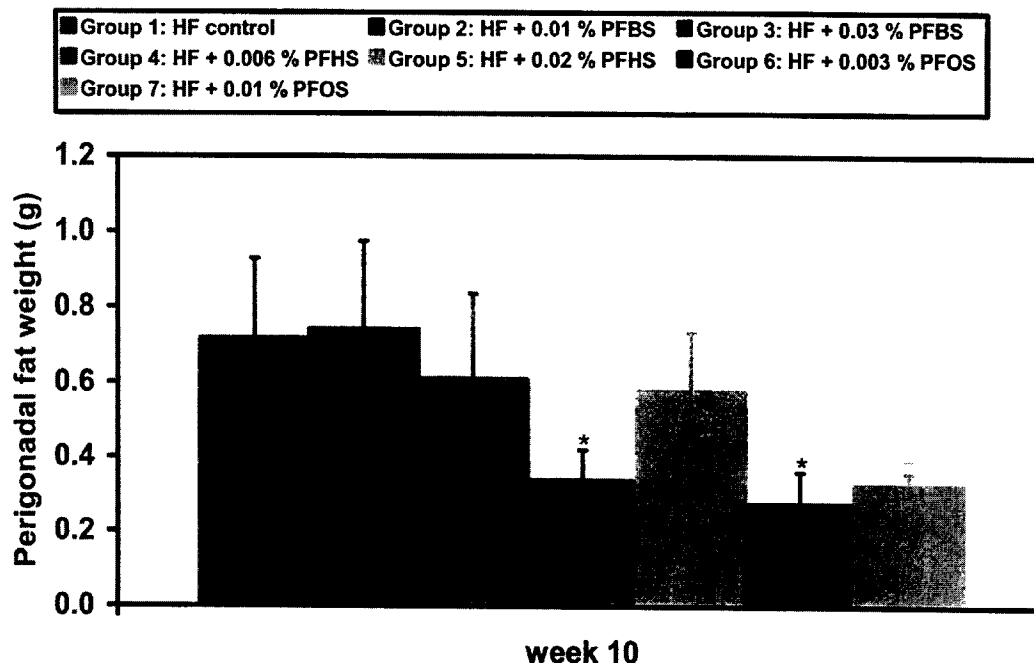
Both PFOS-treated groups 6 and 7 have increased intestinal cholesterol absorption. Since all groups have about the same cholesterol intake via the food and the same fecal cholesterol output (except group 4), this increase must be caused by an increased hepatic cholesterol synthesis. Indeed, the increased HMG-CoA reductase activity in these groups (see Fig. 3.8.2b) suggests an increased hepatic cholesterol synthesis.

Although not significantly, the intestinal cholesterol absorption of group 4 (PFHS) seems to be slightly increased as well, which, beside additionally an increased fecal excretion, might be explained as well by an increased hepatic cholesterol synthesis.

3.6. Perigonadal fat tissue weight

Figure 3.6.1 Perigonadal fat weight

Values are means $\pm$ S.D.



PFHS (group 4) and PFOS (groups 6 and 7) strong reduced perigonadal fat tissue.

Although not measured, this might reflect a decrease in total body fat tissue. This notion is supported by the decrease in body weight. Plasma leptin levels might be measured, which should be found to be decreased as a reflection of decreased fat tissue.

The reduction in perigonadal fat tissue was not seen in the PFBS-treated groups and the PFHS group 5.

3.7. Liver weight and hepatic lipid contents

Livers are strongly increased by PFOS (groups 6 and 7) and PFHS (group 4). The return to control diet of the group 5 PFHS-treated animals caused a return to only slightly but still significantly enlarged livers. When expressed as % of total body weight (Fig. 3.7.1b), the PFBS-treated group 3 also had slightly but significantly enlarged livers when compared to controls.

As shown in Fig. 3.7.2, the lipids, triglycerides and cholesterylesters, have been increased in the livers of PFOS-treated groups 6 and 7. In the other livers these contents were comparable with that of the control mice.

Free cholesterol contents have not been changed by any of the compounds.

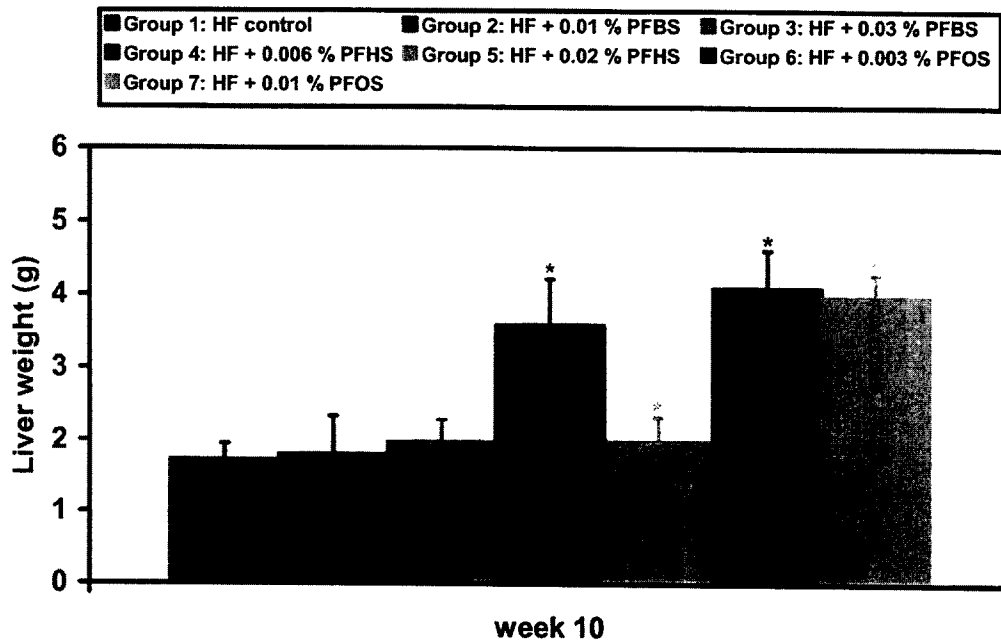
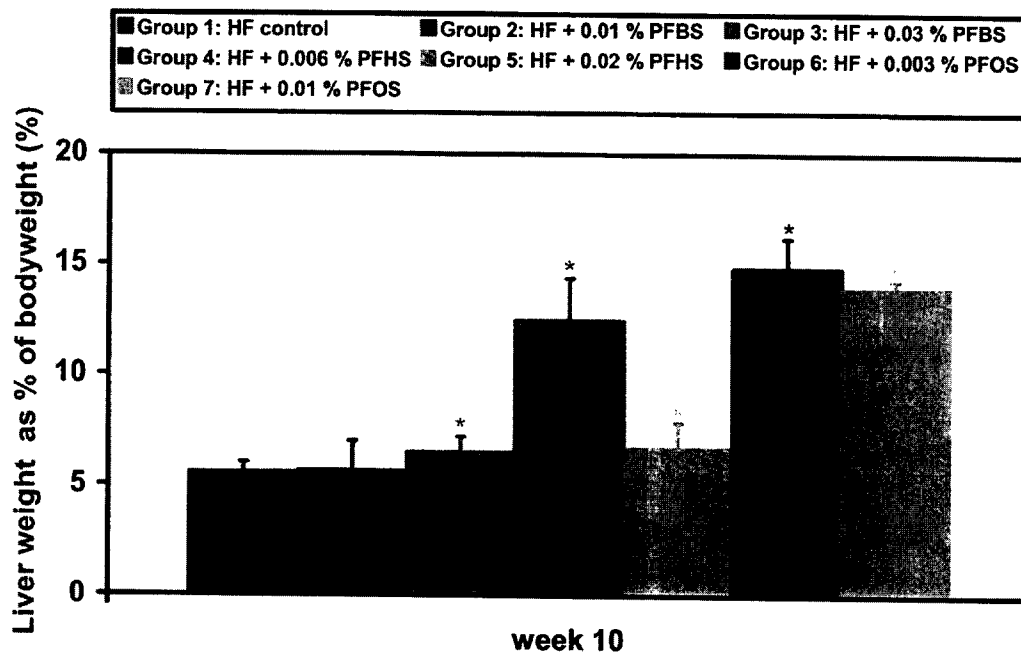
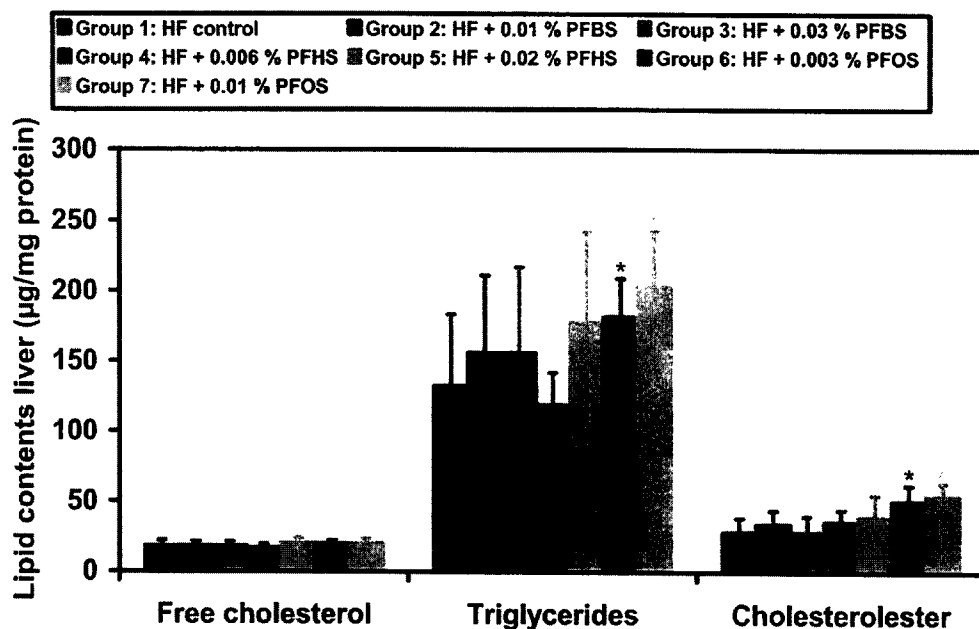
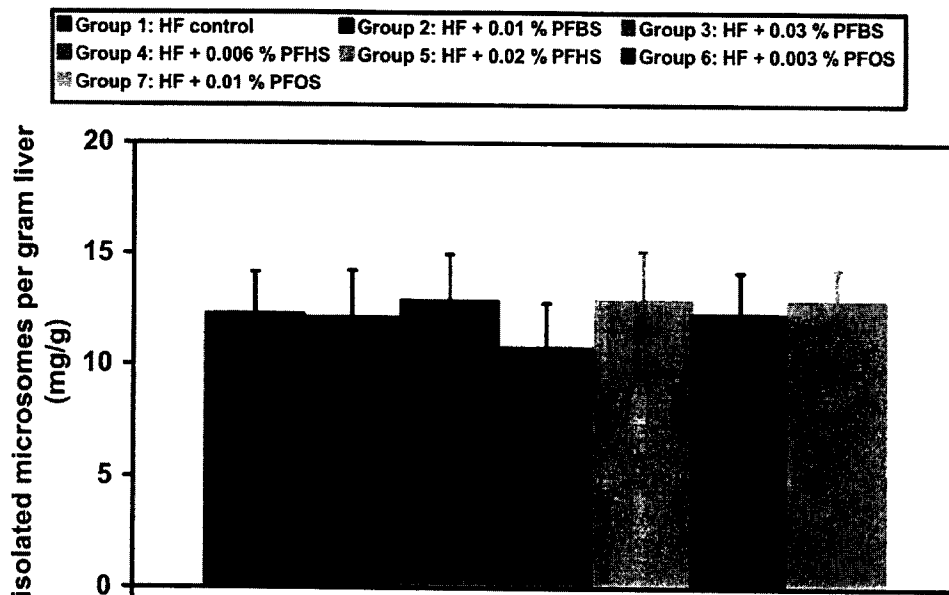
Figure 3.7.1a Liver weightValues are means $\pm$ S.D.**Figure 3.7.1b Liver weight as % of body weight**Values are means $\pm$ S.D.

Figure 3.7.2 Lipid contents liverValues are means $\pm$ S.D.**3.8. Liver enzyme activities: HMG-CoA reductase, cholesterol 7 α -hydroxylase and sterol 27-hydroxylase.**

Immediately after sacrifice, livers have been removed and microsomes and mitochondria have been isolated from the liver tissue. Thereafter, HMG-CoA reductase and cholesterol-7 α -hydroxylase activity have been determined in the microsomal preparations and sterol-27-hydroxylase activity in the mitochondria.

The yield of microsomes per g liver is about the same in all groups (Fig. 3.8.1)

Fig. 3.8.1 Microsomal preparations

Although HMG-CoA reductase activity was rather low in all preparations and therefore SD's are rather large, PFHS and PFOS seem to have increased this activity. This is significantly different from control for PFHS group 4. Since the yield of the microsomes per g liver is more or less the same and large differences between the liver weights have been observed, the activity has been recalculated and expressed as total activity per liver (Fig. 3.8.2b). This might indicate that large differences in total hepatic cholesterol synthesis between the groups exist. Total HMG-CoA reductase activity per liver has been increased significantly in groups 4 (PFHS), 6 (PFOS) and 7 (PFOS).

Figure 3.8.2a HMG-CoA reductase activity in liver microsomes
Values are means $\pm$ S.D.

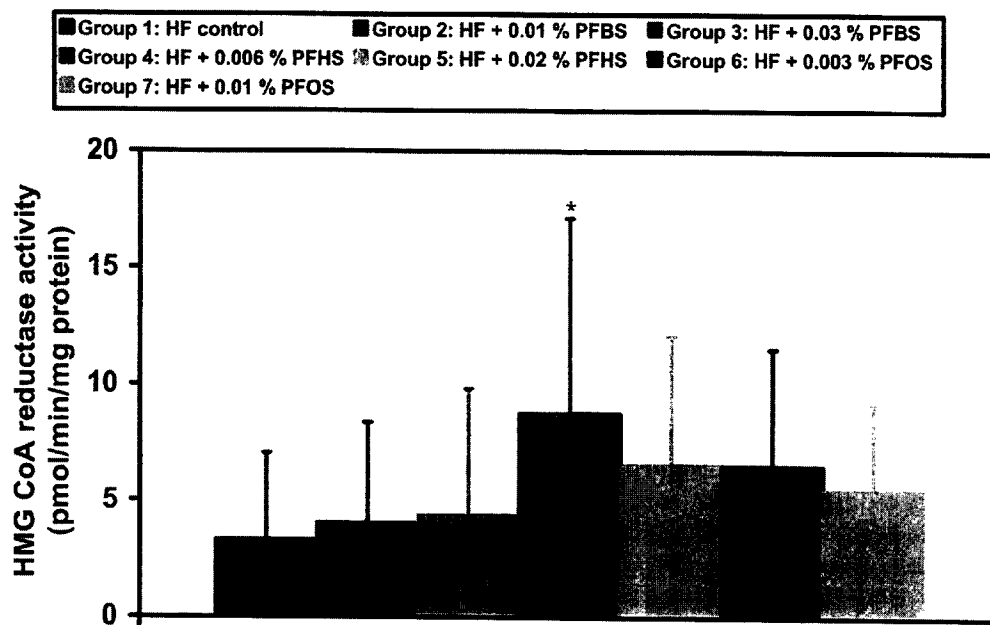


Figure 3.8.2b Total HMG-CoA reductase activity per liver
Values are means $\pm$ S.D.

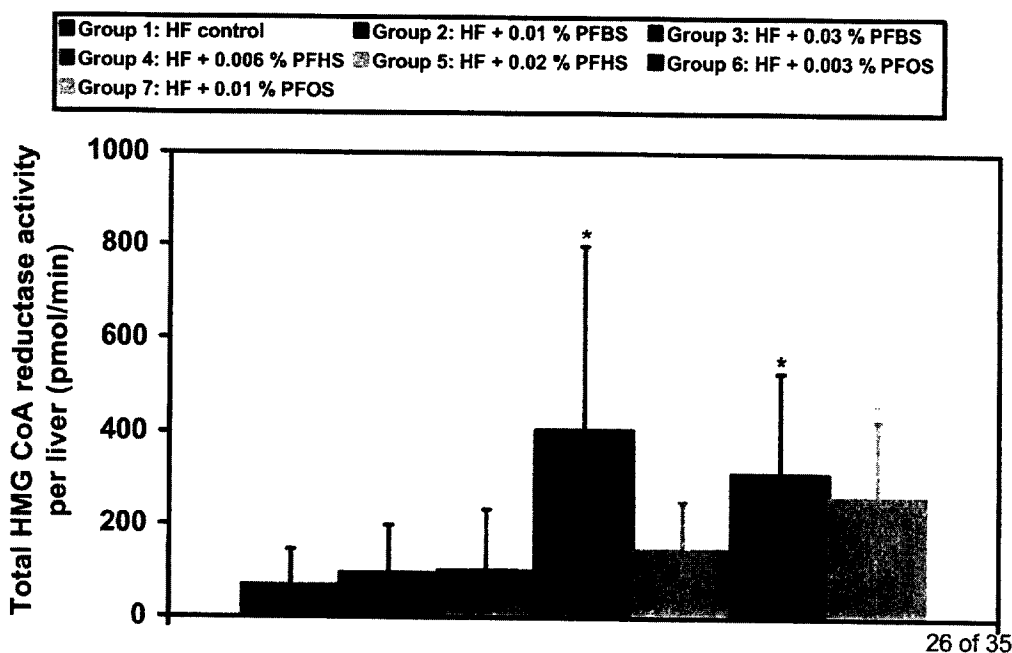
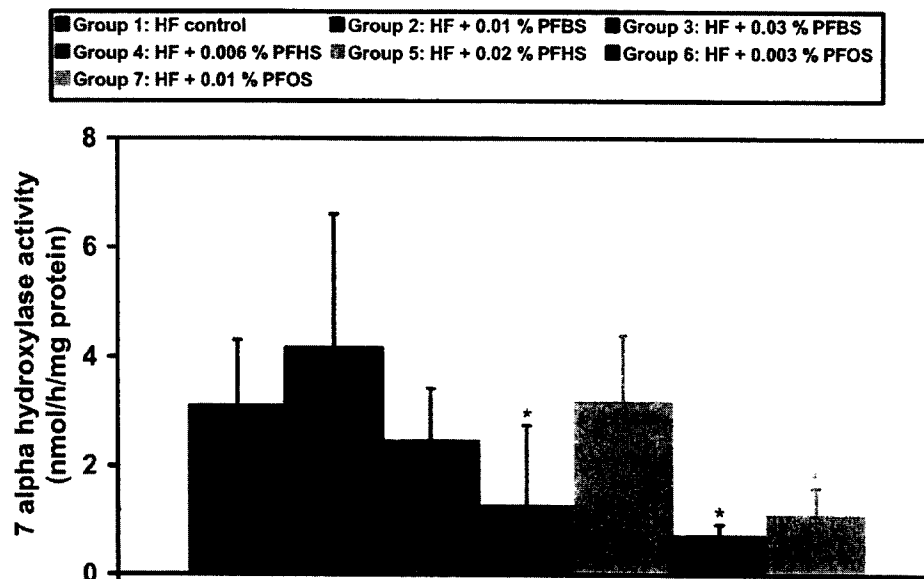
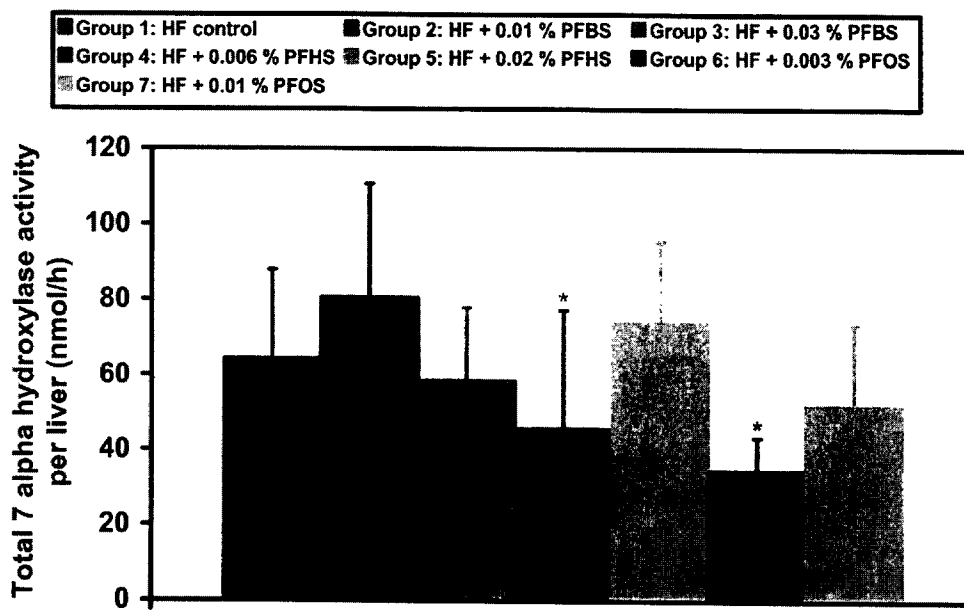


Figure 3.8.3a Cholesterol 7 α -hydroxylase activity in liver microsomesValues are means $\pm$ S.D.**Figure 3.8.3b Total cholesterol 7 α -hydroxylase activity per liver**Values are means $\pm$ S.D.

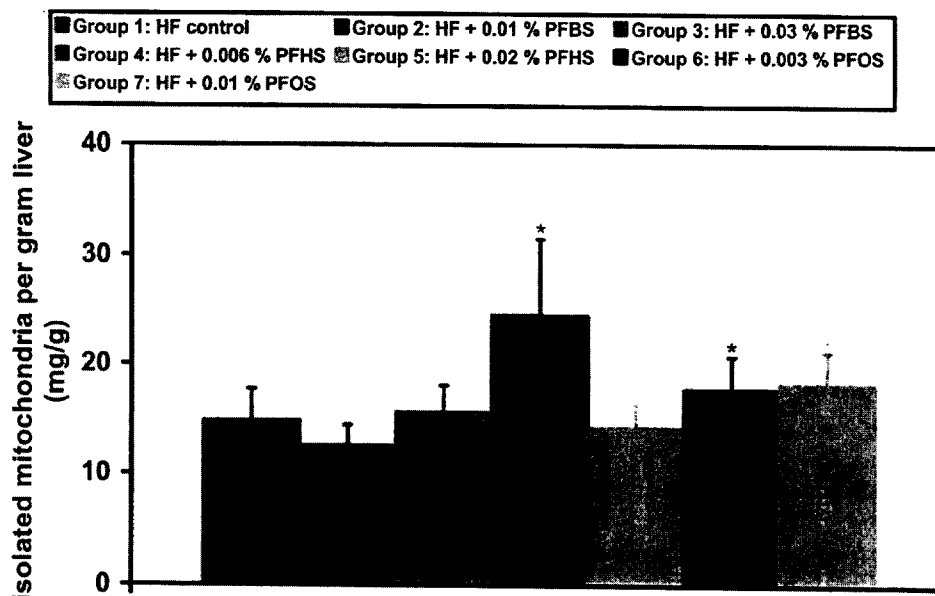
One of the rate limiting enzymes of bile acid synthesis, the microsomal enzyme cholesterol 7 α -hydroxylase, has found to be decreased by PFHS (group 4) and by PFOS (groups 6 and 7). The activity in the other groups did not differ significantly from the control value (although that of group 2 seems to be somewhat enhanced).

If the activity is expressed as total activity per liver a significant decrease by PFHS (group 4) and PFOS (group 6) remained, suggesting that total hepatic bile acid production might be reduced as well.

The other regulatory enzyme of bile acid synthesis, sterol 27-hydroxylase was measured in the mitochondrial preparations. It was remarkable that the yield of mitochondria (mg/g liver; Fig. 3.8.4) seemed to be increased in the PFHS-treated and PFOS-treated groups, suggesting that these compounds increased the number of mitochondria. This might be related with the observed increase of fatty acid oxidation.

Figure 3.8.4 Liver mitochondrial preparations

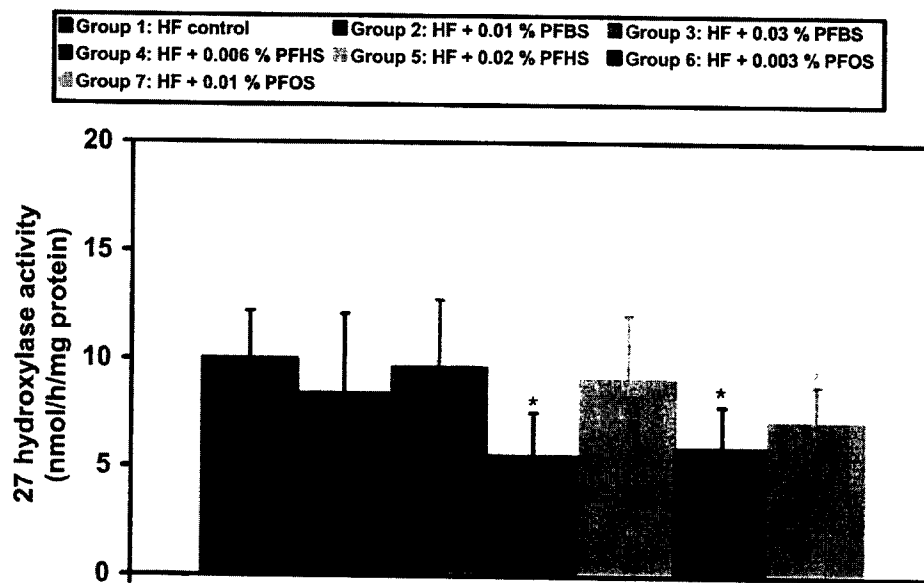
Values are means $\pm$ S.D.



As expresses per mg of mitochondrial protein sterol 27-hydroxylase was found to be decreased by PFHS (group 4) and PFOS (groups 6 and 7) as well.

Figure 3.8.5a sterol 27-hydroxylase activity in liver mitochondria

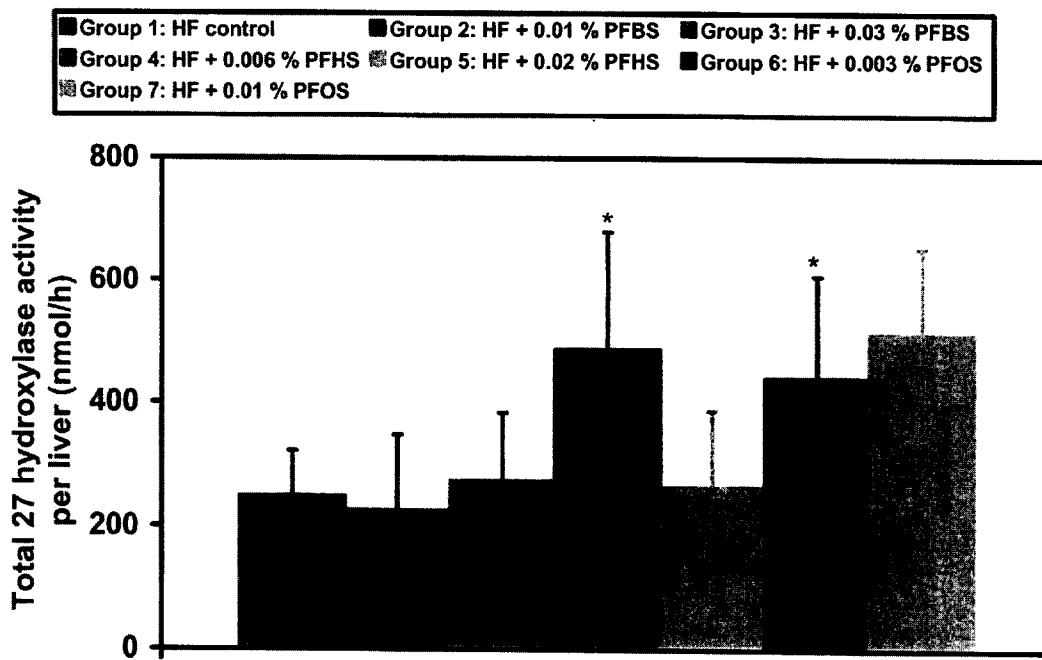
Values are means $\pm$ S.D.



However, taking into account of the differences in mitochondrial yields and in liver weights and expressing the activity per liver (Fig. 3.8.5b), the total sterol 27-hydroxylase activity was found to be increased in the same groups.

Figure 3.8.5b Total sterol 27-hydroxylase activity per liver

Values are means $\pm$ S.D.



4. RESULTS *IN VITRO* EXPERIMENT (RAT HEPATOCYTES)

From the first *in vitro* experiments performed in project 3M-1, it was suggested that the PFAS compounds might influence the internal acetate pool, which is the substrate for hepatic cholesterol synthesis. Since fatty acid catabolism is a source for acetate, the effect of the test compounds on the incorporation of different sized radiolabelled fatty acids into cholesterol has been investigated in the present project. As a positive control, a strong and specific inhibitor of cholesterol synthesis, rosuvastatin has been taken along in each separate experiment. Identical experiments have been performed 3 – 4 times (as mentioned at the figures)

Figure 4.1 Incorporation of [^{14} C]-acetate into cholesterol in rat hepatocytes *in vitro*
Values are means $\pm$ S.D. (n = 4).

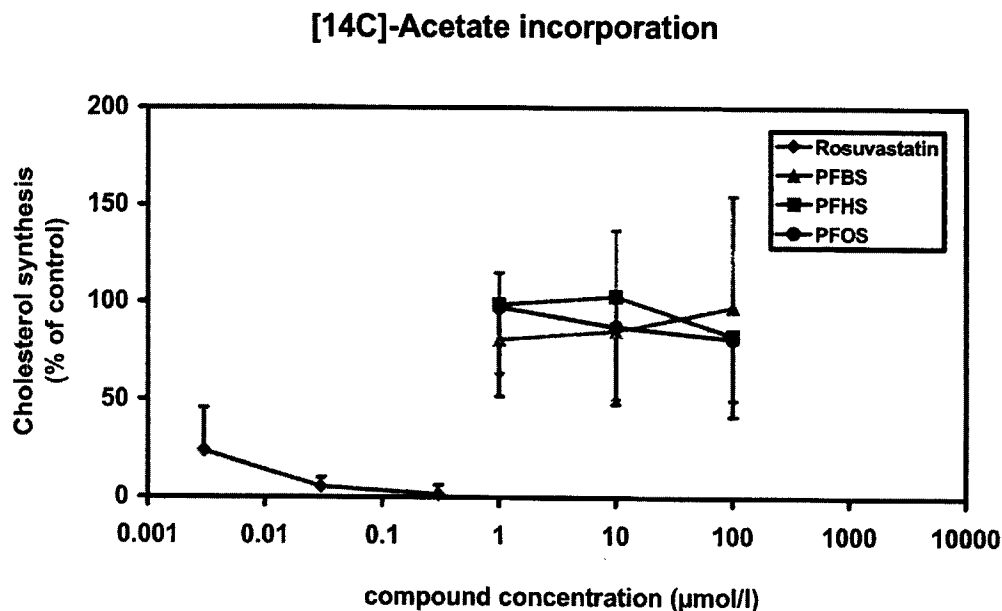
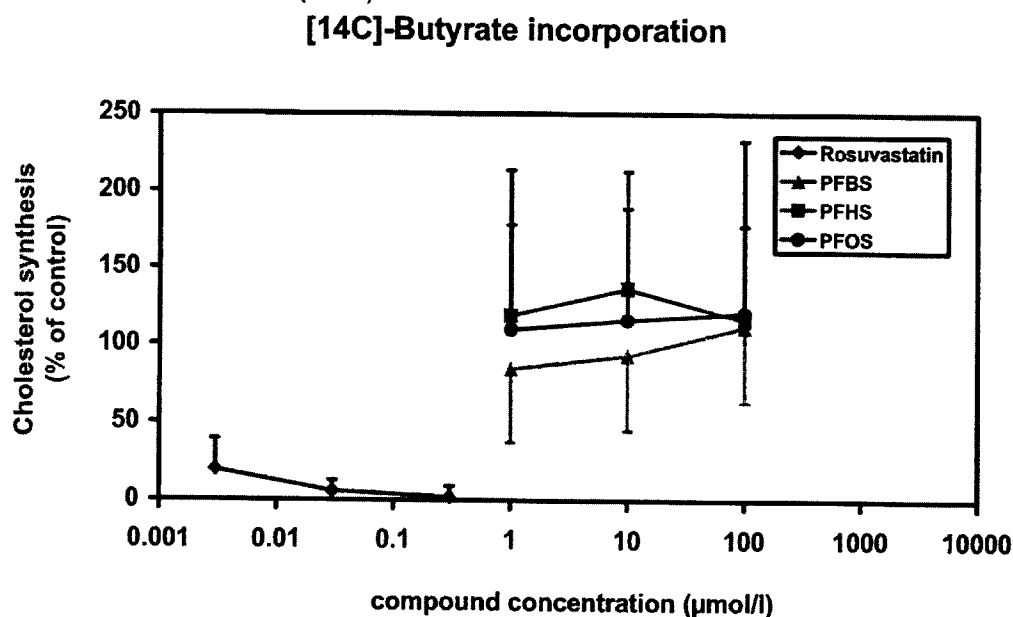


Figure 4.2 Incorporation of [^{14} C]-butyrate into cholesterol in rat hepatocytes *in vitro*
Values are means $\pm$ S.D. (n = 4).



Rosuvastatin strongly inhibited the incorporation of the short chain fatty acids acetate and butyrate into cholesterol (Figs. 4.1 and 4.2). Although there is a large variation in the data obtained for the test compounds in the individual experiments, on average there seems to be hardly an effect of these compounds on cholesterol synthesis from acetate and butyrate.

The incorporation of the longer fatty acid [^{14}C]-laurate into cholesterol is also comparable to control values in the presence of the PFAS's (Fig. 4.3); however, there might be a slight concentration dependent decreasing effect of PFHS and PFOS. Rosuvastatin is again a much stronger inhibitor if the cholesterol synthesis from [^{14}C]-laurate and also from [^{14}C]-palmitate (Fig. 4.4).

Figure 4.3 Incorporation of [^{14}C]-laurate into cholesterol in rat hepatocytes *in vitro*
Values are means $\pm$ S.D. (n = 3).

[^{14}C]-Laurate incorporation

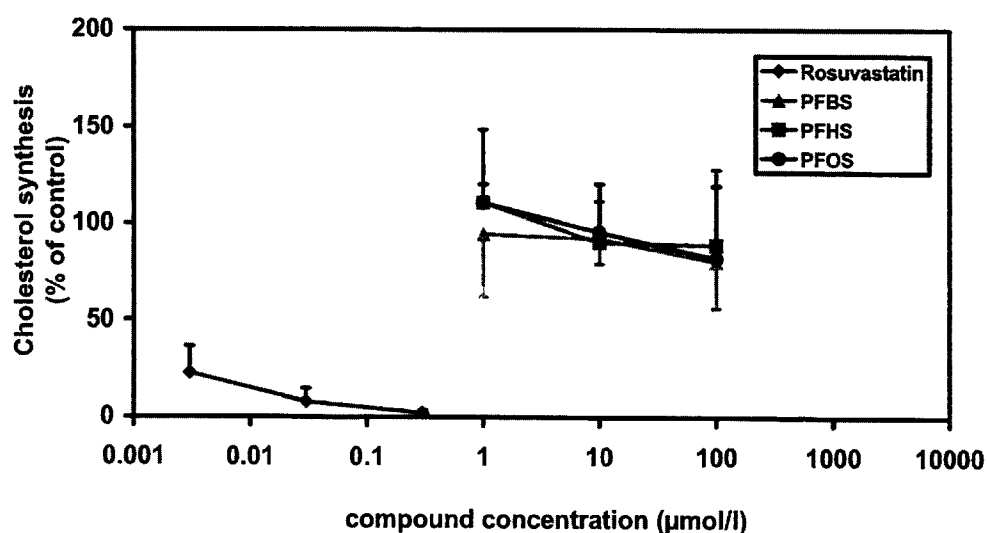
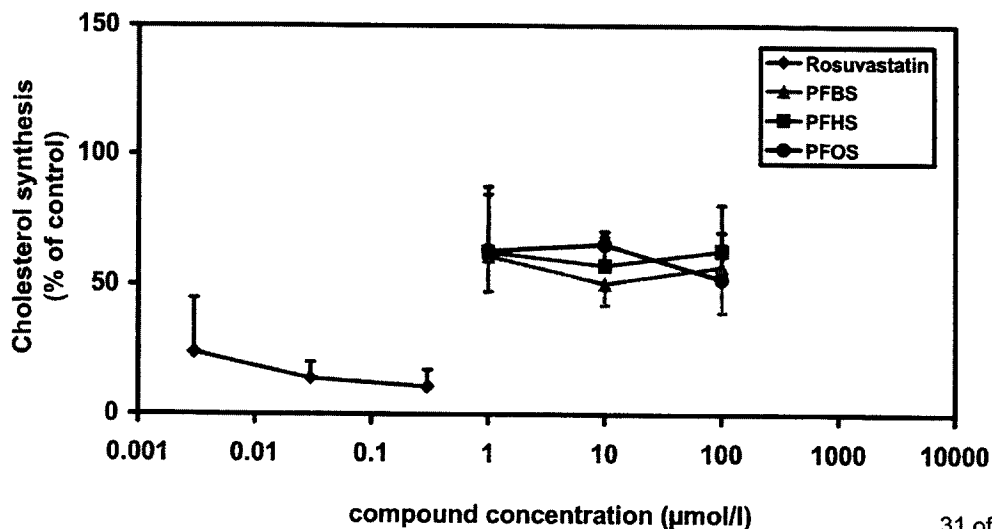


Figure 4.4 Incorporation of [^{14}C]-palmitate into cholesterol in rat hepatocytes *in vitro*
Values are means $\pm$ S.D. (n = 3).

[^{14}C]-Palmitate incorporation



The incorporation of palmitate, the longest fatty acid used in this study, into cholesterol was influenced in a somewhat remarkable way. In the presence of the different concentrations of the test compounds on average all values are lower than control values. But there is no obvious concentration dependency in this decrease. So, it is difficult to understand that all three compounds are influencing palmitate uptake/transport/degradation in the same concentration independent way. Since the solubility of this longer fatty acid in the medium is depending on several factors and the radiolabelled compound was present in tracer amounts, it might be that the test compounds have influenced its solubility and hence its availability for uptake in the cells.

So, all together the test compounds have either no or only slight effects on the incorporation of short and longer radiolabelled fatty acids into cholesterol in rat hepatocytes under the conditions used.

5. SUMMARY AND CONCLUSIONS

Although the test compounds have similar chemical structures, they show differences in their biological behavior. For that reason they are discussed here separately.

5.1. Effects of PFBS in ApoE3Leiden mice

Both PFBS-treated groups 2 (0.01%) and 3 (0.03%) showed no or small differences with the control group 1. No differences were found in body weight, food intake, plasma ALAT and ketone bodies, metabolic parameters as measured in metabolic cages, fecal sterol and fatty acid excretion, intestinal cholesterol absorption, fat tissue weight and liver weight, lipid contents and enzyme activities.

Small differences have been seen in plasma lipid levels: a slight decrease in cholesterol and triglycerides, which was reflected in minor changes of the lipoprotein patterns; VLDL seemed to be increased a little, but IDL/LDL and HDL were somewhat lower than these fractions in the control patterns.

Interesting is the small but significant increase in fecal bile acid excretion in the group 2 mice. These mice showed also an increased hepatic cholesterol 7 α -hydroxylase activity which might support the preceding notion, but because of the large standard deviation in this value it was not statistically significant.

The suggested small increase in bile acid synthesis might be related to the slightly decreased plasma lipid levels.

5.2. Effects of PFHS in ApoE3Leiden mice

The group 4 animals have been treated with 0.006% of PFHS throughout the 10 weeks of the study period. The higher dosed group 5 (0.02% of PFHS) showed already from the start deviations in food intake, which led to a large loss of body weight in the 2nd week of treatment. Therefore, from week 2, these mice were put back on control diet and remained on that throughout the rest of the treatment period. This resulted in a recovery of these animals, which, after a shorter or longer period, showed similar values as measured in the control group; however, some differences remained.

The PFHS-treatment in group 4 had the following effects:

Although food intake did not change, the body weight steadily decreased in the last 3 weeks. This can be explained by the prominent loss in fat tissue (measured as perigonadal fat mass; it might be better to measure plasma leptin as a marker for whole body fat). The latter effect was probably been caused by increased fatty acid oxidation, what can be concluded from increased plasma ketone bodies and a preference for fat oxidation over carbohydrate oxidation, as measured in the metabolic cage analysis (tendency towards decreased RER; group size was rather small). Additionally, O₂-consumption and concomitant energy expenditure was enhanced in these animals. Another indication for increased oxidation is the increased quantity of mitochondria,

isolated from the significantly enlarged livers. For further support of increased fatty acid oxidation, hepatic activity and/or mRNA's of enzymes involved in fatty acid oxidation, e.g. Acyl-CoA oxidase, should be measured.

Plasma cholesterol and triglycerides were strongly decreased by PFHS throughout the treatment period, which was paralleled by a change in lipoprotein profile: ApoB-containing fractions (VLDL, IDL and LDL) were decreased; whereas, a shift in HDL towards larger, less dense particles was observed. These phenomena can be explained by a decrease in hepatic VLDL production and decreased uptake/conversion of HDL by the liver.

In summary, liver functions have been changed, which is further supported by an increase in liver size/weight (liver lipid contents did not change), increased plasma ALAT values, increased HMG-CoA reductase activity and decreased cholesterol 7 α -hydroxylase, which are rate limiting enzymes in cholesterol and bile acid syntheses, respectively.

Mitochondrial sterol 27-hydroxylase activity was changed as well.

Changes in hepatic cholesterol/bile acid synthesis might have influenced the fecal lipid excretion and intestinal cholesterol absorption. PFHS increased fecal cholesterol and fatty acid excretion and decreased fecal bile acid excretion. On the other hand, changes in intestinal uptake/conversion and small changes in food intake cannot be ruled out in this respect. There is a trend observed towards increased intestinal cholesterol absorption by PFHS.

Several of the liver effects of PFHS are similar to those of a PPAR α agonist, e.g., like fibrates. For this reason it might be of use to further investigate the expression of other genes which are regulated by PPAR α .

As known, such compounds lower plasma lipids and decrease fat tissue as well, but their effect on intestinal functions is not known.

As mentioned above, in the group 5 animals with a 2 weeks-treatment at the highest dose of PFHS, followed by 8 weeks on control diet again, the effects by PFHS as seen in group 4 disappeared, and the parameters measured returned more or less rapidly to control values. That was not the case in all instances the case: The livers remained a little enlarged and plasma ALAT stayed somewhat higher than control. Ketone bodies remained significantly increased up to week 6, and fecal bile acid excretion was still reduced. So it might be that during this period PFHS was not yet totally eliminated from the mice. The values of plasma PFHS concentrations, which will be determined by 3M-company, will give inside in this matter.

5.3. Effects of PFOS in ApoE3Leiden mice

The effects of PFOS (group 6; 0.003%) on the parameters measured in ApoE3Leiden mice in this study were very similar to those of PFHS, however, the effects were in several instances more pronounced.

That means that group 6 mice showed:

Loss of (perigonadal) fat tissue, strongly increased plasma ketone bodies and a decreased RER, which showed a preference for fat oxidation over carbohydrate oxidation, and a concomitantly increased energy expenditure; all indications for an increased fatty acid oxidation. Additionally, increased quantities of mitochondria, have been isolated from the livers of these animals.

Plasma cholesterol and triglycerides were strongly decreased, with a similar change in lipoprotein profile as observed with PFHS. ApoB-containing fractions were decreased; whereas, a shift in HDL towards larger, less dense particles was observed. Interestingly, the "large"-HDL peak increased in time, suggesting that PFOS is accumulating during the treatment period in this group.

Furthermore, the liver weight increased almost 3 times with concomitantly increased plasma ALAT levels. Liver lipids, triglycerides and cholesteryl esters were significantly increased. Hepatic microsomal HMG-CoA reductase activity was increased and cholesterol 7 α -hydroxylase and mitochondrial sterol 27-hydroxylase activities were decreased.

PFOS did not change fecal cholesterol and fatty acid excretion, and decreased fecal bile acid excretion and composition. On the other hand, the ratio of different neutral sterols in the feces has been changed, and PFOS increased significantly intestinal cholesterol absorption. The latter might be a reflection of increased hepatic cholesterol synthesis, but other changes in intestinal cholesterol metabolism cannot be ruled out.

As with PFHS, the PFOS mechanism of action might be (partly) understood as working like a PPAR α agonist. This notion needs further investigation.

The observation in group 7 (2 weeks of a higher dose of PFOS followed by 10 weeks on control diet) are almost identical to those in group 6. And although cholesterol levels seem to recover after 4 weeks, the lipoprotein pattern continued to contain the same large "large"-HDL fraction. These all are indications that PFOS concentrations in the mice remained at a similar level throughout the whole period and that PFOS is not eliminated readily from the body. PFOS is known to have a long elimination half-life in rats, monkeys, and humans, and determination of the plasma PFOS-concentrations at the end of the treatment period, should confirm this presumption.

The only remarkable difference between group 6 and 7 is found in the fecal excretion data. Much less fatty acids have been found in the feces of group 7, which also possess a slightly different composition of fatty acids. So, intestinal fatty acid absorption (and/or conversion) seemed to be increased when PFOS is withdrawn from the food.

Table 5.1 gives an overview of the effects of PFBS, PFHS and PFOS treatment on the different measured parameters.

Table 5.1: Overview of effect of PFBS, PFHS and PFOS treatment on measured parameters

Measured parameter	PFBS 0.01%	PFHS 0.008%	PFHS 0.02%	PFOS 0.003%	PFOS 0.01%
Bodyweight	-	-	-	-	-
Food intake	-	-	-	-	-
Total cholesterol	-	-	-	-	-
Total triglycerides	-	-	-	-	-
Lipoprotein profile	-	-	-	-	-
LDL	-	-	-	-	-
HDL	-	-	-	-	-
VLDL	-	-	-	-	-
LDL/HDL ratio	-	-	-	-	-
Fecal bile acids	-	-	-	-	-
Fecal neutral sterols	-	-	-	-	-
Fecal fatty acids	-	-	-	-	-
Fatty acid balance	-	-	-	-	-
Intestinal cholesterol absorption	-	-	-	-	-

* : measured after 1 week of treatment

** : measured after 2 weeks after changing diet to control diet

n.s.: not significant

CONFIDENTIAL**APPENDIX TO TNO-REPORT
OF STUDY 3M-02**

Project / study number: 031.10074 / 3M-02

**TNO Quality of Life
TNO Biosciences**

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Appendix A. Code E3L mice before and after matching

mouse#	cage#	ear tag	group#	mouse#	cage#
before matching			after matching		
		L R			
658	86	0 1			
663	86	1 2			
712	93	0 0			
716	93	2 0			
752	98	0 0			
758	98	0 2			
763	99	1 1			
784	102	0 0			
790	102	0 2			
791	102	1 2			
641	84	1 0			
645	84	2 1			
646	84	0 2			
674	88	0 1			
737	96	1 0			
738	96	0 1			
740	96	2 0			
760	99	0 0			
765	99	2 1			
785	102	1 0			
650	85	0 1			
678	88	0 2			
690	90/91	0 1			
699	90/91	1 1			
729	95	1 0			
754	98	0 1			
756	98	2 0			
759	98	1 2			
766	99	0 2			
793	103	1 0			
681	89	1 0			
686	89	0 2			
704	92	0 0			
705	92	1 0			
706	92	0 1			
710	92	0 2			
768	100	0 0			
771	100	1 1			
792	103	0 0			
795	103	1 1			
665	87	1 0			
666	87	0 1			
667	87	1 1			
671	87	1 2			
679	88	1 2			
700	90/91	2 0			
730	95	0 1			
731	95	1 1			
744	97	0 0			
799	103	1 2			
714	93	0 1			
721	94	1 0			
727	94	1 2			
769	100	1 0			
774	100	0 2			
776	101	0 0			
778	101	0 1			
782	101	0 2			
783	101	2 2			
797	103	2 1			
652	85	2 0			
657	86	1 0			
670	87	0 2			
680	89	0 0			
687	89	1 2			
696	90/91	0 0			
720	94	0 0			
724	94	2 0			
761	99	1 0			
762	99	0 1			
excluded (655)	85	1 2			
excluded (656)	86	0 0			
excluded (741)	96	2 1			
excluded (742)	96	0 2			
excluded (748)	97	2 0			

Appendix B. Bodyweight and food intake measurements

B1. Individual bodyweights

Group	Mouse#	cage#	eartag		bodyweight (g)		
			L	R	week -2	week -1	week 0
run in	641	84	1	0	30.0	30.1	29.2
run in	645	84	2	1	27.5	28.1	28.7
run in	646	84	0	2	31.2	30.9	30.6
run in	650	85	0	1	27.5	27.6	28.5
run in	652	85	2	0	29.9	30.0	31.1
run in	657	86	1	0	31.4	30.9	32.2
run in	658	86	0	1	32.6	31.8	31.9
run in	663	86	1	2	30.1	30.9	31.1
run in	665	87	1	0	30.5	30.7	31.3
run in	666	87	0	1	25.0	25.6	25.4
run in	667	87	1	1	28.0	27.7	27.9
run in	670	87	0	2	30.7	31.0	31.3
run in	671	87	1	2	28.6	27.9	29.9
run in	674	88	0	1	31.5	31.4	31.9
run in	678	88	0	2	29.9	30.0	30.3
run in	679	88	1	2	29.3	29.0	30.9
run in	680	89	0	0	31.4	31.5	31.5
run in	681	89	1	0	29.4	29.2	30.9
run in	686	89	0	2	29.1	28.9	29.1
run in	687	89	1	2	29.9	29.6	31.5
run in	690	90/91	0	1	31.4	31.0	31.8
run in	696	90/91	0	0	26.2	26.3	26.7
run in	699	90/91	1	1	27.6	27.9	27.8
run in	700	90/91	2	0	29.7	29.4	29.5
run in	704	92	0	0	29.0	29.7	29.2
run in	705	92	1	0	31.4	30.9	30.4
run in	706	92	0	1	32.0	31.9	31.8
run in	710	92	0	2	24.6	24.8	26.4
run in	712	93	0	0	29.4	29.1	29.8
run in	714	93	0	1	29.0	29.6	30.2
run in	716	93	2	0	28.8	28.4	28.9
run in	720	94	0	0	28.2	28.8	29.1
run in	721	94	1	0	32.5	32.6	31.8
run in	724	94	2	0	27.5	27.1	29.0
run in	727	94	1	2	26.5	26.9	28.0
run in	729	95	1	0	25.0	25.3	27.0
run in	730	95	0	1	29.4	29.4	30.7
run in	731	95	1	1	28.8	28.5	29.3
run in	737	96	1	0	28.9	29.0	30.0
run in	738	96	0	1	28.1	28.7	28.3
run in	740	96	2	0	30.6	30.9	30.9
run in	744	97	0	0	27.0	27.4	27.7
run in	752	98	0	0	29.0	29.4	30.5
run in	754	98	0	1	28.8	29.0	31.1
run in	756	98	2	0	28.2	28.0	29.0
run in	758	98	0	2	27.8	27.3	29.3
run in	759	98	1	2	24.5	24.7	26.1
run in	760	99	0	0	25.2	25.7	26.4
run in	761	99	1	0	23.1	23.8	24.0
run in	762	99	0	1	25.5	25.9	25.5
run in	763	99	1	1	25.4	25.0	25.9
run in	765	99	2	1	27.2	26.8	26.5
run in	766	99	0	2	28.0	28.1	27.9
run in	768	100	0	0	27.0	27.6	28.9
run in	769	100	1	0	28.1	28.2	30.4
run in	771	100	1	1	29.0	29.3	29.8
run in	774	100	0	2	27.2	27.1	28.0
run in	776	101	0	0	25.5	25.7	25.3
run in	778	101	0	1	28.2	28.3	28.1
run in	782	101	0	2	27.5	27.6	29.0
run in	783	101	2	2	27.1	27.0	29.5
run in	784	102	0	0	28.6	28.9	28.9
run in	785	102	1	0	29.3	29.7	28.8
run in	790	102	0	2	28.8	28.7	29.0
run in	791	102	1	2	26.1	26.8	26.6
run in	792	103	0	0	27.4	27.5	26.0
run in	793	103	1	0	27.7	27.8	27.9
run in	795	103	1	1	26.8	26.7	26.9
run in	797	103	2	1	29.0	29.5	28.0
run in	799	103	1	2	29.1	29.4	29.5
AVERAGE					28.43	28.51	29.03
SD					2.03	1.93	1.93
run in	excluded (655)	85	1	2	27.3	27.0	28.5
run in	excluded (656)	86	0	0	22.2	22.9	24.6
run in	excluded (741)	96	2	1	29.0	29.2	30.9
run in	excluded (742)	96	0	2	31.0	31.6	32.2
run in	excluded (748)	97	2	0	30.6	30.9	31.0

Group	Mouse#	cage#	ear tag		Bodyweight (g)																	
			L	R	week 0	week 1	week 2	week 2.3	week 3	week 3.4	week 4	week 5	week 5.3	week 5.6	week 6	week 6.3	week 7	week 8	week 8.4	week 9	week 10	
2	1	1	0	1		31.9	31.4	32.6		32.5		32.6	32.9	33.9	33.9	32.9	33.2	33.5	33.8	33.7	34.5	34.3
	2	1	1	2		31.1	29.8	29.8		29.8		29.9	30.5	31.2	30.5	30.1	30.2	30.6	31.2	31.0	31.1	31.4
	3	2	0	0		29.8	30.2	29.8		29.6		29.8	30.7	30.4	31.0	30.0	30.2	30.5	30.2	30.3	30.0	30.5
	4	2	2	0		28.9	29.4	28.6		27.9		27.9	28.7	28.1	28.2	28.3	28.4	28.5	28.6	28.5	28.4	28.9
	5	3	0	0		30.5	30.0	30.9		30.5		30.4	31.1	31.1	30.6	29.2	31.1	30.8	31.0	30.8	31.2	32.0
	6	3	0	2		29.3	28.4	27.8		28.1		27.6	29.6	29.5	29.4	30.4	29.8	29.8	29.7	29.9	30.0	29.3
	7	4	1	1		25.9	25.8	24.8		25.0		25.7	26.5	26.7	27.2	26.3	26.5	27.0	27.5	27.3	27.7	28.0
	8	5	0	0		28.9	29.7	29.0		28.6		28.1	30.0	30.4	30.6	30.0	30.8	30.9	31.0	31.9	33.1	33.2
	9	5	0	2		29.0	28.9	29.8		29.7		29.2	30.5	30.6	31.0	30.5	30.7	31.0	30.7	30.8	30.4	31.7
	10	5	1	2		26.6	26.2	26.3		26.2		26.1	27.1	27.2	27.3	27.0	27.1	27.6	27.3	27.1	27.0	27.4
2						29.19	28.98	28.94		28.79		28.73	29.76	29.91	29.97	29.47	29.78	30.02	30.10	30.11	30.34	30.67
						1.85	1.76	2.24		2.15		2.08	1.90	2.14	2.02	1.89	1.99	1.90	1.94	2.03	2.32	2.26
	11	6	1	0		29.2	29.4	29.8		30.2		31.0	31.4	33.0	33.1	32.2	32.8	33.1	34.1	33.7	34.8	35.4
	12	8	2	1		28.7	28.5	28.9		29.0		28.9	29.4	29.8	30.0	30.0	30.0	29.5	29.5	29.5	30.1	30.6
	13	6	0	2		30.6	30.7	30.3		29.3		29.4	29.9	31.2	32.0	31.2	31.8	32.0	32.2	33.1	33.6	33.3
	14	7	0	1		31.9	31.7	32.3		31.7		31.9	32.9	32.8	33.1	33.6	33.1	33.0	33.7	33.5	33.6	33.8
	15	8	1	0		30.0	30.2	29.7		30.2		30.2	31.0	30.8	31.0	30.1	30.3	30.4	29.9	30.8	31.2	30.6
	16	8	0	1		28.3	28.2	29.4		29.6		29.4	30.2	30.1	29.8	30.0	30.9	29.5	30.5	31.0	31.2	30.7
	17	8	2	0		30.9	31.6	31.7		31.7		31.8	32.9	32.8	32.8	32.5	32.7	31.4	31.2	31.7	32.4	32.9
	18	9	0	0		26.4	25.9	25.9		25.6		26.4	26.2	26.5	26.6	26.3	25.9	26.2	26.4	26.5	27.8	28.3
AVERAGE SD	19	9	2	1		26.5	26.3	26.5		26.8		27.0	26.6	26.9	26.6	26.9	26.5	27.7	28.7	28.9	29.8	30.8
	20	10	1	0		28.8	28.1	28.8		28.2		28.3	28.6	29.0	28.8	29.0	29.1	29.5	29.7	29.5	30.1	30.1
						29.13	29.06	29.33		29.23		29.43	29.91	30.29	30.38	30.18	30.31	30.23	30.58	30.82	31.48	31.85
						1.80	2.03	2.00		1.96		1.87	2.31	2.33	2.48	2.34	2.53	2.23	2.32	2.29	2.14	2.12
	21	11	0	1		28.5	27.4	27.3		27.1		27.8	28.2	27.8	28.3	28.4	29.1	29.9	30.2	30.5	30.6	31.0
	22	12	0	2		30.3	29.2	29.7		28.9		29.0	28.8	28.8	28.9	29.2	29.2	30.1	30.0	30.1	30.0	30.9
	23	13	0	1		31.8	32.4	32.0		32.6		32.5	32.9	32.2	32.3	32.3	32.5	33.2	33.1	33.2	33.4	33.8
	24	13	1	1		27.8	27.8	28.6		28.8		29.2	28.9	28.8	28.9	29.2	29.3	29.3	29.5	29.3	29.4	28.4
	25	14	1	0		27.0	26.3	26.1		25.6		25.2	25.8	25.8	26.3	26.1	26.4	27.2	27.0	27.2	27.2	27.3
	26	15	0	1		31.1	30.8	30.0		29.1		29.2	29.0	28.7	28.5	28.8	29.1	29.4	30.1	31.0	31.4	30.9
AVERAGE SD	27	15	2	0		29.0	30.1	29.9		29.9		30.0	30.2	30.1	30.1	29.8	30.2	30.3	30.1	30.3	30.7	31.3
	28	15	1	2		26.1	26.4	25.3		24.9		25.0	25.1	25.0	24.7	25.1	25.4	26.3	26.4	26.1	26.3	25.9
	29	16	0	2		27.9	27.5	27.8		27.8		28.9	29.2	29.0	29.7	29.4	29.6	30.4	30.8	31.1	31.6	32.7
	30	17	1	0		27.9	27.8	27.4		27.3		26.7	27.1	27.0	27.0	27.6	27.8	28.9	28.6	28.5	28.1	27.7
						28.74	28.57	28.41		28.20		28.35	28.52	28.32	28.47	28.59	28.66	29.50	29.58	29.73	29.87	29.99
						1.82	2.00	2.03		2.20		2.27	2.21	2.07	2.12	2.00	1.98	1.87	1.91	2.05	2.17	2.54
	31	18	1	0		30.9	30.5	30.2		29.7		29.7	30.2	30.3	30.2	29.6	29.9	29.4	29.7	29.0	28.4	28.2
	32	18	0	2		29.1	29.3	29.2		29.2		28.9	29.3	29.3	29.2	28.7	29.2	29.4	29.0	28.7	28.1	28.1
	33	19	0	0		29.2	28.6	29.0		28.9		28.9	28.8	29.2	28.9	29.6	29.8	30.0	30.2	29.8	29.6	29.2
	34	19	1	0		30.4	31.0	31.6		30.8		30.9	30.4	30.9	30.7	30.5	30.5	30.5	30.3	30.4	30.2	29.6
AVERAGE SD	35	19	0	1		31.8	31.6	31.4		31.1		31.1	30.7	31.0	30.7	30.7	31.1	30.7	30.8	30.7	30.9	30.3
	36	19	0	2		26.4	25.6	25.6		25.7		25.3	25.3	25.6	25.8	26.2	26.5	26.4	26.5	26.4	26.4	26.2
	37	20	0	0		28.9	28.3	28.1		28.3		28.2	27.3	27.0	26.7	26.9	28.0	27.1	27.6	27.2	27.0	26.7
	38	20	1	1		29.8	30.3	30.7		30.2		30.6	30.2	30.2	30.2	30.1	30.9	30.7	30.9	30.6	30.4	29.7
	39	21	0	0		26.0	27.5	28.0		27.4		27.5	27.1	27.7	27.2	27.2	27.5	27.9	28.1	27.6	27.2	26.8
	40	21	1	1		26.9	26.1	26.3		27.0		27.3	27.5	27.7	27.7	27.7	27.5	28.3	28.5	28.4	28.6	28.1
						28.94	28.88	29.11		28.83		28.84	28.68	28.89	28.73	28.72	29.09	29.04	29.16	28.88	28.68	28.29
						1.95	2.04	2.02		1.74		1.83	1.80	1.82	1.78	1.62	1.61	1.54	1.47	1.50	1.55	1.41
	41	22	1	0		31.3	29.5	25.6	25.0	25.6	26.0	27.5	28.6	28.9	30.0	29.1	29.8	30.5	30.4	30.4	30.2	31.3
	42	22	0	1		25.4	24.7	23.8	23.8	24.8	24.8	24.2	25.0	25.2	25.3	25.5	25.6	25.9	25.6	25.4	25.0	25.4
AVERAGE SD	43	22	1	1		27.9	26.9	26.8	26.6	27.0	27.3	26.7	27.4	27.6	27.8	28.6	29.2	29.6	29.1	29.1	28.9	29.6
	44	22	1	2		29.9	29.4	25.4	25.0	25.7	27.5	28.1	28.2	28.5	28.1	28.8	29.1	29.1	29.1	29.2	29.3	29.4
	45	23	1	2		30.9	29.4	26.9	27.0	27.9	29.1	28.9	29.2	28.6	29.7	30.1	29.6	30.6	30.4	30.1	29.6	29.5
	46	24	2	0		29.5	28.4	26.7	26.5	27.9	28.6	28.4	28.2	28.5	28.6	28.6	28.6	30.2	29.9	29.8	29.7	30.0
	47	25	0	1		30.7	27.9	28.3	28.4	28.4	29.5	29.2	30.3	30.3	30.1	30.1	30.6	30.0	30.4	30.7	31.0	31.2
	48	25	1	1		29.3	27.9	25.8	25.6	28.0	29.7	29.3	29.3	29.3	29.9	29.7	30.2	30.5	30.6	30.5	30.4	30.7
	49	26	0	0		27.7	26.3	24.0	24.6	25.4	25.2	25.7	26.5	27.3	27.2	27.0	27.3	27.2	27.7	28.1	28.5	28.4
	50	27	1	2		29.5	28.0	26.1	25.3	27.0	27.6	27.8	28.0	27.7	28.7	28.4	28.6	29.0	29.1	28.9	29.0	29.0
						29.21	27.84	25.94	25.78	26.77	27.73	27.58	28.07	28.19	28.54	28.59	28.86	29.26	29.23	29.22	29.16	29.45
						1.78	1.53	1.36	1.35	1.30	1.67	1.83	1.51	1.37	1.52	1.42	1.48	1.57	1.56	1.57	1.64	1.70
AVERAGE SD	51	28	0	1		30.2	29.2	28.8		28.7		28.3	28.5	28.4	28.5	28.7	28.7	28.9	28.8	28.5		

Bodyweight, p values Mann-Whitney U-test																								
week	group 1 vs 2			group 1 vs 3			group 1 vs 4			group 1 vs 5			group 1 vs 6			group 1 vs 7			group 2 vs 3					
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
0	10	10	0.739	10	10	0.481	10	10	0.853	10	10	0.796	10	10	0.529	10	10	0.631	10	10	0.529	10	10	0.529
1	10	10	0.912	10	10	0.831	10	10	0.971	10	10	0.075	10	10	0.393	10	10	0.631	10	10	0.481	10	10	0.481
2	10	10	0.796	10	10	0.579	10	10	0.796	10	10	0.004	10	10	0.631	10	10	0.011	10	10	0.353	10	10	0.353
3	10	10	0.631	10	10	0.481	10	10	0.912	10	10	0.019	10	10	0.739	10	10	0.001	10	10	0.190	10	10	0.190
4	10	10	0.436	10	10	0.631	10	10	0.912	10	10	0.218	10	10	0.912	10	10	0.002	10	10	0.247	10	10	0.247
5	10	10	0.971	10	10	0.143	10	10	0.247	10	10	0.029	10	10	0.165	10	10	0.001	10	10	0.143	10	10	0.143
5.3	10	10	0.739	10	10	0.105	10	10	0.218	10	10	0.063	10	10	0.143	10	10	0.002	10	10	0.052	10	10	0.052
5.6	10	10	0.739	10	10	0.123	10	10	0.143	10	10	0.075	10	10	0.165	10	10	0.001	10	10	0.089	10	10	0.089
6	10	10	0.579	10	10	0.190	10	10	0.481	10	10	0.218	10	10	0.218	10	10	0.005	10	10	0.075	10	10	0.075
6.3	10	10	0.579	10	10	0.165	10	10	0.481	10	10	0.190	10	10	0.247	10	10	0.007	10	10	0.105	10	10	0.105
7	10	10	0.971	10	10	0.280	10	10	0.165	10	10	0.190	10	10	0.075	10	10	0.003	10	10	0.393	10	10	0.393
8	10	10	0.739	10	10	0.353	10	10	0.247	10	10	0.280	10	10	0.063	10	10	0.004	10	10	0.436	10	10	0.436
8.4	10	10	0.529	10	10	0.684	10	10	0.143	10	10	0.247	10	10	0.029	10	10	0.029	10	10	0.280	10	10	0.280
9	10	10	0.247	10	10	0.853	10	10	0.105	10	10	0.247	10	10	0.019	10	10	0.019	10	10	0.165	10	10	0.165
10	10	10	0.393	10	10	0.481	10	10	0.029	10	10	0.315	10	10	0.003	10	10	0.035	10	10	0.436	10	10	0.436
week	group 2 vs 4			group 2 vs 5			group 2 vs 6			group 2 vs 7			group 3 vs 4			group 3 vs 5			group 3 vs 6					
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
0	10	10	0.912	10	10	0.796	10	10	0.579	10	10	0.579	10	10	0.739	10	10	0.529	10	10	0.579	10	10	0.579
1	10	10	0.853	10	10	0.143	10	10	0.353	10	10	0.481	10	10	0.631	10	10	0.853	10	10	0.912	10	10	0.912
2	10	10	0.796	10	10	0.001	10	10	0.353	10	10	0.005	10	10	0.393	10	10	0.007	10	10	0.796	10	10	0.796
3	10	10	0.684	10	10	0.005	10	10	0.280	10	10	<0.001	10	10	0.353	10	10	0.105	10	10	0.912	10	10	0.912
4	10	10	0.529	10	10	0.029	10	10	0.353	10	10	<0.001	10	10	0.684	10	10	0.393	10	10	0.971	10	10	0.971
5	10	10	0.280	10	10	0.043	10	10	0.247	10	10	0.001	10	10	0.631	10	10	0.631	10	10	0.971	10	10	0.971
5.3	10	10	0.247	10	10	0.035	10	10	0.123	10	10	0.001	10	10	0.393	10	10	0.796	10	10	0.796	10	10	0.796
5.6	10	10	0.190	10	10	0.075	10	10	0.105	10	10	0.002	10	10	0.579	10	10	0.912	10	10	0.971	10	10	0.971
6	10	10	0.165	10	10	0.089	10	10	0.075	10	10	0.004	10	10	0.684	10	10	1.000	10	10	0.684	10	10	0.684
6.3	10	10	0.218	10	10	0.075	10	10	0.105	10	10	0.009	10	10	0.579	10	10	0.912	10	10	0.579	10	10	0.579
7	10	10	0.218	10	10	0.039	10	10	0.089	10	10	0.003	10	10	0.912	10	10	0.853	10	10	0.218	10	10	0.218
8	10	10	0.165	10	10	0.190	10	10	0.052	10	10	0.002	10	10	0.853	10	10	0.853	10	10	0.218	10	10	0.218
8.4	10	10	0.035	10	10	0.075	10	10	0.011	10	10	0.002	10	10	0.315	10	10	0.436	10	10	0.063	10	10	0.063
9	10	10	0.009	10	10	0.015	10	10	0.002	10	10	<0.001	10	10	0.218	10	10	0.353	10	10	0.052	10	10	0.052
10	10	10	<0.001	10	10	0.035	10	10	<0.001	10	10	<0.001	10	10	0.105	10	10	0.579	10	10	0.043	10	10	0.043
week	group 3 vs 7			group 4 vs 5			group 4 vs 6			group 4 vs 7			group 5 vs 6			group 5 vs 7			group 6 vs 7					
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
0	10	10	0.481	10	10	0.631	10	10	0.796	10	10	0.631	10	10	0.684	10	10	0.631	10	10	0.481	10	10	0.481
1	10	10	0.971	10	10	0.280	10	10	0.529	10	10	0.529	10	10	0.684	10	10	0.393	10	10	0.912	10	10	0.912
2	10	10	0.023	10	10	0.002	10	10	0.529	10	10	0.007	10	10	0.002	10	10	0.796	10	10	0.015	10	10	0.015
2.3																								
3	10	10	0.003	10	10	0.009	10	10	0.579	10	10	<0.001	10	10	0.043	10	10	0.023	10	10	0.001	10	10	0.001
3.4																								
4	10	10	0.011	10	10	0.165	10	10	0.579	10	10	0.001	10	10	0.353	10	10	0.011	10	10	0.002	10	10	0.002
5	10	10	0.029	10	10	0.393	10	10	0.912	10	10	0.011	10	10	0.579	10	10	0.015	10	10	0.009	10	10	0.009
5.3	10	10	0.043	10	10	0.315	10	10	0.529	10	10	0.009	10	10	0.796	10	10	0.007	10	10	0.015	10	10	0.015
5.6	10	10	0.015	10	10	0.579	10	10	0.796	10	10	0.015	10	10	0.912	10	10	0.007	10	10	0.019	10	10	0.019
6	10	10	0.052	10	10	0.796	10	10	0.739	10	10	0.035	10	10	0.631	10	10	0.035	10	10	0.190	10	10	0.190
6.3	10	10	0.023	10	10	0.631	10	10	0.481	10	10	0.019	10	10	0.529	10	10	0.005	10	10	0.105	10	10	0.105
7	10	10	0.003	10	10	0.853	10	10	0.353	10	10	0.029	10	10	0.190	10	10	0.003	10	10	0.247	10	10	0.247
8	10	10	0.019	10	10	0.739	10	10	0.315	10	10	0.035	10	10	0.165	10	10	0.005	10	10	0.631	10	10	0.631
8.4	10	10	0.043	10	10	0.529	10	10	0.165	10	10	0.143	10	10	0.089	10	10	0.019	10	10	0.853	10	10	0.853
9	10	10	0.052	10	10	0.353	10	10	0.165	10	10	0.481	10	10	0.063	10	10	0.063	10	10	0.436	10	10	0.436
10	10	10	0.123	10	10	0.089	10	10	0.190	10	10	0.912	10	10	0.035	10	10	0.075	10	10	0.218	10	10	0.218

p<0.05

B2. Food intake measurements

cage#	number of mice	Food on cage week -2 (g)	Food off cage week -1 (g)	days	Food intake (g/day/mouse)	Food on cage week -1 (g)	Food off cage week 0 (g)	days	Food intake (g/day/mouse)
84	3	86.1	37.1	6	2.72	82	25	7	2.71
85	3	88.8	41.6	6	2.62	81.8	19.7	7	2.96
86	4	117.2	49.1	6	2.84	108.9	30.3	7	2.81
87	5	131.5	51.8	6	2.66	132.7	39.4	7	2.67
88	3	84.2	22.9	6	3.41	77.6	10.4	7	3.20
89	4	105.6	29.3	6	3.18	103.9	20.9	7	2.96
90/91	4	108.5	40.9	6	2.82	105.2	27.7	7	2.77
92	4	107.7	49.6	6	2.42	108.2	40.3	7	2.43
93	3	79.3	21	6	3.24	80.3	16.7	7	3.03
94	4	104.1	40	6	2.67	108.8	31.1	7	2.78
95	3	82.6	25.7	6	3.16	81.6	17.1	7	3.07
96	5	132.8	40	6	3.09	130.8	28.5	7	2.92
97	2	54.5	20.8	6	2.81	52.2	9.5	7	3.05
98	5	139.5	57.2	6	2.74	129.7	33.2	7	2.76
99	6	156.4	78.2	6	2.17	152.1	51.8	7	2.39
100	4	105.8	30.5	6	3.14	104.2	20.5	7	2.99
101	4	102.2	40.3	6	2.58	106.9	31	7	2.71
102	4	102.3	44.7	6	2.40	106.8	33.2	7	2.63
103	5	132.2	53.6	6	2.62	130.6	41.7	7	2.54
					2.80				2.81
					0.32				0.22

Group	cage	number of mice	Food on cage week 0 (g)	Food off cage week 1 (g)	Food intake g/day/mouse	Food on cage week 1 (g)	Food off cage week 2 (g)	Food intake g/day/mouse	Food on cage week 2 (g)	Food off cage week 2.3	Food intake g/day/mouse	Food on cage week 2.3	Food off cage week 3 (g)	Food intake g/day/mouse	Food on cage week 3 (g)	Food off cage week 4 (g)	Food intake g/day/mouse
	1	2	70.8	34.8	3.00	51.4	12	3.28	57.2	15.2	3.00	64.5	16.2	3.00	64.5	28.8	3.00
	2	2	69	28.5	3.54	52.3	9.9	3.53	55	9.3	3.28	59.5	9.3	3.28	59.5	21	3.22
	3	2	62.5	28.4	3.01	51.1	10.9	3.35	55.7	19.2	3.21	59.6	19.2	3.21	59.6	21.2	3.20
	4	2	31	12.5	3.08	28.7	10.5	3.20	27.8	5.1	3.21	30.5	5.1	3.21	30.5	10.7	3.32
	5	3	85.1	38.3	2.66	83.8	31.4	2.80	75.7	17.4	2.87	80.4	17.4	2.87	80.4	30.8	3.09
					3.06			3.25			2.97			2.97			3.09
	6	3	85.8	34.1	0.32	80.7	24.4	0.23	77.6	8.7	0.28	77.4	8.7	0.28	77.4	19.5	0.23
	7	1	38.3	15.3	3.83	28.5	4.3	3.13	27	0.6	3.28	30.1	0.6	3.28	30.1	6.4	3.22
	8	3	89.4	31.4	3.22	81.3	20.1	3.40	83.4	16.5	3.17	79	16.5	3.17	79	18.9	3.36
	9	2	59.8	28.6	2.60	52.9	18	2.91	55.5	17.3	2.73	54.3	17.3	2.73	54.3	19.6	2.89
	10	1	34.1	18.2	3.17	31.1	12.1	3.17	31.8	10.2	3.09	33.5	10.2	3.09	33.5	14	3.25
					3.04			3.33			2.95			2.95			3.27
	11	1	34.4	17	0.51	26.4	6.1	0.43	29.9	17.5	0.33	31.3	17.5	0.33	31.3	11	0.26
	12	1	35	16.4	2.90	31.4	11.6	3.38	29.4	7.9	1.77	31.3	7.9	1.77	31.3	13.7	3.38
	13	2	63	24.3	3.23	60	18.2	3.30	56.3	8.4	3.07	67.6	8.4	3.07	67.6	24.8	3.37
	14	1	32.2	13.5	3.12	27.6	7.6	3.05	30.5	10.3	3.42	27.4	10.3	3.42	27.4	9.1	3.05
	15	3	84.1	31.3	2.83	76.3	23.8	2.82	61.6	25.2	2.89	78.4	25.2	2.89	78.4	26.5	2.88
	16	1	29	12.6	2.73	27.9	8.2	3.28	35.1	15.3	2.83	32.9	15.3	2.83	32.9	14	3.15
	17	1	34.9	12.2	3.12	28.3	8.5	3.30	30.1	10.1	2.86	30.2	10.1	2.86	30.2	11.5	3.12
					3.02			3.30			2.94			2.94			3.15
	18	2	62.4	20.9	0.17	50.9	11.4	0.21	57.4	15.7	0.28	56.7	15.7	0.28	56.7	18.7	0.25
	19	4	110.9	47.6	2.63	98.6	33.7	2.70	106.4	24.8	2.95	110.8	24.8	2.95	110.8	46.8	2.66
	20	2	54.5	12.5	3.50	48.6	8.1	3.38	53.4	10	3.10	55.6	10	3.10	55.6	16.2	3.28
	21	2	55.1	28.8	2.94	58.8	17.8	3.25	52.3	11.8	2.91	59.1	11.8	2.91	59.1	23.1	3.00
					3.13			3.16			2.97			2.97			3.03
	22	4	108.8	48.9	0.42	100.7	40.6	0.31	108.7	62.5	0.09	104.1	62.5	0.09	104.1	30.4	0.27
	23	1	28.5	10.7	3.13	24.9	5.6	3.22	31.7	23.7	2.74	38.5	23.7	2.74	38.5	22.5	3.07
	24	1	23.6	11.6	3.00	27.2	11.2	3.17	31.3	20.1	2.78	40.3	20.1	2.78	40.3	18.7	2.67
	25	2	53.8	17.5	3.03	49.2	14.4	2.90	57.8	41.4	3.10	65.1	41.4	3.10	65.1	21.8	3.43
	26	1	32	15.9	2.68	25.8	9	2.77	30.3	15.5	3.33	35.3	15.5	3.33	35.3	16.8	3.61
	27	1	32	14.9	2.85	29.5	13	2.75	34.1	17.8	3.14	31.3	17.8	3.14	31.3	12.3	2.75
					2.88			2.80			3.00			3.00			3.12
	28	1	38.1	16	0.24	29	8.6	0.24	35.1	14.3	0.23	28	14.3	0.23	28	9.5	0.37
	29	2	96.2	20.1	3.35	83.8	11.8	3.40	87.4	10.3	2.97	94.5	10.3	2.97	94.5	16.3	3.25
	30	2	62.2	20.7	3.29	51.2	9.3	3.49	50.2	7.1	3.36	54.8	7.1	3.36	54.8	19.1	3.18
	31	4	105.1	44.7	2.84	101.5	33	2.85	104.6	25.2	2.84	105.1	25.2	2.84	105.1	39	2.98
	32	1	40.5	23.6	2.82	31.1	11.1	3.33	36	17.8	2.80	28.5	17.8	2.80	28.5	11.1	2.75
					3.07			3.32			2.97			2.97			3.05
	33	1	33.3	14.2	0.32	30.5	12.8	0.27	37.6	23	0.28	50.1	23	0.28	50.1	32.1	0.19
	34	1	32.8	14.6	3.18	27.6	11.9	2.95	32.4	24.2	2.36	41.5	24.2	2.36	41.5	20.3	3.00
	35	1	29.8	13.1	3.17	28.2	10.8	2.82	31.1	16.6	2.24	31.5	16.6	2.24	31.5	13.4	3.03
	36	2	46.8	16.1	2.95	40.8	21	2.90	45.8	26.7	2.62	60.4	26.7	2.62	60.4	26.1	3.02
	37	1	37	16.1	3.37	35.6	13.5	2.88	33.9	18.5	3.07	27.3	18.5	3.07	27.3	8.2	2.69
	38	2	30.5	14.5	2.72	29.2	13.5	2.62	33.9	28.1	2.43	52.7	28.1	2.43	52.7	18.4	3.18
	39	2	55.7	25.1	2.40	54.2	25.7	2.38	55.7	34.5	1.96	54.9	34.5	1.96	54.9	28.1	2.86
					2.65			2.48	56.4	44.5	2.73	58.5	44.5	2.73	58.5	28.1	2.53
					0.30			0.22			0.81			0.81			0.22

Group	cage#	number of mice	Food on cage week 4 (g)	Food off cage week 5 (g)	days	Food intake g/day/mouse	Food on cage week 5 (g)	Food off cage week 6 (g)	days	Food intake g/day/mouse	Food on cage week 6 (g)	Food off cage week 7 (g)	days	Food intake g/day/mouse
	1	2	50.3	19.0	5.5	2.85	60.2	22.1	7	2.72	78.3	61.7	3	2.77
	2	2	55.6	22.0	5.5	3.05	60.7	19.5	7	2.94	73.4	55.5	3	2.98
	3	2	51.7	18.3	5.5	3.04	57.2	18.8	7	2.89	67	48.9	3	3.02
	4	1	26.2	10.0	5.5	2.95	31.6	10.7	7	2.99	38.3	29.1	3	3.07
	5	3	83.0	34.6	5.5	2.93	77.1	19.2	7	2.76	94.8	71	3	2.64
						2.96				2.86				2.90
						0.08				0.12				0.18
2	6	3	74.4	26.0	5.5	2.93	85.4	19.8	7	3.12	97.1	69.2	3	3.10
2	7	1	29.7	10.8	5.5	3.44	37.4	12.4	7	3.57	42	32.6	3	3.13
2	8	3	75.5	24.6	5.5	3.08	85.2	14.2	7	3.38	85.6	54.1	3	3.50
2	9	2	50.2	23.8	5.5	2.40	51.9	13.6	7	2.74	60.9	46.3	3	2.43
2	10	1	25.7	9.5	5.5	2.95	33.8	13.4	7	2.89	46.3	37.3	3	3.00
AVERAGE						2.96				3.14				3.03
SD						0.37				0.34				0.39
	11	1	26.5	9.8	5.5	3.04	36	15.7	7	2.90	39.9	30.3	3	3.20
	12	1	29.5	14.7	5.5	2.69	37.4	16.2	7	3.03	40.9	31.4	3	3.17
	13	2	55.8	18.2	5.5	3.42	55.9	7.1	7	3.49	56.5	39.2	3	2.88
	14	1	30.2	16.1	5.5	2.56	35.4	15.6	7	2.83	46.1	37.8	3	2.77
	15	3	84.8	42.1	5.5	2.59	89.8	32.7	7	2.72	114.5	91.4	3	2.57
	16	1	25.7	10.0	5.5	2.85	27.4	8	7	2.77	34.9	28.2	3	2.90
	17	1	35.6	20.9	5.5	2.67	31.2	9.4	7	3.11	37.9	29.5	3	2.80
						2.83				2.98				2.90
						0.31				0.26				0.22
4	18	2	53.0	19.4	5.5	3.05	57.7	16.5	7	2.94	61.5	42.6	3	3.15
4	19	4	107.9	52.0	5.5	2.54	106.9	33.2	7	2.63	130.6	98.9	3	2.64
4	20	2	58.2	26.7	5.5	2.86	53.4	11.1	7	3.02	70	50.3	3	3.28
4	21	2	58.0	29.5	5.5	2.59	57.7	17.7	7	2.86	67.9	50.3	3	2.93
AVERAGE						2.76				2.86				3.00
SD						0.24				0.17				0.28
	22	4	105.0	60.2	4.5	2.49	109.2	32.3	7	2.75	138.4	107.2	3	2.60
	23	1	30.5	16.8	4.5	3.04	41.4	20.1	7	3.04	52.3	44.3	3	2.67
	24	1	30.2	15.7	4.5	3.22	32.5	10.6	7	3.13	37.3	27.6	3	3.23
	25	2	53.0	22.2	4.5	3.42	61.1	15.5	7	3.26	74.9	53.8	3	3.52
	26	1	28.5	15.4	4.5	2.91	32.8	12.5	7	2.90	39.9	31.1	3	2.93
	27	1	27.6	14.3	4.5	2.96	31.8	10.2	7	3.06	35.4	26.8	3	2.87
AVERAGE						3.01				3.02				2.97
SD						0.32				0.18				0.35
8	28	1	30.2	16.3	5.5	2.53	36.3	16.6	7	2.81	44.3	34.9	3	3.13
8	29	2	50.5	18.2	5.5	2.94	60.8	20.3	7	2.89	66.8	48.7	3	3.02
8	30	2	54.1	22.6	5.5	2.86	52.8	12.3	7	2.88	60	42.9	3	2.85
8	31	4	102.0	45.9	5.5	2.55	105.5	36.7	7	2.46	142	112.9	3	2.43
8	32	1	30.0	17.1	5.5	2.34	34.8	16	7	2.69	46.7	39	3	2.57
AVERAGE						2.64				2.75				2.80
SD						0.25				0.18				0.30
	33	1	33.2	17.4	4.5	3.51	33.2	12.7	7	2.93	35.7	27.4	3	2.77
	34	1	31.4	16.7	4.5	3.27	35.4	16.3	7	2.73	42.4	33.6	3	2.87
	35	1	41.8	29.1	4.5	2.82	39.9	20	7	2.84	46.1	36.9	3	3.07
	36	2	45.3	16.2	4.5	3.23	78.1	38.8	7	2.81	90.6	73.3	3	2.88
	37	1	26.2	13.8	4.5	2.76	31.1	12.1	7	2.71	39.7	30.7	3	3.00
	38	2	65.5	35.9	4.5	3.29	61.2	24.9	7	2.59	76.5	60.4	3	2.68
	39	2	55.0	33.8	4.5	2.36	52.9	15	7	2.71	65.9	50.8	3	2.52
AVERAGE						3.03				2.76				2.83
SD						0.40				0.11				0.19

Group	cage#	mouse#	Food on cage week 7 (g)	Food off cage week 7.5 (g)	days	Food intake g/day/mouse	Food on cage week 7.5(g)	Food off cage week 8 (g)	days	Food intake g/day/mouse
2	1	1	438.1	428.4	3	3.22	29.8	15.7	4	3.52
	MC 101	2	metabolic cage				20.3	12.8	3	2.51
	MC 105	3	metabolic cage				18.6	8.7	3	3.29
	MC 201	4	metabolic cage				23.5	15.0	3	2.84
	3	5	485.4	476.5	3	2.96	26.1	13.9	4	3.05
	MC 206	6	metabolic cage				19.2	8.3	3	3.63
	4	7	496.1		3	2.86	29.2	18.2	4	2.75
	5	8,9,10	425.4	397.3	3	3.12	54.7	25.8	4	2.41
						3.04				3.00
						0.16				0.45
	6	11,12,13	435	407.6	3	3.04	55.9	12.5	4	3.62
	7	14	429.7	421.0	3	2.91	21.9	11.9	4	2.51
	8	15,16,17	475.5	442.1	3	3.71	44.3	11.7	4	2.72
	9	18,19	450.2	431.3	3	3.15	33.6	8.4	4	3.15
	10	20	425.7	9.5	3	2.94	32.1	17.3	4	3.70
	AVERAGE					3.15				3.14
	SD					0.33				0.53
	MC 102	21	metabolic cage				35.6	26.2	3	3.12
	MC 106	22	metabolic cage				29.4	21.4	3	2.67
	13	23	455.8	445.8	3	3.35	33.1	20.3	4	3.20
	MC 202	24	metabolic cage				26.8	17.7	3	3.02
	14	25	430.2	418.8	3	3.79	36.9	24.7	4	3.06
	15	26,28	465.3	449.8	3	2.58	45.1	20.5	4	3.08
	MC 206	27	metabolic cage				32.9	25.1	3	2.61
	16	29	437.8	428.5	3	3.10	26.3	15.5	4	2.71
	17	30	429.1	421.5	3	2.53	44.1	34.7	4	2.36
						3.07				2.87
						0.53				0.29
	MC 103	31	metabolic cage				44.3	35.6	3	2.89
	MC 107	32	metabolic cage				51.2	43.3	3	2.62
19	33,34,35,36	486.1	448.3	3	3.15	84.3	36.0	4	3.02	
MC 203	37	metabolic cage				33.1	23.1	3	3.34	
MC 207	38	metabolic cage				32.6	23.2	3	3.14	
21	39,40	436.2	419.7	3	2.75	44.2	27.0	4	2.15	
AVERAGE					2.95				2.86	
SD					0.28				0.42	
5	22	41,42,43,44	505.9	470.3	3	2.97	109.2	63.4	4	2.86
5	23	45	443.9	434.1	3	3.26	41.4	31.1	4	2.57
5	24	46	438.7	428.7	3	3.35	32.5	18.9	4	3.41
5	25	47,48	443.3	423.9	3	3.24	61.1	38.2	4	2.86
5	26	49	428.6	419.7	3	2.98	32.8	20.9	4	2.98
5	27	50	436.1	427.5	3	2.86	31.6	22.2	4	2.36
AVERAGE					3.11					2.84
SD					0.20					0.36
6	MC104	51	metabolic cage				38.2	27.5	3	3.58
6	29	52	432.6	424.2	3	2.81	27.6	15.6	4	3.00
6	MC 108	53	metabolic cage				33.1	25.6	3	2.49
6	MC204	54	metabolic cage				28.4	20.7	3	2.57
6	MC208	55	metabolic cage				33.1	24.7	3	2.81
6	31	56,57,58,59	409.8	371.4	3	3.20	87.4	46.3	4	2.57
6	32	60	441.6	433.5	3	2.69	21.7	11.4	4	2.58
AVERAGE						2.90				2.80
SD						0.27				0.39
7	33	61	439.2	429.8	3	3.12	33.1	22.4	4	2.68
7	34	62	431.4	422.0	3	3.15	32.5	22.5	4	2.51
7	35	63	442.7	434.7	3	2.67	39.4	27.5	4	2.98
7	36	64,65	445.6	427.0	3	3.10	66.1	39.3	4	3.35
7	37	66	426.1	417.7	3	2.79	30.2	18.8	4	2.84
7	38	67,68	465.5	446.0	3	3.25	65.8	40.7	4	3.14
7	39	69,70	445.2	423.9	3	3.55	52.1	32.5	4	2.45
AVERAGE						3.09				2.85
SD						0.29				0.33

NB: week 7-7.5: all mice are put on powdered food because of metabolic cages of part of mice

