The report states: "If the emergency feeding must be continued for more than a few weeks, the problem of individual nutrients, as well as calories, assumes importance. Cognizance must be taken of needs for protein, thiamine, other B-complex vitamins, and ascorbic acid." Deficiencies of minerals and fat soluble vitamins are not likely to occur, however, unless food shortages persist over several months.

The report stresses the importance of nutritional appraisal of the population by trained survey teams as a part of any emergency program. Such an appraisal will detect any deleterious effects of the food allowance on health and will serve as a basis for further dietary planning.

In regard to use of foods on hand during an atomic explosion, the report points out that food present in closed containers is usually safe if the outside of the container is washed. Food in open or broken containers exposed to radioactive materials should, however, be monitored before use. The report cautions against wasting food because of the possibility of contamination by atomic radiation.

The recommendations of this report, though much less detailed, are in general accord with those set forth by the Federal Civil Defense Administration (2).

REFERENCES

- (1) National Research Council, Food and Nutrition Board: Recommended dietary allowances. Washington, D. C., National Research Council, 1948. Reprint and Circular Series, No. 129.
- (2) U. S. Federal Civil Defense administration: Health services and special weapons defense. Washington, D. C., U. S. Government Printing Office, 1950. Manual AG-11-1, pp. 144-150.



Sanitary Storage and Collection of Refuse

16 mm., sound, color, 19 minutes, 1952.

Audience: Public health and sanitation personnel.

Available: Loan—Communicable Disease Center, Public Health Service, Box 185, Chamblee, Ga. Purchase—Castle Film Division, United World Films, 1445 Park Avenue, New York 29, N. Y.

Operations essential in the sanitary handling, storage, and collection of refuse from homes, restaurants, and business establishments are depicted by this film, produced by the Audio Visual Production Branch of the Communicable Disease Center, Public Health Service, in cooperation with the Public Health Service, Division of Sanitation.

The film is of particular interest to Public Health Service personnel sanitary engineers, sanitarians, and health officers—and can be used by them in working with municipal officials and local sanitation department employees. Refuse, the film points out, consists of both garbage and rubbish. Unless disposed of promptly, refuse furnishes harborage to rodents, flies, and mosquitoes. Local government agencies are encouraged to inform the individual property owner and restaurant operator how to store refuse properly to fit in with good community collection and disposal practices. Garbage may be separated from rubbish for disposal in grinders or to hog





farms, or the two may be combined for disposal in sanitary land fills or in modern predrying kiln process incinerators. In either case, the individual is responsible for sanitary storage of refuse on his own premises. He should wrap all garbage and place it in heavy metal, tightlidded, conveniently located garbage cans.

The film illustrates several devices, such as cloth collection squares, to protect the citizen's cans and to make the loading of garbage into the truck easier. It emphasizes that planned collection routes, properly designed trucks, and courteous service by sanitation department employees pay off in health and efficiency.



Genetic Control Of Metabolism

Bacterial viruses insofar as they contain genelike subunits are very much like bacteria or bread mold or men. A discussion of this subject as it relates to the genetic control of metabolic processes is contained in this publication, the first in the series of the R. E. Dyer lectures honoring the former director of the National Institutes of Health.

The author, George W. Beadle, Ph.D., who is from the Kerckhoff Laboratories of Biology, California Institute of Technology, received the Lasker Award in 1950 for his work along this line. Remarks of W. H. Sebrell, Jr., M. D., present director of the National Institutes of Health, who presided, and of James Stevens, M. D., Brig. General, USA(Ret.), and now Dean of the Harvard School of Public Health, who introduced the lecturer, are included in the publication.

In Neurospora crassa, the bread mold, many hundreds of specific metabolic defects have been produced through gene mutation. The existence in bacteria, the lecturer said, of mutations similar to the genes of higher organisms, has been demonstrated.

Genes as units of inheritance and of function are discussed. Certain inherited diseases in man suggesting a close relation between genes and protein specificities are:

- 1. Hemophilia, in which the serum protein of the gamma globulin fraction that plays a role in the blood-clotting mechanism appears to be absent or greatly reduced in its clotting activity.
- 2. Sickle-cell anemia, in which a defective form of a particular gene changes the electrophoretic mobility of the hemoglobin of the blood cells.
- 3. Alcaptonuria (to which hereditary idiocy is closely related) in which 2,5-dihydroxy-phenyl-acetic acid is not metabolized, but instead is excreted in the urine.

4. Galactosemia, a hereditary inability to utilize the specific sugar galactose.

The inheritance of diabetes mellitus is not clear. It is probable, nevertheless, the lecturer said, that the continued production of the normal amount of insulin is immediately dependent on the normal form of a specific gene.

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Beadle, George W.: Genetic Control of Metabolism—The R. E. Dyer Lecture, 1951. (Public Health Service Publication No. 142) 1952. 19 pages. 20 cents.

Clean Water In the Missouri?

The Public Health Service, in July 1951, released a 212-page technical report on Water Pollution in the Missouri River Drainage Basin, the third in a series of 15 cooperative State-Federal drainage basin reports to consider the economic and health problems caused by water pollution in major streams and their tributaries in the United States.

"Clean Water in the Missouri?" briefly summarizes the long technical report, and in itself is one of a series of brief reviews of the technical studies.

Written in digest style, the pamphlet is intended for circulation far from the desks of health officers, and, at the same time, it has been planned to achieve basic understanding and to motivate action upon the pollution problems which cut across the boundary lines of city limits and State borders.

Three sample quotations:

... "The organic waste being poured into the Missouri and its branches is equivalent to the body wastes and other domestic wastes from 12 million people. About one-third comes from city sewers, the rest from industry."

... "From an industrial viewpoint, the waste problem centers about three kinds of industry: beet sugar, petroleum, and packing houses." ... "Nearly a thousand urban centers—979 according to the technical reports—are today emptying domestic waste into the Missouri and its tributaries. Only 383 have adequate treatment plants."

The pamphlet points to waste treatment plants as the solution for the pollution of water which has become unfit for drinking, cooking, washing, swimming, fishing, industrial, or farm use.

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Clean Water in the Missouri? (Public Health Service Publication No. 151) 1952. 7 pages; illustrated. 5 cents.

for the general public

Menopause

This leaflet describes the "change of life." The symptoms of the body adjustments taking place during the menopause period are explained. Caution is given against ancient superstitions which have caused unnecessary worry. Consultation with a doctor is advised for guidance through the menopause period in order to assure a minimum of physical and emotional discomfort. The leaflet emphasizes that there is nothing abnormal about the change of life.

Menopause. Health Information Series No. 15 (Public Health Publication No. 179). January 1952. 1-fold leaflet. 5 cents; \$1.50 per 100.

Publications for which prices are quoted are for sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. Orders should be accompanied by cash, check, or money order and should fully identify the publication (including its Public Health Service publication number). Single copies of most publications can be obtained without charge frem the Public Inquiries Branch, Public Health Service, Washington 25, D. C.