

## GENERAL SCIENCE

# Food, the Good Medicine

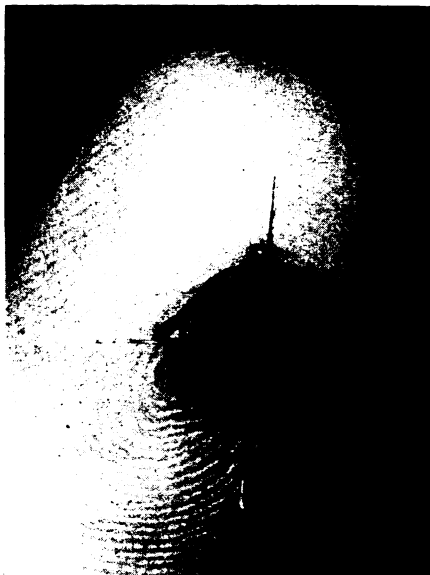
An inexpensive milk substitute high in protein and vitamins fortified with antibiotics has been recommended to cut infant deaths in "have-not" countries.

➤ A WORLD BATTLE for life and health in the less developed areas can be won by applying the latest medical and health methods, the U. N. Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas was told at Geneva.

Food is the good medicine needed to control fatal infant diarrheal diseases in "have-not" lands. Dr. Albert B. Sabin of the University of Cincinnati Medical Center, who developed the oral live-virus poliovaccine widely used in the United States, said that food processed to inhibit bacterial growth would correct the underlying causes of approximately 5,000,000 deaths of infants and young children.

He recommended an inexpensive palatable milk substitute rich in protein and vitamins with antibiotic additives. Malnutrition and contamination of food by viruses from dirty hands are two of the great causes of death in the developing nations.

Saving of many thousands of lives and the prevention of many thousands of deaths due to measles will be possible in the future through use of vaccination against measles which is now coming to successful introduction in advanced nations. Introduction of measles inoculations is expected in the United States within the year on a wide-spread basis.



Battelle Memorial Institute

**TINY TRANSDUCER**—*Smaller than the tip of a finger, this micro-miniature transducer, developed by scientists at Battelle Memorial Institute, Columbus, Ohio, measures the absolute pressure on the surface of a helicopter blade.*

In some of the less developed countries, measles has accounted for more than half of the deaths due to acute communicable diseases. The possibility of the control of measles was told to the conference by Dr. John F. Enders of Harvard University, chief of infectious diseases research at Boston Children's Hospital Medical Center, who did the fundamental work that has led to the measles vaccines.

Using nearly illiterate villagers with minimum training in today's drugs will do more to save lives in the less developed countries than the best doctor in the world could have done 25 years ago, Dr. Leona Baumgartner told the conference. She recently has become assistant administrator for the U. S. Agency of International Development after having developed in New York City as health commissioner some of the unusual applications of health methods which she now proposes should be applied to the other areas of the world.

Dr. Baumgartner advocated programs abroad that would take advantage of the existing beliefs and currents of thought in other countries. She predicted some of the ideas abroad would be applicable to America's own health problems.

"This adventure of worldwide health, economic and social development is the greatest adventure yet launched by man," Dr. Baumgartner told the conference. "It seems more complicated than getting to the moon because we have not put as much of our adventurous spirit, vigor, and know-how into it."

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## Local Farm Coordination

➤ COORDINATION at the local level was stressed by F. F. Hill, vice president of the Ford Foundation, and A. T. Mosher, director of the Council on Economic and Cultural Affairs, as a vital step in increasing farm efficiency.

The individual farm operator, whether owner, tenant, or hired manager, is the key decision-maker in agriculture, the U.N. conference was advised. Any effort to increase agricultural production should concentrate on making it possible and attractive for him to improve his farming practices.

Because there are variations in soils, plant nutrients, and water-air relationships not only from area to area but even from field to field, it is seldom possible to make standardized recommendations for large areas. Locally tested combinations of improved practices and assistance to farmers in adapting them are needed.

Production supplies and equipment must be available where needed. They must be technically effective, dependable, and fairly

priced. Farmers must be convinced that it is to their advantage to adopt new methods. This almost always depends on a combination of actions integrated into a single program. Such activities usually include development of locally tested combinations of improved practices; educational programs and local demonstrations.

In addition, it may be necessary to establish price floors for more important agricultural products and to modify land tenure systems. Failure to take action in one field may largely nullify action in others.

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## Fight Plant Disease

➤ AN INTERNATIONAL PROGRAM is needed to control crop diseases on a worldwide scale, Dr. E. C. Stakman, University of Minnesota professor emeritus of plant pathology, told the U.N. Conference.

There are no easy solutions to the problems of plant disease control, Dr. Stakman said. Basic, less technical ways of doing the job must be first undertaken, but final solution depends on putting scientists and technicians to work on a large scale for a long enough time to be effective.

"Control of plant disease is vital to a hungry world," he said. "World population is increasing rapidly. This is especially the case in portions of the world where hunger already is a frequent problem. Food and food production must keep pace with human reproduction if we are to avert disaster."

Dr. Stakman said that plant disease is but one of many serious barriers to increasing food production on the limited agricultural land available in the world. Other problems, he said, include poor plants, poor soil, bad weather, weeds, insects and human ignorance and apathy.

Agricultural science is far advanced in the United States, Dr. Stakman said, but plant disease each year reduces agricultural production 10% for an estimated loss of \$10 billion. Losses are much higher in many parts of the world and frequently are tragic in countries where food supplies are always low and sometimes critical.

At least a million people died of starvation in India in 1943 because of an outbreak of rice blight.

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## Study World Resources

➤ ESTABLISHMENT of a World Resource Development Institute to make a concerted attack on common problems centering on natural resources of various countries was offered by Dr. Roger Revelle, science adviser to the U.S. Secretary of the Interior and Dr. Joseph L. Fisher, president of Resources for the Future, Inc., Washington, D. C., at the U.N. conference.

Such an international institute, they said, "might undertake research, especially in relation to problems of policy and planning; foster exchange of information; encourage education and training of resource specialists; and facilitate technical aid in resource planning."

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