FILE NAME: Oil Industry and American Petroleum Institute (API)

DATE: 1976

DOC#: API152

DOCUMENT DESCRIPTION: Excerpt of the Memoir Dr. Wilhelm Hueper with Barry Castleman Notes & Obituary

Barry Castleman

ADVENTURES OF A PHYSICIAN IN OCCUPATIONAL CANCER

A MEDICAL CASSANDRA'S TALE

WILHELM C. HUEPER
M. D.

1976

APPENDIX D

SUBCOMMITTEE ON INDUSTRIAL HYGIENE

J. A. Spence, Ph. D., Chairman

The Subcommittee on Industrial Hygiene met on November 9, 1962.

Liaison members to the American Standards Association reported on the activities of the Z-62, Z-37 and Z-4 Committees. No significant activities have occurred since the last report.

The subcommittee's report "Industrial Hygiene Aspects of Petroleum Refining Processes" is complete. Mr. E. O. Mattocks has been asked to distribute the report within the membership of the API.

A questionnaire to determine laboratory hood requirements has been prepared and will be distributed to the medical directors of the API. The results will be compiled as a guide to member companies seeking an economic approach to effective hoods.

The chairman reported on the activities of the Asphalt Committee and asked the subcommittee members to aid in obtaining data evaluating environmental exposures to asphalt.

The subcommittee has no items requiring budgetary expenditures.

J. A. Spence, Ph.D., Chairman

~~11/13/56~~ 9/13/56 (draft) ~~11/13/56~~ Surg. Gen re UCH genotox in NYT

9/24/56 UCH pursued to do his own (NCI) tests

11/5/56 Carc. subc. rec. API support lab tests w/
4/20/57 Shubik (or 2 other labs); finding + skin application

3/1/57 API Chair, Gen Comm. agrees to send
$50,000 for (Shubik) lab tests

? "continuation"

8/21/56 NYT story from Rome mtg.
"paraffins used for milk cartons kill produced ca

11/13/57 Shubik reports to oil docs on 4 ppm
dibenzanthracene "known carcinogen"
in one of the milk wax samples he
analyzed for Dr Hueper.

? "Three Man War Committee" ?

5/13/58 Wax Comm. has contracted research w/ Shubik
(starting 3/1/58)

1959 API grp meet w/ Sec. HEW
Shubik says he finds no
dibenzanthracene in wax samples
analyzed for API (Katin confirmed
earlier finding in a contaminated
wax sample + plowed milk leaches
dibenzanthracene from wax coatings)
⇒ No problem, don't develop rays

When several years later another vice president of this group operating the largest coal tar and pitch operation and coke ovens in the U.S.A., told me at a visit some of the research results, he added the remark that the tar producers had done everything possible, if the workers still should get cancers, this would be their own fault, i.e., the company would not voluntarily offer compensation.

c) Up to about 1935, a commissioner of health of Ohio had faithfully reported about the occurrence of scrotal cancers among wax workers in oil refineries. There were no additional similar reports rendered after this date, suggesting by implication that this type of occupational cancer in the U.S.A. had successfully been brought under control. When I visited about 15 years later, one large eastern refinery, I was informed that such lesions had been diagnosed during recent years as "venereal ulcers" which are not compensable. It took almost 10 years before a group of industrial hygienists of American oil companies published a cooperative study on the occurrence and incidence of wax cancers in the American oil industry. It was the time when many of the wax-pressing operations were replaced by solvent extraction procedures, which carried a much diminished chance of contact with wax. However, it is uncertain whether all cancer hazards from contact with petroleum waxes have been removed thereby, since chemical analyses of several dozen dairy waxes used in impregnation of milk-, cream- and butter containers as well as wrapping material of

cheeses, cakes, etc., were shown to contain in several instances recognized carcinogenic aromatic hydrocarbons.

