THE INTERNATIONAL CAMPAIGN FOR BETTER NUTRITION

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The advance of science has greatly increased man's power to obtain supplies of food from the soil. It is likely that increased agricultural production has resulted in improved nutrition in many countries. Nevertheless it is common knowledge that in the face of agricultural surpluses crying for a market considerable groups of the population in some countries are in a state of semi-starvation, and even larger groups are undernourished and malnourished. Science has made possible an immense improvement in the standard of living and in the general well-being of all nations. So far man has not been able fully to realize, for universal or even national benefit, the possibilities inherent in his increasing control over nature. This, in a nutshell, is the problem which national and international committees of physiologists, biochemists, economists, producers, consumers, agriculturists, politicians, and statesmen are attempting to solve. Better human nutrition has long been a preoccupation of advanced governments. Today interest in the problem has become the subject of discussion and action in international circles. There is general approval of this international attempt to confront and solve the difficulties which prevent man's enjoyment of the fruits of technical advance. No less an authority than Sir Frederick Gowland Hopkins, the late president of the Royal Society of Great Britain, referring to the League's work in this field in his presidential address, said (1):

Policies concerned respectively with the production, transport, distribution, and consumption of foods will all, we hope, be discussed. They seem to be the very proper business of the League, and, if discussion goes deep enough and is frank enough, it may well do no small service to the interests of peace itself.

1 Appointed Executive Director of the Milbank Memorial Fund April 1, 1937, formerly of the staff of the League of Nations.
To those who have followed the development of international cooperation, the campaign is doubly interesting. For it constitutes a new approach to problems, such as economic nationalism, which have for long resisted direct attack. And it has brought about among a variety of international political and technical organizations a much closer degree of cooperation than ever previously existed. The reaction of the man on the street will be astonishment when he is brought to realize that in a comparatively few years such extensive and complicated machinery for international cooperation has grown up.

My purpose is to describe as briefly as possible the first hesitating efforts to set this machinery in motion in order to bring about better human nutrition which may carry with it, as Sir Frederick Gowland Hopkins suggests, that greater measure of social justice which is one of the pillars of peace.

First Steps. The first scattering shots in the campaign were fired by the League's Health Organization. They took the form of reports on the food of Japan (2), travel abroad under League auspices of a few nutrition experts whose lectures aroused considerable interest, and the consultation of experts on dietary standards (3) and the methods best calculated to detect states of malnutrition (4). Studies promoted by the Health Organization into the influence of the economic depression on health dealt mainly with dietary and nutrition questions (5). Finally the government of Chile requested the League for assistance in an economic and health inquiry into the state of nutrition among its people.

To form its policy in this field and to prepare to give assistance to Chile in its two-sided inquiry, the Health Organization instructed two members of its staff to prepare a report on nutrition and public health (6). In the preface to the report the authors speak of "public health work in nutrition as an integral and highly important part of public health activity in general"; state that "the remarkable advance of the science of nutrition during recent years
demands a new orientation of public health activity,” and conclude that “the problem of nutrition is largely a social and economic problem and as such concerns politicians, economists, agriculturists, social workers, et cetera, as closely as it concerns the medical profession.” The closing words of their report now possess more significance than was attributed to them at the time they were written:

“... we would say that production, distribution, and consumption have hitherto been considered mainly as economic phenomena, without sufficient regard to their effect on public health, but that the fact of the economic depression has directed attention to the gap which exists between dietetic needs, as determined by physiology, and the means of satisfying them possible under existing economic conditions. The general problem of nutrition, as it presents itself today, is that of harmonizing economic and public health development.

Workers’ Nutrition. This general report received a wide distribution and aroused considerable interest. Socially-minded persons in various countries looked eagerly to Geneva for guidance in their endeavor to improve national nutrition. The subject had a strong appeal for the International Labour Office as the health of the worker depends to a considerable extent on his ability to buy with his wages a sufficient amount of nourishing food. In his report to the Nineteenth Session of the International Labour Conference (Geneva, June, 1935) the Director of the Office referred to the fact that

It is not open to dispute that large masses of people are at present underfed or wrongly fed. ... Every country is faced with a problem of this kind, but its exploration is only beginning. ... Looked at from another angle, it is evident that a higher and more variegated standard of food consumption would go far to solve the question of agricultural overproduction. ... This question of consumption is not only national but international in its scope. If it is agreed that the only real solution of the problem of economic balance is not through scaling down pro-
duction but in leveling up consumption, then it follows that the best hope of finding a way out of the present troubles is to raise the standards of the millions who are now underfed, underclothed, underequipped. . . . When all other remedies have been clearly seen to fail, it is in this direction that thought will eventually be directed, unless a general regression towards lower standards is accepted as the ironical but inevitable outcome of a civilization condemned to decline through the excess of its own creative ingenuity and technical perfection.