Group	Mouse#	cage#	Food on cage week 8 (g)	Food off cage week 9 (g)	days	Food intake g/day/mouse
	1	1	34.3	11.7	7	3.23
	2	1	27.1	5.8	7	3.05
	3	2	28.6	7.9	7	2.96
	4	2	44.1	24.6	7	2.79
	5	3	36.9	15.6	7	3.05
	6	3	43.3	20.5	7	3.26
	7	4	42.2	22.2	7	2.86
	8	5	34.2	10.1	7	3.45
	9	5	33.0	12.1	7	2.98
	10	5	32.9	8.6	7	3.47
						3.11
						0.23
	11	6	34.1	9.5	7	3.52
	12	6	36.5	16.4	7	2.87
	13	6	28.4	6.3	7	3.16
	14	7	29.5	11.4	7	2.58
	15	8	28.3	5.8	7	3.22
	16	8	27.1	3.2	7	3.42
	17	8	36.0	15.9	7	2.87
	18	9	44.3	22.2	7	3.16
	19	9	45.2	25.0	7	2.88
	20	10	33.9	9.3	7	3.52
AVERAGE						3.12
SD						0.32
	21	11	34.0	12.0	7	3.15
	22	12	35.1	14.2	7	2.98
	23	13	29.8	7.7	7	3.16
	24	13	27.6	8.2	7	2.77
	25	14	44.1	18.8	7	3.62
	26	15	44.3	23.4	7	2.99
	27	15	47.2	26.3	7	2.99
	28	15	34.9	13.8	7	3.01
	29	16	33.2	13.1	7	2.87
	30	17	32.6	12.6	7	2.86
						3.04
						0.24
	31	18	33.1	11.5	7	3.08
	32	18	34.2	15.5	7	2.67
	33	19	45.7	24.8	7	2.98
	34	19	36.0	14.0	7	3.15
	35	19	45.7	23.0	7	3.24
	36	19	44.1	25.6	7	2.65
	37	20	36.9	17.2	7	2.81
	38	20	32.1	10.7	7	3.06
	39	21	22.5	1.2	7	3.04
	40	21	33.4	12.3	7	3.02
AVERAGE						2.97
SD						0.20
	41	22	44.1	19.5	7	3.52
	42	22	37.7	18.9	7	2.68
	43	22	45.1	21.2	7	3.42
	44	22	44.2	25.6	7	2.66
	45	23	35.6	15.2	7	2.91
	46	24	43.2	19.8	7	3.35
	47	25	44.8	26.1	7	2.67
	48	25	42.5	18.6	7	3.42
	49	26	29.6	7.9	7	3.10
	50	27	34.3	15.6	7	2.67
AVERAGE						3.04
SD						0.36
	51	28	33.9	10.7	7	3.32
	52	29	32.4	14.6	7	2.55
	53	29	35.6	18.6	7	2.43
	54	30	41.8	19.9	7	3.13
	55	30	42.1	22.0	7	2.87
	56	31	44.0	23.1	7	2.98
	57	31	43.3	23.1	7	2.88
	58	31	32.5	9.8	7	3.24
	59	31	28.2	7.1	7	3.01
	60	32	29.4	12.0	7	2.49
AVERAGE						2.89
SD						0.31
	61	33	34.4	14.3	7	2.87
	62	34	45.2	21.3	7	3.41
	63	35	30.1	8.8	7	3.05
	64	36	29.8	7.7	7	3.16
	65	36	27.2	3.8	7	3.34
	66	37	33.4	12.5	7	2.99
	67	38	31.5	10.2	7	3.04
	68	38	46.2	26.1	7	2.87
	69	39	44.1	23.2	7	2.99
	70	39	32.5	14.4	7	2.58
AVERAGE						3.03
SD						0.24

Food intake, p values Mann-Whitney U-test																								
week	group 1 vs 2			group 1 vs 3			group 1 vs 4			group 1 vs 5			group 1 vs 6			group 1 vs 7			group 2 vs 3			group 2 vs 4		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
0-1	5	5	0.690	5	5	0.876	5	5	0.905	5	5	0.429	5	5	1.000	5	5	0.755	5	5	0.639	5	5	0.639
1-2	5	5	1.000	5	5	0.530	5	5	0.905	5	5	0.047	5	5	0.690	5	5	0.005	5	5	0.755	5	5	0.755
2-3 (gr 5,7: 2,3-3)	5	5	1.000	5	5	0.755	5	5	0.905	5	5	0.931	5	5	1.000	5	5	0.202	5	5	0.639	5	5	0.639
3-4	5	5	0.222	5	5	0.876	5	5	0.730	5	5	0.931	5	5	0.548	5	5	0.202	5	5	0.432	5	5	0.432
4-5	5	5	0.841	5	5	0.202	5	5	0.286	5	5	0.662	5	5	0.056	5	5	0.755	5	5	0.432	5	5	0.432
5-6	5	5	0.222	5	5	0.432	5	5	0.222	5	5	0.128	5	5	0.222	5	5	0.149	5	5	0.432	5	5	0.432
6-7	5	5	0.310	5	5	1.000	5	5	0.310	5	5	1.000	5	5	0.690	5	5	0.639	5	5	0.530	5	5	0.530
7-7.5	5	5	0.905	5	5	1.000	5	5	0.800	5	5	0.352	5	5	0.400	5	5	0.788	5	5	1.000	5	5	1.000
7.5-8	5	5	0.622	5	5	0.606	5	5	0.755	5	5	0.662	5	5	0.463	5	5	0.613	5	5	0.298	5	5	0.298
8-9	10	10	0.912	10	10	0.529	10	10	0.353	10	10	0.579	10	10	0.190	10	10	0.631	10	10	0.436	10	10	0.436
week	group 2 vs 5			group 2 vs 6			group 2 vs 7			group 3 vs 4			group 3 vs 5			group 3 vs 6			group 3 vs 7			group 4 vs 5		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
0-1	5	5	0.730	5	5	0.792	5	5	0.690	5	5	1.000	5	5	0.648	5	5	0.295	5	5	0.530	5	5	0.530
1-2	5	5	0.905	5	5	0.030	5	5	0.690	5	5	0.005	5	5	0.315	5	5	0.002	5	5	0.432	5	5	0.432
2-3 (gr 5,7: 2,3-3)	5	5	0.905	5	5	0.792	5	5	1.000	5	5	0.149	5	5	0.230	5	5	0.445	5	5	0.639	5	5	0.639
3-4	5	5	0.286	5	5	0.429	5	5	0.151	5	5	0.030	5	5	0.527	5	5	0.836	5	5	0.432	5	5	0.432
4-5	5	5	0.413	5	5	0.931	5	5	0.151	5	5	0.876	5	5	0.788	5	5	0.366	5	5	0.268	5	5	0.268
5-6	5	5	0.286	5	5	0.792	5	5	0.056	5	5	0.030	5	5	0.648	5	5	0.445	5	5	0.149	5	5	0.149
6-7	5	5	1.000	5	5	0.792	5	5	0.421	5	5	0.149	5	5	0.527	5	5	0.731	5	5	0.530	5	5	0.530
7-7.5	5	5	0.571	5	5	0.931	5	5	0.393	5	5	1.000	5	5	1.000	5	5	0.931	5	5	1.000	5	5	1.000
7.5-8	5	5	0.429	5	5	0.429	5	5	0.268	5	5	0.268	5	5	0.955	5	5	0.607	5	5	0.298	5	5	0.298
8-9	10	10	0.247	10	10	0.631	10	10	0.165	10	10	0.436	10	10	0.971	10	10	0.796	10	10	0.481	10	10	0.481
week	group 4 vs 6			group 4 vs 7			group 5 vs 6			group 5 vs 7			group 6 vs 7			group 6 vs 8			group 7 vs 8			group 8 vs 9		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
0-1	5	5	0.805	5	5	0.476	5	5	0.730	5	5	0.527	5	5	0.329	5	5	0.534	5	5	0.530	5	5	0.530
1-2	5	5	0.001	5	5	0.114	5	5	0.190	5	5	0.042	5	5	0.017	5	5	0.445	5	5	0.018	5	5	0.018
2-2.3	5	5		5	5		5	5		5	5		5	5		5	5	0.073	5	5		5	5	
2-3 (gr 5,7: 2,3-3)	5	5	0.383	5	5	0.762	5	5	0.905	5	5	0.230	5	5	0.931	5	5	0.101	5	5	0.202	5	5	0.202
3-4	5	5	0.026	5	5	0.610	5	5	1.000	5	5	0.527	5	5	0.931	5	5	0.295	5	5	0.268	5	5	0.268
4-5	5	5	0.318	5	5	0.352	5	5	0.413	5	5	0.315	5	5	0.082	5	5	0.836	5	5	0.149	5	5	0.149
5-6	5	5	0.073	5	5	0.171	5	5	0.413	5	5	0.230	5	5	0.030	5	5	0.014	5	5	1.000	5	5	1.000
6-7	5	5	0.535	5	5	0.762	5	5	0.286	5	5	0.315	5	5	0.429	5	5	0.628	5	5	1.000	5	5	1.000
7-7.5	5	5	0.755	5	5	0.429	5	5	1.000	5	5	0.667	5	5	0.167	5	5	0.836	5	5	0.667	5	5	0.667
7.5-8	5	5	0.918	5	5	0.699	5	5	0.445	5	5	0.836	5	5	0.836	5	5	0.945	5	5	0.805	5	5	0.805
8-9	10	10	0.684	10	10	0.631	10	10	0.529	10	10	0.739	10	10	0.315	10	10	0.853	10	10	0.315	10	10	0.315

p<0.05

Appendix C. Plasma measurements

C1. Plasma cholesterol measurements

group	Mouse#	cage#	ear tag		Measured cholesterol (mmol/l)				dilution				Cholesterol (mmol/l)			
			L	R	week 0	week 1	week 4	week 8	week 0	week 1	week 4	week 8	week 0	week 1	week 4	week 8
AVERAGE SD	1	1	0	1	3.219	2.814	2.172	2.211	2	2	3	3	6.438	5.628	6.516	6.633
	2	1	1	2	3.446	3.088	2.589	2.384	2	2	3	3	6.892	6.176	7.797	7.182
	3	2	0	0	3.633	3.176	2.120	1.725	2	2	3	3	7.268	6.352	6.360	5.175
	4	2	2	0	3.260	2.556	1.911	1.877	2	2	3	3	8.520	5.112	5.733	5.631
	5	3	0	0	1.847	2.612	2.042	1.733	2	2	3	3	3.694	5.224	6.126	5.199
	6	3	0	2	3.819	3.458	2.033	2.500	2	2	3	3	7.638	6.916	6.099	7.500
	7	4	1	1	4.055	3.958	1.815	2.166	2	2	3	3	8.110	7.916	5.445	6.498
	8	5	0	0	3.949	3.668	2.347	2.295	2	2	3	3	7.898	7.336	7.041	6.885
	9	5	0	2	4.590	3.257	1.972	1.816	2	2	3	3	9.180	6.514	5.916	5.448
	10	5	1	2	3.706	3.015	1.911	1.854	2	2	3	3	7.412	6.030	5.733	5.562
													7.10	6.32	6.28	6.17
													1.45	0.90	0.70	0.87
	11	6	1	0	3.998	3.901	2.625	2.181	2	2	3	3	7.996	7.802	7.875	6.543
	12	6	2	1	1.791	2.145	1.110	0.867	2	2	3	3	3.582	4.290	3.330	2.801
	13	6	0	2	4.428	3.281	2.094	2.287	2	2	3	3	8.856	6.582	6.282	6.861
	14	7	0	1	4.274	2.878	1.859	1.353	2	2	3	3	8.548	5.756	5.577	4.059
	15	8	1	0	4.453	3.080	2.443	2.272	2	2	3	3	8.906	6.160	7.329	6.816
	16	8	0	1	1.774	2.306	1.057	0.837	2	2	3	3	3.548	4.612	3.171	2.511
	17	8	2	0	1.750	2.322	1.563	1.209	2	2	3	3	3.500	4.644	4.689	3.627
	18	9	0	0	4.079	3.450	2.233	2.151	2	2	3	3	8.158	6.900	6.699	6.483
	19	9	2	1	4.055	2.959	2.233	2.439	2	2	3	3	8.110	5.918	6.699	7.317
	20	10	1	0	3.633	3.233	2.085	2.029	2	2	3	3	7.266	6.466	6.255	6.087
												6.85	5.91	5.79	5.29	
												2.33	1.12	1.80	1.88	
21	11	0	1	4.201	3.217	1.850	2.439	2	2	3	3	8.402	6.434	5.550	7.317	
22	12	0	2	3.446	3.007	1.876	2.021	2	2	3	3	6.892	6.014	5.628	6.063	
23	13	0	1	4.047	3.257	2.077	1.771	2	2	3	3	8.094	6.514	6.231	5.313	
24	13	1	1	4.071	2.999	1.920	2.318	2	2	3	3	8.142	5.998	5.760	6.954	
25	14	1	0	3.649	2.685	1.406	1.763	2	2	3	3	7.298	5.370	4.218	5.289	
26	15	0	1	3.893	2.741	1.885	1.870	2	2	3	3	7.786	5.482	5.855	5.610	
27	15	2	0	3.130	2.798	1.737	1.703	2	2	3	3	6.260	5.596	5.211	5.109	
28	15	1	2	3.519	3.201	1.850	2.219	2	2	3	3	7.038	6.402	5.550	6.657	
29	16	0	2	4.290	3.466	2.521	2.431	2	2	3	3	8.580	6.932	7.563	7.293	
30	17	1	0	2.083	1.968	1.153	1.315	2	2	3	3	4.166	3.936	3.459	3.945	
												7.27	5.87	5.48	5.96	
												1.31	0.84	1.10	1.10	
31	18	1	0	3.974	1.566	1.327	1.125	2	2	3	3	7.948	3.130	3.981	3.375	
32	18	0	2	3.625	1.622	1.327	1.353	2	2	3	3	7.250	3.244	3.981	4.059	
33	19	0	0	4.104	2.057	1.476	1.422	2	2	3	3	8.208	4.114	4.428	4.266	
34	19	1	0	3.122	1.912	1.284	1.186	2	2	3	3	6.244	3.824	3.852	3.558	
35	19	0	1	3.698	2.322	1.380	1.490	2	2	3	3	7.396	4.644	4.140	4.470	
36	19	0	2	1.701	1.904	1.301	1.209	2	2	3	3	3.402	3.808	3.903	3.627	
37	20	0	0	3.576	1.895	1.467	1.452	2	2	3	3	7.152	3.790	4.401	4.356	
38	20	1	1	3.511	1.879	1.354	1.156	2	2	3	3	7.022	3.758	4.062	3.468	
39	21	0	0	3.917	2.467	1.754	1.672	2	2	3	3	7.834	4.934	5.262	5.016	
40	21	1	1	2.010	1.557	1.293	1.429	2	2	3	3	4.020	3.114	3.879	4.287	
AVERAGE													6.65	3.84	4.19	4.05
SD													1.65	0.61	0.43	0.53
41	22	1	0	1.661	1.871	1.179	1.072	2	2	3	3	3.322	3.742	3.537	3.216	
42	22	0	1	3.617	1.525	1.197	1.685	2	2	3	3	7.234	3.050	3.591	5.655	
43	22	1	1	3.682	1.839	1.162	1.983	2	2	3	3	7.364	3.678	3.486	5.949	
44	22	1	2	3.795	1.670	1.188	1.490	2	2	3	3	7.590	3.340	3.564	4.470	
45	23	1	2	4.323	3.056	1.258	2.591	2	2	3	3	8.646	6.112	3.774	7.773	
46	24	2	0	3.901	2.226	1.388	2.454	2	2	3	3	7.802	4.452	4.164	7.362	
47	25	0	1	3.641	1.485	0.813	0.746	2	2	3	3	7.282	2.970	2.439	2.238	
48	25	1	1	3.065	1.638	1.449	1.429	2	2	3	3	6.130	3.276	4.347	4.287	
49	26	0	0	1.689	2.008	1.354	1.247	2	2	3	3	3.338	4.016	4.062	3.741	
50	27	1	2	2.708	2.274	1.467	2.097	2	2	3	3	5.416	4.548	4.401	6.291	
AVERAGE													6.41	3.92	3.74	5.10
SD													1.85	0.94	0.57	1.81
51	28	0	1	2.862	1.992	1.101	1.794	2	2	3	3	5.724	3.984	3.303	5.382	
52	29	1	0	3.138	2.604	1.101	1.247	2	2	3	3	6.276	5.208	3.303	3.741	
53	29	1	2	4.086	2.556	1.223	1.953	2	2	3	3	8.172	5.112	3.669	5.859	
54	30	1	0	3.316	2.258	1.110	1.611	2	2	3	3	6.632	4.516	3.330	4.833	
55	30	0	2	3.511	2.492	1.136	1.543	2	2	3	3	7.022	4.984	3.408	4.629	
56	31	0	0	3.584	2.508	1.110	1.968	2	2	3	3	7.168	5.016	3.330	5.904	
57	31	0	1	1.523	1.654	1.214	0.928	2	2	3	3	3.046	3.308	3.642	2.784	
58	31	0	2	3.795	2.330	1.005	1.452	2	2	3	3	7.590	4.660	3.015	4.356	
59	31	2	2	3.357	2.024	1.249	1.763	2	2	3	3	6.714	4.048	3.747	5.289	
60	32	2	1	3.365	2.065	1.310	2.386	2	2	3	3	6.730	4.130	3.930	7.158	
AVERAGE													6.51	4.50	3.47	4.99
SD													1.39	0.62	0.27	1.23
61	33	2	0	3.462	1.646	2.338	2.113	2	2	3	3	6.924	3.292	7.014	6.339	
62	34	1	0	3.763	1.775	3.174	2.021	2	2	3	3	7.526	3.550	9.522	6.063	
63	35	0	2	3.024	1.541	2.573	2.447	2	2	3	3	6.048	3.082	7.719	7.341	
64	36	0	0	3.479	1.549	2.242	2.280	2	2	3	3	6.958	3.098	6.726	6.840	
65	36	1	2	3.324	1.501	1.920	1.816	2	2	3	3	6.648	3.002	5.760	5.448	
66	37	0	0	3.357	1.581	2.077	1.832	2	2	3	3	6.714	3.162	6.231	5.496	
67	38	0	0	4.241	1.879	1.998	1.733	2	2	3	3	8.482	3.758	5.994	5.199	
68	38	2	0	4.274	1.928	1.963	2.158	2	2	3	3	8.548	3.856	5.889	6.474	
69	39	1	0	3.917	1.839	1.824	1.685	2	2	3	3	7.834	3.678	5.472	5.085	
70	39	0	1	3.795	1.783	1.894	1.505	2	2	3	3	7.590	3.566	5.682	4.515	
AVERAGE													7.33	3.40	6.60	5.88
SD													0.81	0.31	1.24	0.88
excluded	655	85	1	2	6.230				2				12.460			
excluded	656	86	0	0	1.336				2				2.672			
excluded	741	96	2	1	1.360				2				2.720			
excluded	742	96	0	2	0.792				2				1.584			
excluded	748	97	2	0	0.776				2				1.552			

Plasma cholesterol, p values Mann-Whitney U-test																					
week	group 1 vs 2			group 1 vs 3			group 1 vs 4			group 1 vs 5			group 1 vs 6			group 1 vs 7			group 2 vs 3		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
0	10	10	0.631	10	10	0.631	10	10	0.631	10	10	0.393	10	10	0.247	10	10	0.912	10	10	0.796
1	10	10	0.436	10	10	0.393	10	10	<0.001	10	10	<0.001	10	10	<0.001	10	10	<0.001	10	10	0.853
4	10	10	0.912	10	10	0.835	10	10	<0.001	10	10	<0.001	10	10	<0.001	10	10	0.853	10	10	0.393
8	10	10	0.436	10	10	0.796	10	10	<0.001	10	10	0.247	10	10	0.035	10	10	0.393	10	10	0.579
week	group 2 vs 4			group 2 vs 5			group 2 vs 6			group 2 vs 7			group 3 vs 4			group 3 vs 5			group 3 vs 6		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
0	10	10	0.247	10	10	0.218	10	10	0.190	10	10	0.529	10	10	0.353	10	10	0.315	10	10	0.123
1	10	10	<0.001	10	10	<0.001	10	10	<0.001	10	10	<0.001	10	10	<0.001	10	10	<0.001	10	10	<0.001
4	10	10	0.023	10	10	0.015	10	10	0.007	10	10	0.579	10	10	0.005	10	10	0.002	10	10	<0.001
8	10	10	0.190	10	10	0.796	10	10	0.579	10	10	0.853	10	10	<0.001	10	10	0.393	10	10	0.089
week	group 3 vs 7			group 4 vs 5			group 4 vs 6			group 4 vs 7			group 5 vs 6			group 5 vs 7			group 6 vs 7		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
0	10	10	0.739	10	10	0.739	10	10	0.393	10	10	0.654	10	10	0.631	10	10	0.436	10	10	0.190
1	10	10	<0.001	10	10	0.739	10	10	0.015	10	10	0.052	10	10	0.052	10	10	0.247	10	10	<0.001
4	10	10	0.023	10	10	0.089	10	10	<0.001	10	10	<0.001	10	10	0.089	10	10	<0.001	10	10	<0.001
8	10	10	0.796	10	10	0.165	10	10	0.023	10	10	<0.001	10	10	0.853	10	10	0.315	10	10	0.089

p<0.05

p<0.05

C2. Plasma triglyceride measurements

group	Mouse#	cage#	ear tag		Measured TG (mmol/l)				dilution				TG (mmol/l)				
			L	R	week 0	week 1	week 4	week 8	week 0	week 1	week 4	week 8	week 0	week 1	week 4	week 8	
2	1	1	0	1	0.445	0.387	0.257	0.298						0.89	0.774	0.771	0.894
	2	1	1	2	0.467	0.270	0.263	0.266	2	2	3	3	0.934	0.54	0.789	0.798	
	3	2	0	0	0.950	0.731	0.290	0.233	2	2	3	3	1.9	1.462	0.87	0.699	
	4	2	2	0	0.706	0.609	0.329	0.277	2	2	3	3	1.412	1.218	0.987	0.831	
	5	3	0	0	1.666	0.583	0.214	0.277	2	2	3	3	3.332	1.166	0.642	0.831	
	6	3	0	2	0.645	0.472	0.345	0.244	2	2	3	3	1.29	0.944	1.035	0.732	
	7	4	1	1	0.595	0.625	0.247	0.471	2	2	3	3	1.19	1.25	0.741	1.413	
	8	5	0	0	0.495	0.482	0.208	0.293	2	2	3	3	0.99	0.964	0.624	0.879	
	9	5	0	2	0.562	0.477	0.296	0.233	2	2	3	3	1.124	0.954	0.888	0.699	
	10	5	1	2	0.756	0.456	0.186	0.212	2	2	3	3	1.512	0.912	0.558	0.836	
													1.46	1.02	0.79	0.84	
													0.73	0.26	0.16	0.22	
	11	6	1	0	0.584	0.434	0.274	0.255	2	2	3	3	1.168	0.888	0.822	0.765	
	12	6	2	1	0.685	0.667	0.356	0.336	2	2	3	3	1.39	1.334	1.068	1.008	
	13	6	0	2	0.639	0.445	0.219	0.255	2	2	3	3	1.278	0.89	0.657	0.765	
	14	7	0	1	0.961	0.535	0.219	0.222	2	2	3	3	1.922	1.07	0.657	0.666	
	15	8	1	0	1.366	0.842	0.340	0.461	2	2	3	3	2.732	1.684	1.02	1.383	
	16	8	0	1	0.833	0.688	0.422	0.655	2	2	3	3	1.666	1.376	1.266	1.965	
	17	8	2	0	0.417	1.080	0.515	0.585	2	2	3	3	0.834	2.16	1.545	1.755	
	18	9	0	0	0.589	0.376	0.257	0.201	2	2	3	3	1.178	0.752	0.771	0.603	
19	9	2	1	0.467	0.477	0.252	0.320	2	2	3	3	0.934	0.954	0.756	0.96		
20	10	1	0	0.501	0.355	0.214	0.195	2	2	3	3	1.002	0.71	0.642	0.585		
AVERAGE												1.41	1.18	0.92	1.05		
SD												0.57	0.46	0.30	0.49		
4	21	11	0	1	0.573	0.276	0.121	0.190	2	2	3	3	1.146	0.552	0.363	0.57	
	22	12	0	2	0.806	0.307	0.148	0.201	2	2	3	3	1.212	0.614	0.444	0.603	
	23	13	0	1	0.978	0.762	0.307	0.233	2	2	3	3	1.956	1.524	0.921	0.699	
	24	13	1	1	0.661	0.932	0.372	0.168	2	2	3	3	1.322	1.864	1.116	0.504	
	25	14	1	0	0.795	0.456	0.143	0.190	2	2	3	3	1.59	0.912	0.429	0.57	
	26	15	0	1	0.656	0.482	0.148	0.244	2	2	3	3	1.312	0.964	0.444	0.732	
	27	15	2	0	0.478	0.376	0.143	0.152	2	2	3	3	0.956	0.752	0.429	0.456	
	28	15	1	2	0.528	0.382	0.137	0.195	2	2	3	3	1.056	0.764	0.411	0.585	
	29	16	0	2	0.412	0.403	0.208	0.336	2	2	3	3	0.824	0.806	0.624	1.008	
	30	17	1	0	0.900	0.673	0.312	0.369	2	2	3	3	1.8	1.346	0.936	1.107	
													1.32	1.01	0.61	0.68	
													0.36	0.43	0.27	0.21	
	31	18	1	0	0.856	0.244	0.137	0.082	2	2	3	3	1.712	0.488	0.411	0.246	
	32	18	0	2	0.634	0.281	0.143	0.082	2	2	3	3	1.268	0.562	0.429	0.246	
	33	19	0	0	0.445	0.276	0.121	0.087	2	2	3	3	0.89	0.552	0.363	0.261	
	34	19	1	0	0.506	0.233	0.099	0.103	2	2	3	3	1.012	0.466	0.297	0.309	
	35	19	0	1	0.589	0.207	0.132	0.093	2	2	3	3	1.178	0.414	0.396	0.279	
	36	19	0	2	0.489	0.297	0.230	0.206	2	2	3	3	0.978	0.594	0.69	0.618	
	37	20	0	0	0.739	0.329	0.132	0.082	2	2	3	3	1.478	0.658	0.396	0.246	
	38	20	1	1	0.994	0.419	0.148	0.082	2	2	3	3	1.988	0.838	0.444	0.246	
39	21	0	0	0.562	0.270	0.104	0.103	2	2	3	3	1.124	0.54	0.312	0.309		
40	21	1	1	0.673	0.339	0.186	0.190	2	2	3	3	1.346	0.678	0.558	0.57		
AVERAGE												1.30	0.58	0.43	0.33		
SD												0.35	0.12	0.12	0.14		
5	41	22	1	0	0.229	0.376	0.121	0.120	2	2	3	3	0.458	0.752	0.363	0.36	
5	42	22	0	1	0.456	0.212	0.132	0.228	2	2	3	3	0.912	0.424	0.396	0.684	
5	43	22	1	1	0.512	0.165	0.099	0.206	2	2	3	3	1.024	0.33	0.297	0.618	
5	44	22	1	2	1.194	0.202	0.132	0.222	2	2	3	3	2.388	0.404	0.396	0.666	
5	45	23	1	2	0.928	0.218	0.099	0.358	2	2	3	3	1.856	0.436	0.297	1.074	
5	46	24	2	0	0.634	0.181	0.110	0.320	2	2	3	3	1.268	0.362	0.33	0.96	
5	47	25	0	1	0.722	0.260	0.247	0.309	2	2	3	3	1.444	0.52	0.741	0.927	
5	48	25	1	1	0.678	0.207	0.208	0.250	2	2	3	3	1.356	0.414	0.624	0.75	
5	49	26	0	0	0.589	0.323	0.870	0.103	2	2	3	3	1.178	0.646	0.246	0.309	
5	50	27	1	2	0.551	0.186	0.115	0.260	2	2	3	3	1.102	0.372	0.345	0.76	
AVERAGE												1.30	0.47	0.42	0.76		
SD												0.53	0.14	0.16	0.21		
6	51	28	0	1	0.728	0.424	0.110	0.131	2	2	3	3	1.456	0.848	0.33	0.383	
6	52	29	1	0	0.545	0.773	0.170	0.125	2	2	3	3	1.09	1.546	0.51	0.375	
6	53	29	1	2	0.850	0.620	0.208	0.201	2	2	3	3	1.7	1.24	0.624	0.603	
6	54	30	1	0	1.227	0.916	0.159	0.136	2	2	3	3	2.454	1.832	0.477	0.408	
6	55	30	0	2	0.667	0.720	0.170	0.212	2	2	3	3	1.334	1.44	0.51	0.636	
6	56	31	0	0	0.606	0.487	0.159	0.228	2	2	3	3	1.212	0.974	0.477	0.684	
6	57	31	0	1	0.188	0.244	0.154	0.114	2	2	3	3	0.336	0.488	0.462	0.342	
6	58	31	0	2	0.628	0.588	0.154	0.179	2	2	3	3	1.256	1.176	0.462	0.537	
6	59	31	2	2	0.578	0.419	0.154	0.168	2	2	3	3	1.156	0.838	0.462	0.504	
6	60	32	2	1	0.467	0.366	0.126	0.325	2	2	3	3	0.934	0.732	0.378	0.875	
AVERAGE												1.29	1.11	0.47	0.55		
SD												0.54	0.41	0.08	0.19		
7	61	33	2	0	1.349	0.196	0.263	0.168	2	2	3	3	2.698	0.392	0.789	0.504	
7	62	34	1	0	0.717	0.228	0.361	0.163	2	2	3	3	1.434	0.456	1.083	0.489	
7	63	35	0	2	0.650	0.249	0.356	0.212	2	2	3	3	1.3	0.498	1.068	0.636	
7	64	36	0	0	0.856	0.244	0.203	0.217	2	2	3	3	1.712	0.488	0.609	0.651	
7	65	36	1	2	0.784	0.265	0.236	0.260	2	2	3	3	1.568	0.53	0.708	0.78	
7	66	37	0	0	0.539	0.329	0.318	0.212	2	2	3	3	1.078	0.658	0.954	0.636	
7	67	38	0	0	0.606	0.202	0.312	0.201	2	2	3	3	1.212	0.404	0.936	0.603	
7	68	38	2	0	0.428	0.265	0.225	0.379	2	2	3	3	0.856	0.53	0.675	1.137	
7	69	39	1	0	0.573	0.302	0.230	0.212	2	2	3	3	1.146	0.604	0.69	0.636	
7	70	39	0	1	0.473	0.255	0.132	0.136	2	2	3	3	0.946	0.51	0.396	0.408	
AVERAGE												1.40	0.51	0.79	0.85		
SD												0.53	0.08	0.22	0.20		
excluded	855	85	1	2	1.954				2				3.908				
excluded	856	86	0	0	0.978				2				1.956				
excluded	741	96	2	1	0.917				2				1.834				
excluded	742	96	0	2	0.251				2				0.502				
excluded	748	97	2	0	0.256				2				0.512				

Plasma triglycerides, p values Mann-Whitney U-test																					
week	group 1 vs 2			group 1 vs 3			group 1 vs 4			group 1 vs 5			group 1 vs 6			group 1 vs 7			group 2 vs 3		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
0	10	10	0.971	10	10	0.971	10	10	0.912	10	10	0.796	10	10	0.912	10	10	0.912	10	10	0.971
1	10	10	0.739	10	10	0.631	10	10	<0.001	10	10	<0.001	10	10	0.739	10	10	<0.001	10	10	0.393
4	10	10	0.393	10	10	0.089	10	10	<0.001	10	10	<0.001	10	10	<0.001	10	10	0.912	10	10	0.023
8	10	10	0.684	10	10	0.043	10	10	<0.001	10	10	0.353	10	10	0.002	10	10	0.007	10	10	0.029
week	group 2 vs 4			group 2 vs 5			group 2 vs 6			group 2 vs 7			group 3 vs 4			group 3 vs 5			group 3 vs 6		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
0	10	10	0.912	10	10	0.796	10	10	0.853	10	10	0.971	10	10	0.971	10	10	0.912	10	10	0.971
1	10	10	<0.001	10	10	<0.001	10	10	0.853	10	10	<0.001	10	10	0.002	10	10	<0.001	10	10	0.529
4	10	10	<0.001	10	10	<0.001	10	10	<0.001	10	10	0.529	10	10	0.063	10	10	0.012	10	10	0.971
8	10	10	<0.001	10	10	0.218	10	10	0.003	10	10	0.029	10	10	0.001	10	10	0.529	10	10	0.123
week	group 3 vs 7			group 4 vs 5			group 4 vs 6			group 4 vs 7			group 5 vs 6			group 5 vs 7			group 6 vs 7		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
0	10	10	1.000	10	10	1.000	10	10	0.971	10	10	0.853	10	10	0.971	10	10	0.796	10	10	0.796
1	10	10	<0.001	10	10	0.029	10	10	0.001	10	10	0.143	10	10	<0.001	10	10	0.190	10	10	0.190
4	10	10	0.123	10	10	0.400	10	10	0.143	10	10	0.001	10	10	0.133	10	10	0.001	10	10	0.001
8	10	10	1.000	10	10	<0.001	10	10	0.004	10	10	<0.001	10	10	0.123	10	10	0.315	10	10	0.315

p<0.05

p<0.05

C3. Pooled lipoprotein profile measurements

Week 0

Cholesterol

fraction	measured cholesterol (mM) pooled sample 1	dilution	cholesterol (mM)	measured cholesterol (mM) pooled sample 2	dilution	cholesterol (mM)	measured cholesterol (mM) pooled sample 3	dilution	cholesterol (mM)	Average plasma cholesterol (mmol/l)	sd
1	0.008	2	0.016	0.012	2	0.024	0.012	2	0.024	0.021	0.005
2	0.002	2	0.004	0.008	2	0.016	0.015	2	0.030	0.017	0.013
3	0.021	2	0.042	0.012	2	0.024	0.005	2	0.010	0.025	0.016
4	0.043	2	0.086	0.068	2	0.136	0.062	2	0.124	0.115	0.026
5	0.292	2	0.584	0.248	2	0.496	0.270	2	0.540	0.540	0.044
6	0.295	2	0.590	0.235	2	0.470	0.285	2	0.570	0.543	0.064
7	0.166	2	0.332	0.131	2	0.262	0.163	2	0.326	0.307	0.039
8	0.109	2	0.218	0.093	2	0.186	0.144	2	0.288	0.231	0.052
9	0.087	2	0.174	0.075	2	0.150	0.103	2	0.206	0.177	0.028
10	0.109	2	0.218	0.078	2	0.156	0.103	2	0.206	0.193	0.033
11	0.115	2	0.230	0.100	2	0.200	0.134	2	0.268	0.233	0.034
12	0.147	2	0.294	0.134	2	0.268	0.181	2	0.362	0.308	0.049
13	0.222	2	0.444	0.188	2	0.376	0.282	2	0.564	0.461	0.095
14	0.286	2	0.532	0.222	2	0.444	0.314	2	0.628	0.535	0.092
15	0.257	2	0.514	0.229	2	0.458	0.279	2	0.558	0.510	0.050
16	0.216	2	0.432	0.194	2	0.388	0.241	2	0.482	0.434	0.047
17	0.232	2	0.464	0.210	2	0.420	0.238	2	0.476	0.453	0.029
18	0.295	2	0.590	0.288	2	0.576	0.339	2	0.678	0.615	0.055
19	0.307	2	0.614	0.288	2	0.576	0.370	2	0.740	0.643	0.086
20	0.229	2	0.458	0.203	2	0.406	0.270	2	0.540	0.468	0.068
21	0.147	2	0.294	0.122	2	0.244	0.166	2	0.332	0.290	0.044
22	0.093	2	0.186	0.090	2	0.180	0.093	2	0.186	0.184	0.003
23	0.071	2	0.142	0.049	2	0.098	0.059	2	0.118	0.119	0.022
24	0.040	2	0.080	0.040	2	0.080	0.040	2	0.080	0.080	0.000

PL

fraction	measured PL (mg/dl) pooled sample 1	dilution	PL (mM)	measured PL (mg/dl) pooled sample 2	dilution	PL (mM)	measured PL (mg/dl) pooled sample 3	dilution	PL (mM)	Average plasma PL(mM)	sd
1	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000	0.000	0.000
2	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000	0.000	0.000
3	0.000	2	0.000	0.003	2	0.000	0.000	2	0.000	0.000	0.000
4	0.000	2	0.000	0.984	2	0.015	0.000	2	0.000	0.005	0.009
5	3.776	2	0.058	3.513	2	0.054	4.145	2	0.064	0.059	0.005
6	4.429	2	0.068	4.235	2	0.065	4.199	2	0.065	0.066	0.002
7	2.305	2	0.038	2.584	2	0.040	2.670	2	0.041	0.039	0.003
8	1.706	2	0.028	2.016	2	0.031	1.850	2	0.029	0.029	0.002
9	1.597	2	0.025	1.706	2	0.026	1.468	2	0.023	0.025	0.002
10	1.652	2	0.026	1.861	2	0.029	1.796	2	0.028	0.027	0.002
11	1.978	2	0.031	2.016	2	0.031	2.561	2	0.040	0.034	0.005
12	3.503	2	0.054	3.409	2	0.053	3.708	2	0.057	0.055	0.002
13	5.083	2	0.079	5.732	2	0.089	7.313	2	0.113	0.093	0.018
14	8.623	2	0.133	7.022	2	0.109	9.389	2	0.145	0.129	0.019
15	7.752	2	0.120	8.416	2	0.130	10.044	2	0.155	0.135	0.018
16	7.261	2	0.112	7.435	2	0.115	8.460	2	0.131	0.119	0.010
17	9.059	2	0.140	8.622	2	0.133	10.099	2	0.156	0.143	0.012
18	12.762	2	0.197	15.229	2	0.235	17.036	2	0.263	0.232	0.033
19	15.104	2	0.234	15.177	2	0.235	19.167	2	0.296	0.255	0.036
20	12.436	2	0.192	13.061	2	0.202	15.944	2	0.246	0.214	0.029
21	10.094	2	0.156	9.913	2	0.153	10.918	2	0.169	0.159	0.008
22	5.954	2	0.092	7.704	2	0.119	7.969	2	0.123	0.111	0.017
23	3.939	2	0.061	3.822	2	0.059	4.418	2	0.068	0.063	0.005
24	1.760	2	0.027	2.171	2	0.034	1.632	2	0.025	0.029	0.004

week 4

Cholesterol

fraction	measured cholesterol (mM) pool group 1	dilution	Average cholesterol (mM) group 1	measured cholesterol (mM) pool group 2	dilution	Average cholesterol (mM) group 2	measured cholesterol (mM) pool group 3	dilution	Average cholesterol (mM) group 3
1	0.006	2	0.012	0.012	2	0.024	0.009	2	0.018
2	0.006	2	0.012	0.009	2	0.018	0.012	2	0.024
3	0.006	2	0.012	0.009	2	0.018	0.009	2	0.018
4	0.028	2	0.056	0.062	2	0.124	0.031	2	0.062
5	0.136	2	0.272	0.185	2	0.370	0.108	2	0.216
6	0.139	2	0.278	0.157	2	0.314	0.142	2	0.284
7	0.096	2	0.192	0.099	2	0.198	0.089	2	0.178
8	0.074	2	0.148	0.074	2	0.148	0.077	2	0.154
9	0.071	2	0.142	0.071	2	0.142	0.068	2	0.136
10	0.083	2	0.166	0.077	2	0.154	0.083	2	0.166
11	0.126	2	0.252	0.120	2	0.240	0.108	2	0.216
12	0.197	2	0.394	0.173	2	0.346	0.157	2	0.314
13	0.272	2	0.544	0.225	2	0.450	0.204	2	0.408
14	0.284	2	0.568	0.231	2	0.462	0.207	2	0.414
15	0.241	2	0.482	0.219	2	0.438	0.182	2	0.364
16	0.204	2	0.408	0.207	2	0.414	0.179	2	0.358
17	0.278	2	0.556	0.253	2	0.506	0.222	2	0.444
18	0.442	2	0.884	0.358	2	0.716	0.337	2	0.674
19	0.429	2	0.858	0.327	2	0.654	0.352	2	0.704
20	0.265	2	0.530	0.204	2	0.408	0.238	2	0.476
21	0.151	2	0.302	0.123	2	0.246	0.136	2	0.272
22	0.099	2	0.198	0.080	2	0.160	0.086	2	0.172
23	0.065	2	0.130	0.049	2	0.098	0.049	2	0.098
24	0.040	2	0.080	0.034	2	0.068	0.031	2	0.062

fraction	measured cholesterol (mM) pool group 4	dilution	Average cholesterol (mM) group 4	measured cholesterol (mM) pool group 5	dilution	Average cholesterol (mM) group 5	measured cholesterol (mM) pool group 6	dilution	Average cholesterol (mM) group 6	measured cholesterol (mM) pool group 7	dilution	Average cholesterol (mM) group 7
1	0.020	2	0.040	0.008	2	0.016	0.011	2	0.022	0.016	2	0.032
2	0.014	2	0.028	0.008	2	0.016	0.008	2	0.016	0.013	2	0.026
3	0.027	2	0.054	0.005	2	0.010	0.011	2	0.022	0.010	2	0.020
4	0.030	2	0.060	0.024	2	0.048	0.024	2	0.048	0.025	2	0.050
5	0.064	2	0.128	0.076	2	0.152	0.054	2	0.108	0.120	2	0.240
6	0.058	2	0.116	0.079	2	0.158	0.073	2	0.146	0.126	2	0.252
7	0.048	2	0.096	0.051	2	0.102	0.039	2	0.078	0.065	2	0.130
8	0.030	2	0.060	0.036	2	0.072	0.036	2	0.072	0.049	2	0.098
9	0.027	2	0.054	0.033	2	0.066	0.027	2	0.054	0.031	2	0.062
10	0.030	2	0.060	0.030	2	0.060	0.030	2	0.060	0.034	2	0.068
11	0.054	2	0.108	0.030	2	0.060	0.036	2	0.072	0.043	2	0.086
12	0.107	2	0.214	0.061	2	0.122	0.064	2	0.128	0.095	2	0.190
13	0.215	2	0.430	0.132	2	0.264	0.135	2	0.270	0.246	2	0.492
14	0.324	2	0.648	0.209	2	0.418	0.215	2	0.430	0.436	2	0.872
15	0.324	2	0.648	0.259	2	0.518	0.249	2	0.498	0.525	2	1.050
16	0.271	2	0.542	0.231	2	0.462	0.218	2	0.436	0.458	2	0.916
17	0.231	2	0.462	0.209	2	0.418	0.197	2	0.394	0.359	2	0.718
18	0.203	2	0.406	0.209	2	0.418	0.184	2	0.368	0.277	2	0.554
19	0.160	2	0.320	0.175	2	0.350	0.160	2	0.320	0.203	2	0.406
20	0.107	2	0.214	0.116	2	0.232	0.110	2	0.220	0.129	2	0.258
21	0.064	2	0.128	0.073	2	0.146	0.064	2	0.128	0.083	2	0.166
22	0.045	2	0.090	0.039	2	0.078	0.039	2	0.078	0.049	2	0.098
23	0.036	2	0.072	0.036	2	0.072	0.027	2	0.054	0.040	2	0.080
24	0.024	2	0.048	0.017	2	0.034	0.014	2	0.028	0.025	2	0.050

PL

fraction	measured PL(mg/dl) pool group 1	dilution	Average PL (mM) group 1	measured PL(mg/dl) pool group 2	dilution	Average PL (mM) group 2	measured PL(mg/dl) pool group 3	dilution	Average PL (mM) group 3
1	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
2	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
3	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
4	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
5	0.113	2	0.002	1.321	2	0.020	0.000	2	0.000
6	0.247	2	0.004	1.187	2	0.018	0.516	2	0.008
7	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
8	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
9	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
10	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
11	0.918	2	0.014	0.650	2	0.010	0.381	2	0.006
12	3.201	2	0.049	2.664	2	0.041	1.992	2	0.031
13	5.752	2	0.089	4.275	2	0.068	3.604	2	0.056
14	7.095	2	0.110	5.886	2	0.091	4.141	2	0.064
15	6.289	2	0.097	5.618	2	0.087	4.409	2	0.068
16	6.155	2	0.095	5.886	2	0.091	4.678	2	0.072
17	12.063	2	0.186	10.317	2	0.160	8.840	2	0.137
18	22.804	2	0.353	17.702	2	0.274	17.031	2	0.263
19	23.744	2	0.367	17.433	2	0.270	19.448	2	0.301
20	14.748	2	0.228	10.586	2	0.164	12.331	2	0.191
21	8.303	2	0.128	5.752	2	0.089	7.363	2	0.114
22	4.946	2	0.076	3.872	2	0.060	4.812	2	0.074
23	2.261	2	0.035	1.187	2	0.018	1.321	2	0.020
24	0.247	2	0.004	0.000	2	0.000	0.000	2	0.000

fraction	measured PL(mg/dl) pool group 4	dilution	Average PL (mM) group 4	measured PL(mg/dl) pool group 5	dilution	Average PL (mM) group 5	measured PL(mg/dl) pool group 6	dilution	Average PL (mM) group 6	measured PL(mg/dl) pool group 7	dilution	Average PL (mM) group 7
1	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
2	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
3	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
4	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
5	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
6	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000	0.187	2	0.003
7	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
8	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
9	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
10	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
11	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
12	0.939	2	0.015	0.000	2	0.000	0.000	2	0.000	0.858	2	0.013
13	4.149	2	0.064	1.742	2	0.027	1.742	2	0.027	5.690	2	0.088
14	8.162	2	0.126	4.551	2	0.070	4.283	2	0.066	11.988	2	0.185
15	9.232	2	0.143	6.825	2	0.106	6.022	2	0.093	16.024	2	0.248
16	8.162	2	0.126	6.825	2	0.106	5.621	2	0.087	15.065	2	0.233
17	6.557	2	0.101	6.022	2	0.093	5.219	2	0.081	12.400	2	0.192
18	6.825	2	0.106	7.226	2	0.112	5.487	2	0.085	10.253	2	0.159
19	5.487	2	0.085	6.022	2	0.093	5.086	2	0.079	7.435	2	0.115
20	2.946	2	0.046	3.481	2	0.054	2.812	2	0.043	4.348	2	0.067
21	1.340	2	0.021	1.875	2	0.029	1.207	2	0.019	2.603	2	0.040
22	0.939	2	0.015	0.672	2	0.010	0.538	2	0.008	1.529	2	0.024
23	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000	0.321	2	0.005
24	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000

Week 6

Cholesterol

fraction	measured cholesterol (mM) pool group 1	dilution	Average cholesterol (mM) group 1	measured cholesterol (mM) pool group 2	dilution	Average cholesterol (mM) group 2	measured cholesterol (mM) pool group 3	dilution	Average cholesterol (mM) group 3
1	0.010	2	0.020	0.007	2	0.014	0.013	2	0.026
2	0.001	2	0.002	0.007	2	0.014	0.013	2	0.026
3	0.004	2	0.008	0.004	2	0.008	0.010	2	0.020
4	0.025	2	0.050	0.050	2	0.100	0.062	2	0.124
5	0.135	2	0.270	0.174	2	0.348	0.189	2	0.378
6	0.135	2	0.270	0.147	2	0.294	0.168	2	0.336
7	0.083	2	0.166	0.083	2	0.166	0.092	2	0.184
8	0.065	2	0.130	0.065	2	0.130	0.077	2	0.154
9	0.056	2	0.112	0.050	2	0.100	0.062	2	0.124
10	0.074	2	0.148	0.068	2	0.136	0.083	2	0.166
11	0.129	2	0.258	0.114	2	0.228	0.123	2	0.246
12	0.223	2	0.446	0.186	2	0.372	0.180	2	0.360
13	0.293	2	0.586	0.226	2	0.452	0.223	2	0.446
14	0.293	2	0.586	0.211	2	0.422	0.211	2	0.422
15	0.238	2	0.476	0.180	2	0.360	0.162	2	0.324
16	0.183	2	0.366	0.162	2	0.324	0.156	2	0.312
17	0.241	2	0.482	0.220	2	0.440	0.235	2	0.470
18	0.368	2	0.736	0.274	2	0.548	0.329	2	0.658
19	0.347	2	0.694	0.241	2	0.482	0.296	2	0.592
20	0.220	2	0.440	0.153	2	0.306	0.189	2	0.378
21	0.132	2	0.264	0.086	2	0.172	0.114	2	0.228
22	0.092	2	0.184	0.059	2	0.118	0.074	2	0.148
23	0.062	2	0.124	0.035	2	0.070	0.047	2	0.094
24	0.044	2	0.088	0.022	2	0.044	0.032	2	0.064

fraction	measured cholesterol (mM) pool group 4	dilution	Average cholesterol (mM) group 4	measured cholesterol (mM) pool group 5	dilution	Average cholesterol (mM) group 5	measured cholesterol (mM) pool group 6	dilution	Average cholesterol (mM) group 6	measured cholesterol (mM) pool group 7	dilution	Average cholesterol (mM) group 7
1	0.016	2	0.032	0.010	2	0.020	0.016	2	0.032	0.008	2	0.016
2	0.004	2	0.008	0.004	2	0.008	0.025	2	0.050	0.011	2	0.022
3	0.010	2	0.020	0.010	2	0.020	0.016	2	0.032	0.011	2	0.022
4	0.022	2	0.044	0.077	2	0.154	0.037	2	0.074	0.029	2	0.058
5	0.068	2	0.136	0.248	2	0.496	0.071	2	0.142	0.093	2	0.186
6	0.056	2	0.112	0.193	2	0.386	0.071	2	0.142	0.081	2	0.162
7	0.034	2	0.068	0.117	2	0.234	0.037	2	0.074	0.051	2	0.102
8	0.031	2	0.062	0.080	2	0.160	0.034	2	0.068	0.045	2	0.090
9	0.025	2	0.050	0.071	2	0.142	0.031	2	0.062	0.036	2	0.072
10	0.028	2	0.056	0.077	2	0.154	0.037	2	0.074	0.045	2	0.090
11	0.059	2	0.118	0.129	2	0.258	0.053	2	0.106	0.075	2	0.150
12	0.138	2	0.276	0.220	2	0.440	0.120	2	0.240	0.142	2	0.284
13	0.251	2	0.502	0.281	2	0.562	0.214	2	0.428	0.306	2	0.612
14	0.315	2	0.630	0.251	2	0.502	0.266	2	0.532	0.425	2	0.850
15	0.300	2	0.600	0.202	2	0.404	0.266	2	0.532	0.407	2	0.814
16	0.217	2	0.434	0.156	2	0.312	0.211	2	0.422	0.306	2	0.612
17	0.168	2	0.336	0.205	2	0.410	0.156	2	0.312	0.206	2	0.412
18	0.129	2	0.258	0.281	2	0.562	0.126	2	0.252	0.139	2	0.278
19	0.080	2	0.160	0.254	2	0.508	0.080	2	0.160	0.081	2	0.162
20	0.056	2	0.112	0.150	2	0.300	0.049	2	0.098	0.054	2	0.108
21	0.037	2	0.074	0.082	2	0.184	0.037	2	0.074	0.039	2	0.078
22	0.028	2	0.056	0.056	2	0.112	0.025	2	0.050	0.033	2	0.066
23	0.025	2	0.050	0.043	2	0.086	0.016	2	0.032	0.026	2	0.052
24	0.019	2	0.038	0.037	2	0.074	0.013	2	0.026	0.017	2	0.034

PL

fraction	measured PL (mg/dl) pool group 1	dilution	Average PL (mM) group 1	measured PL (mg/dl) pool group 2	dilution	Average PL (mM) group 2	measured PL (mg/dl) pool group 3	dilution	Average PL (mM) group 3
1	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
2	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
3	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
4	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
5	1.035	2	0.016	1.823	2	0.028	1.429	2	0.022
6	1.166	2	0.018	1.297	2	0.020	1.429	2	0.022
7	0.246	2	0.004	0.903	2	0.014	0.115	2	0.002
8	0.115	2	0.002	0.640	2	0.010	0.115	2	0.002
9	0.115	2	0.002	0.246	2	0.004	0.000	2	0.000
10	1.035	2	0.016	0.509	2	0.008	0.640	2	0.010
11	2.349	2	0.036	1.823	2	0.028	2.743	2	0.042
12	4.977	2	0.077	4.057	2	0.063	3.400	2	0.053
13	6.948	2	0.107	5.502	2	0.085	4.451	2	0.069
14	7.605	2	0.118	6.159	2	0.095	4.845	2	0.075
15	6.685	2	0.103	5.897	2	0.091	4.188	2	0.065
16	6.685	2	0.103	6.028	2	0.093	5.108	2	0.079
17	11.415	2	0.176	9.313	2	0.144	9.050	2	0.140
18	19.168	2	0.296	13.649	2	0.211	14.963	2	0.231
19	18.248	2	0.282	12.729	2	0.197	14.306	2	0.221
20	11.678	2	0.181	8.525	2	0.132	9.182	2	0.142
21	7.342	2	0.114	4.714	2	0.073	5.239	2	0.081
22	4.977	2	0.077	2.874	2	0.044	3.268	2	0.051
23	2.086	2	0.032	1.035	2	0.016	1.035	2	0.016
24	0.772	2	0.012	0.115	2	0.002	0.246	2	0.004

fraction	measured PL (mg/dl) pool group 4	dilution	Average PL (mM) group 4	measured PL (mg/dl) pool group 5	dilution	Average PL (mM) group 5	measured PL (mg/dl) pool group 6	dilution	Average PL (mM) group 6	measured PL (mg/dl) pool group 7	dilution	Average PL (mM) group 7
1	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
2	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
3	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
4	0.000	2	0.000	0.113	2	0.002	0.000	2	0.000	0.000	2	0.000
5	0.000	2	0.000	2.338	2	0.036	0.000	2	0.000	0.282	2	0.004
6	0.000	2	0.000	1.945	2	0.030	0.505	2	0.008	0.414	2	0.006
7	0.000	2	0.000	0.898	2	0.014	0.000	2	0.000	0.000	2	0.000
8	0.000	2	0.000	0.505	2	0.008	0.000	2	0.000	0.000	2	0.000
9	0.000	2	0.000	0.505	2	0.008	0.000	2	0.000	0.000	2	0.000
10	0.000	2	0.000	0.898	2	0.014	0.000	2	0.000	0.017	2	0.000
11	0.505	2	0.008	2.730	2	0.042	0.374	2	0.006	0.678	2	0.010
12	2.599	2	0.040	5.479	2	0.085	2.338	2	0.036	3.583	2	0.055
13	6.264	2	0.097	7.442	2	0.115	5.348	2	0.083	8.866	2	0.137
14	9.405	2	0.145	7.442	2	0.115	7.968	2	0.123	13.621	2	0.211
15	9.798	2	0.151	6.133	2	0.095	8.862	2	0.137	14.413	2	0.223
16	7.835	2	0.121	6.002	2	0.093	7.049	2	0.109	11.508	2	0.178
17	5.872	2	0.091	8.489	2	0.131	5.610	2	0.087	7.281	2	0.113
18	4.301	2	0.066	12.808	2	0.198	4.039	2	0.062	4.640	2	0.072
19	2.861	2	0.044	12.547	2	0.194	2.599	2	0.040	2.131	2	0.033
20	1.683	2	0.026	8.227	2	0.127	1.552	2	0.024	1.074	2	0.017
21	1.291	2	0.020	5.217	2	0.081	0.898	2	0.014	0.678	2	0.010
22	0.636	2	0.010	2.992	2	0.046	0.505	2	0.008	0.414	2	0.006
23	0.000	2	0.000	1.160	2	0.018	0.000	2	0.000	0.000	2	0.000
24	0.000	2	0.000	0.243	2	0.004	0.000	2	0.000	0.000	2	0.000

Week 8

Cholesterol

fraction	measured cholesterol (mM) pool group 1	dilution	Average cholesterol (mM) group 1	measured cholesterol (mM) pool group 2	dilution	Average cholesterol (mM) group 2	measured cholesterol (mM) pool group 3	dilution	Average cholesterol (mM) group 3
1	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
2	0.000	2	0.000	0.000	2	0.000	0.011	2	0.022
3	0.000	2	0.000	0.002	2	0.004	0.011	2	0.022
4	0.036	2	0.072	0.066	2	0.132	0.054	2	0.108
5	0.191	2	0.382	0.228	2	0.456	0.206	2	0.412
6	0.167	2	0.334	0.182	2	0.364	0.179	2	0.358
7	0.103	2	0.206	0.109	2	0.218	0.112	2	0.224
8	0.078	2	0.156	0.078	2	0.156	0.091	2	0.182
9	0.078	2	0.156	0.069	2	0.138	0.075	2	0.150
10	0.100	2	0.200	0.087	2	0.174	0.112	2	0.224
11	0.164	2	0.328	0.139	2	0.278	0.164	2	0.328
12	0.267	2	0.534	0.200	2	0.400	0.246	2	0.492
13	0.328	2	0.656	0.249	2	0.498	0.298	2	0.596
14	0.292	2	0.584	0.252	2	0.504	0.273	2	0.546
15	0.240	2	0.480	0.237	2	0.474	0.237	2	0.474
16	0.191	2	0.382	0.197	2	0.394	0.188	2	0.376
17	0.249	2	0.498	0.237	2	0.474	0.231	2	0.462
18	0.346	2	0.692	0.276	2	0.552	0.310	2	0.620
19	0.346	2	0.692	0.240	2	0.480	0.288	2	0.576
20	0.200	2	0.400	0.136	2	0.272	0.170	2	0.340
21	0.109	2	0.218	0.078	2	0.156	0.097	2	0.194
22	0.066	2	0.132	0.051	2	0.102	0.063	2	0.126
23	0.048	2	0.096	0.023	2	0.046	0.030	2	0.060
24	0.027	2	0.054	0.020	2	0.040	0.020	2	0.040

fraction	measured cholesterol (mM) pool group 4	dilution	Average cholesterol (mM) group 4	measured cholesterol (mM) pool group 5	dilution	Average cholesterol (mM) group 5	measured cholesterol (mM) pool group 6	dilution	Average cholesterol (mM) group 6	measured cholesterol (mM) pool group 7	dilution	Average cholesterol (mM) group 7
1	0.015	2	0.030	0.000	2	0.000	0.000	2	0.001	0.000	2	0.000
2	0.000	2	0.001	0.000	2	0.000	0.006	2	0.012	0.000	2	0.000
3	0.006	2	0.012	0.006	2	0.012	0.009	2	0.018	0.003	2	0.006
4	0.021	2	0.042	0.041	2	0.082	0.035	2	0.070	0.041	2	0.082
5	0.061	2	0.122	0.153	2	0.306	0.107	2	0.214	0.167	2	0.334
6	0.052	2	0.104	0.130	2	0.260	0.095	2	0.190	0.135	2	0.270
7	0.023	2	0.046	0.078	2	0.156	0.061	2	0.122	0.073	2	0.146
8	0.021	2	0.042	0.058	2	0.116	0.044	2	0.088	0.056	2	0.112
9	0.012	2	0.024	0.049	2	0.098	0.038	2	0.076	0.038	2	0.076
10	0.035	2	0.070	0.058	2	0.116	0.032	2	0.064	0.050	2	0.100
11	0.044	2	0.088	0.098	2	0.196	0.067	2	0.134	0.079	2	0.158
12	0.118	2	0.236	0.159	2	0.318	0.150	2	0.300	0.170	2	0.340
13	0.271	2	0.542	0.210	2	0.420	0.265	2	0.530	0.302	2	0.604
14	0.357	2	0.714	0.225	2	0.450	0.372	2	0.744	0.419	2	0.838
15	0.363	2	0.726	0.208	2	0.416	0.377	2	0.754	0.419	2	0.838
16	0.280	2	0.560	0.179	2	0.358	0.300	2	0.600	0.328	2	0.656
17	0.205	2	0.410	0.199	2	0.398	0.239	2	0.478	0.246	2	0.492
18	0.162	2	0.324	0.257	2	0.514	0.196	2	0.392	0.199	2	0.398
19	0.107	2	0.214	0.222	2	0.444	0.150	2	0.300	0.138	2	0.276
20	0.067	2	0.134	0.144	2	0.288	0.092	2	0.184	0.085	2	0.170
21	0.044	2	0.088	0.075	2	0.150	0.052	2	0.104	0.053	2	0.106
22	0.023	2	0.046	0.052	2	0.104	0.032	2	0.064	0.035	2	0.070
23	0.018	2	0.036	0.025	2	0.050	0.021	2	0.042	0.023	2	0.046
24	0.015	2	0.030	0.029	2	0.058	0.021	2	0.042	0.011	2	0.022

PL

fraction	measured PL(mg/dl) pool group 1	dilution	Average PL (mM) group 1	measured PL(mg/dl) pool group 2	dilution	Average PL (mM) group 2	measured PL(mg/dl) pool group 3	dilution	Average PL (mM) group 3
1	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
2	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
3	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
4	0.000	2	0.000	0.201	2	0.003	0.000	2	0.000
5	2.067	2	0.032	3.000	2	0.046	2.200	2	0.034
6	1.800	2	0.028	2.067	2	0.032	2.067	2	0.032
7	0.601	2	0.009	0.867	2	0.013	0.867	2	0.013
8	0.201	2	0.003	0.201	2	0.003	0.334	2	0.005
9	0.334	2	0.005	0.334	2	0.005	0.734	2	0.011
10	1.400	2	0.022	1.000	2	0.015	1.400	2	0.022
11	3.266	2	0.050	2.600	2	0.040	3.533	2	0.055
12	6.599	2	0.102	4.999	2	0.077	6.199	2	0.096
13	8.998	2	0.139	6.866	2	0.106	8.199	2	0.127
14	8.732	2	0.135	7.932	2	0.123	8.732	2	0.135
15	7.132	2	0.110	7.665	2	0.119	7.265	2	0.112
16	7.265	2	0.112	8.065	2	0.125	7.399	2	0.114
17	11.931	2	0.184	10.731	2	0.166	10.864	2	0.168
18	20.595	2	0.318	15.130	2	0.234	17.929	2	0.277
19	18.596	2	0.287	12.864	2	0.199	15.930	2	0.246
20	11.531	2	0.178	8.065	2	0.125	9.798	2	0.151
21	7.265	2	0.112	5.266	2	0.081	6.732	2	0.104
22	4.733	2	0.073	3.266	2	0.050	4.200	2	0.065
23	2.467	2	0.038	1.000	2	0.015	1.534	2	0.024
24	0.867	2	0.013	0.000	2	0.000	0.334	2	0.005

fraction	measured PL(mg/dl) pool group 4	dilution	Average PL (mM) group 4	measured PL(mg/dl) pool group 5	dilution	Average PL (mM) group 5	measured PL(mg/dl) pool group 6	dilution	Average PL (mM) group 6	measured PL(mg/dl) pool group 7	dilution	Average PL (mM) group 7
1	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
2	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
3	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
4	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
5	0.000	2	0.000	1.515	2	0.023	0.715	2	0.011	1.619	2	0.025
6	0.000	2	0.000	1.249	2	0.019	0.582	2	0.009	0.951	2	0.015
7	0.000	2	0.000	0.181	2	0.003	0.000	2	0.000	0.150	2	0.002
8	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
9	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000	0.000	2	0.000
10	0.000	2	0.000	0.448	2	0.007	0.000	2	0.000	0.000	2	0.000
11	0.048	2	0.001	1.515	2	0.023	0.715	2	0.011	0.951	2	0.015
12	2.583	2	0.040	3.916	2	0.061	3.783	2	0.058	4.290	2	0.066
13	8.185	2	0.127	5.517	2	0.085	8.452	2	0.131	10.033	2	0.155
14	12.587	2	0.195	6.851	2	0.106	12.720	2	0.197	13.639	2	0.211
15	12.987	2	0.201	6.851	2	0.106	13.120	2	0.203	14.707	2	0.227
16	10.453	2	0.162	7.118	2	0.110	11.386	2	0.178	12.570	2	0.194
17	8.052	2	0.124	9.786	2	0.151	9.519	2	0.147	10.166	2	0.157
18	6.184	2	0.096	14.454	2	0.223	8.318	2	0.129	8.163	2	0.126
19	4.183	2	0.065	13.521	2	0.209	5.917	2	0.091	5.626	2	0.087
20	2.583	2	0.040	8.318	2	0.129	3.650	2	0.056	3.622	2	0.056
21	1.916	2	0.030	4.450	2	0.069	2.983	2	0.046	2.687	2	0.042
22	1.115	2	0.017	3.116	2	0.048	2.182	2	0.034	1.619	2	0.025
23	0.000	2	0.000	0.848	2	0.013	0.315	2	0.005	0.150	2	0.002
24	0.000	2	0.000	0.315	2	0.005	0.000	2	0.000	0.000	2	0.000

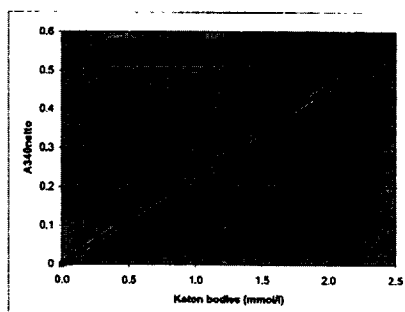
C4. Pooled plasma ALAT measurements

group	Pooled plasma ALAT (U/l)					
	week 0	measured week 4	dilution	week 4	week 6 (o/n fast)	week 8
Group 1: HF control	97.1	27.1	3	81.3	84	57
Group 2: HF + 0.01 % PFBS		30.6	3	91.8	113	134
Group 3: HF + 0.03 % PFBS		23.5	3	70.5	108	87.2
Group 4: HF + 0.006 % PFHS		88.7	3	266.1	213	370
Group 5: HF + 0.02 % PFHS		46	3	138	130	180
Group 6: HF + 0.003 % PFOS		109	3	327	246	394
Group 7: HF + 0.01 % PFOS		119	3	357	307	450

C5. Plasma ketone bodies measurements

Week -1

concentration ketonbodies (mmol/l)	A ₃₄₀ pre	A ₃₄₀ post	A ₃₄₀ netto
0.000	0.214	0.211	-0.003
0.000	0.214	0.214	0
0.033	0.218	0.222	0.004
0.033	0.215	0.22	0.005
0.067	0.218	0.223	0.005
0.067	0.222	0.239	0.017
0.134	0.216	0.249	0.033
0.134	0.22	0.257	0.037
0.268	0.218	0.282	0.064
0.268	0.215	0.284	0.069
0.535	0.218	0.348	0.13
0.535	0.215	0.358	0.143
1.070	0.217	0.462	0.245
1.070	0.218	0.484	0.266
2.140	0.217	0.589	0.472
2.140	0.22	0.716	0.496



y=ax + b

a:

0.2283

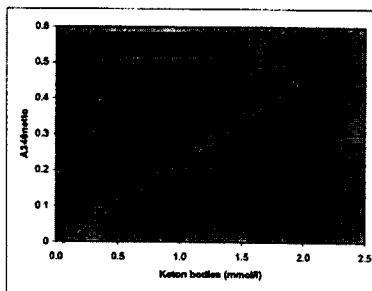
b:

0.0028

mouse#	A ₃₄₀ pre	A ₃₄₀ post	A ₃₄₀ netto	meas. concentration ketonbodies (mmol/l)	dilution	Plasma keton- bodies (mmol/l)	mouse# after matching
641	0.307	0.766	0.459	2.00	1	2.00	11
645	0.321	0.546	0.225	0.97	1	0.97	12
646	0.3	0.623	0.323	1.40	1	1.40	13
650	0.269	0.644	0.375	1.63	1	1.63	21
652	0.293	0.546	0.253	1.10	1	1.10	61
655	0.329	0.53	0.201	0.87	1	0.87	excluded
656	0.307	0.505	0.198	0.86	1	0.86	excluded
657	0.381	0.67	0.289	1.25	1	1.25	62
658	0.293	0.658	0.365	1.59	1	1.59	1
663	0.35	0.66	0.31	1.00	1	1.00	2
665	0.245	0.489	0.244	1.06	1	1.06	41
666	0.276	0.65	0.374	1.63	1	1.63	42
667	0.273	0.668	0.395	1.72	1	1.72	43
670	0.351	0.621	0.27	1.17	1	1.17	63
671	0.324	0.613	0.289	1.25	1	1.25	44
674	0.464	0.628	0.164	0.71	1	0.71	14
678	0.291	0.534	0.243	1.05	1	1.05	22
679	0.447	0.649	0.202	0.87	1	0.87	45
680	0.334	0.579	0.245	1.06	1	1.06	64
681	0.468	0.736	0.268	1.16	1	1.16	31
686	0.352	0.608	0.256	1.11	1	1.11	32
687	0.467	0.638	0.171	0.74	1	0.74	65
690	0.356	0.644	0.288	1.25	1	1.25	23
696	0.274	0.546	0.272	1.18	1	1.18	66
699	0.3	0.563	0.263	1.14	1	1.14	24
700	0.305	0.583	0.278	1.21	1	1.21	46
704	0.311	0.666	0.355	1.54	1	1.54	33
705	0.294	0.609	0.315	1.37	1	1.37	34
706	0.292	0.621	0.329	1.43	1	1.43	35
710	0.419	0.664	0.245	1.06	1	1.06	36
712	0.388	0.624	0.236	1.02	1	1.02	3
714	0.289	0.573	0.284	1.23	1	1.23	51
716	0.333	0.485	0.152	0.57	1	0.57	4
720	0.346	0.692	0.346	1.50	1	1.50	67
721	0.302	0.705	0.403	1.75	1	1.75	52
724	0.347	0.754	0.407	1.77	1	1.77	68
727	0.29	0.44	0.15	0.64	2	1.29	53
729	0.244	0.37	0.126	0.54	2	1.08	25
730	0.317	0.423	0.106	0.45	2	0.90	47
731	0.27	0.405	0.135	0.58	2	1.16	48
737	0.432	0.712	0.28	1.21	1	1.21	15
738	0.387	0.581	0.194	0.84	1	0.84	16
740	0.351	0.578	0.227	0.98	1	0.98	17
741	0.249	0.485	0.236	1.02	1	1.02	excluded
742	0.239	0.418	0.179	0.77	1	0.77	excluded
744	0.242	0.516	0.274	1.19	1	1.19	49
748	0.26	0.429	0.169	0.73	1	0.73	excluded
752	0.284	0.445	0.161	0.69	2	1.39	5
754	0.366	0.631	0.265	1.15	1	1.15	26
756	0.282	0.558	0.276	1.20	1	1.20	27
758	0.333	0.664	0.331	1.44	1	1.44	6
759	0.317	0.613	0.296	1.28	1	1.28	28
760	0.303	0.605	0.302	1.31	1	1.31	18
761	0.293	0.639	0.346	1.50	1	1.50	69
762	0.277	0.623	0.346	1.50	1	1.50	70
763	0.297	0.69	0.393	1.71	1	1.71	7
765	0.287	0.62	0.333	1.45	1	1.45	19
766	0.309	0.627	0.318	1.38	1	1.38	29
768	0.383	0.632	0.249	1.08	1	1.08	37
769	0.382	0.693	0.311	1.35	1	1.35	54
771	0.318	0.533	0.215	0.93	1	0.93	38
774	0.357	0.554	0.197	0.85	1	0.85	55
776	0.31	0.521	0.211	0.91	1	0.91	56
778	0.241	0.466	0.225	0.97	1	0.97	57
782	0.298	0.596	0.298	1.29	1	1.29	58
783	0.282	0.556	0.274	1.19	1	1.19	59
784	0.284	0.653	0.369	1.60	1	1.60	8
785	0.272	0.645	0.373	1.62	1	1.62	20
790	0.253	0.452	0.199	0.88	2	1.72	9
791	0.326	0.589	0.263	1.14	1	1.14	10
792	0.292	0.58	0.288	1.25	1	1.25	39
793	0.281	0.403	0.142	0.61	1	0.81	30
795	0.371	0.561	0.19	0.82	1	0.82	40
797	0.339	0.712	0.373	1.62	1	1.62	60
799	0.301	0.572	0.271	1.17	1	1.17	50

Week 6

concentration			
ketonbodies (mmol/l)	A ₃₄₀ pre	A ₃₄₀ post	A ₃₄₀ netto
0.000	0.255	0.242	-0.013
0.000	0.254	0.246	-0.008
0.033	0.255	0.251	-0.004
0.033	0.258	0.254	-0.004
0.067	0.258	0.261	0.005
0.067	0.262	0.269	0.007
0.134	0.257	0.279	0.022
0.134	0.262	0.287	0.025
0.268	0.257	0.318	0.061
0.268	0.258	0.319	0.063
0.535	0.258	0.388	0.13
0.535	0.257	0.392	0.135
1.070	0.256	0.5	0.244
1.070	0.281	0.521	0.26
2.140	0.259	0.729	0.47
2.140	0.266	0.768	0.502



y = ax + b a: 0.233 b: -0.0053

Group	Mouse#	cage#	ear tag	L	R	A ₃₄₀ pre	A ₃₄₀ post	A ₃₄₀ netto	meas. concentration ketonbodies (mmol/l)	dilution	Plasma ketonbodies (mmol/l)
1	1	1	0	1		0.303	0.443	0.14	0.82	3	1.87
	2	1	1	2		0.284	0.402	0.118	0.53	3	1.59
	3	2	0	0		0.273	0.383	0.11	0.49	3	1.48
	4	2	2	0		0.271	0.359	0.086	0.40	3	1.20
	5	3	0	0		0.267	0.382	0.115	0.52	3	1.55
	6	3	0	2		0.27	0.363	0.093	0.42	3	1.27
	7	4	1	1		0.283	0.424	0.141	0.63	3	1.88
	8	5	0	0		0.27	0.36	0.11	0.49	3	1.48
	9	5	0	2		0.269	0.367	0.098	0.44	3	1.33
	10	5	1	2		0.28	0.379	0.099	0.45	3	1.34
2											1.50
											0.23
	11	6	1	0		0.289	0.413	0.124	0.55	3	1.66
	12	6	2	1		0.288	0.343	0.055	0.26	3	0.78
	13	6	0	2		0.273	0.382	0.109	0.49	3	1.47
	14	7	0	1		0.288	0.468	0.18	0.80	3	2.39
	15	8	1	0		0.282	0.347	0.065	0.26	3	0.69
	16	8	0	1		0.299	0.395	0.113	0.51	3	1.52
	17	8	2	0		0.308	0.364	0.056	0.23	3	0.69
	18	9	0	0		0.271	0.413	0.142	0.63	3	1.90
3	19	9	2	1		0.287	0.386	0.099	0.45	3	1.34
	20	10	1	0		0.27	0.383	0.113	0.51	3	1.52
											1.41
											0.54
	21	11	0	1		0.279	0.443	0.164	0.73	3	2.18
	22	12	0	2		0.277	0.473	0.196	0.86	3	2.59
	23	13	0	1		0.318	0.409	0.091	0.41	3	1.24
	24	13	1	1		0.291	0.38	0.089	0.40	3	1.21
	25	14	1	0		0.282	0.421	0.159	0.71	3	2.12
	26	15	0	1		0.272	0.418	0.146	0.65	3	1.95
4	27	15	2	0		0.261	0.419	0.158	0.70	3	2.10
	28	15	1	2		0.269	0.374	0.105	0.47	3	1.42
	29	16	0	2		0.28	0.445	0.165	0.73	3	2.19
	30	17	1	0		0.289	0.372	0.103	0.46	3	1.39
											1.84
											0.48
	31	18	1	0		0.262	0.409	0.147	0.65	3	1.96
	32	18	0	2		0.266	0.381	0.115	0.52	3	1.55
	33	19	0	0		0.275	0.424	0.149	0.66	3	1.99
	34	19	1	0		0.275	0.439	0.164	0.73	3	2.18
5	35	19	0	1		0.285	0.452	0.167	0.74	3	2.22
	36	19	0	2		0.284	0.446	0.162	0.72	3	2.15
	37	20	0	0		0.283	0.417	0.154	0.68	3	2.05
	38	20	1	1		0.263	0.365	0.102	0.46	3	1.38
	39	21	0	0		0.272	0.49	0.218	0.96	3	2.88
	40	21	1	1		0.273	0.427	0.154	0.68	3	2.05
											2.04
											0.40
	41	22	1	0		0.259	0.435	0.176	0.78	3	2.33
	42	22	0	1		0.29	0.437	0.147	0.65	3	1.96
6	43	22	1	1		0.299	0.541	0.242	1.06	3	3.18
	44	22	1	2		0.284	0.408	0.124	0.55	3	1.66
	45	23	1	2		0.315	0.558	0.243	1.07	3	3.20
	46	24	2	0		0.305	0.529	0.224	0.98	3	2.95
	47	25	0	1		0.309	0.399	0.09	0.41	3	1.23
	48	25	1	1		0.295	0.439	0.144	0.64	3	1.92
	49	26	0	0		0.253	0.44	0.187	0.83	3	2.48
	50	27	1	2		0.296	0.466	0.17	0.75	3	2.26
											2.32
											0.85
7	51	28	0	1		0.283	0.581	0.318	1.39	3	4.16
	52	29	1	0		0.281	0.556	0.295	1.29	3	3.87
	53	29	1	2		0.278	0.541	0.265	1.16	3	3.48
	54	30	1	0		0.262	0.54	0.278	1.22	3	3.65
	55	30	0	2		0.262	0.551	0.289	1.26	3	3.79
	56	31	0	0		0.278	0.805	0.327	1.43	3	4.28
	57	31	0	1		0.284	0.408	0.144	0.64	3	1.92
	58	31	0	2		0.274	0.805	0.331	1.44	3	4.33
	59	31	2	2		0.283	0.564	0.281	1.23	3	3.69
	60	32	2	1		0.284	0.659	0.375	1.63	3	4.90
8											3.81
											0.78
	61	33	2	0		0.268	0.551	0.286	1.25	3	3.74
	62	34	1	0		0.269	0.569	0.299	1.31	3	3.92
	63	35	0	2		0.268	0.566	0.298	1.30	3	3.91
	64	36	0	0		0.268	0.522	0.254	1.11	3	3.34
	65	36	1	2		0.268	0.541	0.273	1.19	3	3.58
	66	37	0	0		0.27	0.579	0.309	1.35	3	4.05
	67	38	0	0		0.266	0.615	0.347	1.51	3	4.54
	68	38	2	0		0.269	0.588	0.299	1.31	3	3.92
9	69	39	1	0		0.277	0.618	0.341	1.49	3	4.46
	70	39	0	1		0.274	0.647	0.373	1.62	3	4.87
											4.03
											0.47

Group	Mouse#	cage#	ear tag		Plasma ketonbodies (mmol/l)	
			L	R	week -1	week 6
	1	1	0	1	1.59	1.87
	2	1	1	2	1.00	1.59
	3	2	0	0	1.02	1.48
	4	2	2	0	0.57	1.20
	5	3	0	0	1.39	1.55
	6	3	0	2	1.44	1.27
	7	4	1	1	1.71	1.88
	8	5	0	0	1.60	1.48
	9	5	0	2	1.72	1.33
	10	5	1	2	1.14	1.34
					1.32	1.50
					0.38	0.23
	11	6	1	0	2.00	1.66
	12	6	2	1	0.97	0.78
	13	6	0	2	1.40	1.47
	14	7	0	1	0.71	2.39
	15	8	1	0	1.21	1.52
	16	8	0	1	0.84	0.69
	17	8	2	0	0.98	0.79
	18	9	0	0	1.31	1.90
	19	9	2	1	1.45	1.34
	20	10	1	0	1.62	1.52
AVERAGE					1.25	1.41
SD					0.39	0.54
	21	11	0	1	1.63	2.18
	22	12	0	2	1.05	2.59
	23	13	0	1	1.25	1.24
	24	13	1	1	1.14	1.21
	25	14	1	0	1.08	2.12
	26	15	0	1	1.15	1.95
	27	15	2	0	1.20	2.10
	28	15	1	2	1.28	1.42
	29	16	0	2	1.38	2.19
	30	17	1	0	0.61	1.39
					1.18	1.84
					0.26	0.48
	31	18	1	0	1.16	1.96
	32	18	0	2	1.11	1.55
	33	19	0	0	1.54	1.99
	34	19	1	0	1.37	2.18
	35	19	0	1	1.43	2.22
	36	19	0	2	1.06	2.15
	37	20	0	0	1.08	2.05
	38	20	1	1	0.93	1.38
	39	21	0	0	1.25	2.88
	40	21	1	1	0.82	2.05
AVERAGE					1.17	2.04
SD					0.22	0.40
	41	22	1	0	1.06	2.33
	42	22	0	1	1.63	1.96
	43	22	1	1	1.72	3.18
	44	22	1	2	1.25	1.66
	45	23	1	2	0.87	3.20
	46	24	2	0	1.21	2.95
	47	25	0	1	0.90	1.23
	48	25	1	1	1.16	1.92
	49	26	0	0	1.19	2.48
	50	27	1	2	1.17	2.26
AVERAGE					1.22	2.32
SD					0.27	0.65
	51	28	0	1	1.23	4.16
	52	29	1	0	1.75	3.87
	53	29	1	2	1.29	3.48
	54	30	1	0	1.35	3.65
	55	30	0	2	0.85	3.79
	56	31	0	0	0.91	4.28
	57	31	0	1	0.97	1.92
	58	31	0	2	1.29	4.33
	59	31	2	2	1.19	3.69
	60	32	2	1	1.62	4.90
AVERAGE					1.25	3.81
SD					0.29	0.78
	61	33	2	0	1.10	3.74
	62	34	1	0	1.25	3.92
	63	35	0	2	1.17	3.91
	64	36	0	0	1.06	3.34
	65	36	1	2	0.74	3.58
	66	37	0	0	1.18	4.05
	67	38	0	0	1.50	4.54
	68	38	2	0	1.77	3.92
	69	39	1	0	1.50	4.46
	70	39	0	1	1.50	4.87
AVERAGE					1.28	4.03
SD					0.30	0.47
excluded (655)					0.87	
excluded (656)					0.86	
excluded (741)					1.02	
excluded (742)					0.77	
excluded (748)					0.73	

Appendix D. Measurements in metabolic cages

D1. Code mice and metabolic cages

group#	mouse#	metabolic cage#
	2	101
	3	105
	4	201
	6	205
	21	102
	22	106
	24	202
	27	206
4	31	103
4	32	107
4	37	203
4	38	207
6	51	104
6	53	108
6	54	204
6	55	208

D2. Average bodyweight mice in metabolic cages

group#	mouse#	metabolic cage#	Bodyweight (g)		Average bodyweight (g) in metabolic cage
			begin metabolic cage	end metabolic cage	
	2	101	29.9	30.7	30.30
	3	105	30.2	30	30.10
	4	201	28	29.1	28.55
	6	205	29.3	29.6	29.45
	21	102	29.5	30.2	29.85
	22	106	29.8	30.1	29.95
	24	202	28.8	29.7	29.25
	27	206	29.5	30.2	29.85
4	31	103	28.9	29.8	29.35
4	32	107	28.9	29	28.95
4	37	203	26.9	28.9	27.90
4	38	207	30.4	31.3	30.85
6	51	104	28.2	29.1	28.65
6	53	108	27.3	26.5	26.90
6	54	204	29.4	30.7	30.05
6	55	208	27.8	28.8	28.30

D3. Food and drink intake measurements

Food intake measurements

Time (hr)	Accumulated food intake (g)				Average acc. food intake (g)	SD (g)
	cage 0101	cage 0105	cage 0201	cage 0205		
6.1	0.258	0.182	0.114	0.206	0.19	0.06
7.4	0.735	0.468	0.273	0.555	0.51	0.19
8.6	0.888	0.696	0.733	0.777	0.77	0.08
9.9	1.017	0.851	0.926	0.997	0.95	0.08
11.1	1.205	0.946	1.021	1.184	1.09	0.13
12.4	1.380	1.248	1.356	1.345	1.33	0.06
13.6	1.571	1.388	1.770	1.525	1.56	0.16
14.9	1.810	1.510	2.016	1.681	1.75	0.21
16.1	2.015	1.682	2.182	1.792	1.92	0.22
17.4	2.184	1.747	2.294	1.898	2.03	0.25
18.6	2.402	1.837	2.324	1.992	2.14	0.27
19.9	2.458	1.940	2.623	2.060	2.27	0.32
21.1	2.616	2.045	3.224	2.152	2.51	0.54
22.4	2.724	2.188	3.390	2.308	2.65	0.54
23.6	2.824	2.437	3.480	2.473	2.80	0.48
24.9	3.064	2.599	3.486	2.689	2.96	0.40
26.1	3.300	2.792	3.510	2.748	3.09	0.38
27.4	3.564	3.013	3.525	2.995	3.27	0.31
28.6	3.879	3.109	3.676	3.304	3.49	0.35
29.9	4.146	3.214	3.802	3.448	3.65	0.41
31.1	4.399	3.284	3.980	3.750	3.85	0.46
32.4	4.531	3.372	4.110	3.918	3.98	0.48
33.6	4.743	3.412	4.174	3.977	4.08	0.55
34.9	4.856	3.514	4.280	4.085	4.18	0.55
36.1	4.935	3.602	4.321	4.343	4.30	0.55
37.4	5.129	3.739	4.441	4.488	4.45	0.57
38.6	5.509	4.064	4.469	4.635	4.67	0.61
39.9	5.770	4.341	4.705	4.815	4.91	0.61
41.1	5.968	4.531	4.897	4.947	5.09	0.62
42.4	6.096	4.684	5.032	5.059	5.22	0.61
43.6	6.260	4.869	5.144	5.138	5.35	0.62
44.9	6.378	5.016	5.351	5.318	5.52	0.59
46.1	6.529	5.181	5.535	5.470	5.68	0.59
47.4	6.741	5.397	5.692	5.729	5.89	0.59
48.6	6.916	5.608	5.944	5.965	6.11	0.56
49.9	7.046	5.794	6.060	6.139	6.26	0.54
51.1	7.233	5.993	6.328	6.449	6.50	0.52
52.4	7.443	6.101	6.615	6.749	6.73	0.55
53.6	7.561	6.231	6.776	6.879	6.86	0.55
54.9	7.629	6.317	7.002	7.007	6.99	0.54
56.1	7.763	6.406	7.175	7.153	7.12	0.56
57.4	8.003	6.555	7.392	7.280	7.31	0.59
58.6	8.140	6.690	7.504	7.345	7.42	0.60
59.9	8.297	6.796	7.656	7.432	7.55	0.62
61.1	8.485	6.840	7.831	7.553	7.68	0.68
62.4	8.671	7.034	7.922	7.620	7.81	0.68
63.6	8.766	7.102	7.973	7.671	7.88	0.69
64.9	8.926	7.156	8.014	7.735	7.96	0.74
66.1	9.030	7.190	8.075	7.826	8.03	0.76
67.4	9.096	7.277	8.149	7.856	8.09	0.76
68.6	9.128	7.336	8.299	7.904	8.17	0.75
69.9	9.139	7.553	8.481	8.007	8.30	0.68
71.1	9.279	7.633	8.613	8.157	8.42	0.70
72.4	9.441	7.933	8.781	8.277	8.61	0.66
73.6	9.564	8.168	8.938	8.488	8.79	0.61
74.9	9.710	8.462	9.207	8.706	9.02	0.55
76.1	9.835	8.621	9.459	8.970	9.22	0.53
77.4	10.044	8.689	9.575	9.184	9.37	0.58

Time (hr)	Accumulated food intake (g)				Average acc. food intake (g)	SD (g)
	cage 0102	cage 0106	cage 0202	cage 0206		
6.1	0.215	0.190	0.188	0.203	0.20	0.01
7.4	0.548	0.528	0.643	0.494	0.55	0.06
8.6	0.834	0.665	0.961	0.615	0.77	0.16
9.9	0.979	0.822	1.200	0.745	0.94	0.20
11.1	1.156	1.081	1.312	0.890	1.11	0.18
12.4	1.416	1.340	1.505	1.058	1.33	0.19
13.6	1.624	1.437	1.738	1.282	1.52	0.20
14.9	1.828	1.652	1.911	1.374	1.69	0.24
16.1	2.005	1.696	2.105	1.503	1.83	0.28
17.4	2.164	1.772	2.282	1.601	1.95	0.32
18.6	2.200	1.844	2.450	1.658	2.04	0.35
19.9	2.290	1.877	2.731	1.761	2.16	0.44
21.1	2.416	2.008	2.955	1.807	2.30	0.51
22.4	2.506	2.171	3.097	1.885	2.41	0.52
23.6	2.638	2.304	3.284	2.120	2.59	0.51
24.9	2.790	2.564	3.633	2.294	2.82	0.58
26.1	3.033	2.637	3.819	2.454	2.99	0.61
27.4	3.288	2.836	4.141	2.726	3.25	0.64
28.6	3.478	3.028	4.557	2.931	3.50	0.74
29.9	3.658	3.030	4.845	3.087	3.66	0.84
31.1	3.815	3.033	4.958	3.251	3.76	0.86
32.4	3.989	3.083	5.184	3.466	3.93	0.91
33.6	4.160	3.140	5.331	3.592	4.06	0.95
34.9	4.264	3.200	5.478	3.741	4.17	0.97
36.1	4.385	3.322	5.596	3.824	4.28	0.98
37.4	4.660	3.464	5.823	4.060	4.50	1.01
38.6	5.208	3.675	6.138	4.316	4.83	1.07
39.9	5.472	3.794	6.381	4.484	5.03	1.13
41.1	5.665	4.016	6.645	4.648	5.24	1.16
42.4	5.794	4.175	6.781	4.691	5.36	1.16
43.6	5.890	4.375	6.887	4.736	5.47	1.14
44.9	6.059	4.476	7.033	4.870	5.61	1.16
46.1	6.241	4.642	7.204	4.965	5.76	1.18
47.4	6.399	4.839	7.392	5.180	5.95	1.17
48.6	6.520	5.095	7.600	5.323	6.13	1.16
49.9	6.764	5.403	7.862	5.512	6.39	1.16
51.1	7.101	5.597	8.127	5.755	6.65	1.20
52.4	7.424	5.802	8.354	6.043	6.91	1.20
53.6	7.608	5.958	8.528	6.120	7.05	1.23
54.9	7.838	6.095	8.658	6.304	7.22	1.23
56.1	8.024	6.240	8.807	6.420	7.37	1.25
57.4	8.114	6.300	8.955	6.534	7.48	1.27
58.6	8.228	6.388	9.050	6.656	7.58	1.27
59.9	8.312	6.460	9.159	6.748	7.67	1.28
61.1	8.479	6.546	9.299	6.817	7.79	1.32
62.4	8.672	6.724	9.494	6.931	7.96	1.35
63.6	8.711	6.908	9.698	6.987	8.08	1.36
64.9	8.785	7.060	9.857	7.086	8.20	1.37
66.1	8.830	7.178	9.942	7.105	8.26	1.37
67.4	8.844	7.263	10.006	7.200	8.33	1.35
68.6	8.903	7.332	10.105	7.285	8.40	1.36
69.9	8.920	7.393	10.230	7.319	8.47	1.39
71.1	8.996	7.574	10.390	7.448	8.60	1.38
72.4	9.098	7.806	10.490	7.629	8.76	1.33
73.6	9.384	7.976	10.763	7.816	8.98	1.38
74.9	9.629	8.172	11.070	8.089	9.24	1.41
76.1	9.819	8.314	11.308	8.285	9.43	1.44
77.4	9.936	8.454	11.426	8.447	9.57	1.42

