

## IN THIS ISSUE

THE Round Table on "New Steps in Public Health" which was a part of the Fund's Twenty-second Annual Conference was concerned with current problems of public health and methods of solving them. Four papers appeared in the October *Quarterly* illustrating the needs of various groups in the community for relief from illness and disability and for disease prevention and health promotion. These served as a background for the discussion. The papers concerned with suggested solutions of these public health problems are published in this issue.

On the second day of the Annual Conference, the group engaged in discussing "New Steps in Public Health" met with the Food and Nutrition Board of the National Research Council. The six papers in this issue dealing with nutrition in public health were presented at this combined meeting.

The paper by Dr. Jean Alonzo Curran, who served as chairman of the Round Table, reviews the development of medical care facilities in this country and the progress of thought in regard to medical care. Dr. Curran points out some of the weaknesses and deficiencies in the present system and discusses some of the experiments in group practice. He sees the need for more comprehensive planning based on the concept of the patient in relation to his total environment. He recommends a broader and more integrated plan for the education of medical personnel, improved organization, closer cooperation with ancillary workers, and general education so that the public will support and participate in plans to keep health at a maximum level.

In the paper, "Proper Attention to the Role of Emotional and Social Factors in Illness as a New Step in Public Health," Dr. G. Canby Robinson states that emotional and social problems influence the condition of a large proportion of patients and that frequently they are the major cause of illness. Studies of patients admitted to outpatient departments

indicate that 65 per cent of the patients are faced with adverse social conditions which are directly related to their illness. These adverse conditions are the major precipitating cause of illness in 36 per cent of the patients and cause emotional disturbances in over 50 per cent of the patients. Dr. Robinson believes that proper attention to the emotional and social factors involved in illness is of value not only in clinical medicine in the treatment of a particular patient, but also has wide implications and significance for public health and preventive medicine.

New concepts in public health make necessary additional community facilities and more efficient use and better integration of the existing facilities. Mr. Bailey B. Burritt discusses some of the newer concepts and their implications in "More Adequate Provision and Better Integration of the Community Facilities." Of primary importance is the concept of the maintenance of health, rather than the treatment of disease, as an objective. To maintain health, periodic health inventories are needed to determine early departures of individuals from healthy conditions. The concept of the relation of the individual personality to disease and the basic concept of the individual as an integral part of the family make new demands upon the present community services and public health programs. Health education requires more careful and effective plans, new techniques, and more adequate facilities for teaching health. Mr. Burritt emphasizes the importance of integrating the present health services and adapting them to suit the newer concepts as well as developing new facilities.

In the paper, "The Role of Nutrition in Preventive Medicine," Dr. F. F. Tisdall has assembled evidence which shows that diets not adequate in all respects, but not producing well-marked classical deficiency syndromes may impair the health and efficiency of the individual throughout life. Because of their infrequent occurrence the so-called nutritional deficiency diseases, such as scurvy, pellagra and beri-beri, do not constitute important public health problems. Dr. Tisdall believes that, "There is no one factor which so affects the health of the people as the food they eat." The data presented in this paper should be of value to the administrator in planning a well-rounded program for the improvement of individual health and, therefore, of the public health.

The relation of nutrition during pregnancy to the condition of the child and also of the mother is discussed by Bertha S. Burke in "Nutrition—Its Place in Our Prenatal Care Programs." Long-continued studies

revealed that the general dietary rating of the mother during pregnancy was directly related to the condition of the infant at birth and within the first two weeks of life. A significant relationship was also found between the protein content of the mother's diet during pregnancy and the length and weight of the infant at birth. The course of pregnancy varied significantly with the dietary rating of the mother although to a lesser extent than did the condition of the infant. The diet of the mother during pregnancy also appeared to influence the incidence of toxemia and the average length of labor of all the primiparae. The author concludes that great gains in national health might be brought about by effective and intelligent nutrition teaching during the prenatal period.

It has been commonly believed that anatomical abnormalities present at birth are due to genetic influences. In the paper, "The Importance of Prenatal Diet," Dr. Josef Warkany presents a summary of the results of animal experiments which have shown that maternal nutritional deficiency is directly related to certain anatomical abnormalities of the offspring. The experiments were carefully controlled in order to determine the exact cause of particular abnormalities. The specific deficiencies which produced anatomical abnormalities of the offspring were riboflavin and vitamin D. Lack of riboflavin in the maternal diet produced a proportion of offspring with abnormalities such as syndactylism, brachydactylism, and cleft palate. Vitamin D deficiency was found to manifest itself in the fetus in a different way than in the infantile rat; it produced a peculiar abnormality of the ribs in which the osteoid was missing or not abundant. Dr. Warkany concluded that the science of nutrition should be concerned not only with the maintenance of the human machine but should also pay attention to its sound construction.

To maintain the highest efficiency in production in wartime, it is proper to consider the industrial workers' nutritional problems. In the paper "Protecting the Health of the Industrial Worker: Nutrition," Dr. Robert S. Goodhart reviews the organization and accomplishments of the government's industrial feeding program and indicates the major problems which remain to be solved. A clear presentation to industrial management of the relationship between nutrition and health, morale, fatigue, industrial diseases, and accidents is stated as one of the most urgent needs. This is considered the responsibility of the industrial physician who should also take an active supervisory role in the industrial food service.

Even though the proportion of the population now engaged in hard physical work is small, the effect of energy expenditure of various degrees upon nutritional requirements is a matter of more than academic interest. In the paper, "The Effects of Hard Physical Work Upon Nutritional Requirements," Dr. W. H. Forbes surveys the present status of knowledge in this particular field. He describes work of various degrees, light, moderate, and hard, in terms of their effect upon man's basal state. Dr. Forbes believes that the general indications from experimental studies are that light or moderate, or even hard physical work adds only to the caloric requirements and increases the needs for proteins and certain of the vitamins little, if at all. He noted also that nothing is known of the extra requirements, if any, for the kind of work that the average industrial worker performs, namely, work which is physically easy but nervously or emotionally tiring.

To reduce the hazard to the worker of occupational poisons there are two methods of approach, both of which are important. One is to reduce the risks through proper ventilation for removing such materials as dust, fumes, and vapors. The other method is to give attention to the resistance of the worker to toxic exposures in which nutrition appears to be a major concern. In the paper, "The Improvement in Nutrition as a Protection Against Industrial Toxicity," Dr. W. E. Crutchfield, Jr. reviews the present state of knowledge concerning the effects of specific types of poisonings upon human nutrition, and the effects of improved nutrition upon resistance to poisonings. Research in this field is still in its infancy, and in the future is likely to achieve a status of great importance.