

EGG INDUSTRY

JANUARY • 1972

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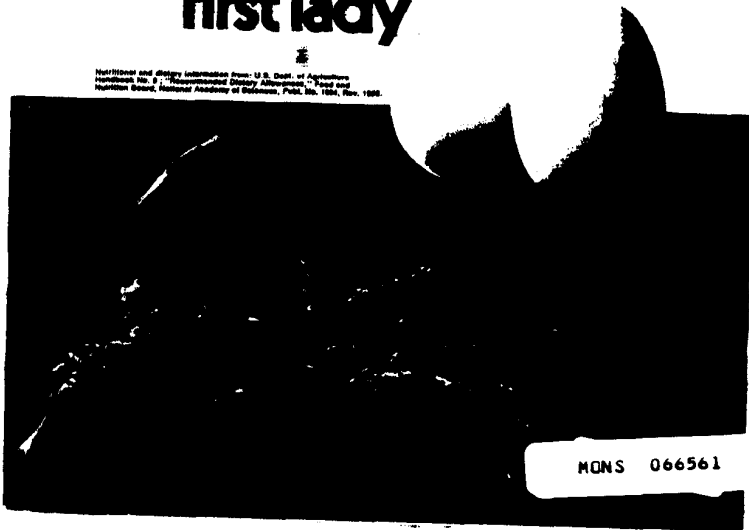
We are pleased to call your attention to material on page

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ADP

Garden State Publishing Co.
Sea Isle City, N. J. 08243

Nutritional and dietary information from U.S. Dept. of Agriculture
Handbook No. 2, "Recommended Dietary Allowances," Food and
Nutrition Board, National Academy of Sciences, Publ. No. 1001, Nov. 1960.



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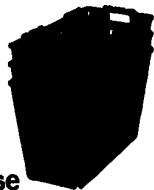


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EGG INDUSTRY

COMMERCIAL EGG MANAGEMENT FROM FARM TO MARKET

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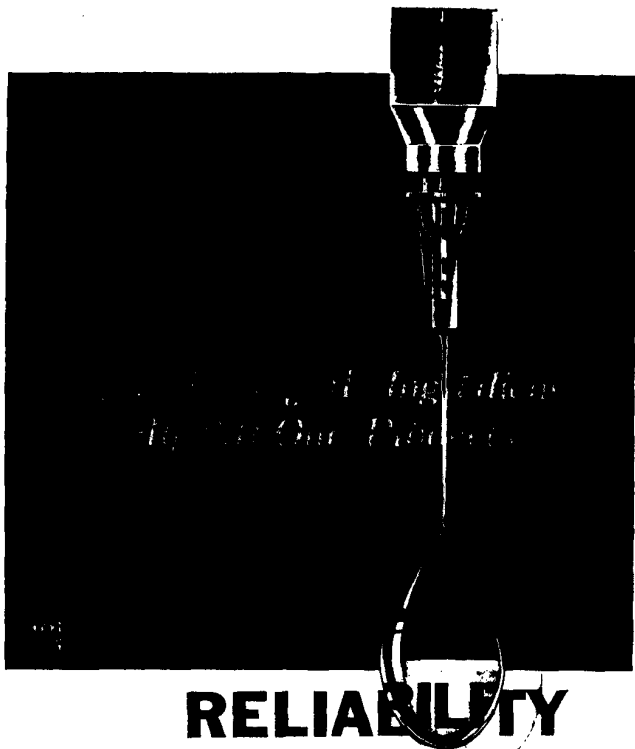
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THE VIEW FROM WASHINGTON

Hearings promised on fowl selloff

CONGRESS HAS PROMISED public hearings in January on the United Egg Producers production adjustment bill, but the UEP still has a rough row to hoe. UEP's campaign for passage of the legislation has been sprinkled with pluses and minuses. Congress has been impressed with the large number of egg-producing organizations backing it, but the absence from the list of the Poultry and Egg Institute (PEIA) and Southeastern Poultry and Egg Ass'n (SEPEA) has hurt.

Wider industry support needed

A key figure in the drive is Georgia Democrat Herman Talmadge, who is chairman of the Senate Agriculture Committee. Talmadge has promised to help UEP get the bill through Congress, provided the industry wants it. The Georgia senator is reported to feel that the UEP plan has support of an overwhelming majority of the egg industry. However, he is inclined right now to let the egg industry lobby the production control plan through Congress.

Although PEIA and SEPEA have not endorsed the UEP bill, they have not opposed it. Capitol Hill sources believe UEP could sell its bill to Congress without support from these two influential trade associations just so long as PEIA and SEPEA do not actively fight it. But without PEIA and SEPEA backing, it could take longer to enact the legislation . . . and time is important. If Congress does not get cracking soon on the UEP bill, its enactment will come too late to do the industry much good.

UEP has set up a temporary political base in Washington, from where its reps fan out daily to recruit votes and respond to congressional queries about the bill. UEP officials also are still plugging away at the Institute and Southeastern, trying to get them in their corner.

Egg mix buy tops last year

USDA'S EGG MIX purchase program has moved more than 1.6 million cases of shell eggs off the market the past year. The government egg buy was the largest egg purchase in 10 years. USDA stayed in the market longer than usual because eggs were a good buy, and because it was felt the market needed the support. The egg mix is used in programs to feed the needy. USDA also tries to key its food purchase programs to help ease the burden when a commodity surplus depresses prices. In 1970, USDA purchased egg mix for only three months in the spring. It bought a total of 846,000 cases.

Corn purchase bought votes

THE NIXON ADMINISTRATION was not especially eager to launch that corn purchase program but was forced to do so to buy the Senate votes needed to confirm Earl Butz as agriculture secretary. USDA market experts warned that the open market buy was an economically unsound way to approach the problem of raising corn prices. The government also was getting heat from feed users. But the White House had no choice. Several Senate farm Republicans put it on the line: no corn purchase program, no vote for Butz.

What effect will the open market buy have on feed prices? It depends on how far the government wants to go in carrying out its commitment. Since the motivation was essentially political, USDA could start with the hope that the announcement would have a positive psychological effect on corn prices, occasionally make a few token purchases, and let it go at that.

However, most market experts here believe that if USDA is to have any appreciable impact on corn prices by using this approach, it will have to go on a real corn buying spree.

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NEWS ANALYSIS

Contract production threatened

THE CONCEPT of contract production in agriculture is threatened by a Justice Department "advisory" opinion which possibly could force many large integrated firms and co-ops to withdraw from

participation in marketing cooperatives such as United Egg Producers (and its six regional co-ops) and National Broiler Marketing Ass'n.

The issue surfaced when Holly

Farms Industries, a broiler company, sought Justice's opinion before joining NBMA. Justice told Holly it failed to qualify as a "farmer" (producer) under provisions of the Capper-Volstead Act. This 1922 act was designed to give farmers some degree of control over their markets by reason of the abnormal risks involved in handling biological products, such as drought, disease, etc.

An exempt co-op is allowed to lessen competition among its members and even agree on prices—something that ordinary businessmen would be jailed for as anti-trust violation.

Ralston Purina Co., as a result of the ruling, dropped membership in National Egg Co., and, consequently, UEP, and in NBMA. The co-ops swiftly filed an informal brief directly with Attorney General Mitchell, seeking a review of the advisory. The best the applicants can hope for, Washington observers say, is for Justice to review the advisory, meanwhile agreeing not to prosecute members of existing C-V co-ops whom it considers to be nonqualified members.

The key seems to be whether the large firms, such as Purina, Swift and Armour, bear the risk of products handled under the contract system. The original C-V intention, apparently, was to allow such firms to participate if they produced more product on their own farms with direct employees than on contract farms.

Few do. But until now, it was understood that this meant that company-owned birds in contract growers' facilities qualified. Now Justice says they don't.

It appears a private civil action probably will be needed to clarify the issue. Hope is dim for a favorable Justice ruling in light of sensitivity of the administration to charges against it—and new Agricultural Secretary Earl Butz, in particular—that it favors "big business" farm corporations.

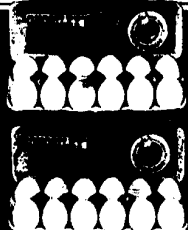
One high UEP officer said: "If carried to the letter, the advisory would put UEP out of business."

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NEWS ANALYSIS

Faulkner's exit may usher in 'Phase Two' era for UEP

UNITED EGG PRODUCERS, beset by regional jealousies and disunity, has ridden out crisis after crisis in its three-year history. It has just faced its gravest. Yet, it probably will survive—maybe in a somewhat different form—and could become even more effective in the future.

Jerry F. Faulkner, who continues until January 15 as general manager after his resignation, December 17, leaves an indelible imprint on poultry organization history. His volatile, free-swinging style, which daily affected the incomes of thousands of producers, distributors and customers, built the first truly national cooperative producer "voice" in history and guided it through its first, formative years.

The situation leading to the change in management actually reflects much more than a departure from Faulkner's personal mode of operation. It culminated from a series of events which shook the industry, combining to create perhaps the worst crisis the industry has yet faced: overproduction, which always follows a period of high prices; the PCB and cholesterol scares, and, finally, the critical 3¢ or more unanticipated increase in egg production

due solely to a new invention—a vaccine to control Marek's disease.

In that sense, Faulkner and UEP were a victim of tragic circumstances. Overproduction and consumer disinterest led to a financial crisis within UEP. Not only did membership dues fall, but the need by UEP for more and more capital grew, in an attempt to put a finger in the dike to bolster paying prices to harassed producers.

UEP played an activist role. It entered the futures market and bought contracts because its directors believed that only by influencing the futures market could it make the "spot"—or cash—market behave according to true laws of supply and demand, instead of moving at the whim of speculators.

There was another way. Let the futures market find its own level, then move in and buy the eggs on the open market and divert them from consumer channels, thereby bolstering paying prices.

UEP played both roles, up to the limit allowed by its financial resources and by the exchange authority trading limits of 150 cars per month. It simply ran out of money. Over a two-month period,

UEP had to take an estimated 300 cars, losing about \$1,000 per car. Some say UEP spent as much as \$600,000 in two months—September and October—trying to stabilize the market.

Faulkner made the daily decisions, any one of which usually offended one segment of UEP or another: the retailer, middleman, West Coast, Southeast or Midwest, etc.

An impossible job, really, given the scope of total industry pressures. In any event, Faulkner, pressed by the five-man executive committee, said the situation could not continue as currently run and offered his resignation.

"We accepted with regret," explained Fred Adams, UEP president, "because, as you know, my analysis is that Jerry has done a tremendous job over the past five or six years with National Egg Co. and UEP. But we feel we had reached a plateau. In order to go from here, we realized we must—to a degree—sacrifice the past and present and start over."

Dr. Gene Masters, UEP economist and statistician, was named as temporary general manager to take over when Faulkner's resignation becomes effective.

Faulkner's exit from UEP may set the scene for a change in style for the organization, which is the national headquarters for six regional egg cooperatives.

It might be looked upon as a transition from Phase One—which saw the birth of the egg cooperative movement from regional to national during a stormy, violent building period—to Phase Two, which could mark a more orderly.

Continued on page 18

PHILIP ALAMPI jokes with Herbert Gabriel during the industry dinner in New York City November 30 honoring Alampi, New Jersey secretary of agriculture and chairman of the National Egg Price Systems Study Committee. Gabriel, head egg buyer for A&I, was honored similarly two years previously. Over 700 attended the \$100-a-plate affair. Proceeds went to an egg industry fund and to Beth Hillel school in Israel. The honor cited Alampi's contributions to the egg industry. For content of the speech delivered after the dinner to a specialist defending eggs contribution to the diet, see page 28.



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NEWS ANALYSIS

Continued

UEP change . . .

business-like era with some decentralization of power back to the grass roots—the regional cooperatives.

Faulkner was the architect of Phase One, guiding the co-op movement through a stormy period, going from crisis to crisis with little chance to chart the course and define long-range objectives. Perhaps few could have performed the job better than Faulkner. Certainly, few could have withstood the heat generated by critics. One with less poise and a thinner skin might have "blown his cool" many times.

Whether Dr. Masters is the "man of the hour" or whether UEP will turn elsewhere for management leadership in this new phase is yet undetermined. Indeed, Masters may not want to continue in the job for the same personal reasons Faulkner had up-fermost in his mind about quitting—time for the family.

Nonetheless, Phase Two leadership demands indicate a somewhat lower key, decentralized approach and change in style of operation. Masters is recognized as the type of manager who may precisely fit the bill in transition—and, perhaps, surprisingly, thereafter.

Dr. Masters was recruited by UEP in April, 1970, from the University of Georgia where he was an employee of USDA's Economic Research Service and a full-time faculty researcher. He had worked on the ERS national study on egg pricing and did his doctorate thesis on the same subject.

Born on an Arkansas farm, he earned a B.S. degree in agriculture at the University of Arkansas and later did graduate study in marketing and business at Georgia State University, Atlanta. His Ph.D. degree in marketing and business administration was received in 1971.

From 1959 to 1962, Masters was production manager of Smith's Pride, Trussville, Ala., an integrated poultry operation. Later he was USDA supervisor of federal grading of poultry, eggs and egg products, at different times, for the states of Missouri, Mississippi, Alabama and Georgia.

The Masters family lives on a farm in Oconee County, near Athens, Ga. His wife is a graduate student at the University of Georgia in library science and a son is an undergraduate in political science. A daughter is an art major at Valdosta (Ga.) State College while one son and one daughter are attending Oconee County schools.

If UEP de-emphasizes its role of actively trading in futures and cash markets, directors will undoubtedly seek to transfer this function to its six regional co-op

members. This would call for an even higher degree of skillful business administration in UEP in coordinating long-range objectives—the kind of training Dr. Masters has had.

It was he who made UEP's short-range and long-range projections on price, supply and cost factors. When UEP challenged USDA forecasts, it was Masters who developed the data.

Stability may be the keynote word for the "new" UEP. If Manager Masters has his way, friends say, the board of directors will hammer out a set of objectives that span an entire cycle of egg prices for at least three years, perhaps five, then stick to them, except for emergency situations. Even then, with Masters' type of planning, standby measures would be available for board and membership consideration.

If UEP can hold its small staff together—which seems likely at this writing—its first objective will be to continue to push for passage of the Fowl Adjustment Act now before Congress. If it proves unpopular, Dr. Masters is the type, associates say, who will concentrate next on what he thinks is much more fundamental in the long run—a checkoff program for research and promotion.

Many within UEP, and without, feel that egg prices generally will not return to profitable levels for most until summer. The "one shot" appeal of a fowl removal

Continued on page 20

PRICE FORECAST

No quick recovery is in the cards

DECEMBER PRICES averaged several cents below the previous year and below the four-year average for the month. We closely predicted the low December prices which resulted from the continuing surplus position of the industry. The present egg surplus problem is primarily the result of improved rate of lay due to Marek's vaccination.

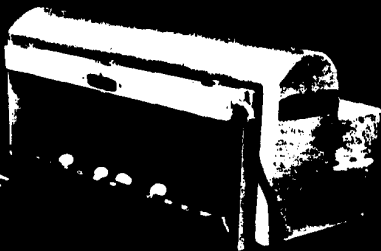
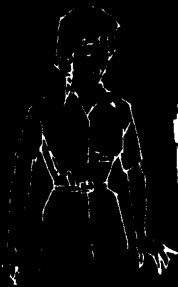
Check placements in November and December were not down as much as many observers expected in light of extremely low prices of recent months. Placements were reduced only 8.7% in November. Reductions do not appear to be sufficient to compensate for improved

laying performance of Marek's vaccinated birds. If the price slump is to be overcome, slaughter will have to be sharply increased this winter.