Several years later about a dozen oil companies organized a committee for the study of cancer problems from contact and use with petroleum waxes. I was for a time a member of this committee whose sessions were usually held in one of the medical schools of the Chicago area, until one representative of an oil company suggested at a meeting that the carcinogenic hydrocarbons demonstrated in the waxes had been in the wax not from industrial sources. He suggested that the collector of the waxes which were obtained through the courtesy of the National Milk Foundation, i.e., Dr. Hueper, might have added them to the waxes. The subsequent experimental studies performed in mice showed that some of these rodents developed bladder cancers when wax pellets were placed into their bladders. This finding was never mentioned or reported outside the committee limits, nor was it discussed at a meeting at the office of the Secretary of Health, Education and Welfare, to which the National Cancer Institute sent as its representative an associate director unfamiliar with the entire problem. The only constructive result of this high level meeting was that the Food and Drug Administration finally adopted standards on the "purity" of petroleum waxes coming in contact with foodstuffs, which had been, up to that time, without such regulations.

The wax committee sponsored then a large experimental study in which pellets of wax, furnished by various oil companies for this purpose and shown to be free allegedly from cancerous

material, were implanted subcutaneously into mice. Some of the waxes thus administered induced subcutaneous cancerous lesions. These were diagnosed by an experienced pathologist, carefully selected by the members of the committee, as being caused by the physical action of paraffin scales and not attributable to any chemical content of the particular waxes. In support of this conclusion, he cited the widely accepted concept that the cancers developing around implanted pieces of various plastic films had a physical origin and not a chemical one. The recent observation of liver cancers in vinyl chloride workers, however, has well discredited this convenient fantasy and have confirmed my concept of a chemical origin of cancers resulting from and around implanted plastic materials of various chemical composition.

d) While during the last 25 years some American producers of carcinogenic aromatic amines used in the manufacture of dyes and rubber antioxidants have seen fit to reveal incomplete data on the number of bladder cancer cases, which have occurred since 1934 in some American plants, these figures are still most deficient for bladder cancers among rubber workers and lack for both dye and rubber workers, information on the occurrence of bladder cancer after changing employment, although pertinent information on these once exposed workers could have been obtained through the use of the Social Security Administration records through which the final fate of many of these workers could have been ascertained. For some known producers of chemicals, no pertinent data have been

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Dr. Wilhelm Hueper, Retired Official Of National Cancer Institute, Dies at 84

By Richard Pearson
Washington Post Staff Writer

Dr. Wilhelm C. Hueper, 84, a retired official of the National Cancer Insititute who was a pioneer in the study of cancer-causing agents in the environment died of cardiac arrest Thursday at the Wisconsin Aveune Nursing Home.

From 1948, when he joined NCI, until his retirement in 1964, he was chief of the institute's environmental cancer section.

Dr. Hueper conducted research into the cancer hazards of heavy metals, petroleum derivatives, synthetic hydrogenated coal oils, asbestos, food additives and plastics.

A colleague at the NCI once characterized Dr. Hueper as possessing, "in high degree" the "ability to shock and alarm."

Examples of this included assertions that he made in the early 1960s that 70 to 80 percent of cancer cases would turn out to be environmental in origin. Although many considered him an alarmist at the time, authorities now acknowledge that 70 to 90 per cent of all cancer is related to environmental factors.

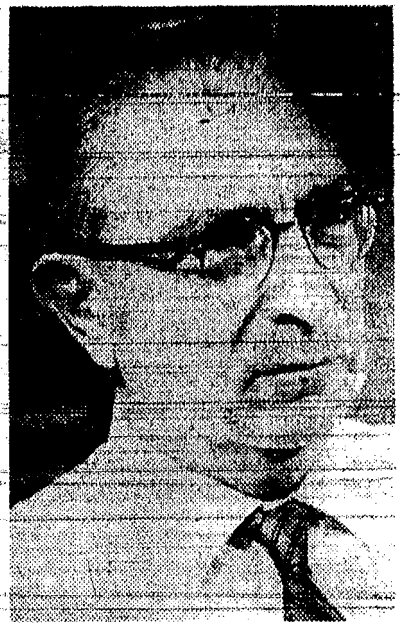
During the early 1950s, he helped spotlight the high incidence of lung cancer in workers in the chromate producing industry. He directed research that discovered that carcinogenic chromates were those most soluble in water, and thus broken down in the body. His works helped to lower the cancer rate dramatically in the industry.