Time (hr)	Accumulated food intake (g)				Average acc. food intake (g)	SD (g)
	cage 0103	cage 0107	cage 0203	cage 0207		
6.1	0.211	0.360	0.336	0.424	0.33	0.09
7.4	0.535	0.688	0.784	0.907	0.73	0.16
8.6	0.656	0.881	1.069	1.157	0.94	0.22
9.9	0.844	1.075	1.187	1.292	1.10	0.19
11.1	0.952	1.146	1.318	1.510	1.23	0.24
12.4	1.045	1.282	1.490	1.612	1.36	0.25
13.6	1.181	1.410	1.611	1.682	1.47	0.23
14.9	1.355	1.470	1.719	1.825	1.59	0.22
16.1	1.475	1.518	1.796	1.867	1.66	0.20
17.4	1.612	1.603	1.896	2.072	1.80	0.23
18.6	1.724	1.856	2.060	2.173	1.95	0.20
19.9	1.840	2.142	2.138	2.328	2.11	0.20
21.1	2.066	2.412	2.257	2.463	2.30	0.18
22.4	2.272	2.630	2.440	2.629	2.49	0.17
23.6	2.408	2.775	2.575	2.771	2.63	0.18
24.9	2.588	2.822	2.849	2.957	2.80	0.16
26.1	2.702	2.952	3.090	3.204	2.99	0.22
27.4	2.899	3.350	3.486	3.580	3.33	0.30
28.6	3.247	3.880	3.988	4.074	3.80	0.38
29.9	3.592	4.090	4.394	4.524	4.15	0.41
31.1	3.788	4.209	4.849	4.851	4.42	0.52
32.4	3.849	4.315	5.167	5.095	4.61	0.64
33.6	3.935	4.435	5.255	5.180	4.70	0.63
34.9	4.033	4.530	5.345	5.222	4.78	0.62
36.1	4.112	4.596	5.513	5.308	4.88	0.65
37.4	4.297	4.917	5.702	5.423	5.08	0.62
38.6	4.563	5.184	5.847	5.572	5.29	0.56
39.9	4.733	5.370	5.977	5.836	5.48	0.56
41.1	4.925	5.644	6.195	5.974	5.68	0.55
42.4	5.058	5.862	6.305	6.104	5.83	0.55
43.6	5.163	6.025	6.418	6.208	5.95	0.55
44.9	5.285	6.249	6.561	6.264	6.09	0.56
46.1	5.412	6.429	6.782	6.450	6.27	0.59
47.4	5.592	6.682	7.023	6.601	6.47	0.62
48.6	5.945	6.866	7.303	6.770	6.72	0.57
49.9	6.233	7.064	7.717	6.965	6.99	0.61
51.1	6.686	7.269	8.032	7.365	7.34	0.55
52.4	7.036	7.546	8.318	7.866	7.69	0.54
53.6	7.312	7.920	8.558	8.118	7.98	0.52
54.9	7.437	8.042	8.678	8.400	8.14	0.54
56.1	7.544	8.134	8.803	8.589	8.27	0.56
57.4	7.578	8.166	8.931	8.735	8.35	0.61
58.6	7.667	8.205	9.030	8.832	8.43	0.62
59.9	7.792	8.260	9.197	8.900	8.54	0.63
61.1	7.871	8.338	9.339	9.022	8.64	0.66
62.4	7.998	8.416	9.506	9.156	8.77	0.69
63.6	8.093	8.503	9.620	9.257	8.87	0.70
64.9	8.272	8.585	9.680	9.388	8.98	0.66
66.1	8.345	8.669	9.753	9.484	9.06	0.66
67.4	8.426	8.750	9.904	9.569	9.16	0.69
68.6	8.474	8.848	10.001	9.658	9.25	0.71
69.9	8.596	8.900	10.123	9.772	9.35	0.72
71.1	8.664	9.017	10.340	9.883	9.48	0.77
72.4	8.858	9.148	10.445	10.118	9.64	0.76
73.6	9.226	9.256	10.689	10.283	9.86	0.74
74.9	9.590	9.385	10.994	10.529	10.12	0.76
76.1	9.961	9.515	11.208	10.865	10.39	0.78
77.4	10.204	9.712	11.433	11.104	10.61	0.79

Time (hr)	Accumulated food intake (g)				Average acc. food intake (g)	SD (g)
	cage 0104	cage 0108	cage 0204	cage 0208		
6.1	0.204	0.119	0.211	0.256	0.20	0.06
7.4	0.535	0.170	0.629	0.547	0.47	0.20
8.6	0.808	0.260	0.916	0.709	0.67	0.29
9.9	0.960	0.518	1.134	0.865	0.87	0.26
11.1	1.185	0.732	1.406	1.047	1.09	0.28
12.4	1.512	0.847	1.618	1.189	1.29	0.35
13.6	1.749	0.889	1.848	1.340	1.46	0.44
14.9	1.940	0.998	2.001	1.406	1.59	0.47
16.1	2.020	1.095	2.100	1.591	1.70	0.46
17.4	2.174	1.216	2.185	1.642	1.80	0.47
18.6	2.406	1.304	2.252	1.767	1.93	0.50
19.9	2.543	1.370	2.270	1.851	2.01	0.51
21.1	2.648	1.558	2.390	1.938	2.13	0.48
22.4	2.810	1.650	2.480	2.082	2.26	0.50
23.6	3.050	1.750	2.546	2.234	2.40	0.55
24.9	3.301	1.898	2.689	2.577	2.62	0.57
26.1	3.423	2.071	2.851	2.815	2.79	0.55
27.4	3.778	2.310	3.211	3.149	3.11	0.60
28.6	4.101	2.641	3.553	3.436	3.43	0.60
29.9	4.314	2.965	3.990	3.637	3.73	0.58
31.1	4.529	3.048	4.316	3.864	3.94	0.66
32.4	4.663	3.078	4.572	3.978	4.07	0.73
33.6	4.720	3.203	4.695	4.070	4.17	0.71
34.9	4.865	3.307	5.002	4.232	4.35	0.77
36.1	4.989	3.385	5.161	4.322	4.46	0.81
37.4	5.264	3.615	5.358	4.501	4.68	0.81
38.6	5.554	3.670	5.466	4.702	4.85	0.87
39.9	5.835	3.735	5.640	4.919	5.03	0.95
41.1	6.067	3.862	5.747	5.126	5.20	0.97
42.4	6.303	3.946	5.878	5.205	5.33	1.03
43.6	6.441	4.055	6.075	5.268	5.46	1.06
44.9	6.584	4.147	6.188	5.421	5.59	1.07
46.1	6.733	4.293	6.320	5.543	5.72	1.07
47.4	7.107	4.400	6.508	5.644	5.91	1.17
48.6	7.672	4.522	6.617	5.846	6.16	1.33
49.9	7.929	4.758	6.854	6.035	6.39	1.34
51.1	8.198	5.100	7.194	6.268	6.69	1.32
52.4	8.427	5.352	7.512	6.465	6.94	1.33
53.6	8.566	5.511	7.721	6.688	7.12	1.32
54.9	8.762	5.603	7.901	6.921	7.30	1.36
56.1	8.892	5.689	8.062	7.030	7.42	1.38
57.4	9.088	5.749	8.139	7.093	7.52	1.43
58.6	9.207	5.852	8.244	7.166	7.62	1.44
59.9	9.378	6.024	8.302	7.200	7.73	1.44
61.1	9.554	6.105	8.386	7.307	7.84	1.48
62.4	9.689	6.228	8.526	7.433	7.97	1.48
63.6	9.839	6.294	8.674	7.524	8.08	1.52
64.9	10.003	6.361	8.830	7.611	8.20	1.57
66.1	10.139	6.478	8.880	7.664	8.29	1.58
67.4	10.256	6.542	8.933	7.717	8.36	1.60
68.6	10.347	6.591	9.006	7.720	8.42	1.62
69.9	10.464	6.718	9.083	7.740	8.50	1.63
71.1	10.593	6.810	9.309	7.807	8.63	1.66
72.4	10.793	6.915	9.451	7.914	8.77	1.71
73.6	11.011	7.103	9.579	8.188	8.97	1.70
74.9	11.264	7.345	9.788	8.977	9.34	1.63
76.1	11.518	7.679	10.107	9.184	9.62	1.61
77.4	11.641	7.878	10.312	9.426	9.81	1.58

Accumulated Food intake; p-values Mann Whitney U-test																		
Time (hr)	group 1 vs 3			group 1 vs 4			group 1 vs 6			group 3 vs 4			group 3 vs 6			group 4 vs 6		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
6.1			0.886		4	0.057		4	0.860		4	0.057		4	0.686		4	0.057
7.4			0.886		4	0.200		4	0.886		4	0.114		4	0.886		4	0.114
8.6			0.886		4	0.486		4	1.000		4	0.343		4	0.886		4	0.343
9.9			0.686		4	0.343		4	0.886		4	0.343		4	0.886		4	0.343
11.1			1.000		4	0.486		4	0.886		4	0.486		4	1.000		4	0.686
12.4			0.886		4	0.886		4	1.000		4	1.000		4	0.886		4	1.000
13.6			0.886		4	0.886		4	0.886		4	0.686		4	0.886		4	0.886
14.9			0.886		4	0.486		4	0.686		4	0.486		4	0.886		4	0.886
16.1			0.686		4	0.343		4	0.486		4	0.486		4	0.886		4	0.686
17.4			0.686		4	0.200		4	0.486		4	0.486		4	0.886		4	0.686
18.6			0.686		4	0.486		4	0.686		4	0.886		4	0.886		4	0.886
19.9			0.686		4	0.686		4	0.486		4	1.000		4	0.686		4	1.000
21.1			0.486		4	0.886		4	0.486		4	0.886		4	0.686		4	0.686
22.4			0.486		4	0.886		4	0.486		4	0.686		4	0.686		4	0.686
23.6			0.486		4	0.686		4	0.486		4	0.686		4	0.686		4	0.486
24.9			0.686		4	0.686		4	0.343		4	0.486		4	0.886		4	0.486
26.1			0.686		4	0.686		4	0.886		4	0.686		4	0.886		4	0.686
27.4			0.686		4	1.000		4	1.000		4	0.486		4	0.886		4	0.686
28.6			0.686		4	0.200		4	1.000		4	0.486		4	1.000		4	0.686
29.9			0.686		4	0.200		4	0.886		4	0.486		4	1.000		4	0.343
31.1			0.686		4	0.200		4	0.886		4	0.486		4	0.686		4	0.486
32.4			0.886		4	0.343		4	0.686		4	0.486		4	0.886		4	0.486
33.6			0.886		4	0.343		4	1.000		4	0.486		4	0.886		4	0.486
34.9			0.886		4	0.343		4	0.686		4	0.486		4	0.886		4	0.486
36.1			1.000		4	0.343		4	0.686		4	0.486		4	0.886		4	0.486
37.4			1.000		4	0.343		4	0.486		4	0.486		4	0.886		4	0.486
38.6			1.000		4	0.200		4	0.686		4	0.686		4	1.000		4	0.486
39.9			1.000		4	0.200		4	0.686		4	0.686		4	1.000		4	0.486
41.1			1.000		4	0.200		4	0.686		4	0.686		4	1.000		4	0.686
42.4			1.000		4	0.200		4	0.686		4	0.486		4	1.000		4	0.686
43.6			0.860		4	0.200		4	0.686		4	0.486		4	1.000		4	0.886
44.9			0.886		4	0.486		4	0.686		4	0.486		4	1.000		4	0.686
46.1			0.886		4	0.486		4	0.686		4	0.486		4	1.000		4	0.486
47.4			0.886		4	0.486		4	1.000		4	0.486		4	1.000		4	0.686
48.6			0.886		4	0.343		4	1.000		4	0.486		4	0.886		4	0.486
49.9			0.886		4	0.114		4	1.000		4	0.486		4	0.886		4	0.486
51.1			0.886		4	0.057		4	1.000		4	0.486		4	0.886		4	0.486
52.4			0.886		4	0.057		4	0.886		4	0.486		4	0.886		4	0.486
53.6			1.000		4	0.057		4	0.886		4	0.343		4	0.886		4	0.486
54.9			1.000		4	0.057		4	0.886		4	0.343		4	0.886		4	0.486
56.1			0.886		4	0.057		4	0.886		4	0.486		4	0.886		4	0.486
57.4			1.000		4	0.057		4	0.886		4	0.486		4	0.886		4	0.486
58.6			1.000		4	0.057		4	0.886		4	0.686		4	0.886		4	0.686
59.9			1.000		4	0.114		4	0.886		4	0.486		4	1.000		4	0.686
61.1			0.886		4	0.114		4	1.000		4	0.486		4	1.000		4	0.686
62.4			0.886		4	0.114		4	1.000		4	0.486		4	1.000		4	0.686
63.6			0.886		4	0.114		4	1.000		4	0.686		4	1.000		4	0.686
64.9			0.886		4	0.114		4	1.000		4	0.686		4	0.886		4	0.686
66.1			0.886		4	0.114		4	1.000		4	0.686		4	0.886		4	0.686
67.4			0.886		4	0.114		4	1.000		4	0.686		4	0.886		4	0.686
68.6			0.886		4	0.114		4	1.000		4	0.686		4	0.886		4	0.686
69.9			0.886		4	0.114		4	1.000		4	0.686		4	0.886		4	0.686
71.1			0.886		4	0.114		4	0.886		4	0.486		4	0.886		4	0.686
72.4			0.886		4	0.114		4	1.000		4	0.486		4	0.886		4	0.686
73.6			0.886		4	0.114		4	0.886		4	0.686		4	0.886		4	0.686
74.9			0.886		4	0.114		4	0.686		4	0.686		4	0.886		4	0.686
76.1			0.886		4	0.057		4	0.686		4	0.486		4	0.886		4	0.686
77.4			0.886		4	0.057		4	0.686		4	0.343		4	0.886		4	0.686

p<0.05

p<0.05

Feeding bout size measurements

Time (hr)	Feeding bout size (g)				Average feeding bout size (g)	SD (g)
	cage 0101	cage 0105	cage 0201	cage 0205		
6.1	0.045	0.036	0.018	0.044	0.036	0.013
7.4	0.043	0.019	0.032	0.025	0.030	0.010
8.6	0.002	0.029	0.034	0.018	0.021	0.014
9.9	0.018	0.002	0.012	0.025	0.014	0.010
11.1	0.017	0.014	0.010	0.008	0.012	0.004
12.4	0.022	0.032	0.053	0.022	0.032	0.015
13.6	0.024	0.013	0.038	0.017	0.023	0.011
14.9	0.023	0.017	0.018	0.013	0.018	0.004
16.1	0.013	0.010	0.005	0.013	0.010	0.004
17.4	0.014	0.005	0.012	0.012	0.011	0.004
18.6	0.023	0.013	0.002	0.003	0.010	0.010
19.9	0.006	0.005	0.078	0.012	0.025	0.035
21.1	0.019	0.014	0.015	0.008	0.014	0.005
22.4	0.008	0.028	0.021	0.014	0.018	0.009
23.6	0.017	0.020	0.000	0.025	0.016	0.011
24.9	0.016	0.005	0.003	0.011	0.009	0.006
26.1	0.038	0.030	0.000	0.016	0.021	0.017
27.4	0.012	0.012	0.005	0.026	0.014	0.009
28.6	0.040	0.011	0.021	0.028	0.025	0.012
29.9	0.029	0.011	0.021	0.009	0.018	0.009
31.1	0.015	0.010	0.000	0.042	0.017	0.018
32.4	0.025	0.002	0.016	0.004	0.012	0.011
33.6	0.011	0.008	0.006	0.003	0.007	0.003
34.9	0.007	0.009	0.008	0.015	0.010	0.004
36.1	0.016	0.016	0.008	0.033	0.018	0.011
37.4	0.031	0.004	0.009	0.010	0.014	0.012
38.6	0.026	0.046	0.011	0.015	0.025	0.016
39.9	0.026	0.025	0.025	0.015	0.023	0.005
41.1	0.018	0.012	0.013	0.010	0.013	0.003
42.4	0.012	0.017	0.010	0.011	0.013	0.003
43.6	0.021	0.014	0.013	0.017	0.016	0.004
44.9	0.008	0.018	0.024	0.017	0.017	0.007
46.1	0.018	0.023	0.021	0.021	0.021	0.002
47.4	0.023	0.020	0.018	0.020	0.020	0.002
48.6	0.009	0.023	0.021	0.017	0.018	0.006
49.9	0.021	0.017	0.012	0.028	0.020	0.007
51.1	0.025	0.014	0.038	0.030	0.027	0.010
52.4	0.010	0.014	0.025	0.029	0.020	0.009
53.6	0.008	0.009	0.008	0.011	0.009	0.001
54.9	0.011	0.009	0.023	0.015	0.015	0.006
56.1	0.013	0.013	0.021	0.016	0.016	0.004
57.4	0.027	0.012	0.015	0.000	0.014	0.011
58.6	0.019	0.012	0.016	0.007	0.014	0.005
59.9	0.007	0.009	0.015	0.018	0.012	0.005
61.1	0.029	0.004	0.013	0.009	0.014	0.011
62.4	0.011	0.020	0.008	0.000	0.010	0.008
63.6	0.002	0.005	0.004	0.008	0.005	0.003
64.9	0.024	0.007	0.008	0.012	0.013	0.008
66.1	0.002	0.002	0.001	0.001	0.002	0.001
67.4	0.008	0.010	0.018	0.003	0.010	0.006
68.6	0.001	0.015	0.009	0.014	0.010	0.006
69.9	0.002	0.017	0.017	0.001	0.009	0.009
71.1	0.017	0.002	0.014	0.021	0.014	0.008
72.4	0.018	0.047	0.019	0.015	0.025	0.015
73.6	0.009	0.012	0.017	0.027	0.016	0.008
74.9	0.019	0.038	0.035	0.020	0.028	0.010
76.1	0.021	0.002	0.013	0.027	0.016	0.011
77.4	0.010	0.010	0.015	0.014	0.012	0.003

Time (hr)	Feeding bout size (g)				Average feeding bout size (g)	SD (g)
	cage 0102	cage 0106	cage 0202	cage 0206		
6.1	0.045	0.043	0.032	0.041	0.040	0.006
7.4	0.018	0.018	0.038	0.010	0.021	0.012
8.6	0.024	0.011	0.033	0.014	0.021	0.010
9.9	0.017	0.026	0.025	0.015	0.021	0.006
11.1	0.036	0.024	0.008	0.015	0.021	0.012
12.4	0.002	0.019	0.026	0.020	0.017	0.010
13.6	0.036	0.017	0.018	0.020	0.023	0.009
14.9	0.012	0.008	0.024	0.008	0.013	0.008
16.1	0.015	0.011	0.019	0.011	0.014	0.004
17.4	0.013	0.001	0.013	0.007	0.009	0.006
18.6	0.010	0.008	0.015	0.012	0.011	0.003
19.9	0.001	0.004	0.028	0.005	0.010	0.012
21.1	0.018	0.018	0.024	0.003	0.016	0.009
22.4	0.012	0.019	0.009	0.015	0.014	0.004
23.6	0.009	0.007	0.025	0.020	0.015	0.009
24.9	0.015	0.028	0.036	0.027	0.027	0.009
26.1	0.028	0.009	0.021	0.012	0.018	0.009
27.4	0.028	0.031	0.046	0.029	0.034	0.008
28.6	0.020	0.001	0.027	0.021	0.017	0.011
29.9	0.011	0.000	0.024	0.009	0.011	0.010
31.1	0.024	0.003	0.016	0.029	0.018	0.011
32.4	0.022	0.008	0.012	0.009	0.013	0.006
33.6	0.000	0.000	0.023	0.008	0.008	0.011
34.9	0.014	0.011	0.010	0.018	0.013	0.004
36.1	0.013	0.012	0.015	0.012	0.013	0.001
37.4	0.055	0.010	0.031	0.032	0.032	0.018
38.6	0.044	0.025	0.028	0.016	0.028	0.012
39.9	0.009	0.012	0.032	0.020	0.018	0.010
41.1	0.027	0.031	0.012	0.009	0.020	0.011
42.4	0.006	0.015	0.011	0.003	0.009	0.005
43.6	0.014	0.011	0.020	0.012	0.014	0.004
44.9	0.010	0.009	0.010	0.010	0.010	0.001
46.1	0.023	0.017	0.018	0.016	0.019	0.003
47.4	0.017	0.032	0.017	0.022	0.022	0.007
48.6	0.005	0.033	0.024	0.011	0.018	0.013
49.9	0.038	0.022	0.025	0.024	0.027	0.007
51.1	0.032	0.019	0.032	0.024	0.027	0.006
52.4	0.030	0.018	0.020	0.023	0.023	0.005
53.6	0.013	0.008	0.014	0.000	0.009	0.006
54.9	0.025	0.015	0.011	0.026	0.019	0.007
56.1	0.015	0.010	0.023	0.008	0.014	0.007
57.4	0.014	0.006	0.004	0.017	0.010	0.006
58.6	0.007	0.013	0.015	0.010	0.011	0.004
59.9	0.013	0.011	0.007	0.002	0.008	0.005
61.1	0.020	0.001	0.022	0.012	0.014	0.010
62.4	0.008	0.030	0.022	0.011	0.018	0.010
63.6	0.004	0.009	0.007	0.002	0.006	0.003
64.9	0.011	0.019	0.020	0.010	0.015	0.005
66.1	0.000	0.011	0.005	0.001	0.004	0.005
67.4	0.007	0.007	0.006	0.014	0.009	0.004
68.6	0.002	0.005	0.013	0.006	0.007	0.005
69.9	0.000	0.011	0.009	0.002	0.006	0.005
71.1	0.013	0.023	0.018	0.022	0.019	0.005
72.4	0.014	0.023	0.010	0.014	0.015	0.006
73.6	0.033	0.008	0.041	0.019	0.025	0.015
74.9	0.019	0.023	0.022	0.032	0.024	0.006
76.1	0.017	0.008	0.021	0.017	0.016	0.006
77.4	0.006	0.015	0.010	0.013	0.011	0.004

Time (hr)	Feeding bout size (g)				Average feeding bout size (g)	SD (g)
	cage 0103	cage 0107	cage 0203	cage 0207		
6.1	0.043	0.050	0.060	0.066	0.055	0.010
7.4	0.019	0.023	0.037	0.037	0.029	0.009
8.6	0.009	0.023	0.014	0.025	0.018	0.008
9.9	0.022	0.014	0.011	0.009	0.014	0.006
11.1	0.007	0.007	0.025	0.021	0.015	0.009
12.4	0.010	0.024	0.006	0.004	0.011	0.009
13.6	0.020	0.000	0.015	0.020	0.014	0.009
14.9	0.010	0.006	0.011	0.001	0.007	0.005
16.1	0.013	0.005	0.006	0.019	0.011	0.007
17.4	0.013	0.012	0.007	0.012	0.011	0.003
18.6	0.011	0.027	0.021	0.005	0.016	0.010
19.9	0.021	0.040	0.008	0.023	0.023	0.013
21.1	0.018	0.013	0.014	0.008	0.013	0.004
22.4	0.016	0.029	0.010	0.021	0.019	0.008
23.6	0.015	0.009	0.025	0.013	0.016	0.007
24.9	0.019	0.001	0.024	0.024	0.017	0.011
26.1	0.009	0.019	0.024	0.030	0.021	0.009
27.4	0.036	0.063	0.056	0.041	0.049	0.013
28.6	0.033	0.030	0.044	0.048	0.039	0.009
29.9	0.024	0.020	0.049	0.049	0.036	0.016
31.1	0.014	0.012	0.036	0.017	0.020	0.011
32.4	0.005	0.009	0.019	0.025	0.015	0.009
33.6	0.010	0.017	0.005	0.000	0.008	0.007
34.9	0.012	0.000	0.018	0.010	0.010	0.007
36.1	0.009	0.012	0.013	0.008	0.011	0.002
37.4	0.028	0.032	0.015	0.007	0.021	0.012
38.6	0.019	0.040	0.020	0.030	0.027	0.010
39.9	0.017	0.000	0.012	0.019	0.012	0.009
41.1	0.022	0.044	0.021	0.011	0.025	0.014
42.4	0.009	0.015	0.007	0.011	0.011	0.003
43.6	0.007	0.016	0.010	0.008	0.010	0.004
44.9	0.012	0.017	0.030	0.019	0.020	0.008
46.1	0.013	0.035	0.011	0.010	0.017	0.012
47.4	0.028	0.007	0.029	0.017	0.020	0.010
48.6	0.037	0.026	0.037	0.017	0.029	0.010
49.9	0.033	0.015	0.035	0.022	0.026	0.009
51.1	0.040	0.027	0.027	0.060	0.039	0.016
52.4	0.030	0.039	0.032	0.026	0.032	0.005
53.6	0.022	0.025	0.023	0.036	0.027	0.006
54.9	0.013	0.004	0.001	0.020	0.010	0.009
56.1	0.008	0.008	0.021	0.016	0.013	0.006
57.4	0.006	0.002	0.006	0.014	0.007	0.005
58.6	0.014	0.007	0.018	0.006	0.011	0.006
59.9	0.004	0.005	0.017	0.007	0.008	0.006
61.1	0.011	0.008	0.015	0.018	0.013	0.004
62.4	0.014	0.012	0.014	0.011	0.013	0.002
63.6	0.017	0.002	0.009	0.009	0.009	0.006
64.9	0.008	0.015	0.000	0.014	0.009	0.007
66.1	0.011	0.009	0.022	0.009	0.013	0.006
67.4	0.006	0.000	0.001	0.008	0.004	0.004
68.6	0.001	0.010	0.017	0.008	0.009	0.007
69.9	0.014	0.010	0.013	0.013	0.013	0.002
71.1	0.006	0.014	0.015	0.013	0.012	0.004
72.4	0.034	0.013	0.011	0.024	0.021	0.011
73.6	0.041	0.008	0.035	0.023	0.027	0.015
74.9	0.034	0.015	0.030	0.025	0.026	0.008
76.1	0.037	0.016	0.019	0.036	0.027	0.011
77.4	0.017	0.014	0.025	0.013	0.017	0.005

Time (hr)	Feeding bout size (g)				Average feeding bout size (g)	SD (g)
	cage 0104	cage 0108	cage 0204	cage 0208		
6.1	0.040	0.017	0.037	0.035	0.032	0.010
7.4	0.026	0.000	0.043	0.025	0.024	0.018
8.6	0.020	0.010	0.018	0.018	0.017	0.004
9.9	0.024	0.036	0.025	0.018	0.026	0.008
11.1	0.022	0.015	0.027	0.013	0.019	0.006
12.4	0.030	0.009	0.027	0.014	0.020	0.010
13.6	0.027	0.003	0.014	0.014	0.015	0.010
14.9	0.008	0.019	0.019	0.008	0.014	0.006
16.1	0.010	0.001	0.000	0.018	0.007	0.008
17.4	0.026	0.013	0.009	0.002	0.013	0.010
18.6	0.014	0.013	0.007	0.012	0.012	0.003
19.9	0.011	0.008	0.010	0.013	0.011	0.002
21.1	0.015	0.017	0.011	0.013	0.014	0.003
22.4	0.019	0.010	0.004	0.014	0.012	0.006
23.6	0.024	0.013	0.006	0.015	0.015	0.007
24.9	0.018	0.010	0.023	0.033	0.021	0.010
26.1	0.013	0.031	0.015	0.033	0.023	0.010
27.4	0.050	0.013	0.049	0.024	0.034	0.018
28.6	0.020	0.046	0.029	0.033	0.032	0.011
29.9	0.027	0.016	0.031	0.011	0.021	0.009
31.1	0.013	0.006	0.035	0.024	0.020	0.013
32.4	0.014	0.003	0.023	0.011	0.013	0.008
33.6	0.010	0.016	0.017	0.012	0.014	0.003
34.9	0.011	0.012	0.036	0.019	0.020	0.012
36.1	0.011	0.004	0.004	0.002	0.005	0.004
37.4	0.039	0.023	0.022	0.023	0.027	0.008
38.6	0.029	0.007	0.014	0.022	0.018	0.010
39.9	0.024	0.013	0.012	0.026	0.019	0.007
41.1	0.023	0.004	0.013	0.014	0.014	0.008
42.4	0.018	0.016	0.017	0.002	0.013	0.008
43.6	0.013	0.003	0.011	0.012	0.010	0.005
44.9	0.020	0.020	0.012	0.013	0.016	0.004
46.1	0.013	0.010	0.015	0.015	0.013	0.002
47.4	0.066	0.010	0.020	0.018	0.029	0.025
48.6	0.026	0.016	0.019	0.012	0.018	0.006
49.9	0.031	0.029	0.032	0.019	0.028	0.006
51.1	0.027	0.029	0.031	0.027	0.029	0.002
52.4	0.021	0.019	0.029	0.023	0.023	0.004
53.6	0.012	0.014	0.017	0.014	0.014	0.002
54.9	0.014	0.012	0.016	0.026	0.017	0.006
56.1	0.019	0.005	0.012	0.005	0.010	0.007
57.4	0.015	0.006	0.005	0.011	0.009	0.005
58.6	0.015	0.014	0.014	0.001	0.011	0.007
59.9	0.014	0.015	0.001	0.006	0.009	0.007
61.1	0.023	0.010	0.014	0.013	0.015	0.006
62.4	0.012	0.013	0.014	0.010	0.012	0.002
63.6	0.016	0.001	0.021	0.008	0.012	0.009
64.9	0.015	0.017	0.005	0.009	0.012	0.006
66.1	0.010	0.002	0.005	0.008	0.006	0.004
67.4	0.012	0.008	0.007	0.001	0.007	0.005
68.6	0.011	0.003	0.009	0.000	0.006	0.005
69.9	0.012	0.014	0.006	0.007	0.010	0.004
71.1	0.009	0.014	0.027	0.003	0.013	0.010
72.4	0.022	0.008	0.011	0.020	0.015	0.007
73.6	0.028	0.028	0.021	0.087	0.041	0.031
74.9	0.027	0.021	0.019	0.015	0.021	0.005
76.1	0.020	0.031	0.036	0.030	0.029	0.007
77.4	0.007	0.016	0.013	0.016	0.013	0.004

Feeding bout size; p-values Mann Whitney U-test																		
Time (hr)	group 1 vs 3			group 1 vs 4			group 1 vs 6			group 3 vs 4			group 3 vs 6			group 4 vs 6		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
6.1			0.886	4		0.114	4		0.486	4		0.057	4		0.200	4		0.029
7.4			0.200	4		0.886	4		0.886	4		0.343	4		0.686	4		1.000
8.6			0.886	4		0.686	4		0.686	4		0.686	4		0.686	4		0.886
9.9			0.343	4		0.886	4		0.200	4		0.114	4		0.486	4		0.057
11.1			0.343	4		1.000	4		0.200	4		0.486	4		0.886	4		0.486
12.4			0.114	4		0.114	4		0.343	4		0.686	4		0.686	4		0.200
13.6			0.886	4		0.486	4		0.486	4		0.486	4		0.200	4		0.886
14.9			0.343	4		0.029	4		0.686	4		0.343	4		1.000	4		0.343
16.1			0.343	4		0.886	4		0.486	4		0.486	4		0.200	4		0.486
17.4			0.886	4		1.000	4		1.000	4		0.886	4		0.686	4		0.886
18.6			0.886	4		0.486	4		0.686	4		0.686	4		0.886	4		0.886
19.9			0.200	4		0.486	4		0.886	4		0.200	4		0.343	4		0.200
21.1			0.686	4		0.686	4		0.886	4		0.486	4		0.343	4		0.886
22.4			0.686	4		0.686	4		0.343	4		0.343	4		0.686	4		0.200
23.6			1.000	4		0.686	4		0.686	4		0.886	4		0.886	4		0.886
24.9			0.057	4		0.343	4		0.114	4		0.200	4		0.486	4		1.000
26.1			0.686	4		0.886	4		1.000	4		0.686	4		0.343	4		0.686
27.4			0.029	4		0.029	4		0.114	4		0.114	4		1.000	4		0.343
28.6			0.343	4		0.114	4		0.486	4		0.029	4		0.114	4		0.343
29.9			0.486	4		0.200	4		0.486	4		0.057	4		0.114	4		0.343
31.1			0.686	4		0.686	4		0.886	4		1.000	4		0.886	4		0.886
32.4			0.886	4		0.486	4		1.000	4		0.886	4		0.886	4		0.886
33.6			0.686	4		1.000	4		0.057	4		0.886	4		0.343	4		0.343
34.9			0.200	4		0.686	4		0.114	4		0.686	4		0.343	4		0.200
36.1			0.343	4		0.200	4		0.057	4		0.200	4		0.029	4		0.114
37.4			0.114	4		0.486	4		0.200	4		0.343	4		0.686	4		0.686
38.6			0.686	4		0.686	4		0.686	4		1.000	4		0.343	4		0.343
39.9			0.486	4		0.114	4		0.343	4		0.486	4		0.686	4		0.343
41.1			0.686	4		0.200	4		0.686	4		0.860	4		0.686	4		0.486
42.4			0.343	4		0.343	4		0.486	4		0.686	4		0.343	4		0.343
43.6			0.343	4		0.114	4		0.029	4		0.200	4		0.343	4		0.886
44.9			0.343	4		0.686	4		1.000	4		0.029	4		0.029	4		0.886
46.1			0.343	4		0.343	4		0.029	4		0.343	4		0.029	4		0.886
47.4			0.886	4		1.000	4		0.686	4		0.886	4		1.000	4		0.886
48.6			0.886	4		0.114	4		1.000	4		0.200	4		0.886	4		0.114
49.9			0.200	4		0.343	4		0.140	4		0.686	4		0.886	4		0.886
51.1			1.000	4		0.343	4		0.886	4		0.343	4		1.000	4		0.686
52.4			0.686	4		0.057	4		0.686	4		0.057	4		0.886	4		0.057
53.6			0.886	4		0.029	4		0.029	4		0.029	4		0.200	4		0.029
54.9			0.343	4		0.486	4		0.486	4		0.200	4		0.886	4		0.343
56.1			0.686	4		0.686	4		0.200	4		0.886	4		0.486	4		0.486
57.4			0.886	4		0.486	4		0.486	4		0.486	4		0.886	4		0.686
58.6			0.486	4		0.486	4		0.686	4		0.886	4		0.686	4		1.000
59.9			0.343	4		0.200	4		0.343	4		0.886	4		0.886	4		1.000
61.1			1.000	4		0.886	4		0.486	4		0.686	4		0.886	4		0.886
62.4			0.343	4		0.343	4		0.486	4		0.886	4		0.886	4		0.686
63.6			0.886	4		0.200	4		0.343	4		0.343	4		0.486	4		1.000
64.9			0.686	4		0.886	4		1.000	4		0.343	4		0.343	4		0.486
66.1			0.886	4		0.029	4		0.057	4		0.114	4		0.486	4		0.114
67.4			0.686	4		0.114	4		0.486	4		0.200	4		1.000	4		0.343
68.6			0.486	4		0.886	4		0.343	4		0.686	4		0.886	4		0.686
69.9			0.460	4		1.000	4		1.000	4		0.057	4		0.343	4		0.343
71.1			0.343	4		0.486	4		0.886	4		0.114	4		0.486	4		0.886
72.4			0.200	4		0.686	4		0.686	4		0.686	4		0.886	4		0.343
73.6			0.486	4		0.486	4		0.057	4		0.886	4		0.686	4		0.886
74.9			0.686	4		0.686	4		0.343	4		0.686	4		0.343	4		0.343
76.1			0.686	4		0.343	4		0.114	4		0.343	4		0.057	4		0.886
77.4			0.686	4		0.200	4		0.686	4		0.114	4		0.343	4		0.343

p<0.05

p<0.05

Drink intake measurements

Time (hr)	Accumulated drink intake (ml)				Average acc. drink intake (ml)	SD (ml)
	cage 0101	cage 0105	cage 0201	cage 0205		
6.1	0.205	0.065	0.129	0.230	0.16	0.08
7.4	0.720	0.337	0.591	0.580	0.56	0.16
8.6	0.946	0.658	0.782	0.846	0.81	0.12
9.9	1.053	0.791	0.784	1.083	0.93	0.16
11.1	1.209	0.845	0.805	1.297	1.04	0.25
12.4	1.284	1.166	0.936	1.334	1.18	0.18
13.6	1.375	1.292	1.208	1.481	1.34	0.12
14.9	1.602	1.326	1.325	1.610	1.47	0.16
16.1	1.716	1.448	1.348	1.624	1.53	0.17
17.4	1.799	1.479	1.373	1.702	1.59	0.20
18.6	1.836	1.499	1.382	1.806	1.63	0.22
19.9	1.898	1.530	1.463	1.826	1.68	0.21
21.1	1.981	1.530	1.564	1.863	1.73	0.22
22.4	2.002	1.530	1.576	1.891	1.75	0.23
23.6	2.049	1.778	1.610	1.976	1.85	0.20
24.9	2.213	1.870	1.610	2.024	1.93	0.25
26.1	2.280	2.047	1.796	2.024	2.04	0.20
27.4	2.465	2.264	1.927	2.098	2.19	0.23
28.6	2.714	2.349	2.268	2.291	2.41	0.21
29.9	3.045	2.480	2.638	2.436	2.65	0.28
31.1	3.250	2.581	2.921	2.691	2.86	0.30
32.4	3.375	2.669	3.022	2.949	3.00	0.29
33.6	3.523	2.720	3.227	2.967	3.11	0.34
34.9	3.640	2.863	3.434	3.036	3.24	0.36
36.1	3.734	3.104	3.738	3.252	3.46	0.33
37.4	3.796	3.281	3.818	3.353	3.56	0.28
38.6	4.053	3.602	4.089	3.434	3.79	0.33
39.9	4.358	3.893	4.292	3.680	4.06	0.32
41.1	4.508	4.029	4.460	3.765	4.19	0.36
42.4	4.524	4.072	4.508	3.832	4.23	0.34
43.6	4.654	4.114	4.517	3.885	4.29	0.36
44.9	4.716	4.201	4.683	4.004	4.40	0.35
46.1	4.784	4.325	4.812	4.170	4.52	0.32
47.4	4.966	4.510	4.908	4.342	4.68	0.30
48.6	5.096	4.661	5.072	4.499	4.83	0.30
49.9	5.140	4.925	5.175	4.538	4.94	0.29
51.1	5.200	5.018	5.251	4.664	5.03	0.27
52.4	5.343	5.110	5.469	4.848	5.19	0.27
53.6	5.465	5.280	5.699	4.922	5.34	0.33
54.9	5.530	5.423	5.895	5.037	5.47	0.35
56.1	5.694	5.540	6.008	5.175	5.60	0.35
57.4	5.892	5.799	6.279	5.348	5.83	0.38
58.6	6.146	5.984	6.385	5.428	5.99	0.41
59.9	6.297	6.086	6.578	5.481	6.11	0.47
61.1	6.399	6.137	6.760	5.557	6.21	0.51
62.4	6.604	6.372	6.937	5.612	6.38	0.56
63.6	6.604	6.499	7.038	5.653	6.45	0.58
64.9	6.695	6.511	7.075	5.773	6.51	0.55
66.1	6.796	6.511	7.222	5.865	6.60	0.57
67.4	6.812	6.547	7.270	5.865	6.62	0.59
68.6	6.812	6.562	7.447	5.900	6.68	0.64
69.9	6.812	6.800	7.544	6.056	6.80	0.61
71.1	6.942	6.848	7.694	6.148	6.91	0.63
72.4	7.192	7.031	7.822	6.297	7.09	0.63
73.6	7.311	7.293	7.852	6.387	7.21	0.61
74.9	7.535	7.560	8.022	6.608	7.43	0.59
76.1	7.639	7.701	8.317	6.845	7.63	0.60
77.4	7.875	7.752	8.349	7.043	7.75	0.54

Time (hr)	Accumulated drink intake (ml)				Average acc. drink intake (ml)	SD (ml)
	cage 0102	cage 0106	cage 0202	cage 0206		
6.1	0.125	0.077	0.074	0.092	0.09	0.02
7.4	0.387	0.392	0.569	0.388	0.43	0.09
8.6	0.699	0.496	0.967	0.560	0.68	0.21
9.9	0.883	0.510	1.102	0.676	0.79	0.26
11.1	0.912	0.691	1.253	0.864	0.93	0.24
12.4	0.994	0.800	1.449	1.024	1.07	0.27
13.6	1.176	0.824	1.634	1.276	1.23	0.33
14.9	1.318	0.834	1.800	1.400	1.34	0.40
16.1	1.462	0.848	1.850	1.400	1.39	0.41
17.4	1.565	0.861	2.153	1.450	1.51	0.53
18.6	1.592	0.872	2.254	1.500	1.55	0.57
19.9	1.600	0.880	2.311	1.500	1.57	0.59
21.1	1.659	0.880	2.578	1.548	1.67	0.70
22.4	1.730	0.923	2.743	1.616	1.75	0.75
23.6	1.768	1.003	2.804	1.780	1.84	0.74
24.9	1.837	1.013	3.065	1.842	1.94	0.85
26.1	1.898	1.024	3.283	1.988	2.05	0.93
27.4	2.045	1.078	3.512	2.146	2.20	1.00
28.6	2.210	1.179	3.904	2.280	2.39	1.13
29.9	2.357	1.194	4.171	2.418	2.53	1.23
31.1	2.539	1.205	4.361	2.606	2.68	1.29
32.4	2.710	1.216	4.558	2.764	2.81	1.37
33.6	2.912	1.232	4.669	2.906	2.93	1.40
34.9	2.968	1.245	4.869	2.988	3.02	1.48
36.1	3.101	1.302	4.941	3.026	3.09	1.49
37.4	3.251	1.360	5.004	3.248	3.22	1.49
38.6	3.547	1.386	5.263	3.424	3.41	1.59
39.9	3.787	1.453	5.465	3.520	3.56	1.65
41.1	3.955	1.557	5.645	3.520	3.67	1.68
42.4	4.046	1.664	5.702	3.590	3.75	1.66
43.6	4.059	1.725	5.731	3.632	3.79	1.65
44.9	4.130	1.776	5.814	3.722	3.86	1.66
46.1	4.232	1.864	6.048	3.788	3.98	1.72
47.4	4.293	1.925	6.185	3.874	4.07	1.75
48.6	4.387	2.098	6.361	4.048	4.22	1.75
49.9	4.488	2.166	6.577	4.100	4.33	1.81
51.1	4.763	2.238	6.869	4.252	4.53	1.90
52.4	5.006	2.384	6.988	4.420	4.70	1.89
53.6	5.194	2.560	7.207	4.608	4.89	1.91
54.9	5.344	2.587	7.337	4.804	5.02	1.95
56.1	5.506	2.672	7.529	5.032	5.18	1.99
57.4	5.597	2.782	7.729	5.188	5.32	2.03
58.6	5.693	2.838	7.884	5.352	5.44	2.07
59.9	5.742	2.869	8.100	5.420	5.53	2.14
61.1	5.842	2.960	8.217	5.510	5.63	2.15
62.4	6.122	3.056	8.334	5.646	5.79	2.17
63.6	6.157	3.131	8.496	5.700	5.87	2.20
64.9	6.176	3.146	8.674	5.836	5.96	2.26
66.1	6.198	3.157	8.726	5.900	6.00	2.28
67.4	6.213	3.168	8.748	5.946	6.02	2.28
68.6	6.235	3.224	8.748	6.000	6.05	2.26
69.9	6.250	3.272	8.748	6.000	6.07	2.24
71.1	6.301	3.341	8.975	6.072	6.17	2.30
72.4	6.358	3.434	9.104	6.260	6.29	2.32
73.6	6.584	3.462	9.446	6.362	6.46	2.44
74.9	6.795	3.486	9.756	6.532	6.64	2.56
76.1	6.912	3.550	9.992	6.730	6.80	2.63
77.4	6.998	3.640	10.177	6.890	6.93	2.67

Time (hr)	Accumulated drink intake (ml)				Average acc. drink intake (ml)	SD (ml)
	cage 0103	cage 0107	cage 0203	cage 0207		
6.1	0.131	0.362	0.214	0.306	0.25	0.10
7.4	0.361	0.782	0.880	0.849	0.72	0.24
8.6	0.479	0.996	1.327	1.135	0.98	0.36
9.9	0.574	1.207	1.512	1.254	1.14	0.40
11.1	0.612	1.207	1.718	1.395	1.23	0.46
12.4	0.669	1.248	1.961	1.518	1.35	0.54
13.6	0.768	1.343	1.995	1.558	1.42	0.51
14.9	0.819	1.370	2.085	1.606	1.47	0.53
16.1	0.982	1.377	2.184	1.624	1.54	0.50
17.4	1.113	1.377	2.184	1.694	1.58	0.46
18.6	1.121	1.550	2.297	1.729	1.67	0.49
19.9	1.159	1.758	2.310	1.815	1.76	0.47
21.1	1.290	1.880	2.329	1.971	1.87	0.43
22.4	1.463	1.938	2.520	2.024	1.99	0.43
23.6	1.516	1.955	2.545	2.024	2.01	0.42
24.9	1.592	1.955	2.747	2.081	2.09	0.48
26.1	1.615	1.955	2.982	2.152	2.18	0.58
27.4	1.685	2.072	3.137	2.429	2.33	0.62
28.6	2.048	2.708	3.620	2.974	2.84	0.65
29.9	2.329	2.948	4.053	3.518	3.21	0.74
31.1	2.453	3.074	4.574	3.846	3.49	0.92
32.4	2.512	3.186	4.893	4.052	3.66	1.04
33.6	2.546	3.349	4.998	4.092	3.75	1.05
34.9	2.595	3.451	4.998	4.145	3.80	1.02
36.1	2.645	3.461	5.093	4.312	3.88	1.06
37.4	2.683	3.667	5.187	4.312	3.96	1.06
38.6	2.831	3.856	5.271	4.396	4.09	1.02
39.9	2.945	3.910	5.414	4.576	4.21	1.04
41.1	3.027	4.175	5.527	4.708	4.36	1.05
42.4	3.173	4.352	5.565	4.717	4.45	0.99
43.6	3.192	4.352	5.649	4.752	4.48	1.02
44.9	3.211	4.423	5.712	4.759	4.53	1.03
46.1	3.276	4.498	5.943	4.888	4.65	1.10
47.4	3.416	4.651	6.203	4.950	4.81	1.14
48.6	3.585	4.763	6.422	4.950	4.93	1.16
49.9	3.753	4.859	6.766	5.025	5.10	1.25
51.1	4.051	5.005	7.046	5.350	5.36	1.25
52.4	4.366	5.263	7.388	5.670	5.72	1.27
53.6	4.579	5.632	7.642	6.395	6.06	1.29
54.9	4.579	5.794	7.854	6.743	6.24	1.39
56.1	4.579	5.868	7.892	7.018	6.34	1.44
57.4	4.579	5.930	8.100	7.227	6.46	1.54
58.6	4.699	6.011	8.245	7.454	6.60	1.57
59.9	4.803	6.042	8.392	7.608	6.71	1.60
61.1	4.872	6.106	8.610	7.726	6.83	1.67
62.4	4.940	6.188	8.736	7.806	6.92	1.69
63.6	4.978	6.297	8.736	7.854	6.97	1.67
64.9	5.043	6.351	8.736	7.920	7.01	1.64
66.1	5.088	6.450	8.763	8.004	7.08	1.64
67.4	5.111	6.480	8.904	8.074	7.14	1.69
68.6	5.111	6.504	8.988	8.140	7.19	1.73
69.9	5.172	6.542	9.114	8.175	7.25	1.75
71.1	5.187	6.664	9.284	8.228	7.34	1.79
72.4	5.324	6.725	9.303	8.391	7.44	1.77
73.6	5.596	6.732	9.574	8.532	7.61	1.78
74.9	5.917	6.773	9.811	8.708	7.80	1.78
76.1	6.236	6.943	10.019	9.082	8.07	1.78
77.4	6.335	7.133	10.185	9.297	8.24	1.80

Time (hr)	Accumulated drink intake (ml)				Average acc. drink intake (ml)	SD (ml)
	cage 0104	cage 0108	cage 0204	cage 0208		
6.1	0.134	0.240	0.151	0.202	0.18	0.05
7.4	0.711	0.288	0.724	0.470	0.55	0.21
8.6	1.078	0.328	1.159	0.616	0.80	0.39
9.9	1.282	0.563	1.269	0.716	0.96	0.37
11.1	1.576	0.813	1.505	0.840	1.18	0.41
12.4	1.877	0.883	1.667	0.976	1.35	0.50
13.6	2.179	0.896	1.818	1.062	1.49	0.61
14.9	2.394	0.941	1.957	1.100	1.60	0.69
16.1	2.567	0.992	2.016	1.216	1.70	0.73
17.4	2.669	1.085	2.016	1.280	1.76	0.73
18.6	2.820	1.146	2.016	1.288	1.82	0.77
19.9	2.948	1.253	2.016	1.360	1.89	0.78
21.1	2.992	1.264	2.016	1.422	1.92	0.78
22.4	2.992	1.278	2.016	1.446	1.93	0.77
23.6	3.012	1.312	2.016	1.560	1.98	0.75
24.9	3.135	1.312	2.088	1.576	2.03	0.81
26.1	3.196	1.338	2.160	1.630	2.08	0.82
27.4	3.344	1.506	2.198	1.794	2.21	0.81
28.6	3.611	1.768	2.362	2.022	2.44	0.82
29.9	3.822	2.093	2.907	2.198	2.75	0.80
31.1	4.039	2.198	3.308	2.390	2.98	0.85
32.4	4.097	2.317	3.438	2.534	3.10	0.83
33.6	4.097	2.394	3.620	2.664	3.19	0.80
34.9	4.097	2.557	3.978	2.808	3.36	0.79
36.1	4.097	2.642	4.104	2.940	3.45	0.77
37.4	4.148	2.720	4.111	3.000	3.49	0.74
38.6	4.423	2.774	4.176	3.134	3.63	0.80
39.9	4.648	2.832	4.363	3.342	3.80	0.85
41.1	4.784	2.864	4.437	3.468	3.89	0.88
42.4	4.944	2.902	4.464	3.480	3.95	0.93
43.6	5.117	3.024	4.529	3.494	4.04	0.95
44.9	5.151	3.024	4.698	3.506	4.09	1.00
46.1	5.156	3.046	4.698	3.550	4.11	0.98
47.4	5.202	3.178	4.698	3.636	4.18	0.93
48.6	5.263	3.205	4.698	3.732	4.22	0.93
49.9	5.535	3.334	4.806	3.858	4.38	0.98
51.1	5.879	3.624	5.123	3.974	4.65	1.04
52.4	5.964	3.898	5.377	4.148	4.85	0.99
53.6	6.137	4.242	5.555	4.378	5.08	0.92
54.9	6.392	4.346	5.767	4.560	5.27	0.98
56.1	6.681	4.536	5.994	4.676	5.47	1.04
57.4	6.871	4.608	6.118	4.778	5.59	1.09
58.6	6.989	4.707	6.311	4.958	5.74	1.09
59.9	7.342	4.891	6.390	5.020	5.91	1.17
61.1	7.431	4.912	6.604	5.212	6.04	1.18
62.4	7.497	5.022	6.772	5.346	6.16	1.17
63.6	7.616	5.152	6.804	5.452	6.26	1.16
64.9	7.616	5.168	6.804	5.516	6.28	1.14
66.1	7.616	5.216	6.804	5.540	6.29	1.12
67.4	7.659	5.222	6.804	5.540	6.31	1.13
68.6	7.701	5.232	6.804	5.540	6.32	1.15
69.9	7.701	5.290	6.804	5.568	6.34	1.12
71.1	7.701	5.347	6.804	5.630	6.37	1.09
72.4	7.701	5.408	6.804	5.676	6.40	1.06
73.6	7.813	5.504	6.944	5.824	6.52	1.06
74.9	8.050	5.678	7.175	5.952	6.71	1.10
76.1	8.109	5.987	7.547	6.098	6.94	1.06
77.4	8.109	6.242	7.686	6.304	7.09	0.95

Accumulated drink intake; p-values Mann Whitney U-test																		
Time (hr)	group 1 vs 3			group 1 vs 4			group 1 vs 6			group 3 vs 4			group 3 vs 6			group 4 vs 6		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
6.1			0.343		4	0.343		4	0.686		4	0.029		4	0.029		4	0.343
7.4			0.343		4	0.200		4	0.886		4	0.343		4	0.486		4	0.200
8.6			0.486		4	0.343		4	1.000		4	0.343		4	0.686		4	0.686
9.9			0.686		4	0.343		4	1.000		4	0.200		4	0.486		4	0.886
11.1			0.886		4	0.486		4	0.686		4	0.486		4	0.686		4	1.000
12.4			0.686		4	0.686		4	0.886		4	0.486		4	0.686		4	1.000
13.6			0.486		4	0.686		4	1.000		4	0.686		4	0.686		4	0.886
14.9			0.686		4	0.686		4	1.000		4	0.886		4	0.686		4	0.886
16.1			0.886		4	0.886		4	1.000		4	0.886		4	0.686		4	0.886
17.4			0.886		4	0.886		4	1.000		4	0.886		4	0.886		4	1.000
18.6			0.886		4	1.000		4	1.000		4	0.686		4	0.886		4	0.886
19.9			0.860		4	1.000		4	1.000		4	0.486		4	0.886		4	0.886
21.1			0.886		4	0.686		4	1.000		4	0.686		4	0.886		4	1.000
22.4			1.000		4	0.486		4	1.000		4	0.686		4	0.886		4	0.686
23.6			0.686		4	0.886		4	0.886		4	0.686		4	0.886		4	0.886
24.9			0.686		4	0.886		4	0.886		4	0.686		4	0.886		4	0.886
26.1			0.686		4	1.000		4	0.886		4	0.886		4	1.000		4	1.000
27.4			0.886		4	1.000		4	0.686		4	0.886		4	1.000		4	0.886
28.6			0.486		4	0.343		4	0.886		4	0.686		4	1.000		4	0.343
29.9			0.343		4	0.486		4	0.886		4	0.686		4	1.000		4	0.343
31.1			0.486		4	0.486		4	1.000		4	0.486		4	1.000		4	0.486
32.4			0.686		4	0.486		4	1.000		4	0.486		4	1.000		4	0.686
33.6			0.686		4	0.486		4	1.000		4	0.486		4	1.000		4	0.686
34.9			0.686		4	0.486		4	1.000		4	0.486		4	1.000		4	0.486
36.1			0.343		4	0.686		4	1.000		4	0.486		4	1.000		4	0.486
37.4			0.343		4	0.686		4	1.000		4	0.486		4	1.000		4	0.686
38.6			0.486		4	0.686		4	1.000		4	0.486		4	1.000		4	0.686
39.9			0.486		4	0.686		4	0.886		4	0.686		4	1.000		4	0.686
41.1			0.486		4	0.686		4	0.686		4	0.686		4	1.000		4	0.686
42.4			0.486		4	0.686		4	0.686		4	0.686		4	1.000		4	0.686
43.6			0.486		4	0.686		4	0.886		4	0.686		4	1.000		4	0.686
44.9			0.486		4	0.686		4	0.886		4	0.686		4	1.000		4	0.686
46.1			0.486		4	0.686		4	0.686		4	0.686		4	1.000		4	0.686
47.4			0.343		4	0.886		4	0.686		4	0.486		4	1.000		4	0.686
48.6			0.343		4	1.000		4	0.686		4	0.486		4	1.000		4	0.486
49.9			0.343		4	0.886		4	0.486		4	0.486		4	1.000		4	0.486
51.1			0.486		4	0.886		4	0.686		4	0.486		4	1.000		4	0.486
52.4			0.486		4	0.686		4	0.886		4	0.486		4	1.000		4	0.486
53.6			0.486		4	0.486		4	0.886		4	0.486		4	1.000		4	0.200
54.9			0.486		4	0.486		4	0.886		4	0.486		4	1.000		4	0.200
56.1			0.486		4	0.486		4	0.886		4	0.486		4	1.000		4	0.486
57.4			0.486		4	0.486		4	0.886		4	0.486		4	1.000		4	0.686
58.6			0.486		4	0.686		4	0.886		4	0.486		4	1.000		4	0.686
59.9			0.486		4	0.886		4	0.886		4	0.486		4	1.000		4	0.686
61.1			0.486		4	0.886		4	0.886		4	0.486		4	1.000		4	0.686
62.4			0.686		4	0.886		4	0.886		4	0.486		4	1.000		4	0.686
63.6			0.686		4	0.886		4	0.886		4	0.486		4	1.000		4	0.686
64.9			0.686		4	0.886		4	0.886		4	0.486		4	1.000		4	0.686
66.1			0.686		4	0.886		4	0.686		4	0.486		4	1.000		4	0.686
67.4			0.686		4	0.886		4	0.686		4	0.486		4	1.000		4	0.686
68.6			0.686		4	0.886		4	0.686		4	0.486		4	1.000		4	0.686
69.9			0.486		4	0.886		4	0.486		4	0.486		4	1.000		4	0.686
71.1			0.486		4	0.886		4	0.486		4	0.486		4	1.000		4	0.686
72.4			0.486		4	0.886		4	0.343		4	0.486		4	1.000		4	0.686
73.6			0.486		4	0.886		4	0.343		4	0.486		4	1.000		4	0.486
74.9			0.486		4	0.886		4	0.486		4	0.686		4	1.000		4	0.486
76.1			0.486		4	0.886		4	0.343		4	0.486		4	1.000		4	0.343
77.4			0.343		4	0.886		4	0.343		4	0.486		4	1.000		4	0.343

p<0.05

p<0.05

D4. X activity measurements

Time (hr)	X activity per interval				Average X activity	SD
	cage 0101	cage 0105	cage 0201	cage 0205		
6.1	100.7	88.8	134.7	99.5	105.9	19.9
7.4	63.9	227.7	123.3	73.9	122.2	75.0
8.6	67.5	124.2	57.2	69.0	79.5	30.3
9.9	76.1	238.3	182.4	62.8	139.9	84.7
11.1	90.7	71.1	72.9	173.1	102.0	48.3
12.4	88.6	74.3	128.0	80.4	92.8	24.2
13.6	69.1	109.8	54.7	35.5	67.3	31.5
14.9	72.2	28.9	67.7	67.7	59.1	20.3
16.1	14.3	92.9	70.7	46.6	56.1	33.7
17.4	112.4	64.9	119.1	63.5	90.0	29.9
18.6	144.9	81.0	41.1	47.5	78.6	47.5
19.9	74.2	81.1	92.5	166.7	103.6	42.7
21.1	44.1	99.0	49.7	29.3	55.5	30.2
22.4	47.4	71.0	121.8	94.7	83.7	31.9
23.6	88.3	91.9	108.7	57.4	86.6	21.4
24.9	424.8	330.7	375.7	615.8	436.8	125.4
26.1	133.7	276.6	421.4	814.9	411.7	293.4
27.4	331.4	346.2	385.6	228.3	322.9	67.1
28.6	121.9	221.1	257.7	488.8	272.4	155.3
29.9	143.4	139.3	121.1	158.0	140.5	15.2
31.1	133.1	229.4	213.0	217.7	198.3	44.0
32.4	74.2	181.4	129.7	250.7	159.0	75.2
33.6	54.6	182.5	199.9	94.7	132.9	69.6
34.9	172.7	166.9	158.2	119.2	154.3	24.1
36.1	84.7	128.2	53.6	109.3	94.0	32.3
37.4	101.7	122.5	136.4	118.5	119.8	14.3
38.6	53.4	25.2	67.8	54.2	50.2	17.9
39.9	33.9	49.9	56.4	55.9	49.0	10.5
41.1	84.9	47.7	44.7	23.0	50.1	25.7
42.4	28.9	79.6	74.6	119.0	75.5	36.9
43.6	64.8	34.9	59.5	96.2	63.9	25.2
44.9	74.9	64.0	65.7	38.0	60.7	15.8
46.1	69.8	101.4	87.1	72.6	82.7	14.6
47.4	90.4	52.7	46.1	71.2	65.1	19.9
48.6	373.3	279.0	284.9	313.7	312.7	43.1
49.9	337.7	147.0	370.8	371.0	306.6	107.6
51.1	361.6	270.6	276.3	229.2	284.4	55.6
52.4	161.5	365.6	199.2	227.9	238.6	89.0
53.6	164.7	143.5	156.8	202.0	166.8	25.1
54.9	119.6	206.4	153.3	185.1	166.1	37.9
56.1	76.2	117.9	136.6	57.6	97.1	36.5
57.4	82.3	180.9	143.9	106.5	128.4	43.2
58.6	96.9	97.8	154.2	234.6	145.9	64.9
59.9	173.9	144.2	96.5	86.3	125.2	41.1
61.1	90.2	68.3	85.5	90.4	83.6	10.4
62.4	71.4	80.6	87.9	29.3	67.3	26.2
63.6	49.0	185.5	93.7	91.4	104.9	57.6
64.9	94.4	67.4	115.8	76.0	88.4	21.5
66.1	36.2	14.6	23.2	57.4	32.9	18.6
67.4	91.6	118.8	97.4	31.4	84.8	37.5
68.6	42.5	77.5	37.2	106.7	66.0	32.5
69.9	50.0	112.7	53.7	40.3	64.2	32.8
71.1	94.0	43.9	83.9	120.3	85.5	31.7
72.4	186.7	126.5	215.6	235.7	191.1	47.5
73.6	380.3	349.8	374.6	551.9	414.2	92.8
74.9	411.4	223.4	274.0	372.4	320.3	86.7
76.1	246.9	230.0	248.0	185.3	227.6	29.3
77.4	156.4	360.5	270.5	260.9	262.1	83.5

Time (hr)	X activity per interval				Average X activity	SD
	cage 0102	cage 0106	cage 0202	cage 0206		
6.1	92.2	254.5	88.7	185.0	155.1	79.9
7.4	92.7	238.4	92.6	375.7	199.9	135.9
8.6	79.1	99.1	110.4	111.4	100.0	15.0
9.9	131.6	82.0	45.9	221.7	120.3	76.2
11.1	134.8	124.3	259.8	60.1	144.8	83.5
12.4	54.7	138.5	174.2	39.8	101.8	64.9
13.6	134.4	53.3	68.6	182.7	109.8	60.0
14.9	59.0	82.5	103.6	47.8	73.2	24.9
16.1	122.4	105.6	146.3	18.4	98.2	55.7
17.4	84.7	29.6	245.5	93.8	113.4	92.5
18.6	158.6	172.4	76.4	41.6	112.3	63.4
19.9	21.0	39.6	50.1	14.5	31.3	16.4
21.1	93.0	113.8	169.7	118.6	123.8	32.6
22.4	111.5	160.0	89.9	126.0	121.9	29.4
23.6	158.6	55.4	169.7	72.4	114.0	58.5
24.9	454.8	579.9	431.8	455.2	480.4	67.2
26.1	432.8	621.4	618.1	933.4	651.4	207.6
27.4	277.4	351.9	422.6	616.8	417.2	145.7
28.6	325.6	48.8	191.6	130.5	174.1	116.7
29.9	262.1	373.9	151.6	282.2	267.5	91.3
31.1	95.4	52.6	238.0	216.4	150.6	90.6
32.4	127.8	215.5	260.5	148.1	188.0	61.2
33.6	99.6	135.3	127.1	112.9	118.7	15.8
34.9	199.2	141.3	217.7	267.4	206.4	52.1
36.1	135.8	276.8	172.6	73.8	164.8	85.1
37.4	109.4	98.3	200.9	103.7	128.1	48.8
38.6	58.6	61.8	132.5	28.6	70.4	44.0
39.9	61.9	88.5	155.1	26.9	83.1	54.2
41.1	60.3	164.0	35.5	11.7	67.9	67.1
42.4	47.7	32.8	87.4	223.3	97.8	86.8
43.6	69.2	57.8	71.1	68.3	66.6	6.0
44.9	131.2	97.6	173.2	60.2	115.6	48.1
46.1	88.0	78.5	143.7	50.2	90.1	39.2
47.4	120.8	63.9	104.5	30.4	79.9	40.8
48.6	361.3	203.4	323.6	485.2	343.4	116.1
49.9	527.6	382.4	442.4	1194.3	636.7	376.5
51.1	308.7	470.4	298.9	609.6	421.9	147.8
52.4	201.9	177.0	84.2	327.0	197.5	100.1
53.6	332.9	80.5	218.2	274.2	226.5	108.0
54.9	117.4	102.8	219.6	242.1	170.5	70.6
56.1	136.8	300.6	165.3	167.6	192.6	73.4
57.4	121.2	113.3	113.2	309.0	164.2	96.6
58.6	177.5	352.3	305.4	374.6	302.5	88.2
59.9	236.1	139.3	186.5	212.9	193.7	41.5
61.1	70.6	171.6	92.8	28.1	90.8	60.2
62.4	102.9	131.2	71.9	161.7	116.9	38.4
63.6	72.1	72.4	43.7	9.3	49.4	29.9
64.9	62.0	63.4	125.6	266.9	129.5	96.3
66.1	130.8	49.7	53.5	23.2	64.3	46.3
67.4	75.2	27.2	84.9	221.5	102.2	83.4
68.6	84.0	116.4	51.9	45.1	74.4	32.8
69.9	63.1	82.3	73.4	35.7	63.6	20.2
71.1	129.7	62.8	151.3	92.7	109.1	39.2
72.4	201.6	143.3	125.5	219.4	172.5	45.1
73.6	429.8	396.0	387.1	405.0	404.5	18.4
74.9	278.5	493.7	280.0	701.6	438.5	202.5
76.1	270.4	175.4	217.9	407.2	267.7	100.8
77.4	256.5	298.8	295.6	603.1	363.5	160.9

Time (hr)	X activity per interval				Average X activity	SD
	cage 0103	cage 0107	cage 0203	cage 0207		
6.1	75.4	118.1	92.7	258.6	136.2	83.5
7.4	91.1	61.6	100.7	151.8	101.3	37.6
8.6	32.3	128.9	85.4	124.6	92.8	44.8
9.9	88.7	58.6	66.1	53.7	66.8	15.5
11.1	56.0	47.9	89.9	144.3	84.5	43.8
12.4	79.3	139.0	66.9	185.7	117.7	55.2
13.6	103.8	31.0	43.1	57.7	58.9	31.9
14.9	51.9	53.5	153.0	95.1	88.4	47.5
16.1	65.2	199.5	53.3	90.9	102.2	66.7
17.4	83.7	172.4	74.7	34.6	91.4	58.1
18.6	28.4	46.4	42.0	124.4	60.3	43.4
19.9	59.3	94.9	103.2	76.9	83.6	19.6
21.1	108.0	72.6	51.6	57.3	72.4	25.4
22.4	59.8	39.3	122.1	273.1	123.6	105.7
23.6	71.2	76.4	74.7	95.4	79.4	10.9
24.9	484.3	589.1	168.2	410.3	413.0	178.9
26.1	821.1	605.3	368.9	719.7	628.8	194.4
27.4	418.6	371.6	219.7	566.0	394.0	142.7
28.6	282.1	99.3	260.1	379.5	255.3	116.2
29.9	175.2	215.2	227.2	177.6	198.8	26.3
31.1	203.6	190.6	144.7	107.9	161.7	43.9
32.4	92.2	84.7	83.6	169.4	107.5	41.5
33.6	146.6	178.0	157.2	185.6	166.9	18.1
34.9	85.3	14.1	101.8	125.7	81.7	48.0
36.1	173.4	94.0	82.6	336.9	171.7	117.3
37.4	141.5	111.9	103.3	374.0	182.7	128.6
38.6	97.6	65.8	82.8	63.6	77.5	15.9
39.9	46.4	28.1	47.1	140.5	65.5	50.8
41.1	54.7	69.4	73.6	65.1	65.7	8.1
42.4	47.0	47.6	44.3	73.3	53.1	13.6
43.6	79.7	55.9	49.8	76.8	65.6	14.9
44.9	33.1	77.6	137.3	47.2	73.8	46.2
46.1	141.3	169.8	67.1	187.9	141.5	53.2
47.4	148.8	21.7	77.9	55.3	75.9	53.8
48.6	211.0	139.5	118.3	271.5	185.1	69.9
49.9	555.2	277.4	176.1	489.8	374.6	177.7
51.1	227.0	219.5	308.1	548.7	325.8	153.9
52.4	192.2	120.1	214.5	482.5	252.3	158.7
53.6	145.5	229.0	129.1	229.2	183.2	53.4
54.9	159.5	85.7	211.4	146.7	150.8	51.6
56.1	114.2	96.2	119.5	189.7	129.9	41.1
57.4	64.4	84.0	123.6	69.4	85.4	26.8
58.6	116.3	161.9	141.4	211.7	157.8	40.5
59.9	59.8	24.8	79.1	127.3	72.8	42.8
61.1	98.7	39.5	90.8	97.0	81.5	28.2
62.4	97.6	87.9	60.4	116.3	90.6	23.3
63.6	97.9	39.2	108.8	93.5	84.9	31.1
64.9	87.3	120.3	55.8	55.3	79.7	30.9
66.1	69.4	44.1	120.1	211.5	111.3	73.9
67.4	63.4	28.1	69.2	83.9	61.2	23.7
68.6	34.3	79.2	92.1	126.5	83.0	38.1
69.9	77.4	110.7	103.2	151.6	110.7	30.8
71.1	54.9	103.1	77.5	66.3	75.5	20.6
72.4	121.3	183.4	84.3	76.1	116.3	48.9
73.6	262.2	613.3	156.4	233.3	316.3	203.0
74.9	393.8	463.2	326.7	686.7	467.6	156.3
76.1	152.2	146.0	423.4	234.1	238.9	129.4
77.4	160.4	290.0	246.2	300.4	249.3	63.7

Metabolic cages group 6: HF + 0.003% PFOS						
Time (hr)	X activity per interval				Average X activity	SD
	cage 0104	cage 0108	cage 0204	cage 0208		
6.1	152.1	223.2	114.3	130.4	155.0	48.0
7.4	136.3	217.5	107.7	211.5	168.3	54.7
8.6	37.5	132.4	78.6	35.1	70.9	45.6
9.9	120.1	164.6	61.9	77.3	106.0	46.2
11.1	165.9	124.0	96.1	64.6	112.7	43.0
12.4	64.9	56.9	76.3	42.0	60.0	14.4
13.6	99.3	51.5	54.9	136.8	85.6	40.5
14.9	66.3	168.5	118.2	51.8	101.2	53.2
16.1	35.2	74.0	67.3	72.4	62.2	18.2
17.4	29.9	94.3	55.5	23.5	50.8	32.1
18.6	75.5	152.4	123.9	48.4	100.1	46.8
19.9	94.7	30.6	41.5	67.2	58.5	28.6
21.1	61.8	90.8	77.4	96.6	81.7	15.5
22.4	41.2	176.7	52.9	68.4	84.8	62.3
23.6	154.0	98.7	119.9	115.8	122.1	23.2
24.9	248.5	353.9	134.8	128.7	216.5	106.9
26.1	432.4	353.1	703.1	283.1	442.9	183.9
27.4	225.6	313.2	437.8	367.4	336.0	89.5
28.6	250.2	403.1	203.5	248.2	276.3	87.3
29.9	130.8	117.3	152.3	164.3	141.2	21.1
31.1	194.5	243.2	125.1	138.7	175.4	54.3
32.4	136.1	54.8	78.9	156.4	106.6	47.6
33.6	138.1	137.0	183.6	133.4	148.0	23.8
34.9	250.1	184.4	140.2	133.4	177.0	53.7
36.1	164.8	39.0	140.4	63.1	101.8	60.3
37.4	111.8	88.9	133.9	108.8	110.9	18.4
38.6	81.0	99.0	41.5	98.2	79.9	26.9
39.9	64.7	12.4	52.8	123.7	63.4	46.0
41.1	29.8	48.0	55.2	50.8	46.0	11.2
42.4	36.2	141.9	24.8	28.7	57.9	56.2
43.6	73.6	35.9	147.9	112.9	92.6	48.5
44.9	75.9	45.5	63.5	32.1	54.3	19.3
46.1	42.3	63.0	57.3	78.0	60.2	14.8
47.4	38.4	84.7	46.8	106.0	69.0	31.9
48.6	140.0	152.0	217.4	78.4	147.0	57.0
49.9	405.1	292.8	232.2	226.6	289.2	82.9
51.1	131.5	332.3	228.9	252.9	236.4	82.7
52.4	212.6	410.7	208.7	235.1	266.8	96.7
53.6	114.7	310.1	107.5	227.4	189.9	97.1
54.9	136.0	161.8	93.3	83.1	118.6	36.8
56.1	198.1	73.7	158.3	108.8	134.7	54.7
57.4	89.1	134.6	91.5	166.0	120.3	36.9
58.6	136.5	126.4	110.9	175.2	137.3	27.4
59.9	180.5	105.8	129.4	141.3	139.3	31.2
61.1	85.9	71.5	90.4	116.7	91.1	18.9
62.4	56.8	151.5	70.7	107.5	96.6	42.4
63.6	74.8	40.4	70.0	67.5	63.2	15.5
64.9	42.2	130.3	32.1	72.8	69.4	44.2
66.1	26.7	24.3	85.4	91.4	57.0	36.4
67.4	74.5	80.0	53.0	61.2	67.2	12.3
68.6	59.1	27.3	68.7	34.4	47.4	19.7
69.9	57.3	101.8	40.5	102.7	75.6	31.6
71.1	55.0	80.3	57.9	55.6	62.2	12.1
72.4	106.5	43.9	112.9	98.0	90.3	31.5
73.6	193.8	308.6	110.3	109.8	180.6	94.0
74.9	256.2	142.5	208.6	290.9	224.6	64.3
76.1	131.1	305.9	223.4	367.3	256.9	102.5
77.4	203.7	407.8	178.4	337.2	281.8	109.1

X activity, p-values Mann Whitney U-test																		
Time (hr)	group 1 vs 3			group 1 vs 4			group 1 vs 6			group 3 vs 4			group 3 vs 6			group 4 vs 6		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
6.1			0.886	4		1.000	4		0.114	4		1.000	4		0.886	4	4	0.486
7.4			0.343	4		0.886	4		0.486	4		0.343	4		1.000	4	4	0.114
8.6			0.343	4		0.486	4		0.886	4		0.886	4		0.343	4	4	0.886
9.9			0.886	4		0.200	4		0.686	4		0.486	4		0.886	4	4	0.200
11.1			0.686	4		0.486	4		0.886	4		0.343	4		0.686	4	4	0.343
12.4			1.000	4		0.886	4		0.057	4		0.486	4		0.886	4	4	0.057
13.6			0.486	4		0.686	4		0.686	4		0.200	4		0.686	4	4	0.486
14.9			0.686	4		0.686	4		0.686	4		0.886	4		0.486	4	4	0.886
16.1			0.200	4		0.486	4		0.886	4		0.886	4		0.343	4	4	0.686
17.4			1.000	4		1.000	4		0.114	4		0.686	4		0.486	4	4	0.343
18.6			0.486	4		0.486	4		0.486	4		0.343	4		0.686	4	4	0.200
19.9			0.029	4		0.886	4		0.200	4		0.029	4		0.200	4	4	0.200
21.1			0.057	4		0.200	4		0.343	4		0.057	4		0.057	4	4	0.486
22.4			0.200	4		0.886	4		0.686	4		0.686	4		0.343	4	4	0.886
23.6			0.886	4		0.686	4		0.057	4		0.886	4		1.000	4	4	0.029
24.9			0.343	4		1.000	4		0.057	4		0.886	4		0.029	4	4	0.114
26.1			0.200	4		0.343	4		0.686	4		0.886	4		0.200	4	4	0.200
27.4			0.343	4		0.486	4		1.000	4		0.886	4		0.686	4	4	0.686
28.6			0.486	4		0.886	4		1.000	4		0.486	4		0.200	4	4	0.886
29.9			0.057	4		0.029	4		1.000	4		0.343	4		0.114	4	4	0.029
31.1			0.686	4		0.200	4		0.686	4		1.000	4		0.686	4	4	0.886
32.4			0.686	4		0.486	4		0.486	4		0.114	4		0.200	4	4	0.686
33.6			1.000	4		0.886	4		0.886	4		0.029	4		0.057	4	4	0.200
34.9			0.200	4		0.057	4		0.686	4		0.029	4		0.343	4	4	0.029
36.1			0.200	4		0.486	4		0.886	4		0.886	4		0.343	4	4	0.343
37.4			0.686	4		0.686	4		0.486	4		0.486	4		1.000	4	4	0.343
38.6			0.486	4		0.114	4		0.200	4		0.343	4		0.686	4	4	0.686
39.9			0.343	4		0.686	4		0.686	4		0.686	4		0.686	4	4	0.886
41.1			1.000	4		0.343	4		0.686	4		0.486	4		0.886	4	4	0.057
42.4			0.886	4		0.343	4		0.486	4		0.486	4		0.343	4	4	0.343
43.6			0.686	4		1.000	4		0.343	4		1.000	4		0.343	4	4	0.686
44.9			0.200	4		0.886	4		0.686	4		0.343	4		0.114	4	4	0.486
46.1			0.886	4		0.343	4		0.114	4		0.343	4		0.200	4	4	0.057
47.4			0.684	4		0.886	4		1.000	4		0.886	4		0.886	4	4	1.000
48.6			0.686	4		0.029	4		0.029	4		0.114	4		0.057	4	4	0.886
49.9			0.029	4		0.686	4		0.886	4		0.486	4		0.057	4	4	0.686
51.1			0.114	4		0.886	4		0.343	4		0.343	4		0.114	4	4	0.886
52.4			0.686	4		0.886	4		0.486	4		0.686	4		0.200	4	4	0.686
53.6			0.343	4		0.886	4		1.000	4		0.686	4		0.886	4	4	0.686
54.9			1.000	4		0.886	4		0.200	4		0.686	4		0.343	4	4	0.486
56.1			0.029	4		0.486	4		0.486	4		0.200	4		0.343	4	4	1.000
57.4			0.686	4		0.200	4		0.886	4		0.200	4		0.686	4	4	0.114
58.6			0.057	4		0.686	4		0.886	4		0.057	4		0.029	4	4	0.486
59.9			0.114	4		0.114	4		0.686	4		0.029	4		0.114	4	4	0.057
61.1			0.886	4		0.343	4		0.486	4		0.886	4		0.886	4	4	0.886
62.4			0.114	4		0.200	4		0.686	4		0.343	4		0.486	4	4	1.000
63.6			0.114	4		1.000	4		0.200	4		0.200	4		0.886	4	4	0.343
64.9			1.000	4		0.686	4		0.486	4		0.343	4		0.486	4	4	0.686
66.1			0.343	4		0.057	4		0.343	4		0.486	4		1.000	4	4	0.343
67.4			0.686	4		0.200	4		0.343	4		0.486	4		0.486	4	4	1.000
68.6			0.486	4		0.686	4		0.343	4		0.886	4		0.343	4	4	0.200
69.9			0.886	4		0.200	4		0.686	4		0.057	4		0.686	4	4	0.114
71.1			0.486	4		0.686	4		0.343	4		0.343	4		0.057	4	4	0.686
72.4			0.686	4		0.057	4		0.029	4		0.114	4		0.029	4	4	0.686
73.6			0.343	4		0.343	4		0.029	4		0.343	4		0.029	4	4	0.343
74.9			0.343	4		0.200	4		0.200	4		0.886	4		0.114	4	4	0.029
76.1			0.886	4		0.686	4		0.886	4		0.686	4		1.000	4	4	1.000
77.4			0.486	4		1.000	4		0.886	4		0.343	4		0.686	4	4	0.686

p<0.05

p<0.05

D5. O₂ consumption, CO₂ production and respiratory exchange ratio measurementsO₂ consumption

Time (hr)	VO ₂ (ml/h/kg mouse)				Average VO ₂ (ml/h/kg mouse)	SD
	cage 0101	cage 0105	cage 0201	cage 0205		
6.1	3055	3609	3572	3183	3355	278
7.4	2909	3769	3278	2987	3236	389
8.6	2786	3499	3070	3028	3096	296
9.9	3051	3540	3607	2913	3278	347
11.1	2741	3200	2943	3204	3022	224
12.4	2814	2966	3194	2903	2969	162
13.6	2636	3102	2744	2661	2786	216
14.9	2685	2756	2766	2705	2728	39
16.1	2399	2814	2770	2676	2665	186
17.4	2811	2699	2874	2756	2785	75
18.6	3115	2850	2610	2730	2826	216
19.9	2766	2917	2939	3098	2930	136
21.1	2602	2990	2628	2542	2691	203
22.4	2743	2708	2828	2892	2793	83
23.6	3001	2963	2979	2785	2937	102
24.9	3803	3693	3803	3939	3809	101
26.1	2959	3356	3539	3857	3428	375
27.4	3391	3518	3497	3027	3358	228
28.6	2921	3300	3385	3544	3287	264
29.9	2968	3266	3115	2992	3085	136
31.1	2981	3263	3316	3042	3150	164
32.4	2763	3180	3307	3199	3112	239
33.6	2742	3182	3401	2921	3062	290
34.9	3160	3090	3203	2842	3074	162
36.1	2844	3097	2702	2680	2831	192
37.4	2831	2938	3274	2716	2940	240
38.6	2671	2564	2826	2528	2647	134
39.9	2400	2696	2776	2658	2633	163
41.1	2690	2872	2630	2450	2611	110
42.4	2344	2796	2790	2828	2689	231
43.6	2542	2523	2642	2639	2587	63
44.9	2549	2679	2872	2558	2665	151
46.1	2757	2884	3000	2753	2849	118
47.4	2937	2860	2704	2758	2815	104
48.6	3585	3535	3750	3397	3566	146
49.9	3458	3277	3756	3348	3460	211
51.1	3320	3475	3528	3083	3352	199
52.4	2985	3469	3327	3112	3223	216
53.6	2933	3202	3213	3143	3123	130
54.9	3066	3289	3231	3090	3169	108
56.1	2657	3247	3191	2815	2977	287
57.4	2818	3230	3258	2922	3057	220
58.6	2822	2877	3274	3079	3013	206
59.9	2899	3156	3119	2652	2957	233
61.1	2683	2820	2794	2648	2736	84
62.4	2389	2882	2765	2368	2601	262
63.6	2451	2707	2939	2554	2663	212
64.9	2727	2568	2982	2495	2693	216
66.1	2399	2276	2392	2563	2407	118
67.4	2588	2697	2816	2448	2637	157
68.6	2392	2652	2564	2667	2569	126
69.9	2532	2656	2612	2506	2576	70
71.1	2612	2511	2816	2723	2666	132
72.4	3115	3156	3363	3306	3235	119
73.6	3315	3487	3910	3443	3539	258
74.9	3280	3320	3488	3288	3344	98
76.1	2917	3251	3373	2915	3114	234
77.4	2855	3337	3389	3106	3172	244

Time (hr)	VO ₂ (ml/h/kg mouse)				Average VO ₂ (ml/h/kg mouse)	SD
	cage 0102	cage 0106	cage 0202	cage 0206		
6.1	3472	3369	3160	3514	3379	158
7.4	3395	3409	3368	3614	3445	113
8.6	3050	3203	3449	3293	3249	167
9.9	3172	2947	3117	3489	3181	226
11.1	3251	3125	3816	3179	3343	320
12.4	2926	3060	3395	2899	3070	228
13.6	3037	2695	3096	3070	2975	188
14.9	2788	2851	3097	2552	2822	224
16.1	2871	2875	3325	2576	2912	309
17.4	2799	2652	3518	2756	2931	396
18.6	3056	3007	3074	2662	2950	194
19.9	2601	2709	3117	2514	2735	267
21.1	2805	2795	3413	2879	2973	296
22.4	2750	2921	3103	2867	2910	147
23.6	3171	2587	3536	2788	3020	420
24.9	3833	3748	4154	3592	3832	237
26.1	3636	3978	4043	3820	3869	181
27.4	3312	3246	3549	3655	3441	193
28.6	3416	2692	3359	3071	3135	332
29.9	3230	3470	3388	3377	3366	100
31.1	2869	2582	3516	3131	3025	397
32.4	2856	2876	3552	3029	3078	325
33.6	2994	2690	3323	2895	2975	264
34.9	3079	2731	3477	3112	3100	305
36.1	2968	3042	3324	2751	3022	237
37.4	3173	2525	3366	2900	2991	364
38.6	2704	2513	3166	2538	2730	302
39.9	2718	2533	3179	2470	2725	320
41.1	2628	2616	3017	2540	2700	215
42.4	2607	2201	3282	3134	2806	496
43.6	2730	2354	3253	2736	2768	369
44.9	2797	2485	3350	2734	2842	365
46.1	2698	2627	3198	2680	2801	267
47.4	3046	2525	3342	2752	2916	355
48.6	3577	3124	3851	3637	3547	306
49.9	3845	3499	3852	3908	3776	187
51.1	3451	3441	3668	3515	3519	105
52.4	3181	2990	3312	3294	3194	148
53.6	3346	2800	3445	3165	3189	284
54.9	3086	2879	3554	3289	3202	289
56.1	3090	3022	3415	3186	3178	172
57.4	2863	2881	3403	3262	3102	272
58.6	3087	3127	3591	3313	3279	230
59.9	3056	2850	3467	3039	3103	260
61.1	2671	3145	3078	2635	2882	266
62.4	2444	2789	2892	2715	2710	191
63.6	2399	2700	2935	2380	2603	265
64.9	2342	2391	3212	2899	2711	418
66.1	2545	2295	2815	2392	2512	227
67.4	2404	2324	3006	2846	2645	332
68.6	2463	2660	2803	2507	2608	155
69.9	2455	2428	2845	2482	2553	196
71.1	2691	2326	3266	2798	2770	387
72.4	3248	2864	3489	3160	3190	258
73.6	3502	3251	4078	3573	3601	346
74.9	3217	3329	3610	3467	3406	170
76.1	3102	2931	3421	3432	3222	247
77.4	3005	2951	3571	3348	3219	293

Time (hr)	VO ₂ (ml/h/kg mouse)				Average VO ₂ (ml/h/kg mouse)	SD
	cage 0103	cage 0107	cage 0203	cage 0207		
6.1	3575	3707	3794	3663	3685	91
7.4	3438	3450	3743	3572	3551	141
8.6	3276	3564	3720	3214	3443	240
9.9	3298	3287	3705	3019	3327	283
11.1	3219	3026	3779	3239	3316	323
12.4	3263	3409	3672	3345	3422	177
13.6	3253	2782	3223	2912	3043	233
14.9	3148	2910	3420	2872	3088	253
16.1	3131	3357	3169	2875	3133	198
17.4	3100	3284	3191	2771	3086	224
18.6	3016	2897	2977	2999	2972	53
19.9	3076	3165	3223	2870	3094	155
21.1	3085	2998	2948	2834	2966	105
22.4	3053	2966	3152	3341	3128	161
23.6	3230	3150	3288	3059	3182	99
24.9	4037	4423	3777	3640	3969	345
26.1	4262	4267	4205	4105	4210	75
27.4	3794	3878	3828	3747	3812	55
28.6	3514	3369	3957	3750	3648	260
29.9	3148	3529	3640	3236	3388	234
31.1	3395	3172	3650	3219	3359	216
32.4	3149	2853	3984	3250	3309	480
33.6	3169	3211	3921	3297	3399	352
34.9	2970	2429	3604	3069	3018	481
36.1	3160	2889	3350	3309	3177	209
37.4	3016	3030	3543	3283	3218	249
38.6	2941	2788	3214	2655	2899	240
39.9	2850	2683	3085	2885	2876	165
41.1	2941	2931	3210	2530	2903	280
42.4	2907	2730	2981	2725	2836	128
43.6	2942	2681	2965	2754	2835	140
44.9	2796	2997	3440	2692	2981	331
46.1	3066	3271	3046	3180	3141	105
47.4	3205	2865	3259	2689	3005	273
48.6	3687	3511	3496	3092	3446	252
49.9	4214	3964	4094	3677	3987	230
51.1	3775	3687	4344	3700	3876	314
52.4	3674	3386	3911	3750	3680	220
53.6	3475	3563	3848	3319	3551	222
54.9	3342	2927	3707	3329	3326	319
56.1	3292	3075	3560	3360	3322	200
57.4	3037	2999	3737	3049	3206	355
58.6	3252	3141	3706	3142	3310	269
59.9	2949	2581	3450	2942	2980	357
61.1	2998	2658	3240	2765	2915	259
62.4	3028	2847	3009	2797	2920	116
63.6	2891	2517	3312	2674	2848	345
64.9	2898	2895	3049	2635	2869	172
66.1	2599	2387	3169	3032	2797	366
67.4	2763	2486	2988	2671	2727	209
68.6	2667	2703	3097	2657	2781	211
69.9	2847	2910	3004	2767	2882	100
71.1	2862	2964	3025	2614	2866	181
72.4	3237	3292	3296	2919	3186	180
73.6	3789	4002	3796	3425	3753	240
74.9	3950	3705	4281	3810	3937	251
76.1	3367	2971	4117	3470	3481	475
77.4	3409	3211	3938	3360	3480	317

Metabolic cages group 6. HF + 0.003 % PFOS						
Time (hr)	VO ₂ (ml/h/kg mouse)				Average VO ₂ (ml/h/kg mouse)	SD
	cage 0104	cage 0108	cage 0204	cage 0208		
6.1	3936	4321	3970	3628	3963	283
7.4	3779	3980	3795	3648	3800	136
8.6	3334	3807	3674	3379	3549	229
9.9	3695	3783	3579	3441	3624	148
11.1	3866	3646	3646	3141	3575	307
12.4	3633	3225	3349	3124	3333	220
13.6	3766	3107	3222	3167	3315	304
14.9	3592	3471	3249	3007	3330	258
16.1	3335	2903	3089	3039	3091	180
17.4	3212	3171	2998	2777	3040	198
18.6	3726	3504	3191	2894	3329	364
19.9	3676	2963	2911	3007	3139	360
21.1	3305	3099	2949	3046	3100	150
22.4	3297	3319	2980	3014	3152	180
23.6	3731	3204	3078	3199	3303	291
24.9	4099	4024	3349	3392	3716	400
26.1	4351	3972	4050	3767	4035	242
27.4	3752	3870	4131	3917	3918	158
28.6	3941	4064	3600	3773	3845	202
29.9	3747	3497	3405	3448	3524	153
31.1	3948	3675	3488	3364	3619	254
32.4	3818	3178	3407	3492	3474	265
33.6	3918	3425	3579	3323	3561	260
34.9	3886	3428	3396	3234	3486	280
36.1	3850	3073	3304	3074	3325	366
37.4	3591	3040	3332	3159	3280	239
38.6	3316	3011	2944	3124	3099	163
39.9	3267	2725	2955	3142	3022	236
41.1	3116	2830	2972	3019	2984	119
42.4	3148	3212	2800	2929	3022	191
43.6	3309	2822	3150	3182	3116	208
44.9	3392	2842	2934	2916	3021	250
46.1	3310	2932	3103	3085	3108	155
47.4	3301	2919	2962	3075	3064	171
48.6	3857	3307	3541	3244	3487	278
49.9	4409	3774	3676	3620	3870	365
51.1	3834	3995	3818	3874	3880	80
52.4	4037	3881	3610	3592	3780	217
53.6	3747	3731	3514	3608	3650	110
54.9	3907	3451	3525	3338	3555	247
56.1	3965	3167	3620	3404	3539	339
57.4	3733	3412	3604	3462	3553	145
58.6	3792	3344	3376	3424	3484	208
59.9	3870	3327	3465	3392	3513	245
61.1	3598	3153	3213	3205	3292	205
62.4	3697	3167	3007	3175	3262	301
63.6	3151	2771	3077	2885	2971	174
64.9	3203	2934	2705	3044	2972	209
66.1	2953	2527	2901	2845	2806	192
67.4	3241	2925	2873	2718	2939	220
68.6	3204	2665	2843	2776	2872	233
69.9	3161	2950	2659	3014	2946	211
71.1	3089	2860	2748	2780	2869	154
72.4	3570	2917	2989	3115	3148	293
73.6	3761	3686	3194	3269	3477	287
74.9	3836	3329	3493	3677	3584	220
76.1	3648	3583	3465	3833	3632	154
77.4	3736	3613	3363	3688	3600	166