Prices are expected to average below cost of production for most of 1972. We're not out of the woods yet!

Price expectations below are for New York Large Grade A (cents per dozen):

Month	4 Yr. Av.	Expected '72 Av.
January	45.6	36.36
February	40.2	34.37
First half of '72	37.4	33.30



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NEWS ANALYSIS

Continued

UEP change . . .

program could bring price recovery almost overnight. However, neither Masters nor UEP directors ever were under the illusion that it could be more than a "one shot" approach. They recognize the impermanence of such a program, but say it would at least exhibit industry's ability, in the face of consumerism and other pressures, of being able to "get something done."

Under Faulkner's forceful direction, UEP drafted and introduced the fowl removal proposal in less than 30 days, a process that normally would have taken six months of deliberation by any other trade group. It didn't provide for a referendum because the nature of the emergency was considered critical enough to give it unorthodox attention.

Faulkner told *Egg Industry* in announcing his resignation, that he never envisioned this piece of legislation as more than a one-time attempt to clean up entirely unanticipated surpluses—the kind of action, he said, any business manager might have taken, in his own business, when beset suddenly with problems such as PCB's, 3% higher production from MD vaccine and a cholesteroi scare that decreased retail demand.

Supporters and foes alike recognize that, even if the bill passes in quick time (by March or April), it may never be used. The industry, feeling the drastic pinch of economics, is beginning to make its own adjustments, and prices could be above cost of production before a three-month below-cost period could occur. Since the "up" cycle usually lasts up to three years, the bill would expire, unused, in two years.

Supporters say the precedent would be valuable, however, if

such a bill were needed again. UEP is learning from experience, too. Part of that lesson is that more can be achieved if the entire industry shares the program rather than if UEP takes the bit and tries to run with it alone.

UEP has scored somewhat of a victory in the number of state poultry organizations which have endorsed the fowl adjustment plan. In mid-December these include at least one (and sometimes two or three) poultry organizations in 19, including most key states.

Even Farm Bureau gave qualified endorsement. But FB wants the plan to include provisions limiting the growing of replacement pullets and the definition of a "producer" to be changed to include contract egg producers.

Masters, at least for the present, is charged with the task of welding together the shaky UEP structure in order to follow through on the fowl adjustment legislation and continue to direct energies toward the checkoff. PEIA directors last month approved a motion to support a checkoff.

UEP's financial crisis, although serious due to heavy futures losses, appears to be under control. Regional co-ops have come up with financial aid to keep UEP solvent until enough regular income is received to erase the debts.

UEP's Phase Two appears to be under way as 1972 begins, and the organization and egg producers everywhere look hopefully ahead to a year that has to be better than the last one.

'YOU CAN'T RIDE THE FENCE'

Regionalism biggest problem faced by UEP: Faulkner

SINCE RESIGNING as general manager of United Egg Producers, Jerry F. Faulkner has been spending more time with his family at their home near Stone Mountain, Ga., harboring no apparent bitterness toward individuals in the organization he helped form and led for three years.

Regionalism, he says, is the single biggest problem he faced while leading UEP. In facing one serious decision after another in day-to-day management of a pioneering co-op organization, he points out that a manager can't "ride the top of the fence."

"You've got to take a position on one side or the other. Once you take it, the decision is not going to be universally accepted."

The deep split in UEP's ranks over participation in futures trading—that left UEP virtually broke after heavy September losses—triggered the crisis that produced



JERRY FAULKNER

his resignation from his job that paid \$45,000 a year, plus fringes.

Faced with the same circumstances, he would make the same decision again, he says. "I never worried about it because we were geared to lose money from day one." The magnitude of the losses were unexpected, however.

It was his own decision for UEP.

Continued on page 24

EGG INDUSTRY / JANUARY 1972

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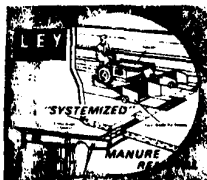
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AN E G G



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NEWS ANALYSIS

Continued

Faulkner . . .

to participate directly in futures in order to influence price so as to benefit producers, Faulkner admits. The alternative would have been to have large firms in UEP's membership handle the paper with UEP picking up the brunt of the losses. He felt the latter way was to be avoided because it might appear to be a conspiracy between these members and the co-op.

Pressure from the Southeast and West Coast led to the brawl over futures and, consequently, to the acceptance of his resignation by the executive committee. But he traces the beginnings to the battle over an improved price discovery system. Some individuals in the Southeast blamed him for the breakdown in communications between Frank Urner and Egg Clearinghouse, Inc., on the eve of its scheduled opening last June.

At times, he notes, he would make a decision popular with West Coast producers and suddenly SWEP (Southwestern Egg Producers) became his ally and NEC (National Egg Co.) might be very critical. Then another decision would irritate the Westerners and SWEP would "get down on me."

He stresses that such assessments should not be interpreted as "sour grapes" because "I tried to call it as I saw it."

While he expects to remain in industry in some role, perhaps in marketing, he maintains that some solution to the violent price swings must be found.

"The industry must be operated as a business, instead of a farm enterprise" . . . with "some kind of production regulation. I don't believe the industry can regulate itself at this point; there may be a time in the future when it can." He thinks "something has to be

done about farming, in general, and egg production, in particular."

Many of UEP's troubles can be traced to the price slump, Faulkner thinks. "When you have membership that has been losing money for 22 months, they become totally numb and lose their clear thinking. One wants to do one thing, one another. If we hadn't had three years behind us, it would have shaken us out of business six months ago."

He fears that "many producers are on the brink (of going broke) and the next six months could be the feather that breaks the camel's back." He doesn't expect substantial price recovery before June or July and thinks the "washout is starting now."

Faulkner, who is geared to action, thinks UEP has been moving away from the activity that made it what it is: directly trying to influence producer paying price. He thinks it is in danger of becoming "just another trade association involved, primarily, in legislative matters."

The tendency has been to get away "from the real guts of what UEP was organized for: to get in the marketplace with both feet and try to do something the producer can feel results from."

He points out that this is why a promotional agency like PENR (Poultry and Egg National Board) has never received the support it needs. "You can't measure results from promotion easily. But you can remove four loads of eggs in the market and move price of eggs up a penny. And you can see those results in your paycheck."

Faulkner, still a young man at 38, must be recognized as the driving force in the movement that founded United Egg Producers, the first national commodity cooperative.

Born on a small farm in northern Georgia, he worked on the University of Georgia poultry farm while earning a degree in 1955, majoring in poultry husbandry.

Continued on page 20

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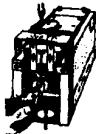
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NEWS ANALYSIS

Continued

Faulkner . . .

After graduation, he began work with a small hatchery, then became serviceman for a small Atlanta feed mill.

From heading the research department for Pillsbury's Gainesville, Ga., operation, he took over as egg projects manager for a million-bird contract operation. When Pillsbury decided to get totally out of egg production during the 1959 price "bust," Faulkner entered the started pullet business.

When Georgia producers approved a checkoff in a statewide referendum in 1962 he was named executive secretary of the ruling body created, the Georgia Egg Commission.

In 1966, he helped organize National Egg Co. in seven Southeastern states. Aware of SWEET's activities, he felt the pool system would not work. The name was selected because original founders hoped to organize producers nationwide.

NEC grew to represent 14 states and talks with producers in the Northeast led to meetings with SWEET representatives. UEP finally emerged.

Faulkner looks back on the extremely demanding aspects of the job that took him away from his family much of the time. Though he had hoped eventually the job pressures would let up some, he finally realized that "I could not go on that way without continuing to make personal sacrifices."

He admits that "the fault is probably mine. I was willing to put my job, my prestige and my work ahead of all else.

"Suddenly I realized it. I looked at my daughter the other day, who will soon be 13, and I said to myself, 'My god, where have I been while she grew up?'"

EGG INDUSTRY / JANUARY 1971

Here's how to get up to 1000 eggs per cage instead of only 750... ...on the same amount of feed!

Yes—it CAN be done with NEW feed saving Colonial True-Lines "Mini" layers! Four 3 lb. "Mini" layers will fit easily in a 12 inch cage built for three 4 lb. "normal" layers. This totals 12 pounds live weight in each cage—but the "Mini" cage has ONE EXTRA EGG MACHINE! Result—you can get up to 1,000 eggs per cage with the four Colonial True-Line "Mini" layers compared to only 750 per cage (250 eggs per hen per year) from the three normal 4 lb. layers, up to 250 MORE EGGS PER CAGE on the same amount of feed with no increase in labor except to gather eggs, no increase in electricity, and no increase in building cost!

The Colonial True-Lines "Mini" represents the FIRST major advance in poultry breeding since the advent of the hybrids. Since she is NEW, we realize you may have questions concerning this new bird developed through Colonial Research. The following are some of the questions we have had to date—and the answers. If you have other questions, we'll be only too happy to answer. Just write us.

Q. Is the Colonial True-Lines "Mini" actually different? If so, what breeding techniques have made her different?

A. Yes, Colonial True-Lines "Mini" white egg layer IS new and different. She represents an entirely new concept in layers. She is small—yet not too small for high sustained production and adequate egg size. The Colonial breeding program as directed by geneticist Dr. Fred Shutt, has for many years been aimed at the development of the smallest layer possible consistent with present day market demands and needs. Our breeding program has several unique features not found in other breeding programs. For instance, we weigh all eggs from the transposed pullets in our several pure lines. This gives us an exact measure of the rate at which egg size increases and the precise time the egg reaches maximum size. Such information is not possible with conventional periodic weighings which most breeders use. Further, we make extra weighings to obtain accurate measures of body weights. These are just two of the key measures designed to produce layers with maximum profit potential. The "Mini" is the result of millions of such measurements by our research staff.

Q. Has there been field testing of the "Mini"? What are the results?

A. The Colonial True-Lines "Mini" has been tested by a number of State Universities. In addition, our own tests and field tests involving several thousand "Mini" layers show



some distinct advantages for the "Mini". In one test, comparing the Colonial True-Line "Mini" with small type and dwarf or midsize layers from other breeders gave the following results in favor of the Colonial "Mini":

- ... 11% to 36% more eggs per hen housed
- ... up to 29% less feed
- ... 12% to 25% more large and extra large eggs
- ... 8% better egg quality as judged by Haugh unit scores.

Q. What is the market value per pound of laid out Colonial "Mini" fowl?

A. The same price per pound as normal size hybrid layers. We have discussed this with some of the nation's largest buyers of fowl and they tell us they will accept the Colonial True-Lines "Mini" fowl at the going price for hybrid or Leghorn fowl.

Q. Some of the new model dwarf layers being developed are said to be very slow maturing—late in starting to lay. How does the Colonial True-Line "Mini" compare in this trait?

A. The Colonial True-Line "Mini" matures quite early, starts laying up to 30 days earlier than some of the better normal size stocks.

Q. Egg size is often a problem in small size layers. What about the egg size of the Colonial True-Lines "Mini"?

A. The Colonial "Mini" eggs will average about 70 per cent large and extra large for the full laying year, depending on environment, feeding and other factors. Shell quality is better than average, holding up particularly well in the late months of lay.

Q. What about the livability of the Colonial True-Lines "Mini"?

A. Even before the development of Marek's vaccine, the Colonial True-Lines "Mini" was showing much better than average livability in areas of heavy exposure. The Colonial "Mini" is a sturdy, healthy little bird. We feel that she will live as well or better than any commercial layer on the market today.

Q. What do you consider to be the "Mini's" most outstanding trait?

A. Her smaller body size which permits up to 25% more birds in a housing unit, and her superior feed efficiency with proven savings of up to 25%.

Q. Where can I order these new Colonial True-Line "Mini" white egg layers?

A. From any one of Colonial's hatcheries and service centers listed in the coupon below or from authorized True-Lines franchise hatcheries and distributors throughout the U.S. and world-wide. Write for name of authorized franchise distributor nearest you. Modern air line shipping puts us within hours of almost any place on earth!



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MONS 066583

Specialist defends eggs, fingers sugar, carbohydrates in atherosclerosis increase



Dr. Robert C. Atkins, New York City, a specialist in diet, nutrition, internal medicine and problems related to heart disease, was the featured speaker at the egg industry dinner honoring Phillip Alampi, New Jersey Secretary of Agriculture. His speech, "Eggs and Cholesterol: Is America Overreacting?" is printed here. Dr. Atkins is the author of numerous magazine articles on the subject and a book he wrote on the topic will be circulated soon.

SOMEONE ASKED ME before my talk, "What do you think of eggs?" I answered, "What else are you going to eat for breakfast?" This is the way I was brought up. But things have changed a bit.

As an example of how they have changed, I was recently going over laboratory reports with a patient. I mentioned that his cholesterol level was a little elevated.

"Does that mean I have to stop eating eggs?" he asked. It wouldn't have bothered me much, but it was one of the men right in this room. A member of the egg industry thought that because his cholesterol level was high, he should stop eating eggs.

If these in the egg industry feel this way, would you expect the lay community to react any differently? How it all came about I don't know. But I place much of the blame on my friends, my buddies, the doctors, the medical establishment and the American Heart Ass'n.

AHA is on record for promoting a diet low in saturated fats, low in cholesterol, low in eggs, and high in anything that is left. Well, some of the things left include sugar and other carbohydrates.

They propose a preventative dietary program to prevent heart disease as though they have proved their case and its effectiveness beyond doubt.

It has been 60 years since researchers were able to show that there was a relation between the level of cholesterol in the blood and this condition they had just discovered: atherosclerosis.

In 60 years since, we have seen no evidence that cholesterol in the blood, that is lowered by diet, in any way modifies or changes the nature of heart disease. Yet nearly everyone—including my egg industry patient—is perfectly willing to accept the recommendations of the medical profession without question. And the doctors use the same logic we would expect of a lay person.

Dr. Yudkin, one of the great nutritionists of the 20th century, describes this as "Reader's Digest logic." It goes like this: There is cholesterol in the aorta and cholesterol in eggs. So, if you eat eggs, it raises your cholesterol level.

It seems perfectly logical. But much more is known about the metabolism of blood and about cholesterol than that.

"We could cut out all cholesterol in our diet and our bodies would begin to manufacture more . . . (with) little change in the cholesterol level in the blood."

First, most cholesterol circulating in the blood is not eaten but is manufactured. About 25% of the cholesterol in our blood comes from our diet and 75% is manufactured. We could cut out all cholesterol in our diet and our bodies would begin to manufacture more. There would be very little change in the cholesterol level in blood.

The calculations go something like this. For every 100 milligrams (mgs.) of cholesterol removed from the diet, the cholesterol blood count drops about three points. If your cholesterol level is in the 200 range—considered normal—you could lower it by about three points for every 100 mgs. of cholesterol you remove from your diet.

One egg contains about 250 mgs. of cholesterol. Americans average eating about one egg per day, based on figures of total eggs sold, divided by the population. Unfortunately, this consumption level has been falling.

So, based on 1965 figures, we got approximately 275 mgs. daily from eggs. Our total cholesterol intake daily was about 520 mgs., slightly more than half accounted for by eggs.

If we were to outlaw eating of eggs—wipe them out of our world—our average cholesterol level drop would be about eight points—an insignificant fall of 3 to 4%, not enough to change anything.

The mechanism for this is really very simple. It is the basic principle of physiology of anything in the body. If we add sugar to the diet, the body manufactures more insulin to lower the sugar level. If we add fat, the body will try to burn up the fat and keep its level constant.