Another coworker said Dr. Hueper was "controversial and misunderstood. He irritated the devil out of the hierarchy of command."

This resulted in Dr. Hueper's speaking out ahead of his time in advocating tighter laws and more thorough research into the possible carcinogenic properties of drugs.

He testified in favor of the Delaney Amendment, passed by Congress in 1958, which barred substances known to induce cancer in animals from being used in drugs consumed by humans.

Although the law itself became controversial in recent years, due to criticism concerning the validity of large doses of drugs to laboratory animals applying to small amounts of the drug to humans, Dr. Hueper continued to favor it.



1962 Photo
DR. WILHELM C. HUEPER

He once wrote that "The data from such tests are not necessarily unrealistic. Although most agents tested are either weak carcinogens or act in relatively small doses, people may ingest them over a perlod of many years. The cumulative effect might then parallel that of a massive dose."

In 1978, Dr. Hueper was given the National Institutes of Health Director's Award.

The award cited his research in luekemia, his pioneer work in chromium research, and also hailed his book, "Occupational Tumors and Allied Diseases," a standard text since its publication in 1942.

His other awards include the 1959 Rosenthal Award from the American Association for the Advancement of Science and a 1962 award from the World Health Organization for his studies.

In 1963 the editors of Modern Medicine voted him a distinguished achievement award for "his identification of carcinogenic substances and his undaunted courage in effecting control of noxious environmental agents in industry."

Dr. Hueper was born in Schwerin, Germany, and earned his medical degree at the University of Kiel. He began his cancer research in Europe in the early 1920s, where he published findings on the rise of lung cancer in industrial cities.

He came to this country in 1923, and practiced medicine and taught pathology in Chicago and Philadelphia before joining the duPont Company in Wilmington, Del., in 1934

At duPont he charted a high incidence of bladder cancer among dye workers, isolating the carcinogenic substance that caused it. He left duPont to join the Warner pharmaceutical laboratories in New York in 1938, remaining there until 1948 when he came to the National Cancer Institute.

After retiring from NCI he worked in projects to obtain funds for persons stricken by cancer who had worked in professions that exposed them to a high degree of risk.

He pointed out in a 1976 interview with The Washington Post, "The whole financial burden of cancer hazards is carried by the general public or by the workers themselves."

Dr. Hueper was among the first authorities to cite a time lag of up to several decades between exposure to carcinogens and the outbreak of cancer symptoms.

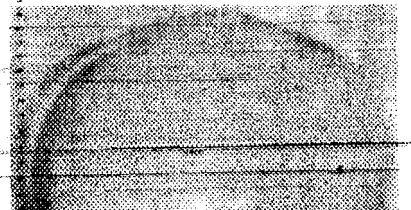
His professional memberships included the American Society of Experimental Pathology, the American Association of Cancer Research, the American College of Pathology, and the American College of Preventive Medicine.

He was the first president of the American Society for the Study of Arteriosclerosis.

Survivors include a son, Klaus, of Bethesda, and one grandchild.

The family suggests that expressions of sympathy be in the form of contributions to the Washington Humane Society.

Benjamin Foer, Milling Firm Official



Benjamin W. Foer, 77, a retired vice president of Wilkins-Rogers, Inc., died Sunday at George Washington University Hospital. He had suffered from cancer.

He had joined the company in 1927 when Wilkins-Rogers was a small local miller and retired in 1969 as vice



TIFFAN

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grandparents, F
Mr. and Mrs. T
Bethesda.

The family
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contributions to
Memorial Fund
Andrews Unite

In Memoriams

BURROUGHS, MARGARETTE E.
In loving memory of my grand-

Deaths

BRIMER, THOMAS J.
On Friday, December 29, 1978, at

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On