VO ₂ p-values Mann Whitney U-test																		
Time (hr)	group 1 vs 3			group 1 vs 4			group 1 vs 6			group 3 vs 4			group 3 vs 6			group 4 vs 6		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
6.1			0.886	4		0.057	4		0.029	4		0.029	4		0.029	4		0.200
7.4			0.343	4		0.343	4		0.057	4		0.200	4		0.029	4		0.057
8.6			0.486	4		0.114	4		0.114	4		0.343	4		0.114	4		0.486
9.9			0.886	4		0.886	4		0.200	4		0.486	4		0.057	4		0.200
11.1			0.343	4		0.114	4		0.114	4		0.886	4		0.486	4		0.486
12.4			0.686	4		0.029	4		0.057	4		0.114	4		0.200	4		0.486
13.6			0.486	4		0.114	4		0.029	4		0.686	4		0.029	4		0.686
14.9			0.343	4		0.029	4		0.029	4		0.114	4		0.057	4		0.200
16.1			0.200	4		0.029	4		0.029	4		0.200	4		0.200	4		0.686
17.4			0.886	4		0.114	4		0.114	4		0.486	4		0.486	4		0.886
18.6			0.686	4		0.343	4		0.057	4		0.486	4		0.200	4		0.343
19.9			0.343	4		0.343	4		0.486	4		0.114	4		0.200	4		0.886
21.1			0.200	4		0.114	4		0.057	4		0.486	4		0.343	4		0.200
22.4			0.200	4		0.029	4		0.029	4		0.114	4		0.114	4		1.000
23.6			0.886	4		0.029	4		0.029	4		0.686	4		0.343	4		0.886
24.9			1.000	4		0.886	4		1.000	4		0.686	4		0.686	4		0.486
26.1			0.114	4		0.029	4		0.057	4		0.029	4		0.486	4		0.343
27.4			0.686	4		0.029	4		0.029	4		0.029	4		0.029	4		0.343
28.6			0.686	4		0.200	4		0.029	4		0.057	4		0.029	4		0.343
29.9			0.057	4		0.114	4		0.029	4		0.886	4		0.114	4		0.686
31.1			0.686	4		0.343	4		0.029	4		0.200	4		0.114	4		0.200
32.4			0.886	4		0.886	4		0.200	4		0.686	4		0.200	4		0.486
33.6			0.686	4		0.343	4		0.057	4		0.200	4		0.029	4		0.343
34.9			0.886	4		0.686	4		0.029	4		0.686	4		0.200	4		0.200
36.1			0.343	4		0.057	4		0.114	4		0.486	4		0.200	4		1.000
37.4			0.886	4		0.114	4		0.114	4		0.486	4		0.486	4		0.486
38.6			1.000	4		0.200	4		0.029	4		0.343	4		0.200	4		0.200
39.9			0.886	4		0.114	4		0.057	4		0.486	4		0.200	4		0.343
41.1			0.886	4		0.200	4		0.029	4		0.686	4		0.114	4		0.686
42.4			0.886	4		0.686	4		0.057	4		1.000	4		0.686	4		0.200
43.6			0.343	4		0.029	4		0.029	4		0.686	4		0.200	4		0.114
44.9			0.686	4		0.114	4		0.057	4		0.686	4		0.200	4		0.886
46.1			0.343	4		0.029	4		0.057	4		0.200	4		0.200	4		1.000
47.4			0.886	4		0.486	4		0.057	4		0.886	4		0.686	4		0.686
48.6			0.886	4		0.486	4		0.686	4		0.486	4		0.886	4		0.886
49.9			0.057	4		0.057	4		0.114	4		0.200	4		0.886	4		0.486
51.1			0.486	4		0.029	4		0.029	4		0.029	4		0.029	4		0.343
52.4			0.886	4		0.057	4		0.029	4		0.029	4		0.029	4		0.886
53.6			0.686	4		0.029	4		0.029	4		0.114	4		0.029	4		0.486
54.9			0.886	4		0.343	4		0.029	4		0.486	4		0.200	4		0.343
56.1			0.686	4		0.114	4		0.114	4		0.486	4		0.200	4		0.343
57.4			0.686	4		0.686	4		0.029	4		0.686	4		0.029	4		0.343
58.6			0.114	4		0.200	4		0.029	4		0.686	4		0.200	4		0.200
59.9			0.886	4		1.000	4		0.029	4		0.486	4		0.200	4		0.114
61.1			0.886	4		0.486	4		0.029	4		0.886	4		0.029	4		0.200
62.4			0.486	4		0.114	4		0.029	4		0.140	4		0.029	4		0.114
63.6			0.486	4		0.686	4		0.114	4		0.486	4		0.114	4		0.686
64.9			0.886	4		0.343	4		0.200	4		0.886	4		0.486	4		0.486
66.1			0.686	4		0.200	4		0.057	4		0.343	4		0.114	4		0.886
67.4			1.000	4		0.686	4		0.057	4		0.886	4		0.343	4		0.343
68.6			0.886	4		0.057	4		0.057	4		0.343	4		0.114	4		0.486
69.9			0.343	4		0.029	4		0.029	4		0.057	4		0.057	4		0.486
71.1			0.886	4		0.114	4		0.114	4		0.686	4		0.686	4		0.886
72.4			1.000	4		0.686	4		0.343	4		0.886	4		0.886	4		0.686
73.6			0.686	4		0.486	4		0.686	4		0.686	4		0.886	4		0.114
74.9			0.686	4		0.029	4		0.057	4		0.029	4		0.200	4		0.114
76.1			0.334	4		0.200	4		0.029	4		0.486	4		0.029	4		0.486
77.4			0.886	4		0.200	4		0.057	4		0.343	4		0.057	4		0.486

p<0.05

p<0.05

CO₂ production

Time (hr)	VCO ₂ (ml/h/kg mouse)				Average VCO ₂ (ml/h/kg mouse)	SD
	cage 0101	cage 0105	cage 0201	cage 0205		
6.1	2929	3110	3620	2845	3126	348
7.4	2978	3408	3399	2787	3143	311
8.6	2781	3142	3042	2814	2945	176
9.9	2963	3025	3464	2655	3027	333
11.1	2773	2718	2664	2841	2749	76
12.4	2721	2759	3107	2565	2788	229
13.6	2478	2619	2736	2379	2553	157
14.9	2629	2308	2708	2391	2509	190
16.1	2418	2501	2567	2267	2438	130
17.4	2713	2207	2650	2315	2471	248
18.6	3008	2361	2357	2233	2490	351
19.9	2486	2419	2757	2474	2534	152
21.1	2362	2465	2357	2041	2306	184
22.4	2412	2231	2731	2440	2453	207
23.6	2563	2617	2602	2402	2546	99
24.9	3454	3237	3386	3369	3361	91
26.1	2775	2971	3388	3044	3044	256
27.4	3139	3105	3283	2578	3026	309
28.6	2804	2718	3414	3120	3014	318
29.9	2860	2620	3100	2592	2793	238
31.1	2861	2568	3243	2750	2856	285
32.4	2563	2568	3137	2730	2750	270
33.6	2599	2436	2976	2197	2552	327
34.9	2801	2505	2827	2280	2603	260
36.1	2500	2421	2436	2334	2423	68
37.4	2517	2267	2933	2241	2490	321
38.6	2627	2362	2813	2191	2498	276
39.9	2470	2518	2873	2345	2552	227
41.1	2748	2440	2656	2095	2485	290
42.4	2281	2470	2655	2354	2440	163
43.6	2448	2244	2505	2168	2341	161
44.9	2369	2400	2829	2209	2451	265
46.1	2594	2551	2874	2334	2588	222
47.4	2662	2631	2543	2510	2587	71
48.6	3258	3226	3635	3092	3303	233
49.9	3054	2903	3311	2877	3036	199
51.1	3010	3083	3407	2777	3069	261
52.4	2744	3012	3274	2839	2967	233
53.6	2610	2778	2975	2727	2773	152
54.9	2547	2717	3158	2521	2736	295
56.1	2403	2640	2997	2341	2595	297
57.4	2581	2784	3114	2383	2715	312
58.6	2571	2393	2915	2423	2576	239
59.9	2631	2574	2798	2088	2523	305
61.1	2574	2152	2597	2128	2363	258
62.4	2295	2478	2429	1822	2256	299
63.6	2211	2122	2445	1985	2191	193
64.9	2536	2019	2461	1914	2232	312
66.1	2132	1693	1936	2008	1943	185
67.4	2274	2161	2434	1765	2159	285
68.6	1943	2025	2320	2073	2090	162
69.9	1969	2239	2420	1970	2150	221
71.1	2228	1950	2546	2267	2248	244
72.4	2767	2843	3065	2691	2841	162
73.6	2844	3169	3474	2866	3088	297
74.9	2927	3054	3241	2818	3010	182
76.1	2559	2840	3150	2531	2770	289
77.4	2530	2822	2961	2683	2749	185

Time (hr)	VCO ₂ (ml/h/kg mouse)				Average VCO ₂ (ml/h/kg mouse)	SD
	cage 0102	cage 0106	cage 0202	cage 0206		
6.1	3252	3003	2825	3076	3039	177
7.4	3223	3131	3321	3262	3234	80
8.6	2920	2824	3352	2920	3004	236
9.9	2958	2601	2985	2986	2883	188
11.1	3064	2849	3475	2676	3016	345
12.4	2699	2726	3161	2520	2776	272
13.6	2801	2151	2872	2743	2642	331
14.9	2572	2481	2697	2060	2452	276
16.1	2714	2400	3020	2190	2581	363
17.4	2585	2148	3083	2324	2535	407
18.6	2574	2524	2858	2156	2478	222
19.9	2164	2181	2852	2015	2303	374
21.1	2411	2426	3150	2209	2549	413
22.4	2300	2522	2630	2256	2427	179
23.6	2736	2188	3094	2372	2598	402
24.9	3201	3308	3794	3129	3358	300
26.1	3254	3232	3611	3130	3307	210
27.4	2985	2775	3335	3186	3073	245
28.6	3014	2175	3300	2743	2808	480
29.9	2775	2675	3305	2895	2913	277
31.1	2439	1920	3161	2671	2548	515
32.4	2504	2269	3092	2606	2618	346
33.6	2610	2010	2889	2378	2472	372
34.9	2617	2140	2941	2590	2572	329
36.1	2477	2465	2788	2208	2485	237
37.4	2899	1937	2859	2524	2555	445
38.6	2685	2169	3039	2355	2562	383
39.9	2683	2199	3043	2262	2547	394
41.1	2621	2408	2877	2293	2550	257
42.4	2474	1986	2836	2555	2463	354
43.6	2507	2197	2699	2100	2376	276
44.9	2548	2105	2784	2263	2425	301
46.1	2467	2244	2683	2211	2401	219
47.4	2764	2233	3009	2456	2615	341
48.6	3042	2866	3422	3123	3113	232
49.9	3429	3157	3477	3172	3309	168
51.1	3211	3074	3245	2974	3126	125
52.4	3047	2715	2949	2936	2912	140
53.6	3111	2508	3013	2564	2799	307
54.9	2896	2513	3032	2765	2802	221
56.1	2872	2595	2781	2578	2707	144
57.4	2476	2380	2820	2651	2582	194
58.6	2685	2602	2998	2616	2725	186
59.9	2488	2275	2807	2394	2491	228
61.1	2467	2477	2587	2067	2399	228
62.4	2183	2398	2543	2186	2328	176
63.6	1944	2326	2532	1776	2145	346
64.9	1948	2041	2791	2344	2281	380
66.1	2018	2013	2171	1721	1981	188
67.4	1832	1903	2347	2267	2087	257
68.6	1932	2169	2213	1916	2057	155
69.9	1855	1854	2316	1905	1982	224
71.1	2156	1965	2756	2343	2305	338
72.4	2564	2510	2797	2630	2625	125
73.6	3132	2821	3506	2895	3088	308
74.9	2833	2869	3164	2960	2956	149
76.1	2774	2421	3060	2920	2794	275
77.4	2464	2451	2963	2853	2683	264

Time (hr)	VCO ₂ (ml/h/kg mouse)				Average VCO ₂ (ml/h/kg mouse)	SD
	cage 0103	cage 0107	cage 0203	cage 0207		
6.1	3309	3390	3535	3348	3395	99
7.4	3243	3195	3526	3375	3335	148
8.6	2910	3285	3487	2961	3161	274
9.9	3013	2980	3360	2695	3012	273
11.1	2848	2670	3385	2981	2971	304
12.4	2803	3043	3222	3000	3017	172
13.6	2757	2340	2802	2483	2596	221
14.9	2834	2384	2957	2469	2661	278
16.1	2699	2685	2527	2316	2557	179
17.4	2641	2677	2628	2448	2598	102
18.6	2474	2658	2505	2519	2539	81
19.9	2501	3011	2615	2533	2665	236
21.1	2834	2835	2489	2379	2634	236
22.4	2638	2685	2634	2873	2708	113
23.6	2739	2772	2653	2586	2687	84
24.9	3504	3473	3331	3246	3389	121
26.1	3532	3535	3688	3585	3585	73
27.4	3236	3539	3498	3374	3412	137
28.6	3243	3256	3755	3475	3432	240
29.9	2940	3382	3493	3025	3210	269
31.1	3109	2912	3516	3001	3135	267
32.4	2575	2599	3708	2979	2965	528
33.6	2536	2804	3465	2755	2890	401
34.9	2419	1953	3136	2496	2501	487
36.1	2531	2461	2999	2664	2664	239
37.4	2613	2818	3063	2466	2740	259
38.6	2766	2612	2756	2243	2594	245
39.9	2533	2538	2510	2677	2564	76
41.1	2656	2834	2715	2186	2598	284
42.4	2367	2515	2371	2250	2376	109
43.6	2316	2481	2372	2195	2341	119
44.9	2273	2767	2861	2035	2484	395
46.1	2587	2927	2695	2742	2738	142
47.4	2771	2605	2987	2323	2672	280
48.6	3419	3205	3237	2691	3138	312
49.9	3884	3492	3775	3089	3560	355
51.1	3549	3283	4014	3281	3532	345
52.4	3537	3116	3646	3478	3444	230
53.6	3286	3411	3615	3060	3343	233
54.9	3013	2658	3123	3020	2954	204
56.1	2856	2761	2950	3005	2893	108
57.4	2482	2458	3004	2631	2644	252
58.6	2653	2516	2972	2505	2662	217
59.9	2446	2003	2652	2388	2422	348
61.1	2471	2132	2679	2317	2400	232
62.4	2444	2248	2508	2381	2395	111
63.6	2317	1959	2651	2239	2292	285
64.9	2384	2357	2281	2202	2306	82
66.1	2092	1863	2403	2467	2206	281
67.4	2089	1983	2360	2074	2127	163
68.6	2019	2148	2535	2135	2209	225
69.9	2254	2256	2476	2241	2307	113
71.1	2189	2394	2578	2122	2321	207
72.4	2792	2665	2648	2485	2648	126
73.6	3502	3130	3196	2820	3162	280
74.9	3708	2929	3755	3224	3404	397
76.1	3218	2380	3623	3083	3076	518
77.4	3192	2698	3327	2906	3031	283

Metabolic cages group 6 -F + 0.003 % PFOS						
Time (hr)	VCO ₂ (ml/h/kg mouse)				Average VCO ₂ (ml/h/kg mouse)	SD
	cage 0104	cage 0108	cage 0204	cage 0208		
6.1	3618	3732	3629	3220	3550	226
7.4	3414	3149	3553	3346	3365	168
8.6	3077	3062	3321	2963	3106	152
9.9	3331	3294	3219	3015	3215	141
11.1	3459	3188	3324	2801	3193	284
12.4	3301	2650	2970	2656	2894	310
13.6	3344	2303	2875	2554	2769	449
14.9	3167	2783	2760	2326	2759	344
16.1	2754	2270	2407	2550	2495	207
17.4	2745	2591	2365	2139	2460	265
18.6	3329	2992	2511	2371	2801	441
19.9	3154	2288	2097	2433	2493	462
21.1	2765	2771	2441	2405	2595	200
22.4	2658	2817	2384	2486	2576	201
23.6	3248	2519	2387	2668	2705	380
24.9	3643	3328	2734	2974	3170	399
26.1	3711	3457	3256	3206	3408	230
27.4	3410	3409	3637	3476	3483	107
28.6	3586	3714	3225	3340	3466	224
29.9	3324	3143	3102	2929	3124	162
31.1	3436	3095	3183	2900	3153	223
32.4	3213	2431	3022	2895	2890	333
33.6	3040	2809	3004	2693	2887	165
34.9	3259	2784	2951	2688	2921	251
36.1	3172	2333	2737	2351	2648	396
37.4	3179	2503	2817	2633	2783	294
38.6	3080	2433	2382	2717	2648	326
39.9	2992	2068	2449	2838	2587	414
41.1	2701	2306	2399	2627	2508	186
42.4	2828	2532	2224	2310	2474	270
43.6	2695	2234	2681	2499	2527	215
44.9	2775	2233	2426	2409	2461	227
46.1	2741	2411	2500	2573	2556	140
47.4	2766	2411	2616	2534	2582	149
48.6	3454	2739	3044	2867	3026	312
49.9	3931	3266	3167	3104	3367	382
51.1	3393	3634	3407	3247	3420	160
52.4	3656	3495	3236	3014	3350	283
53.6	3109	3309	3021	3121	3140	121
54.9	3360	2940	2868	2811	2995	249
56.1	3313	2510	2896	2675	2849	348
57.4	3183	2708	2683	2661	2809	250
58.6	3210	2732	2631	2576	2787	289
59.9	3309	2775	2552	2529	2791	363
61.1	3020	2472	2453	2522	2617	270
62.4	2882	2549	2424	2522	2594	199
63.6	2636	2062	2504	2233	2359	260
64.9	2675	2302	2208	2333	2379	204
66.1	2419	2040	2197	2131	2197	161
67.4	2724	2379	2060	2004	2291	332
68.6	2533	2023	2195	1971	2180	254
69.9	2450	2344	2016	2234	2261	185
71.1	2505	2242	1969	2016	2183	246
72.4	3034	2294	2265	2426	2505	360
73.6	3260	3089	2531	2702	2895	337
74.9	3398	2900	2924	3037	3065	230
76.1	3198	3204	3044	3244	3172	88
77.4	3051	3148	2734	3064	2999	182

VCO ₂ , p-values Mann Whitney U-test																		
Time (hr)	group 1 vs 3			group 1 vs 4			group 1 vs 6			group 3 vs 4			group 3 vs 6			group 4 vs 6		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
6.1			0.886	4		0.343	4		0.114	4		0.029	4		0.057	4		0.343
7.4			1.000	4		0.686	4		0.343	4		0.486	4		0.200	4		0.886
8.6			0.686	4		0.343	4		0.343	4		0.486	4		0.343	4		0.886
9.9			0.486	4		1.000	4		0.486	4		0.486	4		0.029	4		0.343
11.1			0.200	4		0.200	4		0.057	4		0.686	4		0.686	4		0.486
12.4			0.886	4		0.200	4		0.886	4		0.200	4		0.886	4		0.486
13.6			0.343	4		0.686	4		0.686	4		0.886	4		0.686	4		0.686
14.9			0.886	4		0.486	4		0.200	4		0.686	4		0.200	4		1.000
16.1			0.886	4		0.343	4		0.886	4		0.886	4		1.000	4		0.886
17.4			1.000	4		0.889	4		1.000	4		0.486	4		1.000	4		0.486
18.6			0.886	4		0.343	4		0.200	4		0.686	4		0.686	4		0.686
19.9			0.343	4		0.200	4		0.486	4		0.200	4		0.486	4		0.343
21.1			0.486	4		0.057	4		0.114	4		0.686	4		0.686	4		0.686
22.4			1.000	4		0.200	4		0.486	4		0.029	4		0.343	4		0.486
23.6			1.000	4		0.114	4		0.886	4		0.686	4		0.686	4		0.686
24.9			0.486	4		0.686	4		0.486	4		0.486	4		0.686	4		0.486
26.1			0.200	4		0.029	4		0.114	4		0.200	4		0.486	4		0.343
27.4			0.886	4		0.057	4		0.029	4		0.057	4		0.029	4		0.686
28.6			0.886	4		0.114	4		0.114	4		0.114	4		0.057	4		1.000
29.9			0.486	4		0.114	4		0.057	4		0.114	4		0.200	4		0.686
31.1			0.343	4		0.200	4		0.200	4		0.200	4		0.114	4		1.000
32.4			0.486	4		0.489	4		0.686	4		0.486	4		0.486	4		1.000
33.6			0.886	4		0.343	4		0.114	4		0.343	4		0.114	4		0.686
34.9			1.000	4		0.686	4		0.343	4		0.686	4		0.114	4		0.200
36.1			0.686	4		0.057	4		0.886	4		0.486	4		0.886	4		0.886
37.4			0.886	4		0.343	4		0.343	4		0.886	4		0.886	4		0.886
38.6			1.000	4		0.886	4		0.486	4		0.886	4		0.486	4		1.000
39.9			0.886	4		0.486	4		1.000	4		1.000	4		1.000	4		1.000
41.1			1.000	4		0.486	4		0.886	4		0.886	4		1.000	4		0.486
42.4			0.686	4		0.886	4		1.000	4		0.486	4		0.886	4		0.886
43.6			0.886	4		1.000	4		0.343	4		0.886	4		0.686	4		0.200
44.9			0.886	4		1.000	4		0.686	4		0.886	4		1.000	4		1.000
46.1			0.343	4		0.343	4		0.886	4		0.057	4		0.343	4		0.114
47.4			1.000	4		0.686	4		0.886	4		0.886	4		1.000	4		0.686
48.6			0.343	4		0.686	4		0.200	4		0.886	4		0.886	4		0.886
49.9			0.114	4		0.057	4		0.200	4		0.343	4		0.886	4		0.886
51.1			0.886	4		0.114	4		0.114	4		0.029	4		0.029	4		0.886
52.4			0.886	4		0.057	4		0.114	4		0.029	4		0.057	4		0.886
53.6			1.000	4		0.029	4		0.029	4		0.057	4		0.114	4		0.343
54.9			0.886	4		0.486	4		0.200	4		0.486	4		0.486	4		0.886
56.1			0.686	4		0.200	4		0.343	4		0.200	4		0.686	4		0.686
57.4			0.686	4		0.886	4		0.686	4		0.886	4		0.200	4		0.200
58.6			0.200	4		0.486	4		0.200	4		0.486	4		0.886	4		0.486
59.9			0.886	4		0.686	4		0.886	4		0.886	4		0.200	4		0.200
61.1			0.886	4		0.886	4		0.686	4		1.000	4		0.686	4		0.343
62.4			1.000	4		0.686	4		0.114	4		0.686	4		0.114	4		0.114
63.6			0.886	4		0.686	4		0.343	4		0.686	4		0.486	4		1.000
64.9			0.886	4		1.000	4		0.686	4		0.686	4		0.886	4		0.886
66.1			0.486	4		0.343	4		0.114	4		0.343	4		0.114	4		1.000
67.4			0.886	4		0.686	4		0.886	4		0.686	4		0.343	4		0.686
68.6			0.686	4		0.486	4		0.886	4		0.686	4		0.486	4		0.886
69.9			0.200	4		0.200	4		0.486	4		0.200	4		0.114	4		0.686
71.1			0.886	4		0.886	4		0.886	4		0.886	4		0.886	4		0.486
72.4			0.114	4		0.114	4		0.200	4		0.886	4		0.343	4		0.343
73.6			1.000	4		0.886	4		0.486	4		1.000	4		0.486	4		0.343
74.9			0.886	4		0.200	4		1.000	4		0.114	4		0.486	4		0.200
76.1			1.000	4		0.486	4		0.057	4		0.343	4		0.057	4		1.000
77.4			0.886	4		0.200	4		0.114	4		0.200	4		0.114	4		1.000

≥ p<0.05

> p<0.05

Respiratory exchange ratio

Time (hr)	Respiratory exchange ratio				Average RER	SD
	cage 0101	cage 0105	cage 0201	cage 0205		
6.1	0.960	0.861	1.015	0.895	0.933	0.069
7.4	1.025	0.902	1.037	0.934	0.974	0.067
8.6	0.997	0.900	0.994	0.931	0.955	0.048
9.9	0.971	0.854	0.962	0.909	0.924	0.054
11.1	1.014	0.848	0.906	0.884	0.913	0.072
12.4	0.966	0.933	0.975	0.885	0.940	0.041
13.6	0.939	0.841	1.000	0.892	0.918	0.068
14.9	0.981	0.839	0.976	0.883	0.920	0.070
16.1	1.008	0.890	0.926	0.845	0.917	0.069
17.4	0.962	0.817	0.917	0.837	0.883	0.068
18.6	0.969	0.824	0.905	0.815	0.878	0.073
19.9	0.896	0.827	0.936	0.792	0.863	0.065
21.1	0.906	0.821	0.895	0.803	0.856	0.052
22.4	0.877	0.824	0.966	0.843	0.878	0.063
23.6	0.852	0.876	0.867	0.862	0.864	0.010
24.9	0.908	0.878	0.890	0.857	0.883	0.022
26.1	0.941	0.886	0.960	0.785	0.893	0.079
27.4	0.923	0.877	0.936	0.853	0.897	0.039
28.6	0.965	0.823	1.007	0.877	0.918	0.083
29.9	0.963	0.802	0.995	0.866	0.906	0.089
31.1	0.961	0.784	0.977	0.903	0.906	0.087
32.4	0.926	0.805	0.952	0.856	0.885	0.067
33.6	0.948	0.765	0.876	0.747	0.834	0.095
34.9	0.889	0.809	0.881	0.797	0.844	0.047
36.1	0.879	0.780	0.907	0.870	0.859	0.055
37.4	0.882	0.764	0.894	0.821	0.840	0.060
38.6	0.985	0.920	0.998	0.865	0.942	0.062
39.9	1.030	0.936	1.040	0.881	0.972	0.076
41.1	1.027	0.916	1.012	0.856	0.953	0.081
42.4	0.972	0.882	0.947	0.827	0.907	0.066
43.6	0.962	0.890	0.946	0.814	0.903	0.067
44.9	0.930	0.892	0.985	0.863	0.917	0.053
46.1	0.940	0.882	0.959	0.845	0.906	0.052
47.4	0.905	0.920	0.941	0.908	0.918	0.016
48.6	0.913	0.916	0.968	0.915	0.928	0.027
49.9	0.881	0.886	0.881	0.856	0.876	0.013
51.1	0.907	0.888	0.964	0.901	0.915	0.033
52.4	0.919	0.870	0.981	0.910	0.920	0.046
53.6	0.892	0.870	0.923	0.871	0.889	0.025
54.9	0.832	0.827	0.975	0.812	0.861	0.076
56.1	0.907	0.816	0.943	0.828	0.874	0.062
57.4	0.916	0.865	0.956	0.813	0.887	0.062
58.6	0.910	0.831	0.888	0.781	0.853	0.058
59.9	0.903	0.817	0.899	0.787	0.851	0.059
61.1	0.964	0.763	0.931	0.802	0.865	0.097
62.4	0.963	0.861	0.875	0.766	0.867	0.080
63.6	0.896	0.774	0.830	0.772	0.818	0.059
64.9	0.933	0.784	0.817	0.759	0.823	0.077
66.1	0.890	0.745	0.810	0.783	0.807	0.062
67.4	0.876	0.794	0.857	0.721	0.812	0.070
68.6	0.811	0.758	0.907	0.772	0.812	0.067
69.9	0.777	0.839	0.926	0.785	0.832	0.069
71.1	0.852	0.775	0.903	0.830	0.840	0.053
72.4	0.887	0.901	0.912	0.814	0.878	0.044
73.6	0.855	0.909	0.890	0.831	0.871	0.035
74.9	0.891	0.921	0.931	0.854	0.899	0.035
76.1	0.870	0.873	0.930	0.866	0.885	0.030
77.4	0.888	0.844	0.872	0.864	0.867	0.018

Time (hr)	Respiratory exchange ratio				Average RER	SD
	cage 0102	cage 0106	cage 0202	cage 0206		
6.1	0.937	0.894	0.893	0.878	0.900	0.025
7.4	0.950	0.919	0.987	0.903	0.940	0.037
8.6	0.959	0.882	0.972	0.887	0.925	0.047
9.9	0.931	0.884	0.959	0.856	0.908	0.046
11.1	0.944	0.910	0.909	0.842	0.901	0.042
12.4	0.922	0.889	0.932	0.869	0.903	0.029
13.6	0.920	0.800	0.928	0.895	0.886	0.059
14.9	0.923	0.867	0.867	0.805	0.866	0.048
16.1	0.946	0.831	0.908	0.851	0.884	0.053
17.4	0.927	0.808	0.874	0.841	0.862	0.051
18.6	0.836	0.832	0.863	0.807	0.834	0.023
19.9	0.831	0.804	0.916	0.803	0.839	0.053
21.1	0.855	0.863	0.921	0.763	0.851	0.053
22.4	0.833	0.858	0.847	0.780	0.830	0.034
23.6	0.858	0.846	0.874	0.849	0.857	0.013
24.9	0.834	0.878	0.913	0.871	0.874	0.032
26.1	0.894	0.812	0.895	0.818	0.855	0.046
27.4	0.901	0.856	0.943	0.875	0.894	0.037
28.6	0.887	0.809	0.982	0.893	0.892	0.071
29.9	0.858	0.771	0.975	0.855	0.865	0.084
31.1	0.851	0.743	0.896	0.855	0.837	0.065
32.4	0.877	0.783	0.862	0.859	0.845	0.042
33.6	0.871	0.744	0.867	0.823	0.826	0.059
34.9	0.850	0.779	0.842	0.830	0.825	0.032
36.1	0.837	0.802	0.835	0.801	0.819	0.020
37.4	0.922	0.765	0.852	0.871	0.852	0.065
38.6	0.994	0.868	0.960	0.929	0.938	0.053
39.9	0.988	0.870	0.957	0.917	0.933	0.051
41.1	0.998	0.920	0.955	0.904	0.944	0.042
42.4	0.949	0.901	0.864	0.811	0.881	0.059
43.6	0.916	0.931	0.829	0.766	0.860	0.077
44.9	0.912	0.842	0.825	0.824	0.851	0.041
46.1	0.912	0.851	0.833	0.821	0.854	0.040
47.4	0.906	0.883	0.900	0.893	0.895	0.010
48.6	0.854	0.919	0.888	0.861	0.881	0.030
49.9	0.890	0.902	0.902	0.809	0.876	0.045
51.1	0.929	0.892	0.882	0.845	0.887	0.034
52.4	0.958	0.907	0.892	0.893	0.912	0.031
53.6	0.928	0.895	0.873	0.808	0.876	0.051
54.9	0.938	0.875	0.853	0.840	0.877	0.044
56.1	0.930	0.855	0.814	0.809	0.852	0.056
57.4	0.864	0.826	0.829	0.812	0.833	0.022
58.6	0.870	0.829	0.832	0.790	0.830	0.033
59.9	0.815	0.800	0.811	0.783	0.802	0.014
61.1	0.922	0.786	0.840	0.784	0.833	0.065
62.4	0.884	0.858	0.880	0.803	0.856	0.037
63.6	0.809	0.860	0.861	0.746	0.819	0.054
64.9	0.833	0.854	0.863	0.801	0.838	0.027
66.1	0.793	0.877	0.770	0.719	0.790	0.066
67.4	0.759	0.822	0.778	0.790	0.787	0.027
68.6	0.783	0.814	0.789	0.760	0.787	0.022
69.9	0.754	0.758	0.811	0.767	0.772	0.026
71.1	0.794	0.844	0.841	0.835	0.828	0.023
72.4	0.787	0.873	0.794	0.830	0.821	0.039
73.6	0.894	0.867	0.862	0.809	0.858	0.036
74.9	0.879	0.856	0.875	0.854	0.866	0.013
76.1	0.892	0.826	0.893	0.850	0.866	0.033
77.4	0.821	0.826	0.826	0.853	0.831	0.014

Time (hr)	Respiratory exchange ratio				Average RER	SD
	cage 0103	cage 0107	cage 0203	cage 0207		
6.1	0.927	0.918	0.932	0.913	0.922	0.008
7.4	0.944	0.925	0.942	0.944	0.939	0.009
8.6	0.889	0.920	0.938	0.922	0.917	0.020
9.9	0.913	0.905	0.907	0.894	0.905	0.008
11.1	0.885	0.881	0.896	0.920	0.895	0.018
12.4	0.858	0.889	0.876	0.895	0.880	0.016
13.6	0.848	0.843	0.869	0.852	0.853	0.012
14.9	0.901	0.817	0.861	0.860	0.860	0.034
16.1	0.862	0.791	0.795	0.802	0.812	0.034
17.4	0.851	0.807	0.823	0.884	0.841	0.034
18.6	0.820	0.918	0.843	0.837	0.854	0.044
19.9	0.810	0.952	0.803	0.884	0.862	0.070
21.1	0.919	0.943	0.842	0.839	0.886	0.053
22.4	0.863	0.905	0.824	0.857	0.862	0.033
23.6	0.845	0.880	0.802	0.845	0.843	0.032
24.9	0.868	0.787	0.879	0.888	0.855	0.046
26.1	0.829	0.828	0.875	0.871	0.851	0.026
27.4	0.855	0.912	0.912	0.899	0.894	0.027
28.6	0.922	0.968	0.948	0.926	0.941	0.021
29.9	0.933	0.959	0.960	0.934	0.947	0.015
31.1	0.915	0.919	0.963	0.932	0.932	0.022
32.4	0.815	0.912	0.930	0.916	0.893	0.053
33.6	0.795	0.872	0.882	0.833	0.846	0.040
34.9	0.813	0.806	0.870	0.812	0.825	0.030
36.1	0.794	0.851	0.896	0.801	0.836	0.048
37.4	0.866	0.938	0.866	0.749	0.855	0.078
38.6	0.942	0.939	0.856	0.845	0.895	0.052
39.9	0.890	0.945	0.812	0.929	0.894	0.059
41.1	0.903	0.968	0.843	0.867	0.895	0.055
42.4	0.812	0.919	0.795	0.821	0.837	0.056
43.6	0.781	0.925	0.796	0.794	0.824	0.068
44.9	0.813	0.923	0.829	0.754	0.830	0.070
46.1	0.840	0.892	0.884	0.857	0.868	0.024
47.4	0.860	0.910	0.915	0.861	0.887	0.030
48.6	0.925	0.913	0.924	0.871	0.908	0.025
49.9	0.922	0.882	0.921	0.839	0.891	0.040
51.1	0.939	0.890	0.922	0.885	0.909	0.026
52.4	0.964	0.919	0.931	0.926	0.935	0.020
53.6	0.945	0.958	0.940	0.922	0.941	0.015
54.9	0.900	0.909	0.840	0.908	0.889	0.033
56.1	0.863	0.898	0.830	0.893	0.871	0.031
57.4	0.819	0.819	0.803	0.862	0.826	0.025
58.6	0.814	0.801	0.803	0.792	0.803	0.009
59.9	0.823	0.777	0.829	0.810	0.810	0.023
61.1	0.820	0.803	0.828	0.839	0.822	0.015
62.4	0.809	0.786	0.834	0.849	0.819	0.028
63.6	0.801	0.777	0.795	0.838	0.803	0.026
64.9	0.817	0.811	0.745	0.832	0.801	0.039
66.1	0.802	0.781	0.753	0.806	0.786	0.025
67.4	0.754	0.798	0.785	0.771	0.777	0.019
68.6	0.754	0.786	0.820	0.796	0.789	0.027
69.9	0.789	0.769	0.819	0.803	0.795	0.021
71.1	0.763	0.802	0.846	0.809	0.805	0.034
72.4	0.862	0.809	0.804	0.850	0.831	0.029
73.6	0.924	0.781	0.841	0.822	0.842	0.060
74.9	0.939	0.789	0.877	0.846	0.863	0.063
76.1	0.955	0.799	0.878	0.888	0.880	0.064
77.4	0.936	0.836	0.841	0.860	0.868	0.047

Metabolic cages group B HF + 0.003 % PFOS						
Time (hr)	Respiratory exchange ratio				Average RER	SD
	cage 0104	cage 0108	cage 0204	cage 0208		
6.1	0.920	0.863	0.914	0.888	0.896	0.026
7.4	0.903	0.790	0.935	0.916	0.886	0.066
8.6	0.923	0.802	0.903	0.878	0.876	0.053
9.9	0.900	0.871	0.899	0.877	0.887	0.015
11.1	0.894	0.874	0.911	0.891	0.892	0.015
12.4	0.909	0.821	0.887	0.850	0.867	0.039
13.6	0.888	0.741	0.893	0.799	0.830	0.074
14.9	0.882	0.796	0.848	0.774	0.825	0.049
16.1	0.826	0.782	0.777	0.839	0.806	0.031
17.4	0.855	0.817	0.787	0.771	0.808	0.037
18.6	0.891	0.850	0.782	0.814	0.834	0.047
19.9	0.853	0.772	0.718	0.805	0.787	0.057
21.1	0.835	0.895	0.828	0.785	0.836	0.045
22.4	0.806	0.845	0.793	0.818	0.815	0.022
23.6	0.868	0.784	0.771	0.830	0.813	0.044
24.9	0.892	0.828	0.814	0.875	0.852	0.037
26.1	0.851	0.871	0.804	0.848	0.844	0.028
27.4	0.908	0.881	0.879	0.886	0.888	0.013
28.6	0.911	0.914	0.894	0.885	0.901	0.014
29.9	0.886	0.900	0.909	0.848	0.885	0.027
31.1	0.868	0.840	0.912	0.862	0.871	0.030
32.4	0.843	0.764	0.888	0.827	0.830	0.051
33.6	0.776	0.819	0.836	0.812	0.811	0.025
34.9	0.836	0.812	0.865	0.830	0.836	0.022
36.1	0.824	0.756	0.828	0.761	0.792	0.039
37.4	0.890	0.825	0.847	0.839	0.850	0.028
38.6	0.929	0.807	0.801	0.869	0.852	0.060
39.9	0.916	0.759	0.828	0.902	0.851	0.073
41.1	0.867	0.813	0.807	0.871	0.839	0.034
42.4	0.898	0.784	0.793	0.790	0.816	0.055
43.6	0.808	0.787	0.846	0.782	0.806	0.029
44.9	0.816	0.785	0.830	0.825	0.814	0.020
46.1	0.827	0.820	0.804	0.834	0.821	0.013
47.4	0.836	0.826	0.885	0.822	0.842	0.029
48.6	0.896	0.827	0.859	0.883	0.866	0.030
49.9	0.890	0.864	0.860	0.857	0.868	0.015
51.1	0.885	0.909	0.891	0.836	0.880	0.031
52.4	0.905	0.901	0.897	0.837	0.885	0.032
53.6	0.829	0.885	0.860	0.861	0.859	0.023
54.9	0.860	0.852	0.813	0.841	0.841	0.021
56.1	0.835	0.792	0.799	0.784	0.802	0.023
57.4	0.852	0.795	0.743	0.768	0.790	0.047
58.6	0.846	0.817	0.779	0.750	0.798	0.042
59.9	0.855	0.834	0.735	0.745	0.792	0.061
61.1	0.841	0.783	0.762	0.784	0.793	0.034
62.4	0.782	0.803	0.806	0.795	0.797	0.011
63.6	0.838	0.741	0.813	0.772	0.791	0.043
64.9	0.833	0.776	0.816	0.763	0.797	0.033
66.1	0.820	0.807	0.753	0.749	0.782	0.037
67.4	0.833	0.811	0.715	0.736	0.774	0.057
68.6	0.787	0.758	0.766	0.709	0.755	0.033
69.9	0.773	0.792	0.757	0.733	0.764	0.025
71.1	0.809	0.782	0.715	0.722	0.757	0.046
72.4	0.850	0.786	0.755	0.775	0.792	0.041
73.6	0.868	0.838	0.788	0.825	0.830	0.033
74.9	0.885	0.871	0.835	0.825	0.854	0.028
76.1	0.876	0.893	0.878	0.846	0.873	0.020
77.4	0.814	0.869	0.811	0.832	0.832	0.027

Time (hr)	Respiratory exchange ratio, p-values Mann Whitney U-test																	
	group 1 vs 3			group 1 vs 4			group 1 vs 6			group 3 vs 4			group 3 vs 6			group 4 vs 6		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
6.1			0.486	4		1.000	4		0.686	4		0.343	4		0.886	4		0.200
7.4			0.686	4		0.886	4		0.343	4		1.000	4		0.343	4		0.057
8.6			0.343	4		0.343	4		0.114	4		1.000	4		0.343	4		0.343
9.9			0.686	4		0.486	4		0.343	4		1.000	4		0.686	4		0.114
11.1			0.886	4		1.000	4		1.000	4		0.686	4		0.686	4		0.886
12.4			0.200	4		0.114	4		0.114	4		0.486	4		0.200	4		0.686
13.6			0.686	4		0.343	4		0.200	4		0.343	4		0.114	4		1.000
14.9			0.343	4		0.343	4		0.114	4		0.686	4		0.343	4		0.343
16.1			0.686	4		0.057	4		0.029	4		0.114	4		0.057	4		0.686
17.4			0.886	4		0.486	4		0.200	4		0.686	4		0.200	4		0.343
18.6			0.686	4		1.000	4		0.343	4		0.486	4		1.000	4		0.686
19.9			0.886	4		1.000	4		0.200	4		0.886	4		0.486	4		0.200
21.1			1.000	4		0.343	4		0.886	4		0.886	4		0.686	4		0.114
22.4			0.486	4		0.886	4		0.114	4		0.343	4		0.486	4		0.057
23.6			0.343	4		0.343	4		0.200	4		0.343	4		0.200	4		0.343
24.9			0.886	4		0.486	4		0.343	4		0.886	4		0.486	4		1.000
26.1			0.686	4		0.343	4		0.343	4		1.000	4		0.686	4		0.686
27.4			1.000	4		0.886	4		1.000	4		1.000	4		0.886	4		0.486
28.6			0.886	4		0.886	4		1.000	4		0.343	4		0.686	4		0.029
29.9			0.486	4		1.000	4		0.886	4		0.343	4		0.686	4		0.029
31.1			0.200	4		0.886	4		0.486	4		0.029	4		0.486	4		0.029
32.4			0.686	4		1.000	4		0.343	4		0.200	4		0.686	4		0.200
33.6			0.686	4		0.886	4		1.000	4		0.486	4		0.486	4		0.343
34.9			0.686	4		0.886	4		1.000	4		0.886	4		1.000	4		0.486
36.1			0.343	4		0.686	4		0.114	4		0.886	4		0.343	4		0.343
37.4			0.886	4		1.000	4		0.886	4		1.000	4		0.686	4		0.686
38.6			1.000	4		0.343	4		0.200	4		0.343	4		0.200	4		0.343
39.9			0.486	4		0.343	4		0.114	4		0.486	4		0.114	4		0.486
41.1			0.886	4		0.343	4		0.114	4		0.200	4		0.029	4		0.343
42.4			0.686	4		0.114	4		0.114	4		0.486	4		0.114	4		0.200
43.6			0.486	4		0.114	4		0.057	4		0.686	4		0.486	4		1.000
44.9			0.114	4		0.114	4		0.029	4		0.686	4		0.343	4		1.000
46.1			0.200	4		0.486	4		0.029	4		0.486	4		0.200	4		0.029
47.4			0.057	4		0.343	4		0.029	4		1.000	4		0.057	4		0.114
48.6			0.200	4		0.686	4		0.029	4		0.200	4		0.686	4		0.114
49.9			0.343	4		0.486	4		0.886	4		0.686	4		0.486	4		0.486
51.1			0.343	4		0.886	4		0.343	4		0.486	4		0.886	4		0.343
52.4			0.686	4		0.343	4		0.200	4		0.200	4		0.686	4		0.029
53.6			0.886	4		0.057	4		0.114	4		0.057	4		0.486	4		0.029
54.9			0.343	4		0.343	4		0.686	4		0.686	4		0.343	4		0.200
56.1			0.486	4		1.000	4		0.114	4		0.486	4		0.114	4		0.057
57.4			0.200	4		0.200	4		0.057	4		0.486	4		0.200	4		0.200
58.6			0.686	4		0.343	4		0.200	4		0.343	4		0.343	4		1.000
59.9			0.200	4		0.486	4		0.343	4		0.686	4		1.000	4		1.000
61.1			0.686	4		1.000	4		0.343	4		1.000	4		0.343	4		0.343
62.4			1.000	4		0.343	4		0.343	4		0.200	4		0.114	4		0.200
63.6			1.000	4		0.886	4		0.686	4		0.486	4		0.486	4		0.686
64.9			0.486	4		0.886	4		0.886	4		0.200	4		0.114	4		1.000
66.1			0.686	4		0.686	4		0.886	4		0.886	4		1.000	4		0.886
67.4			0.486	4		0.486	4		0.486	4		0.686	4		0.886	4		1.000
68.6			1.000	4		0.886	4		0.200	4		0.886	4		0.200	4		0.343
69.9			0.114	4		0.686	4		0.114	4		0.200	4		0.886	4		0.200
71.1			0.886	4		0.343	4		0.114	4		0.686	4		0.057	4		0.200
72.4			0.114	4		0.114	4		0.057	4		0.686	4		0.200	4		0.200
73.6			0.886	4		0.486	4		0.200	4		0.686	4		0.486	4		1.000
74.9			0.343	4		0.486	4		0.114	4		0.886	4		0.686	4		0.886
76.1			0.686	4		0.686	4		0.886	4		1.000	4		0.886	4		0.886
77.4			0.057	4		0.486	4		0.114	4		0.114	4		0.886	4		0.200

p<0.05

D6. Energy expenditure

Time (hr)	Energy expenditure (kcal/h/kg mouse)				Average energy expenditure (kcal/h/kg mouse)	SD
	cage 0101	cage 0105	cage 0201	cage 0205		
6.1	15.26	17.60	18.09	15.65	16.65	1.40
7.4	14.77	18.58	16.69	14.83	16.22	1.81
8.6	14.06	17.22	15.46	15.02	15.44	1.32
9.9	15.29	17.23	18.03	14.38	16.23	1.89
11.1	13.87	15.56	14.51	15.73	14.92	0.88
12.4	14.09	14.71	16.01	14.24	14.76	0.88
13.6	13.11	15.06	13.84	13.08	13.77	0.93
14.9	13.48	13.36	13.89	13.27	13.50	0.27
16.1	12.13	13.82	13.73	13.00	13.17	0.78
17.4	14.07	13.01	14.23	13.37	13.67	0.58
18.6	15.59	13.78	12.86	13.16	13.85	1.22
19.9	13.62	14.11	14.61	14.87	14.30	0.56
21.1	12.84	14.44	12.93	12.21	13.11	0.95
22.4	13.44	13.08	14.15	14.04	13.68	0.51
23.6	14.61	14.60	14.67	13.58	14.34	0.50
24.9	18.76	18.08	18.68	19.18	18.67	0.45
26.1	14.71	16.46	17.67	18.47	16.83	1.64
27.4	16.80	17.25	17.38	14.72	16.54	1.24
28.6	14.60	15.94	17.12	17.36	16.25	1.27
29.9	14.85	15.69	15.70	14.81	15.21	0.57
31.1	14.90	15.61	16.65	14.99	15.54	0.80
32.4	13.70	15.30	16.48	15.57	15.26	1.16
33.6	13.68	15.14	16.84	13.85	14.62	1.38
34.9	15.51	14.87	15.70	13.65	14.93	0.93
36.1	13.93	14.80	13.31	13.10	13.78	0.76
37.4	13.90	14.00	16.10	13.12	14.28	1.28
38.6	13.43	12.69	14.25	12.34	13.18	0.84
39.9	12.20	13.39	14.13	13.03	13.19	0.80
41.1	13.65	13.20	13.31	11.93	13.02	0.75
42.4	11.75	13.71	13.91	13.60	13.27	1.01
43.6	12.71	12.39	13.16	12.74	12.75	0.32
44.9	12.64	13.18	14.44	12.48	13.19	0.89
46.1	13.72	14.15	14.99	13.38	14.06	0.70
47.4	14.48	14.15	13.45	13.61	13.93	0.48
48.6	17.89	17.46	18.78	16.77	17.67	0.84
49.9	16.95	16.08	18.41	16.32	16.94	1.05
51.1	16.37	17.06	17.66	15.18	16.57	1.06
52.4	14.77	16.94	16.72	15.37	15.95	1.05
53.6	14.41	15.64	15.92	15.35	15.33	0.66
54.9	14.84	15.90	16.22	14.90	15.46	0.70
56.1	13.10	15.64	15.87	13.62	14.56	1.40
57.4	13.93	15.75	16.27	14.08	15.01	1.18
58.6	13.93	13.92	16.08	14.73	14.67	1.02
59.9	14.30	15.21	15.35	12.69	14.39	1.22
61.1	13.41	13.41	13.86	12.72	13.35	0.47
62.4	11.94	14.05	13.54	11.28	12.70	1.31
63.6	12.07	12.94	14.22	12.19	12.86	0.99
64.9	13.53	12.28	14.41	11.88	13.02	1.16
66.1	11.78	10.77	11.51	12.25	11.58	0.62
67.4	12.67	12.95	13.74	11.51	12.72	0.92
68.6	11.52	12.61	12.64	12.73	12.37	0.57
69.9	12.09	12.89	12.94	11.99	12.48	0.51
71.1	12.71	11.98	13.88	13.18	12.94	0.80
72.4	15.29	15.54	16.81	15.93	15.84	0.57
73.6	16.15	17.21	19.20	16.67	17.31	1.33
74.9	16.12	16.43	17.30	16.02	16.47	0.58
76.1	14.28	15.90	16.75	14.24	15.29	1.24
77.4	14.01	16.21	16.58	15.16	15.49	1.16

Time (hr)	Energy expenditure (kcal/h/kg mouse)				Average energy expenditure (kcal/h/kg mouse)	SD
	cage 0102	cage 0106	cage 0202	cage 0206		
6.1	17.43	16.55	15.54	17.20	16.68	0.85
7.4	17.09	16.86	16.94	17.80	17.17	0.43
8.6	15.39	15.70	17.29	16.16	16.13	0.83
9.9	15.91	14.45	15.57	16.99	15.73	1.05
11.1	16.34	15.43	18.84	15.42	16.51	1.61
12.4	14.64	15.03	16.85	14.16	15.17	1.17
13.6	15.19	12.93	15.35	15.09	14.64	1.14
14.9	13.95	13.93	15.14	12.27	13.82	1.18
16.1	14.44	13.92	16.41	12.52	14.32	1.61
17.4	14.01	12.76	17.22	13.38	14.34	1.99
18.6	14.98	14.58	15.00	12.81	14.34	1.04
19.9	12.72	13.02	15.40	12.07	13.30	1.45
21.1	13.81	13.65	16.90	13.71	14.52	1.59
22.4	13.46	14.25	15.08	13.72	14.13	0.72
23.6	15.62	12.57	17.30	13.56	14.76	2.12
24.9	18.75	18.37	20.52	17.56	18.80	1.25
26.1	18.06	19.16	19.87	18.43	18.88	0.80
27.4	16.48	15.80	17.65	17.88	16.95	0.98
28.6	16.92	12.95	16.88	15.09	15.46	1.88
29.9	15.90	16.54	17.00	16.45	16.47	0.45
31.1	14.09	12.21	17.31	15.23	14.71	2.13
32.4	14.12	13.77	17.36	14.77	15.00	1.62
33.6	14.78	12.74	16.24	13.97	14.43	1.47
34.9	15.12	13.05	16.89	15.06	15.03	1.57
36.1	14.52	14.64	16.12	13.22	14.62	1.19
37.4	15.83	12.02	16.36	14.18	14.60	1.95
38.6	13.76	12.26	15.82	12.58	13.61	1.61
39.9	13.81	12.37	15.88	12.21	13.57	1.70
41.1	13.39	12.95	15.06	12.52	13.48	1.11
42.4	13.12	10.84	16.01	15.10	13.77	2.29
43.6	13.64	11.89	15.73	13.03	13.52	1.68
44.9	13.95	12.08	16.21	13.22	13.86	1.74
46.1	13.47	12.78	15.51	12.95	13.68	1.25
47.4	15.18	12.38	16.46	13.52	14.39	1.79
48.6	17.57	15.45	18.91	17.72	17.41	1.44
49.9	19.09	17.24	18.96	18.82	18.53	0.87
51.1	17.30	16.92	17.99	17.07	17.32	0.48
52.4	16.05	14.75	16.27	16.18	15.81	0.71
53.6	16.77	13.77	16.86	15.23	15.66	1.46
54.9	15.50	14.08	17.30	15.96	15.71	1.33
56.1	15.48	14.73	16.46	15.33	15.50	0.72
57.4	14.11	13.92	16.45	15.71	15.05	1.23
58.6	15.24	15.13	17.39	15.86	15.91	1.04
59.9	14.87	13.68	16.69	14.54	14.94	1.27
61.1	13.37	15.05	14.93	12.60	13.99	1.20
62.4	12.14	13.59	14.17	13.05	13.24	0.86
63.6	11.67	13.16	14.32	11.27	12.60	1.40
64.9	11.45	11.64	15.69	13.95	13.18	2.02
66.1	12.32	11.23	13.41	11.25	12.05	1.04
67.4	11.54	11.21	14.36	13.65	12.69	1.55
68.6	11.90	12.82	13.42	11.92	12.52	0.74
69.9	11.77	11.55	13.71	11.82	12.21	1.00
71.1	13.05	11.30	15.86	13.56	13.44	1.88
72.4	15.71	14.02	16.76	15.30	15.44	1.13
73.6	17.40	15.88	19.87	17.20	17.59	1.67
74.9	15.92	16.23	17.67	16.87	16.68	0.77
76.1	15.41	14.16	16.82	16.69	15.77	1.25
77.4	14.65	14.28	17.27	16.29	15.62	1.40

Time (hr)	Energy expenditure (kcal/h/kg mouse)				Average energy expenditure (kcal/h/kg mouse)	SD
	case 0103	case 0107	case 0203	case 0207		
6.1	17.72	18.32	18.90	18.10	18.26	0.49
7.4	17.11	17.10	18.69	17.78	17.67	0.75
8.6	16.08	17.84	18.56	15.91	17.05	1.27
9.9	16.29	16.21	18.34	14.84	16.42	1.44
11.1	15.79	14.83	18.65	16.03	16.33	1.64
12.4	15.90	16.76	18.05	16.46	16.79	0.91
13.6	15.81	13.50	15.81	14.17	14.82	1.17
14.9	15.50	14.04	16.75	14.00	15.07	1.32
16.1	15.27	16.11	15.26	13.82	15.12	0.95
17.4	15.08	15.83	15.47	13.59	14.99	0.99
18.6	14.56	14.33	14.50	14.54	14.48	0.11
19.9	14.82	15.78	15.58	14.07	15.06	0.78
21.1	15.26	14.93	14.36	13.74	14.57	0.67
22.4	14.90	14.82	15.33	16.29	15.28	0.73
23.6	15.70	15.43	15.87	14.86	15.46	0.44
24.9	19.72	21.15	18.58	17.89	18.33	1.43
26.1	20.61	20.83	20.66	20.08	20.50	0.28
27.4	18.46	19.15	18.98	18.45	18.76	0.36
28.6	17.40	16.86	19.80	18.59	18.16	1.31
29.9	15.63	17.83	18.26	16.07	16.90	1.25
31.1	16.78	15.69	18.33	15.98	16.69	1.18
32.4	15.19	14.09	19.84	16.07	16.29	2.50
33.6	15.21	15.71	19.30	15.97	16.56	1.86
34.9	14.31	11.67	17.68	14.78	14.61	2.46
36.1	15.18	14.05	16.54	15.91	15.42	1.07
37.4	14.73	15.03	17.38	15.56	15.67	1.18
38.6	14.83	13.86	15.71	12.89	14.27	1.20
39.9	13.99	13.36	14.92	14.30	14.14	0.65
41.1	14.49	14.67	15.65	12.34	14.29	1.39
42.4	14.01	13.51	14.35	13.17	13.76	0.52
43.6	14.08	13.28	14.29	13.21	13.71	0.55
44.9	13.47	14.84	16.71	12.78	14.45	1.73
46.1	14.88	16.08	15.00	15.51	15.37	0.56
47.4	15.64	14.14	16.17	13.12	14.77	1.40
48.6	18.28	17.34	17.39	15.11	17.03	1.35
49.9	20.86	19.42	20.34	17.84	19.62	1.33
51.1	18.77	18.11	21.60	18.16	19.16	1.65
52.4	18.37	16.76	19.49	18.59	18.30	1.14
53.6	17.30	17.80	19.21	16.43	17.68	1.16
54.9	16.46	14.44	18.06	16.42	16.35	1.48
56.1	16.08	15.13	17.28	16.52	16.25	0.90
57.4	14.64	14.47	18.02	14.88	15.50	1.69
58.6	15.67	15.08	17.87	15.07	15.92	1.33
59.9	14.27	12.31	18.74	14.16	14.37	1.82
61.1	14.48	12.77	15.72	13.40	14.09	1.30
62.4	14.56	13.63	14.82	13.60	14.11	0.56
63.6	13.88	12.02	15.96	12.96	13.70	1.69
64.9	13.99	13.95	14.50	12.77	13.80	0.73
66.1	12.49	11.40	15.11	14.61	13.40	1.75
67.4	13.11	11.93	14.36	12.75	13.04	1.01
68.6	12.66	12.96	14.99	12.77	13.35	1.10
69.9	13.64	13.88	14.56	13.32	13.85	0.53
71.1	13.62	14.26	14.77	12.59	13.81	0.94
72.4	15.79	15.84	15.90	14.20	15.43	0.82
73.6	18.77	19.12	18.49	16.54	18.23	1.16
74.9	19.64	17.74	21.04	18.51	19.23	1.43
76.1	16.81	14.27	20.24	17.03	17.09	2.45
77.4	16.94	15.58	19.19	16.40	17.03	1.55

Metabolic cages group 2: HF + 0.02% D-PROG						
Time (hr)	Energy expenditure (kcal/h/kg mouse)				Average energy expenditure (kcal/h/kg mouse)	SD
	case 0104	case 0108	case 0204	case 0208		
6.1	19.47	21.08	19.61	17.81	19.49	1.34
7.4	18.82	19.06	18.86	18.04	18.65	0.44
8.6	18.51	18.30	18.11	16.54	17.36	0.97
9.9	18.20	18.49	17.62	16.84	17.79	0.73
11.1	19.01	17.84	18.00	15.43	17.57	1.52
12.4	17.93	15.57	16.43	15.19	16.28	1.22
13.6	18.49	14.69	15.83	15.23	16.66	1.68
14.9	17.61	16.67	15.79	14.34	16.10	1.39
16.1	16.12	13.87	14.75	14.73	14.87	0.93
17.4	15.64	15.29	14.35	13.23	14.63	1.08
18.6	18.32	17.05	15.27	13.96	16.15	1.92
19.9	17.91	14.12	13.69	14.47	15.05	1.94
21.1	16.01	15.24	14.26	14.58	15.02	0.78
22.4	15.85	16.13	14.28	14.54	15.20	0.93
23.6	18.23	15.33	14.68	15.49	15.93	1.57
24.9	20.12	19.45	16.14	16.80	18.08	2.00
26.1	21.17	19.41	19.46	18.32	19.59	1.18
27.4	18.52	18.96	20.24	19.23	19.24	0.73
28.6	19.45	20.08	17.71	18.51	18.94	1.04
29.9	18.39	17.21	16.81	16.76	17.29	0.76
31.1	19.29	17.83	17.23	18.41	17.69	1.22
32.4	18.53	15.12	16.72	16.89	16.81	1.39
33.6	18.69	16.53	17.36	15.99	17.14	1.18
34.9	18.84	16.51	16.59	15.65	16.90	1.36
36.1	18.59	14.60	15.98	14.62	15.95	1.88
37.4	17.82	14.68	16.18	15.30	15.94	1.27
38.6	16.44	14.48	14.14	15.27	15.08	1.02
39.9	16.15	12.94	14.29	15.48	14.72	1.41
41.1	15.21	13.64	14.29	14.75	14.47	0.67
42.4	15.50	15.37	13.42	14.02	14.58	1.02
43.6	15.94	13.52	15.32	15.22	15.00	1.04
44.9	16.36	13.59	14.18	14.09	14.56	1.23
46.1	16.01	14.15	14.92	14.94	15.00	0.78
47.4	16.00	14.11	14.52	14.85	14.87	0.81
48.6	18.97	15.99	17.26	15.91	17.03	1.43
49.9	21.66	18.42	17.93	17.63	18.91	1.86
51.1	18.81	19.72	18.76	18.78	19.02	0.47
52.4	19.91	19.11	17.76	17.42	18.55	1.16
53.6	18.13	18.31	17.13	17.61	17.79	0.53
54.9	19.04	16.79	16.98	16.20	17.25	1.24
56.1	19.21	15.17	17.38	16.28	17.01	1.72
57.4	18.16	16.35	17.05	16.49	17.01	0.82
58.6	18.42	16.12	16.12	16.24	16.73	1.13
59.9	18.84	16.11	16.36	16.05	16.84	1.34
61.1	17.44	15.08	15.28	15.33	15.78	1.11
62.4	17.66	15.22	14.46	15.22	15.64	1.39
63.6	15.27	13.11	14.82	13.76	14.24	0.98
64.9	15.52	14.03	13.04	14.49	14.27	1.03
66.1	14.25	12.15	13.77	13.48	13.41	0.90
67.4	15.72	14.09	13.50	12.84	14.04	1.23
68.6	15.34	12.66	13.55	13.02	13.64	1.19
69.9	15.08	14.14	12.63	14.25	14.02	1.02
71.1	14.87	13.67	12.91	13.09	13.64	0.89
72.4	17.36	13.95	14.19	14.87	15.09	1.56
73.6	18.36	17.87	15.30	15.80	16.83	1.51
74.9	18.82	16.27	16.93	17.77	17.45	1.10
76.1	17.86	17.62	16.97	16.62	17.76	0.68
77.4	18.01	17.66	16.20	17.84	17.43	0.83

Energy expenditure, p-values Mann Whitney U-test																		
Time (hr)	group 1 vs 3			group 1 vs 4			group 1 vs 6			group 3 vs 4			group 3 vs 6			group 4 vs 6		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
6.1			0.886	4		0.057	4		0.057	4		0.029	4		0.029	4	4	0.200
7.4			0.343	4		0.200	4		0.057	4		0.200	4		0.029	4	4	0.114
8.6			0.343	4		0.114	4		0.114	4		0.343	4		0.114	4	4	0.686
9.9			0.886	4		0.886	4		0.200	4		0.486	4		0.057	4	4	0.200
11.1			0.343	4		0.114	4		0.114	4		0.886	4		0.343	4	4	0.486
12.4			0.686	4		0.057	4		0.114	4		0.200	4		0.200	4	4	0.343
13.6			0.343	4		0.200	4		0.057	4		0.686	4		0.343	4	4	0.343
14.9			0.343	4		0.029	4		0.029	4		0.114	4		0.057	4	4	0.343
16.1			0.200	4		0.029	4		0.029	4		0.686	4		0.686	4	4	0.886
17.4			1.000	4		0.114	4		0.200	4		0.486	4		0.686	4	4	0.686
18.6			0.886	4		0.343	4		0.114	4		0.343	4		0.200	4	4	0.343
19.9			0.343	4		0.343	4		0.886	4		0.114	4		0.200	4	4	0.686
21.1			0.200	4		0.114	4		0.057	4		0.486	4		0.343	4	4	0.686
22.4			0.343	4		0.029	4		0.029	4		0.114	4		0.114	4	4	0.686
23.6			1.000	4		0.029	4		0.029	4		0.686	4		0.686	4	4	0.886
24.9			0.886	4		0.886	4		1.000	4		0.686	4		0.686	4	4	0.486
26.1			0.114	4		0.029	4		0.057	4		0.029	4		0.486	4	4	0.343
27.4			0.686	4		0.029	4		0.029	4		0.029	4		0.029	4	4	0.343
28.6			0.486	4		0.114	4		0.029	4		0.114	4		0.029	4	4	0.486
29.9			0.029	4		0.114	4		0.029	4		0.886	4		0.114	4	4	0.686
31.1			0.686	4		0.114	4		0.057	4		0.200	4		0.114	4	4	0.343
32.4			0.886	4		0.886	4		0.200	4		0.486	4		0.200	4	4	0.686
33.6			0.886	4		0.200	4		0.114	4		0.200	4		0.057	4	4	0.343
34.9			1.000	4		0.686	4		0.057	4		0.686	4		0.200	4	4	0.200
36.1			0.486	4		0.057	4		0.114	4		0.486	4		0.486	4	4	0.886
37.4			0.686	4		0.200	4		0.114	4		0.686	4		0.486	4	4	0.886
38.6			1.000	4		0.200	4		0.057	4		0.486	4		0.200	4	4	0.486
39.9			0.886	4		0.200	4		0.200	4		0.486	4		0.343	4	4	0.686
41.1			0.886	4		0.200	4		0.057	4		0.486	4		0.200	4	4	1.000
42.4			0.886	4		0.686	4		0.200	4		0.686	4		0.686	4	4	0.343
43.6			0.486	4		0.029	4		0.029	4		1.000	4		0.343	4	4	0.114
44.9			0.686	4		0.200	4		0.200	4		0.686	4		0.343	4	4	0.886
46.1			0.486	4		0.057	4		0.200	4		0.686	4		0.200	4	4	0.486
47.4			0.886	4		0.686	4		0.114	4		0.114	4		0.886	4	4	1.000
48.6			0.886	4		0.486	4		0.486	4		0.886	4		0.886	4	4	0.886
49.9			0.057	4		0.057	4		0.114	4		0.486	4		0.886	4	4	0.686
51.1			0.343	4		0.029	4		0.029	4		0.200	4		0.029	4	4	0.486
52.4			0.686	4		0.057	4		0.029	4		0.029	4		0.029	4	4	0.886
53.6			0.886	4		0.029	4		0.029	4		0.114	4		0.029	4	4	0.886
54.9			0.886	4		0.343	4		0.057	4		0.486	4		0.200	4	4	0.486
56.1			0.686	4		0.114	4		0.114	4		0.343	4		0.343	4	4	0.486
57.4			1.000	4		0.686	4		0.029	4		0.686	4		0.057	4	4	0.200
58.6			0.200	4		0.200	4		0.029	4		0.686	4		0.200	4	4	0.200
59.9			0.886	4		0.686	4		0.029	4		0.686	4		0.200	4	4	0.210
61.1			0.886	4		0.686	4		0.029	4		0.886	4		0.029	4	4	0.200
62.4			0.486	4		0.114	4		0.029	4		0.114	4		0.029	4	4	0.114
63.6			0.886	4		0.686	4		0.114	4		0.486	4		0.200	4	4	0.686
64.9			0.886	4		0.343	4		0.200	4		0.486	4		0.486	4	4	0.486
66.1			0.686	4		0.200	4		0.057	4		0.200	4		0.114	4	4	0.886
67.4			1.000	4		0.686	4		0.200	4		0.686	4		0.486	4	4	0.343
68.6			0.686	4		0.057	4		0.057	4		0.486	4		0.200	4	4	0.486
69.9			0.343	4		0.029	4		0.114	4		0.114	4		0.057	4	4	0.686
71.1			0.886	4		0.343	4		0.486	4		0.686	4		0.886	4	4	1.000
72.4			0.886	4		0.686	4		0.343	4		0.686	4		0.686	4	4	0.486
73.6			0.886	4		0.686	4		0.686	4		0.686	4		0.686	4	4	0.114
74.9			0.886	4		0.029	4		0.200	4		0.029	4		0.200	4	4	0.200
76.1			0.886	4		0.200	4		0.029	4		0.343	4		0.029	4	4	0.486
77.4			0.886	4		0.200	4		0.114	4		0.343	4		0.114	4	4	0.686

p<0.05

p<0.05

Appendix E. Fecal bile acid, sterol and fatty acid measurements

E1. Fecal weight measurements, bodyweight and food intake measurements

Bodyweight and food intake during collecting feces

collection point 1: 2 days feces collection										
Group#	Mouse#	cage#	ear tag		start collection point 1		end collection point 1		Average bodyweight (g)	Food intake (g) coll. point 1
			L	R	bodyweight (g)	food on cage (g)	bodyweight (g)	food off cage (g)		
2	1	1	0	1	33.9		33.9		33.90	
	2	1	1	2	31.2	49.7	30.5	38.9	30.85	10.8
	3	2	0	0	30.4		31.0		30.70	
	4	2	2	0	28.1	51.9	28.2	39.5	28.15	12.4
	5	3	0	0	31.1		30.6		30.85	
	6	3	0	2	29.5	47.4	29.4	35.8	29.45	11.6
	7	4	1	1	26.7	26.9	27.2	20.5	26.95	6.4
	8	5	0	0	30.4		30.6		30.50	
	9	5	0	2	30.6		31.0		30.80	
	10	5	1	2	27.2	61.6	27.3	44.8	27.25	16.8
	11	6	1	0	33.0		33.1		33.05	
	12	6	2	1	29.8		30.0		29.90	
	13	6	0	2	31.2	68.5	32.0	48.6	31.60	19.9
	14	7	0	1	32.8	31.7	33.1	24.8	32.95	6.9
	15	8	1	0	30.8		31.0		30.90	
	16	8	0	1	30.1		29.8		29.95	
	17	8	2	0	32.8	68.0	32.8	47.2	32.80	20.8
	18	9	0	0	26.5		26.6		26.55	
	19	9	2	1	26.9	42.3	26.6	31.8	26.75	10.5
	20	10	1	0	29.0	29.2	28.8	23.4	28.90	5.8
	21	11	0	1	27.8	32.1	28.3	26.2	28.05	5.9
	22	12	0	2	28.8	32.9	28.9	27.2	28.85	5.7
	23	13	0	1	32.2		32.3		32.25	
	24	13	1	1	28.8	44.9	28.9	30.3	28.85	14.6
	25	14	1	0	25.8	31.2	26.3	25.2	26.05	6.0
	26	15	0	1	28.7		28.5		28.60	
	27	15	2	0	30.1		30.1		30.10	
	28	15	1	2	25.0	77.5	24.7	61.0	24.85	16.5
	29	16	0	2	29.8	23.1	29.7	17.1	29.75	6.0
	30	17	1	0	27.0	26.3	27.0	20.0	27.00	6.3
	31	18	1	0	30.3		30.2		30.25	
	32	18	0	2	29.3	48.3	29.2	36.3	29.25	12.0
	33	19	0	0	29.2		28.9		29.05	
	34	19	1	0	30.9		30.7		30.80	
	35	19	0	1	31.0		30.7		30.85	
	36	19	0	2	25.6	90.1	25.8	68.4	25.70	21.7
	37	20	0	0	27.0		26.7		26.85	
	38	20	1	1	30.2	43.1	30.2	31.0	30.20	12.1
	39	21	0	0	27.7		27.2		27.45	
	40	21	1	1	27.7	47.9	27.7	36.0	27.70	11.9
5	41	22	1	0	28.9		30.0		29.45	
5	42	22	0	1	25.2		25.3		25.25	
5	43	22	1	1	27.6		27.8		27.70	
5	44	22	1	2	28.5	90.3	28.1	68.8	28.30	21.5
5	45	23	1	2	28.6	37.8	29.7	30.8	29.15	7.0
5	46	24	2	0	28.5	27.2	28.6	21.1	28.55	6.1
5	47	25	0	1	30.3		30.1		30.20	
5	48	25	1	1	29.3	50.7	29.9	37.2	29.60	13.5
5	49	26	0	0	27.3	27.7	27.2	22.1	27.25	5.6
5	50	27	1	2	27.7	27.1	28.7	20.2	28.20	6.9
6	51	28	0	1	28.4	31.9	28.5	26.2	28.45	5.7
6	52	29	1	0	31.3		31.5		31.40	
6	53	29	1	2	27.3	52.3	27.2	40.4	27.25	11.9
6	54	30	1	0	30.2		30.0		30.10	
6	55	30	0	2	28.8	42.9	28.4	31.2	28.60	11.7
6	56	31	0	0	25.6		25.4		25.50	
6	57	31	0	1	27.6		27.8		27.70	
6	58	31	0	2	29.1		29.1		29.10	
6	59	31	2	2	30.3	88.0	30.7	67.7	30.50	20.3
6	60	32	2	1	26.7	30.5	26.7	25.0	26.70	5.5
7	61	33	2	0	28.2	29.1	27.7	23.4	27.95	5.7
7	62	34	1	0	27.3	31.2	26.7	25.5	27.00	5.7
7	63	35	0	2	26.2	34.7	26.6	29.3	26.40	5.4
7	64	36	0	0	28.2		28.5		28.35	
7	65	36	1	2	27.4	21.2	28.2	9.4	27.80	11.8
7	66	37	0	0	26.1	26.4	26.1	21.3	26.10	5.1
7	67	38	0	0	26.0		26.2		26.10	
7	68	38	2	0	26.7	53.0	26.9	42.5	26.80	10.5
7	69	39	1	0	23.6		23.0		23.30	
7	70	39	0	1	25.1	43.8	24.6	32.4	24.85	11.4

collection point 2; 3 days feces collection										
Group#	Mouse#	cage#	ear tag		start collection point 2		end collection point 2		Average bodyweight (g)	Food intake (g) coll. point 2
			L	R	bodyweight (g)	food on cage (g)	bodyweight (g)	food off cage (g)		
1	1	1	0	1	33.9		32.9		33.40	
	2	1	1	2	30.5	38.9	30.1	22.1	30.30	16.8
	3	2	0	0	31		30		30.50	
	4	2	2	0	28.2	39.5	28.3	19.5	28.25	20.0
	5	3	0	0	30.6		29.2		29.90	
	6	3	0	2	29.4	35.8	30.4	16.8	29.90	19.0
	7	4	1	1	27.2	20.5	26.3	10.7	26.75	9.8
	8	5	0	0	30.6		30		30.30	
	9	5	0	2	31		30.5		30.75	
	10	5	1	2	27.3	44.8	27	19.2	27.15	25.6
2	11	6	1	0	33.1		32.2		32.65	
	12	6	2	1	30		30		30.00	
	13	6	0	2	32	48.6	31.2	19.8	31.60	28.8
	14	7	0	1	33.1	24.8	33.6	12.4	33.35	12.4
	15	8	1	0	31		30.1		30.55	
	16	8	0	1	29.8		30		29.90	
	17	8	2	0	32.8	47.2	32.5	14.2	32.65	33.0
	18	9	0	0	26.6		26.3		26.45	
	19	9	2	1	26.6	31.8	26.9	13.6	26.75	18.2
	20	10	1	0	28.8	23.4	29	13.4	28.90	10.0
3	21	11	0	1	28.3	26.2	28.4	15.7	28.35	10.5
	22	12	0	2	28.9	27.2	29.2	16.2	29.05	11.0
	23	13	0	1	32.3		32.3		32.30	
	24	13	1	1	28.9	30.3	29.2	7.1	29.05	23.2
	25	14	1	0	26.3	25.2	26.1	15.6	26.20	9.6
	26	15	0	1	28.5		28.8		28.85	
	27	15	2	0	30.1		29.8		29.95	
	28	15	1	2	24.7	61.0	25.1	32.7	24.90	28.3
	29	16	0	2	29.7	17.1	29.4	8.0	29.55	9.1
	30	17	1	0	27	20.0	27.6	9.4	27.30	10.6
4	31	18	1	0	30.2		29.6		29.90	
	32	18	0	2	29.2	36.3	28.7	16.5	28.95	19.8
	33	19	0	0	28.9		29.6		29.25	
	34	19	1	0	30.7		30.5		30.60	
	35	19	0	1	30.7		30.7		30.70	
	36	19	0	2	25.8	68.4	26.2	33.2	26.00	35.2
	37	20	0	0	26.7		26.9		26.80	
	38	20	1	1	30.2	31.0	30.1	11.1	30.15	19.9
	39	21	0	0	27.2		27.2		27.20	
	40	21	1	1	27.7	36.0	27.7	17.7	27.70	18.3
5	41	22	1	0	30		29.1		29.55	
	42	22	0	1	25.3		25.5		25.40	
	43	22	1	1	27.8		28.6		28.20	
	44	22	1	2	28.1	68.8	28.8	32.3	28.45	36.5
	45	23	1	2	29.7	30.8	30.1	20.1	29.90	10.7
	46	24	2	0	28.6	21.1	28.6	10.6	28.60	10.5
	47	25	0	1	30.1		30.1		30.10	
	48	25	1	1	29.9	37.2	29.7	15.5	29.80	21.7
	49	26	0	0	27.2	22.1	27	12.5	27.10	9.6
	50	27	1	2	28.7	20.2	28.4	10.2	28.55	10.0
6	51	28	0	1	28.5	26.2	28.7	16.6	28.60	9.6
	52	29	1	0	31.5		31.4		31.45	
	53	29	1	2	27.2	40.4	27	20.3	27.10	20.1
	54	30	1	0	30		29.7		29.85	
	55	30	0	2	28.4	31.2	28	12.3	28.20	18.9
	56	31	0	0	25.4		25.3		25.35	
	57	31	0	1	27.8		26.9		27.35	
	58	31	0	2	29.1		28.8		28.95	
	59	31	2	2	30.7	67.7	30.9	36.7	30.80	31.0
	60	32	2	1	26.7	25.0	26.3	16.0	26.50	9.0
7	61	33	2	0	27.7	23.4	29.1	12.7	28.40	10.7
	62	34	1	0	26.7	25.5	27.8	16.3	27.25	9.2
	63	35	0	2	26.8	29.3	26.8	20.0	26.70	9.3
	64	36	0	0	26.5		28.9		28.70	
	65	36	1	2	28.2	56.1	27.6	38.8	27.90	17.3
	66	37	0	0	26.1	21.3	26.2	12.1	26.15	9.2
	67	38	0	0	26.2		26.7		26.45	
	68	38	2	0	26.9	42.5	27.2	24.9	27.05	17.6
	69	39	1	0	23		23.6		23.30	
	70	39	0	1	24.6	32.4	25.7	15.0	25.15	17.4

collection point 3; 2 days feces collection										
Group#	Mouse#	cage#	ear tag		start collection point 3		end collection point 3		Average bodyweight (g)	Food intake (g) coll. point 3
			L	R	bodyweight (g)	food on cage (g)	bodyweight (g)	food off cage (g)		
1000										

Fecal weight

Feces collection point 1; 2 days collection						
Group	cage#	number of mice	Tube empty (g)	Tube full (g)	Tube full after freeze drying (g)	freeze dried feces (g)
2	1	2	6.6630	8.3248	8.0444	1.3814
	2	2	6.6490	8.6605	8.3426	1.6936
	3	2	6.6221	8.6309	8.3229	1.7008
	4	1	6.6808	7.664	7.4697	0.7889
	5	3	6.6712	9.4474	8.9658	2.2946
	6	3	6.6634	9.8825	9.4253	2.7619
	7	1	6.6794	7.8244	7.6266	0.9472
	8	3	6.6207	10.2937	9.7316	3.1109
	9	2	6.6605	8.2584	8.0008	1.3403
	10	1	6.6630	7.5596	7.4162	0.7532
4	11	1	6.6697	7.5244	7.3942	0.7245
	12	1	6.6594	7.5056	7.3806	0.7212
	13	2	6.6379	9.0681	8.6519	2.0140
	14	1	6.6624	7.5339	7.4049	0.7425
	15	3	6.6568	9.433	8.9562	2.2994
	16	1	6.6607	7.5433	7.3604	0.6997
	17	1	6.6312	7.6683	7.5344	0.9032
	18	2	6.6765	8.6953	8.3655	1.6890
	19	4	6.6311	10.3697	9.7743	3.1432
	20	2	6.6493	8.6134	8.2667	1.6174
5	21	2	6.6603	8.6425	8.2974	1.6371
	22	4	6.6918	10.4134	9.8868	3.1950
	23	1	6.6683	7.7517	7.5567	0.8884
	24	1	6.7028	7.6752	7.5296	0.8268
	25	2	6.6868	9.2271	8.8008	2.1140
	26	1	6.6825	7.5842	7.456	0.7735
	27	1	6.6889	7.8388	7.6669	0.9780
	28	1	6.6648	7.6251	7.4945	0.8297
	29	2	6.6617	8.6518	8.3356	1.6739
	30	2	6.6503	8.6434	8.3383	1.6880
6	31	4	6.6110	9.8507	9.3193	2.7083
	32	1	6.6541	7.4635	7.3215	0.6674
	33	1	6.6615	7.3485	7.2406	0.5791
	34	1	6.6589	7.5622	7.3939	0.7350
	35	1	6.6820	7.476	7.3376	0.6556
	36	2	6.6335	8.4094	8.0542	1.4207
	37	1	6.6727	7.4706	7.3318	0.6591
	38	2	6.6890	8.3375	8.054	1.3650
	39	2	6.6706	8.2396	7.9761	1.3055

Feces collection point 2; 3 days collection						
Group	cage#	number of mice	Tube empty (g)	Tube full (g)	Tube full after freeze drying (g)	freeze dried feces (g)
2	1	2	6.6728	9.043	8.654	1.9812
	2	2	6.6313	9.7853	9.3421	2.7108
	3	2	6.6987	9.5813	9.188	2.4893
	4	1	6.6499	8.1391	7.9395	1.2896
	5	3	6.6805	10.6433	10.0911	3.4106
	6	3	6.6610	11.3687	10.736	4.0750
	7	1	6.6450	8.426	8.1553	1.5103
	8	3	6.6479	12.3927	11.5086	4.8607
	9	2	6.6676	9.2172	8.8482	2.1806
	10	1	6.6137	8.0501	7.8405	1.2268
2	11	1	6.6564	8.1514	7.945	1.2886
	12	1	6.6806	8.3368	8.1005	1.4199
	13	2	6.6554	10.2976	9.7616	3.1062
	14	1	6.6905	8.1358	7.9299	1.2394
	15	3	6.6709	11.0804	10.4427	3.7718
	16	1	6.6500	8.0103	7.7806	1.1306
	17	1	6.6622	8.2678	8.0649	1.4027
	18	2	6.6790	9.8571	9.3923	2.7133
	19	4	6.6452	12.0852	11.2859	4.6407
	20	2	6.6370	9.933	9.4414	2.8044
4	21	2	6.6464	9.514	9.0495	2.4031
	22	4	6.6068	12.3762	11.578	4.9712
	23	1	6.6411	8.2187	7.9954	1.3543
	24	1	6.6557	8.1263	7.9237	1.2680
	25	2	6.6822	10.3758	9.8975	3.2153
	26	1	6.6134	8.0183	7.792	1.1786
	27	1	6.6799	8.1596	7.914	1.2341
	28	1	6.6762	8.1471	7.9636	1.2874
	29	2	6.6989	9.824	9.3799	2.6810
	30	2	6.6732	9.5294	9.1304	2.4572
6	31	4	6.6621	11.3048	10.6299	3.9678
	32	1	6.6310	7.9252	7.7404	1.1094
	33	1	6.6902	8.1846	7.96	1.2698
	34	1	6.6712	7.9152	7.7309	1.0597
	35	1	6.6337	7.9533	7.7519	1.1182
	36	2	6.6633	9.2718	8.8526	2.1893
	37	1	6.6324	7.8893	7.7077	1.0753
	38	2	6.6776	9.1802	8.8063	2.1287
	39	2	6.6697	9.253	8.8469	2.1772

Feces collection point 3; 2 days collection						
Group	cage#	number of mice	Tube empty (g)	Tube full (g)	Tube full after freeze drying (g)	freeze dried feces (g)
2	1	2	6.6429	8.5821	8.2399	1.5970
	2	2	6.6725	8.9822	8.6509	1.9784
	3	2	6.6831	8.9939	8.653	1.9699
	4	1	6.6645	7.7309	7.5727	0.9082
	5	3	6.6432	9.9317	9.4021	2.7589
	6	3	6.6844	10.106	9.6123	2.9279
	7	1	6.6652	7.8515	7.6749	1.0097
	8	3	6.6453	10.6479	10.0341	3.3888
	9	2	6.6397	8.3585	8.1165	1.4768
	10	1	6.6569	7.7971	7.6376	0.9807
	11	1	6.6860	7.7179	7.5628	0.8768
	12	1	6.6590	7.7398	7.58	0.9210
	13	2	6.6605	9.3189	8.8877	2.2272
	14	1	6.6334	7.6444	7.4947	0.8613
	15	3	6.6582	9.6295	9.1847	2.5265
	16	1	6.6145	7.6351	7.4819	0.8674
	17	1	6.6692	7.7894	7.631	0.9618
	18	2	6.6935	9.0966	8.7345	2.0410
	19	4	6.6306	10.6276	10.077	3.4464
	20	2	6.6585	9.1542	8.7793	2.1208
	21	2	6.6901	8.8739	8.5242	1.8341
5	22	4	6.6840	10.9177	10.2953	3.6113
5	23	1	6.6687	7.6866	7.5361	0.8674
5	24	1	6.6635	7.8102	7.6563	0.9928
5	25	2	6.6833	9.43	9.0427	2.3594
5	26	1	6.6333	7.6942	7.5479	0.9146
5	27	1	6.6752	7.7479	7.5966	0.9214
6	28	1	6.6351	7.7734	7.6365	1.0014
6	29	2	6.6633	9.0885	8.5695	1.9062
6	30	2	6.6611	8.8705	8.5556	1.8945
6	31	4	6.6657	10.3688	9.9106	3.2449
6	32	1	6.6786	7.7434	7.5484	0.8698
7	33	1	6.6860	7.6314	7.485	0.7990
7	34	1	6.6887	7.5625	7.393	0.7043
7	35	1	6.6783	7.9028	7.6867	1.0084
7	36	2	6.6551	8.561	8.2858	1.6307
7	37	1	6.6481	7.617	7.4543	0.8062
7	38	2	6.6522	8.6462	8.3568	1.7046
7	39	2	6.6641	8.7084	8.3702	1.7061

Feces weight, bodyweight and food intake GC samples

GC-1 Feces collection 3M-02 week 6; collection point 1, 2 days collection					
code	Group	cage#	feces collected (g)	Bodyweight (g)	Food intake (g)
1:1-1		1,2	3.075	123.6	23.2
1:1-2		3,4	2.4897	87.25	18
1:1-3		5	2.2946	88.55	16.8
1:2-4	2	6	2.7619	94.55	19.9
1:2-5	2	7,8	4.0581	126.6	27.7
1:2-6	2	9,10	2.0935	82.2	16.3
1:3-7		11,12,13	3.4597	118	26.2
1:3-8		15	2.2994	83.55	16.5
1:3-9		14,16,17	2.3454	82.8	18.3
1:4-10	4	18	1.689	59.5	12
1:4-11	4	19	3.1432	116.4	21.7
1:4-12	4	20,21	3.2545	112.2	24
1:5-13		22	3.195	110.7	21.5
1:5-14		24,25	2.9408	88.35	19.6
1:5-15		23,26,27	2.6399	84.6	19.5
1:6-16	6	28,29	2.5036	87.1	17.6
1:6-17	6	31	2.7083	112.8	20.3
1:6-18	6	30,32	2.3554	85.4	17.2
1:7-19		33,34,35	1.9697	81.35	16.8
1:7-20		36,37	2.0798	82.25	16.9
1:7-21		38,39	2.6705	101.05	21.9

GC-2 Feces collection 3M-02 week 6; collection point 2, 3 days collection					
code	Group	cage#	feces collected (g)	Bodyweight (g)	Food intake (g)
2:1-1		1,2	4.692	122.45	36.8
2:1-2		3,4	3.7789	86.55	28.8
2:1-3		5	3.4106	88.2	25.6
2:2-4	2	6	4.075	94.25	28.8
2:2-5	2	7,8	6.371	126.45	45.4
2:2-6	2	9,10	3.4074	82.1	28.2
2:3-7		11,12,13	5.8147	118.75	44.7
2:3-8		15	3.7718	83.5	28.3
2:3-9		14,16,17	3.7727	83.05	29.3
2:4-10	4	18	2.7133	58.85	19.8
2:4-11	4	19	4.8407	116.55	35.2
2:4-12	4	20,21	5.2075	111.85	38.2
2:5-13		22	4.9712	111.6	36.5
2:5-14		24,25	4.4833	88.5	32.2
2:5-15		23,26,27	3.767	85.55	30.3
2:6-16	6	28,29	3.9684	87.15	29.7
2:6-17	6	31	3.9678	112.45	31
2:6-18	6	30,32	3.5666	84.55	27.9
2:7-19		33,34,35	3.4477	82.35	29.2
2:7-20		36,37	3.2646	82.75	26.5
2:7-21		38,39	4.3059	101.95	35

GC-3 Feces collection 3M-02 week 6; collection point 3, 2 days collection					
code	Group	cage#	feces collected (g)	Bodyweight (g)	Food intake (g)
3:1-1		1,2	3.5754	121.65	20.2
3:1-2		3,4	2.8781	86.55	15.3
3:1-3		5	2.7589	88.05	13.8
3:2-4	2	6	2.9279	94	16.7
3:2-5	2	7,8	4.3985	126.6	23.6
3:2-6	2	9,10	2.4575	81.85	13.2
3:3-7		11,12,13	4.025	119.6	23.7
3:3-8		15	2.5265	84.2	13.6
3:3-9		14,16,17	2.6905	83.45	14.7
3:4-10	4	18	2.041	58.7	11.3
3:4-11	4	19	3.4464	117.45	18.7
3:4-12	4	20,21	3.9549	112.9	22.6
3:5-13		22	3.6113	112.85	18.7
3:5-14		24,25	3.3522	88.9	28
3:5-15		23,26,27	2.7034	85.5	14.5
3:6-16	6	28,29	2.9076	87.65	16.5
3:6-17	6	31	3.2449	111.95	17.1
3:6-18	6	30,32	2.7643	84.65	15
3:7-19		33,34,35	2.5117	83.5	15.7
3:7-20		36,37	2.4369	83.35	15
3:7-21		38,39	3.4107	103.2	19.8

