

Toward a National Nutrition Policy

Jean Mayer

The White House Conference on Food, Nutrition, and Health, a watershed in American social history, was held in Washington, D.C., in December 1969 (1, 2). Enough time has elapsed now to pause and consider what the situation was in 1969 and what it is now, what progress has been realized, and what remains to be done. The relation between nutrition and a number of social problems had been recognized for some time; however, in the past, those scientists who were concerned with the clinical aspects of nutrition generally focused their attention on the underdeveloped countries of Africa, Latin America, and the Far East where the problems are more acute, the picture easier to quantitate, and the work supported by a number of international and U.S. agencies. The "apolitical," "establishment-approved" character of international work was also seen by academicians as more congenial than was the raising of disturbing social and political issues about our own society. It was only in the 1960's that Americans came to realize that malnutrition was not limited to the less fortunate nations of the world. The disgraceful state of hunger and poverty in the United States was finally brought to bear on the American people by Martin Luther King, Jr., and the Southern Christian Leadership Conference. By dedicating themselves to bettering the life of poor blacks, Dr. King and his followers created a new climate of concern about many of our urban and educational problems and, above all, about the plight of the poor throughout America.

This slow awakening of the national

conscience is attributable in part to the failure of professionals in the health field to recognize the extent of this nation's nutrition problems. Indeed, it was not the experts but rather a small, heterogeneous group of interested lay individuals who took the first steps toward eliminating hunger among the black agricultural workers in the deep South. In the 1960's, the growing demand for man-made fibers left the owners of the great cotton plantations with few options—either they replaced their cotton with corn crops that require little manpower or they committed their fields to the soil bank in exchange for a subsidy. In the wake of this turnover, no provision was made for poor blacks and their families who were wholly dependent on the plantations for their meager livelihood. Hunger and malnutrition, and at times, actual starvation, were to be their fate (3–5). As they became unneeded in agriculture, and at the same time, eligible to vote, an unspoken conspiracy of reactionary Southern officials created conditions such that the poor blacks would be driven to the North. Certainly, these officials did little to make life tenable for the blacks, let alone attractive.

Awakening

Little by little, however, a growing number of concerned Americans became aware of these conditions. A board of inquiry was established to identify "hunger counties," those areas where malnutrition had become a way of life. A number of concerned or-

ganizations came together, under the leadership of the Field Foundation, and created a "National Council on Hunger and Malnutrition in the United States," of which I was elected the first chairman. Several members of Congress including Joseph Clark, George McGovern, and the late Robert Kennedy, took up the cause. Finally, the newspapers and radio and television networks took cognizance of the problem; a number of pioneering articles written by journalists such as Nick (Nathan) Kotz (6) were followed by a powerful CBS television documentary entitled "Hunger in America" that was based on the findings of the board of inquiry (4) and of the "National Council." This hour-long program marked a turning point in the fight against hunger for it shocked the nation into the realization that ill-fed Americans could no longer be ignored.

It then became publicly evident that the poverty that is so real to so many people in our country had too often been masked by our tendency to look only at those statistics that point to steadily rising incomes and an ever-increasing gross national product. Despite protests to the contrary, the redistribution of income in the United States over the past 30 years has been more apparent than real. Now, as 30 years ago, 20 percent of our population possesses only 5 percent of the total wealth, and half of these no more than 1 to 2 percent of our overall resources. The Department of Agriculture estimated, in 1969, that a minimum of \$106 per month was required to provide a sound diet for a family of four. Yet, at that time, 20 million to 30 million Americans were unable to meet that standard. They lived in a variety of geographic areas, and came from a number of different ethnic and cultural backgrounds. The unemployed agricultural workers of the deep South, many Mexican-Americans in the rural

The author is professor of nutrition at the Harvard University School of Public Health, Boston, Massachusetts. This article is based on the Phi Beta Kappa address delivered on 29 December 1971 at the AAAS meeting, Philadelphia, Pennsylvania.

areas of the Southwest and in the barrios of the larger Texas cities, American Indians on a number of reservations, and many people in Appalachia, fell within this category. In addition, there were (and are) the migrant and other seasonal farm workers who represent some 400,000 Americans, primarily blacks in the East, Mexican-Americans in the Southwest, and a combination of Mexican-Americans and blacks in the West. As a group, these laborers are deprived of the benefits of most social and economic legislation instituted to protect the rights of other types of workers. They are ineligible for the food stamp program because they fail to meet the necessary residency requirements. Private hospitals will admit them only if they can pay their bills in cash, a practice resulting in an infant mortality rate of 63 per 1000 and an incidence of stillbirth of 70 per 1000—statistics that are comparable to those for the inhabitants of underdeveloped countries. The average annual income of migrant workers in Colorado is on the order of \$1885 per family (7).

