

SECTION 4

Nutrition Teaching and Nutrition Education

PANEL IV-1: Nutrition Teaching in Elementary and High Schools

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REPORT OF PANEL IV-1

This report recognizes both the urgency for immediate action to eliminate hunger and the need for a long-range program in nutrition education.

The objective of nutrition education is to promote optimum health through food and thus contribute to an individual's potential for achieving his life's goals. Sound nutrition education should enable each individual, throughout his life, to

make wise decisions about his food choices. Every person should have sufficient economic resources so that these choices can be made without compromising social values, family tradition or cultural preferences. The national emergency relating to hunger and malnutrition means that special attention must be given immediately to reaching children of all ethnic and economic backgrounds.

A dynamic nutrition education program that begins in early childhood and continues through the elementary and secondary schools can help young children to acquire positive attitudes toward food. Also it can help older children to assume responsibility for their own food selection and prepare them for adult and parental responsibility. As future citizens in a democracy, children must develop acceptable nutritional practices and a sense of social consciousness to enable them to participate intelligently in the adoption of public policy affecting the nutrition of people.

Nutrition education in the schools can be effectively integrated into many curriculum areas, or nutrition can be taught separately. School nutrition programs should be extended to include parents and other adults. Learning opportunities should be designed to accommodate to individual differences arising from cultural, economic, personal and family conditions. By applying the best of what is known about how people learn, by utilizing new educational techniques, by taking advantage of school feeding services as a laboratory for classroom experiences, by using new resources, by transmitting a feeling of excitement about the world of food, nutrition education programs that are dramatic and vital can be developed in the schools.

Recommendation No. 1: OPERATION FOLLOWUP— Now!

We recommend:

1. That the urgency of the hunger emergency be communicated to chief State school officers, county and local school administrators, school boards, parent-teacher associations and other community groups by organizations represented in this White House Conference and/or by State nutrition councils and other group and youth organizations concerned with nutrition and health.
2. That all programs to eliminate hunger and malnutrition—both in and out of school—be reinforced with nutrition education programs so that individual food choices will provide optimal nutritional health now and in the future.

Recommendation No. 2: SCHOOL FOOD SERVICES

To make sure that no schoolchild will be hungry and the goal of eliminating malnutrition will be

reached, it is imperative that nutritious food be made available at once to all schoolchildren by expanding school food services.

Children are helped to develop good food habits by receiving needed nutrients in the school setting from a variety of foods acceptable to all cultural groups represented in the schools, and planned, prepared, and served in accordance with scientific and aesthetic principles.

In addition, school food services can function as laboratories for applying nutrition principles taught in classrooms. Nutrition teaching is fostered when inschool feeding is available.

We recommend:

1. That lunch and breakfast to insure good nutrition be provided when needed to all schoolchildren including those in prekindergarten and day care.
2. That the administration of food service be a responsibility of school authorities. Regardless of where or by whom food used in school feeding is prepared, school authorities must set standards of sanitation, nutrition and costing, and provide a comfortable, pleasant place for eating, and allow time for good eating behavior and social interaction.
3. That all levels—Federal, State and local—direction, supervision and monitoring of food service must be provided through personnel trained in nutrition and food management. Continuous inservice and workshop training must be provided for employees at all levels.
4. That maximum use of food service facilities be made for career training and nutrition education for students and adults.
5. That adequate funding be provided through Federal and State legislation to ensure optimum schoolday meals, including breakfast, lunch and supplementary foods as well as necessary facilities.
6. That student, parent, and community involvement in food services be encouraged.
7. That school authorities be encouraged to develop innovative ways to feed schoolchildren with maximum efficiency compatible with the objectives and rationale as expressed in the foregoing recommendations.

This Panel is in basic agreement with the recommendations of Panel V-3 and Panel V-5.