E2. Fecal bile acid measurements

weight feces 5.8 mg							
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	770	1.38	1062.6	6.5	0.447	77.1	0.189
deoxycholate	2880	1	2880	17.6	1.211	208.9	0.532
cholate	837	1	979	6.0	0.412	71.0	0.174
lithocholate	1412	1	1412	8.6	0.594	102.4	0.272
β-muricholate	3635	1.08	3925.8	24.0	1.651	284.7	0.697
w-muricholate	3854	1	5704	34.8	2.399	413.6	1.012
hyodeo/urso	411	1	411	2.5	0.173	29.8	0.076
total	13799		16375	100	7	1187	3.0
nor-hyodeoxy	23775	1	23775	23775			

weight feces 6 mg							
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	481	1.38	663.78	3.9	0.276	46.0	0.113
deoxycholate	1551	1	1551	9.2	0.645	107.4	0.274
cholate	1143	1	1337	7.9	0.556	92.6	0.227
lithocholate	2203	1	2203	13.1	0.916	152.6	0.405
β-muricholate	2222	1.08	2399.76	14.2	0.997	166.2	0.407
w-muricholate	5717	1	8461	50.1	3.517	586.1	1.435
hyodeo/urso	261	1	261	1.5	0.108	18.1	0.046
total	13578		16877	100	7	1169	2.9
nor-hyodeoxy	24059	1	24059	24059			

weight feces 5.5 mg							
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	304	1.38	419.52	4.4	0.269	48.9	0.120
deoxycholate	1047	1	1047	11.0	0.672	122.1	0.311
cholate	535	1	626	6.6	0.401	73.0	0.179
lithocholate	1334	1	1334	14.0	0.856	155.6	0.413
β-muricholate	1317	1.08	1422.36	14.9	0.912	165.9	0.406
w-muricholate	3031	1	4486	47.1	2.877	523.1	1.280
hyodeo/urso	192	1	192	2.0	0.123	22.4	0.057
total	7760		9527	100	6	1111	2.8
nor-hyodeoxy	15591	1	15591	15591			

a-muri	408.6
deoxy	392.6
cholate	408.6
lithochol	376.6
b-muri	408.6
w-muri	408.6
hyodeoxy/urso	392.6

weight feces 7.2 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	314	1.38	433.32	13.0	0.940	130.5	0.319
deoxycholate	688	1	688	20.7	1.492	207.2	0.528
cholate	213	1	249	7.5	0.540	75.0	0.184
lithocholate	335	1	335	10.1	0.726	100.9	0.268
β-muricholate	803	1.08	867.24	26.1	1.880	261.2	0.639
w-muricholate	507	1	750	22.6	1.627	226.0	0.553
hyodeo/urso		1	0	0.0	0.000	0.0	0.000

total	2860		3323	100	7	1001	2.5
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nor-hyodeoxy 4612 1 4612 4612

weight feces 7.2 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	1014	1.38	1399.32	5.0	0.472	65.5	0.160
deoxycholate	2554	1	2554	9.1	0.861	119.6	0.305
cholate	2363	1	2765	9.8	0.932	129.4	0.317
lithocholate	2730	1	2730	9.7	0.920	127.8	0.339
β-muricholate	4506	1.08	4866.48	17.3	1.640	227.8	0.558
w-muricholate	9183	1	13591	48.3	4.581	636.3	1.557
hyodeo/urso	213	1	213	0.8	0.072	10.0	0.025

total	22563		28118	100	9	1316	3.3
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nor-hyodeoxy 29667 1 29667 29667

weight feces 5.1 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	1430	1.38	1973.4	7.3	0.452	88.6	0.217
deoxycholate	3201	1	3201	11.8	0.733	143.6	0.366
cholate	3202	1	3746	13.9	0.857	168.1	0.411
lithocholate	808	1	808	3.0	0.185	36.3	0.096
β-muricholate	5434	1.08	5868.72	21.7	1.343	263.3	0.645
w-muricholate	7559	1	11187	41.4	2.560	502.0	1.229
hyodeo/urso	255	1	255	0.9	0.058	11.4	0.029

total	21889		27040	100	6	1213	3.0
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nor-hyodeoxy 43696 1 43696 43696

a-muri	408.6
deoxy	392.6
cholate	408.6
lithochol	376.6
b-muri	408.6
w-muri	408.6
hyodeoxy/urso	392.6

weight feces 7 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid mg feces	nmol bile acid/ mg feces
a-muricholate	755	1.38	1041.9	3.8	0.319	45.6	0.112
deoxycholate	6854	1	6854	25.2	2.101	300.1	0.764
cholate	1031	1	1206	4.4	0.370	52.8	0.129
lithocholate	1211	1	1211	4.5	0.371	53.0	0.141
β-muricholate	6883	1.08	7433.64	27.3	2.278	325.5	0.797
w-muricholate	6151	1	9103	33.5	2.790	398.6	0.976
hyodeo/urso	349	1	349	1.3	0.107	15.3	0.039

total	23234		27199	100	8	1191	3.0
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nor-hyodeoxy	32626	1	32626	32626
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weight feces 6.6 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid mg feces	nmol bile acid/ mg feces
a-muricholate	475	1.38	655.5	5.2	0.325	49.2	0.120
deoxycholate	1558	1	1558	12.4	0.771	116.9	0.298
cholate	748	1	875	7.0	0.433	65.7	0.161
lithocholate	1489	1	1489	11.8	0.737	111.7	0.297
β-muricholate	1894	1.08	2045.52	16.2	1.013	153.5	0.376
w-muricholate	3897	1	5768	45.8	2.856	432.7	1.059
hyodeo/urso	198	1	198	1.6	0.098	14.9	0.038

total	10259		12589	100	6	944	2.3
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nor-hyodeoxy	20195	1	20195	20195
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weight feces 6.1 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid mg feces	nmol bile acid/ mg feces
a-muricholate	750	1.38	1035	6.6	0.429	70.4	0.172
deoxycholate	1906	1	1906	12.2	0.791	129.6	0.330
cholate	1166	1	1364	8.7	0.566	92.8	0.227
lithocholate	974	1	974	6.2	0.404	66.2	0.176
β-muricholate	3492	1.08	3771.36	24.0	1.565	256.5	0.628
w-muricholate	4213	1	6235	39.8	2.587	424.1	1.038
hyodeo/urso	396	1	396	2.5	0.164	26.9	0.069

total	12897		15682	100	7	1067	2.6
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nor-hyodeoxy	24103	1	24103	24103
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a-muri	408.6
deoxy	392.6
cholate	408.6
lithochol	376.6
b-muri	408.6
w-muri	408.6
hyodeoxy/urso	392.6

1:2-4							
weight feces		6.3	mg				
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid mg feces	nmol bile acid/ mg feces
a-muricholate	133	1.38	183.54	3.3	0.211	33.5	0.082
deoxycholate	741	1	741	13.3	0.853	135.4	0.345
cholate	488	1	571	10.3	0.657	104.3	0.255
lithocholate	509	1	509	9.2	0.586	93.0	0.247
β-muricholate	758	1.08	818.64	14.7	0.942	149.6	0.366
w-muricholate	1756	1	2599	46.8	2.991	474.8	1.162
hyodeo/urso	133	1	133	2.4	0.153	24.3	0.062
total	4518		5555	100	6	1015	2.5
nor-hyodeoxy	8688	1	8688	8688			

1:2-5							
weight feces		6.4	mg				
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid mg feces	nmol bile acid/ mg feces
a-muricholate	385	1.38	531.3	3.0	0.208	32.5	0.080
deoxycholate	1785	1	1785	10.0	0.699	109.3	0.278
cholate	1437	1	1681	9.4	0.659	102.9	0.252
lithocholate	1980	1	1980	11.1	0.776	121.2	0.322
β-muricholate	5071	1.08	5476.68	30.6	2.146	335.3	0.821
w-muricholate	4256	1	6299	35.2	2.468	385.6	0.944
hyodeo/urso	151	1	151	0.8	0.059	9.2	0.024
total	15065		17904	100	7	1096	2.7
nor-hyodeoxy	25522	1	25522	25522			

1:2-6							
weight feces		5.3	mg				
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid mg feces	nmol bile acid/ mg feces
a-muricholate	696	1.38	960.48	4.1	0.324	61.2	0.150
deoxycholate	3055	1	3055	12.9	1.032	194.7	0.496
cholate	1508	1	1764	7.5	0.596	112.5	0.275
lithocholate	3344	1	3344	14.2	1.130	213.2	0.566
β-muricholate	2771	1.08	2992.68	12.7	1.011	190.8	0.467
w-muricholate	7511	1	11116	47.1	3.756	708.6	1.734
hyodeo/urso	363	1	363	1.5	0.123	23.1	0.059
total	19248		23596	100	8	1504	3.7
nor-hyodeoxy	29599	1	29599	29599			

a-muri	408.6
deoxy	392.6
cholate	408.6
lithochol	376.6
b-muri	408.6
w-muri	408.6
hyodeoxy/urso	392.6

2:2-4

weight feces 7.7 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	564	1.38	778.32	6.1	0.518	67.3	0.165
deoxycholate	1799	1	1799	14.1	1.198	155.6	0.396
cholate	924	1	1081	8.4	0.720	93.5	0.229
lithocholate	1298	1	1298	10.1	0.864	112.2	0.298
β-muricholate	1925	1.08	2079	16.2	1.384	179.8	0.440
w-muricholate	3892	1	5760	45.0	3.836	498.1	1.219
hyodeo/urso		1	0	0.0	0.000	0.0	0.000

total	10402		12796	100	9	1107	2.7
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nor-hyodeoxy 15018 1 15018 15018

2:2-5

weight feces 6.6 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	521	1.38	718.98	5.2	0.391	59.2	0.145
deoxycholate	1246	1	1246	9.0	0.677	102.6	0.261
cholate	771	1	902	6.5	0.490	74.3	0.182
lithocholate	1507	1	1507	10.9	0.819	124.1	0.330
β-muricholate	3321	1.08	3586.68	25.9	1.949	295.3	0.723
w-muricholate	3749	1	5549	40.1	3.016	456.9	1.118
hyodeo/urso	322	1	322	2.3	0.175	26.5	0.068

total	11437		13831	100	8	1139	2.8
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nor-hyodeoxy 18400 1 18400 18400

2:2-6

weight feces 6.4 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	1341	1.38	1850.58	6.4	0.624	97.4	0.238
deoxycholate	4170	1	4170	14.3	1.405	219.6	0.559
cholate	1935	1	2264	7.8	0.763	119.2	0.292
lithocholate	3343	1	3343	11.5	1.127	176.0	0.467
β-muricholate	3407	1.08	3679.56	12.6	1.240	193.7	0.474
w-muricholate	9002	1	13323	45.8	4.490	701.5	1.717
hyodeo/urso	474	1	474	1.6	0.160	25.0	0.064

total	23672		29104	100	10	1532	3.8
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nor-hyodeoxy 29674 1 29674 29674

a-muri	408.6
deoxy	392.6
cholate	408.6
lithochol	376.6
b-muri	408.6
w-muri	408.6
hyodeoxy/urso	392.6

3:2-4

weight feces 6.4 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	469	1.38	647.22	4.9	0.389	60.7	0.149
deoxycholate	1577	1	1577	12.0	0.947	148.0	0.377
cholate	949	1	1110	8.5	0.667	104.2	0.255
lithocholate	839	1	839	6.4	0.504	78.7	0.209
β-muricholate	2511	1.08	2711.88	20.7	1.629	254.5	0.623
w-muricholate	4030	1	5964	45.4	3.583	559.8	1.370
hyodeo/urso	280	1	280	2.1	0.168	26.3	0.067

total	10655		13130	100	8	1232	3.0
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nor-hyodeoxy 16647 1 16647 16647

3:2-5

weight feces 6.5 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	438	1.38	604.44	5.0	0.321	49.3	0.121
deoxycholate	1197	1	1197	9.8	0.635	97.7	0.249
cholate	858	1	1004	8.2	0.532	81.9	0.200
lithocholate	906	1	906	7.4	0.481	73.9	0.196
β-muricholate	3408	1.08	3680.64	30.2	1.952	300.3	0.735
w-muricholate	2988	1	4422	36.3	2.345	360.8	0.883
hyodeo/urso	364	1	364	3.0	0.193	29.7	0.076

total	10159		12178	100	6	994	2.5
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nor-hyodeoxy 18855 1 18855 18855

3:2-6

weight feces 5.5 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	871	1.38	1201.98	5.7	0.458	83.4	0.204
deoxycholate	2878	1	2878	13.6	1.098	199.6	0.508
cholate	1791	1	2095	9.9	0.799	145.3	0.356
lithocholate	1999	1	1999	9.5	0.762	138.6	0.368
β-muricholate	2933	1.08	3167.64	15.0	1.208	219.7	0.538
w-muricholate	6248	1	9247	43.8	3.527	641.2	1.569
hyodeo/urso	527	1	527	2.5	0.201	36.5	0.093

total	17247		21116	100	8	1464	3.6
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nor-hyodeoxy 26219 1 26219 26219

a-muri	408.6
deoxy	392.6
cholate	408.6
lithochol	376.6
b-muri	408.6
w-muri	408.6
hyodeoxy/urso	392.6

weight feces 5.8 mg							
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid mg feces	nmol bile acid/ mg feces
a-muricholate	463	1.38	638.94	3.6	0.283	48.7	0.119
deoxycholate	2160	1	2160	12.2	0.956	164.8	0.420
cholate	560	1	655	3.7	0.290	50.0	0.122
lithocholate	2503	1	2503	14.2	1.108	191.0	0.507
β-muricholate	3081	1.08	3327.48	18.8	1.472	253.9	0.621
w-muricholate	5475	1	8103	45.9	3.586	618.2	1.513
hyodeo/urso	269	1	269	1.5	0.119	20.5	0.052
total	14511		17657	100	8	1347	3.4
nor-hyodeoxy	22598	1	22598	22598			

weight feces 5.4 mg							
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid mg feces	nmol bile acid/ mg feces
a-muricholate	258	1.38	356.04	3.2	0.226	41.8	0.102
deoxycholate	1480	1	1480	13.4	0.939	173.9	0.443
cholate	573	1	670	6.1	0.425	78.8	0.193
lithocholate	1667	1	1667	15.1	1.058	195.9	0.520
β-muricholate	1531	1.08	1653.48	14.9	1.049	194.3	0.476
w-muricholate	3397	1	5028	45.4	3.190	590.8	1.446
hyodeo/urso	212	1	212	1.9	0.135	24.9	0.063
total	9118		11066	100	7	1300	3.2
nor-hyodeoxy	15759	1	15759	15759			

weight feces 6.4 mg							
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid mg feces	nmol bile acid/ mg feces
a-muricholate	483	1.38	666.54	4.9	0.414	64.7	0.158
deoxycholate	1604	1	1604	11.8	0.997	155.8	0.397
cholate	840	1	983	7.2	0.611	95.5	0.234
lithocholate	2300	1	2300	16.9	1.430	223.4	0.593
β-muricholate	2706	1.08	2922.48	21.5	1.817	283.8	0.695
w-muricholate	3466	1	5130	37.7	3.189	498.2	1.219
hyodeo/urso		1	0	0.0	0.000	0.0	0.000
total	11399		13606	100	8	1321	3.3
nor-hyodeoxy	16088	1	16088	16088			

a-muri	408.6
deoxy	392.6
cholate	408.6
lithochol	376.6
b-muri	408.6
w-muri	408.6
hyodeoxy/urso	392.6

weight feces 5 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	213	1.38	293.94	2.1	0.139	27.9	0.068
deoxycholate	1811	1	1811	12.7	0.858	171.6	0.437
cholate	1070	1	1252	8.7	0.593	118.7	0.290
lithocholate	2080	1	2080	14.5	0.986	197.1	0.523
β-muricholate	2392	1.08	2583.36	18.0	1.224	244.8	0.599
w-muricholate	4005	1	5927	41.4	2.809	561.8	1.375
hyodeo/urso	367	1	367	2.6	0.174	34.8	0.089

total	11938	14315	100	7	1357	3.4
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nor-hyodeoxy	21102	1	21102	21102
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weight feces 7.3 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	222	1.38	306.36	4.1	0.300	41.0	0.100
deoxycholate	790	1	790	10.6	0.772	105.8	0.269
cholate	602	1	704	9.4	0.689	94.3	0.231
lithocholate	1050	1	1050	14.0	1.026	140.6	0.373
β-muricholate	1101	1.08	1189.08	15.9	1.162	159.2	0.390
w-muricholate	2234	1	3306	44.2	3.232	442.8	1.084
hyodeo/urso	135	1	135	1.8	0.132	18.1	0.046

total	6134	7481	100	7	1002	2.5
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nor-hyodeoxy	10229	1	10229	10229
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weight feces 5.3 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	887	1.38	1224.06	6.5	0.333	62.9	0.154
deoxycholate	2496	1	2496	13.3	0.679	128.2	0.326
cholate	1947	1	2278	12.1	0.620	117.0	0.286
lithocholate	482	1	482	2.6	0.131	24.8	0.066
β-muricholate	4734	1.08	5112.72	27.2	1.391	262.5	0.643
w-muricholate	4874	1	7214	38.4	1.963	370.4	0.907
hyodeo/urso		1	0	0.0	0.000	0.0	0.000

total	15420	18806	100	5	966	2.4
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nor-hyodeoxy	36744	1	36744	36744
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a-muri	408.6
deoxy	392.6
cholate	408.6
lithochol	376.6
b-muri	408.6
w-muri	408.6
hyodeoxy/urso	392.6

weight feces 8.2 mg							
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	727	1.38	1003.26	4.9	0.379	46.3	0.113
deoxycholate	3031	1	3031	14.7	1.146	139.8	0.356
cholate	1265	1	1480	7.2	0.560	68.3	0.167
lithocholate	1974	1	1974	9.6	0.747	91.0	0.242
β-muricholate	4421	1.08	4774.68	23.2	1.806	220.2	0.539
w-muricholate	5331	1	7890	38.4	2.984	363.9	0.891
hyodeo/urso	401	1	401	2.0	0.152	18.5	0.047
total	17150		20554	100	8	948	2.4
nor-hyodeoxy	26440	1	26440	26440			

weight feces 6.4 mg							
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	541	1.38	746.58	4.7	0.264	41.3	0.101
deoxycholate	1842	1	1842	11.6	0.652	101.8	0.259
cholate	998	1	1168	7.4	0.413	64.5	0.158
lithocholate	1904	1	1904	12.0	0.674	105.2	0.279
β-muricholate	2601	1.08	2809.08	17.7	0.994	155.3	0.380
w-muricholate	4796	1	7098	44.8	2.511	392.3	0.960
hyodeo/urso	270	1	270	1.7	0.096	14.9	0.038
total	12952		15837	100	6	875	2.2
nor-hyodeoxy	28268	1	28268	28268			

weight feces 7 mg							
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	612	1.38	844.56	4.8	0.381	54.5	0.133
deoxycholate	2141	1	2141	12.2	0.967	138.1	0.352
cholate	1127	1	1319	7.5	0.595	85.0	0.208
lithocholate	2027	1	2027	11.6	0.915	130.7	0.347
β-muricholate	3995	1.08	4314.6	24.6	1.948	278.3	0.681
w-muricholate	4490	1	6645	37.9	3.000	428.6	1.049
hyodeo/urso	224	1	224	1.3	0.101	14.4	0.037
total	14616		17515	100	8	1130	2.8
nor-hyodeoxy	22149	1	22149	22149			

a-muri	408.6
deoxy	392.6
cholate	408.6
lithochol	376.6
b-muri	408.6
w-muri	408.6
hyodeoxy/urso	392.6

1:4-10

weight feces 5.1 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/ mg feces	nmol bile acid/ mg feces
a-muricholate	103	1.38	142.14	4.0	0.114	22.3	0.055
deoxycholate	354	1	354	9.9	0.283	55.6	0.142
cholate	286	1	335	9.3	0.268	52.5	0.129
lithocholate	394	1	394	11.0	0.315	61.8	0.164
β-muricholate	349	1.08	376.92	10.5	0.302	59.2	0.145
w-muricholate	1185	1	1754	48.8	1.404	275.2	0.674
hyodeo/urso	235	1	235	6.5	0.188	36.9	0.094

total	2906		3590	100	3	563	1.4
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nor-hyodeoxy	12494	1	12494	12494			
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1:4-11

weight feces 4.8 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/ mg feces	nmol bile acid/ mg feces
a-muricholate	276	1.38	380.88	12.2	0.454	94.6	0.231
deoxycholate	396	1	396	12.6	0.472	98.3	0.250
cholate	184	1	215	6.9	0.257	53.5	0.131
lithocholate	214	1	214	6.8	0.255	53.1	0.141
β-muricholate	555	1.08	599.4	19.1	0.715	148.9	0.364
w-muricholate	896	1	1326	42.3	1.581	329.3	0.806
hyodeo/urso		1	0	0.0	0.000	0.0	0.000

total	2521		3132	100	4	778	1.9
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nor-hyodeoxy	8389	1	8389	8389			
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1:4-12

weight feces 6 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/ mg feces	nmol bile acid/ mg feces
a-muricholate	320	1.38	441.6	6.4	0.390	65.1	0.159
deoxycholate	852	1	852	12.4	0.753	125.5	0.320
cholate	475	1	556	8.1	0.491	81.9	0.200
lithocholate	954	1	954	13.9	0.843	140.6	0.373
β-muricholate	954	1.08	1030.32	15.0	0.911	151.8	0.372
w-muricholate	2059	1	3047	44.3	2.694	449.0	1.099
hyodeo/urso		1	0	0.0	0.000	0.0	0.000

total	5614		6881	100	6	1014	2.5
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nor-hyodeoxy	11311	1	11311	11311			
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a-muri	408.6
deoxy	392.6
cholate	408.6
lithochol	376.6
b-muri	408.6
w-muri	408.6
hyodeoxy/urso	392.6

2:4-10							
weight feces	6.2	mg					
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	361	1.38	498.18	5.7	0.258	41.6	0.102
deoxycholate	1051	1	1051	12.0	0.544	87.7	0.223
cholate	1247	1	1459	16.7	0.755	121.7	0.298
lithocholate	1420	1	1420	16.3	0.735	118.5	0.315
β-muricholate	979	1.08	1057.32	12.1	0.547	88.2	0.216
w-muricholate	2197	1	3252	37.2	1.682	271.3	0.664
hyodeo/urso		1	0	0.0	0.000	0.0	0.000
total	7255		8737	100	5	729	1.8
nor-hyodeoxy	19330	1	19330	19330			

2:4-11							
weight feces	6.6	mg					
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	842	1.38	1161.96	8.8	0.510	77.2	0.189
deoxycholate	1126	1	1126	8.5	0.494	74.8	0.191
cholate	866	1	1013	7.6	0.444	67.3	0.165
lithocholate	1217	1	1217	9.2	0.534	80.9	0.215
β-muricholate	2527	1.08	2729.16	20.6	1.197	181.4	0.444
w-muricholate	3746	1	5544	41.8	2.432	368.4	0.902
hyodeo/urso	481	1	481	3.6	0.211	32.0	0.081
total	10805		13272	100	6	882	2.2
nor-hyodeoxy	22800	1	22800	22800			

2:4-12							
weight feces	7.6	mg					
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	543	1.38	749.34	7.6	0.555	73.0	0.179
deoxycholate	902	1	902	9.1	0.668	87.9	0.224
cholate	1180	1	1381	14.0	1.023	134.5	0.329
lithocholate	1019	1	1019	10.3	0.755	99.3	0.264
β-muricholate	1622	1.08	1751.76	17.7	1.297	170.7	0.418
w-muricholate	2624	1	3884	39.3	2.876	378.5	0.926
hyodeo/urso	206	1	206	2.1	0.153	20.1	0.051
total	8096		9892	100	7	964	2.4
nor-hyodeoxy	13502	1	13502	13502			

a-muri	408.6
deoxy	392.6
cholate	408.6
lithochol	376.6
b-muri	408.6
w-muri	408.6
hyodeoxy/urso	392.6

3:4-10							
weight feces		8.1	mg				
	area	response factor	area corrected for response factor	%	µg bile acid	hg bile acid/ mg feces	nmol bile acid/ mg feces
a-muricholate	374	1.38	516.12	6.4	0.307	38.0	0.093
deoxycholate	928	1	928	11.5	0.553	68.2	0.174
cholate	737	1	862	10.7	0.514	63.4	0.155
lithocholate	749	1	749	9.3	0.446	55.1	0.146
β-muricholate	1189	1.08	1284.12	15.9	0.765	94.4	0.231
w-muricholate	2355	1	3485	43.2	2.076	256.3	0.627
hyodeo/urso	244	1	244	3.0	0.145	17.9	0.046
total	6576		8069	100	5	593	1.5
nor-hyodeoxy		16790	1	16790	16790		

3:4-11							
weight feces		8.3	mg				
	area	response factor	area corrected for response factor	%	µg bile acid	hg bile acid/ mg feces	nmol bile acid/ mg feces
a-muricholate	474	1.38	654.12	7.3	0.475	57.2	0.140
deoxycholate	1184	1	1184	13.3	0.860	103.6	0.264
cholate	335	1	392	4.4	0.285	34.3	0.084
lithocholate	668	1	668	7.5	0.485	58.4	0.155
β-muricholate	2030	1.08	2192.4	24.6	1.592	191.8	0.469
w-muricholate	2413	1	3571	40.0	2.593	312.5	0.765
hyodeo/urso	257	1	257	2.9	0.187	22.5	0.057
total	7361		8919	100	6	780	1.9
nor-hyodeoxy		13770	1	13770	13770		

3:4-12							
weight feces		6.6	mg				
	area	response factor	area corrected for response factor	%	µg bile acid	hg bile acid/ mg feces	nmol bile acid/ mg feces
a-muricholate	436	1.38	601.68	6.8	0.394	59.7	0.146
deoxycholate	831	1	831	9.4	0.544	82.4	0.210
cholate	1182	1	1383	15.7	0.905	137.1	0.336
lithocholate	693	1	693	7.9	0.454	68.7	0.182
β-muricholate	1774	1.08	1915.92	21.8	1.254	190.0	0.465
w-muricholate	2161	1	3198	36.4	2.093	317.1	0.776
hyodeo/urso	172	1	172	2.0	0.113	17.1	0.043
total	7249		8795	100	6	872	2.2
nor-hyodeoxy		15281	1	15281	15281		

a-muri	408.6
deoxy	392.6
cholate	408.6
lithochol	376.6
b-muri	408.6
w-muri	408.6
hyodeoxy/urso	392.6

weight feces 5.1 mg							
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	279	1.38	385.02	4.6	0.194	38.1	0.093
deoxycholate	1398	1	1398	16.6	0.706	138.4	0.352
cholate	233	1	273	3.2	0.138	27.0	0.066
lithocholate	1493	1	1493	17.7	0.754	147.8	0.392
β-muricholate	1698	1.08	1833.84	21.8	0.926	181.5	0.444
w-muricholate	1962	1	2904	34.5	1.466	287.4	0.703
hyodeo/urso	138	1	138	1.6	0.070	13.7	0.035
total	7201		8424	100	4	834	2.1
nor-hyodeoxy	19809	1	19809	19809			

weight feces 5.9 mg							
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	273	1.38	376.74	4.5	0.202	34.2	0.084
deoxycholate	1027	1	1027	12.2	0.550	93.3	0.238
cholate	1007	1	1178	14.0	0.631	107.0	0.262
lithocholate	1318	1	1318	15.7	0.706	119.7	0.318
β-muricholate	1369	1.08	1478.52	17.6	0.792	134.3	0.329
w-muricholate	1924	1	2848	33.8	1.526	258.6	0.633
hyodeo/urso	193	1	193	2.3	0.103	17.5	0.045
total	7111		8419	100	5	764	1.9
nor-hyodeoxy	18666	1	18666	18666			

weight feces 6.6 mg							
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	201	1.38	277.38	4.3	0.239	36.3	0.089
deoxycholate	976	1	976	15.3	0.842	127.6	0.325
cholate	457	1	535	8.4	0.461	69.9	0.171
lithocholate	1197	1	1197	18.7	1.033	156.5	0.416
β-muricholate	374	1.08	403.92	6.3	0.349	52.8	0.129
w-muricholate	2027	1	3000	47.0	2.589	392.3	0.960
hyodeo/urso		1	0	0.0	0.000	0.0	0.000
total	5232		6389	100	6	836	2.1
nor-hyodeoxy	11586	1	11586	11586			

a-muri	408.6
deoxy	392.6
cholate	408.6
lithochol	376.6
b-muri	408.6
w-muri	408.6
hyodeoxy/urso	392.6

weight feces 6.9 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/ mg feces	nmol bile acid/ mg feces
a-muricholate	170	1.38	234.6	5.7	0.289	41.9	0.103
deoxycholate	421	1	421	10.2	0.519	75.2	0.191
cholate	188	1	220	5.3	0.271	39.3	0.096
lithocholate	1014	1	1014	24.6	1.249	181.0	0.481
β-muricholate	816	1.08	881.28	21.4	1.086	157.3	0.385
w-muricholate	778	1	1151	28.0	1.418	205.6	0.503
hyodeo/urso	196	1	196	4.8	0.241	35.0	0.089

total	3583		4118	100	5	735	1.8
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nor-hyodeoxy 8118 1 8118 8118

weight feces 7.1 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/ mg feces	nmol bile acid/ mg feces
a-muricholate	488	1.38	673.44	5.4	0.342	48.1	0.118
deoxycholate	1599	1	1599	12.7	0.812	114.3	0.291
cholate	1339	1	1567	12.5	0.795	112.0	0.274
lithocholate	1652	1	1652	13.1	0.838	118.1	0.314
β-muricholate	2345	1.08	2532.6	20.1	1.285	181.0	0.443
w-muricholate	2835	1	4196	33.4	2.130	299.9	0.734
hyodeo/urso	357	1	357	2.8	0.181	25.5	0.065

total	10615		12576	100	6	899	2.2
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nor-hyodeoxy 19702 1 19702 19702

2.5-15
weight feces 5.4 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/ mg feces	nmol bile acid/ mg feces
a-muricholate	1147	1.38	1582.86	6.5	0.461	85.3	0.209
deoxycholate	3831	1	3831	15.7	1.115	206.5	0.526
cholate	1371	1	1604	6.6	0.467	86.5	0.212
lithocholate	3141	1	3141	12.9	0.914	169.3	0.450
β-muricholate	2207	1.08	2383.56	9.8	0.694	128.5	0.314
w-muricholate	7603	1	11252	46.3	3.275	606.5	1.484
hyodeo/urso	531	1	531	2.2	0.155	28.6	0.073

total	19831		24326	100	7	1311	3.3
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nor-hyodeoxy 34357 1 34357 34357

a-muri	408.6
deoxy	392.6
cholate	408.6
lithochol	376.6
b-muri	408.6
w-muri	408.6
hyodeoxy/urso	392.6

5-13							
weight feces	7.9	mg					
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	608	1.38	839.04	6.4	0.282	35.7	0.087
deoxycholate	1723	1	1723	13.2	0.580	73.4	0.187
cholate	925	1	1082	8.3	0.364	46.1	0.113
lithocholate	1896	1	1896	14.5	0.638	80.7	0.214
β-muricholate	2481	1.08	2679.48	20.5	0.901	114.1	0.279
w-muricholate	3000	1	4440	34.0	1.493	189.0	0.463
hyodeo/urso	400	1	400	3.1	0.135	17.0	0.043
total	11033		13060	100	4	556	1.4
nor-hyodeoxy	29729	1	29729	29729			

5-14							
weight feces	8.1	mg					
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	391	1.38	539.58	5.7	0.264	32.6	0.080
deoxycholate	1007	1	1007	10.7	0.493	60.9	0.155
cholate	1069	1	1251	13.2	0.613	75.7	0.185
lithocholate	799	1	799	8.5	0.391	48.3	0.128
β-muricholate	1999	1.08	2158.92	22.8	1.058	130.6	0.320
w-muricholate	2126	1	3146	33.3	1.542	190.3	0.466
hyodeo/urso	548	1	548	5.8	0.268	33.1	0.084
total	7939		9450	100	5	572	1.4
nor-hyodeoxy	20411	1	20411	20411			

5-15							
weight feces	7.3	mg					
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	908	1.38	1253.04	5.7	0.363	49.8	0.122
deoxycholate	3513	1	3513	16.0	1.019	139.5	0.355
cholate	1190	1	1392	6.4	0.404	55.3	0.135
lithocholate	2079	1	2079	9.5	0.603	82.6	0.219
β-muricholate	2885	1.08	3115.8	14.2	0.903	123.7	0.303
w-muricholate	6815	1	10086	46.0	2.924	400.6	0.980
hyodeo/urso	481	1	481	2.2	0.139	19.1	0.049
total	17871		21920	100	6	871	2.2
nor-hyodeoxy	34491	1	34491	34491			

a-muri	408.6
deoxy	392.6
cholate	408.6
lithochol	376.6
β-muri	408.6
w-muri	408.6
hyodeoxy/urso	392.6

1:6-16

weight feces 5.8 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/ mg feces	nmol bile acid/ mg feces
a-muricholate	222	1.38	306.36	5.9	0.188	32.4	0.079
deoxycholate	654	1	654	12.6	0.401	69.1	0.176
cholate	724	1	847	16.3	0.519	89.5	0.219
lithocholate	565	1	565	10.9	0.346	59.7	0.159
β-muricholate	752	1.08	812.16	15.6	0.498	85.8	0.210
w-muricholate	1281	1	1896	36.4	1.162	200.4	0.490
hyodeo/urso	123	1	123	2.4	0.075	13.0	0.033
total	4321		5203	100	3	550	1.4

nor-hyodeoxy 16312 1 16312 16312

1:6-17

weight feces 6.2 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/ mg feces	nmol bile acid/ mg feces
a-muricholate	199	1.38	274.62	7.0	0.250	40.3	0.099
deoxycholate	543	1	543	13.8	0.494	79.7	0.203
cholate	411	1	481	12.2	0.438	70.6	0.173
lithocholate	518	1	518	13.2	0.472	76.1	0.202
β-muricholate	383	1.08	413.64	10.5	0.377	60.7	0.149
w-muricholate	1077	1	1594	40.5	1.451	234.1	0.573
hyodeo/urso	111	1	111	2.8	0.101	16.3	0.042
total	3242		3935	100	4	578	1.4

nor-hyodeoxy 10983 1 10983 10983

1:6-18

weight feces 6.3 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/ mg feces	nmol bile acid/ mg feces
a-muricholate	117	1.38	161.46	2.8	0.120	19.0	0.047
deoxycholate	650	1	650	11.3	0.483	76.7	0.195
cholate	962	1	1126	19.5	0.837	132.8	0.325
lithocholate	598	1	598	10.4	0.444	70.5	0.187
β-muricholate	677	1.08	731.16	12.7	0.543	86.3	0.211
w-muricholate	1575	1	2331	40.4	1.732	275.0	0.673
hyodeo/urso	174	1	174	3.0	0.129	20.5	0.052
total	4753		5771	100	4	681	1.7

nor-hyodeoxy 13455 1 13455 13455

a-muri	408.6
deoxy	392.6
cholate	408.6
lithochol	376.6
b-muri	408.6
w-muri	408.6
hyodeoxy/urso	392.6

2:6-16

weight feces 5.6 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/ mg feces	nmol bile acid/ mg feces
a-muricholate	215	1.38	296.7	5.3	0.169	30.2	0.074
deoxycholate	821	1	821	14.8	0.469	83.7	0.213
cholate	747	1	874	15.7	0.499	89.1	0.218
lithocholate	598	1	598	10.7	0.341	60.9	0.162
β-muricholate	840	1.08	907.2	16.3	0.518	92.5	0.226
w-muricholate	1244	1	1841	33.1	1.051	187.6	0.459
hyodeo/urso	226	1	226	4.1	0.129	23.0	0.059
total	4691		5564	100	3	567	1.4
nor-hyodeoxy	17522	1	17522	17522			

2:6-17

weight feces 5.5 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/ mg feces	nmol bile acid/ mg feces
a-muricholate	196	1.38	270.48	8.3	0.241	43.9	0.107
deoxycholate	966	1	966	29.7	0.862	156.7	0.399
cholate	220	1	257	7.9	0.230	41.8	0.102
lithocholate	486	1	486	14.9	0.434	78.8	0.209
β-muricholate	177	1.08	191.16	5.9	0.171	31.0	0.076
w-muricholate	733	1	1085	33.3	0.968	176.0	0.431
hyodeo/urso		1	0	0.0	0.000	0.0	0.000
total	2778		3256	100	3	528	1.3
nor-hyodeoxy	11207	1	11207	11207			

2:6-18

weight feces 7.4 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/ mg feces	nmol bile acid/ mg feces
a-muricholate	553	1.38	763.14	6.3	0.365	49.3	0.121
deoxycholate	1729	1	1729	14.3	0.827	111.8	0.285
cholate	1319	1	1543	12.8	0.738	99.8	0.244
lithocholate	1154	1	1154	9.6	0.552	74.6	0.198
β-muricholate	1500	1.08	1620	13.4	0.775	104.7	0.256
w-muricholate	3330	1	4928	40.9	2.358	318.6	0.780
hyodeo/urso	318	1	318	2.6	0.152	20.6	0.052
total	9903		12056	100	6	779	1.9
nor-hyodeoxy	20902	1	20902	20902			

a-muri	408.6
deoxy	392.6
cholate	408.6
lithochol	376.6
b-muri	408.6
w-muri	408.6
hyodeoxy/urso	392.6

3:6-16

weight feces 7.4 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/ mg feces	nmol bile acid/ mg feces
a-muricholate	621	1.38	856.98	9.3	0.369	49.9	0.122
deoxycholate	1219	1	1219	13.2	0.525	70.9	0.181
cholate	1628	1	1905	20.6	0.820	110.8	0.271
lithocholate	685	1	685	7.4	0.295	39.9	0.106
β-muricholate	1439	1.08	1554.12	16.8	0.669	90.4	0.221
w-muricholate	1866	1	2762	29.9	1.189	160.7	0.393
hyodeo/urso	253	1	253	2.7	0.109	14.7	0.038

total	7711	9235	100	4	537	1.3
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nor-hyodeoxy	23222	1	23222	23222
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3:6-17

weight feces 8.1 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/ mg feces	nmol bile acid/ mg feces
a-muricholate	829	1.38	1144.02	9.0	0.427	52.7	0.129
deoxycholate	1831	1	1831	14.4	0.683	84.3	0.215
cholate	1171	1	1370	10.7	0.511	63.1	0.154
lithocholate	653	1	653	5.1	0.243	30.1	0.080
β-muricholate	1120	1.08	1209.6	9.5	0.451	55.7	0.136
w-muricholate	4227	1	6256	49.0	2.332	288.0	0.705
hyodeo/urso	295	1	295	2.3	0.110	13.6	0.035

total	10126	12759	100	5	587	1.5
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nor-hyodeoxy	26821	1	26821	26821
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3:6-18

weight feces 7.7 mg

	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/ mg feces	nmol bile acid/ mg feces
a-muricholate	441	1.38	608.58	8.0	0.253	32.9	0.080
deoxycholate	1194	1	1194	15.6	0.497	64.5	0.164
cholate	995	1	1164	15.2	0.484	62.9	0.154
lithocholate	999	1	999	13.1	0.416	54.0	0.143
β-muricholate	934	1.08	1008.72	13.2	0.420	54.5	0.133
w-muricholate	1799	1	2663	34.9	1.108	143.9	0.352
hyodeo/urso		1	0	0.0	0.000	0.0	0.000

total	6362	7637	100	3	413	1.0
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nor-hyodeoxy	24030	1	24030	24030
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a-muri	408.6
deoxy	392.6
cholate	408.6
lithochol	376.6
b-muri	408.6
w-muri	408.6
hyodeoxy/urso	392.6

weight feces 5.2 mg							
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	493	1.38	680.34	8.4	0.556	106.9	0.262
deoxycholate	1997	1	1997	24.7	1.631	313.7	0.799
cholate	1424	1	1666	20.6	1.361	261.7	0.641
lithocholate	376	1	376	4.6	0.307	59.1	0.157
β-muricholate	1518	1.08	1639.44	20.2	1.339	257.6	0.630
w-muricholate	1175	1	1739	21.5	1.421	273.2	0.669
hyodeo/urso		1	0	0.0	0.000	0.0	0.000
total	6983		8098	100	7	1272	3.2
nor-hyodeoxy	12241	1	12241	12241			

weight feces 5.8 mg							
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	602	1.38	830.76	15.4	0.725	125.0	0.306
deoxycholate	895	1	895	16.5	0.781	134.7	0.343
cholate	817	1	956	17.7	0.834	143.8	0.352
lithocholate	302	1	302	5.6	0.264	45.4	0.121
β-muricholate	659	1.08	711.72	13.2	0.621	107.1	0.262
w-muricholate	977	1	1446	26.7	1.262	217.6	0.533
hyodeo/urso	267	1	267	4.9	0.233	40.2	0.102
total	4519		5408	100	5	814	2.0
nor-hyodeoxy	11457	1	11457	11457			

weight feces 5.4 mg							
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	512	1.38	706.56	10.0	0.525	97.3	0.238
deoxycholate	1419	1	1419	20.0	1.055	195.3	0.498
cholate	1545	1	1808	25.5	1.344	248.8	0.609
lithocholate	649	1	649	9.1	0.482	89.3	0.237
β-muricholate	893	1.08	964.44	13.6	0.717	132.8	0.325
w-muricholate	912	1	1350	19.0	1.003	185.8	0.455
hyodeo/urso	204	1	204	2.9	0.152	28.1	0.072
total	6134		7100	100	5	977	2.4
nor-hyodeoxy	13452	1	13452	13452			

a-muri	408.6
deoxy	392.6
cholate	408.6
lithochol	376.6
b-muri	408.6
w-muri	408.6
hyodeoxy/urso	392.6

1.6-15					
weight feces	6.8	mg			
	area	%	µg fatty acid	ng fatty acid/mg feces	nmol fatty acid/mg feces
C14:0	26211	1.5	10.5	1538	6.73
C16:0	674622	39.1	269.2	39589	154.40
C16:1	5831	0.3	2.3	342	1.35
C18:0	907134	52.5	362.0	53233	187.11
C18:1	95082	5.5	37.9	5580	19.75
C18:2	4891	0.3	2.0	287	1.02
C18:3	12523	0.7	5.0	735	2.64
total	1726294	100	688.9	101304	373.01
C15:0	200479				

1.6-16					
weight feces	11.7	mg			
	area	%	µg fatty acid	ng fatty acid/mg feces	nmol fatty acid/mg feces
C14:0	20396	1.2	12.5	1070	4.69
C16:0	664144	40.5	407.7	34849	135.92
C16:1	5241	0.3	3.2	275	1.08
C18:0	854148	52.1	524.4	44819	157.54
C18:1	80539	4.9	49.4	4226	14.96
C18:2	5034	0.3	3.1	264	0.94
C18:3	11097	0.7	6.8	582	2.09
total	1640599	100	1007.2	86086	317.21
C15:0	130309				

1.6-17					
weight feces	5.3	mg			
	area	%	µg fatty acid	ng fatty acid/mg feces	nmol fatty acid/mg feces
C14:0	12309	1.6	10.3	1940	8.49
C16:0	339628	43.8	283.7	53533	208.79
C16:1	3302	0.4	2.8	520	2.05
C18:0	368609	47.5	307.9	58101	204.22
C18:1	45053	5.8	37.6	7101	25.14
C18:2	2365	0.3	2.0	373	1.33
C18:3	4243	0.5	3.5	669	2.40
total	775509	100	647.9	122237	452.42
C15:0	95763				

1.6-18					
weight feces	8.9	mg			
	area	%	µg fatty acid	ng fatty acid/mg feces	nmol fatty acid/mg feces
C14:0	12220	1.4	8.4	939	4.11
C16:0	366294	42.7	250.4	28137	109.74
C16:1	3077	0.4	2.1	236	0.93
C18:0	427401	49.9	292.2	32831	115.40
C18:1	40324	4.7	27.6	3098	10.96
C18:2	2415	0.3	1.7	186	0.66
C18:3	5166	0.6	3.5	397	1.42
total	856897	100	585.8	65824	243.23
C15:0	117016				

1.6-19					
weight feces	8.1	mg			
	area	%	µg fatty acid	ng fatty acid/mg feces	nmol fatty acid/mg feces
C14:0	4597	1.7	4.7	584	2.56
C16:0	119586	44.4	123.1	15199	59.28
C16:1	872	0.3	0.9	111	0.44
C18:0	128120	47.6	131.9	16283	57.23
C18:1	13678	5.1	14.1	1738	6.15
C18:2	939	0.3	1.0	119	0.43
C18:3	1419	0.5	1.5	180	0.65
total	269211	100	277.1	34215	126.73
C15:0	77711				

1.6-20					
weight feces	10.8	mg			
	area	%	µg fatty acid	ng fatty acid/mg feces	nmol fatty acid/mg feces
C14:0	17671	1.4	10.4	962	4.21
C16:0	535579	41.3	315.0	29168	113.76
C16:1	4357	0.3	2.6	237	0.93
C18:0	659139	50.8	387.7	35897	126.18
C18:1	67882	5.2	39.9	3697	13.09
C18:2	4052	0.3	2.4	221	0.79
C18:3	8388	0.6	4.9	457	1.64
total	1297068	100	762.9	70639	260.59
C15:0	136015				

2:6-16					
weight feces	12.1	mg			
	area	%	µg fatty acid	ng fatty acid	nmol fatty acid/
				mg feces	mg feces
C14:0	16368	1.4	12.4	1028	4.50
C16:0	492848	43.0	374.7	30966	120.77
C16:1	3736	0.3	2.8	235	0.92
C18:0	567463	49.5	431.4	35654	125.32
C18:1	55948	4.9	42.5	3515	12.44
C18:2	3689	0.3	2.8	232	0.83
C18:3	6084	0.5	4.6	382	1.37
total	1146136	100	871.4	72013	266.16
C15:0	105228				

3:6-16					
weight feces	9.6	mg			
	area	%	µg fatty acid	ng fatty acid	nmol fatty acid/
				mg feces	mg feces
C14:0	11600	1.2	10.6	1109	4.86
C16:0	381872	39.5	350.5	36507	142.38
C16:1	3071	0.3	2.8	294	1.15
C18:0	510655	52.8	468.7	48818	171.59
C18:1	50174	5.2	46.0	4797	16.98
C18:2	2963	0.3	2.7	283	1.01
C18:3	6403	0.7	5.9	612	2.20
total	966738	100	887.2	92420	340.17
C15:0	87169				

2:6-17					
weight feces	8.5	mg			
	area	%	µg fatty acid	ng fatty acid	nmol fatty acid/
				mg feces	mg feces
C14:0	7619	2.2	7.2	846	3.70
C16:0	165470	48.1	156.1	18369	71.64
C16:1	1010	0.3	1.0	112	0.44
C18:0	151890	44.1	143.3	16862	59.27
C18:1	15484	4.5	14.6	1719	6.08
C18:2	1040	0.3	1.0	115	0.41
C18:3	1620	0.5	1.5	180	0.65
total	344133	100	324.7	38204	142.20
C15:0	84780				

3:6-17					
weight feces	7.6	mg			
	area	%	µg fatty acid	ng fatty acid	nmol fatty acid/
				mg feces	mg feces
C14:0	6657	1.8	6.5	849	3.72
C16:0	174284	45.8	168.9	22222	86.67
C16:1	1200	0.3	1.2	153	0.60
C18:0	175484	46.1	170.0	22375	78.65
C18:1	19588	5.2	19.0	2498	8.84
C18:2	1351	0.4	1.3	172	0.61
C18:3	1768	0.5	1.7	225	0.81
total	380332	100	368.8	48494	179.90
C15:0	82557				

2:6-18					
weight feces	10.2	mg			
	area	%	µg fatty acid	ng fatty acid	nmol fatty acid/
				mg feces	mg feces
C14:0	13778	1.8	9.5	928	4.06
C16:0	361552	46.5	248.5	24363	95.02
C16:1	2752	0.4	1.9	185	0.73
C18:0	355381	45.7	244.3	23948	84.17
C18:1	38817	5.0	26.7	2616	9.26
C18:2	2125	0.3	1.5	143	0.51
C18:3	3865	0.5	2.7	260	0.94
total	778270	100	534.9	52444	194.69
C15:0	116392				

3:6-18					
weight feces	8.1	mg			
	area	%	µg fatty acid	ng fatty acid	nmol fatty acid/
				mg feces	mg feces
C14:0	8700	1.3	8.3	1022	4.47
C16:0	277658	41.8	264.1	32606	127.17
C16:1	1872	0.3	1.8	220	0.86
C18:0	334779	50.4	318.4	39313	138.18
C18:1	34667	5.2	33.0	4071	14.41
C18:2	1792	0.3	1.7	210	0.75
C18:3	4339	0.7	4.1	510	1.83
total	663807	100	631.4	77952	287.68
C15:0	84105				

weight feces 10.7 mg

	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	9334	2.2	6.0	557	2.44
C16:0	205542	47.5	131.2	12263	47.83
C16:1	1575	0.4	1.0	94	0.37
C18:0	189750	43.8	121.1	11321	39.79
C18:1	23168	5.4	14.8	1382	4.89
C18:2	1823	0.4	1.2	109	0.39
C18:3	1777	0.4	1.1	106	0.38

total 432969 100 276.4 25831 96.09

C15:0 125320

weight feces 12.4 mg

	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	10569	1.9	8.5	689	3.02
C16:0	262993	46.4	212.5	17137	66.84
C16:1	1907	0.3	1.5	124	0.49
C18:0	260336	45.9	210.3	16963	59.63
C18:1	26561	4.7	21.5	1731	6.13
C18:2	1861	0.3	1.5	121	0.43
C18:3	2435	0.4	2.0	159	0.57

total 566662 100 457.9 36924 137.09

C15:0 99012

weight feces 7.2 mg

	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	5300	2.2	3.9	545	2.39
C16:0	116241	47.3	86.1	11953	46.62
C16:1	798	0.3	0.6	82	0.32
C18:0	106821	43.5	79.1	10984	38.61
C18:1	14034	5.7	10.4	1443	5.11
C18:2	1332	0.5	1.0	137	0.49
C18:3	1059	0.4	0.8	109	0.39

total 245585 100 181.8 25254 93.92

C15:0 108053

weight feces 6 mg

	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	4357	2.4	3.7	608	2.66
C16:0	90363	49.0	75.7	12617	49.21
C16:1	573	0.3	0.5	80	0.31
C18:0	77962	42.3	65.3	10886	38.26
C18:1	9578	5.2	8.0	1337	4.73
C18:2	799	0.4	0.7	112	0.40
C18:3	815	0.4	0.7	114	0.41

total 184447 100 154.5 25754 95.99

C15:0 95490

weight feces 10 mg

	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	9522	1.5	6.2	622	2.72
C16:0	270616	42.3	176.8	17684	68.97
C16:1	2338	0.4	1.5	153	0.60
C18:0	313018	49.0	204.6	20455	71.90
C18:1	37006	5.8	24.2	2418	8.56
C18:2	3195	0.5	2.1	209	0.74
C18:3	3428	0.5	2.2	224	0.80

total 639123 100 417.7 41766 154.30

C15:0 122421

weight feces 8.7 mg

	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	7650	1.6	5.6	642	2.81
C16:0	212450	45.7	155.1	17829	69.54
C16:1	1476	0.3	1.1	124	0.49
C18:0	217370	46.7	158.7	18242	64.12
C18:1	22360	4.8	16.3	1876	6.64
C18:2	1545	0.3	1.1	130	0.46
C18:3	2300	0.5	1.7	193	0.69

total 465151 100 339.6 39036 144.75

C15:0 109572

weight feces 5.8 mg

	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	4977	1.9	4.8	822	3.60
C16:0	125240	46.9	120.0	20682	80.66
C16:1	723	0.3	0.7	119	0.47
C18:0	123021	46.0	117.8	20316	71.41
C18:1	11441	4.3	11.0	1889	6.69
C18:2	691	0.3	0.7	114	0.41
C18:3	1184	0.4	1.1	196	0.70

total 267277 100 256.0 44138 163.94

C15:0 83524

weight feces 7.7 mg

	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	5155	1.9	4.2	548	2.40
C16:0	125067	46.5	102.5	13306	51.90
C16:1	811	0.3	0.7	86	0.34
C18:0	121012	45.0	99.1	12875	45.25
C18:1	14616	5.4	12.0	1555	5.50
C18:2	1143	0.4	0.9	122	0.43
C18:3	1266	0.5	1.0	135	0.48

total 269070 100 220.4 28627 106.31

C15:0 97655

weight feces 17 mg

	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	11944	1.3	10.3	603	2.64
C16:0	374593	41.5	321.7	18926	73.82
C16:1	3142	0.3	2.7	159	0.62
C18:0	460518	51.0	395.5	23268	81.78
C18:1	44662	4.9	38.4	2257	7.99
C18:2	3197	0.4	2.7	162	0.58
C18:3	5430	0.6	4.7	274	0.99

total 903486 100 776.0 45648 168.41

C15:0 93140

group	capad	GC sample	C14:0	C16:0	C18:0	C18:1	C18:2	C18:3	fatly acids (mmol/kg feces)	fatly acids (mmol/kg feces)	total (mmol/kg feces)	total feces (g)	average weight (g)	days	total fatty acid excretion (mmol/100 g mous/day)	C14:0	C16:0	C18:1	C18:2	C18:3	% of fatly acids	C14:0	C16:0	C18:1	C18:2	C18:3
1	1-1-1	7.08	122.23	1.06	98.29	9.91	0.86	1.21	3.075	123.8	2	300.20	2.94	16.65	0.44	41.14	4.11	0.23	0.50	2.94	16.65	0.44	41.14	4.11	0.23	0.50
2	1-1-2	6.42	141.53	1.18	128.95	12.01	0.80	0.35	2.4897	87.25	2	415.95	2.20	48.43	0.40	44.47	4.11	0.27	0.12	2.20	48.43	0.40	44.47	4.11	0.27	0.12
3	1-1-3	7.09	160.62	1.46	166.30	16.90	0.83	1.89	3.4518	2.2846	2	268.18	2.08	47.74	0.36	43.97	3.94	0.35	0.52	2.08	47.74	0.36	43.97	3.94	0.35	0.52
4	2-1-1	4.35	99.48	0.76	106.39	10.33	0.74	1.19	2.4611	122.45	3	368.19	2.09	47.74	0.36	43.97	3.94	0.35	0.52	2.09	47.74	0.36	43.97	3.94	0.35	0.52
5	2-1-2	5.13	120.96	0.87	106.39	10.33	0.74	1.19	3.7789	86.55	3	420.32	1.69	43.70	0.42	46.33	4.90	0.32	0.84	1.69	43.70	0.42	46.33	4.90	0.32	0.84
6	2-1-3	5.52	142.70	1.38	157.83	16.00	1.03	2.10	3.2656	88.3	2	448.15	1.47	37.39	0.32	53.72	5.84	0.34	0.82	1.47	37.39	0.32	53.72	5.84	0.34	0.82
7	3-1-1	4.48	114.01	0.96	163.82	17.82	1.05	2.80	3.5764	121.85	2	518.42	1.81	45.96	0.35	46.00	5.03	0.31	0.94	1.81	45.96	0.35	46.00	5.03	0.31	0.94
8	3-1-2	5.63	142.74	1.09	142.89	15.61	0.86	1.67	2.8781	86.55	2	454.44	1.74	44.46	0.35	47.73	4.77	0.31	0.85	1.74	44.46	0.35	47.73	4.77	0.31	0.85
9	3-1-3	5.03	128.95	1.02	138.45	13.83	0.80	1.88	2.7589	88.05	2	403.19	2.01	46.00	0.38	45.97	4.79	0.30	0.55	2.01	46.00	0.38	45.97	4.79	0.30	0.55
10	3-1-4	6.76	190.37	1.75	230.05	21.52	1.06	3.40	4.5492	94.55	2	80.09	0.42	3.91	0.04	3.65	0.54	0.04	0.21	0.42	3.91	0.04	3.65	0.54	0.04	0.21
11	1-2-4	6.76	190.37	1.75	230.05	21.52	1.06	3.40	4.5492	94.55	2	80.09	0.42	3.91	0.04	3.65	0.54	0.04	0.21	0.42	3.91	0.04	3.65	0.54	0.04	0.21
12	1-2-5	9.11	236.19	0.02	261.59	34.21	1.73	3.79	5.4664	126.8	2	876.12	1.67	43.21	0.30	47.85	6.28	0.32	0.88	1.67	43.21	0.30	47.85	6.28	0.32	0.88
13	1-2-6	3.19	73.73	0.65	69.14	7.04	0.47	0.79	1.5501	82.2	2	197.40	2.06	47.57	0.42	44.60	4.54	0.30	0.51	2.06	47.57	0.42	44.60	4.54	0.30	0.51
14	2-2-4	6.91	161.55	1.45	173.50	18.07	0.84	2.15	3.8456	94.25	3	525.43	1.90	44.31	0.40	47.59	4.98	0.36	0.59	1.90	44.31	0.40	47.59	4.98	0.36	0.59
15	2-2-5	6.90	166.40	1.84	224.02	26.39	1.33	3.24	4.5012	128.45	3	756.86	1.53	41.41	0.41	49.77	5.88	0.30	0.72	1.53	41.41	0.41	49.77	5.88	0.30	0.72
16	2-2-6	3.61	55.66	0.43	46.98	5.35	0.43	0.50	1.1297	82.1	3	156.26	3.19	49.27	0.36	41.59	4.74	0.38	0.45	3.19	49.27	0.36	41.59	4.74	0.38	0.45
17	3-2-4	7.68	157.11	1.37	183.68	19.16	1.02	2.42	2.9278	94	2	590.05	2.06	42.17	0.37	49.50	5.14	0.28	0.65	2.06	42.17	0.37	49.50	5.14	0.28	0.65
18	3-2-5	6.63	180.78	1.83	212.18	23.09	1.20	2.93	4.3985	126.6	2	744.63	1.55	42.18	0.37	49.50	5.39	0.28	0.68	1.55	42.18	0.37	49.50	5.39	0.28	0.68
19	3-2-6	2.56	69.07	0.56	72.47	7.71	0.57	0.87	1.5380	81.85	2	525.69	1.98	44.91	0.36	47.12	5.01	0.37	0.58	1.98	44.91	0.36	47.12	5.01	0.37	0.58
20	3-2-7	4.00	87.18	0.76	81.79	8.13	0.54	1.00	1.8338	118	2	268.63	2.16	47.53	0.41	44.80	4.43	0.30	0.54	2.16	47.53	0.41	44.80	4.43	0.30	0.54
21	1-3-8	4.65	123.04	1.17	139.95	13.27	0.81	1.69	2.9477	83.55	2	391.66	1.63	43.21	0.41	49.14	4.66	0.28	0.66	1.63	43.21	0.41	49.14	4.66	0.28	0.66
22	1-4-12	5.23	107.96	0.89	112.79	10.86	0.87	1.38	2.2694	83.55	2	473.41	1.42	40.86	0.39	51.45	4.76	0.33	0.72	1.42	40.86	0.39	51.45	4.76	0.33	0.72
23	2-4-10	5.23	152.71	1.16	174.94	16.17	1.05	2.24	3.2543	118.75	3	296.94	2.08	47.31	0.38	44.91	4.48	0.32	0.52	2.08	47.31	0.38	44.91	4.48	0.32	0.52
24	2-4-11	5.12	133.53	1.12	140.43	14.09	0.95	1.59	3.7718	83.5	3	464.20	1.85	44.93	0.41	48.97	5.06	0.30	0.57	1.85	44.93	0.41	48.97	5.06	0.30	0.57
25	2-4-12	5.58	135.05	1.03	150.58	14.98	1.05	1.36	3.7227	83.05	3	368.14	1.83	45.72	0.41	48.74	4.52	0.32	0.48	1.83	45.72	0.41	48.74	4.52	0.32	0.48
26	3-4-10	4.87	132.39	1.05	151.49	13.46	0.88	1.60	3.0594	119.8	2	289.83	2.08	48.97	0.35	44.97	4.77	0.31	0.58	2.08	48.97	0.35	44.97	4.77	0.31	0.58
27	3-4-11	7.63	146.11	1.27	178.35	16.41	0.92	2.39	2.5054	84.2	2	587.05	1.57	42.68	0.31	48.92	4.85	0.27	0.53	1.57	42.68	0.31	48.92	4.85	0.27	0.53
28	3-4-12	5.62	166.55	1.41	212.14	20.63	1.32	2.85	2.8905	83.45	2	380.37	1.84	45.10	0.39	47.00	4.79	0.31	0.58	1.84	45.10	0.39	47.00	4.79	0.31	0.58
29	1-4-10	5.91	162.58	1.23	177.17	16.90	1.00	2.27	3.6706	95.5	2	520.97	1.77	44.36	0.34	48.37	4.80	0.27	0.62	1.77	44.36	0.34	48.37	4.80	0.27	0.62
30	1-4-11	4.23	107.96	0.89	112.79	10.86	0.87	1.38	2.2694	83.55	2	391.66	1.63	43.21	0.41	49.14	4.66	0.28	0.66	1.63	43.21	0.41	49.14	4.66	0.28	0.66
31	1-4-12	5.23	107.96	0.89	112.79	10.86	0.87	1.38	3.2543	118.4	2	510.18	1.57	42.68	0.31	48.92	4.85	0.25	0.54	1.57	42.68	0.31	48.92	4.85	0.25	0.54
32	2-5-13	5.83	149.28	1.27	152.29	16.03	0.86	1.79	3.2735	111.8	3	343.16	1.98	47.18	0.40	45.56	4.13	0.26	0.50	1.98	47.18	0.40	45.56	4.13	0.26	0.50
33	2-5-14	7.58	200.31	1.97	218.49	27.97	1.31	2.76	4.4833	88.5	3	777.41	1.65	43.51	0.43	47.40	5.07	0.28	0.60	1.65	43.51	0.43	47.40	5.07	0.28	0.60
34	2-5-15	3.65	59.24	0.47	44.37	4.99	0.32	0.48	1.1353	85.55	3	166.83	3.21	52.18	0.42	39.09	4.40	0.28	0.42	3.21	52.18	0.42	39.09	4.40	0.28	0.42
35	3-5-13	6.73	154.40	1.35	187.11	19.75	1.02	2.84	3.6713	112.85	2	596.83	1.81	41.39	0.36	50.16	5.30	0.27	0.71	1.81	41.39	0.36	50.16	5.30	0.27	0.71
36	3-5-14	8.48	208.78	2.05	204.22	25.14	1.33	2.40	3.3522	88.9	2	852.97	1.88	46.15	0.45	45.14	5.56	0.29	0.53	1.88	46.15	0.45	45.14	5.56	0.29	0.53
37	3-5-15	2.56	59.28	0.44	57.23	6.15	0.43	0.55	1.2673	85.5	2	200.35	2.02	46.77	0.34	46.16	4.66	0.34	0.51	2.02	46.77	0.34	46.16	4.66	0.34	0.51
38	3-6-16	4.47	127.17	0.86	138.18	14.41	0.75	1.83	2.7634	84.65	2	515.17	1.96	45.46	0.39	46.24	5.10	0.29	0.57	1.96	45.46	0.39	46.24	5.10	0.29	0.57
39	3-6-17	4.47	127.17	0.86	138.18	14.41	0.75	1.83	2.7634	84.65	2	515.17	1.96	45.46	0.39	46.24	5.10	0.29	0.57	1.96	45.46	0.39	46.24	5.10	0.29	0.57
40	3-6-18	4.47	127.17	0.86	138.18	14.41	0.75	1.83	2.7634	84.65	2	515.17	1.96	45.46	0.39	46.24	5.10	0.29	0.57	1.96	45.46	0.39	46.24	5.10	0.29	0.57
41	3-6-19	4.47	127.17	0.86	138.18	14.41	0.75	1.83	2.7634	84.65	2	515.17	1.96	45.46	0.39	46.24	5.10	0.29	0.57	1.96	45.46	0.39	46.24	5.10	0.29	0.57
42	3-6-20	4.47	127.17	0.86	138.18	14.41	0.75	1.83	2.7634	84.65	2	515.17	1.96	45.46	0.39	46.24	5.10	0.29	0.57	1.96	45.46	0.39	46.24	5.10	0.29	0.57
43	3-6-21	4.47	127.17	0.86	138.18	14.41	0.75	1.83	2.7634	84.65	2	515.17	1.96	45.46	0.39	46.24	5.10	0.29	0.57	1.96	45.46	0.39	46.24	5.10	0.29	0.57
44	3-6-22	4.47	127.17	0.86	138.18	14.41	0.75	1.83	2.7634	84.65	2	515.17	1.96	45.46	0.39	46.24	5.10	0.29	0.57	1.96	45.46	0.39	46.24	5.10	0.29	0.57
45	3-6-23	4.47	127.17	0.86	138.18	14.41	0.75	1.83	2.7634	84.65	2	515.17	1.96	45.46	0.39	46.24	5.10	0.29	0.57	1.96	45.46	0.39	46.24	5.10	0.29	0.57
46	3-6-24	4.47	127.17	0.86	138.18	14.41	0.75	1.83	2.7634	84.65	2	515.17	1.96	45.46	0.39	46.24	5.10	0.29	0.57	1.96	45.46	0.39	46.24	5.10	0.29	0.57
47	3-6-25	4.47	127.17	0.86																						

fatty acid excretion, p values Mann-Whitney U-test																								
fatty acid	group 1 vs 2			group 1 vs 3			group 1 vs 4			group 1 vs 5			group 1 vs 6			group 1 vs 7			group 2 vs 3					
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
total fatty acids	9	9	0.258	9	9	0.730	9	9	0.040	9	9	0.387	9	9	0.546	9	9	0.001	9	9	0.297	9	9	0.730
C14:0	9	9	0.297	9	9	0.436	9	9	0.094	9	9	0.436	9	9	0.190	9	9	0.222	9	9	0.730	9	9	0.730
C16:0	9	9	0.136	9	9	0.340	9	9	0.050	9	9	0.436	9	9	0.489	9	9	0.136	9	9	0.387	9	9	0.387
C16:1	9	9	0.666	9	9	0.730	9	9	0.136	9	9	0.605	9	9	0.077	9	9	0.136	9	9	0.730	9	9	0.730
C18:0	9	9	0.191	9	9	0.297	9	9	0.050	9	9	0.546	9	9	0.546	9	9	0.136	9	9	0.387	9	9	0.387
C18:1	9	9	0.222	9	9	0.863	9	9	0.931	9	9	0.387	9	9	0.863	9	9	0.605	9	9	0.113	9	9	0.113
C18:2	9	9	0.931	9	9	0.666	9	9	0.863	9	9	0.387	9	9	0.387	9	9	0.089	9	9	0.546	9	9	0.546
C18:3	9	9	0.190	9	9	0.666	9	9	0.387	9	9	0.863	9	9	1.000	9	9	0.031	9	9	0.340	9	9	0.340
fatty acid	group 2 vs 4			group 2 vs 5			group 2 vs 6			group 2 vs 7			group 3 vs 4			group 3 vs 5			group 3 vs 6					
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
total fatty acids	9	9	0.489	9	9	1.000	9	9	0.222	9	9	0.008	9	9	0.040	9	9	0.297	9	9	0.730	9	9	0.730
C14:0	9	9	0.546	9	9	0.605	9	9	0.931	9	9	0.063	9	9	0.222	9	9	0.931	9	9	0.666	9	9	0.666
C16:0	9	9	1.000	9	9	0.436	9	9	0.222	9	9	0.008	9	9	0.190	9	9	0.931	9	9	0.796	9	9	0.796
C16:1	9	9	0.019	9	9	0.730	9	9	0.014	9	9	0.040	9	9	0.014	9	9	0.863	9	9	0.008	9	9	0.008
C18:0	9	9	0.489	9	9	0.340	9	9	0.546	9	9	0.008	9	9	0.077	9	9	1.000	9	9	1.000	9	9	1.000
C18:1	9	9	0.190	9	9	0.730	9	9	0.094	9	9	0.436	9	9	1.000	9	9	0.340	9	9	0.863	9	9	0.863
C18:2	9	9	0.863	9	9	0.489	9	9	0.796	9	9	0.024	9	9	0.730	9	9	0.136	9	9	0.161	9	9	0.161
C18:3	9	9	0.546	9	9	0.297	9	9	0.190	9	9	0.001	9	9	0.436	9	9	0.796	9	9	0.666	9	9	0.666
fatty acid	group 3 vs 7			group 4 vs 5			group 4 vs 6			group 4 vs 7			group 5 vs 6			group 5 vs 7			group 6 vs 7					
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
total fatty acids	9	9	<0.001	9	9	1.000	9	9	0.040	9	9	<0.001	9	9	0.222	9	9	0.004	9	9	0.002	9	9	0.002
C14:0	9	9	0.040	9	9	0.113	9	9	0.730	9	9	0.011	9	9	0.340	9	9	0.136	9	9	0.040	9	9	0.040
C16:0	9	9	0.011	9	9	0.161	9	9	0.161	9	9	0.002	9	9	1.000	9	9	0.050	9	9	0.077	9	9	0.077
C16:1	9	9	0.019	9	9	0.019	9	9	0.730	9	9	1.000	9	9	0.011	9	9	0.019	9	9	0.796	9	9	0.796
C18:0	9	9	0.006	9	9	0.094	9	9	0.222	9	9	0.001	9	9	0.863	9	9	0.063	9	9	0.050	9	9	0.050
C18:1	9	9	0.546	9	9	0.387	9	9	0.931	9	9	0.605	9	9	0.489	9	9	0.605	9	9	0.489	9	9	0.489
C18:2	9	9	0.031	9	9	0.297	9	9	0.436	9	9	0.040	9	9	0.546	9	9	0.011	9	9	0.008	9	9	0.008
C18:3	9	9	0.002	9	9	0.340	9	9	0.489	9	9	<0.001	9	9	1.000	9	9	0.014	9	9	0.008	9	9	0.008

p<0.05

Fatty acid balance

group	cage#	GC sample#	total fatty acids (μmol/g feces)	total feces (g)	average weight (g)	days	fatty acids excretion (μmol/100 gr mouse/day)	food intake (g)	fatty acids uptake (μmol/100 gr mouse/day)	cholesterol balance (μmol/100 gr mouse/day)
	1,2	1:1-1	241.33	3.075	123.6	2	300.20	23.2	5283.22	4983.02
	3,4	1:1-2	292.24	2.4897	87.25	2	416.95	18	5806.79	5389.84
	5	1:1-3	345.18	2.2946	88.55	2	447.24	16.8	5340.11	4892.87
	1,2	2:1-1	208.40	4.682	122.45	3	266.18	36.8	5639.32	5373.15
	3,4	2:1-2	246.11	3.7789	86.55	3	358.19	28.8	6244.01	5885.82
	5	2:1-3	326.56	3.4106	88.2	3	420.92	25.6	5446.40	5025.48
	1,2	3:1-1	304.96	3.5754	121.65	2	448.15	20.2	4673.78	4225.64
	3,4	3:1-2	310.59	2.8781	86.55	2	516.42	15.3	4975.69	4459.27
	5	3:1-3	290.07	2.7589	88.05	2	454.44	13.8	4411.43	3956.96
							403.19			4910.23
							80.09			611.93
	6	1:2-4	454.92	2.7619	94.55	2	664.43	19.9	5924.08	5259.65
	7,8	1:2-5	546.64	4.0581	126.6	2	876.12	27.7	6158.51	5282.39
	9,10	1:2-6	155.01	2.0935	82.2	2	197.40	18.3	5581.42	5384.03
	6	2:2-4	364.58	4.075	94.25	3	525.43	28.8	5733.89	5208.45
	7,8	2:2-5	450.12	6.371	126.45	3	755.96	45.4	6737.13	5981.17
	9,10	2:2-6	112.97	3.4074	82.1	3	156.29	28.2	6445.31	6289.03
	6	3:2-4	372.45	2.9279	94	2	580.05	16.7	5000.55	4420.50
	7,8	3:2-5	428.65	4.3965	126.6	2	744.63	23.8	5246.96	4502.33
	9,10	3:2-6	153.80	2.4575	81.85	2	230.89	13.2	4539.25	4308.36
AVERAGE							525.69			5181.77
							268.58			682.54
	11,12,13	1:3-7	183.38	3.4597	118	2	268.83	26.2	6249.55	5980.71
	15	1:3-8	284.77	2.2984	83.55	2	391.86	16.5	5558.62	5166.76
	14,16,17	1:3-9	334.26	2.3454	82.8	2	473.41	18.3	6220.85	5747.45
	11,12,13	2:3-7	175.80	5.8147	118.75	3	286.94	44.7	7063.37	6776.43
	15	2:3-8	308.29	3.7718	83.5	3	464.20	28.3	6359.72	5895.52
	14,16,17	2:3-9	243.12	3.7727	83.05	3	368.14	29.3	6620.12	6251.98
	11,12,13	3:3-7	160.36	4.025	119.6	2	269.83	23.7	5577.59	5307.76
	15	3:3-8	221.78	2.5265	84.2	2	332.70	13.6	4546.28	4213.57
SD	14,16,17	3:3-9	351.76	2.6905	83.45	2	567.05	14.7	4958.16	4391.11
							380.33			5525.70
							103.97			841.88
	18	1:4-10	367.08	1.689	59.5	2	520.97	12	5676.67	5155.70
	19	1:4-11	238.78	3.1432	116.4	2	322.39	21.7	5247.30	4924.91
	20,21	1:4-12	351.76	3.2545	112.2	2	510.16	24	6020.71	5510.55
	18	2:4-10	353.44	2.7133	58.85	3	543.18	19.8	6313.30	5770.13
	19	2:4-11	296.84	4.6407	116.55	3	393.97	35.2	5667.20	5273.22
	20,21	2:4-12	289.63	5.2075	111.85	3	449.48	38.2	6408.63	5959.15
	18	3:4-10	305.94	2.041	58.7	2	531.88	11.3	5418.38	4886.51
AVERAGE	19	3:4-11	351.28	3.4464	117.45	2	515.39	18.7	4481.44	3966.05
	20,21	3:4-12	410.51	3.9549	112.9	2	719.00	22.6	5634.35	4915.34
							500.71			5151.28
							110.09			587.51
	22	1:5-13	291.81	3.195	110.7	2	421.11	21.5	5466.64	5045.52
	24,25	1:5-14	499.96	2.9408	88.35	2	832.08	19.6	6244.23	5412.15
	23,26,27	1:5-15	194.27	2.6399	84.6	2	303.10	19.5	6487.74	6184.64
	22	2:5-13	327.35	4.9712	111.6	3	486.06	36.5	6137.15	5651.09
	24,25	2:5-14	460.38	4.4833	88.5	3	777.41	32.2	6827.33	6049.92
	23,26,27	2:5-15	113.53	3.767	85.55	3	166.63	30.3	6646.00	6479.38
SD	22	3:5-13	373.01	3.6113	112.85	2	596.83	18.7	4664.12	4067.29
	24,25	3:5-14	452.42	3.3522	88.9	2	852.97	28	8865.14	8012.16
	23,26,27	3:5-15	126.73	2.7034	85.5	2	200.35	14.5	4773.44	4573.08
							515.17			5719.47
							265.81			1159.56
	28,29	1:6-16	317.21	2.5036	87.1	2	455.90	17.6	5687.53	5231.63
	31	1:6-17	243.23	2.7083	112.8	2	292.00	20.3	5065.43	4773.43
	30,32	1:6-18	260.59	2.3554	85.4	2	359.37	17.2	5668.91	5309.54
	28,29	2:6-16	266.16	3.9684	87.15	3	403.99	29.7	6394.80	5990.81
	31	2:6-17	142.20	3.9678	112.45	3	187.25	31	5172.97	5005.72
AVERAGE	30,32	2:6-18	194.69	3.5666	84.55	3	273.76	27.9	6191.97	5918.21
	28,29	3:6-16	340.17	2.9076	87.65	2	564.22	16.5	5298.60	4734.38
	31	3:6-17	179.90	3.2449	111.95	2	260.72	17.1	4299.33	4038.62
	30,32	3:6-18	287.68	2.7643	84.65	2	469.72	15	4987.62	4517.90
							360.77			5057.81
							124.47			634.70
	33,34,35	1:7-19	96.09	1.9697	81.35	2	116.33	16.8	5812.74	5696.42
	36,37	1:7-20	93.92	2.0798	82.25	2	118.75	16.9	5783.36	5664.61
	38,39	1:7-21	154.30	2.6705	101.05	2	203.89	21.9	6100.10	5896.21
	33,34,35	2:7-19	137.09	3.4477	82.35	3	191.32	29.2	6653.61	6462.29
SD	36,37	2:7-20	95.99	3.2646	82.75	3	126.23	26.5	6009.19	5882.96
	38,39	2:7-21	144.75	4.3059	101.95	3	203.79	35	6441.97	6238.18
	33,34,35	3:7-19	163.94	2.5117	83.5	2	246.56	15.7	5292.28	5045.71
	36,37	3:7-20	106.31	2.4369	83.35	2	155.41	15	5065.41	4910.00
	38,39	3:7-21	168.41	3.4107	103.2	2	278.30	19.8	5400.26	5121.96
							182.29			5657.59
							57.68			537.83

molw

C14:0	228.4	MYSTIC ACID	diet: 15 % fat=	0.563	mmol per g diet
C16:0	256.4	PALMITIC ACID			
C16:1	254.4	PALMITOLEIC ACID			
C18:0	284.5	STEARIC ACID			
C18:1	282.5	OLEIC ACID			
C18:2	280.5	LINOLEIC ACID			
C18:3	278.5	LINOLENIC ACID			

average 266.46 g/mol

fatty acid balance, p values Mann-Whitney U-test																					
fatty acid balance	group 1 vs 2			group 1 vs 3			group 1 vs 4			group 1 vs 5			group 1 vs 6			group 1 vs 7			group 2 vs 3		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
balance	9	9	0.436	9	9	0.113	9	9	0.489	9	9	0.063	9	9	0.730	9	9	0.019	9	9	0.546
fatty acid balance	group 2 vs 4			group 2 vs 5			group 2 vs 6			group 2 vs 7			group 3 vs 4			group 3 vs 5			group 3 vs 6		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
balance	9	9	0.863	9	9	0.258	9	9	0.796	9	9	0.258	9	9	0.222	9	9	0.863	9	9	0.297
fatty acid balance	group 3 vs 7			group 4 vs 5			group 4 vs 6			group 4 vs 7			group 5 vs 6			group 5 vs 7			group 6 vs 7		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
balance	9	9	1.000	9	9	0.222	9	9	0.730	9	9	0.136	9	9	0.136	9	9	0.931	9	9	0.094

p<0.05

p<0.05

Appendix F. Intestinal cholesterol absorption

Cholesterol absorption

Oral gavage mbx:	14 C dpm	76083.3	3H dpm	92065.2
		76547.5		92196.7
		75205.8		90472.4
		74174.5		88575.4
		73763.5		92526.8
		75689.7		92548.9
	average:	75241	average:	91388
14C/3H dosing:		0.823		

Mouse#	14C dpm feces	3H dpm feces	14/3H feces	% cholesterol absorption
1	7900.00	17857.0	0.442	
	9070.58	20224.1	0.449	
	8759.79	19669.7	0.445	
	AVERAGE		0.445	45.89
2	7943.46	17369.9	0.457	
	9442.29	20044.0	0.471	
	9027.49	19314.7	0.467	
	AVERAGE		0.465	43.48
3	9996.01	16226.5	0.616	
	10914.90	17696.9	0.617	
	11495.20	19154.0	0.600	
	AVERAGE		0.611	25.78
4	8402.11	15319.6	0.548	
	8966.49	16793.3	0.534	
	9580.47	16635.3	0.575	
	AVERAGE		0.552	32.90
5	10754.70	19111.4	0.563	
	11858.50	20818.2	0.570	
	12382.30	21352.2	0.580	
	AVERAGE		0.571	30.67
6	8918.47	19316.9	0.462	
	9795.44	21221.6	0.462	
	9570.76	20766.7	0.461	
	AVERAGE		0.461	43.95
7	11342.40	19935.8	0.569	
	10247.10	17921.2	0.572	
	11420.10	19737.7	0.579	
	AVERAGE		0.573	30.38
8	10160.50	22122.3	0.459	
	11533.30	24951.5	0.462	
	11375.70	24849.9	0.458	
	AVERAGE		0.460	44.15
9	9360.62	18676.0	0.501	
	9242.62	18523.6	0.499	
	9409.35	18338.6	0.513	
	AVERAGE		0.504	38.73
10	10257.10	18752.4	0.547	
	11572.10	20963.2	0.552	
	11790.60	21582.7	0.546	
	AVERAGE		0.548	33.38
11	7215.69	13209.8	0.546	
	6854.01	12708.1	0.539	
	8420.46	14817.4	0.568	
	AVERAGE		0.551	33.03
12	7620.85	13562.2	0.562	
	7592.86	13608.7	0.558	
	7701.77	13685.9	0.563	
	AVERAGE		0.561	31.87
13	10718.20	22219.9	0.482	
	9765.43	20159.2	0.484	
	11045.10	22642.2	0.488	
	AVERAGE		0.485	41.10
14	8973.56	15531.3	0.578	
	10118.90	17347.9	0.583	
	10188.80	17603.2	0.579	
	AVERAGE		0.580	29.56
15	11415.30	21059.0	0.542	
	11521.70	21372.1	0.539	
	9926.39	19181.1	0.518	
	AVERAGE		0.533	35.27
16	9713.21	17538.7	0.554	
	10522.10	18995.2	0.554	
	10357.80	18714.0	0.553	
	AVERAGE		0.554	32.73
17	10622.10	17065.5	0.622	
	10309.40	16759.2	0.615	
	9363.58	15186.6	0.617	
	AVERAGE		0.618	24.92
18	9289.29	18158.2	0.512	
	8492.80	16878.2	0.503	
	9169.78	18096.8	0.507	
	AVERAGE		0.507	38.39
19	7720.92	15528.4	0.497	
	8438.85	17238.0	0.490	
	8631.31	17527.8	0.492	
	AVERAGE		0.493	40.11
20	10252.90	18655.8	0.550	
	9662.34	17086.2	0.566	
	10589.00	19019.0	0.557	
	AVERAGE		0.557	32.30

Mouse#	14C dpm feces	3H dpm feces	14/3H feces	% cholesterol absorption
21	8632.76	18263.4	0.473	
	7757.78	18543.7	0.469	
	8732.12	18151.9	0.481	
	AVERAGE		0.474	42.39
22	9317.58	18797.2	0.496	
	10349.10	20750.2	0.499	
	10995.40	21398.2	0.514	
	AVERAGE		0.503	38.93
23	12726.80	21922.9	0.581	
	11922.70	20859.7	0.572	
	10824.40	19073.0	0.568	
	AVERAGE		0.573	30.37
24	11803.80	20531.4	0.575	
	11509.80	19930.8	0.577	
	10446.20	17926.4	0.583	
	AVERAGE		0.578	29.74
25	9824.33	17823.8	0.551	
	10536.10	19638.0	0.537	
	10819.00	19717.7	0.549	
	AVERAGE		0.545	33.74
26	9944.17	17861.6	0.557	
	9896.95	17830.0	0.555	
	9024.08	16251.3	0.555	
	AVERAGE		0.556	32.50
27	11012.10	20530.5	0.536	
	12345.10	22826.4	0.541	
	12611.60	23740.9	0.531	
	AVERAGE		0.536	34.87
28	10539.20	19138.3	0.551	
	11997.90	21840.1	0.549	
	11733.20	21335.4	0.550	
	AVERAGE		0.550	33.19
29	8467.17	19713.7	0.430	
	8615.23	19837.0	0.434	
	7791.76	18343.0	0.425	
	AVERAGE		0.430	47.82
30	10611.20	16118.3	0.658	
	11689.60	17565.2	0.664	
	11704.20	17995.9	0.650	
	AVERAGE		0.658	20.11
31	6797.41	15090.2	0.450	
	8479.36	18363.5	0.462	
	8042.25	17655.2	0.456	
	AVERAGE		0.456	44.62
32	9667.22	18299.0	0.528	
	10332.00	19525.1	0.529	
	10290.40	19416.7	0.530	
	AVERAGE		0.529	35.72
33	9274.67	18965.3	0.489	
	9043.46	18555.8	0.487	
	8359.95	17064.5	0.490	
	AVERAGE		0.489	40.63
34	8337.87	16938.5	0.492	
	8978.72	18142.5	0.495	
	9290.98	18500.1	0.502	
	AVERAGE		0.496	39.69
35	9260.73	21618.5	0.428	
	8926.69	20655.8	0.432	
	8216.57	19301.2	0.426	
	AVERAGE		0.429	47.92
36	7368.65	17101.3	0.432	
	7801.01	18082.3	0.431	
	8272.11	19128.3	0.432	
	AVERAGE		0.432	47.53
37	8775.47	18331.8	0.479	
	8627.50	18170.1	0.475	
	7935.44	16944.8	0.468	
	AVERAGE		0.474	42.43
38	8265.72	17166.9	0.481	
	7672.71	16099.9	0.477	
	7372.15	15533.3	0.475	
	AVERAGE		0.478	41.99
39	6512.96	13424.4	0.485	
	7565.00	15510.5	0.488	
	7444.81	15298.9	0.487	
	AVERAGE		0.487	40.90
40	8569.40	17514.8	0.489	
	9540.76	19514.6	0.489	
	9523.59	19814.4	0.481	
	AVERAGE		0.486	40.93
41	8330.02	16006.8	0.520	
	9412.73	17737.5	0.531	
	9427.18	17550.5	0.537	
	AVERAGE		0.529	35.69
42	9607.51	19624.7	0.490	
	9889.25	19941.0	0.496	
	9677.26	19580.0	0.494	
	AVERAGE		0.493	40.08
43	10990.90	20009.6	0.549	
	9651.99	17422.8	0.554	
	11648.90	20445.0	0.570	
	AVERAGE		0.558	32.26
44	9120.82	17747.4	0.514	
	10887.20	20878.9	0.521	
	11023.60	21294.1	0.518	
	AVERAGE		0.518	37.12
45	7559.63	14314.6	0.528	
	8832.90	16604.8	0.532	
	9369.62	17203.4	0.545	
	AVERAGE		0.535	35.02

Mouset#	14C dpm feces	3H dpm feces	14/3H feces	% cholesterol absorption
46	13292.00	23039.1	0.577	
	12025.90	20891.1	0.576	
	8154.44	14093.8	0.579	
AVERAGE			0.577	29.90
47	7073.99	11977.8	0.591	
	8303.55	13879.6	0.598	
	8312.14	13866.1	0.599	
AVERAGE			0.596	27.59
48	8105.89	14355.8	0.565	
	9177.91	16142.2	0.569	
	8404.42	14482.0	0.580	
AVERAGE			0.571	30.62
49	9083.21	16293.9	0.557	
	10025.30	17848.5	0.562	
	10551.50	18335.8	0.575	
AVERAGE			0.565	31.38
50	7998.17	17522.8	0.456	
	9589.24	20188.8	0.475	
	9485.67	20422.8	0.464	
AVERAGE			0.465	43.48
51	8469.79	18261.6	0.464	
	9318.33	19807.5	0.470	
	9497.10	20101.5	0.472	
AVERAGE			0.469	43.04
52	8613.92	19823.8	0.435	
	8699.27	19531.5	0.445	
	7646.35	17499.6	0.437	
AVERAGE			0.439	46.68
53	10299.70	20630.3	0.499	
	9010.87	17880.3	0.504	
	10286.90	20622.3	0.499	
AVERAGE			0.501	39.18
54	8794.09	18229.9	0.482	
	9327.04	19419.7	0.480	
	9893.72	20500.1	0.483	
AVERAGE			0.482	41.48
55	12083.00	22068.1	0.548	
	11744.30	21734.5	0.540	
	10287.20	19073.9	0.539	
AVERAGE			0.542	34.11
56	7269.37	16991.1	0.428	
	8544.20	19484.0	0.439	
	8283.26	19099.1	0.434	
AVERAGE			0.433	47.36
57	7909.58	18224.2	0.434	
	7041.53	16492.5	0.427	
	8328.59	19378.2	0.430	
AVERAGE			0.430	47.73
58	7120.23	17677.8	0.403	
	8146.99	19926.7	0.409	
	8204.53	19132.5	0.429	
AVERAGE			0.413	49.77
59	8975.84	20407.6	0.440	
	9015.56	19983.1	0.451	
	7523.90	17563.4	0.428	
AVERAGE			0.440	46.58
60	7587.01	17288.6	0.439	
	8719.17	19191.4	0.454	
	8811.04	19513.2	0.452	
AVERAGE			0.448	45.55
61	7582.08	18143.7	0.418	
	8218.83	20142.1	0.408	
	8867.68	21451.9	0.413	
AVERAGE			0.413	49.82
62	8808.83	21295.7	0.414	
	8584.87	20799.9	0.413	
	7447.43	18297.0	0.407	
AVERAGE			0.411	50.06
63	7758.45	17723.8	0.438	
	6896.60	15907.7	0.434	
	7801.31	18207.4	0.428	
AVERAGE			0.433	47.37
64	8952.17	21000.2	0.426	
	10058.20	23550.7	0.427	
	10221.10	23744.5	0.430	
AVERAGE			0.428	48.02
65	8171.80	18430.1	0.443	
	7457.41	17029.8	0.438	
	8538.29	19260.2	0.443	
AVERAGE			0.442	46.36
66	8381.83	20381.9	0.411	
	7890.89	19487.6	0.405	
	7086.95	17369.0	0.408	
AVERAGE			0.408	50.43
67	9800.20	23428.2	0.418	
	11238.90	26990.4	0.416	
	11334.00	26923.6	0.421	
AVERAGE			0.419	49.16
68	6081.05	14094.2	0.431	
	6823.98	15200.4	0.449	
	8967.67	16000.0	0.435	
AVERAGE			0.439	46.72
69	7436.52	18241.1	0.408	
	8308.52	20465.5	0.406	
	8710.60	21554.3	0.404	
AVERAGE			0.406	50.69
70	8595.56	21140.4	0.407	
	8773.69	21390.2	0.410	
	7650.67	18677.5	0.410	
AVERAGE			0.409	50.34

Group#	Mouse#	% cholesterol absorption
	1	45.89
	2	43.48
	3	25.78
	4	32.90
	5	30.67
	6	43.95
	7	30.38
	8	44.15
	9	38.73
	10	33.38
		36.9
		7.2
2	11	33.03
2	12	31.87
2	13	41.10
2	14	29.56
2	15	35.27
2	16	32.73
2	17	24.92
2	18	38.39
2	19	40.11
2	20	32.30
AVERAGE		33.9
SD		5.0
	21	42.39
	22	38.93
	23	30.37
	24	29.74
	25	33.74
	26	32.50
	27	34.87
	28	33.19
	29	47.82
	30	20.11
		34.4
		7.5
4	31	44.62
4	32	35.72
4	33	40.63
4	34	39.69
4	35	47.92
4	36	47.53
4	37	42.43
4	38	41.99
4	39	40.90
4	40	40.93
AVERAGE		42.2
SD		3.7
5	41	35.69
5	42	40.08
5	43	32.26
5	44	37.12
5	45	35.02
5	46	29.90
5	47	27.59
5	48	30.62
5	49	31.38
5	50	43.48
AVERAGE		34.3
SD		4.9
6	51	43.04
6	52	46.68
6	53	39.18
6	54	41.48
6	55	34.11
6	56	47.36
6	57	47.73
6	58	49.77
6	59	46.58
6	60	45.55
AVERAGE		44.1
SD		4.7
7	61	49.82
7	62	50.06
7	63	47.37
7	64	48.02
7	65	46.36
7	66	50.43
7	67	49.16
7	68	46.72
7	69	50.69
7	70	50.34
AVERAGE		48.9
SD		1.6