In the large cities of America, the two groups most vulnerable to malnutrition were (and are) the aged and a growing number of women with small children, abandoned by their husbands, and unable to obtain sufficient alimony and child support. Malnutrition is equally prevalent among groups living in America's more remote states and territories. The Alaskan natives, including Eskimos, Indians, and Aleuts, live on land that not only has marginal economic potential, but that is continually being threatened by outside commercial interests and various forms of pollution. Kwashiorkor (a protein-deficiency syndrome, particularly affecting small children) is rampant in American Samoa, and marasmus (a syndrome of slow starvation again particularly affecting small children) seems widespread in Micronesia, where hurricanes periodically cause extensive devastation to housing and to the crops of an entire season. In the Virgin Islands, generally thought of as a tourist's paradise, the welfare payments for a family of four average \$19 a month.

Attempts at Solution

On the whole, the food assistance programs instituted by the federal government to meet the needs of all of

these groups had been poorly designed and administered. When the first White House Conference on Food, Nutrition, and Health convened in December 1969, there were essentially three major food programs in operation. The food commodity program was originally intended to dispose of surplus food while maintaining farm income and stabilizing agricultural prices; it never presumed to be a nutrition program as such. Among the 23 items offered under direct distribution only small amounts are, in fact, available. In Boston, for example, bulgur wheat, corn flour, and lard were the main ingredients of a potentially disastrous diet. Procurement difficulties were another serious drawback of the commodity program: a complete month's supply of food, 30 pounds, had to be collected at once in the basement of the county courthouse several miles away, and the recipients (usually elderly women or women with small children) had to carry the allotment from the local welfare office to what might be a seventh-floor tenement apartment. Finally, by providing foods that bear little resemblance to those purchased by the consumer at the supermarket, the commodity program served to widen the explosive gap between the haves and the have-nots.

In contrast, the food stamp program offered greater convenience and more variety in the selection of foods. However, its effectiveness was seriously hampered by unrealistic and unreasonable methods of operation. Those who could not pay \$45 in cash on the first day of the month were dropped from the program. In addition, eligibility for welfare was a necessary prerequisite for participation in the food stamp program, thereby automatically barring the elderly and a great many people who would not apply for welfare. In the end, eligibility for welfare, particularly in the South and Southwest, depended entirely on the capriciousness or goodwill of the local sheriff or county judge; in most cases, these magistrates derived their jurisdiction from a patchwork of welfare legislation reminiscent of the Elizabethan poor laws of 1601.

The third program, the provision of nutritious school lunches, contributed primarily to the well-being of the middle classes, and scarcely helped the poor. Plate lunches were provided for some 24 million middle-class children in elementary and secondary schools.

Yet, the program covered only 2 million of the 6 million children who were desperately poor.

Thus, on the eve of the White House Conference, only 5 million or 6 million people, out of a potential 25 million, actually benefited from either the commodity or the food stamp program.

Changing Character of Food

Poverty was obviously the most urgent problem for the conference to consider. But it appeared to me as chairman and chief organizer that the changing character of our food supply was another factor that must be considered. This nation's food products have been virtually transformed under the impact of forces that the public has yet to recognize fully. The food manufacturers, distributors, and retailers are well aware that theirs is not basically a "growth" industry. The failure of Americans to exercise, coupled with their rising concern over the dangers of obesity, have resulted in an extremely slow increase in the overall consumption of food. Thus, in an effort to increase sales, the food companies are marketing service and convenience in the form of frozen foods and packaged meals. The work that was once performed by the unpaid housewife is now being done by organized labor—food has thus become subject to the same inexorable rise in prices that is characteristic of all industrial goods. This is true despite the fact that food is basically a commodity obtained with less land, fewer farmers, and more efficient methods than ever before in history. Faced with increasing prices, the consumer has been driven to find cheaper substitutes for the primary foods: meat, for instance, may be increasingly displaced by textured vegetable protein. These substitutes can be judged acceptable only if they are enriched with an equivalent quantity of a long list of vitamins and minerals—a complex operation which is just beginning to be considered. Our inadequate knowledge of human nutrition also makes it necessary to ensure that only a fraction of the unprocessed foods be replaced by new "engineered" foods.