Recommendation No. 3: APPOINTMENT OF A COORDINATOR OF NUTRITION EDUCATION SERVICES IN THE U.S. OFFICE OF EDUCATION

The poor nutritional status and eating habits of large numbers of people—at all age levels and in all socioeconomic strata—provide ample evidence that there are serious inadequacies in the total nutrition education effort to date. Strong and effective leadership and coordination at the national level in cooperation with State and local agencies is essential to raise the nutritional health of all citizens. There is an urgent need for the creation of innovative approaches combined with the extension of proven methods of nutrition education.

We recommend:

That the Assistant Secretary of HEW, the Commissioner of Education appoint to his staff a coordinator of nutrition education services who is a professional educator with a background in nutrition. Supporting staff should include nutrition educators, health educators and communications specialists.

Provisions should be made for bringing together in an advisory capacity leading nutritionists, educators, behavioral scientists, consumers of varied ethnic and economic backgrounds, industry representatives and youth. The nutritional expertise found in several Federal agencies (including the Inter-agency Committee on Nutrition Education), in allied professional groups, in State agencies, in colleges and universities, and in private industry should be tapped also.

The nutrition education coordinator and staff would assume a leadership role in the development of new curriculum materials; would cooperate with State and local school systems, colleges and universities, allied professional organizations, industry groups and others who have demonstrated a desire to produce sound nutrition education aids; would work with textbook, magazine and newspaper publishers and others in the mass media to further nutrition education efforts in ways which will motivate desired changed behavior; would stimulate, support, and cooperate with those planning nutrition education institutes, workshops, symposia and other methods of inservice training for teachers; and would work toward the continuing evaluation of the status of nutrition education.

In order to expedite the recommendations made by the White House Conference, the appointment of the coordinator of nutrition education services should be made by March 1, 1970.

Recommendation No. 4: COORDINATION OF NUTRITION EDUCATION ACTIVITIES AT THE STATE AND LOCAL LEVELS

In order to implement effectively and at the earliest possible date the recommendations of the White House Conference, there is an urgent need for coordination of existing and emerging nutrition education programs and services at the local and State levels.

Current resources, personnel, and programs need to be identified, utilized, and coordinated so that priorities for innovative programs and services can be developed according to local and State needs.

We recommend: That a person with a nutrition education background and essential personal qualifications be designated to coordinate nutrition education activities and nutrition services at State and local levels. Such coordinating personnel should be assigned in sufficient numbers to cover adequately the student enrollment and the geographical area.

Recommendation No. 5: ENLISTING ESSENTIAL SUPPORT OF KEY SCHOOL ADMINISTRATORS, PROFESSIONAL GROUPS, AND INDUSTRY IN UPGRADING NUTRITION EDUCATION AND SERVICES IN GRADES PREKINDERGARDEN THROUGH 12 OF THE NATION'S SCHOOLS

Administrative leadership personnel at all levels, from the State commissioner of education to the principal of the smallest elementary school in the smallest independent school district, must understand, accept, and actively support a nutrition education program if it is to be implemented and carried out with any appreciable degree of harmony and effectiveness. This is essential regardless of the competency, dedication, or determination of individual teachers, supervisors, or professional organizations, or of the quality or need of the program proposal. In addition, involvement and coordination of nutrition education activities of various professional groups with school programs are necessary in strengthening the whole concept of nutrition education and nutritional services in the schools.

We recommend: That steps be taken immediately by the Office of Education, or an appropriate coordinating agency, to:

1. Develop and obtain funds for a 3- to 5-day national conference or series of regional conferences to be held in the spring of 1970 to which all chief State school officers and appropriate members of their staffs who are associated with nutrition instruction, nutrition and health services, curriculum development, teacher education, and school administration will be invited.

