

Nutrition and Resistance to Infection: Medical Debates and Political Responses in Interwar Years

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During the first decades of the 20th century, the great social evil caused by tuberculosis, venereal disease, infant mortality, cholera, yellow fever, typhus and other epidemics, aroused social alarm and great political concern. The recent bacteriological doctrine posed many questions about the body's defence mechanisms (immunity) against microbial threat. One of the most debated arguments among researchers was the relationship between optimum health, characterized by the necessary organic energy, and diet to guarantee good defence against infection. Many infectious diseases affected particularly the working classes, rural communities and marginalized sectors of society, which namely suffered from chronic malnutrition and nutritional deficiencies. The so-called pre-tubercular children were characterized by organic weakness, cachexia and deficient development, all attributable either to heredity or poor nutrition. The positive effect of the balanced diet to improve immunity boosted campaigns as summer camps and school colonies, spas for the poor and asylums for tuberculosis. Diet was an essential factor to recover organic energy against the threat of infection. Therefore the increasing interest to find out the interactions between nutrition and immunity.

Quantitative Calorie was the first quantitative approach to measure dietary needs. Further research on proteins, fats, carbohydrates, minerals and vitamins served in peacetime to define concepts such as optimal diet, minimum diet, standard diet and to define family patterns, considering sex, age, social groups or working activities. Surveys and reports were implemented to assess the nutritional condition of the population, to define specific deficiency diseases and malnutrition-related states, associated to developmental deficits and infectious diseases. Rationing strategies and propaganda campaigns were social instruments of intervention to influence a change in dietary habits.

This article analyzes the medical and political dimension of nutrition and diet during the interwar years. Main sources are medical journals, technical reports and political campaigns promoted by national and international organizations.