Indeed, the organic food cult so prevalent among the young has focused attention on yet another product of our advanced technology—the highly processed nature of our food supply.

In 1941, only 10 percent of our foods were highly processed; today, that amount has risen to 50 percent. Yet, until the White House Conference, it could be said that the major improvements in the nutritional content of foods had taken place primarily in the 1940's; unfortunately, in the period after World War II, the commitment of both government and industry to establish and revise standards of nutritional quality had not been sustained. For example, the addition of iron, thiamine, riboflavin, and niacin to bread and flour was instituted in 1941. However, many bread substitutes, flour mixes, and most milled rice were (and are) still not enriched. In fact, a great many of the cereal-based products which the public thought were enriched, were not.

The nutritive value of snack foods, a more and more important component of our daily intake of food, was extremely low, and there was essentially no leadership in encouraging or requiring its improvement. Each year, the advertising industry concentrated a major portion of its efforts on the promotion of our least nutritious foods; namely, candy, soft drinks, beer, and a host of crisp-fried snack items that are consumed in great quantities, particularly by our young people. Even though there were no standards of identity for such products, and the food industry was free to add to their nutritive value, to fortify and enrich these foods, few such efforts were made.

Malnourishment, whether caused by poverty or improper diet, contributes to the alarming health situation in the United States today. Since 1950, that portion of the nation's income devoted to health services had risen from \$12 billion to \$70 billion. Yet, during the same period, there had been absolutely no increase in the life expectancy of males at age ten, and a very insignificant increase for women. Indeed, in almost 30 nations life expectancies for adult males were greater than they were in the United States.

White House Conference

The aim of the 1969 White House Conference was thus to evaluate the state of nutrition of the American people and to formulate the basis of a national nutrition policy. The recommendations put forth by the conference had to cover four principal areas of

concern: food assistance for the poor, nutrition and health programs, regulatory aspects of food production and supply, and nutrition education. The meeting was planned to reflect these preoccupations; more than 30 panels of experts from the academic, medical, industrial, and agricultural worlds, as well as qualified representatives of consumer and poverty organizations, prepared preliminary sets of recommendations for action; the conference itself was meant to be a gigantic exercise in sensitivity training. Among the 4000 delegates were hundreds of poor persons, as well as students and representatives from all large social organizations; the chief executives of all large food companies; consumer advocates; government officials, including the President; academic and government nutritionists; and a host of other concerned citizens. A series of managed confrontations forced each group to listen to persons they had never listened to before; in the end, a broad measure of consensus was reached. A follow-up conference, held in January 1971 (2), which had been built into the structure of the original conference, served to measure programs and emphasize deficiencies. Fifteen thousand reports were distributed free of charge by the conference. It appears that the conference has been a very effective planning and action device. (It has also been economical; over \$120,000 of the \$500,000 jointly allotted to the White House Conference by the Ford, Rockefeller, and Kellogg foundations were returned to the foundations.)

Hunger Programs

First, the food stamp program has been radically revised. In general, the amount of food stamps available to poor families—\$106 per month, for a family of four—was sufficient to provide an adequate diet in 1969. The cash commitments necessary to purchase stamps have been reduced, and free stamps are offered to those in the lowest income brackets. The number of people receiving food stamps has risen from 2 million to well over 10 million. And, now that cuts in the program have been warded off, that figure should rise further, to about 14 million in the near future. The 1969 payment of \$106 has been raised to \$112, a sum which, however, is no longer sufficient—a minimum of \$120 for a fam-

ily of four is necessary. In fact, it would be desirable to shift the food stamp basis from the U.S. Department of Agriculture's "economy" diet to the low-cost diet of \$134.

Second, the commodity program is gradually being withdrawn; in many areas, it has already been replaced by the revised food stamp program. However, in December 1971, direct food distribution still covered 3 million to 4 million people, primarily in counties that had previously had no food assistance program of any type. In 1969, nearly 500 counties were without family food programs; today every county in the United States has some form of assistance.

Third, the school lunch program has been expanded to cover over 8 million poor children as compared with only 2 million prior to the conference. In addition, today a total of 14 million to 15 million people out of a potential 25 million are receiving one or the other form of family food assistance (2).

