

nutrition

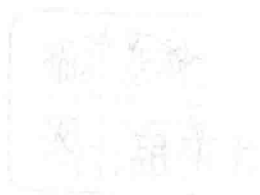
J. Mašek, K. Ošancová
and D. P. Cuthbertson

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AND SIR DAVID P. CUTHBERTSON, GLASGOW



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FOREWORD

The organizers of the VIIIth International Congress of Nutrition held in Prague in September 1969 emphasized, as the main subject, investigations focused on different types of diet, imbalance and deficiency in relation to organic functions.

In view of the size of the Congress, which comprised more than 1000 different lectures and discussions, this intention could not be strictly adhered to. Attention also had to be paid to problems of better food production and protection, to economic problems and social factors related to food production and sale, and to those important problems caused by food shortages in the famine-stricken parts of the world. These are increasingly attracting the attention of scientists and the public, which was apparent throughout the Congress.

In the main symposia, this important trend – the human aspect – was most frequent and therefore it was decided to publish this material on a priority basis.

The proceedings of the Congress revealed above all that diet is an important factor, which has a bearing on different functions of the organism. This applies not only to changes assessed in the investigation of the subclinical symptoms of some deficiencies, but also, particularly, to serious nutritional disturbances in the early stages of life which influence the development and functions of the organism, brain formation and functions, as well as other vital functions.

The attention paid by the medical profession to secondary nutritional disorders is also increasing.

From the theoretical point of view further research into general homeostatic regulation which leads to adaptive mechanisms or maladaptations is important. Regulations may lead to a number of mechanisms which could play a part in the pathogenesis of some diseases of 'civilization'.

The impressive development of research techniques and modern processing of results by computers have opened up new approaches to the biological sciences in general, and hence also in the field of nutrition. There are new possibilities, particularly in epidemiological investigations and in completely new fields, due to the use of labelled substances which enable a dynamic continuous investigation of man to be made.

Protection of foods from deterioration and loss of nutritional value, new sources of foods and their improvement by suitable production, and technological processes are obviously the main sphere of interest for food science technology and agriculture. The important scientific developments in this sphere are represented not only by attempts to supplement the nutritional value of contemporary foods by restitution and fortification, but also by the production of quite new foods with a modified taste, of hypo- and hypercaloric foods with the supplementation and elimination of some components and increased attention to quality which is being conceived in a new way.

A special aspect of this effort is the attempt to bridge the protein gap by new food products and sources, which is the main issue in attempts to improve nutrition in areas threatened by famine. From an analysis of this situation the resolution emerged which was addressed by the IUNS committee and the Congress participants to the United Nations and mankind, and which is therefore included in this publication.

The question is frequently asked whether large congresses with thousands of participants are not a thing of the past; I feel that even today they are not. Their main advantage is the possibility of close personal contact between scientists not only from different continents but also with different basic professions. The problems presented are a survey of recent work and views. These congresses are the places where, in confrontation with special communications, lectures and symposia, the atmosphere of 'great problems' can develop which may stimulate new concepts and team work in those engaged in basic research in a narrow field and thus enable them to take part in broader research programmes.

Finally the increasing discrepancy between knowledge of the effect of nutritional factors in man and the implementation of a new modern structure of the diet makes scientists bring

increasing pressure to bear on government officials to realize the social importance of nutrition and the necessity of rationalizing it.

The organization of large international gatherings nowadays lies beyond the capabilities of one president and secretary. National committees are the obvious basis for technical provisions and programme planning, and are helped greatly by international groups which can offer criticism and assistance to organizing committees as regards the scientific programme.

Effective assistance was provided by the IUNS programme committee (meetings in Paris and Feldbach) and by the international chairmen of different symposia with whom we were constantly in touch. I wish to thank all most sincerely, in particular the ex-President Professor King, Professors Ammon, Gounelle, Kühnau and Somogyi, and the new President Professor Roine, for their exceptional help in this work.

J. MAŠEK

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