The purpose of this conference is to:

- (a) Highlight and focus attention on the critical need to recognize the growing importance of nutrition education in the schools at all levels of school administration, to study and evaluate present educational efforts in this area, and to develop improved programs to strengthen these efforts.
- (b) Consider the findings of HEW's National Nutrition Survey; the long-time trends of food use and nutrient consumption as shown by the repeated studies of the USDA since 1930; and research on diets, food habits, nutritional status, and nutrition education of children in the United States.
- (c) Project the selected on-going programs in individual schools or school districts, or at the State level, that have been exceptionally successful in the development of improved nutrition education and services and optimum school health curricula.
- (d) Report observations, findings, and recommendations of the White House Conference on Food, Nutrition, and Health.
- (e) Suggest evaluative criteria to be generally used in the study and evaluation of present curricula, teaching methods, and resource materials and aids to be used through grade 12.
- (f) Develop methods of implementation of new approaches through the participation of these representatives.
- (g) Examine models of proposed curricula from grades K through 12 to be used

as guidelines for individual State and local consideration.

- (h) Consider parent education and other forms of adult education in the schools that contribute to the nutrition of the children.
 - (i) Display available updated resource materials, related publications, and audio-visual materials by publishers, film producers, private industry, and governmental agencies.
 - (j) Develop followup communication and developmental procedures between groups, and on-going communication between appropriate agencies.
2. Enlist the active and continuing involvement of key school administrators and educators, pertinent professional organizations, private industry, and other groups in the nationwide effort to help eliminate hunger and malnutrition in this country through a coordinated effort in nutrition education in grades pre-kindergarten through 12.
3. Provide funds to support State and local planning and development of curriculum, resource materials, instructional aids, teacher training programs, and school-community activities directed toward improving the nutritional environment of school children. Built into individual proposals should be a system of reporting and evaluation.
4. Develop a plan for continuing surveillance and communication over a 3- to 5-year period to further support, strengthen, and enlarge the concepts of nutrition education and nutrition services in the school.

Recommendation No. 6: CURRICULUM IN NUTRITION EDUCATION

Throughout his life every person should be able to make decisions on his choices of food based on an understanding of his needs as determined by: (1) his physiological state and physical activities, (2) his knowledge of the nutrient composition of plant, animal, and formulated foods in his environment, (3) his ability to distinguish between truth and distortion in relation to foods, nutrition, and health, (4) his personal likes and cultural background and (5) his ability to use his available resources whatever they may be. As future citizens in a democracy, children must acquire knowledge

and social consciousness which will enable them to participate intelligently in the adoption of public policy affecting the nutrition of the people.

We recommend:

1. That a comprehensive and sequential program of nutrition education be included as an integral part of the curriculum of every school in the United States and its territories.
2. That the proposed conceptual framework given below be used as a resource in developing new curriculums and evaluating existing curriculums.
3. That a national interdisciplinary study group be formed to assess the current status of nutrition education in the schools, to prepare curriculum guidelines and resource materials for the use by State and educational agencies, to suggest demonstrations and pilot programs designed to test, evaluate, and revise materials and to give continuing considerations of the proposed conceptual framework.

Conceptual framework for nutrition education in the schools

1. Nutrition is the process by which food and other substances eaten become you. The food we eat enables us to live, to grow, to keep healthy and well, and to get energy for work and play.

2. Food is made up of certain chemical substances that work together and interact with body chemicals to serve the needs of the body.

(a) Each nutrient has specific uses in the body.

(b) For the healthful individual the nutrients needed by the body are usually available through food.

(c) Many kinds and combinations of food can lead to a well-balanced diet.

(d) No natural food, by itself, has all the nutrients needed for full growth and health.

3. The way a food is handled influences the amount of nutrients in the food, its safety, appearance, taste, and cost; handling means everything that happens to food while it is being grown, processed, stored, and prepared for eating.

4. All persons, throughout life, have need for about the same nutrients, but in varying amounts.

(a) The amounts needed are influenced by age, sex, size, activity, specific conditions of

growth, and state of health, altered somewhat by environmental stress.

(b) Suggestions for kinds and needed amounts of nutrients are made by scientists who continuously revise the suggestions in the light of the findings of new research.

(c) A daily food guide is helpful in translating the technical information into terms of everyday foods suitable for individuals and families.

5. Food use relates to the cultural, social, economic, and psychological aspects of living as well as to the physiological.

(a) Food is culturally defined.