Despite these gains, further action must be taken, not only to improve the quality of existing programs, but to implement many of the other recommendations proposed by the conference participants. The school lunch program, in particular, is faced with several serious problems. The depressed state of the American economy has had a clear impact on the number of children who desperately need to be included in the program. In 1969, 6.6 million children were classified among the very poor; a year later the number had risen to 9 million or 9.5 million; at least 1 million eligible children still do not receive a free lunch. Supplementary appropriations are essential if we are to reach these additional students.

At the same time, many communities seem reluctant to implement school lunch (and breakfast) programs. A major problem is insufficient goodwill on the part of school committees in such cities as Boston. Other difficulties are, first, the absence, at the local level, of flexibility and resources such as professional assistance and food services equipment, a failing that could be corrected by the adoption of an adequate revenue-sharing plan; and second, the lack of sharply defined directives from Washington. The regulations set by the Department of Agriculture generally contain such a multitude of loopholes that local school districts, unwilling to institute free lunches, are simply not required to do so.

In terms of general nutrition programs, the federal government has moved much more slowly. The Department of Health, Education, and Welfare has been particularly tardy in expanding health services. The President's family assistance plan, *if established on a sufficient and meaningful level*, would be an effective way to provide food assistance through income maintenance. However, a great many other programs, particularly those relating to child health, should have been developed without waiting for an overall rise in the income of the poor, a rise that will be decisive in only five or six states once the plan is enacted. Comprehensive health care programs, incorporating effective nutritional services, should be provided immediately for all children.

The elderly present a problem of special urgency. On the whole, they are poor. They are also handicapped by a number of chronic diseases, lack mobility, and often have lost their teeth. They are often isolated; many are malnourished. They fear being sent to nursing homes as the young fear being drafted. They need supporting nutritional services which also enable them to have daily contacts with the outside world (8). "Meals on Wheels" programs delivering at least one good meal every day, or daily community meals, were programs recommended by the Section on Aging of the White House Conference on Food, Nutrition, and Health, and repeated by the Nutrition Section of the White House Conference on Aging (8). A bill to implement these proposals has been passed by Congress this year and will provide \$100 million in fiscal 1973 and \$150 million in fiscal 1974.

Consumer Programs

With regard to informed labeling, quality grading, and food safety, progress is evident in some areas and totally absent in others. The question of improved food labeling and date coding has engendered considerable interest over the past year. Consumers regard labels as their primary source of information about the contents, safety, and nutritional value of the food they buy. Given our existing nutrition education programs, it is not difficult for the average citizen to select simple meats, vegetables, and fruits, and pro-

duce a balanced diet. But what if the choice involves such new foods as frozen pizza or a spinach souffle? How should these products be classified, and how should they be labeled? In recent months, various attempts have been made to devise an accurate and useful method of presenting food information to consumers through product labeling (9). An experimental scheme has now been adopted by the chain of Giant Food stores in the Washington, D.C., Baltimore, Maryland, and northern Virginia area (9). The content and percentage of recommended dietary allowances in terms of calories and vitamins and minerals—ten different nutrients—are now printed on the label of house brands distributed by the chain. The old system, where the only indications on the label were those favorable to the product, has been replaced by a complete listing of the calories per portion, the amounts of protein and fat, and the quantity of several vitamins and minerals. All of these nutrients appear in the same order on the label of every item, along with the specific concentration for that particular product; for instance, the listing on a can of pork and beans may indicate the content of vitamin A and C to be zero. In addition, the labels will give the percentage content of the valuable (named) ingredient: percentage of beef in "beef stew," percentage of turkey in "turkey pie," percentage of pork and of beans in "pork and beans." Hopefully, this system or a comparable form of informed labeling will soon be adopted by food manufacturers and retailers across the country. Legislation to this effect has been introduced in the U.S. Senate.

Food Safety

With regard to food safety, an effective approach to the complex question of toxicity has yet to be found. The Food and Drug Administration (FDA) is unable to carry out all the research required in this area, and no independent research groups had been established to study such problems as the safety of new chemical additives, and to make recommendations to federal regulatory agencies. A large U.S. Army installation in Arkansas has now been deactivated and will be put at the disposal of the FDA. This will enlarge the "in-house" capabilities of the FDA and will some-

what relieve the pressure on it. With respect to nutrition advice, the Food and Nutrition Board of the National Academy of Sciences-National Research Council performed a valuable service in regard to a limited number of nutritional problems during World War II; but it seems unable to provide on a day-by-day basis the advice required by the FDA now with the speed expected (and required) by consumers, manufacturers, and the federal agencies.