Intestinal cholesterol absorption, p values Mann-Whitney U-test																					
week	group 1 vs 2			group 1 vs 3			group 1 vs 4			group 1 vs 5			group 1 vs 6			group 1 vs 7			group 2 vs 3		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
8/9	10		0.315			0.529	10		0.143			0.353	10		0.015			<0.001	10		0.796
week	group 2 vs 4			group 2 vs 5			group 2 vs 6			group 2 vs 7			group 3 vs 4			group 3 vs 5			group 3 vs 6		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
8/9	10	10	<0.001	10		0.912	10	10	<0.001	10	10	<0.001	10		0.009			1.000	10		0.005
week	group 3 vs 7			group 4 vs 5			group 4 vs 6			group 4 vs 7			group 5 vs 6			group 5 vs 7			group 6 vs 7		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
8/9		10	<0.001	10	10	0.002	10	10	0.315	10	10	<0.001		10	0.001	10	10	<0.001	10	10	0.003
																				p<0.05	

p<0.05

Appendix G. Liver weight and perigonadal fat weight and lipid contents liver

G1. Liver weight and perigonadal fat weight

group	Mouse#	ear tag		bodyweight (g)	perigonadal fat weight (g)	liver weight (g)	liver weight as % of bw (%)
		L	R				
	1	0	1	34.5	1.06	2.19	6.35
	2	1	2	31.9	0.72	2	6.27
	3	0	0	30.4	0.68	1.66	5.46
	4	2	0	28.9	0.39	1.41	4.88
	5	0	0	32.4	0.81	1.68	5.19
	6	0	2	30.1	0.57	1.7	5.65
	7	1	1	28.4	0.63	1.61	5.67
	8	0	0	32.8	0.94	1.77	5.40
	9	0	2	32	0.89	1.68	5.25
	10	1	2	28	0.48	1.49	5.32
					0.72	1.72	5.54
					0.21	0.23	0.46
	11	1	0	35.2	1.16	2.77	7.87
	12	2	1	30.3	0.53	1.17	3.86
	13	0	2	34	0.92	1.88	5.53
	14	0	1	34.9	0.78	2.53	7.25
	15	1	0	30.4	0.55	1.68	5.53
	16	0	1	31.3	0.43	1.23	3.93
	17	2	0	32.9	0.50	1.35	4.10
	18	0	0	29.2	0.74	1.84	6.30
	19	2	1	28.8	0.87	1.53	5.31
	20	1	0	31.2	0.92	1.98	6.35
AVERAGE					0.74	1.80	5.60
SD					0.23	0.53	1.38
	21	0	1	31	0.77	2	6.45
	22	0	2	31	0.74	2.23	7.19
	23	0	1	33.6	0.59	2.27	6.76
	24	1	1	29.8	0.37	1.68	5.64
	25	1	0	27.7	0.42	1.56	5.63
	26	0	1	30.9	0.64	2.06	6.67
	27	2	0	31.2	0.75	1.85	5.93
	28	1	2	26.3	0.44	1.51	5.74
	29	0	2	32.3	1.05	2.42	7.49
	30	1	0	29.6	0.33	2.14	7.23
					0.61	1.97	6.47
					0.23	0.31	0.71
	31	1	0	28.3	0.24	3.46	12.23
	32	0	2	28.5	0.26	3.68	12.91
	33	0	0	29.1	0.43	3.69	12.68
	34	1	0	29.8	0.42	3.93	13.19
	35	0	1	31.1	0.45	4.23	13.60
	36	0	2	26.4	0.39	1.94	7.35
	37	0	0	27.6	0.23	3.62	13.12
	38	1	1	30.1	0.30	3.9	12.96
	39	0	0	27.8	0.34	4.03	14.50
	40	1	1	28.3	0.32	3.39	11.98
AVERAGE					0.34	3.59	12.45
SD					0.08	0.63	1.92
	41	1	0	31.8	0.82	1.9	5.97
	42	0	1	25.9	0.54	1.71	6.60
	43	1	1	29.6	0.65	2.48	8.38
	44	1	2	29.2	0.39	1.69	5.79
	45	1	2	29.6	0.51	2.25	7.60
	46	2	0	30.2	0.57	2.46	8.15
	47	0	1	31.9	0.44	1.47	4.61
	48	1	1	30.1	0.52	1.88	6.25
	49	0	0	29.2	0.86	1.82	6.23
	50	1	2	29.6	0.47	2.14	7.23
AVERAGE					0.58	1.98	6.68
SD					0.16	0.34	1.16
	51	0	1	28	0.23	3.9	13.93
	52	1	0	31.2	0.34	4.87	15.61
	53	1	2	25.9	0.14	4.1	15.83
	54	1	0	27.5	0.19	4.17	15.16
	55	0	2	26.9	0.25	4.13	15.35
	56	0	0	25.4	0.30	3.48	13.70
	57	0	1	26.6	0.41	3.13	11.77
	58	0	2	27.8	0.37	4.11	14.78
	59	2	2	30	0.31	4.74	15.80
	60	2	1	26.4	0.21	4.33	16.40
AVERAGE					0.28	4.10	14.83
SD					0.09	0.52	1.37
	61	2	0	29.9	0.34	4.29	14.35
	62	1	0	30	0.36	4.33	14.43
	63	0	2	28.7	0.33	3.88	13.52
	64	0	0	30.3	0.38	4.28	14.13
	65	1	2	29.4	0.30	4.15	14.12
	66	0	0	28.3	0.30	3.85	13.60
	67	0	0	28.1	0.35	3.91	13.91
	68	2	0	28	0.32	3.83	13.68
	69	1	0	25	0.29	3.33	13.32
	70	0	1	28	0.30	3.92	14.00
AVERAGE					0.33	3.98	13.91
SD					0.03	0.30	0.37

Liverweight; perigonadal fat weight; liverweight as % of bodyweight, p values Mann-Whitney U-test																								
tissue	group 1 vs 2			group 1 vs 3			group 1 vs 4			group 1 vs 5			group 1 vs 6			group 1 vs 7			group 2 vs 3					
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
perigonadal fat	10	10	0.912	10	10	0.315	10	10	<0.001	10	10	0.123	10	10	<0.001	10	10	<0.001	10	10	0.190	10	10	0.190
liver	10	10	0.971	10	10	0.075	10	10	<0.001	10	10	0.043	10	10	<0.001	10	10	<0.001	10	10	0.247	10	10	0.247
liver as % of bodyweight	10	10	0.796	10	10	0.003	10	10	<0.001	10	10	0.015	10	10	<0.001	10	10	0.003	10	10	0.089	10	10	0.089
tissue	group 2 vs 4			group 2 vs 5			group 2 vs 6			group 2 vs 7			group 3 vs 4			group 3 vs 5			group 3 vs 6					
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
perigonadal fat	10	10	<0.001	10	10	0.123	10	10	<0.001	10	10	<0.001	10	10	0.003	10	10	0.971	10	10	<0.001	10	10	<0.001
liver	10	10	<0.001	10	10	0.315	10	10	<0.001	10	10	<0.001	10	10	<0.001	10	10	0.912	10	10	<0.001	10	10	<0.001
liver as % of bodyweight	10	10	<0.001	10	10	0.105	10	10	<0.001	10	10	<0.001	10	10	<0.001	10	10	0.529	10	10	<0.001	10	10	<0.001
tissue	group 3 vs 7			group 4 vs 5			group 4 vs 6			group 4 vs 7			group 5 vs 6			group 5 vs 7			group 6 vs 7					
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
perigonadal fat	10	10	<0.001	10	10	<0.001	10	10	0.105	10	10	0.796	10	10	<0.001	10	10	<0.001	10	10	0.190	10	10	0.190
liver	10	10	<0.001	10	10	<0.001	10	10	0.043	10	10	0.105	10	10	<0.001	10	10	<0.001	10	10	0.481	10	10	0.481
liver as % of bodyweight	10	10	<0.001	10	10	<0.001	10	10	0.003	10	10	0.003	10	10	<0.001	10	10	<0.001	10	10	0.029	10	10	0.029

p<0.05

G2. Lipid contents liver

Liverhomogenates; protein concentration

mouse	measured prot conc (mg/ml)		dilution	Protein conc (mg/ml)
	well 1	well 2		
1	0.551	0.56	20	11.11
13	0.292	0.301	20	5.93
21	0.701	0.686	20	13.87
31	1.058	1.098	20	21.56
45	0.384	0.389	20	7.73
51	0.468	0.46	20	9.28
61	1.208	1.279	20	24.87
2	0.468	0.46	20	9.28
14	0.479	0.468	20	9.47
22	0.596	0.587	20	11.83
32	1.011	0.949	20	19.60
46	0.707	0.692	20	13.99
52	1.406	1.44	20	28.46
62	1.185	1.185	20	23.70
3	0.35	0.341	20	6.91
17	0.59	0.579	20	11.69
23	0.768	0.772	20	15.40
33	0.622	0.607	20	12.29
41	0.484	0.494	20	9.78
53	1.022	1.091	20	21.13
63	0.942	0.945	20	18.87
4	0.75	0.734	20	14.84
11	0.734	0.71	20	14.44
24	0.508	0.516	20	10.24
34	0.747	0.722	20	14.69
42	0.407	0.407	20	8.14
54	1.054	1.047	20	21.01
64	0.778	0.765	20	15.43
6	0.489	0.468	20	9.57
12	0.185	0.187	20	3.72
25	0.263	0.274	20	5.37
35	0.822	0.829	20	16.51
43	0.546	0.573	20	11.19
55	1.251	1.231	20	24.82
65	1.627	1.608	20	32.35
5	0.524	0.529	20	10.53
15	0.579	0.579	20	11.58
26	0.533	0.541	20	10.74
36	0.296	0.321	20	6.17
44	0.758	0.749	20	15.07
56	0.707	0.71	20	14.17
66	0.453	0.455	20	9.08
7	0.468	0.478	20	9.46
16	0.433	0.425	20	8.58
27	0.438	0.438	20	8.76
37	1.099	1.151	20	22.50
47	0.13	0.13	20	2.60
57	0.93	0.934	20	18.64
67	1.953	2.04	20	39.93
8	0.428	0.415	20	8.43
18	0.36	0.351	20	7.11
28	0.463	0.458	20	9.21
38	1.124	1.147	20	22.71
48	0.481	0.465	20	9.46
58	0.372	0.363	20	7.35
68	0.779	0.801	20	15.80
9	0.465	0.478	20	9.43
19	0.568	0.554	20	11.22
29	0.776	0.755	20	15.31
39	0.173	0.169	20	3.42
49	0.62	0.612	20	12.32
59	2.018	2.035	20	40.53
69	0.692	0.674	20	13.66
10	0.321	0.314	20	6.35
20	0.341	0.341	20	6.82
40	0.239	0.235	20	4.74
60	0.355	0.348	20	7.03
30	0.175	0.177	20	3.52
50	0.743	0.728	20	14.71
70	1.444	1.462	20	29.06

HPTLC measurements, liver lipids:

mouse#	Peak#	Name	Width [mm]	Pos [mm]	od-Bkg	µg lipid/ 200 µg protein
1	1	Free cholesterol	4.57	6.73	62604	5.44
	2	Triglycerides	8.13	21.84	287988	50.09
	3	Internal standard	3.94	27.3	22996	2.00
	4	Cholesterol ester	4.19	35.31	105220	9.15
13	1	Free cholesterol	4.57	6.22	52524	4.33
	2	Triglycerides	6.22	19.94	197880	32.62
	3	Internal standard	4.06	26.42	24262	2.00
	4	Cholesterol ester	5.08	34.8	125607	10.35
21	1	Free cholesterol	4.57	5.97	43766	3.24
	2	Triglycerides	7.87	19.68	251729	37.32
	3	Internal standard	3.94	26.16	26977	2.00
	4	Cholesterol ester	4.06	34.42	68880	5.11
31	1	Free cholesterol	3.81	6.35	34466	2.55
	2	Triglycerides	5.46	19.43	123478	18.26
	3	Internal standard	4.19	26.42	27048	2.00
	4	Cholesterol ester	4.32	34.8	67378	4.98
45	1	Free cholesterol	4.06	6.35	52422	4.22
	2	Triglycerides	6.99	20.32	260322	41.92
	3	Internal standard	4.19	26.42	24841	2.00
	4	Cholesterol ester	4.83	34.67	141768	11.41
51	1	Free cholesterol	4.57	6.48	50585	4.09
	2	Triglycerides	7.62	20.07	265253	42.87
	3	Internal standard	4.32	26.29	24749	2.00
	4	Cholesterol ester	4.7	34.42	127056	10.27
61	1	Free cholesterol	4.19	6.48	48224	3.38
	2	Triglycerides	7.75	20.07	248371	34.87
	3	Internal standard	4.06	26.16	28494	2.00
	4	Cholesterol ester	4.32	34.16	130184	9.14
2	1	Free cholesterol	4.57	6.99	44510	3.51
	2	Triglycerides	6.73	20.32	192428	30.37
	3	Internal standard	4.06	26.54	25345	2.00
	4	Cholesterol ester	4.45	34.54	79085	6.24
14	1	Free cholesterol	4.32	6.86	54357	4.54
	2	Triglycerides	7.11	20.83	258846	43.24
	3	Internal standard	4.06	26.16	23946	2.00
	4	Cholesterol ester	4.32	33.66	89672	7.49
22	1	Free cholesterol	4.06	6.86	57023	5.09
	2	Triglycerides	7.49	21.97	299353	53.39
	3	Internal standard	3.17	26.29	22427	2.00
	4	Cholesterol ester	3.81	33.66	84768	7.56
32	1	Free cholesterol	4.45	7.62	39787	3.78
	2	Triglycerides	5.71	23.24	115041	21.84
	3	Internal standard	3.81	27.56	21069	2.00
	4	Cholesterol ester	4.19	34.16	81470	7.73
46	1	Free cholesterol	4.45	6.48	51326	4.75
	2	Triglycerides	8.64	22.86	318787	59.01
	3	Internal standard	3.17	27.56	21609	2.00
	4	Cholesterol ester	4.57	35.31	111253	10.30
52	1	Free cholesterol	4.83	6.48	41327	3.28
	2	Triglycerides	8	20.83	242241	38.43
	3	Internal standard	4.32	26.54	25212	2.00
	4	Cholesterol ester	4.57	34.54	94035	7.46
62	1	Free cholesterol	4.45	6.22	46397	3.41
	2	Triglycerides	6.6	19.56	221527	32.53
	3	Internal standard	3.94	25.65	27238	2.00
	4	Cholesterol ester	4.83	34.16	133113	9.77
3	1	Free cholesterol	4.95	5.97	35829	2.77
	2	Triglycerides	4.83	18.41	104710	16.20
	3	Internal standard	4.06	25.4	25858	2.00
	4	Cholesterol ester	3.94	33.78	42916	3.32
17	1	Free cholesterol	4.45	6.22	44899	4.06
	2	Triglycerides	6.6	20.07	206251	37.26
	3	Internal standard	3.68	26.16	22142	2.00
	4	Cholesterol ester	4.7	34.29	78487	7.09
23	1	Free cholesterol	4.06	6.35	51469	3.99
	2	Triglycerides	6.86	21.34	216844	33.62
	3	Internal standard	3.81	26.67	25800	2.00
	4	Cholesterol ester	5.08	34.54	74388	5.77
33	1	Free cholesterol	4.57	6.86	46317	3.55
	2	Triglycerides	6.22	22.23	162768	24.94
	3	Internal standard	4.19	27.3	26102	2.00
	4	Cholesterol ester	4.57	34.92	89651	6.87

mouse#	Peak#	Name	Width [mm]	Pos [mm]	od-Bkg	µg lipid/ 200 µg protein
41	1	Free cholesterol	5.08	7.37	39765	2.88
	2	Triglycerides	5.59	22.61	132487	19.17
	3	Internal standard	4.06	27.69	27644	2.00
	4	Cholesterol ester	4.06	35.31	37392	2.71
53	1	Free cholesterol	4.19	7.24	49635	4.26
	2	Triglycerides	6.86	22.99	246286	42.23
	3	Internal standard	3.94	27.81	23327	2.00
	4	Cholesterol ester	3.94	35.31	123642	10.60
63	1	Free cholesterol	4.45	6.73	60183	5.41
	2	Triglycerides	7.49	23.11	294481	52.97
	3	Internal standard	3.3	27.43	22239	2.00
	4	Cholesterol ester	4.45	35.05	141459	12.72
4	1	Free cholesterol	4.32	7.37	38024	2.55
	2	Triglycerides	5.33	23.37	104943	14.05
	3	Internal standard	4.32	28.45	29874	2.00
	4	Cholesterol ester	3.56	36.07	26558	1.78
11	1	Free cholesterol	4.19	5.46	35962	2.99
	2	Triglycerides	8.51	21.21	307860	51.20
	3	Internal standard	3.56	26.16	24049	2.00
	4	Cholesterol ester	5.33	34.04	107934	8.98
24	1	Free cholesterol	3.94	5.46	40358	3.18
	2	Triglycerides	5.97	18.8	115325	18.19
	3	Internal standard	4.45	25.27	25364	2.00
	4	Cholesterol ester	4.95	33.66	52857	4.17
34	1	Free cholesterol	4.19	4.95	42991	3.44
	2	Triglycerides	6.48	17.02	172245	27.56
	3	Internal standard	4.06	24	24996	2.00
	4	Cholesterol ester	5.33	33.02	73646	5.89
42	1	Free cholesterol	4.45	4.57	56968	4.38
	2	Triglycerides	6.48	16	192630	29.62
	3	Internal standard	3.94	23.24	26017	2.00
	4	Cholesterol ester	5.08	32.64	123337	9.48
54	1	Free cholesterol	4.06	4.7	56224	4.15
	2	Triglycerides	6.6	15.75	215795	31.82
	3	Internal standard	3.94	23.11	27127	2.00
	4	Cholesterol ester	5.59	32.64	153105	11.29
64	1	Free cholesterol	4.06	5.21	55767	3.57
	2	Triglycerides	6.99	16	238689	30.55
	3	Internal standard	4.32	23.24	31249	2.00
	4	Cholesterol ester	6.1	32.64	162067	10.37
6	1	Free cholesterol	4.7	6.22	53651	4.19
	2	Triglycerides	5.97	19.68	199383	31.13
	3	Internal standard	3.56	26.29	25618	2.00
	4	Cholesterol ester	4.06	34.29	75588	5.90
12	1	Free cholesterol	3.94	4.45	38266	2.39
	2	Triglycerides	5.97	15.37	151763	18.95
	3	Internal standard	4.32	22.86	32037	2.00
	4	Cholesterol ester	5.59	32.13	54371	3.39
25	1	Free cholesterol	3.81	5.33	49570	3.72
	2	Triglycerides	5.46	17.14	149995	22.54
	3	Internal standard	3.94	24.13	26617	2.00
	4	Cholesterol ester	4.45	33.02	46177	3.47
35	1	Free cholesterol	4.32	5.59	61124	4.27
	2	Triglycerides	6.73	19.05	219127	30.59
	3	Internal standard	4.06	24.77	28657	2.00
	4	Cholesterol ester	4.95	33.15	145012	10.12
43	1	Free cholesterol	4.7	5.46	56257	3.95
	2	Triglycerides	7.24	20.57	295337	41.51
	3	Internal standard	3.94	25.53	28462	2.00
	4	Cholesterol ester	4.95	33.4	97524	6.85
55	1	Free cholesterol	3.68	3.94	48925	3.47
	2	Triglycerides	6.6	13.97	249297	35.37
	3	Internal standard	3.56	21.21	28191	2.00
	4	Cholesterol ester	5.59	30.35	157664	11.19
65	1	Free cholesterol	3.81	3.94	65477	4.75
	2	Triglycerides	6.6	13.84	276227	40.07
	3	Internal standard	3.81	20.96	27578	2.00
	4	Cholesterol ester	5.84	30.35	178277	12.93
5	1	Free cholesterol	3.56	4.19	49411	3.33
	2	Triglycerides	5.71	13.08	189703	25.57
	3	Internal standard	4.19	20.7	29682	2.00
	4	Cholesterol ester	5.59	30.23	95600	6.44

mouse#	Peak#	Name	Width [mm]	Pos [mm]	od-Bkg	µg lipid/ 200 µg protein
15	1	Free cholesterol	3.3	3.94	51117	3.29
	2	Triglycerides	5.71	12.57	186121	23.97
	3	Internal standard	4.19	20.45	31056	2.00
	4	Cholesterol ester	5.33	30.1	108021	6.96
26	1	Free cholesterol	3.43	3.94	51578	3.43
	2	Triglycerides	7.49	13.84	314298	41.81
	3	Internal standard	3.81	21.08	30069	2.00
	4	Cholesterol ester	5.59	30.73	134094	8.92
36	1	Free cholesterol	3.94	4.32	49352	3.64
	2	Triglycerides	6.35	14.48	209014	30.84
	3	Internal standard	3.81	22.1	27111	2.00
	4	Cholesterol ester	5.46	31.5	117556	8.67
44	1	Free cholesterol	3.56	4.19	43993	3.53
	2	Triglycerides	5.71	14.73	173724	27.86
	3	Internal standard	3.81	22.48	24940	2.00
	4	Cholesterol ester	4.95	31.62	61245	4.91
56	1	Free cholesterol	3.94	4.57	53573	4.32
	2	Triglycerides	6.6	16.13	223574	36.04
	3	Internal standard	3.68	23.37	24814	2.00
	4	Cholesterol ester	5.33	32.26	161398	13.01
66	1	Free cholesterol	4.19	5.33	55464	4.56
	2	Triglycerides	7.37	18.16	270083	44.39
	3	Internal standard	3.68	24.51	24336	2.00
	4	Cholesterol ester	5.46	33.02	153330	12.60
7	1	Free cholesterol	4.45	5.33	51342	4.32
	2	Triglycerides	5.97	18.92	176085	29.66
	3	Internal standard	4.19	25.27	23750	2.00
	4	Cholesterol ester	4.7	33.27	76943	6.48
16	1	Free cholesterol	4.7	5.59	47717	3.80
	2	Triglycerides	6.35	20.32	148024	23.58
	3	Internal standard	4.19	25.91	25114	2.00
	4	Cholesterol ester	3.68	33.27	60069	4.78
27	1	Free cholesterol	4.83	5.84	45004	3.22
	2	Triglycerides	6.99	21.21	193690	27.70
	3	Internal standard	4.7	27.69	27970	2.00
	4	Cholesterol ester	4.57	35.69	60245	4.31
37	1	Free cholesterol	4.32	5.71	43432	3.40
	2	Triglycerides	6.22	20.45	150439	23.55
	3	Internal standard	4.06	26.92	25551	2.00
	4	Cholesterol ester	4.45	34.92	98765	7.73
47	1	Free cholesterol	3.94	5.97	42568	3.64
	2	Triglycerides	6.6	20.07	194874	33.29
	3	Internal standard	3.81	26.42	23418	2.00
	4	Cholesterol ester	4.06	34.54	72154	6.16
57	1	Free cholesterol	4.19	5.97	40720	3.01
	2	Triglycerides	5.71	19.3	177809	26.24
	3	Internal standard	3.68	25.65	27101	2.00
	4	Cholesterol ester	4.06	33.78	69768	5.15
67	1	Free cholesterol	4.7	6.48	52458	3.50
	2	Triglycerides	7.49	20.45	292884	39.10
	3	Internal standard	3.43	25.65	29963	2.00
	4	Cholesterol ester	5.08	33.66	160643	10.72
8	1	Free cholesterol	3.81	6.99	50307	3.70
	2	Triglycerides	5.59	20.45	162127	23.85
	3	Internal standard	3.81	25.91	27192	2.00
	4	Cholesterol ester	4.06	33.66	70970	5.22
18	1	Free cholesterol	3.94	7.11	56774	4.17
	2	Triglycerides	5.84	21.21	225869	33.16
	3	Internal standard	3.94	25.91	27244	2.00
	4	Cholesterol ester	4.45	33.53	91446	6.71
28	1	Free cholesterol	4.32	6.48	49756	3.78
	2	Triglycerides	5.71	20.83	171023	25.99
	3	Internal standard	3.81	25.53	26319	2.00
	4	Cholesterol ester	4.45	32.89	87109	6.62
38	1	Free cholesterol	4.06	7.37	41083	2.99
	2	Triglycerides	5.59	22.23	144165	20.96
	3	Internal standard	3.81	26.8	27516	2.00
	4	Cholesterol ester	4.45	33.91	61184	4.45
48	1	Free cholesterol	4.32	7.75	55902	4.23
	2	Triglycerides	6.6	23.88	285090	43.14
	3	Internal standard	3.17	27.43	26432	2.00
	4	Cholesterol ester	4.7	34.16	119215	9.02

mouse#	Peak#	Name	Width [mm]	Pos [mm]	od-Bkg	µg lipid/ 200 µg protein
58	1	Free cholesterol	3.81	7.11	50057	4.20
	2	Triglycerides	6.73	23.24	254148	42.61
	3	Internal standard	3.43	27.43	23859	2.00
	4	Cholesterol ester	4.57	34.16	136982	11.48
68	1	Free cholesterol	3.56	4.57	59495	4.01
	2	Triglycerides	8.89	14.61	368098	49.58
	3	Internal standard	4.06	22.1	29699	2.00
	4	Cholesterol ester	5.71	32.13	172395	11.61
9	1	Free cholesterol	3.17	4.57	47364	3.19
	2	Triglycerides	5.59	12.19	186870	25.17
	3	Internal standard	3.81	20.83	29695	2.00
	4	Cholesterol ester	4.95	31.24	97139	6.54
19	1	Free cholesterol	3.3	4.32	44604	3.02
	2	Triglycerides	4.7	11.68	114977	15.59
	3	Internal standard	3.94	20.57	29508	2.00
	4	Cholesterol ester	4.95	31.12	85494	5.79
29	1	Free cholesterol	3.3	3.81	55495	3.70
	2	Triglycerides	6.99	12.57	290613	38.78
	3	Internal standard	3.68	20.57	29976	2.00
	4	Cholesterol ester	5.33	31.12	133502	8.91
39	1	Free cholesterol	3.56	3.81	54475	3.54
	2	Triglycerides	5.08	11.68	146150	18.97
	3	Internal standard	4.19	20.7	30815	2.00
	4	Cholesterol ester	5.33	31.24	126727	8.23
49	1	Free cholesterol	3.94	4.06	63475	3.82
	2	Triglycerides	4.83	11.81	140542	16.92
	3	Internal standard	4.32	21.34	33224	2.00
	4	Cholesterol ester	4.95	32.13	84388	5.08
59	1	Free cholesterol	3.94	3.81	64340	4.20
	2	Triglycerides	5.97	12.57	238585	31.14
	3	Internal standard	4.06	21.84	30644	2.00
	4	Cholesterol ester	5.71	32.38	139703	9.12
69	1	Free cholesterol	3.17	4.7	56623	3.72
	2	Triglycerides	8.13	14.86	368599	48.43
	3	Internal standard	4.32	22.99	30442	2.00
	4	Cholesterol ester	5.46	33.4	178078	11.70
10	1	Free cholesterol	3.43	4.57	37007	2.77
	2	Triglycerides	5.21	13.59	124055	18.57
	3	Internal standard	3.68	22.99	26723	2.00
	4	Cholesterol ester	4.83	33.27	78711	5.89
20	1	Free cholesterol	3.43	4.83	47883	3.56
	2	Triglycerides	6.22	14.99	216520	32.20
	3	Internal standard	3.68	23.75	26901	2.00
	4	Cholesterol ester	4.7	33.91	83366	6.20
30	1	Free cholesterol	3.17	5.08	34039	2.45
	2	Triglycerides	5.08	15.49	136553	19.66
	3	Internal standard	3.68	24.38	27780	2.00
	4	Cholesterol ester	4.32	34.16	92480	6.66
40	1	Free cholesterol	4.06	8.76	54261	4.44
	2	Triglycerides	5.46	27.43	222500	36.45
	3	Internal standard	2.92	30.1	24418	2.00
	4	Cholesterol ester	4.83	35.18	136191	11.15
50	1	Free cholesterol	3.56	8.89	36509	2.61
	2	Triglycerides	4.83	25.78	87808	12.53
	3	Internal standard	3.43	29.34	28028	2.00
	4	Cholesterol ester	3.94	35.18	35295	2.52
60	1	Free cholesterol	4.19	8	58652	5.37
	2	Triglycerides	6.35	24.77	238639	43.70
	3	Internal standard	2.79	28.57	21843	2.00
	4	Cholesterol ester	4.83	35.05	134627	12.33
70	1	Free cholesterol	4.7	7.49	58311	3.65
	2	Triglycerides	7.49	23.11	269150	33.69
	3	Internal standard	3.17	27.81	31958	2.00
	4	Cholesterol ester	4.45	34.8	124736	7.81

Group#	Mouse#	Liver lipids (µg/200 µg protein)			Liver lipids (µg/mg protein)		
		Free cholesterol	Triglycerides	Cholesterol/ester	Free cholesterol	Triglycerides	Cholesterol/ester
	1	5.44	50.09	9.15	27.22	250.5	45.76
	2	3.51	30.37	6.24	17.56	151.8	31.20
	3	2.77	16.20	3.32	13.86	81.0	16.60
	4	2.55	14.05	1.78	12.73	70.3	8.89
	5	3.33	25.57	6.44	16.65	127.8	32.21
	6	4.19	31.13	5.90	20.94	155.7	29.51
	7	4.32	29.66	6.48	21.62	148.3	32.40
	8	3.70	23.85	5.22	18.50	119.2	26.10
	9	3.19	25.17	6.54	15.95	125.9	32.71
	10	2.77	18.57	5.89	13.85	92.8	29.45
					17.89	132.3	28.48
					4.41	51.0	9.92
	11	2.99	51.20	8.98	14.95	256.0	44.88
	12	2.39	18.95	3.39	11.94	94.7	16.97
	13	4.33	32.62	10.35	21.65	163.1	51.77
	14	4.54	43.24	7.49	22.70	216.2	37.45
	15	3.29	23.97	6.96	16.46	119.9	34.78
	16	3.80	23.58	4.78	19.00	117.9	23.92
	17	4.06	37.26	7.09	20.28	186.3	35.45
	18	4.17	33.16	6.71	20.84	165.8	33.57
	19	3.02	15.59	5.79	15.12	77.9	28.97
	20	3.56	32.20	6.20	17.80	161.0	30.99
AVERAGE					18.07	155.9	33.87
SD					3.44	55.1	9.86
	21	3.24	37.32	5.11	16.22	186.6	25.53
	22	5.09	53.39	7.56	25.43	267.0	37.80
	23	3.99	33.62	5.77	19.95	168.1	28.83
	24	3.18	18.19	4.17	15.91	90.9	20.84
	25	3.72	22.54	3.47	18.62	112.7	17.35
	26	3.43	41.81	8.92	17.15	209.0	44.59
	27	3.22	27.70	4.31	16.09	138.5	21.54
	28	3.78	25.99	6.62	18.90	130.0	33.10
	29	3.70	38.78	8.91	18.51	193.9	44.54
	30	2.61	12.53	2.52	13.03	62.7	12.59
					17.98	155.9	28.67
					3.28	61.0	11.14
	31	2.55	18.26	4.98	12.74	91.3	24.91
	32	3.78	21.84	7.73	18.88	109.2	36.67
	33	3.55	24.94	6.87	17.74	124.7	34.35
	34	3.44	27.56	5.89	17.20	137.8	29.46
	35	4.27	30.59	10.12	21.33	152.9	50.60
	36	3.64	30.84	8.67	18.20	154.2	43.36
	37	3.40	23.55	7.73	17.00	117.8	38.65
	38	2.99	20.96	4.45	14.93	104.8	22.24
	39	3.54	18.97	8.23	17.68	94.9	41.13
	40	2.45	19.66	6.66	12.25	98.3	33.29
AVERAGE					16.80	118.6	35.67
SD					2.78	23.2	8.64
	41	2.88	19.17	2.71	14.38	95.9	13.53
	42	4.38	29.62	9.48	21.90	148.1	47.41
	43	3.95	41.51	6.85	19.77	207.5	34.26
	44	3.53	27.86	4.91	17.64	139.3	24.56
	45	4.22	41.92	11.41	21.10	209.6	57.07
	46	4.75	59.01	10.30	23.75	295.1	51.49
	47	3.64	33.29	6.16	18.18	166.4	30.81
	48	4.23	43.14	9.02	21.15	215.7	45.10
	49	3.82	16.92	5.08	19.10	84.6	25.40
	50	5.37	43.70	12.33	26.85	218.5	61.64
AVERAGE					20.38	178.1	39.13
SD					3.45	63.8	15.76
	51	4.09	42.87	10.27	20.44	214.4	51.34
	52	3.28	38.43	7.46	16.39	192.2	37.30
	53	4.26	42.23	10.60	21.28	211.2	53.00
	54	4.15	31.82	11.29	20.73	159.1	56.44
	55	3.47	35.37	11.19	17.35	176.9	55.93
	56	4.32	36.04	13.01	21.59	180.2	65.04
	57	3.01	26.24	5.15	15.03	131.2	25.74
	58	4.20	42.61	11.48	20.98	213.0	57.41
	59	4.20	31.14	9.12	21.00	155.7	45.59
	60	4.44	36.45	11.15	22.22	182.2	55.77
AVERAGE					19.70	181.6	50.36
SD					2.49	27.5	11.40
	61	3.38	34.87	9.14	16.92	174.3	45.69
	62	3.41	32.53	9.77	17.03	162.7	48.87
	63	5.41	52.97	12.72	27.06	264.8	63.61
	64	3.57	30.55	10.37	17.85	152.8	51.86
	65	4.75	40.07	12.93	23.74	200.3	64.65
	66	4.56	44.39	12.60	22.79	222.0	63.01
	67	3.50	39.10	10.72	17.51	195.5	53.61
	68	4.01	49.58	11.61	20.03	247.9	58.05
	69	3.72	48.43	11.70	18.60	242.2	58.50
	70	3.65	33.69	7.81	18.25	168.4	39.03
AVERAGE					19.98	203.1	54.69
SD					3.43	39.4	8.45

lipid contents liver, p values Mann-Whitney U-test																							
lipid	group 1 vs 2			group 1 vs 3			group 1 vs 4			group 1 vs 5			group 1 vs 6			group 1 vs 7			group 2 vs 3				
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p		
free cholesterol	10	10	0.739	10	10	0.796	10	10	0.853	10	10	0.105	10	10	0.218	10	10	0.190	10	10	0.739		
triglyceride	10	10	0.247	10	10	0.353	10	10	0.631	10	10	0.105	10	10	0.004	10	10	0.002	10	10	0.912		
cholesterolester	10	10	0.218	10	10	0.912	10	10	0.105	10	10	0.190	10	10	0.002	10	10	<0.001	10	10	0.280		
lipid	group 2 vs 4			group 2 vs 5			group 2 vs 6			group 2 vs 7			group 3 vs 4			group 3 vs 5			group 3 vs 6				
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p		
free cholesterol	10	10	0.353	10	10	0.218	10	10	0.315	10	10	0.353	10	10	0.529	10	10	0.089	10	10	0.089		
triglyceride	10	10	0.089	10	10	0.436	10	10	0.280	10	10	0.052	10	10	0.143	10	10	0.353	10	10	0.247		
cholesterolester	10	10	0.684	10	10	0.529	10	10	0.004	10	10	<0.001	10	10	0.143	10	10	0.105	10	10	0.001		
lipid	group 3 vs 7			group 4 vs 5			group 4 vs 6			group 4 vs 7			group 5 vs 6			group 5 vs 7			group 6 vs 7				
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p		
free cholesterol	10	10	0.247	10	10	0.023	10	10	0.052	10	10	0.075	10	10	0.739	10	10	0.579	10	10	0.971		
triglyceride	10	10	0.075	10	10	0.035	10	10	<0.001	10	10	<0.001	10	10	0.971	10	10	0.315	10	10	0.315		
cholesterolester	10	10	<0.001	10	10	0.579	10	10	0.005	10	10	<0.001	10	10	0.105	10	10	0.015	10	10	0.393		

p<0.05

H. HMG-CoA reductase and cholesterol-7 α -hydroxylase activity in liver microsomes and sterol-27-hydroxylase activity in liver mitochondria

H1. HMG-CoA reductase and cholesterol-7 α -hydroxylase activity in liver microsomes

Protein concentration isolated microsomes

Microsomes for HMG CoA reductase determination

mouse	measured prot conc (mg/ml)		dilution	Protein conc (mg/ml)
	well 1	well 2		
1	0.828	0.866	20	16.94
13	0.725	0.739	20	14.64
21	1.052	1.102	20	21.54
31	1.42	1.525	20	29.45
45	0.927	0.977	20	19.04
51	0.659	0.654	60	39.39
61	0.654	0.688	60	40.26
2	0.763	0.801	20	15.64
14	1.019	1.073	20	20.92
22	0.788	0.818	20	16.06
32	1.667	1.803	20	34.70
46	1.031	1.056	20	20.87
52	0.64	0.647	60	38.61
62	0.691	0.709	60	42.00
3	0.789	0.828	20	16.17
17	0.669	0.688	20	13.57
23	0.718	0.739	20	14.57
33	0.876	0.888	20	17.64
41	0.664	0.677	20	13.41
53	1.86	1.983	20	38.43
63	1.733	1.851	20	35.84
4	0.583	0.604	20	11.87
11	0.752	0.773	20	15.25
24	0.718	0.729	20	14.47
34	1.124	1.161	20	22.85
42	0.734	0.752	20	14.86
54	1.555	1.696	20	32.51
64	1.756	1.961	20	37.17
6	0.7	0.723	20	14.23
12	0.519	0.521	20	10.40
25	0.822	0.846	20	16.68
35	1.223	1.308	20	25.31
43	1.136	1.176	20	23.12
55	1.649	1.791	20	34.40
65	0.651	0.643	60	38.82
5	0.622	0.628	20	12.50
15	0.98	1.041	20	20.21
26	0.98	0.991	20	19.71
36	0.763	0.796	20	15.59
44	0.881	0.91	20	17.91
56	1.149	1.216	20	23.65
66	1.2	1.281	20	24.81
7	0.66	0.734	20	13.94
16	0.597	0.64	20	12.37
27	1.127	1.198	20	23.25
37	1.254	1.315	20	25.69
47	0.67	0.699	20	13.69
57	1.697	1.712	20	34.09
67	1.641	1.823	20	34.64
8	0.637	0.668	20	13.05
18	0.794	0.826	20	16.20
28	0.832	0.859	20	16.91
38	1.63	1.553	20	31.83
48	0.796	0.817	20	16.13
58	1.747	1.899	20	36.46
68	0.636	0.632	60	38.04
9	1.097	1.149	20	22.46
19	0.736	0.766	20	15.02
29	0.92	0.906	20	18.26
39	1.503	1.47	20	29.73
49	0.98	1.034	20	20.14
59	0.621	0.612	60	36.99
69	1.154	1.219	20	23.73
10	0.798	0.82	20	16.18
20	0.807	0.794	20	16.01
40	1.17	1.203	20	23.73
60	1.685	1.612	20	32.97
30	0.629	0.657	20	12.86
50	1.092	1.048	20	21.40
70	1.529	1.598	20	31.27

Microsomes for 7-alpha-hydroxylase determination

mouse	Code	measured prot conc (mg/ml)		dilution	Protein conc (mg/ml)
		well 1	well 2		
1	1.1	0.952	0.996	20	19.48
13	1.2	0.683	0.703	20	13.86
21	1.3	1.097	1.048	20	21.45
31	1.4	1.543	1.438	20	29.81
45	1.5	1.222	1.218	20	24.40
51	1.6	0.652	0.644	60	38.88
61	1.7	0.612	0.694	60	39.18
2	1.8	1.103	1.113	20	22.16
14	1.9	1.366	1.329	20	26.95
22	1.10	0.999	0.963	20	19.62
32	1.11	1.524	1.447	20	29.71
46	1.12	0.921	0.909	20	18.30
52	1.13	0.569	0.575	60	34.32
62	1.14	0.577	0.571	60	34.44
3	1.15	0.708	0.679	20	13.87
17	1.16	0.553	0.545	20	10.98
23	2.1	0.918	0.874	20	17.92
33	2.2	1.15	1.14	20	22.90
41	2.3	0.69	0.694	20	13.84
53	2.4	0.5	0.436	60	28.08
63	2.5	0.543	0.479	60	30.66
4	2.6	0.599	0.569	20	11.68
11	2.7	0.887	0.837	20	17.24
24	2.8	0.726	0.724	20	14.50
34	2.9	0.882	0.893	20	17.75
42	2.10	0.772	0.829	20	16.01
54	2.11	0.541	0.515	60	31.68
64	2.12	0.61	0.579	60	35.67
6	2.13	0.604	0.624	20	12.28
12	2.14	0.488	0.498	20	9.86
25	2.15	0.674	0.67	20	13.44
35	2.16	1.263	1.329	20	25.92
43	3.1	1.023	1.055	20	20.78
55	3.2	0.507	0.472	60	29.37
65	3.3	0.505	0.492	60	29.91
5	3.4	0.595	0.581	20	11.76
15	3.5	0.808	0.79	20	15.98
26	3.6	0.994	0.988	20	19.82
36	3.7	0.673	0.646	20	13.19
44	3.8	1.164	1.183	20	23.47
56	3.9	0.472	0.488	60	28.80
66	3.10	0.385	0.376	60	22.83
7	3.11	0.792	0.772	20	15.64
16	3.12	0.561	0.592	20	11.53
27	3.13	0.942	0.933	20	18.75
37	3.14	1.404	1.527	20	29.31
47	3.15	0.933	0.948	20	18.81
57	3.16	0.462	0.479	60	28.23
67	4.1	0.35	0.366	60	21.48
8	4.2	0.74	0.699	20	14.39
18	4.3	0.818	0.821	20	16.39
28	4.4	0.837	0.859	20	16.96
38	4.5	1.604	1.483	20	30.87
48	4.6	0.829	0.824	20	16.53
58	4.7	0.45	0.46	60	27.30
68	4.8	0.468	0.455	60	27.69
9	4.9	0.821	0.865	20	16.86
19	4.10	0.832	0.826	20	16.58
29	4.11	0.916	0.954	20	18.70
39	4.12	1.164	1.132	20	22.96
49	4.13	0.893	0.951	20	18.44
59	4.14	0.455	0.468	60	27.69
69	4.15	0.432	0.41	60	25.26
10	4.16	0.821	0.845	20	16.66
20	5.1	0.994	1.039	20	20.33
40	5.2	1.268	1.517	20	27.85
60	5.3	0.483	0.525	60	30.24
30	5.4	0.779	0.785	20	15.64
50	5.5	0.919	0.87	20	17.89
70	5.6	0.553	0.511	60	31.92

Amount isolated liver microsomes

group#	mouse#	Protein conc (mg/ml)		estimated µl	mg microsomes	mg microsomes	isolated microsomes	used liver	mg microsomes
		microsomes	microsomes	microsomes	7 alpha hydroxylase	HMGCo A reduct.	(mg)	for isolation (g)	per g liver
		7 alpha hydroxylase	HMGCo A reduct.						
	1	19.48	16.94	600	11.688	10.164	21.85	1.92	11.38
	2	22.16	15.64	600	13.296	9.384	22.68	1.76	12.89
	3	13.87	16.17	600	8.322	9.702	18.02	1.45	12.43
	4	11.68	11.87	600	7.008	7.122	14.13	1.19	11.87
	5	11.76	12.50	600	7.056	7.5	14.56	1.49	9.77
	6	12.28	14.23	600	7.368	8.538	15.91	1.48	10.75
	7	15.64	13.94	600	9.384	8.364	17.75	1.42	12.50
	8	14.39	13.05	600	8.634	7.83	16.46	1.6	10.29
	9	16.86	22.46	600	10.116	13.476	23.59	1.52	15.52
	10	16.68	16.18	600	9.996	9.708	19.70	1.31	15.04
							18.47		12.24
							3.37		1.89
	11	17.24	15.25	600	10.344	9.15	19.49	2.52	7.74
	12	9.86	10.40	600	5.916	6.24	12.16	1.04	11.69
	13	13.86	14.64	600	8.316	8.784	17.10	1.8	9.50
	14	26.95	20.92	600	16.17	12.552	28.72	2.23	12.88
	15	15.98	20.21	600	9.588	12.126	21.71	1.48	14.67
	16	11.53	12.37	600	6.918	7.422	14.34	1.05	13.66
	17	10.98	13.57	600	6.588	8.142	14.73	1.16	12.70
	18	16.39	16.20	600	9.834	9.72	19.55	1.67	11.71
	19	16.58	15.02	600	9.948	9.012	18.96	1.34	14.15
	20	20.33	16.01	600	12.198	9.606	21.80	1.79	12.18
AVERAGE							18.86		12.09
SD							4.72		2.12
	21	21.45	21.54	600	12.87	12.924	25.79	1.76	14.68
	22	19.62	16.06	600	11.772	9.636	21.41	1.98	10.81
	23	17.92	14.57	600	10.752	8.742	19.49	1.97	9.90
	24	14.5	14.47	600	8.7	8.682	17.38	1.5	11.59
	25	13.44	16.68	600	8.064	10.008	18.07	1.39	13.00
	26	19.82	19.71	600	11.892	11.826	23.72	1.78	13.32
	27	18.75	23.25	600	11.25	13.95	25.20	1.67	15.09
	28	16.96	16.91	600	10.176	10.146	20.32	1.35	15.05
	29	18.7	18.26	600	11.22	10.956	22.18	2.18	10.17
	30	15.64	12.86	600	9.384	7.716	17.10	1.14	15.00
							21.07		12.86
							3.15		2.10
	31	29.81	29.45	700	20.867	20.615	41.48	3.1	13.38
	32	29.71	34.70	700	20.797	24.29	45.09	3.33	13.54
	33	22.9	17.64	700	16.03	12.348	28.38	3.33	8.52
	34	17.75	22.85	700	12.425	15.995	28.42	3.53	8.05
	35	25.92	25.31	700	18.144	17.717	35.86	3.89	9.22
	36	13.19	15.59	600	7.914	9.354	17.27	1.72	10.04
	37	29.31	25.69	700	20.517	17.983	38.50	3.21	11.99
	38	30.87	31.83	700	21.609	22.281	43.89	3.43	12.80
	39	22.96	29.73	700	16.072	20.811	36.88	3.64	10.13
	40	27.85	23.73	700	19.495	16.611	36.11	3.19	11.32
AVERAGE							35.19		10.90
SD							8.44		2.00
	41	13.84	13.41	600	8.304	8.046	16.35	1.71	9.56
	42	16.01	14.86	600	9.606	8.916	18.52	1.51	12.27
	43	20.78	23.12	600	12.488	13.872	26.34	2.32	11.35
	44	23.47	17.91	600	14.082	10.746	24.83	1.47	16.89
	45	24.4	19.04	600	14.64	11.424	26.06	2.14	12.18
	46	18.3	20.87	600	10.98	12.522	23.50	2.17	10.83
	47	18.81	13.69	600	11.286	8.214	19.50	1.32	14.77
	48	16.53	16.13	600	9.918	9.678	19.60	1.65	11.88
	49	18.44	20.14	600	11.064	12.084	23.15	1.62	14.29
	50	17.89	21.40	600	10.734	12.84	23.57	1.86	12.67
AVERAGE							22.14		12.67
SD							3.42		2.13
	51	38.88	39.39	700	27.216	27.573	54.79	3.49	15.70
	52	34.32	38.61	700	24.024	27.027	51.05	4.36	11.71
	53	28.08	38.43	700	19.656	26.901	46.56	4.1	11.36
	54	31.68	32.51	700	22.176	22.757	44.93	4.17	10.78
	55	29.37	34.40	700	20.559	24.08	44.64	4.13	10.81
	56	28.8	23.65	700	20.16	16.555	36.72	3.13	11.73
	57	28.23	34.09	700	19.761	23.863	43.62	2.78	15.69
	58	27.3	36.46	700	19.11	25.522	44.63	3.57	12.50
	59	27.69	36.99	700	19.383	25.893	45.28	4.17	10.86
	60	30.24	32.97	700	21.168	23.079	44.25	3.85	11.49
AVERAGE							45.65		12.26
SD							4.74		1.88
	61	39.18	40.26	700	27.426	28.182	55.61	3.85	14.44
	62	34.44	42.00	700	24.108	29.4	53.51	3.86	13.86
	63	30.66	35.84	700	21.462	25.088	46.55	3.27	14.24
	64	35.67	37.17	700	24.969	26.019	50.99	3.92	13.01
	65	29.91	38.82	700	20.937	27.174	48.11	3.7	13.00
	66	22.83	24.81	700	15.981	17.367	33.35	3.48	9.58
	67	21.48	34.64	700	15.036	24.248	39.28	3.27	12.01
	68	27.89	38.04	700	19.383	26.628	46.01	3.36	13.69
	69	25.26	23.73	700	17.682	16.611	34.29	2.92	11.74
	70	31.92	31.27	700	22.344	21.889	44.23	3.48	12.71
AVERAGE							45.19		12.83
SD							7.58		1.45

	group 1-7
AVERAGE	12.26
SD	1.97

Cholesterol-7- α -hydroxylase activity measurements in microsomes

used per assay 420 μ g protein
 20 min incubation
 internal standard 20 OH: 0.5 μ g per determination

Mouse	energy generating mix added	area 20 OH	area 7 α OH	μ g 7 α OH formed	7 alpha hydroxylase activity (nmol/h/mg protein)
1	+ NADPH mix	7.489	1.417	0.095	1.681
	+ NADPH mix	7.764	1.459	0.094	
	- NADPH mix	8.344	0.055	0.003	
13	+ NADPH mix	7.459	2.470	0.166	2.959
	+ NADPH mix	7.921	2.542	0.160	
	- NADPH mix	8.048	0.046	0.003	
21	+ NADPH mix	7.859	2.287	0.146	2.662
	+ NADPH mix	8.072	2.372	0.147	
	- NADPH mix	8.614	0.036	0.002	
31	+ NADPH mix	8.284	0.709	0.043	0.785
	+ NADPH mix	8.279	0.725	0.044	
	- NADPH mix	7.708	0.012	0.001	
45	+ NADPH mix	7.956	2.363	0.149	2.661
	+ NADPH mix	8.246	2.406	0.146	
	- NADPH mix	8.569	0.054	0.003	
51	+ NADPH mix	8.034	0.580	0.036	0.658
	+ NADPH mix	8.103	0.602	0.037	
	- NADPH mix	8.551	0.017	0.001	
61	+ NADPH mix	8.177	0.525	0.032	0.576
	+ NADPH mix	7.462	0.452	0.030	
	- NADPH mix	8.615	n.d.	0.000	
2	+ NADPH mix	8.176	2.048	0.125	2.296
	+ NADPH mix	7.997	2.039	0.127	
	- NADPH mix	8.678	0.036	0.002	
14	+ NADPH mix	7.153	0.912	0.064	1.137
	+ NADPH mix	8.014	0.988	0.062	
	- NADPH mix	7.760	0.018	0.001	
22	+ NADPH mix	7.119	1.032	0.072	1.373
	+ NADPH mix	8.211	1.302	0.079	
	- NADPH mix	8.341	0.026	0.002	
32	+ NADPH mix	7.684	0.389	0.025	0.456
	+ NADPH mix	7.654	0.369	0.024	
	- NADPH mix	8.062	n.d.	0.000	
46	+ NADPH mix	8.155	1.034	0.063	1.093
	+ NADPH mix	8.529	0.991	0.058	
	- NADPH mix	8.412	0.027	0.002	
52	+ NADPH mix	8.674	0.344	0.020	0.368
	+ NADPH mix	8.281	0.332	0.020	
	- NADPH mix	9.215	n.d.	0.000	
62	+ NADPH mix	7.851	0.414	0.026	0.472
	+ NADPH mix	8.260	0.408	0.025	
	- NADPH mix	8.138	n.d.	0.000	
3	+ NADPH mix	9.023	2.248	0.125	2.282
	+ NADPH mix	9.148	2.242	0.123	
	- NADPH mix	8.783	n.d.	0.000	
17	+ NADPH mix	7.856	2.554	0.163	2.898
	+ NADPH mix	7.946	2.519	0.159	
	- NADPH mix	7.525	0.055	0.004	
23	+ NADPH mix	7.842	2.020	0.129	2.346
	+ NADPH mix	7.885	2.034	0.129	
	- NADPH mix	8.094	0.031	0.002	
33	+ NADPH mix	7.994	0.878	0.055	1.014
	+ NADPH mix	7.866	0.863	0.055	
	- NADPH mix	7.808	n.d.	0.000	

Mouse	energy generating mix added	area 20 OH	area 7aOH	µg 7aOH formed	7 alpha hydroxylase activity (nmol/h/mg protein)
41	+ NADPH mix	8.173	3.471	0.212	3.751
	+ NADPH mix	7.392	2.911	0.197	
	- NADPH mix	7.547	0.024	0.002	
53	+ NADPH mix	7.601	0.537	0.035	0.614
	+ NADPH mix	8.694	0.542	0.031	
	- NADPH mix	8.113	n.d.	0.000	
63	+ NADPH mix	8.815	0.556	0.032	0.621
	+ NADPH mix	8.171	0.583	0.036	
	- NADPH mix	8.490	n.d.	0.000	
4	+ NADPH mix	8.332	2.127	0.128	2.485
	+ NADPH mix	8.091	2.288	0.141	
	- NADPH mix	8.957	n.d.	0.000	
11	+ NADPH mix	8.472	1.862	0.110	2.023
	+ NADPH mix	7.915	1.780	0.112	
	- NADPH mix	8.828	0.029	0.002	
24	+ NADPH mix	8.352	1.753	0.105	2.096
	+ NADPH mix	8.133	1.984	0.122	
	- NADPH mix	8.018	n.d.	0.000	
34	+ NADPH mix	7.148	0.368	0.026	0.455
	+ NADPH mix	8.432	0.396	0.023	
	- NADPH mix	6.831	n.d.	0.000	
42	+ NADPH mix	8.519	2.052	0.120	2.246
	+ NADPH mix	8.106	1.990	0.123	
	- NADPH mix	8.352	n.d.	0.000	
54	+ NADPH mix	8.875	0.496	0.028	0.521
	+ NADPH mix	7.996	0.455	0.028	
	- NADPH mix	8.907	n.d.	0.000	
64	+ NADPH mix	8.561	0.678	0.040	0.700
	+ NADPH mix	9.027	0.653	0.036	
	- NADPH mix	9.222	n.d.	0.000	
6	+ NADPH mix	8.466	1.697	0.100	1.815
	+ NADPH mix	8.414	1.674	0.099	
	- NADPH mix	8.950	0.029	0.002	
12	+ NADPH mix	7.978	6.870	0.431	7.668
	+ NADPH mix	8.371	6.821	0.407	
	- NADPH mix	9.549	0.075	0.004	
25	+ NADPH mix	8.359	1.183	0.071	1.275
	+ NADPH mix	7.939	1.091	0.069	
	- NADPH mix	7.754	0.011	0.001	
35	+ NADPH mix	7.600	0.546	0.036	0.646
	+ NADPH mix	8.216	0.559	0.034	
	- NADPH mix	7.859	n.d.	0.000	
43	+ NADPH mix	8.187	2.021	0.123	2.229
	+ NADPH mix	7.860	1.895	0.121	
	- NADPH mix	7.683	0.020	0.001	
55	+ NADPH mix	9.259	0.619	0.033	0.633
	+ NADPH mix	8.480	0.595	0.035	
	- NADPH mix	8.305	0.024	0.000	
65	+ NADPH mix	7.459	1.066	0.071	1.284
	+ NADPH mix	8.254	1.116	0.068	
	- NADPH mix	8.066	n.d.	0.000	
5	+ NADPH mix	8.428	2.606	0.155	2.892
	+ NADPH mix	8.346	2.667	0.160	
	- NADPH mix	7.805	0.010	0.001	
15	+ NADPH mix	8.127	3.369	0.207	3.783
	+ NADPH mix	8.333	3.371	0.202	
	- NADPH mix	8.348	n.d.	0.000	
26	+ NADPH mix	7.974	2.884	0.181	3.268
	+ NADPH mix	7.537	2.681	0.178	
	- NADPH mix	8.761	0.043	0.002	

Mouse	energy generating mix added	area 20 OH	area 7aOH	µg 7aOH formed	7 alpha hydroxylase activity (nmol/h/mg protein)
36	+ NADPH mix	7.543	4.629	0.307	5.466
	+ NADPH mix	7.412	4.514	0.305	
	- NADPH mix	8.080	0.158	0.010	
44	+ NADPH mix	8.523	4.801	0.282	4.482
	+ NADPH mix	8.450	4.542	0.269	
	- NADPH mix	7.586	0.494	0.033	
56	+ NADPH mix	8.189	0.921	0.056	0.967
	+ NADPH mix	9.455	0.949	0.050	
	- NADPH mix	7.871	0.014	0.001	
66	+ NADPH mix	9.543	1.148	0.060	1.098
	+ NADPH mix	8.293	0.974	0.059	
	- NADPH mix	8.583	0.026	0.000	
7	+ NADPH mix	6.707	3.465	0.258	4.684
	+ NADPH mix	8.792	4.504	0.256	
	- NADPH mix	8.695	0.064	0.004	
16	+ NADPH mix	7.664	6.853	0.447	8.312
	+ NADPH mix	8.129	7.362	0.453	
	- NADPH mix	9.510	n.d.	0.000	
27	+ NADPH mix	9.979	2.836	0.142	2.577
	+ NADPH mix	9.559	2.618	0.137	
	- NADPH mix	9.372	n.d.	0.000	
37	+ NADPH mix	8.482	0.848	0.050	0.923
	+ NADPH mix	9.335	0.932	0.050	
	- NADPH mix	7.948	n.d.	0.000	
47	+ NADPH mix	8.375	4.765	0.284	5.149
	+ NADPH mix	8.607	4.853	0.282	
	- NADPH mix	9.266	0.083	0.004	
57	+ NADPH mix	7.959	0.895	0.056	0.960
	+ NADPH mix	10.692	1.034	0.048	
	- NADPH mix	8.987	0.006	0.000	
67	+ NADPH mix	8.115	0.890	0.055	0.967
	+ NADPH mix	9.262	0.924	0.050	
	- NADPH mix	8.761	0.028	0.000	
8	+ NADPH mix	4.538	2.079	0.229	4.295
	+ NADPH mix	4.178	2.064	0.247	
	- NADPH mix	4.434	0.049	0.006	
18	+ NADPH mix	3.873	1.823	0.235	4.031
	+ NADPH mix	4.184	1.740	0.208	
	- NADPH mix	4.643	0.032	0.003	
28	+ NADPH mix	8.343	4.317	0.259	4.642
	+ NADPH mix	9.026	4.463	0.247	
	- NADPH mix	9.171	0.031	0.002	
38	+ NADPH mix	3.989	0.463	0.058	1.051
	+ NADPH mix	3.669	0.409	0.056	
	- NADPH mix	4.843	n.d.	0.000	
48	+ NADPH mix	4.001	1.789	0.224	4.071
	+ NADPH mix	4.331	1.905	0.220	
	- NADPH mix	5.012	0.014	0.001	
58	+ NADPH mix	3.910	0.450	0.058	1.035
	+ NADPH mix	4.155	0.453	0.055	
	- NADPH mix	5.027	n.d.	0.000	
68	+ NADPH mix	4.100	0.821	0.100	1.852
	+ NADPH mix	4.005	0.866	0.108	
	- NADPH mix	4.765	0.037	0.004	
9	+ NADPH mix	4.192	2.296	0.274	4.954
	+ NADPH mix	4.391	2.352	0.268	
	- NADPH mix	4.288	0.023	0.003	
19	+ NADPH mix	4.084	2.755	0.337	6.311
	+ NADPH mix	4.075	2.820	0.346	
	- NADPH mix	4.527	n.d.	0.000	
29	+ NADPH mix	4.149	1.052	0.127	2.296
	+ NADPH mix	3.944	1.025	0.130	
	- NADPH mix	4.428	0.036	0.004	

Mouse	energy generating mix added	area 20 OH	area 7aOH	µg 7aOH formed	7 alpha hydroxylase activity (nmol/h/mg protein)
39	+ NADPH mix	4.145	0.417	0.050	1.004
	+ NADPH mix	4.132	0.483	0.058	
	- NADPH mix	3.371	n.d.	0.000	
49	+ NADPH mix	4.812	1.356	0.141	2.669
	+ NADPH mix	3.305	0.979	0.148	
	- NADPH mix	4.276	n.d.	0.000	
59	+ NADPH mix	3.994	0.219	0.027	0.498
	+ NADPH mix	3.969	0.210	0.026	
	- NADPH mix	4.551	n.d.	0.000	
69	+ NADPH mix	3.328	0.710	0.107	1.880
	+ NADPH mix	3.792	0.735	0.097	
	- NADPH mix	10.237	n.d.	0.000	
10	+ NADPH mix	9.887	3.986	0.202	3.654
	+ NADPH mix	11.010	4.342	0.197	
	- NADPH mix	8.101	0.026	0.002	
20	+ NADPH mix	9.894	3.083	0.156	2.542
	+ NADPH mix	12.152	3.063	0.126	
	- NADPH mix	11.089	0.073	0.003	
40	+ NADPH mix	10.748	0.839	0.039	0.757
	+ NADPH mix	10.280	0.883	0.043	
	- NADPH mix	11.854	n.d.	0.000	
60	+ NADPH mix	9.866	0.951	0.048	0.816
	+ NADPH mix	10.231	0.893	0.044	
	- NADPH mix	11.422	0.040	0.002	
30	+ NADPH mix	10.852	2.471	0.114	2.057
	+ NADPH mix	10.771	2.346	0.109	
	- NADPH mix	11.044	n.d.	0.000	
50	+ NADPH mix	10.087	4.003	0.198	3.435
	+ NADPH mix	10.560	3.663	0.173	
	- NADPH mix	10.687	n.d.	0.000	
70	+ NADPH mix	10.035	1.536	0.077	1.436
	+ NADPH mix	10.174	1.606	0.079	
	- NADPH mix	10.971	n.d.	0.000	

n.d.: not detectable

Group	mouse#	liver weight (g)	average mg microsomes/g liver	cholesterol 7 alpha hydroxylase activity	
				(nmol/h/mg protein)	per liver (nmol/h)
	1	2.19	12.26	1.681	45.14
	2	2.00	12.26	2.296	56.32
	3	1.66	12.26	2.282	46.47
	4	1.41	12.26	2.485	42.97
	5	1.68	12.26	2.892	59.59
	6	1.70	12.26	1.815	37.83
	7	1.61	12.26	4.684	92.49
	8	1.77	12.26	4.295	93.24
	9	1.68	12.26	4.954	102.07
	10	1.49	12.26	3.654	66.76
				3.104	64.29
				1.206	23.55
	11	2.77	12.26	2.023	68.74
	12	1.17	12.26	7.668	110.02
	13	1.88	12.26	2.959	68.22
	14	2.53	12.26	1.137	35.27
	15	1.68	12.26	3.783	77.94
	16	1.23	12.26	8.312	125.39
	17	1.35	12.26	2.898	47.98
	18	1.84	12.26	4.031	90.96
	19	1.53	12.26	6.311	118.43
	20	1.98	12.26	2.542	61.74
				4.166	80.47
				2.442	30.16
	21	2.00	12.26	2.662	65.31
	22	2.23	12.26	1.373	37.55
	23	2.27	12.26	2.346	65.30
	24	1.68	12.26	2.096	43.19
	25	1.56	12.26	1.275	24.40
	26	2.06	12.26	3.268	82.56
	27	1.85	12.26	2.577	58.48
	28	1.51	12.26	4.642	85.97
	29	2.42	12.26	2.296	68.15
	30	2.14	12.26	2.057	54.00
				2.459	58.49
				0.965	19.37
4	31	3.46	12.26	0.785	33.32
4	32	3.68	12.26	0.456	20.60
4	33	3.69	12.26	1.014	45.89
4	34	3.93	12.26	0.455	21.91
4	35	4.23	12.26	0.646	33.51
4	36	1.94	12.26	5.466	130.06
4	37	3.62	12.26	0.923	40.97
4	38	3.90	12.26	1.051	50.26
4	39	4.03	12.26	1.004	49.65
4	40	3.39	12.26	0.757	31.48
				1.256	45.77
				1.495	31.40
5	41	1.90	12.26	3.751	87.40
5	42	1.71	12.26	2.246	47.11
5	43	2.48	12.26	2.229	67.81
5	44	1.69	12.26	4.482	92.91
5	45	2.25	12.26	2.661	73.43
5	46	2.46	12.26	1.093	32.96
5	47	1.47	12.26	5.149	92.83
5	48	1.88	12.26	4.071	93.86
5	49	1.82	12.26	2.669	59.59
5	50	2.14	12.26	3.435	90.15
				3.179	73.80
				1.221	21.60
6	51	3.90	12.26	0.658	31.48
6	52	4.87	12.26	0.368	22.00
6	53	4.10	12.26	0.614	30.88
6	54	4.17	12.26	0.521	26.64
6	55	4.13	12.26	0.633	32.05
6	56	3.48	12.26	0.967	41.25
6	57	3.13	12.26	0.960	36.84
6	58	4.11	12.26	1.035	52.17
6	59	4.74	12.26	0.498	28.93
6	60	4.33	12.26	0.816	43.33
				0.707	34.56
				0.226	8.94
7	61	4.29	12.26	0.576	30.32
7	62	4.33	12.26	0.472	25.05
7	63	3.88	12.26	0.621	29.54
7	64	4.28	12.26	0.700	36.74
7	65	4.15	12.26	1.284	65.37
7	66	3.85	12.26	1.098	51.84
7	67	3.91	12.26	0.967	46.38
7	68	3.83	12.26	1.852	86.98
7	69	3.33	12.26	1.880	76.80
7	70	3.92	12.26	1.436	69.03
				1.089	51.81
				0.516	21.79

HMG CoA reductase activity measurements

internal standard mix	mouse#	3H dpm (internal standard)	14C dpm	14C dpm -blanc	14C mevalonate formed (dpm)	HMG CoA activity pmol/min/mg protein	mean
1	1	14802	222	82	169	5.111	4.60
1		15138	207	67	135	4.083	
1	13	14416	199	59	125	3.776	6.19
1		16500	294	154	284	8.611	
1	21	16182	310	170	320	9.692	8.34
1		18200	278	138	231	6.995	
1	31	16197	437	297	558	16.917	13.65
1		16086	321	181	342	10.381	
1	45	15302	187	47	93	2.834	3.64
1		17401	224	84	147	4.454	
1	51	19233	296	156	247	7.483	9.33
1		18151	360	220	369	11.182	
1	61	18408	192	52	86	2.606	2.11
1		16484	169	29	54	1.623	
1	2	14705	132	-8	-17	-0.502	0.26
1		17314	159	19	33	1.012	
1	14	no sample					1.55
1		19044	172	32	51	1.550	
1	22	17259	124	-16	-28	-0.855	0.00
1		17962	137	-3	-5	-0.154	
1	32	16815	205	65	118	3.566	4.87
1		18678	265	125	204	6.174	
1	46	17627	140	0	0	0.000	0.49
1		16776	158	18	33	0.990	
1	52	18636	226	86	140	4.257	2.33
1		13567	146	6	13	0.408	
1	3	12055	118	-22	-56	-1.684	0.00
1		12101	92	-48	-121	-3.659	
1	17	13870	143	3	7	0.200	0.02
1		12322	138	-2	-5	-0.150	
1	23	13846	116	-24	-53	-1.599	0.00
1		15599	144	4	8	0.237	
1	33	13354	197	57	130	3.938	5.10
1		14885	241	101	207	6.260	
1	53	17744	231	91	156	4.731	5.61
1		17935	266	126	214	6.481	
1	4	15926	190	50	96	2.896	2.42
1		15147	172	32	64	1.949	
1	11	17598	221	81	140	4.246	6.57
1		18276	316	176	293	8.885	
1	24	17701	187	47	81	2.450	1.77
1		13443	156	16	36	1.098	
1	34	16084	260	120	227	6.883	5.87
1		13092	209	69	160	4.862	
1	42	12500	127	-13	-32	-0.959	0.00
1		12547	116	-24	-58	-1.765	
1	54	12475	114	-26	-63	-1.923	0.00
1		15313	145	5	10	0.301	
1	64	15836	119	-21	-40	-1.223	0.00
1		11436	86	-54	-144	-4.356	
1	6	13617	104	-36	-80	-2.439	0.00
1		15941	110	-30	-57	-1.736	
1	12	12877	196	56	132	4.012	6.04
1		13025	254	114	266	8.075	
1	25	17786	405	265	453	13.746	10.61
2		15984	279	139	247	7.482	
2	35	16769	378	238	403	12.211	8.16
2		15482	214	74	136	4.112	
2	blanc	14676	162				
2	blanc	12984	118				

Input internal standard (dpm):	mix 1	mix 2	¹⁴ C dpm HMG CoA mix:	58465	average	per 5 µl mix per µl mix
	30176	28810		57242		
	29765	28307		55833		
	31362	28031				
average	30434	28383		57180		
				11436		

HMG CoA mix: 2.6 mmol/l HMG CoA
 Specific activity ¹⁴C HMGCoA: 4398.46 dpm/nmol
 incubation time: 30.0 min
 liver microsomes: 0.250 mg

mouse#	3H dpm (internal standard)	14C dpm	14C dpm -blanc	14C mevalonate formed (dpm)	HMG CoA act. pmol/min.mg eiwit	mean
43	16023	252	83	146	4.237	2.77
	14382	192	23	45	1.308	
55	15354	261	92	169	4.901	3.51
	16171	211	42	73	2.124	
65	15593	451	282	510	14.792	6.52
	15352	136	-33	-61	-1.758	
5	13631	140	-29	-60	-1.740	0.00
	12996	139	-30	-65	-1.888	
15	13907	98	-71	-144	-4.176	0.00
	11471	109	-60	-147	-4.278	
26	10075	97	-72	-202	-5.845	0.00
	12964	93	-76	-165	-4.795	
36	13289	139	-30	-64	-1.846	0.00
	16215	173	4	7	0.202	
44	17106	402	233	384	11.141	10.22
	14863	338	169	321	9.300	
66	14921	155	-14	-26	-0.767	0.00
	14914	168	-1	-2	-0.055	
7	14706	195	26	50	1.446	4.84
	15107	321	152	284	8.230	
16	13433	191	22	46	1.340	0.00
	14340	287	118	232	6.731	
27	14736	142	-27	-52	-1.499	0.00
	15759	154	-15	-27	-0.779	
37	16357	204	35	60	1.750	1.13
	15923	179	10	18	0.514	
blanc	14228	194				
blanc	11628	144				

Input internal standard (dpm):

27932

27694

28968

average

28198

¹⁴C HMG CoA mix:

58407

55714

65147

average

59756

per 5 µl mix

11951.2

per µl mix

HMG CoA mix:

2.6 mmol/l HMG CoA

Specific activity ¹⁴C HMGCoA: 4596.62 dpm/nmol

incubation time: 30.0 min

liver microsomes: 0.250 mg

mouse#	3H dpm (internal standard)	14C dpm	14C dpm -blanc	14C mevalonate formed (dpm)	HMG CoA act. pmol/min.mg eiwit	mean
67	16112	284	201	348	9.646	7.15
	16092	180	97	168	4.648	
8	14295	129	46	89	2.467	3.00
	17696	164	81	127	3.526	
9	17286	379	296	478	13.251	11.95
	16982	317	234	384	10.658	
19	14651	145	62	117	3.254	2.23
	19083	113	30	43	1.198	
29	16755	142	59	98	2.706	2.09
	16504	115	32	53	1.479	
39	17225	247	164	265	7.358	6.62
	17750	218	135	212	5.874	
49	18651	209	126	188	5.216	4.37
	15076	152	69	127	3.522	
59	15831	159	76	133	3.697	3.49
	16644	154	71	118	3.283	
50	16807	195	112	185	5.142	8.94
	14453	321	238	459	12.738	
70	16679	191	108	180	4.996	7.48
	15823	287	204	359	9.969	
blanc	16121	95				
blanc	16049	72				

Input internal standard (dpm):

27956

27723

28126

average

27935

¹⁴C HMG CoA mix:

63731

60065

63603

average

62466

per 5 µl mix

12493.27

per µl mix

HMG CoA mix:

2.6 mmol/l HMG CoA

Specific activity ¹⁴C HMGCoA: 4805.1 dpm/nmol

incubation time: 30.0 min

liver microsomes: 0.250 mg

mouse#	3H dpm (internal standard)	14C dpm	14C dpm -blanc	14C mevalonate formed (dpm)	HMG CoA act. pmol/min.mg eiwit	mean
18	18621	513	349	596	17.513	13.82
	18163	361	197	345	10.135	
28	16885	265	101	190	5.589	5.39
	17274	260	96	177	5.193	
38	15495	682	518	1064	31.238	28.94
	18485	691	527	907	26.640	
48	15821	341	177	356	10.454	9.28
	17041	312	148	276	8.115	
58	19175	412	248	412	12.085	10.20
	17310	318	154	283	8.313	
68	16607	241	77	148	4.333	8.08
	14530	348	184	403	11.833	
69	16586	352	188	361	10.592	11.58
	14581	360	196	428	12.561	
10	15189	275	111	233	6.829	5.74
	15445	241	77	159	4.658	
20	16021	224	60	119	3.499	3.73
	16747	235	71	135	3.962	
40	15999	404	240	477	14.017	13.29
	14205	355	191	428	12.564	
30	20405	591	427	666	19.554	15.40
	19844	403	239	383	11.254	
62	16228	328	164	322	9.443	6.41
	14978	218	54	115	3.369	
41	15343	233	69	143	4.202	7.47
	13316	317	153	366	10.736	
63	15166	214	50	105	3.081	5.49
	16339	302	138	269	7.892	
56	17431	407	243	444	13.026	17.70
	14614	514	350	762	22.379	
47	15456	650	486	1001	29.382	18.32
	15823	287	123	247	7.264	
blanc	16766	164				

Input internal standard (dpm):
32959
31221
31297

average 31826

¹⁴C HMG CoA mix: 61119
60406
55583

average 59036 per 5 µl mix
11807.2 per µl mix

HMG CoA mix: 2.6 mmol/l HMG CoA
Specific activity ¹⁴C HMGC_oA: 4541.23 dpm/nmol
incubation time: 30.0 min
liver microsomes: 0.250 mg

Group	mouse#	liver weight (g)	average mg microsomes/g liver	HMG CoA reductase activity	
				(pmol/min/mg protein)	per liver (pmol/min)
	1	2.19	12.26	4.60	123.43
	2	2.00	12.26	0.26	6.26
	3	1.66	12.26	0.00	0.00
	4	1.41	12.26	2.42	41.88
	5	1.68	12.26	0.00	0.00
	6	1.70	12.26	0.00	0.00
	7	1.61	12.26	4.84	95.49
	8	1.77	12.26	3.00	65.03
	9	1.68	12.26	11.95	246.23
	10	1.49	12.26	5.74	104.92
				3.28	68.32
				3.77	78.41
	11	2.77	12.26	6.57	222.96
	12	1.17	12.26	6.04	86.69
	13	1.88	12.26	6.19	142.75
	14	2.53	12.26	1.55	48.08
	15	1.68	12.26	0.00	0.00
	16	1.23	12.26	0.00	0.00
	17	1.35	12.26	0.02	0.41
	18	1.84	12.26	13.82	311.85
	19	1.53	12.26	2.23	41.76
	20	1.98	12.26	3.73	90.56
	AVERAGE			4.02	94.51
	SD			4.33	104.24
	21	2.00	12.26	8.34	204.59
	22	2.23	12.26	0.00	0.00
	23	2.27	12.26	0.00	0.00
	24	1.68	12.26	1.77	36.54
	25	1.56	12.26	10.61	203.00
	26	2.06	12.26	0.00	0.00
	27	1.85	12.26	0.00	0.00
	28	1.51	12.26	5.39	99.81
	29	2.42	12.26	2.09	62.10
	30	2.14	12.26	15.40	404.15
				4.36	101.02
				5.44	133.13
	31	3.46	12.26	13.65	578.98
	32	3.68	12.26	4.87	219.73
	33	3.69	12.26	5.10	230.67
	34	3.93	12.26	5.87	282.96
	35	4.23	12.26	8.16	423.27
	36	1.94	12.26	0.00	0.00
	37	3.62	12.26	1.13	50.24
	38	3.90	12.26	28.94	1383.68
	39	4.03	12.26	6.62	326.87
	40	3.39	12.26	13.29	552.38
	AVERAGE			8.76	404.88
	SD			8.36	392.39
	41	1.90	12.26	7.47	173.99
	42	1.71	12.26	0.00	0.00
	43	2.48	12.26	2.77	84.30
	44	1.69	12.26	10.22	211.77
	45	2.25	12.26	3.64	100.51
	46	2.46	12.26	0.49	14.93
	47	1.47	12.26	18.32	330.22
	48	1.88	12.26	9.28	214.00
	49	1.82	12.26	4.37	97.48
	50	2.14	12.26	8.94	234.56
	AVERAGE			6.55	146.18
	SD			5.51	104.48
	51	3.90	12.26	9.33	446.23
	52	4.87	12.26	2.33	139.28
	53	4.10	12.26	5.61	281.81
	54	4.17	12.26	0.00	0.00
	55	4.13	12.26	3.51	177.86
	56	3.48	12.26	17.70	755.28
	57	3.13	12.26	6.15	236.05
	58	4.11	12.26	10.20	513.93
	59	4.74	12.26	3.49	202.82
	60	4.33	12.26	6.69	355.05
	AVERAGE			6.50	310.83
	SD			5.01	216.26
	61	4.29	12.26	2.11	111.22
	62	4.33	12.26	6.41	340.07
	63	3.88	12.26	5.49	260.98
	64	4.28	12.26	0.00	0.00
	65	4.15	12.26	6.52	331.58
	66	3.85	12.26	0.00	0.00
	67	3.91	12.26	7.15	342.61
	68	3.83	12.26	8.08	379.53
	69	3.33	12.26	11.58	472.60
	70	3.92	12.26	7.48	359.61
	AVERAGE			5.48	259.82
	SD			3.71	165.03

micromes; mg per g liver, 7-alpha-hydroxylase activity and HMG CoA reductase activity, p values Mann-Whitney U-test																								
micromes	group 1 vs 2			group 1 vs 3			group 1 vs 4			group 1 vs 5			group 1 vs 6			group 1 vs 7			group 2 vs 3					
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
mg/g liver	10	10	0.971	10	10	0.529	10	10	0.143	10	10	0.739	10	10	0.971	10	10	0.315	10	10	0.436			
7-alpha act.	10	10	0.353	10	10	0.393	10	10	0.002	10	10	0.912	10	10	<0.001	10	10	<0.001	10	10	0.105			
7-alpha act. per liver	10	10	0.190	10	10	0.684	10	10	0.095	10	10	0.353	10	10	<0.001	10	10	0.247	10	10	0.089			
HMG Co A act.	10	10	0.631	10	10	1.000	10	10	0.025	10	10	0.165	10	10	0.105	10	10	0.165	10	10	0.796			
HMG Co A act. per liver	10	10	0.739	10	10	1.000	10	10	0.007	10	10	0.105	10	10	0.003	10	10	0.019	10	10	0.739			
micromes	group 2 vs 4			group 2 vs 5			group 2 vs 6			group 2 vs 7			group 3 vs 4			group 3 vs 5			group 3 vs 6					
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
mg/g liver	10	10	0.218	10	10	0.579	10	10	0.579	10	10	0.315	10	10	0.035	10	10	0.912	10	10	0.738			
7-alpha act.	10	10	<0.001	10	10	0.529	10	10	<0.001	10	10	<0.001	10	10	0.002	10	10	0.190	10	10	<0.001			
7-alpha act. per liver	10	10	0.009	10	10	0.684	10	10	<0.001	10	10	0.043	10	10	0.052	10	10	0.075	10	10	0.005			
HMG Co A act.	10	10	0.190	10	10	0.247	10	10	0.247	10	10	0.315	10	10	0.218	10	10	0.280	10	10	0.218			
HMG Co A act. per liver	10	10	0.015	10	10	0.247	10	10	0.015	10	10	0.035	10	10	0.011	10	10	0.190	10	10	0.023			
micromes	group 3 vs 7			group 4 vs 5			group 4 vs 6			group 4 vs 7			group 5 vs 6			group 5 vs 7			group 6 vs 7					
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
mg/g liver	10	10	0.796	10	10	0.063	10	10	0.029	10	10	0.029	10	10	0.481	10	10	0.971	10	10	0.143			
7-alpha act.	10	10	0.001	10	10	0.062	10	10	0.529	10	10	0.529	10	10	<0.001	10	10	<0.001	10	10	0.143			
7-alpha act. per liver	10	10	0.631	10	10	0.015	10	10	0.353	10	10	0.353	10	10	<0.001	10	10	0.029	10	10	0.123			
HMG Co A act.	10	10	0.436	10	10	0.631	10	10	0.684	10	10	0.579	10	10	0.912	10	10	0.684	10	10	0.912			
HMG Co A act. per liver	10	10	0.063	10	10	0.043	10	10	0.631	10	10	0.684	10	10	0.052	10	10	0.063	10	10	0.853			

p<0.05

H2. Cholesterol-27-hydroxylase activity in mitochondria

Protein concentration isolated mitochondria

Mitochondria

mouse	measured prot conc (mg/ml)		dilution	Protein conc (mg/ml)
	well 1	well 2		
1	0.772	0.8	50	39.30
13	0.699	0.699	50	34.95
21	0.848	0.908	50	43.90
31	1.508	1.499	50	75.18
45	0.925	0.973	50	47.45
51	0.784	0.813	100	79.85
61	0.865	0.881	100	87.30
2	1.143	1.162	50	57.63
14	0.918	0.931	50	46.23
22	0.945	1.022	50	49.18
32	1.192	1.104	100	114.80
46	1.043	1.062	50	52.63
52	1.26	1.236	100	124.80
62	1.201	1.204	100	120.25
3	0.81	0.81	50	40.50
17	0.57	0.54	50	27.75
23	0.915	0.949	50	46.60
33	1.036	1.092	100	106.40
41	0.699	0.655	50	33.85
53	1.033	0.942	100	98.75
63	0.898	0.839	100	86.85
4	0.576	0.587	50	29.08
11	0.726	0.672	50	34.95
24	0.969	0.959	50	48.20
34	1.532	1.43	100	148.10
42	0.784	0.852	50	40.90
54	0.98	0.997	100	98.85
64	1.201	1.28	100	124.05
6	0.699	0.658	50	33.93
12	0.383	0.359	50	18.55
25	0.931	0.861	50	44.80
35	1.37	1.235	100	130.25
43	0.842	0.845	50	42.18
55	0.945	0.976	100	96.05
65	0.949	0.901	100	92.50
5	0.649	0.637	50	32.15
15	0.648	0.635	50	32.08
26	0.775	0.799	50	39.35
36	0.678	0.705	50	34.58
44	0.757	0.757	50	37.85
56	0.84	0.843	100	84.15
66	1.031	0.998	100	101.45
7	0.754	0.714	50	36.70
16	0.467	0.443	50	22.75
27	0.876	0.886	50	44.05
37	1.171	1.1	100	113.55
47	0.554	0.554	50	27.70
57	0.847	0.809	100	82.80
67	0.578	0.596	100	58.70
8	0.616	0.596	50	30.30
18	0.697	0.7	50	34.93
28	0.728	0.745	50	36.83
38	1.808	1.903	100	185.55
48	1.086	0.85	50	48.40
58	1.261	1.147	100	120.40
68	0.734	0.766	100	75.00
9	0.616	0.611	50	30.68
19	0.691	0.659	50	33.75
29	0.847	0.847	50	42.35
39	1.255	1.251	100	125.30
49	0.76	0.751	50	37.78
59	0.85	0.796	100	82.30
69	0.751	0.728	100	73.95
10	0.837	0.821	50	41.45
20	0.84	0.809	50	41.23
40	1.344	1.34	100	134.20
60	0.769	0.827	100	79.80
30	0.642	0.598	50	31.00
50	0.987	0.965	50	48.80
70	1.039	0.926	100	98.25

Amount isolated mitochondria

group#	mouse#	Protein conc. mitochondria (mg/ml)	estimated μ microsomes	isolated mitochondria (mg)	used liver for isolation (g)	mg mitochondria per g liver
	1	39.30	600	23.58	1.92	12.28
	2	57.63	600	34.58	1.76	19.64
	3	40.50	600	24.30	1.45	16.76
	4	29.08	600	17.45	1.19	14.66
	5	32.15	600	19.29	1.49	12.95
	6	33.93	600	20.36	1.48	13.75
	7	36.70	600	22.02	1.42	15.51
	8	30.30	600	18.18	1.6	11.36
	9	30.68	600	18.41	1.52	12.11
	10	41.45	600	24.87	1.31	18.98
						14.80
						2.89
	11	34.95	600	20.97	2.52	8.32
	12	18.55	600	11.13	1.04	10.70
	13	34.95	600	20.97	1.8	11.65
	14	46.23	600	27.74	2.23	12.44
	15	32.08	600	19.25	1.48	13.00
	16	22.75	600	13.65	1.05	13.00
	17	27.75	600	16.65	1.16	14.35
	18	34.93	600	20.96	1.67	12.55
	19	33.75	600	20.25	1.34	15.11
	20	41.23	600	24.74	1.79	13.82
AVERAGE						12.49
SD						1.94
	21	43.90	600	26.34	1.76	14.97
	22	49.18	600	29.51	1.98	14.90
	23	48.80	600	27.96	1.97	14.19
	24	48.20	600	28.92	1.5	19.28
	25	44.80	600	26.88	1.39	19.34
	26	39.35	600	23.61	1.78	13.26
	27	44.05	600	26.43	1.67	15.83
	28	36.83	600	22.10	1.35	16.37
	29	42.35	600	25.41	2.18	11.66
	30	31.00	600	18.60	1.14	16.32
						15.81
						2.42
	31	75.18	700	52.62	3.1	16.98
	32	114.80	700	80.36	3.33	24.13
	33	106.40	700	74.48	3.33	22.37
	34	148.10	700	103.67	3.53	29.37
	35	130.25	700	91.18	3.89	23.44
	36	34.58	600	20.75	1.72	12.06
	37	113.55	700	79.49	3.21	24.76
	38	185.55	700	129.89	3.43	37.87
	39	125.30	700	87.71	3.64	24.10
	40	134.20	700	93.94	3.19	29.45
AVERAGE						24.45
SD						7.03
	41	33.85	600	20.31	1.71	11.88
	42	40.90	600	24.54	1.51	16.25
	43	42.18	600	25.31	2.32	10.91
	44	37.85	600	22.71	1.47	15.45
	45	47.45	600	28.47	2.14	13.30
	46	52.63	600	31.58	2.17	14.55
	47	27.70	600	16.62	1.32	12.59
	48	48.40	600	29.04	1.85	17.60
	49	37.78	600	22.67	1.62	13.99
	50	48.80	600	29.28	1.86	15.74
AVERAGE						14.23
SD						2.09
	51	79.85	700	55.90	3.49	16.02
	52	124.80	700	87.36	4.36	20.04
	53	98.75	700	69.13	4.1	16.86
	54	98.85	700	69.20	4.17	16.59
	55	96.05	700	67.24	4.13	16.28
	56	84.15	700	58.91	3.13	18.82
	57	82.80	700	57.96	2.78	20.85
	58	120.40	700	84.28	3.57	23.61
	59	82.30	700	57.61	4.17	13.82
	60	79.80	700	55.86	3.85	14.51
AVERAGE						17.74
SD						3.05
	61	87.30	700	61.11	3.85	15.87
	62	120.25	700	84.18	3.86	21.81
	63	86.85	700	60.80	3.27	18.59
	64	124.05	700	86.84	3.92	22.15
	65	92.50	700	64.75	3.7	17.50
	66	101.45	700	71.02	3.48	20.41
	67	58.70	700	41.09	3.27	12.57
	68	75.00	700	52.50	3.36	15.63
	69	73.95	700	51.77	2.92	17.73
	70	98.25	700	68.78	3.48	19.76
AVERAGE						18.20
SD						2.99

group 1-3,5	
AVERAGE	14.28
SD	2.55

group 4	
AVERAGE	24.45
SD	7.03

group 6,7	
AVERAGE	17.97
SD	2.95

Cholesterol-27-hydroxylase activity measurements

used per assay 420 µg protein

20 min incubation

internal standard 20 OH: 0.5 µg per determination

Mouse	energy generating mix added	area 20 OH	area 27OH	µg 27 OH formed	27- hydroxylase activity (nmol/h/mg protein)
1	+ NADPH mix	10.798	13.936	0.645	11.659
	+ NADPH mix	10.39	13.174	0.634	
	- NADPH mix	7.98	0.136	0.009	
13	+ NADPH mix	11.806	20.962	0.888	15.332
	+ NADPH mix	12.439	19.566	0.786	
	- NADPH mix	8.742	0.125	0.007	
21	+ NADPH mix	11.5	19.885	0.865	14.181
	+ NADPH mix	11.782	16.14	0.685	
	- NADPH mix	8.867	0.126	0.007	
31	+ NADPH mix	9.271	8.456	0.456	8.715
	+ NADPH mix	10.042	9.881	0.492	
	- NADPH mix	8.477	0.038	0.002	
45	+ NADPH mix	12.431	18.514	0.745	13.306
	+ NADPH mix	12.184	17.151	0.704	
	- NADPH mix	8.816	0.07	0.004	
51	+ NADPH mix	10.388	10.217	0.492	9.645
	+ NADPH mix	10.595	11.997	0.566	
	- NADPH mix	8.259	0.113	0.007	
61	+ NADPH mix	9.893	11.615	0.587	10.656
	+ NADPH mix	10.305	11.839	0.574	
	- NADPH mix	8.75	0.068	0.004	
2	+ NADPH mix	9.624	11.398	0.592	11.407
	+ NADPH mix	10.36	13.32	0.643	
	- NADPH mix	8.95	n.a.	0.000	
14	+ NADPH mix	11.022	14.253	0.647	11.766
	+ NADPH mix	11.6	14.61	0.630	
	- NADPH mix	9.308	0.023	0.001	
22	+ NADPH mix	10.919	15.555	0.712	13.689
	+ NADPH mix	10.512	16.346	0.777	
	- NADPH mix	9.52	0.074	0.004	
32	+ NADPH mix	8.987	8.043	0.447	8.267
	+ NADPH mix	9.298	8.372	0.450	
	- NADPH mix	8.538	0.023	0.001	
46	+ NADPH mix	10.614	15.727	0.741	13.654
	+ NADPH mix	10.223	15.178	0.742	
	- NADPH mix	9.715	0.048	0.002	
52	+ NADPH mix	9.353	9.827	0.525	9.007
	+ NADPH mix	10.539	9.649	0.458	
	- NADPH mix	8.851	0.071	0.004	
62	+ NADPH mix	10.024	6.711	0.335	6.389
	+ NADPH mix	9.352	6.677	0.357	
	- NADPH mix	8.92	n.a.	0.000	
3	+ NADPH mix	12.459	19.765	0.793	13.571
	+ NADPH mix	11.384	15.393	0.676	
	- NADPH mix	9.006	n.a.	0.000	
17	+ NADPH mix	10.383	12.005	0.578	11.209
	+ NADPH mix	14.276	18.144	0.635	
	- NADPH mix	9.026	n.a.	0.000	
23	+ NADPH mix	9.646	14.544	0.754	13.480
	+ NADPH mix	10.293	14.524	0.706	
	- NADPH mix	7.233	n.a.	0.000	
33	+ NADPH mix	8.216	7.206	0.439	7.549
	+ NADPH mix	8.156	6.744	0.413	
	- NADPH mix	7.185	0.249	0.017	