This challenge was at once taken up. The President of the Mixed Advisory Agricultural Committee which acts as an intermediary body between the International Labour Office and the International Institute of Agriculture, stated that the question of overproduction in agriculture as related to a rational dietary standard was deserving of special attention, and the Committee urged that the two international organizations concerned should continue their researches in this field.

*The International Labour Conference Acts.* Further action was taken by the International Labour Conference which met at Geneva in June, 1935. The delegate of Australia, Sir Frederick Stewart, introduced a resolution (8) which was adopted unanimously after Miss Abbot, delegate of the United States; Dr. Ada Paterson, delegate of Australia; and a number of others had spoken in its favor. The resolution drew attention to the fact that nutrition, adequate in quantity and quality, was essential to the health and well-being of workers and their families, that there was considerable evidence to show that in both town and country large numbers of persons were inadequately nourished. Referring to agriculture, the resolution declared that an increase in the consumption of foodstuffs would help to raise standards of life and relieve the existing agricultural depression. The resolution went on to ask the Labour Office to continue its work in this field in collaboration with the Health and Economic Organizations of the League and the International
Institute of Agriculture, with a view to presenting a report to the next Labour Conference.

The League Assembly Records its Approval. The ferment was now at work. The demands for copies of the Health Organization's report on "Public Health and Nutrition" grew so heavy that new editions had to be printed. Government delegates and technical experts meeting in Geneva discussed the subject in private. Economists and agriculturists explored its possible repercussions on national economy and agriculture. When the Assembly of the League of Nations met at Geneva in September, 1935, the interest among the delegates was widespread. But the subject was not on the Assembly agenda. Twelve delegations promptly addressed a letter to the President of the Assembly asking that the question of the relationship of nutrition to the health of the population, which had become a social and economic problem of widely accepted significance, and was recognized as having an important bearing on world agricultural problems, should be discussed during the session.

The subject was introduced to the Assembly by the Right Honorable S. M. Bruce of Australia who made a moving and well-documented address during a plenary session. Eighteen states supported the resolution (1) which he moved in the Second Committee. No dissenting voice was raised. The resolution provided for the appointment of a mixed committee including agricultural, economic, and health experts which was to submit a general report on the whole question. The Health Organization was encouraged to continue its work on nutrition, and the technical organizations of the League (which include the Health Organization) were instructed to collect and publish information on the measures taken in all countries for securing improved nutrition, in consultation with the International Labour Office, and the International Institute of Agriculture. The Council of the League, meeting during the Assembly sessions, took measures to give effect to this resolution.

The next international organization to take up the question was
the International Committee for Inter-Cooperative Relations, a private liaison body between agricultural and consumers' cooperatives, which is presided over by the Director of the International Labour Office. This Committee, meeting at Geneva in October, 1935, decided to study certain questions relating to nutrition which are of direct interest to the cooperative movement. During the same month the governing body of the International Labour Office met to give effect to the resolutions of the Labour Conference. It set up a Committee of Experts on Workers' Nutrition (8) consisting of eleven members—five of them experts in various aspects of nutrition, the others representing the three groups in the governing body—governments, employers, and labor.

Resolutions of the Labour Conference of American States. My purpose in dealing so fully with procedure has been to give some indication of the size and complexity of the international machinery involved and the great interest manifested by international organizations, both technical and political. However it would serve no useful purpose to describe the results of each of the subsequent meetings of each of the organizations concerned. But for the information of American readers I must point out that the subject was discussed and resolutions adopted at the Labour Conference of American States which met at Santiago-de-Chile in January, 1936 (7). Of the two long and detailed resolutions adopted I need reproduce only two paragraphs:

The Conference notes the following as possible bases for a policy intended to bring about an improvement in nutrition:

(f) The orientation of the economic policy of states in such manner as to take account of the primordial character of biological necessities in the sense of subordinating production, transport, and distribution, both national and international, of foodstuffs of primary necessity, to the nutrition requirements of the population.