The current controversy surrounding the mercury content of fish underscores the need for authoritative, yet understandable, information about food safety. Mercury is an element of the earth's crust and is present, in varying trace amounts, in every food. However, if this natural toxicant occurs in excessive quantities, or is consumed in excessive amounts, it can cause death. Somewhere there is a safe limit of intake of mercury. How long it will take to determine that limit remains to be seen, but, in the interim, some guidance must be provided. As an experimental scientist, I would be reluctant to offer advice on the basis of incomplete evidence. Yet, it is clear that when a case of food toxicity becomes public knowledge, a host of journalists and commentators begin to voice opinions that influence the eating habits of the American consumer. Given this situation, it is better to act on the conjecture of scientists than on the guesses of newspapermen.

The safety of the more than 1500 chemical additives now present in American foods should also be studied more closely. Most of these substances fulfill definite needs; others, however, have been introduced for no compelling reason. In evaluating each compound, its safety must be balanced against its potential social usefulness (10).

Long-Range Problems

Efforts to establish new guidelines for food enrichment and fortification have progressed at a disappointingly slow pace. The organized scientific bodies seem unwilling to make recommendations on the basis of information currently available and then to make clear that their judgments may be modified in 3 to 5 years if subsequent research dictates such action. In addition, virtually no steps have been taken by the food industry to reduce either the sugar

content or the saturated fat and cholesterol content of foods. The technology of the food processing industry has made it possible to alter the fat and sugar content of a great variety of foods, but without public pressure few changes can be expected. There is evidence, however, that this pressure is now being felt in some areas; the meat industry, for example, is being urged to shift its emphasis to leaner meat or even to substitute polyunsaturated fats for part of the meat fats in formulated meat products.

In the end, each individual must have a basic understanding of the principles of nutrition if we are to ensure a healthful diet for all Americans. Throughout the past year, there has been widespread discussion on the importance of instituting nutrition education in the schools and universities, and at the community level (11). However, few attempts have been made to advance the social sciences from a means of imparting knowledge to that of changing attitudes, and even of changing behavior. A public information nutrition campaign should be instituted immediately on the basis of existing knowledge and resources; later, the effectiveness of this program can be improved through further research into the socio-economic and cultural factors that influence the individual's choice of food.

A national nutrition policy cannot succeed unless substantial federal funds are appropriated for applied nutrition research, nutrition education, and food control. Each year, the United States spends approximately \$125 billion on food, yet the FDA must carry out its varied program of food inspection on an annual budget of \$34 million. At the present time, the FDA has only a few hundred inspectors to oversee 60,000 to 80,000 food plants in this country. Only

a few million dollars have been allocated by the federal government to counterbalance the expenditures of well over a billion dollars that are annually devoted by food companies to promote what are often the least nutritious foods (12). Unless a minimum of 0.2 percent of the nation's food bill is expended on each one of the three programs—food control, nutrition research, and public education—the United States cannot even begin to achieve an adequate and comprehensive nutrition policy (2).

Greater public awareness of our social problems will be a decisive factor in eradicating the hunger due to poverty. For the first time in the history of mankind, we have the technical potential to fulfill all the food needs of this nation, now and for many years to come. However, this tremendous agricultural productivity cannot, by itself, ensure an adequate diet for all Americans; it must be coupled with a genuine compassion for the poor, a realization of the extent of their needs, and finally, a determination to ease their plight. In contrast, the problems of food policy are far more difficult to solve. They will be present continuously not only in this country but, to a far greater extent, in those areas of the world where population pressures are intensifying so rapidly. These issues necessitate a thorough reexamination of our policies and habits concerning food. This rethinking should begin in the scientific and medical community which, oddly enough, has appeared reluctant to accept the call for change. To an extent, their reticence reflects a lack of training in basic and applied nutrition science; nutrition is a relatively new science. Until very recently, it was not taught at all in medical schools, and, even now, it is not taught in the vast majority of them (13), yet, a national

nutrition policy cannot become a reality unless advanced academic training in nutrition is required for medical personnel, health scientists and educators.

There are many social problems whose vastness and complexity defy any but slow and experimental solutions. Our nutrition problems, though vast, are by no means hopeless. The White House Conference demonstrated that a blueprint could be established. Progress since then shows that action is possible, but it will take the concentrated action of "experts" and large, vigorous elements of the public if the momentum is to be conserved.

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14. Additional information on U.S. nutrition programs can be obtained by writing to the U.S. Department of Agriculture, Washington, D.C., and asking for "Food and Nutrition News."