(b) Food selection is an individual act but it is usually influenced by social and cultural sanctions.

(c) Food can be chosen so as to fulfill physiological needs and at the same time satisfy social, cultural, and psychological wants.

(d) Attitudes toward food are a culmination of many experiences, past and present.

6. The nutrients, singly and in combinations of chemical substances simulating natural foods, are available in the market; these may vary widely in usefulness, safety of use, and economy.

7. Foods play an important role in the physical and psychological health of a society or a nation just as it does for the individual and the family.

(a) The maintenance of good nutrition for the larger units of society involves many matters of public concern.

(b) Nutrition knowledge and social consciousness enable citizens to participate intelligently in the adoption of public policy affecting the nutrition of people around the world.

Recommendation No. 7: PREPARATION OF PERSONS WHO HAVE RESPONSIBILITY FOR NUTRITION EDUCATION IN SCHOOLS

Adequate preparation for teaching nutrition in the schools requires undergraduate education in nutrition, as well as in methods of teaching. Also, because of continuous expansion of knowledge in nutrition and food science, advancements in food technology, and developments in educational techniques, a strong continuing education program must be provided both for teacher-educators and school personnel.

We recommend: That the following steps be taken as soon as possible to prepare teachers in nutrition education and to keep them up to date, and that funds shall be made available through public and private sources for the support of such training and for tuition and other costs of courses and workshops.

1. *Pretraining*

(a) State departments of education should encourage individual universities and colleges to incorporate appropriate nutrition units in existing courses for all elementary teachers, school nurses, and at the secondary level, all teachers of health education, biology, chemistry, home economics, and physical education.

(b) These courses should be taught by teachers with a doctoral degree in nutrition, or professionally qualified personnel in closely related fields, such as public health, food science, home economics, education, or biochemistry.

2. *Continuing education*

(a) Teachers and supervisors in related areas, school health personnel, and school food service should keep up to date in nutrition education and educational techniques.

(b) Opportunities for continuing education should be made available through workshops, extension courses, inservice institutions, individualized instruction and educational television.

Recommendation No. 8: PARENT AND OTHER ADULT EDUCATION

Effective nutrition education programs in schools involve the parents and other members of the community. Schools must acquaint all people with the nutritional needs of children, the importance of good nutrition to the total well-being and behavior of the child, the significance of child nutrition to education and social progress, and the deterrents to good nutrition which children encounter in their environment. To be most effective nutrition programs for children should involve parents. Education in nutrition should be provided for parents of children in day care centers and prekindergartens administered by the schools as an important first step in the continuing education of the child.

In order to promote better health and greater productivity in adulthood, opportunities for continuing education in nutrition should be provided. Such education would help adults of various groups to improve their own health as well as that of their families, and would enable them to be intelligent consumers in the marketplace.

Special nutrition education opportunities are needed for older people whose food habits often need improvement and whose health often suffers from poor nutrition. In school feeding programs for the elderly poor, nutrition education should be emphasized strongly.

Vocational education programs may be used as a means for preparing more people for food services. Some basic education in nutrition can enhance the contribution of these people to the welfare of the children. In vocational education some attention should be given to the role of nutrition in the employability of people and their performance on the job.

We recommend: That schools should expand nutrition education programs to include parents of schoolchildren and other adults in the community, especially where need is the greatest; and that curriculum guidelines for nutrition education of children should include suggestions for education of parents.

Recommendation No. 9: EXECUTIVE, ADMINISTRATIVE, AND LEGISLATIVE ACTION FOR RESEARCH AND TRAINING EDUCATIONAL PERSONNEL

The preceding recommendations will require appropriation of funds at the Federal and State levels. In addition, the following actions are needed urgently in the interest of building a sound nutrition education program throughout the Nation:

We recommend:

1. That funding for the preparation and retraining of teachers and paraprofessionals, and for research in nutrition education be designated as high priority needs under existing legislation and various Federal programs which include:

Education Professional Development Act, particularly part E and title IV of the National Defense Education Act.