Mouse	energy generating mix added	area 20 OH	area 27OH	µg 27 OH formed	27- hydroxylase activity (nmol/h/mg protein)
41	+ NADPH mix	10.176	4.943	0.243	4.610
	+ NADPH mix	9.541	4.889	0.256	
	- NADPH mix	7.88	n.a.	0.000	
53	+ NADPH mix	7.856	4.981	0.317	5.749
	+ NADPH mix	7.979	4.873	0.305	
	- NADPH mix	7.279	n.a.	0.000	
63	+ NADPH mix	10.998	7.897	0.359	6.458
	+ NADPH mix	8.797	6.181	0.351	
	- NADPH mix	7.705	0.086	0.006	
4	+ NADPH mix	9.576	11.39	0.595	10.962
	+ NADPH mix	10.192	12.068	0.592	
	- NADPH mix	7.719	n.a.	0.000	
11	+ NADPH mix	11.137	8.145	0.366	6.920
	+ NADPH mix	9.797	7.601	0.388	
	- NADPH mix	8.556	0.038	0.002	
24	+ NADPH mix	10.407	11.002	0.529	10.396
	+ NADPH mix	9.642	11.512	0.597	
	- NADPH mix	6.778	n.a.	0.000	
34	+ NADPH mix	6.577	3.674	0.279	5.049
	+ NADPH mix	9.528	5.095	0.267	
	- NADPH mix	7.252	n.a.	0.000	
42	+ NADPH mix	9.538	11.731	0.615	10.933
	+ NADPH mix	9.074	10.387	0.572	
	- NADPH mix	7.471	0.027	0.002	
54	+ NADPH mix	8.887	6.229	0.350	6.297
	+ NADPH mix	8.267	5.477	0.331	
	- NADPH mix	7.436	n.a.	0.000	
64	+ NADPH mix	8.585	6.457	0.376	6.976
	+ NADPH mix	8.945	6.783	0.379	
	- NADPH mix	6.454	n.a.	0.000	
6	+ NADPH mix	11.823	13.325	0.564	10.270
	+ NADPH mix	8.846	9.816	0.555	
	- NADPH mix	8.775	0.057	0.003	
12	+ NADPH mix	9.224	1.784	0.097	1.767
	+ NADPH mix	9.098	1.721	0.095	
	- NADPH mix	9.234	n.a.	0.000	
25	+ NADPH mix	10.72	7.132	0.333	6.619
	+ NADPH mix	9.542	7.327	0.384	
	- NADPH mix	8.864	0.031	0.000	
35	+ NADPH mix	9.856	5.695	0.289	4.714
	+ NADPH mix	10.84	4.8	0.221	
	- NADPH mix	8.053	n.a.	0.000	
43	+ NADPH mix	10.178	12.222	0.600	10.450
	+ NADPH mix	10.114	10.741	0.531	
	- NADPH mix	7.765	n.a.	0.000	
55	+ NADPH mix	8.696	5.552	0.319	5.748
	+ NADPH mix	8.713	5.349	0.307	
	- NADPH mix	8.251	0.032	0.002	
65	+ NADPH mix	9.579	6.842	0.357	6.758
	+ NADPH mix	9.473	7.217	0.381	
	- NADPH mix	8.811	0.056	0.003	
5	+ NADPH mix	9.569	7.618	0.398	7.499
	+ NADPH mix	9.56	7.922	0.414	
	- NADPH mix	8.442	0.004	0.000	
15	+ NADPH mix	10.061	8.488	0.422	7.366
	+ NADPH mix	10.559	7.934	0.376	
	- NADPH mix	9.105	n.a.	0.000	
26	+ NADPH mix	9.863	7.929	0.402	7.746
	+ NADPH mix	9.469	8.269	0.437	
	- NADPH mix	8.926	n.a.	0.000	

Mouse	energy generating mix added	area 20 OH	area 27OH	µg 27 OH formed	27- hydroxylase activity (nmol/h/mg protein)
36	+ NADPH mix	9.147	4.853	0.265	4.792
	+ NADPH mix	9.469	4.856	0.256	
	- NADPH mix	7.56	0.022	0.001	
44	+ NADPH mix	9.972	8.19	0.411	6.991
	+ NADPH mix	11.897	8.239	0.346	
	- NADPH mix	8.394	n.a.	0.000	
56	+ NADPH mix	9.607	5.319	0.277	4.846
	+ NADPH mix	9.685	4.876	0.252	
	- NADPH mix	8.852	0.035	0.002	
66	+ NADPH mix	9.829	7.898	0.402	7.244
	+ NADPH mix	10.203	7.893	0.387	
	- NADPH mix	9.701	0.042	0.002	
7	+ NADPH mix	10.39	6.813	0.328	6.422
	+ NADPH mix	9.963	7.322	0.367	
	- NADPH mix	9.004	n.a.	0.000	
16	+ NADPH mix	9.887	6.158	0.311	5.647
	+ NADPH mix	9.808	5.884	0.300	
	- NADPH mix	8.749	n.a.	0.000	
27	+ NADPH mix	10.948	8.509	0.389	7.026
	+ NADPH mix	11.307	8.456	0.374	
	- NADPH mix	9.47	0.018	0.001	
37	+ NADPH mix	10.004	6.283	0.314	5.725
	+ NADPH mix	9.859	6.029	0.306	
	- NADPH mix	8.538	n.a.	0.000	
47	+ NADPH mix	9.054	6.579	0.363	7.341
	+ NADPH mix	10.166	8.773	0.431	
	- NADPH mix	9.566	n.a.	0.000	
57	+ NADPH mix	10.482	5.812	0.277	5.392
	+ NADPH mix	9.237	5.663	0.307	
	- NADPH mix	9.439	n.a.	0.000	
67	+ NADPH mix	9.185	8.637	0.470	9.408
	+ NADPH mix	9.321	10.313	0.553	
	- NADPH mix	8.555	0.041	0.002	
8	+ NADPH mix	10.123	14.048	0.694	11.412
	+ NADPH mix	10.395	11.26	0.542	
	- NADPH mix	8.227	n.a.	0.000	
18	+ NADPH mix	9.534	9.63	0.505	8.666
	+ NADPH mix	9.641	8.353	0.433	
	- NADPH mix	7.802	n.a.	0.000	
28	+ NADPH mix	10.422	10.021	0.481	9.586
	+ NADPH mix	10.894	12.138	0.557	
	- NADPH mix	7.384	n.a.	0.000	
38	+ NADPH mix	9.189	3.667	0.200	3.858
	+ NADPH mix	8.998	3.925	0.218	
	- NADPH mix	8.56	n.a.	0.000	
48	+ NADPH mix	10.497	11.218	0.534	9.251
	+ NADPH mix	10.009	9.378	0.468	
	- NADPH mix	8.178	0.01	0.001	
58	+ NADPH mix	8.418	4.05	0.241	4.499
	+ NADPH mix	9.913	4.887	0.246	
	- NADPH mix	8.293	n.a.	0.000	
68	+ NADPH mix	9.401	6.674	0.355	6.255
	+ NADPH mix	10.176	6.558	0.322	
	- NADPH mix	8.704	n.a.	0.000	
9	+ NADPH mix	8.909	7.488	0.420	8.660
	+ NADPH mix	9.904	10.247	0.517	
	- NADPH mix	7.036	n.a.	0.000	
19	+ NADPH mix	6.336	5.573	0.440	8.031
	+ NADPH mix	8.809	7.57	0.430	
	- NADPH mix	6.461	n.a.	0.000	
29	+ NADPH mix	6.725	5.613	0.417	7.405
	+ NADPH mix	9.786	7.53	0.385	
	- NADPH mix	4.961	0.002	0.000	

Mouse	energy generating mix added	area 20 OH	area 27OH	µg 27 OH formed	27- hydroxylase activity (nmol/h/mg protein)
39	+ NADPH mix	8.832	4.203	0.238	4.380
	+ NADPH mix	9.279	4.385	0.236	
	- NADPH mix	8.084	n.a.	0.000	
49	+ NADPH mix	9.633	6.413	0.333	6.010
	+ NADPH mix	11.234	7.141	0.318	
	- NADPH mix	7.927	n.a.	0.000	
59	+ NADPH mix	9.799	4.515	0.230	4.419
	+ NADPH mix	9.597	4.761	0.248	
	- NADPH mix	9.087	n.a.	0.000	
69	+ NADPH mix	9.836	6.674	0.339	6.322
	+ NADPH mix	9.96	6.877	0.345	
	- NADPH mix	1.235	n.a.	0.000	
10	+ NADPH mix	9.549	8.229	0.431	8.204
	+ NADPH mix	10.004	9.15	0.457	
	- NADPH mix	7.526	n.a.	0.000	
20	+ NADPH mix	9.543	7.346	0.385	7.331
	+ NADPH mix	9.019	7.444	0.413	
	- NADPH mix	8.008	0.031	0.002	
40	+ NADPH mix	7.696	2.057	0.134	2.390
	+ NADPH mix	8.096	2.046	0.126	
	- NADPH mix	7.695	0.01	0.001	
60	+ NADPH mix	8.639	3.465	0.201	3.828
	+ NADPH mix	8.551	3.757	0.220	
	- NADPH mix	8.104	0.047	0.003	
30	+ NADPH mix	8.271	5.462	0.330	6.184
	+ NADPH mix	8.406	5.704	0.339	
	- NADPH mix	7.768	n.a.	0.000	
50	+ NADPH mix	9.353	8.537	0.456	7.941
	+ NADPH mix	9.445	7.619	0.403	
	- NADPH mix	7.913	n.a.	0.000	
70	+ NADPH mix	9.568	4.626	0.242	4.849
	+ NADPH mix	8.325	4.716	0.283	
	- NADPH mix	7.941	n.a.	0.000	

Group	Mouse#	mouse#	liver weight (g)	average mg mitochondria/g liver	cholesterol 27 hydroxylase activity	
					(nmol/h/mg protein)	per liver (nmol/h)
	1	1	2.19	14.28	11.66	364.7
	2	2	2.00	14.28	11.41	325.9
	3	3	1.66	14.28	13.57	321.8
	4	4	1.41	14.28	10.96	220.8
	5	5	1.68	14.28	7.50	180.0
	6	6	1.70	14.28	10.27	249.4
	7	7	1.61	14.28	6.42	147.7
	8	8	1.77	14.28	11.41	288.5
	9	9	1.68	14.28	8.66	207.8
	10	10	1.49	14.28	8.20	174.6
					10.01	248.1
					2.22	73.9
	11	11	2.77	14.28	6.92	273.8
	12	12	1.17	14.28	1.77	29.5
	13	13	1.88	14.28	15.33	411.7
	14	14	2.53	14.28	11.77	425.2
	15	15	1.68	14.28	7.37	176.8
	16	16	1.23	14.28	5.65	99.2
	17	17	1.35	14.28	11.21	216.1
	18	18	1.84	14.28	8.67	227.8
	19	19	1.53	14.28	8.03	175.5
	20	20	1.98	14.28	7.33	207.3
AVERAGE					8.40	224.3
SD					3.70	123.2
	21	21	2.00	14.28	14.18	405.1
	22	22	2.23	14.28	13.69	436.0
	23	23	2.27	14.28	13.48	437.1
	24	24	1.68	14.28	10.40	249.5
	25	25	1.56	14.28	6.62	147.5
	26	26	2.06	14.28	7.75	227.9
	27	27	1.85	14.28	7.03	185.6
	28	28	1.51	14.28	9.59	206.8
	29	29	2.42	14.28	7.40	255.9
	30	30	2.14	14.28	6.18	189.0
					9.63	274.0
					3.14	109.9
	31	31	3.46	24.45	8.72	737.3
	32	32	3.68	24.45	8.27	743.8
	33	33	3.69	24.45	7.55	681.1
	34	34	3.93	24.45	5.05	485.2
	35	35	4.23	24.45	4.71	487.5
	36	36	1.94	24.45	4.79	227.3
	37	37	3.62	24.45	5.72	506.7
	38	38	3.90	24.45	3.86	367.9
	39	39	4.03	24.45	4.38	431.6
	40	40	3.39	24.45	2.39	198.1
AVERAGE					5.54	486.7
SD					2.03	192.9
	41	41	1.90	14.28	4.61	125.1
	42	42	1.71	14.28	10.93	267.0
	43	43	2.48	14.28	10.45	370.2
	44	44	1.69	14.28	6.99	168.8
	45	45	2.25	14.28	13.31	427.6
	46	46	2.46	14.28	13.65	479.8
	47	47	1.47	14.28	7.34	154.1
	48	48	1.88	14.28	9.25	248.4
	49	49	1.82	14.28	6.01	156.2
	50	50	2.14	14.28	7.94	242.7
AVERAGE					9.05	264.0
SD					3.02	123.5
	51	51	3.90	17.97	9.65	676.0
	52	52	4.87	17.97	9.01	788.2
	53	53	4.10	17.97	5.75	423.5
	54	54	4.17	17.97	6.30	471.8
	55	55	4.13	17.97	5.75	426.6
	56	56	3.48	17.97	4.85	303.0
	57	57	3.13	17.97	5.39	303.3
	58	58	4.11	17.97	4.50	332.3
	59	59	4.74	17.97	4.42	376.4
	60	60	4.33	17.97	3.83	297.8
AVERAGE					5.94	439.9
SD					1.93	167.2
	61	61	4.29	17.97	10.66	821.5
	62	62	4.33	17.97	6.39	497.1
	63	63	3.88	17.97	6.46	450.3
	64	64	4.28	17.97	6.98	536.5
	65	65	4.15	17.97	6.76	504.0
	66	66	3.85	17.97	7.24	501.1
	67	67	3.91	17.97	9.41	661.0
	68	68	3.83	17.97	6.25	430.5
	69	69	3.33	17.97	6.32	378.3
	70	70	3.92	17.97	4.85	341.6
AVERAGE					7.13	512.2
SD					1.68	140.0

mitochondria: mg per g liver and 27-hydroxylase activity, p values Mann-Whitney U-test																							
mitochondria	group 1 vs 2			group 1 vs 3			group 1 vs 4			group 1 vs 5			group 1 vs 6			group 1 vs 7			group 2 vs 3				
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p		
mg/g liver	10	10	0.165	10	10	0.436	10	10	0.002	10	10	0.796	10	10	0.043	10	10	0.019	10	10	0.005		
27 hydroxylase act.	10	10	0.247	10	10	0.631	10	10	0.003	10	10	0.353	10	10	0.001	10	10	0.004	10	10	0.579		
27 hydroxylase act. per liver	10	10	0.579	10	10	0.684	10	10	0.001	10	10	0.971	10	10	0.002	10	10	<0.001	10	10	0.353		
mitochondria	group 2 vs 4			group 2 vs 5			group 2 vs 6			group 2 vs 7			group 3 vs 4			group 3 vs 5			group 3 vs 6				
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p		
mg/g liver	10	10	<0.001	10	10	0.075	10	10	<0.001	10	10	<0.001	10	10	0.002	10	10	0.218	10	10	0.123		
27 hydroxylase act.	10	10	0.075	10	10	0.796	10	10	0.063	10	10	0.165	10	10	0.005	10	10	0.684	10	10	0.008		
27 hydroxylase act. per liver	10	10	0.003	10	10	0.631	10	10	0.002	10	10	<0.001	10	10	0.015	10	10	0.739	10	10	0.019		
mitochondria	group 3 vs 7			group 4 vs 5			group 4 vs 6			group 4 vs 7			group 5 vs 6			group 5 vs 7			group 6 vs 7				
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p		
mg/g liver	10	10	0.052	10	10	0.001	10	10	0.009	10	10	0.011	10	10	0.011	10	10	0.005	10	10	0.739		
27 hydroxylase act.	10	10	0.043	10	10	0.015	10	10	0.528	10	10	0.075	10	10	0.019	10	10	0.123	10	10	0.035		
27 hydroxylase act. per liver	10	10	0.001	10	10	0.009	10	10	0.393	10	10	0.796	10	10	0.009	10	10	<0.001	10	10	0.089		

p<0.05

I. Measurements in vitro experiment (rat hepatocytes)

Experiment 1

Protein concentration determination

sample	Measured protein conc (mg/ml)	dilution	average protein conc (mg/ml)	µg protein per well
1	97.5	4	376.2	125.4
	90.6			
2	119.5	4	490.0	163.3
	125.5			
3	172.9	4	626.8	208.9
	140.5			
4	155.8	4	672.2	224.1
	180.3			
5	167.7	4	689.6	229.9
	177.1			
6	131.6	4	505.6	168.5
	121.2			
7	139.7	4	508.4	169.5
	114.5			
8	257.5	4	944.4	314.8
	214.7			
9	176	4	702.0	234.0
	175			
10	155.8	4	594.8	198.3
	141.6			
11	155.8	4	555.8	185.3
	122.1			
12	167.7	4	645.0	215.0
	154.8			
13	129	4	512.4	170.8
	127.2			
14	136.1	4	555.2	185.1
	141.5			
15	170.8	4	695.8	231.9
	177.1			
16	172.9	4	717.2	239.1
	185.7			
17	168.7	4	648.6	216.2
	155.6			
18	177.1	4	685.6	228.5
	165.7			
19	151.9	4	605.6	201.9
	150.9			
20	188.9	4	744.8	248.3
	183.5			
21	190.1	4	840.0	280.0
	229.9			
22	168.7	4	662.8	220.9
	162.7			
23	167.7	4	650.8	216.9
	157.7			
24	229.9	4	896.6	298.9
	218.4			
25	150.9	4	594.2	198.1
	146.2			
26	127.2	4	521.2	173.7
	133.4			
27	172.9	4	649.6	216.5
	151.9			
28	170.8	4	713.0	237.7
	185.7			
29	170.8	4	697.8	232.6
	178.1			
30	163.7	4	669.0	223.0
	170.8			

sample	Measured protein conc (mg/ml)	dilution	average protein conc (mg/ml)	µg protein per well
31	134.3	4	523.0	174.3
	127.2			
32	149.9	4	563.0	187.7
	131.6			
33	202.7	4	796.8	265.6
	195.7			
34	194.1	4	821.8	273.9
	216.8			
35	188.7	4	784.8	261.6
	203.7			
36	173.8	4	670.2	223.4
	161.3			
37	194.1	4	821.8	273.9
	216.8			
38	188.7	4	785.0	261.7
	203.8			
39	173.9	4	670.4	223.5
	161.3			
40	168.6	4	685.0	228.3
	173.9			
41	140.8	4	569.2	189.7
	143.8			
42	139.7	4	569.0	189.7
	144.8			
43	155.1	4	606.0	202.0
	147.9			
44	162.4	4	653.6	217.9
	164.4			
45	164.4	4	649.4	216.5
	160.3			
46	179.2	4	697.8	232.6
	169.7			
47	198.4	4	732.0	244.0
	167.6			
48	209.1	4	808.4	269.5
	195.1			
49	207	4	847.6	282.5
	216.8			
50	239.9	4	991.0	330.3
	255.6			
51	241.1	4	982.0	327.3
	249.9			
52	182.33	4	630.1	210.0
	132.7			
53	201.6	4	793.4	264.5
	195.1			
54	212.4	4	867.2	289.1
	221.2			
55	210.4	4	806.8	268.9
	193			
56	211.4	4	909.4	303.1
	243.3			
57	208.1	4	828.0	276.0
	205.9			
58	239.9	4	926.6	308.9
	223.4			
59	213.5	4	849.8	283.3
	211.4			
60	198.4	4	759.4	253.1
	181.3			
61	129.7	4	526.8	175.6
	133.7			
62	156.1	4	674.8	224.9
	181.3			

sample	Measured protein conc (mg/ml)	dilution	average protein conc (mg/ml)	µg protein per well
63	171.8	4	729.6	243.2
	193			
64	146.9	4	575.4	191.8
	140.8			
63	166.5	4	667.0	229.0
	177			
64	147.9	4	561.2	187.1
	132.7			
63	130.7	4	516.8	172.3
	127.7			
64	135.7	4	563.2	187.7
	145.9			
69	131.7	4	542.8	180.9
	139.7			
70	77.6	4	299.4	99.8
	72.1			
71	153.1	4	626.6	208.9
	160.2			
72	132.7	4	518.8	172.9
	126.7			
73	96.4	4	373.2	124.4
	90.2			
74	118.4	4	487.4	162.5
	125.3			
75	162.2	4	605.6	201.9
	140.6			
76	152.9	4	660.8	220.3
	177.5			
77	165.9	4	682.6	227.5
	175.4			
78	129.7	4	498.2	166.1
	119.4			
79	138.7	4	504.0	168.0
	113.3			
80	261.1	4	956.4	318.8
	217.1			
81	176.4	4	703.6	234.5
	175.4			
82	153.9	4	585.2	195.1
	138.7			
83	154.8	4	549.8	183.3
	120.1			
84	167.9	4	645.6	215.2
	154.9			
85	126.1	4	502.8	167.6
	125.3			
86	133.2	4	547.6	182.5
	140.6			
87	169	4	690.2	230.1
	176.1			
88	174.3	4	721.2	240.4
	186.3			
89	167.9	4	647.6	215.9
	155.9			
90	176.4	4	682.6	227.5
	164.9			
91	150	4	598.0	199.3
	149			
92	188.5	4	745.2	248.4
	184.1			
93	189.6	4	822.0	274.0
	221.4			
94	166.9	4	657.6	219.2
	161.9			
95	166.9	4	647.6	215.9
	156.9			
96	230.1	4	897.0	299.0
	218.4			
97	149	4	588.4	196.1
	145.2			
98	125.3	4	515.2	171.7
	132.3			
99	172.2	4	648.2	216.1
	151.9			
100	170.1	4	710.6	236.9
	185.2			
101	170.1	4	693.0	231.0
	176.4			
102	163.9	4	668.0	222.7
	170.1			
103	132.3	4	516.8	172.3
	126.1			
104	148.1	4	557.4	185.8
	130.6			
105	203.6	4	800.2	266.7
	196.5			
106	212.1	4	815.0	271.7
	195.4			
107	146.2	4	719.2	239.7
	213.4			

^{14}C -Cholesterol synthesis in rat hepatocytes

sample	compound concentration	^{14}C Label	^3H -cholesterol (dpm)	^{14}C -cholesterol (dpm)	^{14}C -cholesterol for recovery (dpm)	μg protein	^{14}C -cholesterol per mg protein (dpm/mg)	Average ^{14}C -cholesterol per mg protein (dpm/mg)	% of control	Average % of control	SD
1	control	^{14}C acetic acid	12705	7957	16067	125.4	128130	129029	99	100	0.7
2	control	^{14}C acetic acid	12827	10612	21225	163.3	129974		101		
3	control	^{14}C acetic acid	11820	12414	26944	208.9	129982		100		
4	control	^{14}C butyric acid	14124	8971	16295	224.1	72713	108158	67	100	34.2
5	control	^{14}C butyric acid	12899	11979	24200	229.9	105285		97		
6	control	^{14}C butyric acid	15542	14654	24684	168.5	146495		135		
7	control	^{14}C lauric acid	12531	17327	35474	169.5	209286	156534	134	100	31.0
8	control	^{14}C lauric acid	11864	16561	35812	314.8	113781		73		
9	control	^{14}C lauric acid	11644	15565	34294	234	146556		94		
10	control	^{14}C palmitic acid	14154	7988	14442	188.3	72832	70783	103	100	19.5
11	control	^{14}C palmitic acid	12949	7804	15462	185.3	83441		118		
12	control	^{14}C palmitic acid	14391	6763	12058	215	56077		79		
13	PFBS 1 μM	^{14}C acetic acid	15327	11600	19249	170.8	112700	110093	87	85	2.9
14	PFBS 1 μM	^{14}C acetic acid	14468	11220	18986	185.1	107488		83		
15	PFBS 10 μM	^{14}C acetic acid	14439	13928	24747	231.9	106714	105182	83	82	1.7
16	PFBS 10 μM	^{14}C acetic acid	18146	17531	24783	239.1	103650		80		
17	PFBS 100 μM	^{14}C acetic acid	12484	10821	22237	216.2	102856	97594	80	76	5.8
18	PFBS 100 μM	^{14}C acetic acid	13353	10981	21098	228.5	92331		72		
19	PFBS 1 μM	^{14}C acetic acid	15401	13298	22152	201.9	109717	117064	85	91	8.1
20	PFBS 1 μM	^{14}C acetic acid	14081	16955	30891	248.3	124411		96		
21	PFBS 10 μM	^{14}C acetic acid	14883	15087	25833	280	92281	105305	72	82	14.3
22	PFBS 10 μM	^{14}C acetic acid	13978	14244	26143	220.9	118349		92		
23	PFBS 100 μM	^{14}C acetic acid	14523	14505	25623	216.9	118134	107898	92	84	11.2
24	PFBS 100 μM	^{14}C acetic acid	16419	18882	29191	298.9	97861		76		
25	PFOS 1 μM	^{14}C acetic acid	13313	9191	17712	198.1	89408	120763	69	94	34.4
26	PFOS 1 μM	^{14}C acetic acid	13999	14418	26423	173.7	152118		118		
27	PFOS 10 μM	^{14}C acetic acid	13086	11960	23430	216.5	108220	103774	84	80	4.9
28	PFOS 10 μM	^{14}C acetic acid	14417	13268	23610	237.7	99328		77		
29	PFOS 100 μM	^{14}C acetic acid	12438	8472	17475	232.6	75127	83236	58	65	8.9
30	PFOS 100 μM	^{14}C acetic acid	12519	9940	20370	223.0	91345		71		
31	Rosuvastatin 0.003 μM	^{14}C acetic acid	13661	6222	11685	174.3	67038	58119	52	45	9.8
32	Rosuvastatin 0.003 μM	^{14}C acetic acid	14096	5074	9235	187.7	49200		38		
33	Rosuvastatin 0.03 μM	^{14}C acetic acid	12455	1670	3440	265.6	12951	14780	10	11	2.0
34	Rosuvastatin 0.03 μM	^{14}C acetic acid	12781	2288	4549	273.9	16808		13		
35	Rosuvastatin 0.3 μM	^{14}C acetic acid	14394	624	1112	281.6	4251	4151	3	3	0.1
36	Rosuvastatin 0.3 μM	^{14}C acetic acid	13181	465	905	223.4	4051		3		
37	PFBS 1 μM	^{14}C butyric acid	13006	7687	15124	273.9	55216	66147	51	61	14.3
38	PFBS 1 μM	^{14}C butyric acid	13189	10370	20172	261.7	77079		71		
39	PFBS 10 μM	^{14}C butyric acid	13331	17500	33678	223.5	150685	138237	139	128	18.3
40	PFBS 10 μM	^{14}C butyric acid	12774	14299	28718	228.3	125790		116		
41	PFBS 100 μM	^{14}C butyric acid	13454	8093	15432	189.7	81351	100007	75	92	24.4
42	PFBS 100 μM	^{14}C butyric acid	16489	14468	22511	189.7	118664		110		
43	PFBS 1 μM	^{14}C butyric acid	12397	13939	28846	202.0	142802	124204	132	115	24.3
44	PFBS 1 μM	^{14}C butyric acid	12966	11630	23012	217.9	105606		98		
45	PFBS 10 μM	^{14}C butyric acid	13703	10974	20546	216.5	94899	109301	88	101	18.8
46	PFBS 10 μM	^{14}C butyric acid	13864	15549	28773	232.6	123702		114		
47	PFBS 100 μM	^{14}C butyric acid	15672	16480	26978	244.0	110564	108003	102	100	3.3
48	PFBS 100 μM	^{14}C butyric acid	15719	17411	28417	269.5	105442		97		
49	PFOS 1 μM	^{14}C butyric acid	12626	9783	19878	282.5	70366	82685	65	76	16.1
50	PFOS 1 μM	^{14}C butyric acid	13507	16521	31380	320.3	95004		88		
51	PFOS 10 μM	^{14}C butyric acid	15475	19586	32470	337.3	99207	105912	92	96	8.8
52	PFOS 10 μM	^{14}C butyric acid	13164	12135	23650	210.0	112617		104		
53	PFOS 100 μM	^{14}C butyric acid	15165	9934	16838	284.5	67898	62847	58	58	0.1
54	PFOS 100 μM	^{14}C butyric acid	15228	10776	18155	289.1	62797		58		

sample	compound concentration	¹⁴ C Label	¹⁴ C-cholesterol (dpm)	¹⁴ C-cholesterol (dpm)	¹⁴ C-cholesterol corrected for recovery (dpm)	µg protein	¹⁴ C-cholesterol per mg protein (dpm/mg)	Average ¹⁴ C-cholesterol per mg protein (dpm/mg)	% of control	Average % of control
55	Rosuvastatin 0.003 µM	¹⁴ C butyric acid	15609	4123	6777	268.9	25201	25531	23	24
56	Rosuvastatin 0.003 µM	¹⁴ C butyric acid	15687	4793	7839	303.1	25881		24	
57	Rosuvastatin 0.03 µM	¹⁴ C butyric acid	14378	901	1608	276.0	5825	5889	5	5
58	Rosuvastatin 0.03 µM	¹⁴ C butyric acid	13730	984	1839	308.9	5862		6	
59	Rosuvastatin 0.3 µM	¹⁴ C butyric acid	15870	311	503	283.3	1775	2910	2	3
60	Rosuvastatin 0.3 µM	¹⁴ C butyric acid	12832	512	1024	253.1	4044		4	
61	PFBS 1 µM	¹⁴ C lauric acid	13019	11827	23306	175.6	132722	132231	85	84
62	PFBS 1 µM	¹⁴ C lauric acid	16814	19187	28628	224.9	131739		84	
63	PFBS 10 µM	¹⁴ C lauric acid	16141	21002	33381	243.2	137258	152501	88	97
64	PFBS 10 µM	¹⁴ C lauric acid	15873	18906	32173	191.8	167745		107	
65	PFBS 100 µM	¹⁴ C lauric acid	17295	21050	31225	229.0	136354	136623	87	87
66	PFBS 100 µM	¹⁴ C lauric acid	16841	16813	25612	187.1	136891		87	
67	PFBS 1 µM	¹⁴ C lauric acid	10210	11716	29439	172.3	170860	168120	109	108
68	PFBS 1 µM	¹⁴ C lauric acid	15012	18405	31558	187.7	168120		107	
69	PFBS 10 µM	¹⁴ C lauric acid	15875	17804	28772	180.9	159051	240583	102	154
70	PFBS 10 µM	¹⁴ C lauric acid	18131	20213	32147	99.8	322115		208	
71	PFBS 100 µM	¹⁴ C lauric acid	16397	12748	18946	208.9	95480	106037	61	68
72	PFBS 100 µM	¹⁴ C lauric acid	14452	11356	20159	172.9	116594		74	
73	PFOS 1 µM	¹⁴ C lauric acid	15496	14299	23673	124.4	190300	177579	122	113
74	PFOS 1 µM	¹⁴ C lauric acid	17004	17756	26790	162.5	164859		105	
75	PFOS 10 µM	¹⁴ C lauric acid	13663	13984	26258	201.9	130053	133496	83	85
76	PFOS 10 µM	¹⁴ C lauric acid	13951	16405	30168	220.3	136839		87	
77	PFOS 100 µM	¹⁴ C lauric acid	14919	11557	19874	227.5	87357	101731	56	65
78	PFOS 100 µM	¹⁴ C lauric acid	16126	12122	19285	166.1	116105		74	
79	Rosuvastatin 0.003 µM	¹⁴ C lauric acid	15126	4914	8335	168.0	49611		32	25
80	Rosuvastatin 0.003 µM	¹⁴ C lauric acid	15117	5462	9270	318.8	29076		19	
81	Rosuvastatin 0.03 µM	¹⁴ C lauric acid	15845	1201	1945	234.5	8292	11666	5	7
82	Rosuvastatin 0.03 µM	¹⁴ C lauric acid	15353	1756	2934	195.1	15040		10	
83	Rosuvastatin 0.3 µM	¹⁴ C lauric acid	16583	465	719	183.3	3925	3948	3	3
84	Rosuvastatin 0.3 µM	¹⁴ C lauric acid	15168	505	855	215.2	3972		3	
85	PFBS 1 µM	¹⁴ C palmitic acid	14410	5450	9703	167.6	57894	54127	82	76
86	PFBS 1 µM	¹⁴ C palmitic acid	15961	5718	9191	182.5	50361		71	
87	PFBS 10 µM	¹⁴ C palmitic acid	16275	5596	8821	230.1	38336	39833	54	56
88	PFBS 10 µM	¹⁴ C palmitic acid	14927	5781	9936	240.4	41330		58	
89	PFBS 100 µM	¹⁴ C palmitic acid	14899	5367	9242	215.9	42805		60	71
90	PFBS 100 µM	¹⁴ C palmitic acid	2959	1505	13049	228.5	57105	42805	81	
91	PFBS 1 µM	¹⁴ C palmitic acid	14864	6875	11521	199.3	57807	44320	82	63
92	PFBS 1 µM	¹⁴ C palmitic acid	15988	4773	7659	248.4	30833		44	
93	PFBS 10 µM	¹⁴ C palmitic acid	14366	5602	10004	274.0	36511	48134	52	68
94	PFBS 10 µM	¹⁴ C palmitic acid	15718	8024	13098	219.2	59756		84	
95	PFBS 100 µM	¹⁴ C palmitic acid	13749	5977	11153	215.9	51657	41565	73	59
96	PFBS 100 µM	¹⁴ C palmitic acid	16009	5872	9410	299.0	31472		44	
97	PFOS 1 µM	¹⁴ C palmitic acid	14012	4048	7412	196.1	37795	63501	53	90
98	PFOS 1 µM	¹⁴ C palmitic acid	15284	9125	15317	171.7	89207		126	
99	PFOS 10 µM	¹⁴ C palmitic acid	14474	5125	9084	216.1	42036	43968	59	62
100	PFOS 10 µM	¹⁴ C palmitic acid	12042	5104	10874	236.9	45801		65	
101	PFOS 100 µM	¹⁴ C palmitic acid	14571	4478	7884	231.0	34131	36182	48	51
102	PFOS 100 µM	¹⁴ C palmitic acid	13866	4542	8514	222.7	38232		54	
103	Rosuvastatin 0.003 µM	¹⁴ C palmitic acid	13478	3476	6616	172.3	38401	34136	54	48
104	Rosuvastatin 0.003 µM	¹⁴ C palmitic acid	13285	2874	5550	185.8	29871		42	
105	Rosuvastatin 0.03 µM	¹⁴ C palmitic acid	12506	1940	3980	266.7	14822	13974	21	20
106	Rosuvastatin 0.03 µM	¹⁴ C palmitic acid	13476	1859	3539	271.7	13026		18	
107	Rosuvastatin 0.3 µM	¹⁴ C palmitic acid	14963	1145	1963	239.7	8190	8190	12	12
		Input ¹⁴ C cholesterol	26014							
		Input ¹⁴ C cholesterol	25923							
		Input ¹⁴ C cholesterol	25028							
		average input ¹⁴ C cholesterol	25655							

Experiment 2

Protein concentration determination

sample	Measured protein conc (mg/ml)	dilution	average protein conc (mg/ml)	µg protein per well
1	191.5	4	792.2	264.1
	204.6			
2	218.1	4	896.8	298.9
	230.3			
3	234.8	4	911.6	303.9
	221			
4	267.6	4	965.6	321.9
	215.2			
5	187.7	4	803.8	267.9
	214.2			
6	222.9	4	913.4	304.5
	233.8			
7	235.8	4	1004.8	334.9
	266.6			
8	250	4	1020.6	340.2
	260.3			
9	232.8	4	949.4	316.5
	241.9			
10	246.9	4	1033.2	344.4
	269.7			
13	211.4	4	813.2	271.1
	195.2			
14	155.9	4	620.0	206.7
	154.1			
15	123.5	4	591.2	197.1
	172.1			
16	156.8	4	777.2	259.1
	231.8			
17	139.1	4	508.0	169.3
	114.9			
18	147	4	682.6	227.5
	194.3			
19	256.2	4	952.6	317.5
	220.1			
20	126.6	4	540.2	180.1
	143.5			
21	221	4	876.2	292.1
	217.1			
22	158.6	4	676.0	225.3
	179.4			
23	235.8	4	921.4	307.1
	224.9			
24	175.8	4	835.2	278.4
	241.8			
25	196.3	4	801.8	267.3
	204.6			
26	206.6	4	814.8	271.6
	200.8			
27	240.8	4	967.4	322.5
	242.9			
28	190.5	4	764.0	254.7
	191.5			
29	150.6	4	609.4	203.1
	154.1			
30	142.6	4	567.0	189.0
	140.9			

sample	Measured protein conc (mg/ml)	dilution	average protein conc (mg/ml)	µg protein per well
31	231.9	4	945.6	315.2
	240.9			
32	211.3	4	839.6	279.9
	208.5			
33	216.2	4	912.0	304.0
	239.8			
34	203.7	4	879.0	293.0
	235.8			
35	292.4	4	1266.0	422.0
	340.6			
36	167.6	4	729.4	243.1
	197.1			
37	177.5	4	777.6	259.2
	211.3			
38	237.4	4	939.6	313.2
	232.4			
39	217.3	4	924.4	308.1
	244.9			
40	202.1	4	816.6	272.2
	206.2			
41	240	4	1013.4	337.8
	266.7			
42	181.8	4	769.4	256.5
	202.9			
43	217.3	4	880.8	293.6
	223.1			
44	188.5	4	725.2	241.7
	174.1			
45	238.2	4	976.4	325.5
	250			
46	173.3	4	755.8	251.9
	204.6			
47	235.8	4	934.8	311.6
	231.6			
48	229.9	4	939.8	313.3
	240			
49	183.5	4	744.0	248.0
	188.5			
50	163.1	4	630.2	210.1
	152			
51	202.9	4	862.0	287.3
	228.1			
52	213.8	4	917.4	305.8
	244.9			
53	211.4	4	859.0	286.3
	218.1			
54	168.2	4	635.2	211.7
	149.4			
55	211.4	4	848.8	282.9
	213			
56	232.4	4	973.2	324.4
	254.2			
57	245.8	4	939.6	313.2
	224			
58	156.2	4	585.4	195.1
	136.5			
59	215.6	4	904.4	301.5
	236.6			
60	133.9	4	585.2	195.1
	158.7			
61	210.5	4	840.4	280.1
	209.7			
62	156.2	4	681.0	227.0
	184.3			

sample	Measured protein conc (mg/ml)	dilution	average protein conc (mg/ml)	µg protein per well
63	252.5	4	252	84.0
	225.7			
64	153.8	4	256	85.3
	142.5			
63	228.2	4	252	84.0
	210.5			
64	228.1	4	256	85.3
	204.6			
63	220.6	4	252	84.0
	244.2			
64	133.9	4	256	85.3
	150.2			
69	220.8	4	276	92.0
	224.8			
70	234.9	4	280	93.3
	236.6			
71	247.5	4	284	94.7
	230.7			
72	137.3	4	288	96.0
	156.4			
73	206.2	4	292	97.3
	194.7			
74	150	4	296	98.7
	175			
75	152.7	4	300	100.0
	142.8			
76	141.9	4	304	101.3
	140.1			
77	230.3	4	308	102.7
	233.8			
78	237.3	4	312	104.0
	211.6			
79	184	4	316	105.3
	146.9			
80	118.4	4	320	106.7
	200.1			
81	180.4	4	324	108.0
	235.6			
82	162.6	4	328	109.3
	132			
83	211.6	4	332	110.7
	252.4			
84	168.8	4	336	112.0
	170.6			
85	222.3	4	340	113.3
	242.6			
86	257.7	4	344	114.7
	247.1			
87	223.1	4	348	116.0
	208.9			
88	178.7	4	352	117.3
	215.1			
89	179.6	4	356	118.7
	194.7			
90	168.8	4	360	120.0
	142.9			
91	188.5	4	364	121.3
	222.3			
92	196.5	4	368	122.7
	180.4			
93	226.7	4	372	124.0
	240.9			
94		4	376	125.3
	182.2			
95	228.4	4	380	126.7
	240			
96	165.2	4	384	128.0
	142.8			
97	272.7	4	388	129.3
	243.5			
98	201.8	4	392	130.7
	187.1			
99	213.4	4	396	132.0
	236.5			
100	254.2	4	400	133.3
	219.6			
101	153.6	4	404	134.7
	122			
102	232	4	408	136.0
	281.5			
103	207.2	4	412	137.3
	227.6			
104	208.1	4	416	138.7
	207.2			
105	182.9	4	420	140.0
	161.7			
106	281.6	4	424	141.3
	218.7			
107	145.5	4	428	142.7
	151.8			
108	162.6	4	432	144.0
	137.4			

[¹⁴C]-Cholesterol synthesis in rat hepatocytes

sample	compound concentration	¹⁴ C Label	³ H-cholesterol (dpm)	¹⁴ C-cholesterol (dpm)	¹⁴ C-cholesterol corrected for recovery (dpm)	µg protein	¹⁴ C-cholesterol per mg protein (dpm/mg)	Average ¹⁴ C-cholesterol per mg protein (dpm/mg)	% of control	Average % of control	SD
1	control	¹⁴ C acetic acid	10176	13013	34516	284.1	130711	179336	73	100	27.1
2	control	¹⁴ C acetic acid	15087	29921	53601	298.9	178328		100		
3	control	¹⁴ C acetic acid	8013	20565	69272	303.9	227969		127		
4	control	¹⁴ C butyric acid	7102	3628	13788	321.9	42839	58296	73	100	29.1
5	control	¹⁴ C butyric acid	13239	7313	14910	267.9	55647		95		
6	control	¹⁴ C butyric acid	16182	13946	23262	304.5	78402		131		
7	control	¹⁴ C lauric acid	11285	19393	46384	334.9	138487	126585			
8	control	¹⁴ C lauric acid	9341	14887	43017	340.2	126446				
9	control	¹⁴ C lauric acid	14585	19635	36337	316.5	114821				
13	PFBS 1 µM	¹⁴ C acetic acid	10415	15531	40250	271.1	148487	205388	83	115	44.9
14	PFBS 1 µM	¹⁴ C acetic acid	11106	22304	54206	206.7	262288		146		
15	PFBS 10 µM	¹⁴ C acetic acid	13209	31195	63444	197.1	323464	281912	180	157	32.8
16	PFBS 10 µM	¹⁴ C acetic acid	17775	41007	62289	258.1	240359		134		
17	PFBS 100 µM	¹⁴ C acetic acid	11729	24081	55416	169.3	327262	316996	182	177	8.1
18	PFBS 100 µM	¹⁴ C acetic acid	16244	42002	68791	227.5	308730		171		
19	PFBS 1 µM	¹⁴ C acetic acid	15747	34491	59120	317.5	186184	265754	104	148	62.7
20	PFBS 1 µM	¹⁴ C acetic acid	13331	30717	62193	180.1	345324		193		
21	PFBS 10 µM	¹⁴ C acetic acid	15569	28923	50143	292.1	171682	244224	96	136	57.2
22	PFBS 10 µM	¹⁴ C acetic acid	8199	21682	71378	225.3	318765		177		
23	PFBS 100 µM	¹⁴ C acetic acid	15486	25911	45162	307.1	147042	198459	82	111	40.5
24	PFBS 100 µM	¹⁴ C acetic acid	14084	36289	69565	278.4	249876		139		
25	PFOS 1 µM	¹⁴ C acetic acid	15835	30330	51899	267.3	193434	233088	108	130	31.3
26	PFOS 1 µM	¹⁴ C acetic acid	16929	46461	74077	271.6	272742		152		
27	PFOS 10 µM	¹⁴ C acetic acid	15411	37008	84817	322.5	201004	213159	112	119	9.6
28	PFOS 10 µM	¹⁴ C acetic acid	9434	20098	57380	254.7	226315		128		
29	PFOS 100 µM	¹⁴ C acetic acid	15895	26782	45479	203.1	223922	236019	125	132	9.5
30	PFOS 100 µM	¹⁴ C acetic acid	17054	29629	46894	189.0	248115		138		
31	Rosuvastatin 0.003 µM	¹⁴ C acetic acid	16199	16110	23893	315.2	75803	71058	42	40	3.7
32	Rosuvastatin 0.003 µM	¹⁴ C acetic acid	17403	11966	18559	279.9	66313		37		
33	Rosuvastatin 0.03 µM	¹⁴ C acetic acid	16235	3127	5199	304.0	17101	14585	10	8	2.0
34	Rosuvastatin 0.03 µM	¹⁴ C acetic acid	14014	1836	3536	293.0	12069		7		
35	Rosuvastatin 0.3 µM	¹⁴ C acetic acid	15647	499	861	422.0	2040	3601	1	2	1.2
36	Rosuvastatin 0.3 µM	¹⁴ C acetic acid	9439	439	1255	243.1	5163		3		
37	PFBS 1 µM	¹⁴ C butyric acid	17104	8190	12924	259.2	49863	85262	86	146	85.9
38	PFBS 1 µM	¹⁴ C butyric acid	16962	23749	37791	313.2	120662		207		
39	PFBS 10 µM	¹⁴ C butyric acid	16583	11608	18894	308.1	61317	81825	105	140	49.8
40	PFBS 10 µM	¹⁴ C butyric acid	15991	16193	27855	272.2	102332		176		
41	PFBS 100 µM	¹⁴ C butyric acid	14616	17212	31788	337.8	94102	102220	161	175	19.7
42	PFBS 100 µM	¹⁴ C butyric acid	16380	17173	28298	256.5	110398		189		
43	PFBS 1 µM	¹⁴ C butyric acid	16700	12743	20596	293.6	70149	110637	120	190	98.2
44	PFBS 1 µM	¹⁴ C butyric acid	15447	20907	36532	241.7	151125		259		
45	PFBS 10 µM	¹⁴ C butyric acid	15347	18404	32368	325.5	99450	128104	171	220	69.5
46	PFBS 10 µM	¹⁴ C butyric acid	15868	22910	39492	251.9	156757		269		
47	PFBS 100 µM	¹⁴ C butyric acid	16797	19524	31733	311.6	100685	116660	173	200	38.8
48	PFBS 100 µM	¹⁴ C butyric acid	16476	25363	41550	313.3	132635		228		
49	PFOS 1 µM	¹⁴ C butyric acid	14120	11804	24616	248.0	98258	152828	170	262	130.0
50	PFOS 1 µM	¹⁴ C butyric acid	13621	21880	43357	210.1	206398		354		
51	PFOS 10 µM	¹⁴ C butyric acid	16279	28289	46904	287.3	163241	129729	280	223	81.3
52	PFOS 10 µM	¹⁴ C butyric acid	16347	17820	29423	305.8	96218		165		
53	PFOS 100 µM	¹⁴ C butyric acid	15609	18980	32638	286.3	114684	166712	187	286	126.2
54	PFOS 100 µM	¹⁴ C butyric acid	16385	28115	46314	211.7	218739		375		

sample	compound concentration	¹⁴ C Label	¹⁴ C-cholesterol (dpm)	¹⁴ C-cholesterol corrected for recovery (dpm)	µg protein	¹⁴ C-cholesterol per mg protein (dpm/mg)	Average ¹⁴ C-cholesterol per mg protein (dpm/mg)	% of control	Average % of control	SD
55	Rosuvastatin 0.003 µM	¹⁴ C butyric acid	16224	7200	282.9	25449	27019	44	48	3.8
56	Rosuvastatin 0.003 µM	¹⁴ C butyric acid	16103	9274	324.4	28589		49		
57	Rosuvastatin 0.03 µM	¹⁴ C butyric acid	16808	1566	313.2	4899	9501	9	16	10.9
58	Rosuvastatin 0.03 µM	¹⁴ C butyric acid	17593	2732	195.1	14003		24		
59	Rosuvastatin 0.3 µM	¹⁴ C butyric acid	14906	818	301.5	2715	2604	5	4	0.3
60	Rosuvastatin 0.3 µM	¹⁴ C butyric acid	15758	486	195.1	2494		4		
61	PFBS 1 µM	¹⁴ C lauric acid	14491	38645	280.1	137952	165768	109	131	31.1
62	PFBS 1 µM	¹⁴ C lauric acid	17266	43943	227.0	183563		153		
63	PFBS 10 µM	¹⁴ C lauric acid	16587	35007	318.8	109809	129179	87	102	21.6
64	PFBS 10 µM	¹⁴ C lauric acid	17688	29324	197.4	148550		117		
65	PFBS 100 µM	¹⁴ C lauric acid	17520	33351	292.5	114033	127014	90	100	14.5
66	PFBS 100 µM	¹⁴ C lauric acid	19364	40384	288.5	139895		111		
67	PFBS 1 µM	¹⁴ C lauric acid	16638	42637	309.9	137582	168120	109	150	58.5
68	PFBS 1 µM	¹⁴ C lauric acid	17741	45884	189.4	242261		191		
69	PFBS 10 µM	¹⁴ C lauric acid	17115	40628	286.9	136826	130644	108	103	6.9
70	PFBS 10 µM	¹⁴ C lauric acid	16449	39123	314.3	124482		98		
71	PFBS 100 µM	¹⁴ C lauric acid	23842	36483	318.8	114438	169881	90	134	81.9
72	PFBS 100 µM	¹⁴ C lauric acid	15800	21356	195.8	225325		178		
73	PFOS 1 µM	¹⁴ C lauric acid	16793	44119	267.3	118363	150205	94	119	35.6
74	PFOS 1 µM	¹⁴ C lauric acid	18050	31635	216.7	182048		144		
75	PFOS 10 µM	¹⁴ C lauric acid	17035	38444	197.0	137234	157048	108	124	22.1
76	PFOS 10 µM	¹⁴ C lauric acid	15883	27035	188.0	176863		140		
77	PFOS 100 µM	¹⁴ C lauric acid	16046	33250	309.4	148200	157868	117	125	10.8
78	PFOS 100 µM	¹⁴ C lauric acid	13213	45853	289.3	167537		132		
79	Rosuvastatin 0.003 µM	¹⁴ C lauric acid	13776	11915	220.6	54010	44273	43	35	10.9
80	Rosuvastatin 0.003 µM	¹⁴ C lauric acid	12988	7333	212.3	34537		27		
81	Rosuvastatin 0.03 µM	¹⁴ C lauric acid	15098	3159	277.3	11390	16684	9	15	8.1
82	Rosuvastatin 0.03 µM	¹⁴ C lauric acid	11184	5102	196.4	25977		21		
83	Rosuvastatin 0.3 µM	¹⁴ C lauric acid	13447	1136	309.3	3673	3183	3	3	0.5
84	Rosuvastatin 0.3 µM	¹⁴ C lauric acid	14569	610	226.3	2694		2		
		input ¹⁴ C cholesterol	26701							
		input ¹⁴ C cholesterol	27378							
		input ¹⁴ C cholesterol	26895							
		average input ¹⁴ C cholesterol	26891.33333							

Experiment 3

Protein concentration determination

sample	Measured protein conc (mg/ml)	dilution	protein conc (mg/ml)	µg protein per well
1	246.35	4	985.4	328.5
3	298.46	4	1193.8	397.9
4	229.35	4	917.4	305.8
5	266.32	4	1065.3	355.1
6	232.70	4	930.8	310.3
7	299.74	4	1199.0	399.7
8	186.54	4	746.2	248.7
9	154.56	4	618.2	206.1
10	143.00	4	572.0	190.7
11	169.33	4	677.3	225.8
12	153.58	4	614.3	204.8
13	301.02	4	1204.1	401.4
14	220.50	4	882.0	294.0
15	370.42	4	1481.7	493.9
16	222.70	4	890.8	296.9
17	224.91	4	899.6	299.9
18	171.32	4	685.3	228.4
19	272.34	4	1089.4	363.1
20	180.40	4	721.6	240.5
21	240.62	4	962.5	320.8
22	227.12	4	908.5	302.8
23	209.66	4	838.6	279.5
24	295.91	4	1183.6	394.5
25	248.65	4	994.6	331.5
26	295.91	4	1183.6	394.5
27	331.42	4	1325.7	441.9
28	268.72	4	1074.9	358.3
29	222.71	4	890.8	296.9
30	282.13	4	1128.5	376.2
31	236.08	4	944.3	314.8
32	172.33	4	689.3	229.8
33	263.93	4	1055.7	351.9
34	175.34	4	701.4	233.8
35	171.32	4	685.3	228.4
36	247.50	4	990.0	330.0
37	249.81	4	999.2	333.1
38	393.62	4	1574.5	524.8
39	348.03	4	1392.1	464.0
40	289.60	4	1158.4	386.1
41	153.58	4	614.3	204.8
42	227.12	4	908.5	302.8
43	209.66	4	838.6	279.5
44	317.98	4	1271.9	424.0
45	272.34	4	1089.4	363.1
46	211.81	4	847.2	282.4
47	258.00	4	1032.0	344.0
48	195.88	4	783.5	261.2
49	304.88	4	1219.5	406.5
50	389.03	4	1556.1	518.7
51	352.27	4	1409.1	469.7
52	258.00	4	1032.0	344.0
53	279.67	4	1118.7	372.9
54	363.75	4	1455.0	485.0
55	295.91	4	1183.6	394.5

sample	Measured protein conc (mg/ml)	dilution	protein conc (mg/ml)	µg protein per well
56	356.51	4	1426.0	475.3
57	319.45	4	1277.8	425.9
58	356.51	4	1426.0	475.3
59	319.45	4	1277.8	425.9
60	226.01	4	904.0	301.3
61	241.05	4	964.2	321.4
62	333.17	4	1332.7	444.2
63	251.23	4	1004.9	335.0
64	297.09	4	1188.4	396.1
65	232.80	4	931.2	310.4
66	268.15	4	1072.6	357.5
67	294.15	4	1176.6	392.2
68	222.82	4	891.3	297.1
69	295.13	4	1180.5	393.5
70	244.74	4	979.0	326.3
71	237.38	4	949.5	316.5
72	207.61	4	830.4	276.8
73	324.00	4	1296.0	432.0
74	253.09	4	1012.4	337.5
75	241.05	4	964.2	321.4
76	283.46	4	1133.8	377.9
77	267.20	4	1068.8	356.3
78	275.77	4	1103.1	367.7
79	347.64	4	1390.6	463.5
80	216.53	4	866.1	288.7
81	368.75	4	1475.0	491.7
82	219.00	4	876.0	292.0
83	329.09	4	1316.4	438.8
84	221.92	4	887.7	295.9
85	285.39	4	1141.6	380.5
86	348.30	4	1393.2	464.4
87	312.93	4	1251.7	417.2
88	212.95	4	851.8	283.9
89	288.30	4	1153.2	384.4
90	281.53	4	1126.1	375.4
91	305.97	4	1223.9	408.0
92	245.66	4	982.6	327.5
93	274.81	4	1099.2	366.4
94	289.28	4	1157.1	385.7
95	254.03	4	1016.1	338.7
96	230.98	4	923.9	308.0
97	288.30	4	1153.2	384.4
98	332.15	4	1328.6	442.9
99	294.15	4	1176.6	392.2
100	219.22	4	876.9	292.3
101	335.22	4	1340.9	447.0
102	252.16	4	1008.6	336.2
103	297.09	4	1188.4	396.1
104	247.52	4	990.1	330.0
105	280.57	4	1122.3	374.1
106	250.30	4	1001.2	333.7
107	296.11	4	1184.4	394.8
108	217.43	4	869.7	289.9

[¹⁴C]-Cholesterol synthesis in rat hepatocytes

3H cholesterol mk	sample	compound concentration	¹⁴ C Label	¹⁴ C-cholesterol (dpm)	¹⁴ C-cholesterol (dpm)	¹⁴ C-cholesterol (for recovery (dpm))	µg protein	¹⁴ C-cholesterol per mg protein (dpm/mg)	Average ¹⁴ C-cholesterol per mg protein (dpm/mg)	% of control	Average % of control	SD
1	1	control	¹⁴ C acetic acid	12507	44451	91111	328.5	277384	306452	90.5	100.0	13.4
1	3	control	¹⁴ C acetic acid	19023	133519	29376	305.8	335520	306452	109.5	100.0	17.5
1	4	control	¹⁴ C butyric acid	16324	18935	29736	305.8	97240	91366	106.4	100.0	17.5
1	5	control	¹⁴ C butyric acid	15491	15714	28005	335.1	73233	91366	80.2	100.0	17.5
1	6	control	¹⁴ C butyric acid	14301	17937	32153	310.3	103632	200821	113.4	100.0	23.6
1	7	control	¹⁴ C butyric acid	15647	40817	65674	399.7	167329	200821	83.3	100.0	23.6
1	8	control	¹⁴ C lauric acid	14301	32511	58279	248.7	234314	116.7	116.7	100.0	0.18
1	11	control	¹⁴ C palmitic acid	16834	5000	7614	225.8	33767	33767	99.9	100.0	0.18
1	12	control	¹⁴ C palmitic acid	17733	4789	6923	204.8	33809	100.1	100.1	100.0	9.6
1	13	PFBS 1 µM	¹⁴ C acetic acid	17724	22466	32176	401.4	80168	100979	28.2	33.0	9.6
1	14	PFBS 1 µM	¹⁴ C acetic acid	15643	21649	35806	284.0	121789	100979	39.7	33.0	9.6
1	15	PFBS 10 µM	¹⁴ C acetic acid	13898	22496	41495	493.9	84018	108922	27.4	34.9	10.6
1	16	PFBS 10 µM	¹⁴ C acetic acid	17481	26287	38550	286.9	128926	108922	42.4	34.9	10.6
1	17	PFBS 100 µM	¹⁴ C acetic acid	17149	23557	35215	299.9	117430	128964	38.3	42.1	5.3
1	18	PFBS 100 µM	¹⁴ C acetic acid	18303	22881	32048	228.4	140298	128964	45.8	42.1	5.3
1	19	PFBS 1 µM	¹⁴ C acetic acid	17772	35195	50786	363.1	138810	195490	45.6	53.8	25.7
1	20	PFBS 1 µM	¹⁴ C acetic acid	16907	39844	60414	240.5	251169	195490	82.0	53.8	25.7
1	21	PFBS 10 µM	¹⁴ C acetic acid	17592	23683	34512	320.8	107571	118962	35.1	38.8	5.3
1	22	PFBS 10 µM	¹⁴ C acetic acid	16152	24871	38474	302.8	130352	118962	42.5	38.8	5.3
1	23	PFBS 100 µM	¹⁴ C acetic acid	18689	27769	38091	279.5	136259	110155	44.5	35.9	12.0
1	24	PFBS 100 µM	¹⁴ C acetic acid	17098	22118	33162	384.5	84052	110155	27.4	35.9	12.0
1	25	PFOS 1 µM	¹⁴ C acetic acid	17841	27624	39693	331.5	119725	132758	39.1	43.3	6.0
1	26	PFOS 1 µM	¹⁴ C acetic acid	19413	43559	57521	394.5	145791	132758	47.8	43.3	6.0
1	27	PFOS 10 µM	¹⁴ C acetic acid	17762	25533	38851	441.9	83394	99876	27.2	32.6	7.6
1	28	PFOS 10 µM	¹⁴ C acetic acid	14828	24114	41690	358.3	116357	99876	38.0	32.6	7.6
1	29	PFOS 100 µM	¹⁴ C acetic acid	18243	22967	38248	296.9	122069	117752	39.6	38.4	2.0
1	30	PFOS 100 µM	¹⁴ C acetic acid	15814	26323	42672	376.2	113439	117752	37.0	38.4	2.0
1	31	Rosuvastatin 0.003 µM	¹⁴ C acetic acid	15332	2853	4938	314.8	15686	19131	5.1	6.2	1.6
1	32	Rosuvastatin 0.003 µM	¹⁴ C acetic acid	14969	3029	5187	229.8	22576	19131	7.4	6.2	1.6
1	33	Rosuvastatin 0.03 µM	¹⁴ C acetic acid	14770	574	996	351.9	2631	3830	0.9	1.2	0.5
1	34	Rosuvastatin 0.03 µM	¹⁴ C acetic acid	14215	628	1129	233.8	4829	3830	1.6	1.2	0.5
1	35	Rosuvastatin 0.3 µM	¹⁴ C acetic acid	16761	257	393	228.4	1721	1436	0.8	0.5	0.1
1	36	Rosuvastatin 0.3 µM	¹⁴ C acetic acid	16727	246	380	330.0	1152	1436	0.4	0.5	0.1
1	37	PFBS 1 µM	¹⁴ C butyric acid	15968	5934	9527	333.1	28602	34641	31.3	37.9	9.3
1	38	PFBS 1 µM	¹⁴ C butyric acid	14142	11778	21350	524.8	40881	34641	44.5	37.9	9.3
1	39	PFBS 10 µM	¹⁴ C butyric acid	16118	13512	21491	464.0	46312	46312	50.7	50.7	50.7
1	40	PFBS 10 µM	¹⁴ C butyric acid	16293	9931	15626	204.8	76307	55054	83.5	60.3	32.9
1	41	PFBS 100 µM	¹⁴ C butyric acid	19457	7789	10236	302.8	33802	55054	37.0	60.3	32.9
1	42	PFBS 100 µM	¹⁴ C butyric acid	18922	6439	8724	278.5	31206	41506	34.2	45.4	15.9
1	43	PFBS 1 µM	¹⁴ C butyric acid	17479	14876	21965	424.0	51807	41506	56.7	45.4	15.9
1	44	PFBS 1 µM	¹⁴ C butyric acid	17443	7993	11747	363.1	32351	44115	35.4	48.3	18.2
1	45	PFBS 10 µM	¹⁴ C butyric acid	16118	9922	15781	282.4	55979	44115	61.2	48.3	18.2
1	46	PFBS 10 µM	¹⁴ C butyric acid	18498	8585	11898	344.0	34586	47423	37.9	51.9	19.9
1	47	PFBS 100 µM	¹⁴ C butyric acid	17002	10436	15738	261.2	80261	47423	66.0	51.9	19.9
1	48	PFBS 100 µM	¹⁴ C butyric acid	17226	7974	11867	406.5	26192	26566	32.0	29.1	4.1
1	49	PFOS 1 µM	¹⁴ C butyric acid	16924	8198	12418	518.7	23940	26566	26.2	29.1	4.1
1	50	PFOS 1 µM	¹⁴ C butyric acid	15074	12993	22097	489.7	47045	62883	51.5	88.8	24.5
1	51	PFOS 10 µM	¹⁴ C butyric acid	17062	18014	27068	344.0	78680	62883	66.1	88.8	24.5
1	52	PFOS 10 µM	¹⁴ C butyric acid	15031	12106	20647	372.9	55370	41284	60.8	45.2	21.8
1	53	PFOS 100 µM	¹⁴ C butyric acid	18507	9530	13201	485.0	27218	41284	29.8	45.2	21.8
1	54	PFOS 100 µM	¹⁴ C butyric acid	14681	830	1624	384.5	4116	3273	4.5	3.6	1.3
1	55	Rosuvastatin 0.003 µM	¹⁴ C butyric acid	15247	687	1155	475.3	2430	3273	2.7	3.6	1.3
1	56	Rosuvastatin 0.003 µM	¹⁴ C butyric acid	15805	276	1155	475.3	2430	3273	2.7	3.6	1.3
1	57	Rosuvastatin 0.03 µM	¹⁴ C butyric acid	17593	212	309	425.9	1044	847	1.1	0.9	0.3
1	58	Rosuvastatin 0.03 µM	¹⁴ C butyric acid	13507	94	178	425.9	650	847	0.7	0.9	0.3
1	59	Rosuvastatin 0.3 µM	¹⁴ C butyric acid	18268	120	168	301.3	559	488	0.5	0.5	0.1
1	60	Rosuvastatin 0.3 µM	¹⁴ C butyric acid	18268	120	168	301.3	559	488	0.6	0.5	0.1

3H cholesterol mix	sample	compound concentration	¹⁴ C Label	³ H-cholesterol (dpm)	¹⁴ C-cholesterol (dpm)	¹⁴ C-cholesterol corrected for recovery (dpm)	µg protein	¹⁴ C-cholesterol per mg protein (dpm/mg)	Average ¹⁴ C-cholesterol per mg protein (dpm/mg)	% of control	Average % of control	SD
1	81	PFBS 1 µM	¹⁴ C lauric acid	18064	35197	49950	321.4	155414	137572	77.4	68.5	12.6
1	82	PFBS 1 µM	¹⁴ C lauric acid	16312	33843	53187	444.2	119730		59.6		
1	83	PFBS 10 µM	¹⁴ C lauric acid	16632	31024	47819	335.0	142754	155117	71.1	77.2	8.7
1	84	PFBS 10 µM	¹⁴ C lauric acid	16430	42519	66342	396.1	167480		83.4		
1	85	PFBS 100 µM	¹⁴ C lauric acid	17140	24245	36262	310.4	116825	107084	58.2	53.3	6.9
1	86	PFBS 100 µM	¹⁴ C lauric acid	16929	22983	34803	357.5	97343		48.5		
1	87	PFBS 1 µM	¹⁴ C lauric acid	17947	34462	49226	392.2	125512	188120	62.5	74.4	10.8
1	88	PFBS 1 µM	¹⁴ C lauric acid	17660	35488	51457	297.1	173201		86.2		
1	89	PFBS 10 µM	¹⁴ C lauric acid	17511	31581	46205	393.5	117417	131364	58.5	65.4	9.8
1	90	PFBS 10 µM	¹⁴ C lauric acid	18652	34500	47417	326.3	145310		72.4		
1	91	PFBS 100 µM	¹⁴ C lauric acid	17842	20913	30048	316.5	94937	128980	47.3	64.2	24.0
1	92	PFBS 100 µM	¹⁴ C lauric acid	17390	30612	45127	276.8	163023		81.2		
2	73	PFOS 1 µM	¹⁴ C lauric acid	12194	39952	81432	432.0	188500	201654	93.9	100.4	9.3
2	74	PFOS 1 µM	¹⁴ C lauric acid	17125	49945	72488	337.5	214908		107.0		
2	75	PFOS 10 µM	¹⁴ C lauric acid	16554	29563	44386	321.4	138103	155901	68.8	77.6	12.5
2	76	PFOS 10 µM	¹⁴ C lauric acid	16018	42312	65849	377.9	173700		86.5		
2	77	PFOS 100 µM	¹⁴ C lauric acid	15880	27742	35594	356.3	99909	111603	49.8	55.6	8.2
2	78	PFOS 100 µM	¹⁴ C lauric acid	17209	31360	45335	367.7	123297		61.4		
2	79	Rosuvastatin 0.003 µM	¹⁴ C lauric acid	15981	3218	5005	483.5	10787	15073	5.4	7.5	3.0
2	80	Rosuvastatin 0.003 µM	¹⁴ C lauric acid	14109	3171	5586	288.7	19348		9.6		
2	81	Rosuvastatin 0.03 µM	¹⁴ C lauric acid	17448	754	1074	491.7	2185	2895	1.1	1.4	0.5
2	82	Rosuvastatin 0.03 µM	¹⁴ C lauric acid	16191	666	1053	292.0	3606		1.8		
2	83	Rosuvastatin 0.3 µM	¹⁴ C lauric acid	15558	261	417	438.8	950	1050	0.5	0.5	0.1
2	85	PFBS 1 µM	¹⁴ C palmitic acid	16555	4312	6474	380.5	17013	13562	50.4	50.4	
2	86	PFBS 1 µM	¹⁴ C palmitic acid	17040	3219	4695	484.4	10110				
2	87	PFBS 10 µM	¹⁴ C palmitic acid	15827	3366	5286	417.2	12669	18425	37.5	54.6	24.1
2	88	PFBS 10 µM	¹⁴ C palmitic acid	16659	4602	8866	283.9	24182		71.6		
2	89	PFBS 100 µM	¹⁴ C palmitic acid	15285	2953	4802	384.4	12492	42805	37.0	37.1	0.1
2	90	PFBS 100 µM	¹⁴ C palmitic acid	17337	3284	4708	375.4	12542		37.1		
2	91	PFBS 1 µM	¹⁴ C palmitic acid	14572	2399	4092	408.0	10030	13584	29.7	40.2	14.9
2	92	PFBS 1 µM	¹⁴ C palmitic acid	14708	3322	5614	327.5	17139		50.8		
2	93	PFBS 10 µM	¹⁴ C palmitic acid	15562	3238	5171	366.4	14114	15426	41.8	45.7	5.5
2	94	PFBS 10 µM	¹⁴ C palmitic acid	14849	3857	6456	385.7	18736		49.6		
2	95	PFBS 100 µM	¹⁴ C palmitic acid	16477	2952	4453	338.7	13147	18038	38.9	47.5	12.1
2	96	PFBS 100 µM	¹⁴ C palmitic acid	15761	3897	5830	308.0	18930		56.1		
2	97	PFOS 1 µM	¹⁴ C palmitic acid	16923	3659	5668	364.4	14744	14158	43.7	41.9	2.5
2	98	PFOS 1 µM	¹⁴ C palmitic acid	18055	4608	6010	442.9	13572		40.2		
2	99	PFOS 10 µM	¹⁴ C palmitic acid	16210	4074	6247	392.2	15927	21316	47.2	63.1	22.6
2	100	PFOS 10 µM	¹⁴ C palmitic acid	17729	5568	7806	292.3	26705		79.1		
2	101	PFOS 100 µM	¹⁴ C palmitic acid	18090	2981	4605	447.0	10302	11655	30.5	34.5	5.7
2	102	PFOS 100 µM	¹⁴ C palmitic acid	3072	4373	336.2	336.2	13008		38.5		
2	103	Rosuvastatin 0.003 µM	¹⁴ C palmitic acid	12554	711	1408	396.1	3554	3935	10.5	11.7	1.6
2	104	Rosuvastatin 0.003 µM	¹⁴ C palmitic acid	17205	986	1424	330.0	4316		12.8		
2	105	Rosuvastatin 0.03 µM	¹⁴ C palmitic acid	16635	534	798	374.1	2133	2234	6.3	6.6	0.4
2	106	Rosuvastatin 0.03 µM	¹⁴ C palmitic acid	17350	544	779	333.7	2335		6.9		
2	107	Rosuvastatin 0.3 µM	¹⁴ C palmitic acid	13361	313	582	394.8	1475	8190	4.4	5.1	1.0
2	108	Rosuvastatin 0.3 µM	¹⁴ C palmitic acid	15847	359	563	289.9	1942		5.8		
				mix 1	mix 2							
				input ³ H cholesterol	25660	24418						
				input ¹⁴ C cholesterol	25671	25185						
				input ³ H cholesterol	25376	24950						
				average input ³ H cholesterol	25635.7	24854.3						

Experiment 4

Protein concentration determination

sample	Measured protein conc (mg/ml)		dilution	protein conc (mg/ml)	µg protein per well
	well 1	well 2			
1	207.81	223.77	5	1079.0	359.7
2	214.31	224.72	5	1097.6	365.9
3	189.73	202.31	5	980.1	326.7
4	205.97	230.5	5	1091.2	363.7
5	234.4	252.34	5	1216.9	405.6
6	221.86	205.97	5	1069.6	356.5
7	218.07	224.72	5	1107.0	369.0
8	225.68	225.68	5	1128.4	376.1
9	214.31	223.77	5	1095.2	365.1
10	210.58	214.31	5	1062.2	354.1
11	210.58	220.91	5	1078.7	359.6
12	199.58	205.97	5	1013.9	338.0
13	212.44	214.31	5	1066.9	355.6
14	241.29	245.28	5	1216.4	405.5
15	230.5	226.54	5	1142.6	380.9
16	234.4	239.31	5	1184.3	394.8
17	272.05	262.61	5	1336.7	445.6
18	292.63	272.24	5	1412.2	470.7
19	254.37	242.28	5	1241.6	413.9
20	231.47	237.34	5	1172.0	390.7
21	269.94	274.18	5	1360.3	453.4
22	272.05	253.35	5	1313.5	437.8
23	253.35	250.31	5	1259.2	419.7
24	242.28	221.86	5	1160.4	386.8
25	202.31	210.58	5	1032.2	344.1
26	241.29	242.28	5	1208.9	403.0
27	245.28	239.31	5	1211.5	403.8
28	230.5	235.37	5	1164.7	388.2
29	245.28	233.42	5	1196.8	398.9
30	218.07	209.66	5	1069.3	356.4
31	250.31	240.3	5	1226.5	408.8
32	253.35	242.28	5	1239.1	413.0
33	244.28	249.3	5	1234.0	411.3
34	233.42	237.34	5	1176.9	392.3
35	215.24	204.14	5	1048.5	349.5
36	227.6	210.58	5	1095.5	365.2
37	249.52	228.83	5	1195.9	398.6
38	256.56	246.52	5	1257.7	419.2
39	277.1	284.44	5	1403.9	468.0
40	248.52	238.6	5	1217.8	405.9
41	251.52	254.54	5	1265.2	421.7
42	266.75	258.59	5	1313.4	437.8
43	238.6	246.52	5	1212.8	404.3
44	265.73	254.54	5	1300.7	433.6
45	251.52	253.53	5	1262.6	420.9
46	242.55	245.53	5	1220.2	406.7
47	237.62	229.8	5	1188.6	389.5
48	212.56	208.8	5	1053.4	351.1
49	211.62	203.19	5	1037.0	345.7
50	206.92	209.73	5	1041.6	347.2
51	194.87	192.13	5	967.5	322.5
52	206.92	210.68	5	1044.0	348.0
53	222.08	234.67	5	1141.9	380.6
54	177.7	186.68	5	911.0	303.7
55	214.45	228.83	5	1108.2	369.4
56	220.17	214.45	5	1086.6	362.2

sample	Measured protein conc (mg/ml)		dilution	protein conc (mg/ml)	µg protein per well
	well 1	well 2			
57	224.96	223.04	5	1120.0	373.3
58	219.21	218.26	5	1093.7	364.6
59	213.51	204.12	5	1044.1	348.0
60	199.48	205.99	5	1013.7	337.9
61	210.68	204.12	5	1037.0	345.7
62	186.68	193.04	5	949.3	316.4
63	160.17	161.9	5	805.2	268.4
64	209.73	203.19	5	1032.3	344.1
65	205.99	217.3	5	1058.2	352.7
66	229.8	225.93	5	1139.3	379.8
67	237.62	246.52	5	1210.4	403.5
68	222.08	234.67	5	1141.9	380.6
69	261.64	263.68	5	1313.3	437.8
70	259.6	235.65	5	1238.1	412.7
71	239.59	255.55	5	1237.9	412.6
72	278.14	285.49	5	1409.1	469.7
73	212.61	215.22	5	1069.6	356.5
74	232.92	229.35	5	1155.7	385.2
75	225.79	240.13	5	1164.8	388.3
76	231.13	233.82	5	1162.4	387.5
77	233.82	241.03	5	1187.1	395.7
78	225.79	239.22	5	1162.5	387.5
79	241.03	238.32	5	1198.4	399.5
80	239.22	232.03	5	1178.1	392.7
81	217.85	221.37	5	1098.1	366.0
82	224.02	234.72	5	1146.9	382.3
83	220.49	225.79	5	1115.7	371.9
84	283	287.81	5	1427.0	475.7
85	208.27	190.32	5	996.5	332.2
86	204.81	214.35	5	1047.9	349.3
87	203.09	217.85	5	1052.4	350.8
88	218.73	214.35	5	1082.7	360.9
89	216.10	212.61	5	1071.8	357.3
91	205.67	203.95	5	1024.1	341.4
92	224.02	217.85	5	1104.7	368.2
94	218.73	211.74	5	1076.2	358.7
95	233.82	224.02	5	1144.6	381.5
96	226.68	218.73	5	1113.5	371.2
97	242.85	235.62	5	1196.2	398.7
98	252.91	239.22	5	1230.3	410.1
100	242.85	245.58	5	1221.1	407.0
101	218.73	209.13	5	1069.7	356.6
103	255.68	256.60	5	1280.7	426.9
104	242.85	245.58	5	1221.1	407.0
105	248.32	237.42	5	1214.4	404.8
106	229.35	242.85	5	1180.5	393.5
107	251.99	243.76	5	1239.4	413.1
109	245.58	259.39	5	1262.4	420.8
110	231.13	217.85	5	1122.5	374.2
112	251.07	255.68	5	1266.9	422.3
113	272.51	291.69	5	1410.5	470.2
114	219.61	216.10	5	1089.3	363.1
115	243.74	246.67	5	1226.0	408.7
116	255.52	269.48	5	1312.5	437.5
118	267.47	271.50	5	1347.4	449.1
119	234.05	235.01	5	1172.7	390.9

$[^{14}\text{C}]$ -Cholesterol synthesis in rat hepatocytes

3H cholesterol mix	sample	compound concentration	^{14}C Label	^3H -cholesterol (dpm)	^{14}C -cholesterol (dpm)	^{14}C -cholesterol for recovery (dpm)	μg protein	^{14}C -cholesterol per mg protein (dpm/mg)	% of control	Average % of control	SD
1	1	control	^{14}C acetic acid	11557	1815	3220	359.7	8953	98.5	100.0	12.7
1	2	control	^{14}C acetic acid	13921	1877	2765	365.9	7556	83.2		
1	3	control	^{14}C acetic acid	12789	2094	3357	326.7	10276	113.1		
1	4	control	^{14}C acetic acid	14330	2430	3477	363.7	9559	105.2		
1	5	control	^{14}C butyric acid	14143	2257	3272	405.7	8067	64.9	100.0	33.3
1	7	control	^{14}C butyric acid	12409	2888	4772	368.0	12832	104.0		
1	8	control	^{14}C butyric acid	13395	4007	6134	376.1	16307	131.1		
1	9	control	^{14}C palmitic acid	12206	1918	1142	385.1	5255	76.4	100.0	16.2
1	10	control	^{14}C palmitic acid	13316	1694	2608	354.1	7367	107.2		
1	11	control	^{14}C palmitic acid	12816	1574	2558	369.8	7114	103.5		
1	12	control	^{14}C palmitic acid	13307	1703	2624	338.0	7764	112.9		
1	13	PFBS 1 μM	^{14}C acetic acid	14019	2569	3757	355.6	10566	116.3		
1	15	PFBS 1 μM	^{14}C acetic acid	14018	1506	2203	380.9	5784	63.7	90.0	37.2
1	17	PFBS 1 μM	^{14}C acetic acid	13123	1714	2678	445.6	6011	66.2	67.3	1.6
1	18	PFBS 10 μM	^{14}C acetic acid	12858	1837	2928	470.7	6223	68.5		
1	19	PFBS 100 μM	^{14}C acetic acid	12350	1427	2369	413.9	5724	63.0	93.7	43.4
1	20	PFBS 100 μM	^{14}C acetic acid	12583	2709	4414	390.7	11289	124.4		
1	22	PFBS 1 μM	^{14}C acetic acid	12002	1811	3084	437.8	7066	77.8	91.8	21.4
1	23	PFBS 1 μM	^{14}C acetic acid	12074	1822	3094	419.7	7372	81.1		
1	24	PFBS 1 μM	^{14}C acetic acid	10469	2088	4091	396.8	10578	116.4		
1	25	PFBS 10 μM	^{14}C acetic acid	12178	2935	4942	344.1	14362	158.1	154.3	20.2
1	26	PFBS 10 μM	^{14}C acetic acid	13070	3091	4849	403.8	12033	132.4		
1	27	PFBS 10 μM	^{14}C acetic acid	11021	3398	6322	403.8	15655	172.3		
1	28	PFBS 100 μM	^{14}C acetic acid	12484	2059	3379	388.2	8704	95.8	100.0	5.9
1	30	PFBS 100 μM	^{14}C acetic acid	11686	1924	3373	356.4	9463	104.1		
1	31	PFOS 1 μM	^{14}C acetic acid	12079	3650	6196	408.8	15155	166.8	139.9	24.2
1	32	PFOS 1 μM	^{14}C acetic acid	12015	2929	4988	413.0	12102	133.2		
1	33	PFOS 1 μM	^{14}C acetic acid	12687	2772	4480	411.3	10982	118.9		
1	34	PFOS 10 μM	^{14}C acetic acid	12477	2383	3916	392.3	9982	108.9	113.9	8.6
1	35	PFOS 10 μM	^{14}C acetic acid	12560	2407	3929	349.5	11243	123.7		
1	36	PFOS 10 μM	^{14}C acetic acid	10462	1828	3583	385.2	9811	108.0		
1	38	PFOS 100 μM	^{14}C acetic acid	10416	1647	3242	419.2	7733	85.1	89.0	5.4
1	39	PFOS 100 μM	^{14}C acetic acid	9390	1807	3946	488.0	8432	92.8		
2	40	Rosuvastatin 0.003 μM	^{14}C acetic acid	9534	81	171	405.9	420	4.6	3.8	1.1
2	41	Rosuvastatin 0.003 μM	^{14}C acetic acid	11731	95	163	421.7	386	4.2		
2	42	Rosuvastatin 0.003 μM	^{14}C acetic acid	12187	61	100	437.8	230	2.5		
2	43	Rosuvastatin 0.03 μM	^{14}C acetic acid	11494	36	63	404.3	156	1.7	1.4	0.5
2	44	Rosuvastatin 0.03 μM	^{14}C acetic acid	12998	42	65	433.6	150	1.6		
2	45	Rosuvastatin 0.03 μM	^{14}C acetic acid	10852	18	33	420.9	79	0.9		
2	46	Rosuvastatin 0.3 μM	^{14}C acetic acid	9480	7	15	406.7	36	0.4	0.6	0.1
2	47	Rosuvastatin 0.3 μM	^{14}C acetic acid	8849	10	23	389.5	58	0.6		
2	48	Rosuvastatin 0.3 μM	^{14}C acetic acid	11450	12	21	351.1	60	0.7		
2	49	PFBS 1 μM	^{14}C butyric acid	9541	1216	2559	345.7	7402	59.5	92.0	36.8
2	50	PFBS 1 μM	^{14}C butyric acid	11879	2158	3647	347.2	10504	84.5		
2	51	PFBS 1 μM	^{14}C butyric acid	12114	3192	5280	322.5	16403	131.9		
2	52	PFBS 10 μM	^{14}C butyric acid	11350	998	1765	348.0	5073	40.8	52.2	10.1
2	53	PFBS 10 μM	^{14}C butyric acid	11456	1499	2627	380.6	6902	55.5		
2	54	PFBS 10 μM	^{14}C butyric acid	9935	1125	2273	303.7	7487	60.2		
2	56	PFBS 100 μM	^{14}C butyric acid	11036	4223	7682	362.2	21211	170.6	118.7	73.4
2	57	PFBS 100 μM	^{14}C butyric acid	9818	1517	3102	373.3	8309	66.8		
2	58	PFBS 1 μM	^{14}C butyric acid	12175	1866	2780	364.6	7626	61.3	124.5	62.2

3H cholesterol mix	sample	compound concentration	¹⁴ C Label	³ H-cholesterol (dpm)	¹⁴ C-cholesterol (dpm)	¹⁴ C-cholesterol for recovery (dpm)	µg protein	¹⁴ C-cholesterol per mg protein (dpm/mg)	% of control	Average % of control	SD
2	59	PFHS 1 µM	¹⁴ C butyric acid	11871	3180	5470	348.0	15718	128.4		
2	60	PFHS 1 µM	¹⁴ C butyric acid	11805	4989	7804	337.9	23087	185.7		
2	61	PFHS 10 µM	¹⁴ C butyric acid	11841	3479	6000	345.7	17357	139.8	175.7	64.8
2	62	PFHS 10 µM	¹⁴ C butyric acid	11848	4837	8337	316.4	26346	211.9		
2	64	PFHS 100 µM	¹⁴ C butyric acid	11806	2793	4710	344.1	13687	110.1	110.6	0.8
2	66	PFHS 100 µM	¹⁴ C butyric acid	12251	3204	5250	379.8	13825	111.2		
2	67	PFOS 1 µM	¹⁴ C butyric acid	12598	1926	3069	403.5	7807	61.2	71.1	15.9
2	68	PFOS 1 µM	¹⁴ C butyric acid	10509	2215	4231	380.6	11117	89.4		
2	69	PFOS 1 µM	¹⁴ C butyric acid	12593	2141	3413	437.8	7797	82.7		
2	70	PFOS 10 µM	¹⁴ C butyric acid	12245	2079	3409	412.7	8259	86.4	73.4	8.4
2	71	PFOS 10 µM	¹⁴ C butyric acid	11423	2076	3649	412.8	8843	71.1		
2	72	PFOS 10 µM	¹⁴ C butyric acid	12013	2892	4833	489.7	10290	82.7		
2	73	PFOS 100 µM	¹⁴ C butyric acid	11895	2655	4486	356.5	12579	101.2	92.1	10.1
2	74	PFOS 100 µM	¹⁴ C butyric acid	11791	2641	4497	385.2	11673	83.9		
2	75	PFOS 100 µM	¹⁴ C butyric acid	11061	2162	3924	388.3	10107	81.3		
2	76	Rosuvastatin 0.003 µM	¹⁴ C butyric acid	12385	137	222	387.5	573	4.6	4.8	0.7
2	77	Rosuvastatin 0.003 µM	¹⁴ C butyric acid	12579	127	203	395.7	512	4.1		
2	78	Rosuvastatin 0.003 µM	¹⁴ C butyric acid	12107	162	289	387.5	693	5.6		
2	79	Rosuvastatin 0.03 µM	¹⁴ C butyric acid	12774	35	55	399.5	138	1.1	1.3	0.2
2	80	Rosuvastatin 0.03 µM	¹⁴ C butyric acid	11186	33	59	392.7	151	1.2		
2	81	Rosuvastatin 0.03 µM	¹⁴ C butyric acid	12355	43	70	366.0	191	1.5		
2	82	Rosuvastatin 0.3 µM	¹⁴ C butyric acid	13007	30	48	382.3	121	1.0	1.2	0.4
2	83	Rosuvastatin 0.3 µM	¹⁴ C butyric acid	12240	43	71	371.9	190	1.5		
2	85	PFBS 1 µM	¹⁴ C palmitic acid	14199	978	1383	332.2	4163	60.6	56.3	7.1
2	86	PFBS 1 µM	¹⁴ C palmitic acid	12961	745	1154	349.3	3304	48.1		
2	87	PFBS 1 µM	¹⁴ C palmitic acid	13307	963	1453	350.8	4142	60.2		
2	88	PFBS 10 µM	¹⁴ C palmitic acid	13107	863	1322	360.9	3663	53.3	40.8	17.6
2	89	PFBS 10 µM	¹⁴ C palmitic acid	12361	429	697	357.3	1950	28.4		
2	91	PFBS 100 µM	¹⁴ C palmitic acid	14351	1088	1536	341.4	4500	85.5	62.4	4.3
2	92	PFBS 100 µM	¹⁴ C palmitic acid	12742	954	1503	368.2	4082	59.4		
2	94	PFHS 1 µM	¹⁴ C palmitic acid	13653	1536	2259	358.7	6296	91.6	84.3	7.1
2	95	PFHS 1 µM	¹⁴ C palmitic acid	12703	1392	2200	381.5	5766	83.9		
2	96	PFHS 1 µM	¹⁴ C palmitic acid	12039	1184	1975	371.2	5320	77.4		
2	97	PFHS 10 µM	¹⁴ C palmitic acid	13137	1031	1578	398.7	3952	57.5	58.2	1.1
2	98	PFHS 10 µM	¹⁴ C palmitic acid	11960	991	1663	410.1	4056	59.0		
2	100	PFHS 100 µM	¹⁴ C palmitic acid	11398	1551	2732	407.0	8712	97.6	82.3	21.7
2	101	PFHS 100 µM	¹⁴ C palmitic acid	14337	1171	1640	356.6	4599	66.9		
2	103	PFOS 1 µM	¹⁴ C palmitic acid	11689	851	1462	426.9	3424	49.8	57.4	8.1
2	104	PFOS 1 µM	¹⁴ C palmitic acid	13498	1062	1580	407.0	3881	56.5		
2	105	PFOS 1 µM	¹⁴ C palmitic acid	13069	1193	1833	404.8	4527	65.9		
2	106	PFOS 10 µM	¹⁴ C palmitic acid	13862	1377	1994	393.5	5068	73.7	71.1	3.7
2	107	PFOS 10 µM	¹⁴ C palmitic acid	14202	1377	1947	413.1	4712	68.5		
2	109	PFOS 100 µM	¹⁴ C palmitic acid	9771	742	1525	420.8	3623	52.7	70.7	25.5
2	110	PFOS 100 µM	¹⁴ C palmitic acid	8624	980	2281	374.2	6097	88.7		
2	112	Rosuvastatin 0.003 µM	¹⁴ C palmitic acid	6247	152	488	422.3	1157	16.8	11.7	4.4
2	113	Rosuvastatin 0.003 µM	¹⁴ C palmitic acid	8729	122	281	470.2	957	8.7		
2	114	Rosuvastatin 0.03 µM	¹⁴ C palmitic acid	10667	128	241	363.1	663	9.7		
2	115	Rosuvastatin 0.03 µM	¹⁴ C palmitic acid	6797	127	375	408.7	918	13.4	14.3	1.3
2	116	Rosuvastatin 0.03 µM	¹⁴ C palmitic acid	4697	107	457	437.5	1045	15.2		
2	118	Rosuvastatin 0.3 µM	¹⁴ C palmitic acid	9054	141	313	449.1	898	10.1	15.1	7.0
2	119	Rosuvastatin 0.3 µM	¹⁴ C palmitic acid	4874	125	537	390.9	1374	20.0		
				mix 1	21367						
				mix 2	17423						
				input ³ H cholesterol	20598						
				input ¹⁴ C cholesterol	19529						
				average input ³ H cholesterol	20504						
				20076							

Average [^{14}C]-Cholesterol synthesis in rat hepatocytes (% of control)

Concentration:	1 μM	10 μM	100 μM	0.003 μM	0.03 μM	0.3 μM
experiment	^{14}C acetate incorporation, n=4, PFBS					
1	85.0	82	76			
2	115	157	177			
3	33	34.9	42.1			
4	90	67.3	93.7			
AVERAGE	80.8	85.3	97.2			
SD	34.4	51.7	57.3			
experiment	^{14}C acetate incorporation, n=4, PFHS					
1	91	82	84			
2	148	136	111			
3	63.8	36.8	35.9			
4	91.8	154.3	100			
AVERAGE	98.7	102.8	82.7			
SD	35.4	52.5	33.1			
experiment	^{14}C acetate incorporation, n=4, PFOS					
1	76	84	85			
2	130	119	132			
3	43.3	32.6	38.4			
4	139.9	113.9	89			
AVERAGE	97.3	87.4	81.1			
SD	45.7	39.6	39.7			
experiment	^{14}C acetate incorporation, n=4, Rosuvastatin					
1				45	11	3
2				40.0	8	2
3				6.2	1	0.5
4				3.8	1	0.6
AVERAGE				23.8	5.4	1.5
SD				21.8	4.9	1.2

