GENERAL SCIENCE

From Now On: Food

Science can find the ways for feeding the two billion or more people on the earth and for solving water shortages by utilizing rainfall.

By WATSON DAVIS

Second in a series of glances forward in science.

➤ OUR world has chronic hunger. There is not enough food for all of the couple of billion men, women and children on the face of the earth.

The world has always been hungry. It probably will always be hungry. That does not mean that there is not now opulent living, overstuffed fatness, personal and otherwise, in almost every country. There is luxurious waste where death by starvation in the streets is a commonplace.

Food surpluses worry some parts of the world, not alone in the United States. Some day there may again be burning of coffee in Brazil. Or burning of corn in Kansas. We have powdered eggs stored in caves, like atom bombs.

Three-quarters of the world's population live as poorly as their parents and grandparents lived, almost unaffected by the great technical developments both in manufacturing and farming.

In the more advanced countries, where a fortunate fourth of the world's population lives, the average individual can buy far more than his father or mother could a half-century ago. The output of sugar, fats, fish, livestock products, fruits and vegetables has expanded enormously. This is true despite two devastating world wars and an economic depression.

We know we have the "know-how" of sufficiency for all. Poverty and malnutrition are technically the disgrace of nations. The wooden plough, the sickle, the poor seed from last year's field, and the outworn soil have no real excuse in 1950. Making them obsolete should be the world's point one.

Breaking down barriers of commerce, money exchange, and trade are needed, but the interchange of knowledge and the smashing of the barricades of folkways, mores and ignorance are even more important to cure world hunger and other social and economic ills.

Export of our "know-how" and "how-do" (experts, plans, machinery, seed, chemicals, as prototypes) will fill more empty stomachs of the future than scores of tons of surplus wheat.

Tomorrow morning at the world's breakfast tables some 55,000 more mouths must be fed—that is the rush of birth surpassing death. Obviously hunger can be fought, too, by limiting production of people as well as increasing production of food—a job that rising culture seems to do, but probably not well enough.

The market-basket task is one to which the UN Food and Agricultural Organization is dedicated. Their far-reaching plans need doing. We need a constant scientific searching for new ways to satisfy the cries of hungry people.

We need to:

A. Fertilize the backward areas with the scientific and technical knowledge we have.

B. Cultivate the sea, for its fishes too little appreciated and for its great plant growths now unharvested and scorned.

C. Fit the quality of our food to our needs, for nutritionists can combat "hidden hunger" with menus that promise a longer and happier "prime of life" for millions of seemingly well-fed Americans.

D. Explore more intensively food production from wood, one-celled algae, coal, petroleum and other unconventional raw materials.

Science News Letter, April 8, 1950

ENGINEERING

Fluorescent Lamps Tested Inside Huge Plastic Sphere

➤ EIGHT-FOOT fluorescent lamps are tested at the Westinghouse lamp division inside a huge plastic sphere, it was announced in Bloomfield, N. J. This so-called photometer is to measure light output.

The plastic photometer is 35,000 times the size of a baseball. It is in two halves and can be opened and closed like a giant clamshell. It has an outer coating of aluminum, and an inner coating of heavy white chalk paint. The paint gives proper light reflection and diffusion.

Lamps to be tested are placed inside by a mechanical loading arrangement. When positioned and lighted, a lamp gives light that bounces off the sides of the sphere in all directions, striking a light-sensitive photocell. Electrical output of the cell records on an outside instrument, from which the operator can read the light output.

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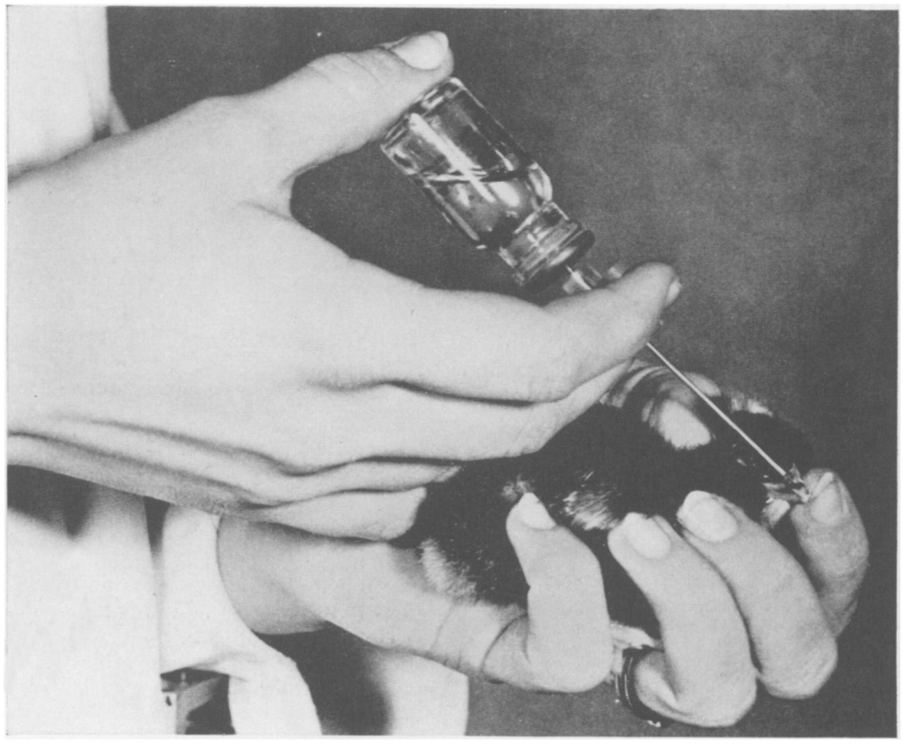

NEWCASTLE DISEASE VACCINE—Now, even-day-old chicks can be safely protected from the dread Newcastle disease. The intranasal vaccine, developed by Lederle Laboratories, is administered by placing a single drop of vaccine in one nostril of a chick, using a special applicator. Although this live-virus vaccine protects chicks until a month before they are old enough for egg production, they should be revaccinated with wing-web vaccine if they are to be used for laying purposes.