Elementary and Secondary Education Act.
National Institute of Mental Health.

National Institute of Child Health and Human Development.

Health Services and Mental Health Administration.

National Science Foundation.

Vocational Education Amendments of 1968.

2. That the full authorization of funds be appropriated under the Elementary and Secondary Act, the Educational Professional Development Act, and other existing Federal legislation that can be used for the promotion and development of nutrition education.
3. That the Allied Health Profession's Personnel Training Act of 1966 (Public Law 89-75) be extended in fiscal 1971 to include training grants for nutrition educators and nutritional scientists.
4. That the President approve the expenditure of all funds presently appropriated for education by the Congress.

Recommendation No. 10: ACTIONS NEEDED TO SUPPORT NUTRITION EDUCATION IN SCHOOLS

One of the goals of nutrition education is to develop an informed public capable of making wise food choices. However, when advertisements

of private industry are contradictory or are at cross purposes with school nutrition efforts, nutrition education is seriously handicapped. Labels on common packaged processed foods give little or no information regarding the quantity of nutrients contained. Also, there is a great increase in availability of imitation foods, processed foods, snacks, and related manufactured products whose composition is generally unknown to the consumer and even to most nutrition educators, who must give advice on the use of such products. Many educational materials in nutrition are available, but not enough give consideration to the different cultural groups of our country.

We recommend:

1. That in the interest of nutrition education the recommendations of the panels of this conference concerned with informative labeling, responsible advertising, and nationwide uniform enrichment laws be put into practice quickly.
2. That food industries, textbook publishers, State and Federal agencies encourage the development of additional nutrition curriculum materials and aids which reflect the different cultures of the people of our Nation.

PANEL IV-2: Advanced Academic Teaching of Nutrition

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REPORT OF PANEL IV-2

INTRODUCTION AND SUMMARY

A physically healthy population is a prerequisite to all other national goals. The White House Conference on Food, Nutrition, and Health is based on the conviction that the provision of a quantitatively and qualitatively adequate diet for all citizens is a key element in maintaining a health population, in preventing illness and in facilitating recovery from illness. The health growth and development of children and the maintenance of health in adults rests primarily on the interaction of patterns of diet and activity. Therefore, a national nutrition program must be a fundamental element in a national policy of public health and preventive medicine. Preventive health care is the best single avenue for reducing the Nation's rising medical bill.

Proposing a national policy for advanced academic teaching of nutrition implies some assumptions about the future health care delivery system in our country and about the manpower policy necessary to provide the personnel needed. Therefore, the Panel makes specific recommendations regarding these two topics as a basis for recommendations concerning education.

I. THE ROLE OF NUTRITION IN THE NATION'S HEALTH CARE SYSTEM

A national nutrition and health policy must have its primary focus at the community level to ensure that adequate food and knowledge of how to use it is available to provide health benefits in the daily lives of people.

(a) *Food Availability.*—The most urgent objective is to combat hunger and malnutrition. Therefore, the Panel supports several recommended actions of other panels aimed at insuring that every citizen has available an adequate and balanced supply of food as the cornerstone of a national nutrition policy.

(b) *Food Utilization.*—To encourage the effective utilization of the available food supply in order to facilitate both health and recovery from illness, the Panel recommends expansion and further development of Community Nutrition Services as part of the comprehensive health and welfare or human services program of every State.

II. A MANPOWER POLICY FOR A NATIONAL NUTRITION PROGRAM

A national program cannot be accomplished without a major increase in manpower with competence and commitment in the field of nutrition including physicians, dentists, basic scientists (biological and social), dietitians, public health nutritionists, nurses, health educators, and food scientists and technologists. The Panel recommends a manpower policy as follows:

(a) The direct delivery of service at the community level is an objective that can be accomplished primarily by nutritionists and dietitians educated at the baccalaureate or higher degrees level assisted by health aides and technicians with competence in nutrition.

(b) Leadership for the development and administration of community nutrition services, for nutrition education, and for nutrition research requires advanced training and specialization in nutrition.