So it is with the mechanism for control of cholesterol. The more cholesterol you eat, the less you manufacture. You cannot raise the cholesterol level by eating cholesterol.

Yet, there is no question that something in our diet is contributing to heart disease. It wasn't until 1911 that the first coronary thrombosis was ever described. It has grown, just in the 20th century, to an illness that seems destined to eventually afflict more than half of us.

People ask why they weren't diagnosing coronaries before 1911. It wasn't because pathologists in the medical colleges were not good. They were skilled in dissecting the body and finding out just about anything that was wrong. But these men did not describe coronaries.

As common as coronaries are, we are prone to think of them as something we have always had. But they really are a disease of the 20th century.

We have always had trouble with animals in heart experiments. We couldn't even get most ani-

mals to develop atherosclerosis, or hardening of the arteries. It wasn't until about a month ago that Dr. Wessler showed that the best way to give monkeys atherosclerosis is to feed them exactly what Americans eat.

They had previously tried to do this by feeding cholesterol or saturated fat or most everything else. But when they began to feed them the typical American table diet of pizza, cereal, ice cream and candy, then the monkeys began to develop the same kind of coronary arteries we have.

The increase in heart disease is a very real thing. The World Health Organization has kept figures only

ON THE COVER this month is a reproduction of the third promotional advertisement for eggs in the series financed by PENB's 30-60 Cholesterol Club. These ads are appearing in medical and nutritional journals. The cover ad, prepared by Buchen Agency, Chicago, was published by *Egg Industry* so the industry can see one type of promotion that could be seriously undertaken if PENB were properly financed, or if the proposed mandatory egg checkoff becomes law. Other activities that might benefit eggs in the marketplace include publicizing talks such as was given by Dr. Robert C. Atkins and is reprinted here, and by industry groups that are doing something about cholesterol charges with a campaign to determine the facts and publicize them. See story about such a group on page 50.

in recent years. What we don't know is the prevalence of heart disease in the 19th century, but it was truly very low. We have seen it go up by 20% in the last 15 years. In the same period, incidentally, per capita consumption of eggs in this country has gone down by 20%.

When the World Health Organization studied other countries, they noticed that Japan was fortunate enough to show a 14% decrease in heart attack deaths during the same period. During the same period, not only was their intake of saturated fats and dairy products increased, but their consumption of eggs went up 300%!

So there is no correlation in epidemiological studies between intake of eggs and the change in rate of heart disease. Findings are similar in every study done.

In Israel, a Dr. Kohn has been interested in the Yemini tribe. He was amazed that these people never had three things: diabetes, heart disease or trouble in the aorta—the three things that in our society

"The Eskimos never had heart disease when they lived on a pure Eskimo diet, which was nothing but fat."

go hand in glove. They usually occur in the same individual.

Yet, he found that when the Yeminites moved to the cities after World War II, 20 years later the incidence of diabetes and heart disease in them was identical to that of the other city dwellers.

In a very careful dietary analysis, he found that the intake of fats and eggs and nearly everything was the same for those living in the city, compared to previously. There was only one significant change. Intake of sugar was unheard of in the tribal Yeminites, but those in the city consumed the same high level of sugar as their neighbors.

In every study on incidence of heart disease, it has correlated with sugar intake, or a very refined carbohydrate diet, such as flour or polished rice.

Although many tribes, such as the Masai and Somburo, have very low cholesterol levels in their blood, they have a diet very high in cholesterol and fat—but eat no sugar.

The Eskimos never had heart disease when they lived on a pure Eskimo diet, which was nothing but fat.

The most significant evidence was a very comprehensive study of American eating habits of over a hundred years ago. They found out that in 1840, per capita consumption of sugar was about seven pounds per year. By the turn of the century, with advent of mass distribution of soft drinks, it went up to 60 pounds. By World War II it was 100 pounds and now is up to 120 pounds of sugar per person. If we consider all the simple sugars that occur in syrup, honey, fruits and milk, it's about 170 pounds a year—contrasted to seven pounds 100 years ago.

This then, in the eyes of those who have studied the epidemiology of heart disease, is the reason we have so much heart disease in the 20th century.

I'll try to explain exactly what the mechanism of heart disease is. Our forebears were carnivorous, or meat eaters—and I'm talking about the human race before we became civilized. We couldn't even grow grain; all we could do is kill animals, or sometimes rob their eggs.

We found a few berries, which were very low in caloric value anyhow. It is estimated mankind survived on a diet that contained 90% fat and protein and no more than 10% carbohydrates.

Then came the agricultural revolution and we began to plant crops and grain. This latter period represents perhaps 1% of mankind's existence. Our bodies then were able to handle the small amount of unrefined carbohydrates as they occur in nature, mixed with protein and fat.

It wasn't until this dramatic change of the last 100 years that the human body could not adapt to

30

an intake of sugar in the magnitude so different from anything that the human body has ever before been asked to handle.

Our bodies handle sugar by producing insulin. Our pancreas is capable of handling perhaps 10, 15 or 20 pounds of refined carbohydrates a year. If it is asked to handle 100, 150 or 200 pounds, something has to give. What gives is that the pancreas begins to act hysterically and can't begin to control the insulin level. It overreacts and produces too much insulin.

So we get a good deal of low blood sugar because of high insulin levels. This is when the pancreas loses its ability to keep up and diabetes occurs. There is some link between the high level of insulin our bodies produce and heart disease.

This is getting somewhat technical for a nonmedical group. But I think we need to know what we are talking about before we say cholesterol correlates with heart disease.

We are all interested in knowing whether we can predict who is going to have a heart attack. We take all sorts of blood determinations and try to find out what correlates with what.

We have learned that the blood level of cholesterol does show some correlation with heart disease. A little later we discovered that another fat seems to show a correlation. It's triglyceride and is being studied more closely.

Triglyceride is the fat you store when you're overweight, and is part of the fat cells. Triglycerides seem to have just as much correlation with heart disease as cholesterol. Any study that tries to link the cholesterol level with heart disease, without considering the triglyceride level, is incomplete.

It is possible to raise the cholesterol level and lower triglycerides and be at a standoff, or vice versa. In order to do any good, you have to lower one without raising the other.

Our studies show that the substance in the blood showing the most correlation with heart disease is the insulin level. The sweets that should most be avoided are those that force us to manufacture the most insulin. Most of us know that insulin will be manufactured when we consume sugar.

This, then, is the link between increased incidence of heart disease in the 20th century and our diet. Much evidence proves the role of insulin in heart disease. One pathologist showed that if you add insulin to the serum in rats, you increase the formation of atherosclerosis in arteries.

Recently I visited Dr. John Goodkin in London, probably the greatest name in the field of understanding heart disease. He showed me photographs

"If a man can't eat eggs, I feel sorry for him. He can't substitute cereals, which is nothing but an empty source of carbohydrates."

he had taken of the aorta of laboratory animals he studied. In animals on a high sugar diet, there was fat all through the aorta. In photographs of other animals which ate the same diet, except with no sugar, there was no sign of fat or atherosclerosis in the aorta.

Many other technical points show that intake of eggs is not a link in the causation of heart disease. You may be aware that we now type blood fats as type 1, 2, 3, 4 and 5. One is a high triglyceride, one a high cholesterol, one a combination, etc. In our studies, 95% of patients were either normal or type 4. Type 4 is the most predominate disturbance of all, having a high triglyceride. This has been proven beyond a shadow of a doubt to be related to sugar and carbohydrate intake, and not related to intake of dietary fat.

No more than 5% of our patients show the disturbance which is said to be aggravated by increasing fat intake. We are very interested in the cholesterol problem and have treated about 8,000 patients. We put them on a very special diet: restricted in carbohydrates, yet with no restriction on eggs, meat, fat or saturated fat.

Yet, in our patients' population, 63% show lower cholesterol levels compared to before they went on the diet. And 11% show a drop in cholesterol level of 100 points or more; not little drops, but fantastic ones. The cholesterol problem in these cases vanishes, although we tell patients to eat all the eggs they want. And 94% show a drop in the triglyceride level.

I recently had a patient who was allergic to eggs; she breaks out in a rash when she consumes eggs. I thought to myself, "This poor soul is going to be deprived of about 50% of items I recommend on the diet."

I went over this recommended diet—not only for treatment of obesity, which has been my main interest, but for treatment for prevention of heart disease and for correction of low blood sugar, which has gotten to be one of the commonest reasons why anyone walks into a doctor's office today.

This patient not only can't have her bacon and eggs or a Western omelet in the morning, but she can't enjoy our special dessert—diet cheesecake, made with a lot of eggs. She can't have our special dishes made of egg yolk or merguine made of egg white. She can't use our recipes for breeding or for fish and meatballs where eggs help the product from falling apart.

We have diet muffins and diet bread, made from eggs. We recommend chicken, tuna and shrimp salad, which uses mayonnaise, so she can't have that. She can't have any of the things that help make our diet palatable.

Our theories about dieting vary greatly from the standard, which says cut your calories and eat less. We have proved that if you cut out carbohydrates, it's not necessary to eat less.

We have one patient who is a caterer and all he eats is chicken, corned beef and three eggs for breakfast. Despite eating 5,000 calories daily, he has already dropped 100 pounds by eliminating carbohydrates. His friend, eating the same food, has lost 95 pounds.

This is routine. All we have to do is cut carbohydrates from the diet and we lose weight. This has been proven time and again. Yet the same medical establishment that denies that eggs are perfectly safe and, in fact, lower cholesterol levels, if anything, says such a diet does not work.

You may wonder why I seem to be alone in the medical profession in making these recommendations, with no restrictions whatsoever on eggs or fat consumption. I fail to see how the medical profession and those advocating eating fewer eggs can fail to know so little about cholesterol metabolism to see that eggs aren't doing anything harmful to the cholesterol level.

They are vaguely aware that something is wrong with the diet because they are aware about the increased incidence of heart disease, and they feel they must do something. Somehow or other, these men have found themselves in positions of authority and they have to speak. They say the only thing they know—which is "Reader's Digest logic"—that if cholesterol is high, it must be the eggs.

Many are not aware of the results of our studies and others like ours because, frankly, we have trouble publicizing our work. There are people like Dr. Frederick Stare at Harvard—who is a paid consultant to the American Cereal Institute—who happen to control many nutrition publications. Whenever I write something that disagrees with their views, it is rejected.

I have been forced to use lay publications in order to get my viewpoint across. So I am writing a book and you may see things I believe in magazine articles.

I don't know what role the source of revenue of these people—from the cereal and sugar industries—plays, but it strikes me as a possibility.

The reason eggs are important in our diet is easy for me to understand because every day I have to tell people what to eat. If a man can't eat eggs, I feel sorry for him. He can't substitute cereal, which is nothing but an empty source of carbohydrates, which is really bad for the conditions I treat. When

Continued on page 80

WINTERPOCK FARMS

A fresh look at high density housing

Hudgins likes automated egg collection, manure cleanup, traveling feed hoppers

HIGH DENSITY cage laying houses are receiving more attention from American poultrymen, especially in crowded Eastern areas.

On Winterpock Farms, Powhatan, Va., less than 30 miles from Richmond, a new 45,000-bird, fully automated laying house is nearing completion. While some houses now being built hold up to 60,000 layers, the impressive thing about this galvanized steel structure is its physical size—only 40 feet wide and 330 feet long, including a work area.

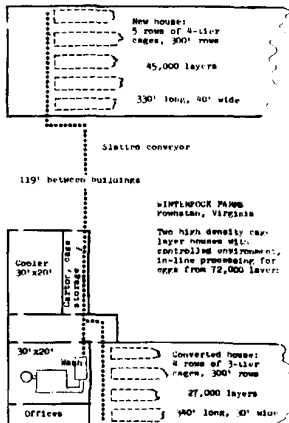
This is high density. Installed inside are five rows of four-deck cages. The house is equipped with the English-built Salmel Laying Battery Cage 21-day system, featuring complete automation including feed, water, ventilation, egg collection and manure removal.

The new house was constructed alongside an older, converted house, 32x330 feet in size, with four rows of three-deck cages, sim-

ilarly equipped, housing 27,000 birds. The two houses are being connected by a covered conveyor so that eggs from all 72,000 birds will feed in-line to an egg packing room at the end of the older building.

Ludson Hudgins, general manager, explains that the older house formerly held 8,500 layers in a double-deck cage system. It was increased last June to its present capacity by adding 100 feet to the length and converting to the Salmel three-tier system.

WINTERPOCK'S LUD HUDGINS



SKETCH of new in-line system for processing eggs from two layer houses.

Hudgins liked what he saw and decided to erect the new, larger house.

Engineers from Harrell Bennett Sales, Inc., Nashville, Tenn., Salmel distributor for the Southeast, supervised installation of the equipment but Winterpock's own crew handled all construction.

Hudgins has definite ideas about poultry housing design and construction. He chose Salmel's 21 day cleantown system over the same company's deep-pit Europak system because he thinks the pits offer potential problems in regard to odor and manure disposal.

"Whether you let it accumulate five years or do it now, it's got to be done," he said. "You get rats, flies and odors in a deep pit that you don't have in my houses. I've been in some deep pit houses that didn't smell, but I know there are days when they do smell."

At Winterpock, the manure is cleaned out about every two weeks. Manure drops onto an asbestos

board supported by the cage below. Scrapers push the manure to the far end of the building where it drops into a collection bin and is augered to a truck outside.

Even in rainy weather, manure dries on the boards enough (50% moisture) so that it is firm, much like soil, when it is scraped into the bins.

Hudgins likes this cage system because it is easily adapted to older buildings. "Our cost per bird in the new house, as far as the building goes, is going to beat anything anyone else could come up with. We figured with another company and know our cost is 50% of what theirs would be if we built it to use their equipment."

Five birds are put in the 16x17-inch cages, figuring out to 54 square inches per bird—the same as for four birds in a 12x18-inch cage or five in a 15x18-inch cage.

Cost of the 45,000-bird house, fully equipped including Eggomatic drum-type auto packer, was about \$2.60 per bird.

Hudgins likes this system, which places the equipment on a concrete foundation. He feels that systems where equipment is hung from the ceiling are less stable. His building has steel braces in the walls for wind resistance.

The new building is equipped with one 72-inch fan, powered by a two-horsepower motor; two 48-inch fans, and one 30-inch fan in the center of the building on one side and a 42-inch fan on one end. When the outside temperature is around zero, the 30-inch fan will take care of the entire house. Split baffles on the opposite side may be used to direct air up or down or both simultaneously, as desired.

Three inches of fiber glass insulation is used in the ceiling and windowless walls. An additional 22-inch fan in the attic runs during hot weather. Total ventilation from fans is 270,000 cubic feet per minute (c.f.m.), or 6 c.f.m. per bird.

In 100-degree weather last summer, it was more comfortable in the older, completed house than



MANURE IS STORED on boards above cages for up to 21 days. Because ample space provides for good ventilation, manure often dries down to about 50% moisture. The cable-drawn scraper is beginning to operate. In top photo, as far end of cage row. At bottom the dry condition of the manure is evident as it is pushed into a storage bin. From there it is augered to a truck outside. Manure is removed about every two weeks in this installation at Winterpock Farms.

outside, Hudgins said.

Doors, instead of shutters, are used outside the fans. When fans are on, doors blow open. When off, weights pull the doors shut.

A Texas engineer, who recently entered poultry designing, handled the ventilation system, from the fan doors to the split baffle system. Hudgins says it is simpler and cheaper to build than the baffle system used on the converted house.

Fans are on the "downwind"

side so that strong gusts of wind will not tend to blow the doors shut when fans are operating.