(g) The adoption insofar as possible of international health legislation on nutrition questions.

It will be obvious from the foregoing that a rather impressive
amount of work on nutrition was contemplated by a number of the most important international organizations. But this work needed to be based on a scientific foundation, and the Health Organization hastened to enroll skilled workers to lay that foundation. Economists and agricultural experts could not be expected to produce reports on the relation to nutrition of wages, costs, transport, production, consumption, supply and demand, the effects of high tariffs and quota, exchange restriction, et cetera, without knowing the quantity and kind of foodstuffs required to maintain and improve the nutrition of the population. True, national standards had been fixed in some cases but these often differed from country to country. Moreover some of them at least—perhaps the majority—were minimal rather than optimum requirements, and as the whole object was to improve nutrition it was necessary to consider these standards anew.

*The Physiological Basis of Nutrition.* The Health Committee of the League proceeded to provide the basis for future work on nutrition by consulting a distinguished group of biochemists and physiologists, who met at London in November, 1935. The chairman of the group was Dr. Edward Mellanby, secretary of the (British) Medical Research Council. Three American experts participated: Professor E. V. McCollum of The Johns Hopkins School of Hygiene, Dr. Mary Schwartz Rose of Columbia University, and Dr. W. Sebrell in charge of the Department of Nutrition in the National Health Institute at Washington. The Commission's report (9) was divided into two parts: the first dealing with energy, protein, and fat requirements; and the second with mineral and vitamin needs. The basic calorie allowance recommended was 2,400 net calories (the amount of energy available from the food actually assimilated) for an adult living an ordinary life in a temperate climate and not engaged in manual work. Supplements for muscular activity were to be added—they vary from seventy-five calories per hour of light work to 300 and upwards per hour of very hard
work. A table of coefficients was supplied to permit the calculation of energy requirements for other ages and for pregnant and nursing women. Protein and fat requirements were then set out.

In the second part of its report the Commission emphasized the fact that deficiencies in modern diets are usually in the protective foods, i.e., those rich in minerals and vitamins, and proceeded to recommend the use of certain of these protective foods for given climatic and dietetic conditions.

**Protective Foods.** “Thus in the United States of America,” said the Commission, “where the chief constituents of the daily diet are usually white bread and other foods made from white flour, sugar, and muscle-meats—milk and the leafy vegetables form the most important protective foods.” They went on to point out that in Asia where the protein of the diet is either too low in quantity or of poor quality, meat would provide a highly valuable protective food, whereas in other areas where the diet consists almost exclusively of cooked or dried foods, fresh fruits and (or) vegetables are highly important from the point of view of protection. Emphasis was laid on the mineral and vitamin requirements of pregnancy and lactation, and due attention paid to the needs of other adults and children. A series of general recommendations was adopted (advantages of variety in diet, partial substitution of white flour by lightly milled cereals and potatoes, the excessive use of sugar and the great value of milk, fresh vegetables, fruit, and extra Vitamin D). Finally, a list of problems requiring further study was set out, and dietary schemes for pregnant and nursing women, infants under one year, and children from one to fourteen were given in some detail.

The Technical Commission met for the second time in June, 1936, to examine the observations submitted concerning their first report, to take account of the progress made in the study of the problems they had referred to national technical institutions, to consider the desirability of undertaking certain studies on milk as
a food, and to hear the preliminary reports of the health and economic experts who had assisted the government of Chile in its study of national nutrition. The summary I have given above is of the Commission's report as it was modified in the light of the observations submitted from various sources. As regards two of the subjects mentioned by the Commission as requiring further study—assessment of the nutritional state of children, and nutritive food requirements in the first year of life—the Commission proposed that they should be referred to experts and proceeded to record its general views for the guidance of such experts. One of these statements gives a clue to the spirit in which the Commission dealt with the whole subject:

Too often there is a tendency to take as fixed standards of normal nutrition values which are mere averages of the day. . . . However, especially in children, a state of nutrition which is not excellent cannot be called normal. So far as we are concerned, the optimum is the normal.