(c) Personnel in other health professions whose primary commitment is not in nutrition should be prepared also to play a supporting role in a national nutrition program.

The Panel further recommends that the Department of Health, Education, and Welfare, through the Office of Nutrition proposed by Panel I (a recommendation that our Panel supports), work with public and private agencies at national, State and local levels to revise civil service and other job descriptions to permit employment of, and provide a career ladder for employment of nutrition personnel with educational preparation below the graduate level, as well as at the graduate level.

III. A POLICY FOR ADVANCED EDUCATION IN NUTRITION

To provide the manpower for a national nutrition program, training grants must be provided to stimulate a major expansion of nutrition education opportunities. The Panel recommends the following approach:

(a) The prerequisite for a national effort is to increase the number of people with advanced degrees in nutrition to provide the needed manpower for an enlarged training effort and to provide leadership for developing community nutrition services. First priority must be given to expanding graduate programs in nutrition with primary (although not sole) emphasis on the application of nutrition knowledge to the improvement of health. Training grants and student stipends must be provided to effectively carry out this recommendation.

(b) To expand the number of personnel available to provide direct service at the community level, the second priority must be a program of training grants to stimulate the development of baccalaureate programs in community nutrition and dietetics. In addition, this program should stimulate the provision of nutrition teaching to students in related fields such as nursing, health education, home economics, and other allied health specialties.

(c) The present program for developing health aides in nutrition should be continued and correlated with the utilization of baccalaureate personnel, who should be qualified to train and supervise such aides. Special attention should be given to providing opportunity and incentive for nutrition health aides to continue their education toward a baccalaureate degree. This would provide a "career ladder" opportunity for nutrition aides who are usually recruited from the consumer groups with the greatest nutrition problems.

(d) *Funding of Education Proposals:* The sources and time available to the panel did not permit responsible estimates of costs of implementing these educational programs. Estimates should be prepared by an agency of Government, hopefully through the proposed Office of Nutrition in the Department of Health, Education, and Welfare, and funded by means of appropriate legislation.

Recommendation No. 1: EXPANSION OF NUTRITION SERVICES

A national nutrition program must have its ultimate focus at the community level where the

citizen must be served. New approaches to the delivery of this service are needed. Recommended approaches are more creative use of mass media, and expansion and further development of Community Nutrition Services, as outlined in Appendix A. Such services would provide:

1. Public education programs to make up-to-date nutrition information easily available to every citizen.
2. Consultation services to health professionals concerning the nutrition needs of their patients.
3. Consultation with individuals and families concerned with nutrition problems.
4. Provision of training programs for community health aides and technicians, educational opportunities for students working on degrees in nutrition and other health professions, and support for school programs in nutrition education.

Recommendation No. 2: EXPANSION OF NUTRITION MANPOWER

A national nutrition program cannot be accomplished without a major increase in manpower with competence and commitment in the field of nutrition.

1. The initial necessary condition for expanding nutrition education is increasing the number of people who can do the teaching. Therefore, the first priority in advanced academic education should be given to support for graduate (masters' and doctoral) programs in nutrition to provide manpower for university teaching and research and other positions of leadership.
2. High priority must be given for funding of educational programs (both traineeships and institutional support), for the entire continuum of the public health nutrition and dietetic professions, i.e., undergraduate, internship, masters' and doctoral programs, since these are the only health professions concerned solely with translating the findings of nutritional science into action in the nutritional care of people. Expansion of professionally focused baccalaureate programs in nutrition must be emphasized if a major expansion of personnel to work at the community level is to occur. Civil service and

other employment specifications should be expanded to include the nutritionist with baccalaureate education for entry level and staff positions under qualified supervision.

3. Programs for training community health aides and technicians in nutrition must be developed. Special attention should be given to providing opportunity and incentives for qualified community health aides and technicians to continue their education toward a baccalaureate degree. This would provide a career ladder opportunity for aides who are usually recruited from consumer groups within the community.

