The Addition Of Specific Nutrients To Foods

In November 1953, a joint statement of general policy in regard to the addition of specific nutrients to foods was issued by the Food and Nutrition Board of the National Research Council and the Council on Foods and Nutrition of the American Medical Association.

The Food and Nutrition Board of the division of biology and agriculture, National Research Council, was organized in 1940 for the "translation of nutritional science to public welfare." Establishment of the board was a result of efforts of the executive branch of the Government to establish a Consumer Protection Committee as a part of the National Defense Council. To secure scientific guidance for the committee's programs, the National Research Council was asked to set up a Committee on Food and Nutrition. The committee held its first meeting in November 1940 and 1 year later it was given board status and renamed the Food and Nutrition Board.

During World War II, the board served the defense agencies in an advisory capacity, under contract. With the cessation of the war, the Milbank Memorial Fund, the Nutrition Foundation, and the Williams and Waterman Fund of the Research Corporation undertook support of its peacetime activities.

Although it has no authority in governmental or regulatory matters, the Food and Nutrition Board is frequently requested to advise various

This short report was prepared by the Laboratory of Biochemistry and Nutrition, National Institute of Arthritis and Metabolic Diseases, National Institutes of Health, Public Health Service. agencies on nutritional problems. Occasionally, its deliberations form the basis for regulatory promulgations, action programs for health and welfare agencies, and research studies, the results of which might have broad health implications.

The 24 members of the board are chosen for their ability to interpret "the results of food and nutrition research in terms of its broad applications and implications in national and world affairs" (1). They are affiliated with universities, research institutions, and industrial organizations and serve without compensation. The governmental and nongovernmental agencies that might be affected by the board's deliberations participate through liaison representatives, but have no voting power. The problems presented are considered by both standing and ad hoc committees, the chairmen of which report to the semiannual meetings. A permanent secretariat is maintained under the administration of the National Research Council for coordinating committee activities and advancing the operational activities and programs resulting from the board meetings.

Some of the committees of the Food and Nutrition Board that have public health implications are those on nutrition surveys, industrial feeding, food protection, cereals, survey of food and nutrition research, fluoridation, maternal and child feeding, definition and standards of identity for foods, dietary allowances, and milk. These committees have developed a variety of standards which have been used in public health activities. The best known of these standards are the Recommended Dietary Allowances (2); Tables of Food Composition (3); and the previously mentioned statement of general policy in regard to the addition of specific nutrients to foods, which is quoted below.

Standards for Food Additives

"During the 1930's certain nutritional deficiencies were prevalent in the population of the United States, and newly developed synthetic vitamins were being used in foods with little or no scientific guidance. In 1939, and again in 1946, the Council on Foods and Nutrition of the American Medical Association adopted its policies on the proper additions of vitamins and minerals to foods. In 1941 the Food and Nutrition Board (originally the Committee on Foods and Nutrition) of the National Research Council likewise adopted a policy on the addition of specific nutrients to foods. These statements of policy have now been reconsidered jointly by the Food and Nutrition Board and the Council on Foods and Nutrition in the light of experience and of new developments. There is good evidence to indicate that the policies have been beneficial to the public and have encouraged sound nutritional practices. The policies are therefore reaffirmed in principle, and with revision of wording are embodied in the following statements:

"1. With carefully defined limitations, the principle of the addition of specific nutrients to certain staple foods is endorsed for the purpose of maintaining good nutrition as well as for correcting deficiencies in the diets of the general population or of significant segments of the population. The requirements for endorsement of the addition of a particular nutrient to a particular food include (a) clear indications of probable advantage from increased intake of the nutrient; (b) assurance that the food item concerned would be an effective vehicle of distribution for the nutrient to be added; and (c)evidence that such addition would not be prejudicial to the achievement of a diet good in other respects. These requirements have been met in the specific cases indicated in paragraph 6, below.

"2. The desirability of meeting the nutritional needs of the people by the use of natural foods as far as practicable is emphasized, and to that end education in the proper choice and preparation of foods and the betterment of food production, processing, storage, and distribution so as to provide more fully the essential nutrients native thereto are to be encouraged. "3. In order to avoid undue artificiality of food supply, foods chosen as vehicles for the distribution of additional nutrients should be, whenever practicable, those foods which have suffered loss in refining or other processing, and the nutrients added to such foods should preferably be the kinds and quantities native to the class of foods involved.

"4. The addition of other than natural levels of nutrients to foods which are suitable vehicles of distribution may be favored when properly qualified judgment indicates that the addition will be advantageous to the public health and when other methods for effecting the desired purpose appear to be less feasible.

"5. Whenever technologic and economic developments lead to extensive reduction in the consumption of a staple food, with a consequent nutritionally significant reduction in the intake of an essential nutrient or nutrients, consideration by qualified bodies should be given to the desirability of restoring such nutrient or nutrients to the dietary.

"6. The endorsement of the following is reaffirmed: The enrichment of flour, bread, degerminated corn meal, and corn grits; the nutritive improvement of whole grain corn meal and of white rice; the retention or restoration of thiamine, niacin, and iron in processed food cereals; and the addition of vitamin D to milk, of vitamin A to table fats, and of iodine to table salt."

REFERENCES

- Voris, L.: The Food and Nutrition Board of the National Research Council. Nutritional Observatory 9: 43-48 (1948).
- (2) National Research Council. Food and Nutrition Board: Recommended dietary allowances. Reprint and Circular Series No. 129. Washington, D. C. The Council, 1948.
- (3) U. S. Department of Agriculture: Tables of food composition in terms of eleven nutrients. Misc. Pub. No. 572. Washington, D. C., U. S. Government Printing Office, 1945.