As regards milk, the Commission described as precisely as possible the types of studies which should be carried out to determine the optimum milk ration at different ages and under different conditions. These should include metabolism laboratory experiments on animals; institutional observations on the health, growth, and development of children; observations made upon large groups of children, as in the elementary schools; and similar observations upon groups of pregnant and lactating women. These recommendations have been referred to national research institutions for study.

The Nutrition Problem in Chile. After hearing the preliminary reports of the two experts who had studied the health and economic aspects of nutrition in Chile, the Commission considered the subject from two points of view: first, as an example of the inquiries that might be conducted in other countries; second, as regards the
desire of the Chilean government to utilize the results of the inquiry as a basis for remedial action. Having in mind the first point, the Commission asked that the final report should be communicated to its members. On the second point it made a number of observations of some significance. In its opinion the conclusion was warranted that a part of the population examined is undernourished. Should the Chilean government decide upon a long-range national policy as regards nutrition, it would be desirable to take a series of measures to be coordinated by a central technical body acting under the authority of the government. The Commission would be prepared, if so requested, to collaborate with this technical body. Further action, so far as the Chilean inquiry is concerned, awaits the decision of the Chilean government upon the conclusions and recommendations of the report.

Toward the end of 1936 the Health Committee convened two groups of experts to deal with methods of assessing the nutritional state of children and the nutritive food requirements during the first year of life (10). Dr. Martha Eliot of the United States Children’s Bureau, attended both these consultations.

Workers’ Nutrition and Social Policy. In the meantime the International Labour Office had issued its report on workers’ Nutrition and Social Policy (7), a substantial document which has drawn forcibly to the attention of governments, employers, and workers the need for the application of measures to improve the nutrition of workers and their families, and the potential economic advantages of such a policy. The chapter headings indicate the scope of the report. Some of these are: Nutrition and Occupation, Facts on Workers’ Diets, Agricultural Production and Food Consumption (prepared by the International Institute of Agriculture), Social-Economic Aspects of Nutrition, Social Legislation and Nutrition, Agencies and Methods to Improve Nutrition, and Problems of Policy. Important statistical material and a review of national food regulations appear in the appendices.
The report has the great merit of defining the problem as clearly and precisely as possible, a great advantage in a document for the use of experts in so many different fields as well as for governmental authorities.

In the chapter “Problems of Policy” the authors of the report state:

First, large numbers of the working population not only in impoverished or depressed areas but even in the most advanced industrial countries are inadequately nourished. Such malnourishment and undernourishment are not the result merely of temporary dislocations due to an industrial depression, though a depression usually has an aggravating influence. It is a condition found among employed workers in times of normal business activity.

While ignorance of food values accounts to some extent for inadequate nourishment among workers, its main cause is inability to buy the right kinds of foods, especially protective foods. The potential productive capacity of agriculture is such as to supply the foods necessary to improve workers’ nutrition, but the fact that this productive capacity has not been used or has been misused is due to maladjustments created by changes in agriculture and in world economy.

The attempt to obtain higher standards of nutrition depends upon the interplay of social-economic factors which affect the supply and demand for foodstuffs. The reduction of production and marketing costs, the removal of trade barriers, and the elimination of undesirable forms of taxation are involved in the attempt to secure relatively low prices for foodstuffs without reducing producers’ incomes. An active demand for better foodstuffs, however, is influenced by the size of the national income and by its distribution. After mentioning the influence on nutrition of labor and social legislation and describing the measures applied to improve the diet of various classes of the population the report states:

But many effective ways for improving popular nutrition which
are open to the modern state as well as to voluntary organizations are still to be fully explored.

The report is a storehouse of information and suggestion, reaching beyond the scope of workers' nutrition to the larger factors involved in the social policy of a modern state:

For the development of a special nutrition policy holds out the promise of shaping some economic and social legislation in a more objective way on the basis of standards obtained by scientific research. And the demand for adequate food for all the people may make clear in a new and striking way the need for economic readjustment and development in order to enable everybody to enjoy health and well-being.