The egg collection system has some unique features. Due to a slight slope, eggs laid in each tier of cages roll onto a separate plastic belt, which conveys them at a maximum speed of three feet per minute to the end of cage row.

Here a "soapy dish" litter gently takes two eggs at a time at timed intervals to the bottom. From here

eggs are transported on an 18-inch-wide "round" slatted conveyor.

To bring the eggs in at the right level for in-line washing and grading, eggs are lifted by plastic-covered fingers on an elevator and gently discharged.

One advantage of the slatted conveyor over a belt, Hudgins pointed out, is that the conveyor may carry eggs uphill at a slight angle without fear they will roll backwards.

This is an advantage since the new house is on a lower level 119 feet away and the slatted conveyor will carry eggs up a slight grade toward the egg room in the older house.

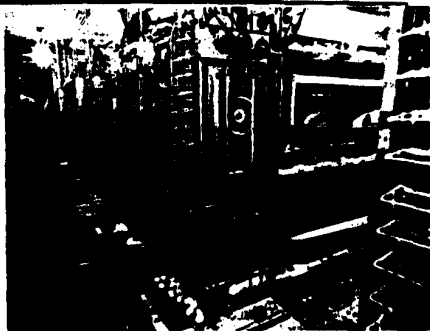
With belts running at maximum speed, it would take 100 minutes to collect eggs from the 300-foot cage rows. Hudgins says, but the packer could not handle the eggs at that speed. He thinks one person will be able to pack the 90 cases of eggs daily in about three hours.

Sides and doors of the cages are independent parts that slide together and can easily be assembled or taken down. "The financial people like this," Hudgins explained, "because it's a portable operation. If we had to move a house, or if a producer failed, the cages can be taken apart, put in a hot-dip galvanizer and be like new again."

A plastic pipe runs through the cages to bring water. Either nipples or cups may be installed in each cage. Connections are at 18-inch intervals. Below the pipe runs a shallow water trough that catches any spillage or overflow from the system and prevents excess water from falling in the manure.

It's not difficult to observe birds in each cage, Hudgins claims. One can look up through the fourth tier from the bottom to see if there are any sick or dead birds.

Distribution of feed is handled by traveling feed hoppers operated automatically by a time clock. Hoppers move to the end where an overhead feed system fills each



LIFTER SYSTEM at end of cage rows gently lowers eggs to the slatted conveyor system at bottom. Eggs enter the lifters two at a time, each lifting into a separate "soup bowl" cup, controlled by a timing mechanism.

hopper with fresh feed. Then all feed hoppers move at the same time, if desired, evenly distributing feed along the feed bins. This assures that bins next to each cage receive the same amount of feed. Hoppers can be timed, too, so that all of the old feed is consumed before fresh feed is distributed.

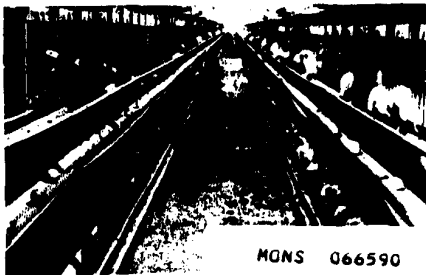
"It takes only 17 minutes for the hoppers to travel the 300-foot cage row," Hudgins said, "which is a quick way to feed 45,000 birds."

Inside Winterpock's converted



SLATTED CONVEYOR transports eggs from cage rows to in-line processing equipment. Round, plastic-coated wire slats make it possible for conveyor to travel up a slight grade without danger of eggs rolling back.

UNUSUAL SIGHT in Winterpock Farm's converted house shows brown and white egg layers looking at each other across the aisle. Winterpock supplies a limited brown egg market. These are three-tier cages.



MGNS 066590

house is an unusual sight. Brown and white layers stare at each other from across one aisle.

"We have a limited brown egg market," Hudgins said. "There's no more profit because it costs us more to produce brown eggs. If we get overloaded on them, we lose. We don't feature brown eggs in advertising, except occasionally on Mediums. It is more of an accommodation. Brown egg layers eat more feed and lay fewer eggs, but they size up and grade out better. We feel we must get two

cents more per dozen for them to break even."

Winterpock Farms is the commercial egg branch of Clay's Hatchery, a DeKalb franchise at Blackstone, Va. Most eggs are sold in Richmond independent stores, some under private labels and some under the Winterpock label. The market is growing. While 500 cases were being marketed weekly early last fall, Hudgins said there is a market for 1,000 cases that he intends to fill with his new production and outside sources.

"We're sitting just about 25 miles from 700,000 people," Hudgins says. But he recognizes that nearness to market has its disadvantages, also. While manure is now being spread on a 1,000-acre farm, in rainy weather it presents a difficult problem. Because of nearness to residential areas, no more expansion will be undertaken at the present Winterpock Farms location.

But Hudgins thinks his automated housing system will allow him to operate with minimal concern from odors and flies. The clean-out system is especially favored because the space between cages



CAGES ARE MADE of component parts that slide together. Consequently, cages can be disassembled, regalvanized and erected at another location. If desired, Harrell Dennett, Salmest distributor, easily lifts the door off a cage.



SLIDING DOORS, instead of shutters, close when restraining fans are not operating, pulled by a weighted system. When fans operate, air pushes the doors open.

is sufficient to allow for air drying of manure before each clean-out.

The degree of automation will allow one person to take care of the 72,000 layers, with some occasional help on mechanical problems and manure handling.

"We've had some problems, just like anyone does with this much new automated equipment," he says. "But we are very pleased and are convinced it was the best way for us to go."

Future PCB outbreaks unlikely: Monsanto

OUTBREAKS OF PCB's such as appeared in the North Carolina fish meal incident last summer are extremely unlikely to recur in the future, according to the environmental protection director for the Monsanto Chemical Co., St. Louis, Mo. Monsanto is the only United States manufacturer of PCB's (polychlorinated biphenyls).

W. A. Papageorge traced the history of the use of PCB's, including their recent emergence as a potential polluter of environment and foodstuffs, and told how Monsanto has moved to avert possible future contamination. His talk was heard at the Midwest "Quickie" Seminar of Poultry and Egg Insti-

tute of America at Kansas City in December.

Are any new outbreaks of PCB's likely? "Extremely unlikely," Papageorge said, "unless some process or application has escaped our attention . . . It's inconceivable, unless someone has stockpiled PCB's and is secretly using them."

Monsanto has discontinued supplying PCB's for most uses, especially for any application remotely connected—directly or indirectly—with food or feed for animals. The action was taken due to recently uncovered data concerning PCB's in the environment.

What are PCB's? Papageorge

said in high school chemistry we learn that when you put benzene under proper temperature and pressure, you produce some hydrocarbon biphenyls (two benzenes together). If you add chlorine, it attaches itself randomly to the benzenes. The product "is not a pure chemical, but a god-awful mixture, depending on how many chlorines are attached."

The resulting PCB's have certain valuable properties, however. It is fire resistant, doesn't react with acids or alkalis, and has good insulating properties that last forever.

"Notice," Papageorge said, "that

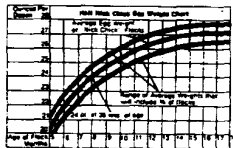
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A closer look at the Golden Egg.

At first sight, the HEN Golden Egg may look like an ordinary white egg from an ordinary White Leghorn laying hen. Far from it. There's nothing ordinary about either the egg or the chicken that lays it. When you look close enough to discover how remarkable it is, and how profitable it is, you'll realize that the HEN Golden Egg can be just as valuable to your operation as the name implies.

The HEN Golden Egg is extraordinarily marketable for two reasons.

1. It's the right size — HEN's new "Ned Chick" through our "balanced breeding" program, is carefully selected to lay eggs that weigh an average of 24 ounces per dozen at 35 weeks of age. That formula was applied in recent surveys of flocks containing more than 115 million "Ned Chicks" with the following results:



The sample flocks of new HEN "Ned Chicks" ended the laying year with an average of about 265 ounces per dozen, which amounts to 73 to 80% larger, on average, for the year. Selecting for bigger eggs, as several of our competitors do, won't add very much to the percent larger, but it can limit production, and will

add measurably to the feed cost. Enough to give the new "Ned Chick" an advantage of three to five cents per hen housed due to egg size alone! Moreover, HEN's new "Ned Chicks" offer an additional feed cost advantage by maintaining lower body weight than most other Leghorn strains.



2. It has a strong shell — hens that lay predominantly extra large or jumbo eggs naturally deplete their calcium reserves faster and produce poor quality shells sooner. The new HEN "Ned Chick" maintains a desirable egg size and puts its calcium supply to work for you more efficiently, resulting in persistently good shell strength and quality. Strength and quality that are an absolute must for today's mechanical egg handling systems. In specific gravity tests of eggs from the major White Leghorn strains, new HEN "Ned Chick" eggs rate among the highest. Traditionally HEN "Ned Chick" eggs show very low incidence of blood spots.

The HEN Golden Egg is particularly profitable for one big reason. We believe the new HEN "Ned Chick" will lay more marketable eggs than any chicken anywhere. Reports from the field indicate that the new HEN "Ned Chick" now in the midst of its first complete laying year is achieving top spectacular production figures. Lays averaging 90.1% rate of lay for 25 weeks after reaching 80% L. viables has a lot to do with it. Many flocks of new HEN "Ned Chicks" are recording mortality rates between 20 and 36 weeks as low as 1% or 1% a month. Healthy, low body weight and persistency are qualities you can depend on, as always, from HEN "Ned Chicks."

To find out more about the HEN Golden Egg, and the chicken that lays it, contact your HEN representative. He'll be happy to show it to you, complete with a detailed explanation of what HEN is doing to make it even better. Like the tests our Poultry Virology Department (one of the most advanced in the

Egg.

industry) has been conducting since 1942, testing commercial conditions with Lymphoid Leukosis free flocks. Tests that put HEN far ahead of all other breeders in the study of Lymphoid Leukosis eradication.

Take a closer look at the HEN Golden Egg. It's a view you can't afford to miss.

HEN

HEN, Inc. Redmond, Washington 98072



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"PCB's have certain valuable properties . . . fire resistant, doesn't react with acids or alkalines . . . good insulating properties that last forever. Notice that these are the characteristics that plague us today."



PCB'S

Continued from page 35

these are the characteristics that plague us today."

Initially, PCB's were manufactured, starting in 1929, by a small Alabama company, to supply a nonflammable, nonexplosive fluid for use in electrical transformers. Today, this is the most valuable use of PCB's—because of its ability to "resist breakdown when the transformer arcs internally" so that "explosive gases are not formed."

If a transformer should rupture, PCB's mean "you don't have the situation of a flammable fluid scattered in all directions."

The only substitutes known for PCB's in these electrical applications are mineral oil and air, Papageorge said, but these require much larger units and are dangerous and cannot be used unless the transformer is isolated in remote country—such as is seen in isolated electrical installations surrounded by high fences to keep people away.

In the 1930's, Monsanto acquired the Alabama company and has continued to be the only American PCB manufacturer. It was found that PCB's were valuable in capacitors, which allow transmission of electricity over long distances without loss of power. In this period of power blackouts, this use

has increased dramatically because of need to transmit power over long distances.

Because of PCB's characteristics of resisting breakdown, new uses were found during the mid-1960's, Papageorge continued. PCB's were attractive as ingredients in the following products:

- **Paints.** PCB's help paint withstand corrosive environment. Uses extended to marine paints and paint for factories working with corrosive materials. PCB paint has also been used on concrete surfaces and for traffic lanes. It was not used in normal interior paints, however.

- **Sealants.** PCB's were attractive to caulking manufacturers because it would allow material to stay pliable for years. PCB caulk was used in modern skyscrapers to fix glass panes permanently, the caulking promising to last the lifetime of the building.

- **Inks.** Only in specialty printing inks were PCB's used. It helped inks withstand ultraviolet lighting deterioration. It wasn't used in common or newspaper inks.

- **Adhesives.** Its attractive properties were its flowability in application of adhesives.

- **Carbonless copy paper.** PCB's made possible use of copy paper without carbons.

With extended uses, PCB's, "more and more were starting to get into our environment," Papageorge said. "PCB's range from materials that have about the same consistency and clearness of wa-

ter to solid types that look like wax or resins. PCB's that look like water have little viscosity and have small amounts of chlorine in them. The more chlorine added, the more viscous PCB's become, until they finally become solid."

Due to problems in manufacture, Monsanto was aware quite early that it needed to be careful in application of PCB in the plant and for customers. "We warned customers to ventilate rooms properly, don't get it on your hands, wash hands after handling it, etc., primarily oriented to industrial hygiene practices known through the years. But at no time were we aware this material could be harming the environment."

In 1968, when Swedish investigators identified the unknown material that interfered with insecticide analysis as being PCB's, "we at Monsanto were frankly surprised and disbelieving," Papageorge said.

As reports kept coming in that PCB's were out there in the environment, Monsanto in late 1967 decided to "have a look."

"We developed our analytical methodology, capable of detecting this material down to parts per billion—a new standard since no attempt had been made to operate at such a low concentration before."

"The analytical methodology is as sophisticated as any that we're aware of in the business. It takes experienced chemists and expen-

Sometime in 1968, "we convinced ourselves that, sure enough, this material was out there in the environment. The next question was: what harm does it do?"

alive equipment. Those of you who have had this work done for you by lab are aware it's expensive work."

Sometime in 1968, "we convinced ourselves that, sure enough, this material was out there in the environment. The next question was: what harm does it do?"

"Throughout 1968 and 1969, we received reports of PCB's being found in some sports fish, fish-eating birds and shellfish. The problem appeared to be one of possible harm to some species of wildlife in the environment and it appeared to be the more highly chlorinated versions."

"No one had detected the lower chlorinated materials. This led us to believe, initially, that the latter were probably degrading and not really a program."

Monsanto began a multi-pointed program:

- Continue refining analytical capabilities.
- Begin trying to develop replacement products.
- Start animal feeding studies.
- Initiate biodegradation studies.
- Educate customers as to potential problems.

The two-year feeding studies on beagle dogs, white mice and White Leghorn chickens were completed last summer. The higher chlorinated materials were fed at 100 parts per million (p.p.m.). They affected dogs and mice in terms of weight gain and causing enlarged livers.

Livers were not damaged but appeared to be growing larger to cope with this new, strange substance. The lower chlorinated materials had no effects on mice or dogs.

The higher chlorinated materials also affected reproduction capabilities. The second generation had difficulty in reproducing a

third generation in terms of litter size, mating and survival of pups.

Nothing in the experiments indicated that PCB materials were highly toxic, Papageorge stated.

With the chickens, the lower chlorinated materials did show some effect. The first warning signal was lower hatchability of the egg. It was found that at 2 p.p.m. there was no effect, but at 4 p.p.m. some showed up.

"This was the first indication we had that the lower chlorinated materials could also be a problem."

What did Monsanto do? "We saw it as an environmental problem

Animal experiments revealed that reproduction capabilities were adversely affected, but nothing indicated that PCB materials were highly toxic.

and we had better get out of the business." By late 1969, a plan was formulated to drop all PCB business that could not be controlled in terms of escape into the environment.

It's easy to reach such a decision in the conference room, but difficult to implement. "There are thousands of customers involved and many don't appreciate environmental problems. Many businesses depend entirely on this one product and they don't have research departments and resources to find alternative materials."

"It was an emotional situation. In some quarters, we were hailed as heroes—usually by the person who hasn't been affected—and in other quarters we were S.O.B.'s."

"By May, 1970, we dropped all businesses where PCB's might leak

into the environment, such as paint, adhesives, sealants and ink. The only businesses we would continue to serve were electrical transformers, electrical capacitors and heat transfer systems."