Concentration:	1 μM	10 μM	100 μM	0.003 μM	0.03 μM	0.3 μM
experiment	^{14}C butyrate incorporation, n=4, PFBS					
1	61.0	128	82	24	5	3.0
2	146	140	175			
3	37.9	50.7	80.3			
4	92	52.2	118.7			
AVERAGE	84.2	92.7	111.5			
SD	46.8	47.9	48.6			
experiment	^{14}C butyrate incorporation, n=4, PFHS					
1	115	101	100			
2	190	220	200			
3	45.4	48.3	51.9			
4	124.5	175.7	110.6			
AVERAGE	118.7	136.3	115.6			
SD	59.2	76.5	61.8			
experiment	^{14}C butyrate incorporation, n=4, PFOS					
1	76	98	58			
2	262	223	286			
3	29.1	68.8	45.5			
4	71.1	73.4	92.1			
AVERAGE	109.6	115.8	120.4			
SD	103.8	72.6	112.1			
experiment	^{14}C butyrate incorporation, n=4, rosuvastatin					
1				24	5	3
2				46.0	16	4
3				3.7	1	0.5
4				4.8	1	1.2
AVERAGE				19.6	5.8	2.2
SD				19.9	7.0	1.6

Concentration:	1 μM	10 μM	100 μM	0.003 μM	0.03 μM	0.3 μM
experiment	^{14}C laurate incorporation, n=3, PFBS					
1	84.0	97	87			
2	131	102	100			
3	68.5	77.2	53.3			
AVERAGE	94.5	92.1	80.1			
SD	32.5	13.1	24.1			
experiment	^{14}C laurate incorporation, n=3, PFHS					
1	108	102	68			
2	150	103	134			
3	74.4	65.4	64.2			
AVERAGE	110.8	90.1	88.7			
SD	37.9	21.4	39.2			
experiment	^{14}C laurate incorporation, n=3, PFOS					
1	113	85	65			
2	119	124	125			
3	100.4	77.6	55.6			
AVERAGE	110.8	95.5	81.9			
SD	9.5	24.9	37.6			
experiment	^{14}C laurate incorporation, n=3, rosuvastatin					
1				25	7	3
2				35.0	15	3
3				7.5	1	0.5
AVERAGE				22.5	7.8	2.2
SD				13.9	6.8	1.4

Concentration:	1 μM	10 μM	100 μM	0.003 μM	0.03 μM	0.3 μM
experiment	^{14}C palmitate incorporation, n=3, PFBS					
1	76.0	56	71			
3	50.4	54.6	37.1			
4	56.3	40.8	62.4			
AVERAGE	60.9	50.5	56.8			
SD	13.4	8.4	17.6			
experiment	^{14}C palmitate incorporation, n=3, PFHS					
1	63	68	59			
3	40.2	45.7	47.5			
4	84.3	58.2	82.3			
AVERAGE	62.5	57.3	62.9			
SD	22.1	11.2	17.7			
experiment	^{14}C palmitate incorporation, n=3, PFOS					
1	90	62	51			
3	41.6	63.1	34.5			
4	57.4	71.1	70.7			
AVERAGE	63.0	65.4	52.1			
SD	24.7	5.0	18.1			
experiment	^{14}C palmitate incorporation, n=3, rosuvastatin					
1				48	20	12
3				11.7	7	5
4				11.7	14	15.1
AVERAGE				23.8	13.8	10.7
SD				21.0	6.5	5.2

2-2-03							
weight feces	5.5	mg					
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	216	1.38	298.08	12.4	0.542	98.6	0.241
deoxycholate	631	1	631	26.3	1.148	208.7	0.532
cholate	176	1	206	8.6	0.375	68.1	0.167
lithocholate	110	1	110	4.6	0.200	36.4	0.097
β-muricholate	543	1.08	586.44	24.4	1.067	194.0	0.475
w-muricholate	386	1	571	23.8	1.039	189.0	0.463
hyodeo/urso		1	0	0.0	0.000	0.0	0.000
total	2062		2403	100	4	795	2.0
nor-hyodeoxy	5496	1	5496	5496			

2-2-03							
weight feces	5.9	mg					
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	872	1.38	1203.36	8.9	0.443	75.1	0.184
deoxycholate	3015	1	3015	22.2	1.110	188.2	0.479
cholate	1451	1	1698	12.5	0.625	106.0	0.259
lithocholate	382	1	382	2.8	0.141	23.8	0.063
β-muricholate	2004	1.08	2164.32	16.0	0.797	135.1	0.331
w-muricholate	3004	1	4446	32.8	1.637	277.5	0.679
hyodeo/urso	653	1	653	4.8	0.240	40.8	0.104
total	11381		13561	100	5	846	2.1
nor-hyodeoxy	27158	1	27158	27158			

2-2-21							
weight feces	5.3	mg					
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/mg feces	nmol bile acid/mg feces
a-muricholate	665	1.38	917.7	8.3	0.585	110.4	0.270
deoxycholate	3474	1	3474	31.4	2.215	418.0	1.065
cholate	1201	1	1405	12.7	0.896	169.1	0.414
lithocholate	397	1	397	3.6	0.253	47.8	0.127
β-muricholate	1600	1.08	1728	15.6	1.102	207.9	0.509
w-muricholate	2024	1	2996	27.1	1.910	360.4	0.882
hyodeo/urso	155	1	155	1.4	0.099	18.6	0.047
total	9516		11072	100	7	1332	3.3
nor-hyodeoxy	15683	1	15683	15683			

a-muri	408.6
deoxy	392.6
cholate	408.6
lithochol	376.6
b-muri	408.6
w-muri	408.6
hyodeoxy/urso	392.6

3.7.1							
weight feces	6.7	mg					
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/ mg feces	nmol bile acid/ mg feces
a-muricholate	535	1.38	738.3	12.0	0.631	94.1	0.230
deoxycholate	850	1	850	13.8	0.726	108.4	0.276
cholate	877	1	1026	16.7	0.877	130.8	0.320
lithocholate	325	1	325	5.3	0.278	41.4	0.110
β-muricholate	1150	1.08	1242	20.2	1.061	158.4	0.388
w-muricholate	921	1	1363	22.2	1.164	173.8	0.425
hyodeo/urso	605	1	605	9.8	0.517	77.1	0.196
total	5263		6149	100	5	784	1.9
nor-hyodeoxy	11706	1	11706	11706			

3.7.2							
weight feces	6.5	mg					
	oppervlakte	response factor	oppervlakte	%	µg bile acid	ng bile acid/ mg faeces	nmol bile acid/ mg faeces
a-muricholate	290	1.38	400.2	14.7	0.950	146.1	0.358
deoxycholate	571	1	571	21.0	1.355	208.5	0.531
cholate	462	1	541	19.9	1.283	197.3	0.483
lithocholate	258	1	258	9.5	0.612	94.2	0.250
β-muricholate	300	1.08	324	11.9	0.769	118.3	0.289
w-muricholate	422	1	625	23.0	1.482	228.0	0.558
hyodeo/urso		1	0	0.0	0.000	0.0	0.000
total	2303		2718	100	6	992	2.5
nor-hyodeoxy	4214	1	4214	4214			

3.7.2							
weight feces	7.2	mg					
	area	response factor	area corrected for response factor	%	µg bile acid	ng bile acid/ mg feces	nmol bile acid/ mg feces
a-muricholate	1184	1.38	1633.92	9.1	0.503	69.8	0.171
deoxycholate	3208	1	3208	17.8	0.987	137.1	0.349
cholate	2501	1	2926	16.2	0.900	125.1	0.306
lithocholate	1182	1	1182	6.6	0.364	50.5	0.134
β-muricholate	3049	1.08	3292.92	18.3	1.013	140.7	0.344
w-muricholate	3105	1	4595	25.5	1.414	196.4	0.481
hyodeo/urso	1201	1	1201	6.7	0.370	51.3	0.131
total	15430		18039	100	6	771	1.9
nor-hyodeoxy	32495	1	32495	32495			

a-muri	408.6
deoxy	392.6
cholate	408.6
lithochol	376.6
b-muri	408.6
w-muri	408.6
hyodeoxy/urso	392.6

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Bile acid excretion, p values Mann-Whitney U-test																					
bile acid	group 1 vs 2			group 1 vs 3			group 1 vs 4			group 1 vs 5			group 1 vs 6			group 1 vs 7			group 2 vs 3		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
total bile acids	9	9	0.019	9	9	0.297	9	9	0.003	9	9	0.019	9	9	<0.001	9	9	0.019	9	9	0.387
a-muricholate	9	9	0.258	9	9	0.077	9	9	0.190	9	9	0.863	9	9	0.258	9	9	0.002	9	9	0.258
deoxycholate	9	9	0.863	9	9	0.931	9	9	0.340	9	9	0.796	9	9	0.258	9	9	0.001	9	9	1.000
cholate	9	9	0.340	9	9	1.000	9	9	0.190	9	9	0.931	9	9	0.002	9	9	0.001	9	9	0.222
lithocholate	9	9	0.605	9	9	0.063	9	9	0.666	9	9	0.019	9	9	0.340	9	9	0.077	9	9	0.040
b-muricholate	9	9	0.666	9	9	1.000	9	9	0.258	9	9	0.190	9	9	0.003	9	9	0.136	9	9	0.605
w-muricholate	9	9	0.931	9	9	0.730	9	9	1.000	9	9	0.258	9	9	0.297	9	9	0.001	9	9	0.436
hyodeo/urso	9	9	0.436	9	9	1.000	9	9	0.387	9	9	0.040	9	9	0.094	9	9	0.387	9	9	0.340
bile acid	group 2 vs 4			group 2 vs 5			group 2 vs 6			group 2 vs 7			group 3 vs 4			group 3 vs 5			group 3 vs 6		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
total bile acids	9	9	<0.001	9	9	0.003	9	9	<0.001	9	9	0.001	9	9	0.002	9	9	0.008	9	9	<0.001
a-muricholate	9	9	0.006	9	9	0.297	9	9	0.024	9	9	<0.001	9	9	0.004	9	9	0.094	9	9	0.008
deoxycholate	9	9	0.113	9	9	0.222	9	9	0.040	9	9	<0.001	9	9	0.094	9	9	0.340	9	9	0.063
cholate	9	9	0.546	9	9	0.666	9	9	0.001	9	9	<0.001	9	9	0.161	9	9	0.796	9	9	0.001
lithocholate	9	9	0.931	9	9	0.019	9	9	0.730	9	9	0.002	9	9	0.094	9	9	0.387	9	9	0.161
b-muricholate	9	9	0.605	9	9	0.666	9	9	0.077	9	9	0.546	9	9	0.387	9	9	0.340	9	9	0.001
w-muricholate	9	9	0.387	9	9	0.094	9	9	0.063	9	9	<0.001	9	9	0.863	9	9	0.258	9	9	0.094
hyodeo/urso	9	9	0.730	9	9	0.258	9	9	0.258	9	9	0.546	9	9	0.222	9	9	0.001	9	9	0.050
bile acid	group 3 vs 7			group 4 vs 5			group 4 vs 6			group 4 vs 7			group 5 vs 6			group 5 vs 7			group 6 vs 7		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
total bile acids	9	9	0.008	9	9	0.489	9	9	0.002	9	9	0.489	9	9	<0.001	9	9	0.863	9	9	<0.001
a-muricholate	9	9	<0.001	9	9	0.031	9	9	1.000	9	9	0.003	9	9	0.063	9	9	<0.001	9	9	0.002
deoxycholate	9	9	<0.001	9	9	0.031	9	9	0.003	9	9	<0.001	9	9	0.730	9	9	<0.001	9	9	0.011
cholate	9	9	<0.001	9	9	0.340	9	9	0.077	9	9	0.011	9	9	0.014	9	9	0.002	9	9	0.340
lithocholate	9	9	0.004	9	9	0.031	9	9	0.666	9	9	0.003	9	9	0.077	9	9	<0.001	9	9	0.002
b-muricholate	9	9	0.161	9	9	1.000	9	9	0.040	9	9	0.796	9	9	0.050	9	9	0.666	9	9	0.050
w-muricholate	9	9	<0.001	9	9	0.161	9	9	0.094	9	9	<0.001	9	9	0.931	9	9	<0.001	9	9	<0.001
hyodeo/urso	9	9	0.387	9	9	0.546	9	9	0.931	9	9	0.605	9	9	0.931	9	9	0.863	9	9	0.546

p<0.05

p<0.05

E3. Fecal sterol measurements

weight feces 6.2 mg							
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	284344	0.98	278657	85.2	60.3	9718	25.13
cholestanol	9225	0.91	8395	2.6	1.8	293	0.75
lathosterol	10102	1	10102	3.1	2.2	352	0.91
campesterol	4671	1.56	7287	2.2	1.6	254	0.63
stigmasterol	1682	1.49	2506	0.8	0.5	87	0.21
b-sitosterol	13713	1.47	20158	6.2	4.4	703	1.70
b-sitostanol		1	0	0.0	0.0	0	0.00
total	323737		327105	100	71	11407	29.3
cholestane	111178	1.04	115625				
			115625				

weight feces 6.5 mg							
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	313994	0.98	307714	86.6	76.7	11803	30.52
cholestanol	9355	0.91	8513	2.4	2.1	327	0.84
lathosterol	9015	1	9015	2.5	2.2	346	0.89
campesterol	4796	1.56	7482	2.1	1.9	287	0.72
stigmasterol	1808	1.49	2694	0.8	0.7	103	0.25
b-sitosterol	13562	1.47	19936	5.6	5.0	765	1.84
b-sitostanol		1	0	0.0	0.0	0	0.00
total	352530		355354	100	89	13631	35.1
cholestane	96413	1.04	100270				
			100270				

weight feces 7.1 mg							
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	298829	0.98	292852	86.7	73.5	10347	26.76
cholestanol	8558	0.91	7788	2.3	2.0	275	0.71
lathosterol	10265	1	10265	3.0	2.6	363	0.94
campesterol	4356	1.56	6795	2.0	1.7	240	0.60
stigmasterol	1589	1.49	2368	0.7	0.6	84	0.20
b-sitosterol	12044	1.47	17705	5.2	4.4	626	1.51
b-sitostanol		1	0	0.0	0.0	0	0.00
total	335641		337773	100	85	11934	30.7
cholestane	95828	1.04	99661				
			99661				

coprostanol	388.7	388.7
coprostanon	386.7	386.7
cholesterol	386.7	386.7
cholestanol	388.7	388.7
lathosterol	386.7	386.7
campesterol	400.7	400.7
stigmasterol	412.7	412.7
b-sitosterol	414.7	414.7
b-sitostanol	416.7	416.7

weight feces 7 mg

	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/ mg feces	nmol sterol/ mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	319680	0.98	313286	86.1	87.7	12532	32.41
cholestanol	11436	0.91	10407	2.9	2.9	416	1.07
lathosterol	10467	1	10467	2.9	2.9	419	1.08
campesterol	5023	1.56	7836	2.2	2.2	313	0.78
stigmasterol	1268	1.49	1889	0.5	0.5	76	0.18
b-sitosterol	13626	1.47	20030	5.5	5.6	801	1.93
b-sitostanol		1	0	0.0	0.0	0	0.00

total	361500		363916	100	102	14557	37.5
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cholestane	85850	1.04	89284
			89284

weight feces 10.4 mg

	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/ mg feces	nmol sterol/ mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	508256	0.98	498091	87.4	131.0	12591	32.56
cholestanol	15011	0.91	13660	2.4	3.6	345	0.89
lathosterol	13004	1	13004	2.3	3.4	329	0.85
campesterol	7404	1.56	11550	2.0	3.0	292	0.73
stigmasterol	2781	1.49	4144	0.7	1.1	105	0.25
b-sitosterol	19988	1.47	29382	5.2	7.7	743	1.79
b-sitostanol		1	0	0.0	0.0	0	0.00

total	566444		569831	100	150	14405	37.1
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cholestane	91434	1.04	95091
			95091

weight feces 6.8 mg

	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/ mg feces	nmol sterol/ mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	292666	0.98	286813	86.8	89.9	13215	34.17
cholestanol	8651	0.91	7872	2.4	2.5	363	0.93
lathosterol	9600	1	9600	2.9	3.0	442	1.14
campesterol	4193	1.56	6541	2.0	2.0	301	0.75
stigmasterol	1436	1.49	2140	0.6	0.7	99	0.24
b-sitosterol	11876	1.47	17458	5.3	5.5	804	1.94
b-sitostanol		1	0	0.0	0.0	0	0.00

total	328422		330424	100	104	15225	39.2
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cholestane	76721	1.04	79790
			79790

coprostanol	388.7	388.7
coprostanon	386.7	386.7
cholesterol	386.7	386.7
cholestanol	388.7	388.7
lathosterol	386.7	386.7
campesterol	400.7	400.7
stigmasterol	412.7	412.7
b-sitosterol	414.7	414.7
b-sitostanol	416.7	416.7

weight feces 6.1 mg

	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	440429	0.98	431620	87.6	73.9	12121	31.34
cholestanol	13442	0.91	12232	2.5	2.1	344	0.88
lathosterol	11803	1	11803	2.4	2.0	331	0.86
campesterol	6241	1.56	9736	2.0	1.7	273	0.68
stigmasterol	2114	1.49	3150	0.6	0.5	88	0.21
b-sitosterol	16460	1.47	24196	4.9	4.1	679	1.64
b-sitostanol		1	0	0.0	0.0	0	0.00

total	490489	492738	100	84	13837	35.6
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cholestane	140330	1.04	145943
			145943

weight feces 5.3 mg

	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	237491	0.98	232741	86.7	55.6	10481	27.10
cholestanol	7441	0.91	6771	2.5	1.6	305	0.78
lathosterol	6444	1	6444	2.4	1.5	290	0.75
campesterol	3777	1.56	5892	2.2	1.4	265	0.66
stigmasterol	982	1.49	1463	0.5	0.3	66	0.16
b-sitosterol	10254	1.47	15073	5.6	3.6	679	1.64
b-sitostanol		1	0	0.0	0.0	0	0.00

total	266389	268385	100	64	12086	31.1
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cholestane	100714	1.04	104743
			104743

weight feces 6.7 mg

	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	404372	0.98	396285	88.1	72.6	10838	28.03
cholestanol	11102	0.91	10103	2.2	1.9	276	0.71
lathosterol	11373	1	11373	2.5	2.1	311	0.80
campesterol	5436	1.56	8480	1.9	1.6	232	0.58
stigmasterol	2003	1.49	2984	0.7	0.5	82	0.20
b-sitosterol	14146	1.47	20795	4.6	3.8	569	1.37
b-sitostanol		1	0	0.0	0.0	0	0.00

total	448432	450020	100	82	12307	31.7
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cholestane	131190	1.04	136438
			136438

coprostanol	388.7	388.7
coprostanon	386.7	386.7
cholesterol	386.7	386.7
cholestanol	388.7	388.7
lathosterol	386.7	386.7
campesterol	400.7	400.7
stigmasterol	412.7	412.7
b-sitosterol	414.7	414.7
b-sitostanol	416.7	416.7

1:2-4							
weight feces	9.1	mg					
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	473290	0.98	463824	88.5	123.6	13579	35.12
cholestanol	9709	0.91	8835	1.7	2.4	259	0.67
lathosterol	12754	1	12754	2.4	3.4	373	0.97
campesterol	6031	1.56	9408	1.8	2.5	275	0.69
stigmasterol	2406	1.49	3585	0.7	1.0	105	0.25
b-sitosterol	17298	1.47	25428	4.9	6.8	744	1.80
b-sitostanol		1	0	0.0	0.0	0	0.00
total	521488		523835	100	140	15336	39.5
cholestane	90227	1.04	93836				
			93836				

1:2-5							
weight feces	7.2	mg					
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	446804	0.98	437868	90.1	114.1	15846	40.98
cholestanol	6124	0.91	5573	1.1	1.5	202	0.52
lathosterol	14209	1	14209	2.9	3.7	514	1.33
campesterol	4560	1.56	7114	1.5	1.9	257	0.64
stigmasterol	1811	1.49	2698	0.6	0.7	98	0.24
b-sitosterol	12767	1.47	18767	3.9	4.9	679	1.64
b-sitostanol		1	0	0.0	0.0	0	0.00
total	486275		486229	100	127	17596	45.3
cholestane	92255	1.04	95945				
			95945				

1:2-6							
weight feces	6.2	mg					
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	298782	0.98	292806	84.8	65.1	10502	27.16
cholestanol	11596	0.91	10552	3.1	2.3	378	0.97
lathosterol	8473	1	8473	2.5	1.9	304	0.79
campesterol	5240	1.56	8174	2.4	1.8	293	0.73
stigmasterol	1956	1.49	2914	0.8	0.6	105	0.25
b-sitosterol	15108	1.47	22209	6.4	4.9	797	1.92
b-sitostanol		1	0	0.0	0.0	0	0.00
total	341155		345129	100	77	12379	31.8
cholestane	108095	1.04	112419				
			112419				

coprostanol	388.7	388.7
coprostanon	386.7	386.7
cholesterol	386.7	386.7
cholestanol	388.7	388.7
lathosterol	386.7	386.7
campesterol	400.7	400.7
stigmasterol	412.7	412.7
b-sitosterol	414.7	414.7
b-sitostanol	416.7	416.7

2:2-4							
weight feces		8.6	mg				
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	481673	0.98	472040	88.7	118.2	13750	35.56
cholestanol	11693	0.91	10641	2.0	2.7	310	0.80
lathosterol	12978	1	12978	2.4	3.3	378	0.98
campesterol	6203	1.56	9677	1.8	2.4	282	0.70
stigmasterol	1175	1.49	1751	0.3	0.4	51	0.12
b-sitosterol	17089	1.47	25121	4.7	6.3	732	1.76
b-sitostanol		1	0	0.0	0.0	0	0.00
total	530811		532206	100	133	15502	39.9
cholestane	95962	1.04	99800				
			99800				

2:2-5							
weight feces		9.9	mg				
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	434117	0.98	425435	88.8	152.2	15373	39.75
cholestanol	8812	0.91	8019	1.7	2.9	290	0.75
lathosterol	13243	1	13243	2.8	4.7	479	1.24
campesterol	5232	1.56	8162	1.7	2.9	295	0.74
stigmasterol	2068	1.49	3081	0.6	1.1	111	0.27
b-sitosterol	14440	1.47	21227	4.4	7.6	767	1.85
b-sitostanol		1	0	0.0	0.0	0	0.00
total	477912		479167	100	171	17315	44.6
cholestane	67196	1.04	69884				
			69884				

2:2-6							
weight feces		6	mg				
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	268071	0.98	262710	85.9	72.3	12043	31.14
cholestanol	10152	0.91	9238	3.0	2.5	423	1.09
lathosterol	6784	1	6784	2.2	1.9	311	0.80
campesterol	4476	1.56	6983	2.3	1.9	320	0.80
stigmasterol	1045	1.49	1557	0.5	0.4	71	0.17
b-sitosterol	12736	1.47	18722	6.1	5.1	858	2.07
b-sitostanol		1	0	0.0	0.0	0	0.00
total	303264		305993	100	84	14027	36.1
cholestane	87400	1.04	90896				
			90896				

coprostanol	388.7	388.7
coprostanon	386.7	386.7
cholesterol	386.7	386.7
cholestanol	388.7	388.7
lathosterol	386.7	386.7
campesterol	400.7	400.7
stigmasterol	412.7	412.7
b-sitosterol	414.7	414.7
b-sitostanol	416.7	416.7

3:2-4							
weight feces		5.6	mg				
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/ mg feces	nmol sterol/ mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	269271	0.98	263886	87.6	66.6	11896	30.76
cholestanol	7132	0.91	6490	2.2	1.6	293	0.75
lathosterol	7058	1	7058	2.3	1.8	318	0.82
campesterol	3976	1.56	6203	2.1	1.6	280	0.70
stigmasterol	1401	1.49	2087	0.7	0.5	94	0.23
b-sitosterol	10601	1.47	15583	5.2	3.9	702	1.69
b-sitostanol		1	0	0.0	0.0	0	0.00
total	299439		301307	100	76	13582	35.0
cholestane	95225	1.04	99034				
			99034				

3:2-5							
weight feces		6.9	mg				
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/ mg feces	nmol sterol/ mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	398275	0.98	390310	89.5	79.9	11581	29.95
cholestanol	7905	0.91	7194	1.6	1.5	213	0.55
lathosterol	11474	1	11474	2.6	2.3	340	0.88
campesterol	4821	1.56	7521	1.7	1.5	223	0.56
stigmasterol	1507	1.49	2245	0.5	0.5	67	0.16
b-sitosterol	11865	1.47	17442	4.0	3.6	518	1.25
b-sitostanol		1	0	0.0	0.0	0	0.00
total	435847		436185	100	89	12942	33.3
cholestane	117414	1.04	122111				
			122111				

3:2-6							
weight feces		7.2	mg				
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/ mg feces	nmol sterol/ mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	336997	0.98	330257	86.2	80.7	11206	28.98
cholestanol	12422	0.91	11304	2.9	2.8	384	0.99
lathosterol	7963	1	7963	2.1	1.9	270	0.70
campesterol	5484	1.56	8555	2.2	2.1	290	0.72
stigmasterol	2009	1.49	2993	0.8	0.7	102	0.25
b-sitosterol	15075	1.47	22160	5.8	5.4	752	1.81
b-sitostanol		1	0	0.0	0.0	0	0.00
total	379950		383233	100	94	13003	33.4
cholestane	98396	1.04	102332				
			102332				

coprostanol	388.7	388.7
coprostanon	386.7	386.7
cholesterol	386.7	386.7
cholestanol	388.7	388.7
lathosterol	386.7	386.7
campesterol	400.7	400.7
stigmasterol	412.7	412.7
b-sitosterol	414.7	414.7
b-sitostanol	416.7	416.7

weight feces 6 mg							
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/ mg feces	nmol sterol/ mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	240788	0.98	235972	85.5	67.4	11229	29.04
cholestanol	7267	0.91	6613	2.4	1.9	315	0.81
lathosterol	9283	1	9283	3.4	2.7	442	1.14
campesterol	3808	1.56	5940	2.2	1.7	283	0.71
stigmasterol	1488	1.49	2217	0.8	0.6	106	0.26
b-sitosterol	10778	1.47	15844	5.7	4.5	754	1.82
b-sitostanol		1	0	0.0	0.0	0	0.00
total	273412		275869	100	79	13128	33.8
cholestane	84191	1.04	87559				
			87559				

weight feces 7 mg							
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/ mg feces	nmol sterol/ mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	283543	0.98	277872	85.5	71.7	10245	26.49
cholestanol	10969	0.91	9982	3.1	2.6	368	0.95
lathosterol	8285	1	8285	2.5	2.1	305	0.79
campesterol	4663	1.56	7274	2.2	1.9	268	0.67
stigmasterol	1774	1.49	2643	0.8	0.7	97	0.24
b-sitosterol	12953	1.47	19041	5.9	4.9	702	1.69
b-sitostanol		1	0	0.0	0.0	0	0.00
total	322187		325097	100	84	11986	30.8
cholestane	93139	1.04	96865				
			96865				

weight feces 10.8 mg							
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/ mg feces	nmol sterol/ mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	529012	0.98	518432	89.0	153.4	14205	36.73
cholestanol	14038	0.91	12775	2.2	3.8	350	0.90
lathosterol	11702	1	11702	2.0	3.5	321	0.83
campesterol	6647	1.56	10369	1.8	3.1	284	0.71
stigmasterol	1317	1.49	1962	0.3	0.6	54	0.13
b-sitosterol	18688	1.47	27471	4.7	8.1	753	1.82
b-sitostanol		1	0	0.0	0.0	0	0.00
total	581404		582711	100	172	15966	41.1
cholestane	81233	1.04	84482				
			84482				

coprostanol	388.7	388.7
coprostanon	386.7	386.7
cholesterol	386.7	386.7
cholestanol	388.7	388.7
lathosterol	386.7	386.7
campesterol	400.7	400.7
stigmasterol	412.7	412.7
b-sitosterol	414.7	414.7
b-sitostanol	416.7	416.7

weight feces 8 mg							
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/ mg feces	nmol sterol/ mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	330311	0.98	323705	86.2	95.0	11875	30.71
cholestanol	9369	0.91	8526	2.3	2.5	313	0.80
lathosterol	11675	1	11675	3.1	3.4	428	1.11
campesterol	5157	1.56	8045	2.1	2.4	295	0.74
stigmasterol	1936	1.49	2885	0.8	0.8	106	0.26
b-sitosterol	14114	1.47	20748	5.5	6.1	761	1.84
b-sitostanol		1	0	0.0	0.0	0	0.00
total	372562		375583	100	110	13778	35.4
cholestane	81910	1.04	85186				
			85186				

weight feces 7.3 mg							
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/ mg feces	nmol sterol/ mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	361988	0.98	354748	87.7	89.9	12322	31.86
cholestanol	10955	0.91	9969	2.5	2.5	346	0.89
lathosterol	10492	1	10492	2.6	2.7	364	0.94
campesterol	4873	1.56	7602	1.9	1.9	264	0.66
stigmasterol	1595	1.49	2377	0.6	0.6	83	0.20
b-sitosterol	13274	1.47	19513	4.8	4.9	678	1.63
b-sitostanol		1	0	0.0	0.0	0	0.00
total	403177		404701	100	103	14057	36.2
cholestane	94804	1.04	98596				
			98596				

weight feces 7.7 mg							
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/ mg feces	nmol sterol/ mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	409014	0.98	400834	88.8	109.4	14211	36.75
cholestanol	11289	0.91	10273	2.3	2.8	364	0.94
lathosterol	9106	1	9106	2.0	2.5	323	0.83
campesterol	5174	1.56	8071	1.8	2.2	286	0.71
stigmasterol	1042	1.49	1553	0.3	0.4	55	0.13
b-sitosterol	14716	1.47	21633	4.8	5.9	767	1.85
b-sitostanol		1	0	0.0	0.0	0	0.00
total	450341		451469	100	123	16006	41.2
cholestane	88054	1.04	91576				
			91576				

coprostanol	388.7	388.7
coprostanon	386.7	386.7
cholesterol	386.7	386.7
cholestanol	388.7	388.7
lathosterol	386.7	386.7
campesterol	400.7	400.7
stigmasterol	412.7	412.7
b-sitosterol	414.7	414.7
b-sitostanol	416.7	416.7

weight feces 8.2 mg							
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/ mg feces	nmol sterol/ mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	428635	0.98	420062	87.0	95.1	11598	29.99
cholestanol	12166	0.91	11071	2.3	2.5	306	0.79
lathosterol	13406	1	13406	2.8	3.0	370	0.96
campesterol	6496	1.56	10134	2.1	2.3	280	0.70
stigmasterol	2441	1.49	3637	0.8	0.8	100	0.24
b-sitosterol	16860	1.47	24784	5.1	5.6	684	1.65
b-sitostanol		1	0	0.0	0.0	0	0.00
total	480004		483094	100	109	13338	34.3

cholestane	106174	1.04	110421
			110421

weight feces 7.6 mg							
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/ mg feces	nmol sterol/ mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	370433	0.98	363024	86.3	74.7	9828	25.41
cholestanol	13556	0.91	12336	2.9	2.5	334	0.86
lathosterol	9317	1	9317	2.2	1.9	252	0.65
campesterol	6050	1.56	9438	2.2	1.9	256	0.64
stigmasterol	2043	1.49	3044	0.7	0.6	82	0.20
b-sitosterol	15825	1.47	23263	5.5	4.8	630	1.52
b-sitostanol		1	0	0.0	0.0	0	0.00
total	417224		420422	100	87	11382	29.3

cholestane	116833	1.04	121506
			121506

weight feces 6 mg							
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/ mg feces	nmol sterol/ mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	327522	0.98	320972	88.4	71.3	11877	30.71
cholestanol	9565	0.91	8704	2.4	1.9	322	0.83
lathosterol	7411	1	7411	2.0	1.6	274	0.71
campesterol	4458	1.56	6954	1.9	1.5	257	0.64
stigmasterol	1015	1.49	1512	0.4	0.3	56	0.14
b-sitosterol	11869	1.47	17447	4.8	3.9	646	1.56
b-sitostanol		1	0	0.0	0.0	0	0.00
total	361840		363001	100	81	13432	34.6

cholestane	108272	1.04	112603
			112603

coprostanol	388.7	388.7
coprostanon	386.7	386.7
cholesterol	386.7	386.7
cholestanol	388.7	388.7
lathosterol	386.7	386.7
campesterol	400.7	400.7
stigmasterol	412.7	412.7
b-sitosterol	414.7	414.7
b-sitostanol	416.7	416.7

1:4-10							
weight feces		5.9	mg				
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	362101	0.98	354859	88.7	81.6	13829	35.76
cholestanol	9381	0.91	8537	2.1	2.0	333	0.86
lathosterol	7899	1	7899	2.0	1.8	308	0.80
campesterol	4622	1.56	7210	1.8	1.7	281	0.70
stigmasterol	1882	1.49	2804	0.7	0.6	109	0.26
b-sitosterol	12850	1.47	18890	4.7	4.3	736	1.78
b-sitostanol		1	0	0.0	0.0	0	0.00
total	398735		400199	100	92	15595	40.2
cholestane	104552	1.04	108734				
			108734				

1:4-11							
weight feces		8	mg				
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	489702	0.98	479908	90.0	107.0	13380	34.60
cholestanol	15062	0.91	13706	2.6	3.1	382	0.98
lathosterol	10888	1	10888	2.0	2.4	304	0.78
campesterol	4869	1.56	7596	1.4	1.7	212	0.53
stigmasterol	748	1.49	1115	0.2	0.2	31	0.08
b-sitosterol	13552	1.47	19921	3.7	4.4	555	1.34
b-sitostanol		1	0	0.0	0.0	0	0.00
total	534821		533134	100	119	14864	38.3
cholestane	107776	1.04	112087				
			112087				

1:4-12							
weight feces		6.1	mg				
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	459088	0.98	449906	89.5	96.7	15857	41.01
cholestanol	15039	0.91	13685	2.7	2.9	482	1.24
lathosterol	11182	1	11182	2.2	2.4	394	1.02
campesterol	4797	1.56	7483	1.5	1.6	264	0.66
stigmasterol	686	1.49	1022	0.2	0.2	36	0.09
b-sitosterol	13085	1.47	19235	3.8	4.1	678	1.63
b-sitostanol		1	0	0.0	0.0	0	0.00
total	503877		502514	100	108	17711	45.6
cholestane	111810	1.04	116282				
			116282				

coprostanol	388.7	388.7
coprostanon	386.7	386.7
cholesterol	386.7	386.7
cholestanol	388.7	388.7
lathosterol	386.7	386.7
campesterol	400.7	400.7
stigmasterol	412.7	412.7
b-sitosterol	414.7	414.7
b-sitostanol	416.7	416.7

2:4-10							
weight feces 7.7 mg							
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/ mg feces	nmol sterol/ mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	521217	0.98	510793	90.7	142.2	18473	47.77
cholestanol	14915	0.91	13573	2.4	3.8	491	1.26
lathosterol	11055	1	11055	2.0	3.1	400	1.03
campesterol	4779	1.56	7455	1.3	2.1	270	0.67
stigmasterol	743	1.49	1107	0.2	0.3	40	0.10
b-sitosterol	13109	1.47	19270	3.4	5.4	697	1.68
b-sitostanol		1	0	0.0	0.0	0	0.00
total	565818		563253	100	157	20370	52.5
cholestane	86322	1.04	89775				
			89775				

2:4-11							
weight feces 6.4 mg							
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/ mg feces	nmol sterol/ mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	497491	0.98	487541	90.8	118.8	18567	48.01
cholestanol	13351	0.91	12149	2.3	3.0	463	1.19
lathosterol	10137	1	10137	1.9	2.5	386	1.00
campesterol	4786	1.56	7466	1.4	1.8	284	0.71
stigmasterol	727	1.49	1083	0.2	0.3	41	0.10
b-sitosterol	12456	1.47	18310	3.4	4.5	697	1.68
b-sitostanol		1	0	0.0	0.0	0	0.00
total	538948		536687	100	131	20439	52.7
cholestane	98627	1.04	102572				
			102572				

2:4-12							
weight feces 8.9 mg							
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/ mg feces	nmol sterol/ mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	572090	0.98	560648	90.6	171.6	19286	49.87
cholestanol	15045	0.91	13691	2.2	4.2	471	1.21
lathosterol	12013	1	12013	1.9	3.7	413	1.07
campesterol	5734	1.56	8945	1.4	2.7	308	0.77
stigmasterol	676	1.49	1007	0.2	0.3	35	0.08
b-sitosterol	15286	1.47	22470	3.6	6.9	773	1.86
b-sitostanol		1	0	0.0	0.0	0	0.00
total	620844		618775	100	189	21285	54.9
cholestane	78519	1.04	81660				
			81660				

coprostanol	388.7	388.7
coprostanon	386.7	386.7
cholesterol	386.7	386.7
cholestanol	388.7	388.7
lathosterol	386.7	386.7
campesterol	400.7	400.7
stigmasterol	412.7	412.7
b-sitosterol	414.7	414.7
b-sitostanol	416.7	416.7

3:4-10							
weight feces 6.8 mg							
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	434209	0.98	425525	90.4	89.6	13179	34.08
cholestanol	12431	0.91	11312	2.4	2.4	350	0.90
lathosterol	9196	1	9196	2.0	1.9	285	0.74
campesterol	4448	1.56	6939	1.5	1.5	215	0.54
stigmasterol	651	1.49	970	0.2	0.2	30	0.07
b-sitosterol	11421	1.47	16789	3.6	3.5	520	1.25
b-sitostanol		1	0	0.0	0.0	0	0.00
total	472356		470731	100	99	14579	37.6
cholestane	114142	1.04	118708				
			118708				

3:4-11							
weight feces 6.8 mg							
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	690765	0.98	676950	91.4	122.7	18042	46.66
cholestanol	15497	0.91	14102	1.9	2.6	376	0.97
lathosterol	14645	1	14645	2.0	2.7	390	1.01
campesterol	6317	1.56	9855	1.3	1.8	263	0.66
stigmasterol	805	1.49	1199	0.2	0.2	32	0.08
b-sitosterol	16234	1.47	23864	3.2	4.3	636	1.53
b-sitostanol		1	0	0.0	0.0	0	0.00
total	744263		740615	100	134	19739	50.9
cholestane	132638	1.04	137944				
			137944				

3:4-12							
weight feces 7.7 mg							
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	657017	0.98	643877	91.0	121.8	15814	40.89
cholestanol	16315	0.91	14847	2.1	2.8	365	0.94
lathosterol	13781	1	13781	1.9	2.6	338	0.88
campesterol	6401	1.56	9986	1.4	1.9	245	0.61
stigmasterol	812	1.49	1210	0.2	0.2	30	0.07
b-sitosterol	16291	1.47	23948	3.4	4.5	588	1.42
b-sitostanol		1	0	0.0	0.0	0	0.00
total	710617		707648	100	134	17380	44.8
cholestane	127109	1.04	132193				
			132193				

coprostanol	388.7	388.7
coprostanon	386.7	386.7
cholesterol	386.7	386.7
cholestanol	388.7	388.7
lathosterol	386.7	386.7
campesterol	400.7	400.7
stigmasterol	412.7	412.7
b-sitosterol	414.7	414.7
b-sitostanol	416.7	416.7

13
weight feces 7.8 mg

	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	482166	0.98	472523	89.1	129.2	16561	42.83
cholestanol	15148	0.91	13785	2.6	3.8	483	1.24
lathosterol	13001	1	13001	2.5	3.6	456	1.18
campesterol	5131	1.56	8004	1.5	2.2	281	0.70
stigmasterol	1060	1.49	1579	0.3	0.4	55	0.13
b-sitosterol	14512	1.47	21333	4.0	5.8	748	1.80
b-sitostanol		1	0	0.0	0.0	0	0.00

total 531018 530225 100 145 18583 47.9

cholestane 87934 1.04 91451
91451

14
weight feces 13.4 mg

	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	634279	0.98	621593	89.9	187.2	13972	36.13
cholestanol	12599	0.91	11465	1.7	3.5	258	0.66
lathosterol	16167	1	16167	2.3	4.9	363	0.94
campesterol	6696	1.56	10446	1.5	3.1	235	0.59
stigmasterol	2927	1.49	4361	0.6	1.3	98	0.24
b-sitosterol	18799	1.47	27635	4.0	8.3	621	1.50
b-sitostanol		1	0	0.0	0.0	0	0.00

total 691467 691667 100 208 15547 40.1

cholestane 79811 1.04 83003
83003

15
weight feces 6.2 mg

	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	255399	0.98	250291	85.5	66.1	10669	27.59
cholestanol	13187	0.91	12000	4.1	3.2	512	1.32
lathosterol	6307	1	6307	2.2	1.7	269	0.70
campesterol	3843	1.56	5995	2.0	1.6	256	0.64
stigmasterol	729	1.49	1086	0.4	0.3	46	0.11
b-sitosterol	11657	1.47	17136	5.9	4.5	730	1.76
b-sitostanol		1	0	0.0	0.0	0	0.00

total 291122 292815 100 77 12481 32.1

cholestane 90959 1.04 94597
94597

coprostanol	388.7	388.7
coprostanon	386.7	386.7
cholesterol	386.7	386.7
cholestanol	388.7	388.7
lathosterol	386.7	386.7
campesterol	400.7	400.7
stigmasterol	412.7	412.7
b-sitosterol	414.7	414.7
b-sitostanol	416.7	416.7

2-5-12
weight feces 7.9 mg

	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	455921	0.98	446803	89.0	124.6	15774	40.79
cholestanol	13655	0.91	12426	2.5	3.5	439	1.13
lathosterol	12928	1	12928	2.6	3.6	456	1.18
campesterol	5203	1.56	8117	1.6	2.3	287	0.72
stigmasterol	898	1.49	1338	0.3	0.4	47	0.11
b-sitosterol	13941	1.47	20493	4.1	5.7	723	1.74
b-sitostanol		1	0	0.0	0.0	0	0.00

total	502546	502105	100	140	17726	45.7
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cholestane	86190	1.04	89638
			89638

2-5-13
weight feces 6.9 mg

	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	302926	0.98	296867	90.2	101.4	14697	38.01
cholestanol	6271	0.91	5707	1.7	1.9	283	0.73
lathosterol	8314	1	8314	2.5	2.8	412	1.06
campesterol	3149	1.56	4912	1.5	1.7	243	0.61
stigmasterol	541	1.49	806	0.2	0.3	40	0.10
b-sitosterol	8475	1.47	12458	3.8	4.3	617	1.49
b-sitostanol		1	0	0.0	0.0	0	0.00

total	329676	329065	100	112	16291	42.0
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cholestane	70369	1.04	73184
			73184

2-5-15
weight feces 4.8 mg

	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	210645	0.98	206432	83.6	52.2	10870	28.11
cholestanol	13493	0.91	12279	5.0	3.1	647	1.66
lathosterol	5461	1	5461	2.2	1.4	288	0.74
campesterol	3832	1.56	5978	2.4	1.5	315	0.79
stigmasterol	733	1.49	1092	0.4	0.3	58	0.14
b-sitosterol	10573	1.47	15542	6.3	3.9	818	1.97
b-sitostanol		1	0	0.0	0.0	0	0.00

total	244737	246784	100	62	12995	33.4
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cholestane	95106	1.04	98910
			98910

coprostanol	388.7	388.7
coprostanon	386.7	386.7
cholesterol	386.7	386.7
cholestanol	388.7	388.7
lathosterol	386.7	386.7
campesterol	400.7	400.7
stigmasterol	412.7	412.7
b-sitosterol	414.7	414.7
b-sitostanol	416.7	416.7

weight feces 11.8 mg							
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	760655	0.98	745442	88.7	146.6	12425	32.13
cholestanol	21051	0.91	19156	2.3	3.8	319	0.82
lathosterol	19855	1	19855	2.4	3.9	331	0.86
campesterol	9056	1.56	14127	1.7	2.8	235	0.59
stigmasterol	3585	1.49	5342	0.6	1.1	89	0.22
b-sitosterol	24867	1.47	36554	4.3	7.2	609	1.47
b-sitostanol		1	0	0.0	0.0	0	0.00
total	839069		840477	100	165	14009	36.1

cholestane	122218	1.04	127107
			127107

weight feces 7.2 mg							
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	475539	0.98	466028	90.3	88.3	12257	31.70
cholestanol	8894	0.91	8094	1.6	1.5	213	0.55
lathosterol	11319	1	11319	2.2	2.1	298	0.77
campesterol	4936	1.56	7700	1.5	1.5	203	0.51
stigmasterol	2133	1.49	3178	0.6	0.6	84	0.20
b-sitosterol	13417	1.47	19723	3.8	3.7	519	1.25
b-sitostanol		1	0	0.0	0.0	0	0.00
total	516238		516042	100	98	13573	35.0

cholestane	126938	1.04	132016
			132016

weight feces 7.1 mg							
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	369324	0.98	361938	85.4	62.2	8763	22.66
cholestanol	21096	0.91	19197	4.5	3.3	465	1.20
lathosterol	8285	1	8285	2.0	1.4	201	0.52
campesterol	6116	1.56	9541	2.3	1.6	231	0.58
stigmasterol	1212	1.49	1806	0.4	0.3	44	0.11
b-sitosterol	15819	1.47	23254	5.5	4.0	563	1.36
b-sitostanol		1	0	0.0	0.0	0	0.00
total	421852		424021	100	73	10267	26.4

cholestane	139834	1.04	145427
			145427

coprostanol	388.7	388.7
coprostanon	386.7	386.7
cholesterol	386.7	386.7
cholestanol	388.7	388.7
lathosterol	386.7	386.7
campesterol	400.7	400.7
stigmasterol	412.7	412.7
b-sitosterol	414.7	414.7
b-sitostanol	416.7	416.7

1:6-16							
weight feces		5.5	mg				
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/ mg feces	nmol sterol/ mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	316760	0.98	310425	88.4	75.3	13682	35.38
cholestanol	10679	0.91	9718	2.8	2.4	428	1.10
lathosterol	7883	1	7883	2.2	1.9	347	0.90
campesterol	3863	1.56	6026	1.7	1.5	266	0.66
stigmasterol	573	1.49	854	0.2	0.2	38	0.09
b-sitosterol	10951	1.47	16098	4.6	3.9	710	1.71
b-sitostanol		1	0	0.0	0.0	0	0.00
total	350709		351004	100	85	15471	39.8
cholestane	99161	1.04	103127				
			103127				

1:6-17							
weight feces		5.1	mg				
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/ mg feces	nmol sterol/ mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	283717	0.98	278043	86.7	61.2	12006	31.05
cholestanol	12638	0.91	11501	3.6	2.5	497	1.28
lathosterol	7544	1	7544	2.4	1.7	326	0.84
campesterol	4033	1.56	6291	2.0	1.4	272	0.68
stigmasterol	593	1.49	884	0.3	0.2	38	0.09
b-sitosterol	11162	1.47	16408	5.1	3.6	709	1.71
b-sitostanol		1	0	0.0	0.0	0	0.00
total	319687		320670	100	71	13847	35.6
cholestane	109156	1.04	113522				
			113522				

1:6-18							
weight feces		9.3	mg				
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/ mg feces	nmol sterol/ mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	432750	0.98	424095	87.8	121.3	13048	33.74
cholestanol	15694	0.91	14282	3.0	4.1	439	1.13
lathosterol	11216	1	11216	2.3	3.2	345	0.89
campesterol	5531	1.56	8628	1.8	2.5	265	0.66
stigmasterol	828	1.49	1234	0.3	0.4	38	0.09
b-sitosterol	15866	1.47	23323	4.8	6.7	718	1.73
b-sitostanol		1	0	0.0	0.0	0	0.00
total	481885		482778	100	138	14853	38.2
cholestane	84015	1.04	87376				
			87376				

coprostanol	388.7	388.7
coprostanon	386.7	386.7
cholesterol	386.7	386.7
cholestanol	388.7	388.7
lathosterol	386.7	386.7
campesterol	400.7	400.7
stigmasterol	412.7	412.7
b-sitosterol	414.7	414.7
b-sitostanol	416.7	416.7

2:6-16							
weight feces		5.2	mg				
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	306320	0.98	300194	89.1	71.3	13705	35.44
cholestanol	10414	0.91	9477	2.8	2.2	433	1.11
lathosterol	7025	1	7025	2.1	1.7	321	0.83
campesterol	3400	1.56	5304	1.6	1.3	242	0.60
stigmasterol	583	1.49	869	0.3	0.2	40	0.10
b-sitosterol	9578	1.47	14080	4.2	3.3	643	1.55
b-sitostanol		1	0	0.0	0.0	0	0.00
total	337320		336948	100	80	15383	39.6
cholestane	101256	1.04	105306				
			105306				

2:6-17							
weight feces		4.6	mg				
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	264813	0.98	259517	86.0	58.0	12612	32.61
cholestanol	13978	0.91	12720	4.2	2.8	618	1.59
lathosterol	6351	1	6351	2.1	1.4	309	0.80
campesterol	4076	1.56	6359	2.1	1.4	309	0.77
stigmasterol	392	1.49	584	0.2	0.1	28	0.07
b-sitosterol	11081	1.47	16289	5.4	3.6	792	1.91
b-sitostanol		1	0	0.0	0.0	0	0.00
total	300691		301819	100	67	14667	37.8
cholestane	107534	1.04	111835				
			111835				

2:6-18							
weight feces		7.1	mg				
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	415098	0.98	406796	88.0	89.1	12553	32.46
cholestanol	15248	0.91	13876	3.0	3.0	428	1.10
lathosterol	11257	1	11257	2.4	2.5	347	0.90
campesterol	5140	1.56	8018	1.7	1.8	247	0.62
stigmasterol	790	1.49	1177	0.3	0.3	36	0.09
b-sitosterol	14501	1.47	21316	4.6	4.7	658	1.59
b-sitostanol		1	0	0.0	0.0	0	0.00
total	462034		462441	100	101	14270	36.8
cholestane	109718	1.04	114107				
			114107				

coprostanol	388.7	388.7
coprostanon	386.7	386.7
cholesterol	386.7	386.7
cholestanol	388.7	388.7
lathosterol	386.7	386.7
campesterol	400.7	400.7
stigmasterol	412.7	412.7
b-sitosterol	414.7	414.7
b-sitostanol	416.7	416.7

3:6-16							
weight feces		9.4	mg				
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	528030	0.98	517469	90.2	120.9	12861	33.26
cholestanol	15892	0.91	14462	2.5	3.4	359	0.92
lathosterol	10925	1	10925	1.9	2.6	272	0.70
campesterol	5503	1.56	8585	1.5	2.0	213	0.53
stigmasterol	761	1.49	1134	0.2	0.3	28	0.07
b-sitosterol	14410	1.47	21183	3.7	4.9	526	1.27
b-sitostanol		1	0	0.0	0.0	0	0.00
total	575521		573757	100	134	14260	36.8
cholestane	102895	1.04	107011				
			107011				

3:6-17							
weight feces		5.2	mg				
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	325132	0.98	318629	87.3	55.5	10671	27.59
cholestanol	15757	0.91	14339	3.9	2.5	480	1.24
lathosterol	7236	1	7236	2.0	1.3	242	0.63
campesterol	4495	1.56	7012	1.9	1.2	235	0.59
stigmasterol	611	1.49	910	0.2	0.2	30	0.07
b-sitosterol	11479	1.47	16874	4.6	2.9	565	1.36
b-sitostanol		1	0	0.0	0.0	0	0.00
total	364710		365001	100	64	12224	31.5
cholestane	138038	1.04	143560				
			143560				

3:6-18							
weight feces		6.9	mg				
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	716301	0.98	701975	88.7	96.4	13976	36.14
cholestanol	24577	0.91	22365	2.8	3.1	445	1.15
lathosterol	18733	1	18733	2.4	2.6	373	0.96
campesterol	8508	1.56	13272	1.7	1.8	264	0.66
stigmasterol	1102	1.49	1642	0.2	0.2	33	0.08
b-sitosterol	22755	1.47	33450	4.2	4.6	666	1.61
b-sitostanol		1	0	0.0	0.0	0	0.00
total	791976		791437	100	109	15758	40.6
cholestane	174978	1.04	181977				
			181977				

coprostanol	388.7	388.7
coprostanon	386.7	386.7
cholesterol	386.7	386.7
cholestanol	388.7	388.7
lathosterol	386.7	386.7
campesterol	400.7	400.7
stigmasterol	412.7	412.7
b-sitosterol	414.7	414.7
b-sitostanol	416.7	416.7

weight feces 7.5 mg							
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/ mg feces	nmol sterol/ mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	449806	0.98	440810	86.5	98.4	13115	33.92
cholestanol	25289	0.91	23013	4.5	5.1	685	1.76
lathosterol	7667	1	7667	1.5	1.7	228	0.59
campesterol	6477	1.56	10104	2.0	2.3	301	0.75
stigmasterol	917	1.49	1366	0.3	0.3	41	0.10
b-sitosterol	18151	1.47	26682	5.2	6.0	794	1.91
b-sitostanol		1	0	0.0	0.0	0	0.00
total	508307		509642	100	114	15163	39.0
cholestane	107726	1.04	112035				
			112035				

weight feces 10.8 mg							
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/ mg feces	nmol sterol/ mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	497481	0.98	487531	85.5	119.2	11041	28.55
cholestanol	30777	0.91	28007	4.9	6.9	634	1.63
lathosterol	9362	1	9362	1.6	2.3	212	0.55
campesterol	7714	1.56	12034	2.1	2.9	273	0.68
stigmasterol	1041	1.49	1551	0.3	0.4	35	0.09
b-sitosterol	21441	1.47	31518	5.5	7.7	714	1.72
b-sitostanol		1	0	0.0	0.0	0	0.00
total	567816		570004	100	139	12909	33.2
cholestane	98281	1.04	102212				
			102212				

weight feces 8.5 mg							
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/ mg feces	nmol sterol/ mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	328489	0.98	321919	86.3	100.2	11792	30.49
cholestanol	18232	0.91	16591	4.4	5.2	608	1.56
lathosterol	5881	1	5881	1.6	1.8	215	0.56
campesterol	5028	1.56	7844	2.1	2.4	287	0.72
stigmasterol	654	1.49	974	0.3	0.3	36	0.09
b-sitosterol	13624	1.47	20027	5.4	6.2	734	1.77
b-sitostanol		1	0	0.0	0.0	0	0.00
total	371908		373237	100	116	13671	35.2
cholestane	77207	1.04	80295				
			80295				

coprostanol	388.7	388.7
coprostanon	386.7	386.7
cholesterol	386.7	386.7
cholestanol	388.7	388.7
lathosterol	386.7	386.7
campesterol	400.7	400.7
stigmasterol	412.7	412.7
b-sitosterol	414.7	414.7
b-sitostanol	416.7	416.7

27.19
weight feces 7.3 mg

	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	393028	0.98	385167	87.2	87.9	12046	31.15
cholestanol	19805	0.91	18023	4.1	4.1	564	1.45
lathosterol	6961	1	6961	1.6	1.6	218	0.56
campesterol	5235	1.56	8167	1.8	1.9	255	0.64
stigmasterol	2749	1.49	4096	0.9	0.9	128	0.31
b-sitosterol	13255	1.47	19485	4.4	4.4	609	1.47
b-sitostanol		1	0	0.0	0.0	0	0.00

total 441033 441898 100 101 13820 35.6

cholestane 105292 1.04 109504
109504

27.20
weight feces 7 mg

	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	363884	0.98	356606	86.1	91.7	13105	33.89
cholestanol	22163	0.91	20168	4.9	5.2	741	1.91
lathosterol	6943	1	6943	1.7	1.8	255	0.66
campesterol	5485	1.56	8557	2.1	2.2	314	0.78
stigmasterol	752	1.49	1120	0.3	0.3	41	0.10
b-sitosterol	14149	1.47	20799	5.0	5.4	764	1.84
b-sitostanol		1	0	0.0	0.0	0	0.00

total 413376 414194 100 107 15222 39.2

cholestane 93444 1.04 97182
97182

27.21
weight feces 6.9 mg

	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/mg feces	nmol sterol/mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	399924	0.98	391926	87.3	88.6	12845	33.22
cholestanol	19224	0.91	17494	3.9	4.0	573	1.48
lathosterol	7234	1	7234	1.6	1.6	237	0.61
campesterol	5395	1.56	8416	1.9	1.9	276	0.69
stigmasterol	2024	1.49	3016	0.7	0.7	99	0.24
b-sitosterol	14143	1.47	20790	4.6	4.7	681	1.64
b-sitostanol		1	0	0.0	0.0	0	0.00

total 447944 448876 100 102 14711 37.9

cholestane 106300 1.04 110552
110552

coprostanol	388.7	388.7
coprostanon	386.7	386.7
cholesterol	386.7	386.7
cholestanol	388.7	388.7
lathosterol	386.7	386.7
campesterol	400.7	400.7
stigmasterol	412.7	412.7
b-sitosterol	414.7	414.7
b-sitostanol	416.7	416.7

3M-02							
weight feces 10 mg							
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/ mg feces	nmol sterol/ mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	582689	0.98	571035	88.5	114.6	11457	29.63
cholestanol	23901	0.91	21750	3.4	4.4	436	1.12
lathosterol	10390	1	10390	1.6	2.1	208	0.54
campesterol	7529	1.56	11745	1.8	2.4	236	0.59
stigmasterol	942	1.49	1404	0.2	0.3	28	0.07
b-sitosterol	19466	1.47	28615	4.4	5.7	574	1.38
b-sitostanol		1	0	0.0	0.0	0	0.00
total	644917		644939	100	129	12940	33.3

cholestane	119811	1.04	124603
			124603

3M-02							
weight feces 4.9 mg							
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/ mg feces	nmol sterol/ mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	282329	0.98	276682	87.2	56.9	11609	30.02
cholestanol	16221	0.91	14761	4.7	3.0	619	1.59
lathosterol	5485	1	5485	1.7	1.1	230	0.60
campesterol	3642	1.56	5682	1.8	1.2	238	0.59
stigmasterol	437	1.49	651	0.2	0.1	27	0.07
b-sitosterol	9568	1.47	14065	4.4	2.9	590	1.42
b-sitostanol		1	0	0.0	0.0	0	0.00
total	317682		317326	100	65	13314	34.3

cholestane	116924	1.04	121601
			121601

3M-02							
weight feces 9.5 mg							
	area	response factor	area corrected for response factor	%	µg sterol	ng sterol/ mg feces	nmol sterol/ mg feces
coprostanol		1	0	0.0	0.0	0	0.00
coprostanon		1	0	0.0	0.0	0	0.00
cholesterol	486322	0.98	476596	88.6	110.7	11653	30.13
cholestanol	21163	0.91	19258	3.6	4.5	471	1.21
lathosterol	7823	1	7823	1.5	1.8	191	0.49
campesterol	6293	1.56	9817	1.8	2.3	240	0.60
stigmasterol	622	1.49	927	0.2	0.2	23	0.05
b-sitosterol	16081	1.47	23639	4.4	5.5	578	1.39
b-sitostanol		1	0	0.0	0.0	0	0.00
total	538304		538060	100	125	13155	33.9

cholestane	103492	1.04	107632
			107632

coprostanol	388.7	388.7
coprostanon	386.7	386.7
cholesterol	386.7	386.7
cholestanol	388.7	388.7
lathosterol	386.7	386.7
campesterol	400.7	400.7
stigmasterol	412.7	412.7
b-sitosterol	414.7	414.7
b-sitostanol	416.7	416.7

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group	age	GC sample	camposterol 25-OH	neutral sterols 25-OH	total sterols (μmol feces)	total feces (g)	average weight (g)	days	total neutral sterols excretion (μmol/100 g mouse/day)	camposterol 25-OH	% of neutral sterols 25-OH	b-sitosterol 25-OH
1	12	1-1-1	0.33	0.21	0.54	3.075	123.6	2	3.16	24.96	8.33	68.71
2	12	1-1-2	0.72	0.25	0.97	2.4897	87.25	2	4.01	25.48	8.91	65.61
3	12	1-1-3	0.60	0.20	0.80	2.2946	88.55	2	2.99	25.94	8.77	65.29
4	12	1-1-4	0.78	0.18	0.96	4.892	122.45	3	3.70	27.00	6.32	66.69
5	12	1-1-5	0.73	0.25	0.98	3.7789	88.55	3	4.04	26.27	9.15	64.58
6	12	1-1-6	0.75	0.24	0.99	3.4108	88.2	3	3.78	25.66	6.15	66.18
7	12	1-1-7	0.68	0.21	0.89	3.5754	121.55	3	3.73	26.91	8.45	64.63
8	12	1-1-8	0.68	0.18	0.86	2.6761	86.55	2	4.09	26.93	8.49	64.57
9	12	1-1-9	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
10	12	1-1-10	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
11	12	1-1-11	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
12	12	1-1-12	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
13	12	1-1-13	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
14	12	1-1-14	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
15	12	1-1-15	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
16	12	1-1-16	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
17	12	1-1-17	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
18	12	1-1-18	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
19	12	1-1-19	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
20	12	1-1-20	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
21	12	1-1-21	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
22	12	1-1-22	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
23	12	1-1-23	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
24	12	1-1-24	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
25	12	1-1-25	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
26	12	1-1-26	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
27	12	1-1-27	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
28	12	1-1-28	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
29	12	1-1-29	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
30	12	1-1-30	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
31	12	1-1-31	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
32	12	1-1-32	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
33	12	1-1-33	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
34	12	1-1-34	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
35	12	1-1-35	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
36	12	1-1-36	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
37	12	1-1-37	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
38	12	1-1-38	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
39	12	1-1-39	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
40	12	1-1-40	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
41	12	1-1-41	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
42	12	1-1-42	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
43	12	1-1-43	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
44	12	1-1-44	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
45	12	1-1-45	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
46	12	1-1-46	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
47	12	1-1-47	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
48	12	1-1-48	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
49	12	1-1-49	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
50	12	1-1-50	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
51	12	1-1-51	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
52	12	1-1-52	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
53	12	1-1-53	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
54	12	1-1-54	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
55	12	1-1-55	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
56	12	1-1-56	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
57	12	1-1-57	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
58	12	1-1-58	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
59	12	1-1-59	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
60	12	1-1-60	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
61	12	1-1-61	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
62	12	1-1-62	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
63	12	1-1-63	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
64	12	1-1-64	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
65	12	1-1-65	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
66	12	1-1-66	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
67	12	1-1-67	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
68	12	1-1-68	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
69	12	1-1-69	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
70	12	1-1-70	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
71	12	1-1-71	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
72	12	1-1-72	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
73	12	1-1-73	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
74	12	1-1-74	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
75	12	1-1-75	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
76	12	1-1-76	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
77	12	1-1-77	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
78	12	1-1-78	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
79	12	1-1-79	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
80	12	1-1-80	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
81	12	1-1-81	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
82	12	1-1-82	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
83	12	1-1-83	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
84	12	1-1-84	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
85	12	1-1-85	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
86	12	1-1-86	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
87	12	1-1-87	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
88	12	1-1-88	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
89	12	1-1-89	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
90	12	1-1-90	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
91	12	1-1-91	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
92	12	1-1-92	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
93	12	1-1-93	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
94	12	1-1-94	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
95	12	1-1-95	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
96	12	1-1-96	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
97	12	1-1-97	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85
98	12	1-1-98	0.58	0.20	0.78	2.7569	88.05	2	3.37	26.95	9.21	63.85

Sterol excretion, p values Mann-Whitney U-test																		
sterols	group 1 vs 2			group 1 vs 3			group 1 vs 4			group 1 vs 5			group 1 vs 6			group 1 vs 7		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
total neutral sterols	9	9	0.050	9	9	0.077	9	9	<0.001	9	9	0.050	9	9	0.161	9	9	0.605
coprostanol	9	9	1.000	9	9	1.000	9	9	1.000	9	9	1.000	9	9	1.000	9	9	1.000
coprostanon	9	9	1.000	9	9	1.000	9	9	1.000	9	9	1.000	9	9	1.000	9	9	1.000
cholesterol	9	9	0.040	9	9	0.863	9	9	<0.001	9	9	0.546	9	9	0.489	9	9	0.024
cholestanol	9	9	0.258	9	9	0.546	9	9	0.050	9	9	1.000	9	9	0.002	9	9	0.190
lathosterol	9	9	0.190	9	9	0.489	9	9	<0.001	9	9	0.008	9	9	0.010	9	9	0.931
total phytosterols	9	9	0.113	9	9	0.222	9	9	0.489	9	9	0.730	9	9	0.077	9	9	0.063
campesterol	9	9	0.863	9	9	0.546	9	9	0.002	9	9	0.489	9	9	0.014	9	9	0.387
stigmasterol	9	9	0.666	9	9	0.863	9	9	0.004	9	9	0.258	9	9	<0.001	9	9	0.605
b-sitosterol	9	9	0.931	9	9	1.000	9	9	<0.001	9	9	0.190	9	9	<0.001	9	9	0.730
b-sitostanol	9	9	1.000	9	9	1.000	9	9	1.000	9	9	1.000	9	9	1.000	9	9	1.000
sterols	group 2 vs 4			group 2 vs 5			group 2 vs 6			group 2 vs 7			group 3 vs 4			group 3 vs 5		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
total neutral sterols	9	9	0.040	9	9	0.666	9	9	0.666	9	9	0.113	9	9	0.006	9	9	0.161
coprostanol	9	9	1.000	9	9	1.000	9	9	1.000	9	9	1.000	9	9	1.000	9	9	1.000
coprostanon	9	9	1.000	9	9	1.000	9	9	1.000	9	9	1.000	9	9	1.000	9	9	1.000
cholesterol	9	9	0.077	9	9	0.605	9	9	0.040	9	9	0.003	9	9	0.003	9	9	0.730
cholestanol	9	9	0.489	9	9	0.340	9	9	0.050	9	9	<0.001	9	9	0.136	9	9	0.931
lathosterol	9	9	<0.001	9	9	0.113	9	9	0.009	9	9	<0.001	9	9	<0.001	9	9	0.387
total phytosterols	9	9	0.024	9	9	0.136	9	9	0.001	9	9	<0.001	9	9	0.063	9	9	0.546
campesterol	9	9	0.006	9	9	0.489	9	9	0.008	9	9	0.003	9	9	0.006	9	9	0.730
stigmasterol	9	9	0.004	9	9	0.387	9	9	<0.001	9	9	0.031	9	9	0.004	9	9	0.436
b-sitosterol	9	9	0.024	9	9	0.387	9	9	<0.001	9	9	0.113	9	9	0.024	9	9	0.546
b-sitostanol	9	9	1.000	9	9	1.000	9	9	1.000	9	9	1.000	9	9	1.000	9	9	1.000
sterols	group 3 vs 7			group 4 vs 5			group 4 vs 6			group 4 vs 7			group 5 vs 6			group 5 vs 7		
	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p	n	n	p
total neutral sterols	9	9	0.190	9	9	0.113	9	9	0.006	9	9	<0.001	9	9	0.190	9	9	0.094
coprostanol	9	9	1.000	9	9	1.000	9	9	1.000	9	9	1.000	9	9	1.000	9	9	1.000
coprostanon	9	9	1.000	9	9	1.000	9	9	1.000	9	9	1.000	9	9	1.000	9	9	1.000
cholesterol	9	9	0.031	9	9	0.094	9	9	<0.001	9	9	<0.001	9	9	0.489	9	9	0.113
cholestanol	9	9	<0.001	9	9	0.605	9	9	<0.001	9	9	<0.001	9	9	0.258	9	9	0.063
lathosterol	9	9	<0.001	9	9	<0.001	9	9	0.011	9	9	<0.001	9	9	0.297	9	9	<0.001
total phytosterols	9	9	<0.001	9	9	0.190	9	9	0.190	9	9	0.340	9	9	0.004	9	9	0.001
campesterol	9	9	0.008	9	9	0.031	9	9	0.258	9	9	0.796	9	9	0.094	9	9	0.031
stigmasterol	9	9	0.040	9	9	0.002	9	9	0.436	9	9	0.297	9	9	<0.001	9	9	0.024
b-sitosterol	9	9	0.190	9	9	0.387	9	9	0.040	9	9	0.730	9	9	0.024	9	9	0.605
b-sitostanol	9	9	1.000	9	9	1.000	9	9	1.000	9	9	1.000	9	9	1.000	9	9	1.000

p<0.05

E4. Fecal fatty acid measurements

weight feces 8.6 mg					
	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	13257	2.5	13.9	1619	7.09
C16:0	256605	48.4	269.5	31340	122.23
C16:1	2203	0.4	2.3	269	1.06
C18:0	231285	43.6	242.9	28247	99.29
C18:1	22933	4.3	24.1	2801	9.91
C18:2	1279	0.2	1.3	156	0.56
C18:3	2731	0.5	2.9	334	1.20
total	530293	100	557.0	64766	241.33
C15:0	76166				

weight feces 7.6 mg					
	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	8193	1.8	7.5	993	4.35
C16:0	210520	45.4	193.9	25508	99.49
C16:1	1596	0.3	1.5	193	0.76
C18:0	214647	46.3	197.7	26008	91.42
C18:1	24494	5.3	22.6	2968	10.51
C18:2	1701	0.4	1.6	206	0.73
C18:3	2635	0.6	2.4	319	1.15
total	463786	100	427.1	56196	208.40
C15:0	86874				

weight feces 10.1 mg					
	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	16324	1.9	14.8	1465	6.42
C16:0	404265	46.1	366.5	36288	141.53
C16:1	3337	0.4	3.0	300	1.18
C18:0	411875	47.0	373.4	36971	129.95
C18:1	37807	4.3	34.3	3394	12.01
C18:2	2492	0.3	2.3	224	0.80
C18:3	1091	0.1	1.0	98	0.35
total	877191	100	795.3	78739	292.24
C15:0	88241				

weight feces 5.7 mg					
	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	7613	1.8	6.7	1172	5.13
C16:0	201403	46.8	176.8	31014	120.96
C16:1	1437	0.3	1.3	221	0.87
C18:0	196561	45.7	172.5	30268	106.39
C18:1	19865	4.6	17.4	3059	10.83
C18:2	1352	0.3	1.2	208	0.74
C18:3	2147	0.5	1.9	331	1.19
total	430378	100	377.8	66274	246.11
C15:0	91143				

weight feces 8.8 mg					
	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	18959	1.7	14.2	1618	7.09
C16:0	482473	44.2	362.4	41183	160.62
C16:1	4337	0.4	3.3	370	1.46
C18:0	520971	47.7	391.3	44469	156.30
C18:1	55946	5.1	42.0	4775	16.90
C18:2	3057	0.3	2.3	261	0.93
C18:3	6151	0.6	4.6	525	1.89
total	1091894	100	820.2	93201	345.18
C15:0	106504				

weight feces 7.2 mg					
	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	9801	1.4	9.1	1262	5.52
C16:0	284195	41.3	263.4	36587	142.70
C16:1	2725	0.4	2.5	351	1.38
C18:0	348778	50.7	323.3	44901	157.83
C18:1	35118	5.1	32.6	4521	16.00
C18:2	2252	0.3	2.1	290	1.03
C18:3	4534	0.7	4.2	584	2.10
total	687403	100	637.2	88496	326.56
C15:0	86307				

molw

C14:0	228.4	MYSTIC ACID
C16:0	256.4	PALMITIC ACID
C16:1	254.4	PALMITOLEIC ACID
C18:0	284.5	STEARIC ACID
C18:1	282.5	OLEIC ACID
C18:2	280.5	LINOLEIC ACID
C18:3	278.5	LINOLENIC ACID

weight feces 7.3 mg					
	area	%	µg fatty acid	ng fatty acid/mg feces	nmol fatty acid/mg feces
C14:0	5463	1.2	7.5	1023	4.48
C16:0	156085	35.1	213.4	29233	114.01
C16:1	1332	0.3	1.8	249	0.98
C18:0	248855	56.0	340.2	46607	163.82
C18:1	26880	6.0	36.8	5034	17.82
C18:2	1566	0.4	2.1	293	1.05
C18:3	4158	0.9	5.7	779	2.80
total	444339	100	607.5	83219	304.96
C15:0	58514				

1:2-4 weight feces 13.4 mg					
	area	%	µg fatty acid	ng fatty acid/mg feces	nmol fatty acid/mg feces
C14:0	27893	1.2	20.7	1545	6.76
C16:0	881387	39.5	654.1	48810	190.37
C16:1	8053	0.4	6.0	446	1.75
C18:0	1181866	53.0	877.0	65450	230.05
C18:1	109775	4.9	81.5	6079	21.52
C18:2	5394	0.2	4.0	299	1.06
C18:3	17094	0.8	12.7	947	3.40
total	2231462	100	1655.9	123575	454.92
C15:0	107806				

weight feces 5.7 mg					
	area	%	µg fatty acid	ng fatty acid/mg feces	nmol fatty acid/mg feces
C14:0	7866	1.5	7.3	1287	5.63
C16:0	223765	43.6	208.6	36598	142.74
C16:1	1702	0.3	1.6	278	1.09
C18:0	248550	48.4	231.7	40651	142.89
C18:1	26968	5.3	25.1	4411	15.61
C18:2	1646	0.3	1.5	269	0.96
C18:3	2844	0.6	2.7	465	1.67
total	513341	100	478.6	83959	310.59
C15:0	85813				

1:2-5 weight feces 9.2 mg					
	area	%	µg fatty acid	ng fatty acid/mg feces	nmol fatty acid/mg feces
C14:0	31737	1.4	19.1	2081	9.11
C16:0	923618	40.8	557.2	60560	236.19
C16:1	93	0.0	0.1	6	0.02
C18:0	1135022	50.2	684.7	74421	261.59
C18:1	147397	6.5	88.9	9665	34.21
C18:2	7383	0.3	4.5	484	1.73
C18:3	16098	0.7	9.7	1056	3.79
total	2261348	100	1364.1	148272	546.64
C15:0	132620				

weight feces 8.3 mg					
	area	%	µg fatty acid	ng fatty acid/mg feces	nmol fatty acid/mg feces
C14:0	11108	1.5	9.5	1150	5.03
C16:0	319405	42.1	274.4	33063	128.95
C16:1	2509	0.3	2.2	260	1.02
C18:0	380522	50.1	326.9	39390	138.45
C18:1	37736	5.0	32.4	3906	13.83
C18:2	2443	0.3	2.1	253	0.90
C18:3	5057	0.7	4.3	523	1.88
total	758780	100	651.9	78546	290.07
C15:0	93112				

1:2-6 weight feces 9 mg					
	area	%	µg fatty acid	ng fatty acid/mg feces	nmol fatty acid/mg feces
C14:0	10087	1.7	6.6	728	3.19
C16:0	262021	45.2	170.1	18905	73.73
C16:1	2302	0.4	1.5	166	0.65
C18:0	272616	47.0	177.0	19669	69.14
C18:1	27573	4.8	17.9	1989	7.04
C18:2	1825	0.3	1.2	132	0.47
C18:3	3059	0.5	2.0	221	0.79
total	579483	100	376.3	41810	155.01
C15:0	123199				

2:2-4					
weight feces		9.7	mg		
	area	%	µg fatty acid	ng fatty acid/mg feces	nmol fatty acid/mg feces
C14:0	18615	1.6	15.3	1579	6.91
C16:0	488224	42.0	401.8	41421	161.55
C16:1	4357	0.4	3.6	370	1.45
C18:0	581814	50.0	478.8	49361	173.50
C18:1	60179	5.2	49.5	5106	18.07
C18:2	3098	0.3	2.5	263	0.94
C18:3	7073	0.6	5.8	600	2.15
total	1163360	100	957.4	98699	364.58
C15:0	97212				

3:2-4					
weight feces		8.6	mg		
	area	%	µg fatty acid	ng fatty acid/mg feces	nmol fatty acid/mg feces
C14:0	18311	1.7	15.1	1754	7.68
C16:0	420511	39.9	346.4	40284	157.11
C16:1	3649	0.3	3.0	350	1.37
C18:0	545499	51.7	449.4	52257	183.68
C18:1	56501	5.4	46.5	5413	19.16
C18:2	3001	0.3	2.5	287	1.02
C18:3	7025	0.7	5.8	673	2.42
total	1054497	100	868.7	101017	372.45
C15:0	97105				

2:2-5					
weight feces		9.3	mg		
	area	%	µg fatty acid	ng fatty acid/mg feces	nmol fatty acid/mg feces
C14:0	18128	1.3	14.7	1575	6.90
C16:0	549910	39.1	444.5	47793	186.40
C16:1	5378	0.4	4.3	467	1.84
C18:0	733331	52.1	592.7	63734	224.02
C18:1	85796	6.1	69.3	7457	26.39
C18:2	4289	0.3	3.5	373	1.33
C18:3	10396	0.7	8.4	904	3.24
total	1407228	100	1137.4	122302	450.12
C15:0	98978				

3:2-5					
weight feces		7.7	mg		
	area	%	µg fatty acid	ng fatty acid/mg feces	nmol fatty acid/mg feces
C14:0	14837	1.3	11.7	1515	6.63
C16:0	453886	39.8	356.9	46352	180.78
C16:1	4567	0.4	3.6	466	1.83
C18:0	591094	51.9	464.8	60364	212.18
C18:1	63874	5.6	50.2	6523	23.09
C18:2	3296	0.3	2.6	337	1.20
C18:3	7991	0.7	6.3	816	2.93
total	1139545	100	896.1	116374	428.65
C15:0	101736				

2:2-6					
weight feces		5.9	mg		
	area	%	µg fatty acid	ng fatty acid/mg feces	nmol fatty acid/mg feces
C14:0	5981	2.7	4.9	824	3.61
C16:0	103637	47.0	84.2	14272	55.66
C16:1	790	0.4	0.6	109	0.43
C18:0	97059	44.0	78.9	13366	46.98
C18:1	10984	5.0	8.9	1513	5.35
C18:2	884	0.4	0.7	122	0.43
C18:3	1019	0.5	0.8	140	0.50
total	220354	100	179.0	30345	112.97
C15:0	98463				

3:2-6					
weight feces		8.4	mg		
	area	%	µg fatty acid	ng fatty acid/mg feces	nmol fatty acid/mg feces
C14:0	5585	1.4	4.9	585	2.56
C16:0	169177	42.5	148.8	17709	69.07
C16:1	1364	0.3	1.2	143	0.56
C18:0	196952	49.5	173.2	20617	72.47
C18:1	20806	5.2	18.3	2178	7.71
C18:2	1530	0.4	1.3	160	0.57
C18:3	2302	0.6	2.0	241	0.87
total	397716	100	349.7	41633	153.80
C15:0	90981				

weight feces 11 mg					
	area	%	µg fatty acid	ng fatty acid/mg feces	nmol fatty acid/mg feces
C14:0	14517	1.8	10.1	914	4.00
C16:0	354931	45.2	245.8	22349	87.16
C16:1	3055	0.4	2.1	192	0.76
C18:0	369554	47.1	256.0	23269	81.79
C18:1	36484	4.6	25.3	2297	8.13
C18:2	2417	0.3	1.7	152	0.54
C18:3	4404	0.6	3.1	277	1.00
total	785362	100	544.0	49451	183.38
C15:0	115502				

weight feces 8.3 mg					
	area	%	µg fatty acid	ng fatty acid/mg feces	nmol fatty acid/mg feces
C14:0	7895	1.8	6.9	833	3.65
C16:0	202071	45.0	177.0	21327	83.18
C16:1	1616	0.4	1.4	171	0.67
C18:0	212839	47.4	186.4	22464	78.96
C18:1	21090	4.7	18.5	2226	7.88
C18:2	1476	0.3	1.3	156	0.56
C18:3	2397	0.5	2.1	253	0.91
total	449384	100	393.7	47429	175.80
C15:0	91324				

weight feces 11.1 mg					
	area	%	µg fatty acid	ng fatty acid/mg feces	nmol fatty acid/mg feces
C14:0	20655	1.4	11.8	1062	4.65
C16:0	613614	40.9	350.2	31548	123.04
C16:1	5769	0.4	3.3	297	1.17
C18:0	774403	51.6	441.9	39815	139.95
C18:1	72889	4.9	41.6	3747	13.27
C18:2	4402	0.3	2.5	226	0.81
C18:3	10243	0.7	5.8	527	1.89
total	1501975	100	857.2	77221	284.77
C15:0	140182				

weight feces 7.6 mg					
	area	%	µg fatty acid	ng fatty acid/mg feces	nmol fatty acid/mg feces
C14:0	13707	1.6	9.9	1300	5.69
C16:0	374445	42.6	269.9	35519	138.53
C16:1	3351	0.4	2.4	318	1.25
C18:0	433392	49.3	312.4	41111	144.50
C18:1	46483	5.3	33.5	4409	15.61
C18:2	2770	0.3	2.0	263	0.94
C18:3	5202	0.6	3.8	493	1.77
total	879350	100	633.9	83414	308.29
C15:0	110969				

weight feces 13.4 mg					
	area	%	µg fatty acid	ng fatty acid/mg feces	nmol fatty acid/mg feces
C14:0	26223	1.2	14.5	1081	4.73
C16:0	851207	38.6	470.3	35098	136.89
C16:1	7949	0.4	4.4	328	1.29
C18:0	1186581	53.8	655.6	48927	171.97
C18:1	108707	4.9	60.1	4482	15.87
C18:2	7434	0.3	4.1	307	1.09
C18:3	16281	0.7	9.0	671	2.41
total	2204382	100	1218.0	90894	334.26
C15:0	144789				

weight feces 7.4 mg					
	area	%	µg fatty acid	ng fatty acid/mg feces	nmol fatty acid/mg feces
C14:0	9500	1.5	7.5	1014	4.44
C16:0	267057	43.4	210.9	28499	111.15
C16:1	2386	0.4	1.9	255	1.00
C18:0	302932	49.2	239.2	32327	113.63
C18:1	29071	4.7	23.0	3102	10.98
C18:2	2020	0.3	1.6	216	0.77
C18:3	3014	0.5	2.4	322	1.15
total	615980	100	486.4	65734	243.12
C15:0	101306				

weight feces 8.5 mg					
	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	7543	1.7	6.4	753	3.30
C16:0	193432	44.6	164.2	19312	75.32
C16:1	1421	0.3	1.2	142	0.56
C18:0	205498	47.4	174.4	20517	72.12
C18:1	21652	5.0	18.4	2162	7.65
C18:2	1375	0.3	1.2	137	0.49
C18:3	2581	0.6	2.2	258	0.93
total	433502	100	367.9	43281	160.36
C15:0	94269				

1:4-10 weight feces 8.2 mg					
	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	16048	1.4	11.1	1350	5.91
C16:0	495415	41.9	341.8	41686	162.58
C16:1	3727	0.3	2.6	314	1.23
C18:0	599026	50.7	413.3	50404	177.17
C18:1	56734	4.8	39.1	4774	16.90
C18:2	3322	0.3	2.3	280	1.00
C18:3	7505	0.6	5.2	631	2.27
total	1181777	100	815.4	99439	367.06
C15:0	115946				

weight feces 6.5 mg					
	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	6822	1.6	6.4	987	4.32
C16:0	183086	44.2	172.2	26486	103.30
C16:1	1710	0.4	1.6	247	0.97
C18:0	197892	47.8	186.1	28628	100.63
C18:1	21000	5.1	19.7	3038	10.75
C18:2	1164	0.3	1.1	168	0.60
C18:3	2282	0.6	2.1	330	1.19
total	413956	100	389.3	59885	221.76
C15:0	85077				

1:4-11 weight feces 8.8 mg					
	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	13693	1.5	8.5	966	4.23
C16:0	392497	42.8	243.6	27681	107.96
C16:1	3202	0.3	2.0	226	0.89
C18:0	454998	49.7	282.4	32089	112.79
C18:1	43482	4.7	27.0	3067	10.86
C18:2	2667	0.3	1.7	188	0.67
C18:3	5468	0.6	3.4	386	1.38
total	916007	100	568.5	64603	238.78
C15:0	128901				

weight feces 14 mg					
	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	13974	1.4	12.4	883	3.87
C16:0	420919	41.7	372.5	26609	103.78
C16:1	4038	0.4	3.6	255	1.00
C18:0	511096	50.6	452.3	32310	113.57
C18:1	49923	4.9	44.2	3156	11.17
C18:2	3410	0.3	3.0	216	0.77
C18:3	6144	0.6	5.4	388	1.39
total	1009504	100	893.5	63818	235.56
C15:0	90391				

1:4-12 weight feces 9.8 mg					
	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	11857	1.3	12.4	1261	5.52
C16:0	361984	40.3	377.2	38489	150.11
C16:1	2570	0.3	2.7	273	1.07
C18:0	460388	51.3	479.7	48952	172.06
C18:1	51833	5.8	54.0	5511	19.51
C18:2	3265	0.4	3.4	347	1.24
C18:3	5863	0.7	6.1	623	2.24
total	897760	100	935.5	95457	351.76
C15:0	76774				

2:4-10					
weight feces 7.1 mg					
	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	10522	1.2	8.5	1196	5.23
C16:0	344618	40.8	278.0	39156	152.71
C16:1	2591	0.3	2.1	294	1.16
C18:0	438053	51.9	353.4	49772	174.94
C18:1	40213	4.8	32.4	4569	16.17
C18:2	2602	0.3	2.1	296	1.05
C18:3	5292	0.6	4.3	601	2.16
total	843891	100	680.8	95883	353.44
C15:0	99169				

3:4-10					
weight feces 8.5 mg					
	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	10172	1.3	9.5	1112	4.87
C16:0	310431	40.9	288.5	33946	132.39
C16:1	2449	0.3	2.3	268	1.05
C18:0	394129	51.9	366.3	43098	151.49
C18:1	34766	4.6	32.3	3802	13.46
C18:2	2260	0.3	2.1	247	0.88
C18:3	4580	0.6	4.3	501	1.80
total	758787	100	705.3	82973	305.94
C15:0	86070				

2:4-11					
weight feces 8.7 mg					
	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	13021	1.5	10.2	1170	5.12
C16:0	381006	42.6	297.9	34238	133.53
C16:1	3180	0.4	2.5	286	1.12
C18:0	444595	49.7	347.6	39952	140.43
C18:1	44296	5.0	34.6	3981	14.09
C18:2	2954	0.3	2.3	265	0.95
C18:3	4928	0.6	3.9	443	1.59
total	893980	100	698.9	80335	296.84
C15:0	102328				

3:4-11					
weight feces 9.8 mg					
	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	20169	1.9	17.5	1789	7.83
C16:0	422311	39.3	367.1	37462	146.11
C16:1	3653	0.3	3.2	324	1.27
C18:0	565589	52.6	491.7	50171	176.35
C18:1	52273	4.9	45.4	4637	16.41
C18:2	2913	0.3	2.5	258	0.92
C18:3	7488	0.7	6.5	664	2.39
total	1074396	100	934.0	95305	351.28
C15:0	92026				

2:4-12					
weight feces 7.2 mg					
	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	12246	1.6	9.2	1273	5.58
C16:0	332981	44.3	249.3	34627	135.05
C16:1	2528	0.3	1.9	263	1.03
C18:0	357246	47.5	267.5	37150	130.58
C18:1	40701	5.4	30.5	4232	14.98
C18:2	2826	0.4	2.1	294	1.05
C18:3	3646	0.5	2.7	379	1.36
total	752174	100	563.2	78218	289.63
C15:0	106848				

3:4-12					
weight feces 10.7 mg					
	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	15056	1.1	13.7	1283	5.62
C16:0	501243	38.2	456.9	42703	166.55
C16:1	4206	0.3	3.8	358	1.41
C18:0	708410	54.0	645.8	60353	212.14
C18:1	68397	5.2	62.3	5827	20.63
C18:2	4333	0.3	3.9	369	1.32
C18:3	9322	0.7	8.5	794	2.85
total	1310967	100	1195.1	111688	410.51
C15:0	87759				

1-3-15					
weight feces	8.3	mg			
	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	13526	1.4	9.5	1140	4.99
C16:0	393457	42.0	275.2	33162	129.34
C16:1	3030	0.3	2.1	255	1.00
C18:0	473949	50.5	331.6	39947	140.41
C18:1	44962	4.8	31.5	3790	13.41
C18:2	3228	0.3	2.3	272	0.97
C18:3	5563	0.6	3.9	469	1.68
total	937715	100	656.0	79035	291.81
C15:0	114357				

2-3-15					
weight feces	8.1	mg			
	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	13428	1.5	10.8	1331	5.83
C16:0	386269	43.2	310.0	38276	149.28
C16:1	3253	0.4	2.6	322	1.27
C18:0	437237	48.9	350.9	43327	152.29
C18:1	45693	5.1	36.7	4528	16.03
C18:2	2448	0.3	2.0	243	0.86
C18:3	5034	0.6	4.0	499	1.79
total	893362	100	717.1	88525	327.35
C15:0	99670				

1-5-15					
weight feces	11	mg			
	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	33483	1.3	19.7	1792	7.84
C16:0	1006010	39.7	592.1	53832	209.95
C16:1	9704	0.4	5.7	519	2.04
C18:0	1300166	51.3	765.3	69572	244.54
C18:1	160875	6.3	94.7	8608	30.47
C18:2	7669	0.3	4.5	410	1.46
C18:3	18973	0.7	11.2	1015	3.65
total	2536880	100	1493.2	135749	499.96
C15:0	135913				

2-5-15					
weight feces	9.9	mg			
	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	23143	1.4	17.1	1731	7.58
C16:0	686470	41.2	508.5	51359	200.31
C16:1	6696	0.4	5.0	501	1.97
C18:0	830835	49.8	615.4	62160	218.49
C18:1	105595	6.3	78.2	7900	27.97
C18:2	4899	0.3	3.6	367	1.31
C18:3	10267	0.6	7.6	768	2.76
total	1667905	100	1235.4	124767	460.38
C15:0	108008				

1-5-15					
weight feces	8.3	mg			
	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	11073	1.7	7.3	884	3.87
C16:0	294462	44.8	195.1	23500	91.65
C16:1	2464	0.4	1.6	197	0.77
C18:0	315545	48.0	209.0	25183	88.52
C18:1	28429	4.3	18.8	2269	8.03
C18:2	1608	0.2	1.1	128	0.46
C18:3	3367	0.5	2.2	269	0.96
total	656948	100	435.2	52429	194.27
C15:0	120773				

2-5-15					
weight feces	8.3	mg			
	area	%	µg fatty acid	ng fatty acid mg feces	nmol fatty acid/ mg feces
C14:0	7030	2.7	6.9	833	3.65
C16:0	128252	50.0	126.1	15190	59.24
C16:1	1016	0.4	1.0	120	0.47
C18:0	106592	41.5	104.8	12624	44.37
C18:1	11903	4.6	11.7	1410	4.99
C18:2	760	0.3	0.7	90	0.32
C18:3	1127	0.4	1.1	133	0.48
total	256680	100	252.3	30401	113.53
C15:0	81381				