The Coordinating Body. Finally we come to the Mixed Committee set up by the Assembly in 1935. It includes in its membership agricultural, economic, and health experts and is presided over by Viscount Astor. On the Committee sit representatives of the International Office, the International Institute of Agriculture, the Health Organization's Technical Commission on Nutrition, and a number of others. The American member of the Committee is Professor Edwin G. Nourse of the Brookings Institute. He was replaced on one occasion by Professor Warren C. Waite of the University of Minnesota, and on another by Mr. Harold B. Rowe of Brookings. Miss Faith Williams of the Labor Department sits as the representative of the International Labour Office, and Professor E. V. McCollum as one of the representatives of the Technical Commission.

The Mixed Committee was obviously intended to act as the mechanism of coordination as regards the various international organizations taking part in the inquiry. It was expected to bring together the work of the technical committees and to prepare a report "on the whole question" in which the importance of the constituent elements would be given due recognition. Most im-
portant of all, it was obviously to this Committee that the Assembly looked for conclusions and practical recommendations.

Now it must be remembered that committees of economists have been meeting for years at Geneva, and that the economic policy of many governments has often run counter to the views of economic experts. This is not the place to review recent economic history, but it must be obvious to anyone that the growth of tariff barriers, quotas, exchange restrictions, subsidies to producers, and dumping do not constitute means of promoting world trade. In its work on the economics of nutrition the Mixed Committee will find—has indeed found—that the causes underlying economic nationalism are still at work. Partly on account of this very serious obstacle and partly because such a wide field had to be explored, the Committee was not able to produce a final report with definite conclusions and recommendations before the 1936 session of the Assembly. Its mandate was therefore renewed and it will meet again early in 1937. It must be emphasized, however, that its work goes on steadily in the intervals between meetings.

The preliminary report (1) of the Committee consists of four parts, each a volume of respectable size. Part I is the report proper, embodying the suggestions of the Committee to the Assembly, and giving a general idea of the problems involved. Part II consists of the report of the Technical Commission on Nutrition. The data on nutrition in various countries submitted by governments to the Committee may be found in Part III, while Part IV is a report on the statistics of food production, consumption, and prices prepared by the International Institute of Agriculture.

I shall restrict myself to the quotation of three of the Committee’s preliminary recommendations:

The Committee recommended that governments should:

6. Consider what steps should be taken, whether at the public expense or otherwise, to meet the nutritional needs of the lower-income sections of the community, and in particular, the means by
which they might ensure that an adequate supply of food, especially safe milk, should be made available for expectant and nursing mothers, infants, children, and adolescents;

11. Consider whether any modification of their general economic and commercial policy is desirable in order to ensure adequate supplies of foodstuffs, and, in particular, to assist the reorientation of agricultural production necessary to satisfy the requirements of sound nutrition;

12. Coordinate the work done by different authorities which affects the nutrition of the people, and, in the absence of a central authority, set up a special body for this purpose, in order to ensure unity of policy and direction.

The National Effort. So far I have been discussing the subject from the international point of view. There is another side to the picture, the reactions of governments to this international movement and the influence on the latter of national activity in this field. It is, of course, quite obvious that national interest in nutrition preceded the international movement, and that the relation of improved nutrition to agricultural income was clearly recognized. But this was the case in only a few countries and those the most advanced. At present the subject in its larger aspects has been brought home forcibly to every government. In a number of countries central nutrition committees have been set up to coordinate action and policy. Scientific bodies are engaged in working out the problems recommended for study by the Technical Commission. The need for adequate food for the purposes of nutrition is replacing anxiety over the disposal of agricultural surpluses. The gains already won are of inestimable value. The hope is that this effort of the governments to utilize the machinery of international collaboration for a humanitarian as well as an economic purpose will lead to even more tangible results, perhaps in the form of conventions regulating and promoting social welfare, lower tariff barriers for needed food products, fewer obstacles in the way of world trade, and greater agricultural prosperity.
Nutrition and Agricultural Policy. As far as America is concerned, I must refer to an excellent article (10) on the subject by two authors, one of whom sat on the Mixed Committee of the League. After describing the plight of agriculture after the war, and the measures taken to remedy it, the authors go on to state:

Sizable groups in both the importing European nations and the exporting agricultural countries have now come to realize that the policies thus far followed have not, taken as a whole, furnished a solution to the problem. In the export countries it is held that while the present world crisis is the result of a great many different causes, recovery would be substantially promoted by a lessening of the agrarian protection policies of the European nations and a return to a larger volume of trade between the industrial and agricultural countries. In the importing countries it is suggested that the high food costs are having a measurable influence upon the health and strength of the people, and that when the total costs of the present policy are finally reckoned they will be found to be very great.

