

MEDICINE

Deaths From Botulism

► **BOTULISM** is caused by a poison so deadly that only about 14 ounces of it would probably be necessary to kill the entire population of the world.

However, experts feel that any general apprehension over botulism danger is not justified, as prior to this year botulism has not occurred in commercially packed canned foods in the United States for more than 35 years. Considering the billions of cans of food manufactured and consumed, this is a remarkable record.

The organism, *Clostridium botulinum*, which causes the poison, is a spore-forming natural saprophyte commonly found in soil. It grows in the absence of air.

It can grow in temperatures as cold as 38 degrees Fahrenheit, lower than the average apartment refrigerator temperature, which is about 41 degrees.

Type E botulism, which is believed to have caused the deaths of four persons who ate smoked whitefish in Michigan and in Tennessee, rarely occurs in fresh water fish, Dr. Glenn G. Slocum, director of the microbiology division of the U.S. Food and Drug Administration, told **SCIENCE SERVICE**.

Botulism E has been found mainly in salt water fish in the waters of northern Japan, and other cold waters—in Alaska, Canada, Russia and the Baltic regions of the Scandinavian countries, Dr. Slocum said.

A few years ago, however, two deaths from smoked fish in fresh water occurred in Minnesota, and studies have been going on continuously to discover how such things can happen after the organism has apparently been killed by heat.

There was no connection whatever with the tuna fish deaths in Detroit, the National Canners Association said.

"The smoked fish was processed in plastic bags," Dr. Ira I. Somers, head of research for the association, said. "It was vacuum packed and an entirely different product from the tin-canned tuna."

There are six poison-producing types of

botulism—A, B, C, D, E and F—all of which have been found to cause food poisoning in humans.

It is rarely that commercially packed food gives trouble, as home canning is usually to blame. Only last September there was a report of a death from eating home-canned corn in Kentucky, where a 12-year-old girl was treated with chewing tobacco by a doctor three days after her initial illness.

In California, another death occurred from home-canned mushrooms.

Dr. Daniel A. Boroff of the Laboratory of Immunology, Albert Einstein Medical Center, Philadelphia, is one of the few scientists in the world doing basic research on *C. botulinum*.

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1963 Lasker Awards

► **DRS. MICHAEL E. DeBAKEY** of Baylor University College of Medicine and Charles B. Huggins of the University of Chicago will share the \$10,000 Albert Lasker Clinical Research Award for their work on heart and cancer respectively.

Dr. Lyman C. Craig of the Rockefeller Institute is to receive the \$10,000 Basic Medical Research Award. The awards will be given in New York Oct. 30.

Dr. DeBakey won his award for pioneering work in surgical treatment of heart and vascular diseases considered totally hopeless only a few years ago. Professor and chairman of the department of surgery at Baylor, Houston, Texas, Dr. DeBakey has been a leader in the cardiovascular field for nearly 20 years. His practical Dacron graft for blood vessel replacement is in wide use.

Dr. Huggins, William B. Ogden distinguished service professor and director of the Ben May Laboratory for Cancer Re-

search at the University of Chicago, was cited as one whose epoch-making discoveries led to the first temporary hormonal control of human cancer.

He initiated the use of castration and of female sex hormone in the treatment of cancer of the prostate in man, and of surgical removal of one or both adrenal glands in the treatment of advanced cancer of the breast. Benefit and longer life have resulted in a high percentage of cases.

Dr. Craig, a professor and member of the Rockefeller Institute, New York, won his \$10,000 award for his creation and continued development of the now indispensable "countercurrent" technique.

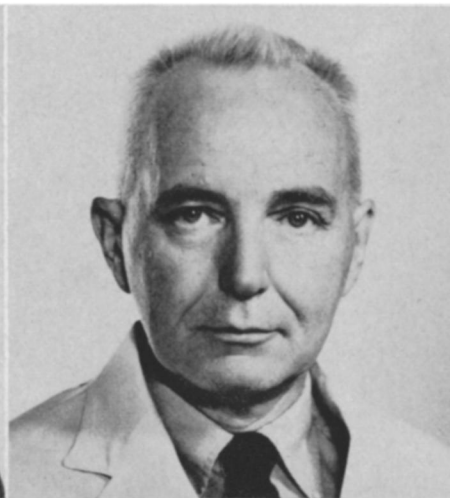
The technique is crucial in the establishment of the structure of insulin, and in the isolation and study of hormones and other compounds and structures that are synthesized for therapeutic purposes. The technique is used in laboratories throughout the world.

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DR. LYMAN C. CRAIG