

PUBLIC HEALTH

Baby Malnutrition

Over 50 names are used around the world to describe malnutrition resulting from inadequate protein intake, the Food and Agriculture Organization reports.

► "SUGAR BABY" is a term of endearment for some people, but in Jamaica it is the name for a disease of malnutrition that may kill as many as half the babies affected.

Fatty liver disease, infantile pellagra and nutrition dystrophy are others of the 50 odd names used around the world to describe the same type of malnutrition.

The condition is protein malnutrition, nowadays considered more serious than vitamin or mineral deficiencies.

In some parts of Africa, nearly every child suffers from it at some time in his life, according to a report from the Food and Agriculture Organization of the United Nations. Until recently, this condition had been reported under so many different names that its worldwide occurrence was obscure.

Basic facts of this disease are simple, FAO reported. Infants and young people need a diet rich in protein to build healthy bodies. Mother's milk is the best source of protein for the infant, as long as the mother can provide it. However, as the child grows up this diet must be supplemented.

Cow's milk and other forms of protein are fed to the growing child in some areas, such as the United States, but protein is scarce in many parts of the world where staple foods are starches—manioc, corn or banana.

Children in such areas are suddenly switched from mother's milk to the family fare, and their bodies suffer from lack of protein. In countries where protein-rich meat, fish or eggs are served rarely, adult members of the family often reserve such food for themselves.

This is what slows the growth of children, and often leads to permanent deformity and death.

Put the child on a diet of protein-rich skim milk, and he will often recover in a few weeks. In the most serious cases, blood transfusions may be necessary at first.

At many international nutrition conferences, various foods, such as soy milk, have been considered as substitutes for milk. Soy bean mixes have been successfully prepared in America and Europe for children allergic to milk, but these usually are too expensive for poor pocketbooks.

A factory in Hongkong now prepares and distributes an emulsion of soy beans. In other parts of Asia, particularly in the Philippines, Indonesia and India, experiments with soy beans and peanuts are underway.

Another source of protein is peanut cake, a material left after oil has been crushed from peanuts. Peanut flour, like soy flour,

supplements the proteins of maize and other cereals.

Fish, rich in protein, often is available in large quantities at low prices. FAO has encouraged fishing industries in both fresh and salt water. In the Philippines, Japan and Indonesia, schools now serve meals of fish small enough to be eaten whole.

Fish flour, once highly rancid in flavor and odor, now is being worked on by FAO scientists for improved edibility and nutritional value. It may prove a valuable source of protein nutrition.

Putting more protein into diets is not just a technical production problem, FAO reported. It is also a sociological and educational problem.

In many parts of the world, for example, livestock are symbols of wealth and social standing, and remain un-milked and uneaten. Convincing people to make use of this already existing protein is a problem for sociologists.

Mothers in underdeveloped communities must be told of nutritional needs of their children. Too many of these mothers react to their children's digestive upsets by putting them on a near-starvation diet in the hope that the disturbances will clear up. Instead they are aggravated. This is an educational problem.

Once these problems are cleared up and more protein-rich foods are produced throughout the world, FAO believes this tragic disease will dwindle to relative insignificance within 10 or 20 years.

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ICHTHYOLOGY

Fish Dislike Man's Smell

► YOU MAY not like the fish smell around water-front areas, but the feeling is mutual. Fish, salmon at least, also dislike your odor.

If salmon smell man, or another natural enemy, wading into upstream water, they keep their distance until sure that all threat to life and fin has passed.

J. R. Brett and D. MacKinnon of the Pacific Biological Station, Nanaimo, B. C., reported to the Fisheries Research Board of Canada that they tried out 54 "smells" at a fish ladder at Stamp Falls. Spring and coho salmon use this ladder to bypass the dam while swimming upstream to spawn.

Since the tests were conducted at a time when migration was stable, any marked decrease in the number of fish meant that the fish were reacting to the new odor.

Of the 54 odor solutions tested, only five

● RADIO

Saturday, July 31, 1954, 3:15-3:30 p.m. EDT
"Adventures in Science" with Watson Davis, director of Science Service, over the CBS Radio Network. Check your local CBS station.

Carl N. Shuster Jr., instructor in zoology, Rutgers University, the State University of New Jersey, will discuss the "Horseshoe Crab."

PSYCHIATRY

100-Year-Old System Slows Mental Health Care

► PREVENTION OF mental sickness and care of mental patients is slowed by century-old systems of administration in most states, Raymond G. Fuller, social research specialist, charges in reporting a study made for the National Association for Mental Health in New Jersey. (See p. 60.)

A separate, coordinate department of mental health would be the most desirable system for most states, he believes. Only 10 states, however, have such departments.

In his two-year study of the administration of state psychiatric services, Mr. Fuller noted the trend in recent legislation affecting administrative set-ups and systems has been unmistakably in the direction of improvement. However, he feels the improvement might be speeded up.

His report calls for "intensive, comprehensive research into every phase of the problem of mental illness" and urges that adequate training facilities be provided for all groups of psychiatric personnel.

Research costs money, but Mr. Fuller points out that "business and industry think it pays." At the present time, he reports, "only two cents of every dollar spent on medical research in this country are available for research in mental illness, though the direct expense for mental illness in 1952 was more than a billion dollars, or one-third of the nation's bill for medical care."

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produced changes in the migration rate. These were from human skin, bear paw, deer foot, dog paw and sea-lion meat. All five of these mammals are enemies of the salmon.

For ten minutes after these odors were mixed in the water, no fish downstream climbed farther up the ladder. A few of the salmon even leaped backward, down the ladder.

Among the substances tested were two commercial products widely used by salmon troll fishermen to clean their spoons. Neither products alarmed the fish.

Bait preservative, shark repellent, pulp-mill waste, fish products, and several types of oil were also tested, but the rate of migration did not change with any of these.

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