Others with a more humanistic bent have pointed to the vast numbers of poorly nourished and even starving groups in various parts of the world in the face of abundant supplies and low prices in other sectors. The implication is that the real need of the world with respect to agricultural products is not a restriction in their output, but an expansion of consumption through better diets for submerged fractions of the population, and that a subsidizing of consumption is better social policy than restriction of output of farm products.

Having defined the problem and described the League’s initiative in this field the authors go on to discuss the obstacles in the path of progress. These, as any intelligent person must appreciate, are enormous. Good food costs more than poor food. But the poorly fed classes spend a larger proportion of their income on food than the well fed. Therefore poverty is one of the main roots of the evil. Moreover it is extremely difficult to change food habits. Agrarian protectionism is based on strong influences—the desire for a
contented farming class, the needs of national defense, the demands of strongly organized groups. Perhaps, say the advocates of the new policy, subsidizing consumption would content the farmers too. A marked increase in animal husbandry even at some sacrifice of acreage under cereals and sugar would serve the purposes of national defense and in addition add to soil fertility.

Obstacles in the Path of Progress. National adjustments of this kind are very difficult to bring about. It need surprise no one that international adjustments are even more difficult, for the interests of agricultural and industrial countries may conflict. Nevertheless, economists are working away at the problem in almost every country. Numerous committees are meeting to consider the problem in its purely economic aspects. Economic pressure may possibly bring the answer more quickly than the appeal for better nutrition. Nevertheless, the work being done by international organizations, linking better nutrition with agricultural and economic policy, will not be thrown away even if it does no more than to make all governments conscious of facts which several enlightened governments have long recognized and sought to remedy, the undernourishment and malnourishment of large classes and their relation to agricultural and economic policy.

The authors I have quoted above are sure that good results would follow the efforts to improve nutrition:

Sufficient evidence is now available to warrant the opinion that an improvement of the world's diet along the lines suggested by modern nutritional knowledge would produce large social dividends. Health and strength would be improved and the greater productivity of the working class might well pay substantial economic dividends. These changes would also call for a redistribution of agricultural efforts and in general would benefit agriculture by necessitating a great increase in the production of a number of products.

In view of the grave practical difficulties, "All that may be
expected for a considerable period of time is some acceleration of the tendencies toward improvement already apparent, but even this is worthy of great effort.”

National versus International Action. In this international campaign to improve nutrition, the real need is for national action. Further research to elucidate still unsolved problems must be carried on nationally. Economic policy will, in the future as in the past, be the primary concern of individual countries. Education must be promoted by the state authorities. But the value of international action is not thereby lessened. National progress may be stimulated and directed along sound lines by the opportunity to exchange ideas, information, and the results of experience with other countries. International agreement on programs of research and on methods of working out nutrition problems will tend to make the results comparable and more generally available and applicable. Finally, cooperation in matters of social and economic policy is needed to permit the different countries to promote national nutrition without thereby losing any of their advantages in world markets.

The relation of better nutrition to peace may seem very remote. But there is no single road to peace, and if in the attempt to improve national nutrition, the governments succeed in promoting a fuller measure of social justice and in doing away in part at least with economic nationalism in the interests of health, it may be that the real objective of the League and of the Labour Office will not seem so remote as it appears to be today.

REFERENCES

The reader will find a full account of League and International Labour Office decisions on the nutrition inquiry, in the official records. I refer below only to the most important publications of which copies may be obtained. There are also a large number of mimeographed documents which are not on sale. Volume V, Num-
ber 3 of the Health Organisation's Quarterly Bulletin (September, 1936) is devoted entirely to the subject of nutrition.


As I write, delegates from national committees on nutrition are gathering in Geneva for a meeting which begins on February 22. Miss Hazel Stiebeling of the Bureau of Home Economics, United States Department of Agriculture, represents the American subcommittee set up by an interdepartmental committee consisting of the under-secretaries of the departments concerned with health work, under the presidency of Miss Josephine Roche, assistant secretary of the United States Treasury.