Papageorge explained that in commonly used steam heat transfer systems, water is heated into steam and the steam is transferred to the process for sterilization. It condenses as it cools and is returned to be recycled. The recycling is carried on as a closed system, within pipes. The pipes heat and only their exterior surfaces are in contact with the material to be sterilized.

PCB's were used for this system because they can withstand extremely high temperatures without being vaporized. "This means when you design the system, you don't need safety valves or the high-pressure design of steam systems."

These should be closed systems and with proper maintenance can be operated as such. Monsanto figured that, with proper care, they could live with such a system.

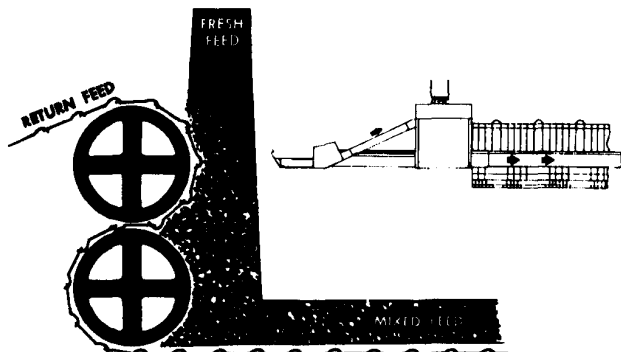
"When the unfortunate North Carolina fish meal contamination broke, we realized we had neglected one very important consideration: attitude of the operators, and ability to inspect, repair and maintain the closed system."

"Also, in a system like this, the problem must occur before you can locate it."

As a result of the fish meal incident, Monsanto reviewed its policy and decided it was too much to expect all heat transfer systems to be entirely leakproof at all times. So it was decided not to service any heat transfer system related—directly or indirectly—to food or animal feed.

Monsanto went to each such customer, helped them drain and flush the units, and gave them re-

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PCB'S

Continued from page 40

placement fluids. The PCB's were then destroyed by Monsanto. All of this was at no cost to the customer.

Unfortunately, no fluid except PCB's is fire resistant. Within a month three units had suffered fires. Many customers had to go back to insurance underwriters and were told they must install additional fire protection systems, sprinklers and fire walls.

Monsanto also decided to sell no PCB's for any new heat transfer systems, regardless of application. And a program was begun to try to convince all remaining heat transfer applicants to change over to other fluids.

"The sources of PCB's that could affect your business are no longer being supplied," Papageorge declared.

Since PCB's do not break down easily, they will continue to contaminate the environment for some time, but not in massive outbreaks, he thinks.

Source of PCB's in recycled paper products was the PCB that carbonless copy paper contained, plus some possibly from inks and adhesives used on boxes and containers. Some small use of PCB's was made in special paper coatings.

All of these products are recycled and carry PCB's into the recycled product. "Much PCB contamination being observed today in cereal and cracker boxes may well be third generation because PCB's are so persistent. It will be with us for some time to come."

Monsanto took the lead in alerting foreign manufacturers of PCB dangers. At first they were politely ignored, but now these firms are taking similar steps, about a year behind Monsanto.

Could PCB's continue to be used

in food-related applications by companies that import the substance? Unlikely, Papageorge said. The foreign companies say they cannot realistically accept such business because of the consequences. Monsanto is monitoring imports and has found no evidence of PCB's being sold to domestic companies by foreign firms.

There are two PCB producers in Japan, one in England, West Germany, France, Spain and Italy. All are following Monsanto's lead except Italy ("they haven't recognized that PCB's are a problem") and Spain ("they don't listen").

Monsanto has no way of know-

ing. Since PCB's don't break down easily, they will continue to contaminate the environment for some time, but massive outbreaks are unlikely.

ing steps being taken inside the Iron Curtain where there are producers in East Germany, Russia and Rumania.

Japan was slow to recognize the problem but is now moving so fast on regulations and control that they may exceed the concern of the Scandinavian countries, where PCB's are being banned.

Are PCB's being used in heat transfer units to process ingredi-

ents such as fish meal in foreign countries? No, Papageorge said. Steam sterilization is being used in all operations outside the U. S.

Is there danger that PCB's can escape from old transformers into the environment when they are being dismantled? Papageorge said all users of such transformers are constantly warned not to dispose of them randomly. They are to be returned to Monsanto for disposal. Any company found not to be cooperating would not be able to secure equipment containing PCB's in the future.

"Anyone causing trouble will be dropped. We can't stand this situation any longer," he said.

How are PCB's destroyed? Monsanto has a specially built incinerator at St. Louis, believed to be the only one capable of destroying PCB's. Heat in the firebox reaches 3,000 degrees F. Near this point, PCB's ignite and "take off with a roar like a jet engine. The flame is incandescent and one can't look at it long with the naked eye."

Products of the combustion are water, carbon dioxide and muriatic acid. "We can't dispose of muriatic acid straight up the stack but we scrub it. We end up with a weak acid that is neutralized and treated along with other wastes."

Monsanto charges a nominal three cents per pound to dispose of PCB's—which is a break-even cost, Papageorge explained. "We don't intend to make profit from our customers' problems."

Better performance found in large units

LARGER PRODUCTION units generally have better bird performance than small units, according to a study made in England by Mrs. Sue Richardson, of Manchester University, as reported in the August, 1971, issue of *Poultry Industry*.

"Some bigger units surveyed had marginal pluses in lower feed costs, lower labor and a higher margin over costs than the smaller unit," the article says.

"And this survey destroys the hairiest of myths—that the small unit will always outproduce the large unit in terms of egg numbers. The Manchester survey indicates that this is not so. Units with an average number of 8,500 birds produced five eggs per bird less than 30,000-bird units."

Mrs. Richardson also found that larger units had a lower flock mortality than smaller flocks, "contrary to what everyone believes."

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Poultry Larvicide
stops maggots.**

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HEALTH & NUTRITION

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HOME ECONOMISTS watch Greenbrier chefs prepare tasty delicacies.

Surplus? sell more eggs— promotion people tell how

A SIMPLE SOLUTION to the egg industry's surplus problems? Sure. Sell more eggs.

Few would argue with that. But how?

When overproduction was building in mid-1970, Poultry and Egg National Board launched a program to alert supermarket buyers across the country what bargains eggs would be that fall. Surveys indicate this paid off in many areas as eggs were featured in more store promotions than usual and observers believe the volume of egg sales increased.

Kraft Foods and PENB, in a post-mortem of last April's "Eggs 'n Cheese" promotion, indicate egg sales were up sharply over a year earlier, despite the anti-cholesterol TV attacks that occurred during the final week of the promotion.

If eggs were a bargain in 1970, they are now a "super bargain" at 1971's much lower prices. United Egg Producers got into the act with a call for retailers and egg producers to feature eggs during two weeks in mid-October. UEP's effort was designed to move a "small" surplus off the market

by increasing sales. It's well documented that a small surplus exerts a bearish effect on egg prices far out of proportion.

How do you sell more eggs? A panel at the Northeastern Poultry Producers Council's convention explored successful methods, after hearing PENB's president, Dr. L. A. Wilhelm, offer 40 ideas of his own. Home economists and state egg promotion specialists, meeting in White Sulphur Springs, W. Va., swapped ideas on how promotions fared in their respective states.

A capsule of some of the ideas offered in these various events include:

LOCAL NEWSPAPER ADS—Missouri's egg promoters also advertised in state newspapers which reach 1.5 million families. They placed ads in food sections of Wednesday and Thursday issues, stressing the value of eggs, noting that two Large eggs, costing about 10 cents total, constitute a meal for one person.

CONTESTS—PENB ties in with the New York Police Athletic League's annual "egg art show"

where up to 12,000 children make art works out of egg cartons, cases and shells—including sculptures.

COLOR CARTONS—Full-color labels on pulp cartons and pastel colors of pulp cartons help increase sales.

DEVELOP SPACE—conscientiousness for eggs in the dairy case. Most stores underdisplay and under-sell and are frequently out of stock.

PERSONAL CONTACT—Pack-er salesman must convince the store manager of high profitability and turnover of eggs and offer merchandising advice and help. Provide him more than eggs and price.

CENTS OFF—When eggs are plentiful, encourage retailer to use "10 cents off" promotion instead of cutting price.



COOKING OMELETS—Phil Doolin, executive secretary, said Missouri Egg Merchandising Council cooked about 2,500 omelets in a booth for nine days at the state fair, and handed out 10,000 omelet servings to interested persons. It demonstrated how to make at least 30 different types of omelets, showed how easy omelets are prepared and promoted the nutritional aspects. See photo above.

TIE-INS—Work for breakfast displays where eggs are sold side

Continued on page 80

Up to \$432 extra profit per 1000 housed birds

Today with the cost-price squeeze it is important to make every bird count for maximum profits. The new Cyanamid Week-A-Month layer program will help. It produced an extra \$432 over cost per 1000 birds housed in actual use tests.

And it's easy to implement. You simply add 100 grams of AUREOMYCIN[®] chlortetracycline per ton of feed for the first week after housing and the first week of every month. Your extra return will soon be realized from increased egg production, improved feed efficiency and greater hatchability.

The cost—not more than \$46 per 1,000 commercial caged layers in production 12 months or \$48 per 1,000 broiler breeders in production nine months. Results will vary...no matter how or where you operate the increased production from the Week-A-Month layer program will pay the cost many times over.

Help beat the cost price squeeze by starting on the Week-A-Month layer program. See your Cyanamid representative for the complete trial results and a handy Week-A-Month reminder calendar. Or write American Cyanamid Company, P.O. Box 400, Princeton, New Jersey 08540.



MGNS 066600



HARRY TREMBATH



MILTON CHAMBERLAIN



J. R. FELDMAN



MALCOLM CLELAND

Checkoff, inspection, fowl sell-off head SEPEA topics

EGG CHECKOFF legislation, upcoming shell egg inspection and the proposed fowl sell-off bill highlight topics on the egg program at the Southeastern "International" Poultry Convention, January 23-26, at Atlanta, Ga.

Herman O. Jones, Herman O. Enterprises, Jacksonville, Fla., will preside over the egg program which begins at 9:45 a.m. on Tuesday, January 25, in the mezzanine of the Civic Center.

At 9:45 a.m., Connor Kennett, deputy director of USDA's Poultry Division, C&MS, will bring up-to-date information about shell egg inspection that will begin July 1, 1972.

Legislative objectives of the

46

mandatory egg checkoff will be discussed by Malcolm Cleland, Roscoe Hill Hatchery, Lincoln, Neb., at 10 a.m. Cleland is chairman of Poultry and Egg National Board.

"Putting the 'Sell' in Eggs" is the topic of a talk by Harry Trembath, Nulaid Foods, San Leandro, Calif., starting at 10:30 a.m. He will question whether current pricing methods are suited to the composition of the market.

At 11 a.m., J. R. Feldman, J&R Packers, Winnipeg, Canada, will explain Canada's egg program. Feldman has served as egg chairman of the Canadian Poultry and Egg Council and is a recognized Canadian egg leader.

"The Washington Scene" is the

topic of an analysis to be presented by Milton Chamberlain, president of Seymour Foods, Topeka, Kan. He will give special emphasis to the proposed fowl sell-off plan to adjust egg production, beginning at 11:30 a.m.

After lunch, Dr. Heartail Wilson, Denver, Colo., will deliver a speech on "The World of the Uncommon Leader," starting at 2 p.m.

Educational programs for the turkey and broiler industries will also take place Tuesday.

On Monday, January 24, educational activities will be of general interest. On Wednesday, sessions will highlight waste and its usage and producing broilers in cages.

Headquarters hotels for the event will be the Marriott Motor Inn and the Sheraton Hotel.

Court ruling validates cash accounting

A POULTRYMAN operating under the cash method of accounting may take as a deductible expense payments made for feed ingredients prior to the end of the fiscal year, even though the ingredients are not used until the year following.

Dismissal in November of a countersuit by the U. S. Government against Gaddis Breeder Farms, Inc., Forrest, Miss., confirmed that the practice is consistent with the cash method of handling receipts and disbursements.

The U. S. District Court, Southern District Miss., Jackson, ruled last June in favor of Gaddis Breeder Farms, Inc., which had sued for recovery of additional income taxes, penalty and interest when the Internal Revenue Service had disallowed certain expense payments. These involved (1) payments made in the fiscal year ending April 30, 1967, for corn and soybean oil meal, most of which

Continued on page 48

FOR INDUSTRY / JANUARY 1972

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To get the feed saving with Hy-Line layers you don't have to give up a thing... certainly not egg value.

Tough shells, practically spot free interiors, and large egg size could bring you 28¢ more per bird for the eggs from your Hy-Line layers.

Weigh some Hy-Line birds and other brands of the same age or ask your local Hy-Line representative to take a look at feed records of local Hy-Line flocks.

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MONS 066602

COURT RULING

Continued from page 46

was used in the following year, and (2) payments for certain items which IRS considered capital expenditures.

On October 20, 1966, Gaddis had contracted to purchase from Cargill, Inc., 420,000 bushels of corn under a pricing formula confirmed by Cargill on November 1, 1966. About 60,000 bushels were delivered by April 30, 1967, and the balance was delivered in May and June. All was paid for before April 30, 1967.

Had the contracts not been binding, the court pointed out, Gaddis could have saved over \$21,000 on 182,000 bushels if the contracts had been canceled and the corn bought locally at the lower prices prevailing in May, 1967. The payments made prior to April 30, 1967, therefore, could not be construed as deposits in any sense.

The situation was similar on the purchase of soybean oil meal. On April 24, 1967, Gaddis contracted with Paymaster Oil Co. for 1,000 tons of soybean oil meal at \$84.50 per ton to be delivered in May. It was paid for on April 29, and delivery was made in May and June.

The court noted that "the total storage capacity of the Gaddis feed mill was 25,000 bushels of corn and less than 100 tons of soybean oil meal, making it impossible for the plaintiff to accept delivery of, and adequately and safely store, the full amount of the feed it had contracted to purchase."

Gaddis' claim was granted for refund of taxes paid on the \$228,476.90 expense disallowance for the payment on corn and soybean oil meal during the fiscal year ending April 30, 1967, together with legal interest.

In a second action, Gaddis Breeder Farms, Inc., claimed a re-

fund on taxes paid on \$14,232.81 for equipment and supplies which IRS had not allowed as deductible. The court agreed with IRS that purchases of three incinerators should be regarded as capital expenditures, but found that the other items, none of which cost more than \$8.51 each, constituted expendable supplies. Items which the court said were deductible consisted of water troughs, hanging feeders, hoses, valves, egg baskets, piping, nests and accessory packs, each of which had a useful life of no more than 12 months and which were used to keep the buildings and equipment in good repair.

Where these items had been placed in new buildings on new farms, the plaintiff had handled them as capital expenditures. ■



ILLINOIS POULTRY SEMINAR panel members discussing the role of independent producers at Bloomington were, from left: Carl Nethers, Relaton Purina Co., Bloomington; Fred Munroe, Munroe-Horne Juice Egg Co., Plainfield; George Egbert, president of Illinois Poultry and Hatchery Federation, Monticello, and Henry Marlowe, Marlowe Feed and Hatchery, Huntley.

CME changes futures contract

REACTING TO CRITICISM by United Egg Producers, governors of Chicago Mercantile Exchange have voted two significant changes in the fresh, shell egg futures contract favorable to the producer element.

Warehouse delivery was eliminated in favor of delivery from approved plants, recognizing that eggs no longer move into storage.