Recommendation No. 3: ADVANCED ACADEMIC TRAINING AND RESEARCH IN NUTRITION

A national program in nutrition can be effective only with major increases in competent personnel, teachers, investigators, and practitioners, who have been trained in the various nutrition disciplines.

The overall objective is the development of leaders who can plan programs, provide nutrition information and deliver nutrition services to the people. The training of leaders in nutrition should have first priority.

It is recommended that current advanced academic training and research programs in both basic and applied nutrition be strengthened and new programs established in colleges and universities so that nutrition leaders of the future can receive preparation for their careers in centers of excellence:

1. These centers should be devoted to training in one or more of the several disciplines of nutrition.
 - (a) Basic scientists in areas of biological or social sciences;
 - (b) Dietitians, public health and community nutritionists;
 - (c) Nutrition teachers for colleges, schools of home economics, health and physical education, special education, food science and technology, etc.;
 - (d) Physicians, dentists, nurses and allied health workers who either specialize in nutrition or use nutrition as part of their professional practice.
2. The strength of future programs in nutrition will be dependent in large part on the scholarly productivity and investigative efforts of

the leaders of nutrition in academic institutions. It is recommended that the search for new information and for elucidation of unsolved problems be continued with increased financial support. Important discoveries of the future can change the whole course of society.

3. Present facilities and training programs must be greatly expanded if present and future manpower needs are to be met. This can occur only if adequate Federal funds are made available for institutions, for training, and for student fellowships and stipends.

Recommendation No. 4: CURRICULA FOR TRAINING NUTRITION SCIENTISTS

Curricula for training nutrition scientists, teachers, and practitioners of all types need periodic revision and evaluation. The following recommendations are made for all areas:

1. More emphasis should be given to the meaning and value of nutrition in the whole life span as well as to nutrition in disease. The nutritionist's laboratory should be the home and the community in which the person lives as well as the traditional basic research laboratories.
2. New systems of delivery of nutrition services should be developed in conjunction with programs of total health care. Community medicine and ambulatory care are good areas for nutrition teaching in that basic information can be applied at a practical level.
3. Increased attention should be given to the preventive aspects of nutrition.
4. Special projects, courses and services in nutrition should be developed which can be elected by students as part of the curriculum.
5. More emphasis should be given to applied nutrition, not only in the classroom but through field experience in hospitals, clinics, and the community. Students of today are more socially conscious and community oriented than in the past. More interaction with the community and more interdisciplinary teaching and health services activity should be incorporated early in the course of study. The team approach is of great value in understanding and solving nutrition problems, for example, the physician, dentist,

dietitian, nurse, and social worker can work together in this area.

6. The scientific principles of modern food processing, including refining and manufacturing operations involved in preparation of commonly processed standard foods, convenience foods, and special dietary foods, should be included in the curriculum. Numerous advances in food science and technology in recent years have resulted in marked changes in the food supply of the American public.
7. Authoritative, attractive, and readily understandable information, derived from nutrition science should be provided for the continuing education of all personnel engaged in the teaching and practice of nutrition, from the elementary teacher and community worker through the university professor and high level administrator.

Recommendation No. 5: RECRUITMENT OF NUTRITION PERSONNEL

Public Awareness

The exciting values of good nutrition must be made evident to the public and all professional people who deal with individuals and groups.

There is a great need for men and women trained in the various nutrition disciplines. The public seems unaware of the various fascinating services to mankind for one educated in nutrition. One of the problems is the lack of understanding of the many meanings of nutrition. The public and school counselors need to know the values of nutrition such as its contribution to health, growth, learning, alertness, and ability to work. The positive values of nutrition in the actual lives of people should be stressed. The emphasis has been on the negative—on disease and deficiency.

The social, psychological, and cultural implications in nutritional care, along with the scientific applications, would interest many young people who are seeking to be involved in helping individuals to a better life. The personal rewards and satisfactions in life's work is being sought by youth through working to help people live better. The tremendous implications of nutrition in the welfare of the population should be used to recruit to the field of nutrition.