Quality standards were raised to reduce the impact of "junk" eggs on market price. Quality specification was raised to 90%

from 85% on Large, white Grade A eggs. Discounts of a half cent per dozen are placed on lots of 87.5 to 89.9% Grade A and one cent per dozen on eggs grading 85.0 to 87.4%.

The trading unit is 750 cases with an average net delivered weight of at least 46 pounds, with none less than 45 pounds. ■

Negotiations end

NEGOTIATIONS between Seymour Foods and Cal-Maine Foods for sale of Seymour's food division have been called off. Seymour, Topeka, Kan.-based manufacturer of special egg processing machinery and processor of egg products, is a wholly owned subsidiary of Walham Industries. ■

Birds spread TB

TUBERCULOSIS of birds spreads to other animals and humans, according to a Michigan State University microbiologist, Dr. Walter L. Mallmann. Avian TB causes damage very similar to that caused by human TB, he said.

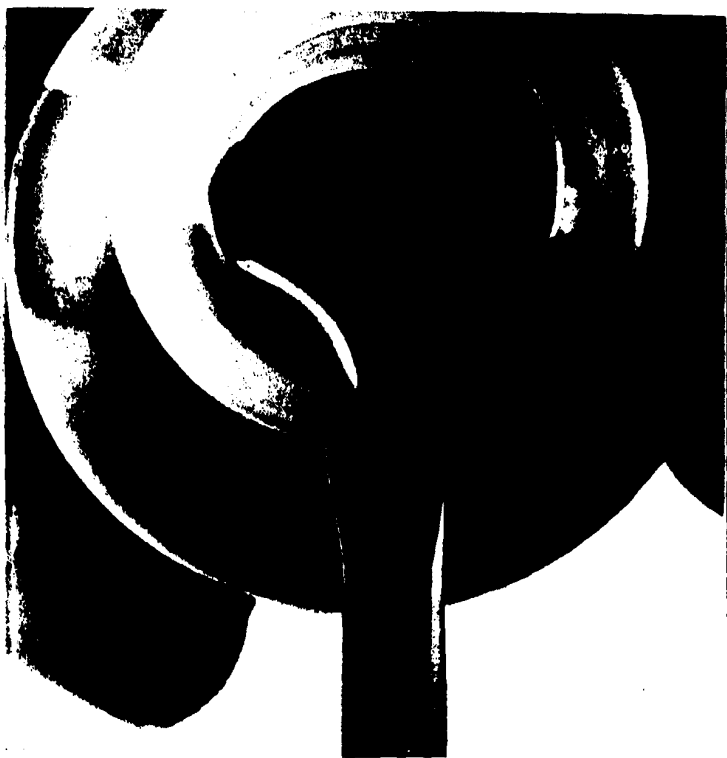
Last year, 129,000 of approximately 160 million spent fowl slaughtered were condemned for suspicion of TB infection.

"Chickens are not the health hazard they could be if it were not for the practice of cleaning out the laying hens before they become unproductive," said Dr. Mallmann.

Another good reason why the industry should slaughter its older birds, added to the long list of more vital ones. ■

Montana complex

THREE LAYING HOUSES of 40,000-bird capacity each, a brooder grow house and an egg processing plant comprise the layer project being built at Townsend, Mont., by Woodcrest Egg Ranch, Inc., Riverside, Calif. It is being built to supply eggs to Safeway stores in Montana. Woodcrest has been producing and packing for Safeway. ■



The TWINVAX[®] cocktail. 2 jiggers of bronchitis, 1 jigger of Newcastle, and just enough of a jolt to stimulate immunity.

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Of course, the B-1 Newcastle strain we use is naturally mild. But at least one of the bronchitis viruses

isn't. So we've specially attenuated that virus to the point where it gives a nice little jolt instead of a great big kick.

As if that weren't enough, we produce TWINVAX from rigidly-tested S-6 P/LD-free and Coli- negative flocks. And after we make it, we make sure it's still as free as the flocks it came from.

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So when you're looking for something to serve your feathered friends, remember us. We serve the best drinks in town. American Scientific Laboratories, Division of Schering Corporation USA, 60 Orange St., Bloomfield, N.J.



The most lasting protection, that mildness can make.



BLANTON SMITH

SEARCH FOR FACTS

Commission drafts plan for attack

GATHERING THE FACTS and then finding a way to disseminate them to the American public was the objective undertaken last summer by the National Commission on Egg Nutrition.

"We believe we have the facts now," said Blanton Smith, Nashville, Tenn., chairman of the five-man commission originally founded as the Egg Cholesterol Commission as the last official act of American Poultry and Hatchery Federation before its merger with the Institute of American Poultry Industries.

APHF funded \$30,000 to be used for two years' work (\$15,

50

000 per year). United Egg Producers agreed to match the amount and other trade associations have been asked to help finance the "crusade for facts."

Smith, appointed by the UEP, was joined on the commission by four prominent industry leaders: Mal Cleland, Hill Hatchery, Lincoln, Neb., representing Poultry and Egg National Board; Harry Trembath, Pacific Growers, San Leandro, Calif., representing Pacific Egg and Poultry Ass'n; Ed Murphy, Diamond National Corp., New York, representing North-eastern Poultry Producers Council; and Hugh Purnell, Purnell's Pride, Tupelo, Miss., representing Southeastern Poultry and Egg Ass'n.

Though the Poultry and Egg Institute of America, created by the APHP-IAPF merger, is not directly represented, Purnell is chairman of the organization. Smith and Trembath are directors and all five are members of PEIA.

Smith and his committee undertook an energetic, thorough search for facts relating to eggs, cholesterol and heart disease.

"Without facts, we could do nothing but talk, and there had been too much talk without facts to back it up," Smith said. Their search led them to a meeting with Dr. Campbell Moses, medical director of the American Heart Ass'n, and to interviews with noted heart specialists and researchers all over the country.

Smith began to accumulate additional data to a file on the cholesterol question which he had personally begun to compile many years ago.

The commission dispelled many false premises and unsupported contentions. The idea that eggs were indicted in heart disease because of fat content was quickly blown apart. In the confrontation with Dr. Moses, Smith drew from him an admission that eggs have never been indicted for their fat content, which Moses admitted "insignificant."

AHA had attacked eggs solely

for their cholesterol content, he explained. Moses also expressed shock that the egg industry had suffered serious financial losses due to AHA publicity and, especially, following the two national television heart disease specials last spring.

One of the nation's leading heart researchers told the commission there are a certain number of people—perhaps as high as 10% of the population—who inherit high cholesterol blood levels (300 or more) from both sides of their families and, also, are subject to heart attacks and strokes rather early in life.

These persons stand a good chance of being crippled by, or dying from, heart disease or related troubles by the time they are 50. Many are stricken in their 30's and 40's. It is very difficult to lower their blood cholesterol levels.

On one of the TV specials, it was stated that men under 45 with a serum cholesterol level of more than 250 are three times more likely to die of a heart attack or stroke than men with normal cholesterol levels.

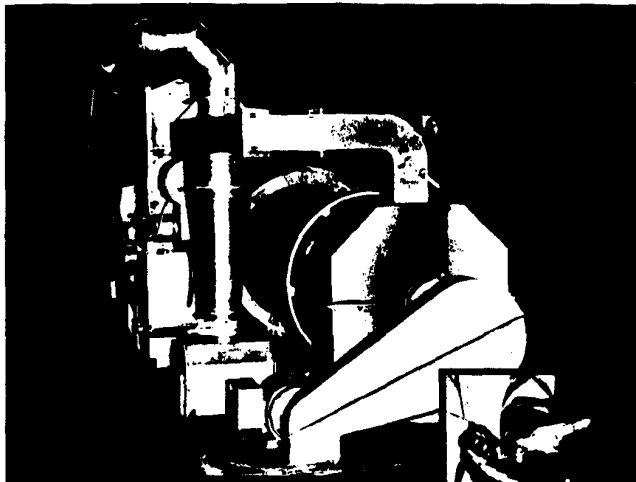
"This is true," Smith said, "but it is true only because those who have the inherited high cholesterol and the inherited high risk of heart attack load the statistics. The implication is that if the serum cholesterol were lowered in time by diet or drugs, the risk of a heart attack would be less. This, of course, is not true."

When AHA's Moses was asked, "On what scientific evidence does AHA base its recommendation to the American public to limit their egg consumption to three eggs per week?" he finally replied: "Clinical opinion."

"This verified our feeling that there was no such scientific evidence," Smith said.

"As you know, most of the talk we have heard about this has to do with whether or not eating eggs will raise the cholesterol level in the blood serum of a person. From

Continued on page 52



Above: Colman Manure Drier



Pulsed material from Colman Manure Drier.

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SEARCH FOR FACTS

Continued from page 50

the studies we have seen, in only a very small percentage of the population will the ingestion of eggs increase serum cholesterol levels, and these people have an abnormal condition.

"However, we now know that the key information we were looking for is: there is absolutely no scientific evidence that indicates lowering serum cholesterol through diet or drugs will reduce the risk of a heart attack."

The commission's research has clearly indicated that most of the anti-egg publicity over the past six years has originated with two men: Dr. Frederick Stare, chairman of Harvard University's nutrition department, and Dr. Jeremiah Stamler, formerly with the Chicago public health department and on the medical faculty at Northwestern University.

The commission has documented the fact that Dr. Stare, by his own admission, has been a paid consultant for the cereal industry for 15 to 18 years. He came to the

defense of cereal before a Senate consumer subcommittee in mid-1970 after Robert B. Choate, Jr., a former Nixon advisor on hunger, had described cereals as "empty calories" that "fatten but do little to prevent malnutrition."

Choate used charts to expose the nutritional deficiencies of most cereals and illustrated how cereal companies spend many millions of dollars on advertising beamed at young children. The result is that many families substitute sugar-coated nutritional "nothings" at the expense of nutritious foods, such as eggs.

Dr. Stare was rushed in to defend cereals, but the most significant thing he could say in their defense was that, when served with milk (which no one denies has good nutritional qualities), cereal provides a good deal of nutrition.

Dr. Stamler went much further than that when CBS gave him a national television audience on its "60 Minutes" show. In a supermarket where he attacked the high-protein animal foods such as meat and dairy products, Dr. Stamler held up a carton of eggs and declared they should be restored only to the function of "making chickens."

The commission is carefully doc-

umenting the statements of these two men, along with their respective roles in promoting the anti-egg publicity in AHA and many publications. Dr. Stamler's major role in drafting the report of the Inter-Society Commission for Heart Disease Resources is well known. This study, financed by the Department of Health, Education and Welfare, was able to cite no new research on the heart question, yet came to conclusions, despite lack of evidence, that the government should undertake a program of trying to alter Americans' diets by reducing the amount of cholesterol consumed.

Armed with facts, the commission plans to formulate a program to take this story to the American public. A number of plans have been proposed, but all are still under study.

But the gathering of facts will continue, said Smith. "We must know we are on solid ground before we proceed on anything," he declared. "Otherwise we can do our cause more harm than good."

The day when it may have been advisable to remain silent on the cholesterol question has long passed, Smith believes.

"We need to get this question out in the open because we have a real story to tell," he asserted. ■

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"We found this equipment superior to anything else on the market. Its sound construction looks like it will last. We like the feeding system especially. The traveling hoppers can feed 45,000 birds in 17 minutes. Birds are easily accessible. The three and four-deck cages provide such high density that we have 45,000 birds in a 40x300-foot house. Our cost for the building itself was 50% of that of houses using other companies' equipment. Equipment is supported on a concrete floor and can be easily installed in older type houses. We think the belt collection system, coupled with a round slat conveyor system to the egg room—allowing eggs to be transported up a slight grade without rolling back—results in the fewest dirties of any automated system. With the 21-day automatic cleanout system, manure stored between cages air dries down to about 50% before being removed, so we have little odor, few flies and few handling problems. We feel we are being fairly treated by Bennett Sales and Salmat personnel as far as maintenance and service are concerned."

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Why put up with wet manure? Salmat has a drip trough running under its water pipe and drinkers to catch any spillage.



RESEARCH DIGEST

BY DR. W. J. STADELMAN

Age of hen affects albumen height

Summary: As a hen ages, the eggs laid have a lower albumen height. The same is true as an egg ages. In the latter instance the pH has been found to increase and a close relationship with eggs from a single flock between albumen height and pH can be found. This research emphasizes that as a hen ages the eggs produced have lower pH values rather than higher values as might be suspected from the lower albumen height values. Data are presented on eggs from several sources, verifying the validity of this observation.

Comment: This report is further evidence that the egg is a very complex structure about which our knowledge is limited.

Short of egg at low albumen height and pH. by S. S. Moore, (deceased). Report available from: East Research Station, Poultry Science Department, University of Missouri, Columbia, MO 65211. Published in Poultry Science 58:575-576 (1977).

Test tells if eggs are pasteurized

Summary: An automated enzyme activity test was devised, measuring the degree of heat treatment given chicken egg white by the pasteurization process. The test is based on measurement of para-nitrophenol released by the enzymes in egg white from p-nitrophenyl-N-acetyl-beta-D-glucosaminide before and after pasteurization. The kinetics and thermal processing parameters for thermal inactivation of the enzyme activity in egg white have been determined by use of the Technicon Auto Analyzer (35 egg samples per hour). A 60% inactivation of

beta-N-acetylglucosaminidase activity upon heating appears to be a suitable indication that egg white has been held at an adequate time-temperature combination to meet USDA recommendations.

Comment: The test should be useful to egg product quality control laboratories and to USDA inspection personnel to insure that the egg products are being given the heat treatment intended.

Automation study of beta-N-acetylglucosaminidase activity as an indicator for egg white pasteurization. by Tim J. Hansen. USDA Western Regional Laboratory, AES, Albany, Calif. 94710. Published in Journal of Food Science 58:663-665 (1977).

Cholesterol studied in commercial eggs

Summary: The cholesterol content of pooled samples of eggs, 12 or more eggs per sample, was determined for eggs produced in several geographic locations. Strain and hen's age differences were also checked. All eggs were market eggs from layers of known ages, breeds, management systems, feed sources and geographic location. The total cholesterol per egg increased with increasing age of layers. This increase was due to increased egg size as cholesterol concentration in the eggs did not change with age of hens.

Eggs from broiler breeds contained significantly more cholesterol and had greater cholesterol concentration than did eggs laid by commercial layer strains. Caged layers tended to produce eggs with lower cholesterol concentrations but differences were not significant at the 5% level. No differences were observed among commercial layer strains or as due to geographic location or feed source. Turkey, duck and quail eggs had

higher concentrations of cholesterol than did chicken eggs.

Comment: From these data, the chance to reduce chicken egg cholesterol significantly through breeding, feeding or management practices appears to be negligible. To market eggs more successfully we will have to shift our emphasis from such negatives as cholesterol to positive considerations of vitamin, protein and mineral content.

Cholesterol content of market eggs. by D. J. Bacon and B. B. Barakat. Poultry Science Department, University of Missouri, Columbia, MO 65211. Published in Poultry Science 58:1383-1386 (1977).

New instrument to check albumen

Summary: An instrument was developed and is described that speeds up the measurement of egg albumen height and minimizes errors by using electrical conductivity as the point of contact and a digital display made reading easier. One problem still not solved is the accumulation of albumen on the movable leg of the micrometer. Measurement speed was approximately doubled. In the instrument described automatic transfer of readings to an automatic data recording device was not included but such an addition could be easily made.

Comment: Anyone measuring large numbers of eggs for albumen height should investigate this improved instrument. The authors did not recognize that a micrometer reading directly in Haugh units is on the market. It would be possible to get a program for a computer to convert directly from height and weight information on eggs to Haugh units.

A digital egg albumen height measurement device. by D. J. Bacon and W. E. Barakat. Poultry Science Department, University of Missouri, Columbia, MO 65211. Published in Poultry Science 58:1387-1390 (1977).

Method evaluates solids quality

Summary: Egg white and whole egg solids were stored at 5, 24 and 43 degrees C. for up to four months. The flavor and aroma changes known to occur in egg

Continued on page 60

Sustained production of
more marketable eggs.
Just one reason why more than
1 out of every 5 pullets housed
is a

"The Businessman's Bird"



MONS 066610



Edward M. Jones, President of the
Merchant's Association, is shown
in a circular portrait. He is a
member of the Board of Directors
of the Chamber of Commerce.

Edward M. Jones, President of the
Merchant's Association, is shown



David S. Cross,
R. R. 1, La Grange, Ill.



Bryant and Henry M. Jones,
McDonough Station, McDonough, Ill.



Earl A. Hudson,
Mantoloking Farm, Mantoloking, N. J.

MCNS 066611

Extra eggs...with less feed..
It's all in the performance record
of

YANBICOCK
"The Businessman's Bird"

MONS 066612

Talk to a representative from
the Babcock franchised hatchery
nearest you.

Look at the records...
and learn how Babcock Breeding can
reduce your costs and
give you more marketable eggs.

A representative from one of our 48 U.S. franchised hatcheries will be glad to visit
with you. Let him show you how Babcock gained its world-wide reputation as the
breeder of "The Businessman's Bird." Let him give you the facts, show you the re-
cords, and work with you in developing the most profitable program for your operation.

ARIZONA

ARIZONA STATE HATCHERY, INC.
Tucson, Ariz. 85709

ARKANSAS

BABCOCK SOUTHWEST, INC.
P.O. Box 348

Bonney, Ark. 72143

CALIFORNIA

JOHNSON BROTHERS, INC.
P.O. Box 1278

Pomona, Calif. 91768

RAINBOW FARM

3600 E. Diamond Ave.

Farmers, Calif. 91330

COLORADO

WEIS BROTHERS HATCHERY

718 7th St., Denver, Colo. 80203

FLORIDA

SUNL COAST HATCHERY, INC.

Box 261, Seelye, Fla. 32511

HOMER'S POULTRY FARM, INC.

P.O. Box 9, Columbia, Fla. 32611

GEORGIA

ARMSTRONG'S HATCHERY, INC.

Midwayville, Ga. 30062

ILLINOIS

OWEN HATCHERY, INC.

P.O. Box 131, Carpin, Ill. 62231

UNIONWEST PLY. ENTER., INC.

1118 Broadway, Box 175

St. Vernon, Ill. 62684

INDIANA

COCHRAN HATCHERY, INC.

887 S. Wayne St., Portland, Ind. 47333

LANDBRIGHT HAY & PLY. FARM, INC.

88 1/2 N. La Grange, Ind. 46041

IOWA

KEAT HATCHERY

282 Richmond Ave.

Ottumwa, Iowa 52501

NORTH IOWA HATCHERIES, INC.

E. Main St., Des Moines, Iowa 50301

KANSAS

CENTRAL KANSAS HATCHERY

Box 8, Mountbridge, Kan. 67107

NEBRASKA

NEBRASKA POULTRY FARM, INC.

Box 107, Morganville, Kan. 67448

NEVADA

CO-MENEE COMPANY

St. S. Dayton, South Center,

Las Vegas 89109

NEIGHBOR

CONWAY'S PLY. FARM & HATCH., INC.

7473 Lowell, Goodwin, Minn. 55057

MINNESOTA

ALLEN'S HATCHERY

Box 1018, Winnetka, Minn. 55091

ANDERSON'S HATCHERY, INC.

Neopatan, Minn. 55065

MR. VILPOT'S HATCHERIES, INC.

Minneapolis, Minn. 55408

MISSISSIPPI

BARNETT'S HATCHERY & PLY. FARM

RD 22, Box 23, Winona, Miss. 39087

ANDERSON'S PLY. FARM & HATCH., INC.

414 North St., Jackson, Miss. 39201

MISSOURI

ALLEN'S HATCHERY, INC.

P.O. Box 249, Winifred, Mo. 64308

NEW HALL'S HATCHERY, INC.

St. Louis, Mo. 63104

BUFFER COUNTY HATCHERY

428 Maple, Poplar Bluff, Mo. 63901

KIRK-BOY HATCHERY

Box 2014

WINTER'S HATCHERY

P.O. Box 375, Jackson, Mo. 63275

NEBRASKA

CLYDE'S HATCHERY

P.O. Box 14, Adams, Neb. 68261

NEW YORK

BABCOCK POULTRY FARM, INC.

P.O. Box 88

Yonkers, N.Y. 10459

BATIMORE HATCHERY

Yonkers, N.Y. 10459

NORTH CAROLINA

BEARDALL FARM

RD 22, Lenoir, N.C. 28550

HARRIS'S OF NORTH CAROLINA

607 S. Commerce St.

Coleman, N.C. 27538

OHIO

THE ELLIOTT WEST HATCHERY CO.

116 South St.

Upper Sandusky, Ohio 44821

OREGON

SEVIERSON HATCHERY

P.O. Box 289, Monmouth, Oregon 97042

WILSON'S HATCHERY

RD 21, Linn, Oregon 97350

PENNSYLVANIA

BABCOCK FARM, INC.

Box 180, Limerick, Pa. 17543

THOMAS MACK & SONS

West Limerick, Pa. 19081

SOUTH CAROLINA

COLUMBIA T.C.S. HATCHERY

1715 Bruce St., Columbia, S.C. 29201

SOUTH DAKOTA

SIMPSON HATCHERY

722 E. Hurley, Mitchell, S.D. 57301

TENNESSEE

PINCARD FARM & HATCHERY

Box 21, Clarendon, Tenn. 37311

RIVERSIDE HATCHERY

P.O. Box 1281, Knoxville, Tenn. 37906

TEXAS

ALLEN'S HATCHERY & FEED, INC.

Box 1, Trane

La Grange, Texas 76045

UTAH

RIEHLER HATCHERY

RD 27, Spanish Fork, Utah 84606

VIRGINIA

GRISBY HOOK HATCHERY, INC.

P.O. Box 1414

Charlottesville, Va. 22901

WASHINGTON

BRIDGEMAN'S HATCHERY

Box 367, Lumpeah, Wash. 98046

WEST VIRGINIA

ROBERTS HATCHERY

Marble, W. Va. 25871

WISCONSIN

WICK'S HATCHERY & PLY. FARM

RR 24, Baraboo, Wis. 53003

MONS 066613

TINY'S CORNER

By DR. L. A. WILHELM, President
Poultry and Egg National Board



Ignorance is a dangerous thing

EVERY EGGMAN, as well as everyone else associated with the egg business, knows exactly why egg consumption has declined since 1950, been reasonably steady since 1960, and is "about the same as" the prewar 1930's.

Of course, we eat up the eggs produced! That's not what breaks egg producers. It's the price they receive for the eggs the consumers eat!

How about the homemaker's use of and opinions about eggs?

Too much of the meager knowledge available is based on the sample of one . . . (my wife, my neighbor, I know a guy who says . . .) or on research data at least 10 years old!

Several private consumer studies have been made. These to our knowledge include: (1) acceptability of carton designs and colors; (2) acceptability of some synthetic or altered egg products; (3) acceptability of shell-less hard-cooked eggs; (4) acceptability of a trademarked egg selling at a higher price and promoted.

But none of these extended and updated the information brought out in the 1959 study, first published in July, 1960, by the Market Development Branch, Agricultural Marketing Service, USDA.

This study noted:

● Although eggs are used mainly as a breakfast food, 40% of individuals do not eat them regularly.

● Most of those who do not eat eggs regularly simply don't like eggs, so when taste factors do operate, they are negative.

● Homemakers view eggs primarily as related to health, the

most healthful of common breakfast foods.

● The level of energy required for activity generally governs the estimate of the size of breakfast required.

● A large breakfast included two eggs; a medium breakfast, one egg.

● If people could be convinced that they need a "good breakfast," eggs would almost automatically be included.

● The "morning rush" was the most important reason given for not having breakfast eggs.

● Most homemakers thought that "eggs are no trouble to fix—at any meal."

● For a small group, mostly older men and women, health factors operate against the use of eggs.

● Most who "had heard anything lately about eggs and health" were aware of favorable information.

● Homemakers did not report a change in the total number of eggs used per week "as compared to the past two or three years."

● Price was not a limiting factor in egg consumption.

● Families in the higher socioeconomic-educational levels were more prone toward the "small" breakfast—and fewer eggs.

Remember that was 12 years ago! There are more "older men and women" now. Both the income and educational levels are higher in 1971.

The "morning rush" is probably more intense in 1971. There are more "working mothers" employed outside the home.

It would be doubtful if there is

any homemaker today who has not heard the cholesterol story and that "eggs are bad for you."

The egg industry needs to have the USDA study updated. The egg industry needs to know the opinions of the homemakers in the 1970's.

This knowledge is necessary if a turnaround in egg acceptability is to be achieved.

COMING EVENTS

January 12: Pennsylvania Poultry Federation banquet, Harrisburg, Pa.

January 12-14: Western "Quickie" Seminar, PEIA Production Division, The Admiralty, Fort Ligon, Wash.

January 19: Missouri Egg Day, Missouri Egg Industries Ass'n, Hannibal Inn, Columbia, Mo.

January 22-24: Southeastern Poultry & Egg Ass'n convention and exhibition, Civic Center, Atlanta, Ga.

January 24: Poultry Day, New Jersey Farmers Week (January 22-29), Nassau Inn, Princeton, N. J.

January 31-February 2: Cornell Agricultural Waste Management Conference, Hotel Syracuse, Syracuse, N. Y.

February 4-5: Midwestern Poultry Federation convention, Leamington Hotel, Minneapolis, Minn.

February 7-11: First New Zealand-held Australasian Poultry Science Convention, Hotel Inter-Continental, Auckland, N. Z.

February 8: South Dakota Poultry Ass'n, Holiday Inn, Mitchell, S. D.

February 9-11: Georgia Nutrition Conference, Marriott Motor Hotel, Atlanta, Ga.

February 21-23: Egg Grading School, Purdue University, Lafayette, Ind.

February 29: March 1: PEIA Stated Pullet Seminar, Hilton Inn, Airport, St. Louis, Mo.

March 22-25: PEIA/Western Poultry Congress "Supershow '72," Town & Country Hotel, San Diego, Calif.

March 29-30: Colorado Poultry Institute, Colorado State University, Fort Collins, Colo.

April 11-12: Western Poultry Disease Conference, University of California, Davis.

April 12-14: PEIA Fort Picking Conference, New Orleans, La.

April 12: Sixth California Poultry Health Symposium, University of California, Davis.

April 14-16: Georgia Poultry Federation spring meeting, Holiday Inn, Callaway Gardens, Ga.

April 22-23: Florida Poultry Days, Florida Poultry Federation, Disney World, Orlando, Fla.

April 25-27: Poultry and Egg National Board annual meeting, Regency Hyatt House, Chicago, Ill.

April 28: Georgia Commercial Egg Seminar, Gainesville, Ga.

April 29: Georgia Commercial Egg Seminar, Douglas, Ga.

DR. ATKINS ON DIET

Continued from page 31

you add milk that's more carbohydrate, and when you add sugar you've really added something.

If you don't have eggs, maybe you will eat Danish pastry or a doughnut. That, self-evidently, is much worse from any standpoint of health you could mention.

What you're really saying, if you tell people not to eat so many eggs, is to eat more carbohydrates. When you tell a person to eat more carbohydrates, you're telling his body to produce more insulin. When you have his body doing this, you're going to produce more heart disease than less.

I propose, therefore, that America needs a new, completely revolutionary diet. We should go back to the diet of the 17th, 18th and 19th centuries before

we had heart disease. It's a diet very, very low in refined carbohydrates, and which contains eggs, meat and other protein.

I think the egg and poultry industry should take a much more active role, rather than accept the fact that eggs have become the community whipping boy and scapegoat. I think you should fight back.

If the egg industry will sponsor some research, I can almost guarantee it will be very pleased with the results. It would find that studies will strongly support the view that high egg consumption is, basically, an improvement over the diet we eat today.

Just see what other industries are doing. The sugar industry has no difficulty in promoting its products and it has a product that, I think, is in the same position the tobacco industry was in 20 years ago: knowing they have a killer substance and trying to cover it up. They have done an effective job.

Yet, the egg industry, with a very beneficial, nutritious substance—a wonderful product—is taking a beating because it is not fighting back.

SELL MORE EGGS

Continued from page 44

by side with bacon or ham. Promote them together, such as "Bacon and eggs for six—only \$1.25."

END DISCOUNTING—Rather than reduce price, egg suppliers should offer "advertising incentives" to retailers to advertise eggs in their food page ads. Discounting frequently is passed on to consumers in lower prices, yet does not increase number of eggs sold or gross profits. It costs egg supplier money without moving product.

OKLAHOMA Egg Council participated in a booth at the Oklahoma Food and Fiber Show at the Tulsa State Fair. In a drawing, Mrs. Jean Stem, of Tulsa, was the winner of one dozen eggs per week, presented by the egg council. OEC also participated in egg promotions with booths at the Oklahoma Restaurant Ass'n convention, Retail Grocers convention and the state school lunch convention.

TAPE RECORDING of cackling hen, played back at egg display,

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attracts attention and increases volume of sales and profits.

VARIED PACKS—Offer the consumer half-dozen sizes, plus two and three-dozen packs. This could be tied in with mass displays of loose eggs in "pick your own" manner.

RESEARCH DIGEST

Continued from page 54

solids during storage could be followed by using the gas-liquid chromatogram. Changes in carbonyl and free fatty acids were related to loss in functional and flavor attributes of the egg products. As the carbonyl content of the products increased, cake volume decreased. The carbonyl content maximum limit on egg white solids was 100 p.p.m. and on whole egg solids was 1,200 p.p.m.

Comment: In these laboratories equipped with gas-liquid chromatography, the equipment can be utilized to give objective methods for egg solids quality evaluation.

Use of gas-liquid chromatography for quality evaluation of dry egg products by E. Lorenz and J. Hogg, Department of Food Science and Nutrition, Colorado State University, Fort Collins, Colo. 80521. Published in Journal of Food Science 36: 750-757 (1971).

Exhibit seminar

A SEMINAR for poultry industry exhibitors will be held March 1 at Statler Hilton Hotel, 401 Seventh Ave., New York City, from 1 to 6 p.m. Sponsored by Northeastern Poultry Producers Council, it was postponed from November 30.

Robert Letwin will conduct the seminar on subjects such as establishing exhibit objectives and evaluating results, designing exhibits and training personnel to achieve objectives, and pre-show attendance promotions.

To enroll, contact NEPPCO, 322 Oxford Valley Rd., Fairless Hills, Pa. 19030.

Some taxes due

"OFF THE FARM" hatcheries must pay federal unemployment tax, effective January 1, 1972, according to the Internal Revenue Service. Such hatcheries are interpreted to be those that do not (all under the "agricultural labor" exemption as outlined in Section 3306 of the Employment Amendments of 1970.

Affected hatcheries must pay the tax on the first \$4,200 earned by each employee in 1972 and subsequent years.

100 INDUSTRIAL / JANUARY, 1972

We believe DEKALB birds will lay 15% more eggs for you in their last three months.

And more marketable eggs over-all.

That's because our birds are bred for high, sustained lay. Records from 191 DeKalb flocks across the country show an average of 271 eggs laid per hen.* This average is achieved, not by an early peak followed by a sharp drop, but by maintaining high production over the entire length of lay.

In the 13th month of production (72 weeks of age), DeKalb birds are bred to lay at 60% and to continue a high rate of lay to the end of the cycle. The result: 15% more eggs in the last 3 months.

Ask for the facts about DeKalb layers, bred to convert feed efficiently into highly marketable eggs — and more of them. Seeing is believing.

*Hen-day basis

DEKALB BREEDS SUCCESS



MONS 066616

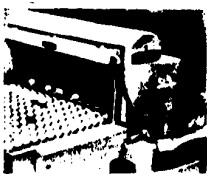
EQUIPMENT/SERVICES

UNVEILING of the inline Conditioning Tower, manufactured by FMC Corp., will take place at the January Southeastern Convention, Atlanta, Ga. Live action equipment and action-filled audio visual presentation of the FMC 400 will attract visitors to witness a blanket of eggs rising above the booth toward the ceiling. The 800-square-foot display has twin towers, 18 feet high, demonstrating continuous flow egg cooling and albumin clearing.



A&P COOP CO. has announced a new poultry coop that combines advantages of seasoned hardwood and a super-tough plastic. Named the Gray Eagle for the color of its two exterior coatings of gray plastic, it is constructed of seasoned oak. It does not absorb moisture and may be cleaned with steam or high-pressure water. Write the company at 103 Gee St., Jonesboro, Ark. 72401.

GALLIMYCIN Feed Grade products on a 30 gm. continuous level for layers have received federal approval, according to the Agricultural and Veterinary Products Division of Abbott Laboratories, Abbott Park, North Chicago, Ill. 60064. The clearance allows Gallimycin, an antibiotic feed additive, to be used continuously, rather than intermittently, as aid to increasing egg production and feed efficiency.



COMPACT AUTOMATIC blood detector, shown above, and a plastic flux washer are two new products that will highlight the Diamond Systems display at the SEPCA exhibit in Atlanta, January 23-26. The blood detector can be added to an existing line without disturbing the setup. It accepts eggs on a 15 or 8 wide basis and detection is achieved through use of one simple set of printed circuit electronics. The washer with self-contained hot water heating system can be installed as part of the Versi-Spread loader operation or operated independently out of line.

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AUTOMATIC, directional radiant heaters have been introduced by Kellogg Electronics Co., 901 Tighman St., Allentown, Pa. 18102. Capable of hanging up to 15 KW, the heaters, the specially designed heaters can be cleaned with a hose. The company says the heating system is applicable for chick brooding, in cages or on the floor. Solid-state circuitry in the controllers are said to result in power savings up to 45%.

ANTIBIOTIC to prevent and treat a broad spectrum of poultry diseases is available for use in feed mix from Vineland Laboratories, 2285 E. Landis Ave., Vineland, N. J. 08360. Called Vi-Mycin Feed Formula 50, the formulation helps control chronic respiratory disease complex, blue comb and synovitis in chickens. It is also available in powder form for use in drinking water.

METHOGEN, an effective treatment to overcome noxious odors and ammonia resulting from poultry breeding and growing, is available from Vineland Laboratories, 2285 E. Landis Ave., Vineland, N. J. 08360. Vineland also has a product called Sand-Sound, a powder disinfectant which is said to destroy disease organisms such as Marek's, Gumboro, fowl pox, laryngotracheitis, Newcastle and bronchitis.

HI-BRON BLEN vaccine, an effective aid in control of bronchitis and Newcastle disease, has been announced by the Agricultural and Veterinary Products Division of Abbott Laboratories. Intended for vaccination of broilers and replacement pullets already possessing a high parental immunity, Hi-Bron works to insure positive immunity by overriding parental immunity.

EMERGENCY POWER STATION is a module unit in a prefabricated building completely assembled at Winpower Mfg. Co., Newton, Mass. 02459. No local technicians are needed to assemble and wire up components. The company claims more precision, lower total cost, better efficiency and longer life.

California hit by 'hot' strain

THE FEAR that the dreaded, "hot strain" Asiatic Newcastle disease might spread to commercial poultry flocks became a reality in California in mid-December. Previously, the highly virulent, veno-genic disease had been confined to commercial flocks in the western Texas-New Mexico area and to a few imported pet birds.

A 33-square-mile area near Fontana, Calif., containing up to two million birds, was quarantined after an outbreak on a pullet farm. After 8,000 of 22,000 pullets died by 10 weeks of age, state and federal agencies ordered the remaining birds destroyed and buried on the premises. The birds had been vaccinated for Newcastle at four weeks.

This outbreak followed the wiping out of a hobbyist flock nearby where only three of 100 birds survived. In the desert area around Lancaster in Los Angeles County, 4,000 of 12,000 fryer chickens died by eight weeks and the remainder were also destroyed and buried.

Flockowners were partially indemnified for losses by state and federal funds. These ranches were ordered cleaned and disinfected and no poultry will be allowed on them for 30 days. Feed mills, not wanting to be implicated in spread of the highly contagious disease, were washing and disinfecting trucks.

When this issue went to press, more serious outbreaks were feared. A flock was reported to be affected halfway between the destroyed pullet flock and an Olson Farms' operation, one and a half miles away, which contains 280,000 layers.

Poultrymen in the area were urged to revaccinate all birds with the B, Newcastle strain. Restrictions were being drafted in Washington to prohibit importation of exotic birds. USDA had already withdrawn import permits for chickens, turkeys, pigeons, etc., from 22 countries.

EOG INDUSTRIES / JANUARY 1972

MONS 066618

ON THE MOVE



Parrett



Gerig



Haynes



Van Leer

OLIN K. PARRETT appointed sales representative for Vineland Laboratories, Vineland, N. J. He was formerly Midwest and Southeast manager for Dave's Labs.

PHILIP GERIG named administrative assistant for Poultry Division, DeKalb AgResearch, DeKalb, Ill.

JOHN BERGDOLL named vice-president of sales, Colonial Metals, Inc., Indianapolis, Ind. He was formerly in sales with Anderson Box Co.

DR. GARY WALTERS promoted in newly created position of poultry sales and service manager for Hy-Line Poultry Farms, Des Moines, Ia. He was formerly Hy-Line customer service manager.

CAROLYN GODMAN named consultant in nutrition and economics for Purcell's Pride, Tupelo, Miss. Integrated production processing distribution firm for chicken and eggs.

WENDELL LANGFORD promoted from production manager to vice-president and general manager of Babcock Southwest, Reary, Ark., a subsidiary of Babcock Industries, Ithaca, N. Y.

WALLACE M. LEROY joined sales staff of Molded Products Division, Packaging Corp. of America, 1608 Orrington Ave., Evanston, Ill. 60204. He will represent the company in New England and the eastern two-thirds of New York.

GILBERT B. ECKHOFF joined Henningsen Foods, White Plains, N. Y., as director of purchasing. He will be headquartered at the firm's Omaha, Neb., office.

D'WAID ANDERHECK promoted to district sales manager, South Central states, for Molded Products Division, Packaging Corp. of America.

GARY BOWEN named general manager of Southwestern Egg Producers, Riverside, Calif.

ROBERT L. HAYNES named poultryman with Cooperative Extension Service, Mississippi State University. He received his Ph.D. at MSU in animal physiology, and was manager of hatchery and breeder program for MPC Services, Jackson, Miss.

HANS VAN LEER named production farms manager at Babcock Poultry Farm, Ithaca, N. Y. Most recently he was general manager of Arbor Acres Farm, Williamstown, Mass.

BRIEFLY

ELECTED: Lionel Grise as president of Northeast Egg Marketing Ass'n. Other officers are: Maurice Stein, first vice-president; Donald Horn, second vice-president; Mike Hirth, treasurer, and Frank Reed, secretary. Ray Delano, manager, said NEEMA now represents 19 million layers in the Northeast and sent \$121,000 as its share of support to United Egg Producers in the past year.

ELECTED: Jim Hanna, Alexandria, as president of Poultry Industries of Louisiana. Albin Johnson, Alexandria, is vice-president and Dr. Harry Hathaway, Baton Rouge, secretary-treasurer. Neil Hungerford, Lake Charles, was named to the Louisiana Egg Council.

ELECTED: Elroy Koester, Stover, as president of Missouri Poultry Improvement Ass'n. Herbert Steinbrueck, Troy, is vice-president; Harriet Rimmer, secretary-treasurer, and Ken Ballew, official state agency chairman.

ELECTED: Allen Ashcraft, FCX Egg Service, Charlotte, as president of the North Carolina Egg Marketing Ass'n. Other officers are Bob Dominick, Sunnyvale Eggs, Greenville, vice-president, and Joe Davis, Davis Hatchery, Earl, secretary-treasurer.

EGG INDUSTRY MARKET PLACE

Undispatched classified, 25¢ per word per month. Minimum charge \$1.75.

Business Opportunities

\$450 DAILY INCOME from egg factory with 45,000-hen capacity and established egg routes. Business can be purchased with or without additional housing space for 15,000 hens, 50 acres of land, full set of farm buildings, including frame home and two mobile homes. Owner is retiring. For additional information, call or write: Fred A. Richards, of Reed Howell Assoc., Inc., 3227 S. Calhoun, Fort Wayne, Ind. 46807. Telephone 218-744-1182.

For Sale

EGG CARTONS from Agway. Your egg quality deserves cartons that sell. Agway has a broad selection of pack-age style, tailored and personalized to meet your market demands. Sturdy design minimizes breakage. When you think egg cartons, think Agway. Call your nearest Agway store or write Agway Inc., Box 1235, Syracuse, N. Y. 13201. Attention: B. R. Thompson.

ONE 60-cans-per-hour fully automatic FMC egg canner has been outgrown this unit and have bought new larger machine. Available after January 15, 1972. Sunnyvale Foods Ltd., Box 38, Grimsby, Ont., Canada. 416-945-5835.

Help Wanted

EGG PROCESSING plant manager for new, completely in-line plant handling 8,000 cases shell eggs per week. Must be experienced in managing people and handling volume product. Midwest location offering growth opportunity. Send resume and expected salary in first letter. Box 15, Egg industry, See late City, N. J. 08043.

POSITION AVAILABLE—Manager for plant processing 3,000 to 5,000 cases cartoned eggs weekly; also small mechanical liquid egg department. Must be experienced in the use of mechanized grading equipment, sales and handling people. Location Northeast. Send resume and salary expected first letter. Box 6, Egg Industry, See late City, N. J. 08043.

Lease—Sell—Merge—Trade

GRAVITY FLOW bulk feed plant, 156-ton fully automatic installed in a 300 Butler food building dock high 300-ton overhead storage 16 bins square corner drive. 30,000-bushel grain storage 5-bin. Two 3,000-bushel-per-hour elevators. Two vertical 2100 mixers. One horizontal 3-ton mixer. Two J. B. Sedberry hammermills. One 10-in. Hoss roller mill. 100-ton inside. York lift and pallets. 14½ acres on U.S. 71 Highway and Missouri-Pacific R.R. Will finance \$250,000. Phone 417-236-2805. Ardell Moore, P. O. Box 329, Carthage, Mo. 64834.

Miscellaneous

ORGANIC DIESTERS—Ded. 3rd for sanitary disposal of dead, diseased poultry. 100% litter treatment eliminates ammonia, controls odor, dries litter. Write for literature: Ryer Organic, Medalla, Minn. 56082.

EDITORIAL COMMENT

PENB sinking—we need it more than ever

Most of us in the egg industry and allied fields would be shocked if we woke up some morning to learn that there was no more Poultry and Egg National Board. This is nearer to reality than all but a few realize.

In December, PENB was within a few weeks of not being able to meet its small payroll. It is ironic that, at a time when the industry seems to be waking up to the vital need of promotion, its only promotional arm should be the victim of such blatant neglect.

The position of PENB, never blessed with more than a token budget and charged with the task of competing with other food products and commodities with hundreds of times as much money to spend, has worsened over the past two years. There are several reasons.

One, promotional money has been channeled into groups outside PENB. These organizations (such as the National Commission on Egg Nutrition, see story on page 50) are undoubtedly performing important services for the industry. But there is no question that money contributed to them means that some funds are siphoned off that would have gone to PENB.

Two, many organizations which formerly checked off funds to PENB discontinued doing so when they joined United Egg Producers because they were assured UEP would contribute enough to PENB to make up the difference.

Unfortunately, it hasn't worked that way. Even before UEP spent itself broke with diversions and in futures trading this fall, its payments to PENB were usually well behind schedule. It is difficult to plan any meaningful programs if income is sporadic. At best, UEP agreed to contribute 10% of its income to PENB, which constitutes about nearly a third of what PENB receives.

UEP's losses in September left it unable to help PENB much in its present plight. It did manage to send a \$5,000 check in December to help PENB meet current expenses of payroll and rent. At an executive committee meeting of both organizations, UEP agreed to send more money in January. But it will still be well behind the agreed payment schedule and in its present condition may not be able to catch up.

Organizations in UEP which thought a portion

of its checkoff to the regional co-op was being funneled direct to PENB are understandably concerned.

This is no time, in our opinion, to point fingers of blame at one group or another. PENB's talented staff and contacts in the communications field are much too valuable to be lost to the industry. Something must be done immediately to see that this does not happen.

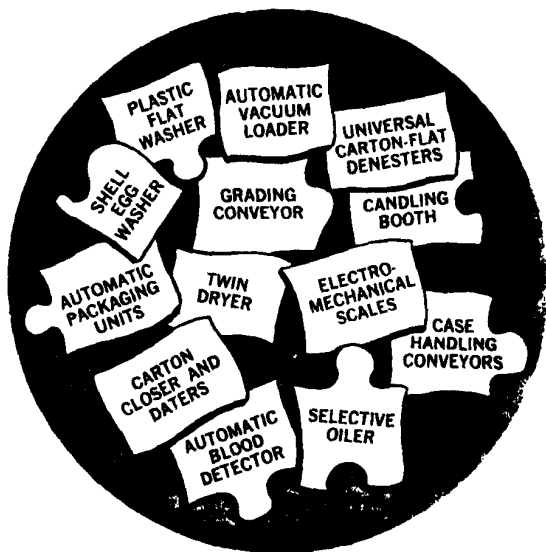
We suggest that the solution may lie in combining all the independent efforts at promotion and research under a reorganized and expanded PENB. This might mean hiring of a financially oriented general manager who would coordinate all fund raising programs, manage the business end of PENB and leave its present staff free to pursue its promotional projects with no worry about finances.

Dr. L. A. Wilhelm, an accomplished public speaker and a walking library of industry knowledge, could devote his full energies toward promotional activities. Howard Helmer, PENB's widely respected Eastern representative whose contacts with magazine and TV editors in New York are invaluable, and Pat Myles, recognized for building the image of eggs before home economists and the public, must not be lost to the industry. Such an organizational setup would also leave Charles Meador free to work on getting the EGGSERT (carton insert) program in operation. It has the potential of providing much needed income for PENB.

This enlarged organization should, presumably, be able to carry out the activities now under way by the nutrition commission and by the allied industry group which is preparing radio and TV promotional.

They could continue with the same members and objectives. These two groups are performing vital much-needed functions that no one else was doing. But if they came under the umbrella of a single organization, there should be better coordination of efforts with no overlapping.

Regardless of whether such a proposal is feasible or whether another one would be better, something should be done soon. If PENB closed up shop, it would leave a tragic void. It might indicate that the egg industry, itself, has decided to give up and accept a dwindling share of the market as inevitable.



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