We recommend: That a massive program of recruitment to nutrition professions and educational programs be undertaken to fulfill the

needs expressed in this White House Conference.

Financial support should be provided for the development of existing and new training programs that will attract students into the field of nutrition as it relates to human health.

1. Increased numbers of scholarship and training stipends should be made available, and stipend levels should be increased.
2. New types of training and educational programs should be designed and supported to increase interest in nutrition among medical students and other members of the health care team: For example, interdisciplinary projects where future professionals from all relevant disciplines are exposed to important problems in nutrition, and to new systems of health care to alleviate these problems. Such programs should include a large component of applied nutrition so that the students will be prepared to participate effectively in nutrition education of the public.
3. There should be reinforcement of current programs in nutrition training and research, as well as establishment of additional programs.

Need for Recruitment

Recruitment should draw from all groups in American society with emphasis placed upon those who have not had an opportunity to participate previously in responsible positions in health and nutrition. It is believed that recruits drawn from the community will be especially well equipped to return to that same community as competent leaders, and thereby increase the effectiveness of the discipline they represent.

Career Opportunities

In addition to public health nutrition and dietetics, there is a multitude of opportunities for teaching and interpreting nutrition to people of all ages and walks of life in the community health-care institutions, the educational field, the food, equipment, and utilities industries, and communications media. Some of these opportunities are available to people with a baccalaureate degree, while others require some postbachelor's work.

Recruitment of Previously Trained Persons

Programs must be initiated to attract professionals who have been inactive, or who have left

nutrition, back into the field full-time and part-time. Also, an attempt should be made to bring individuals trained in areas close to nutrition directly into nutritional occupation by means of appropriately designed training programs and job incentives.

Recommendation No. 6: NUTRITION IN PUBLIC HEALTH PROGRAMS

The positive role of good nutrition in the well-being of individuals of all ages should receive increased emphasis. Nutrition must be included as an integral part of all public health programs at Federal, State, and community levels.

We recommend: That every health department, school system, department of public welfare, and voluntary health agency have an adequate number of nutritionists, dietitians, or nutrition consultants available. Hospitals, nursing homes, and similar institutions likewise need dietetic and nutrition personnel on either a full-time or consultant basis.

Recommendation No. 7: TRAINING OF PUBLIC HEALTH AND COMMUNITY NUTRITIONISTS AND DIETITIANS

Public health and community nutritionists and dietitians are the only health professionals whose professional training is grounded solely and specifically in the knowledge, skills, and art required in translating the findings of nutritional science into action in the nutritional care of people. Such care requires the ability to deal directly, or through others, with understanding of the science of nutrition, nutritional needs in health and disease throughout the life cycle, dietetics, food practices, food economics and budgeting, the psychological and social importance of food and eating, educational methods, and knowledge of ways of meeting the nutritional needs of individuals and communities. For the most part, the dietitian works in the hospital or clinic, while the public health or community nutritionist works in agencies in the community.

Educational requirements for dietitians and public health nutritionists are essentially the same at the undergraduate level and may be similar at the graduate level. Dietitians usually have an internship; public health nutritionists may or may not have an internship, but do have training in public health areas.

At the present time, there are about 30,000 dietitians and 1,000 public health nutritionists in this country. While data for estimating the number needed to provide even moderately adequate services to the American people are not at hand, there is common agreement that these numbers should be no less than doubled within 5 years. There is urgent need for these services in antipoverty programs, school health programs, consultation to patients of private physicians, programs of local and State health departments, and of various community agencies, clinics, hospitals, and other medical care facilities.

The potential impact of the services of these public health and community nutritionists and dietitians has never been realized, largely because of the small number available.

The aim of this recommendation is to urge that funds be provided for the training of increased numbers of dietitians and public health and community nutritionists, and that a national effort of recruitment for these fields be instituted.

We recommend: That funds, facilities, and staffing for education of dietitians and public health and community nutritionists, for various levels of competence, be provided immediately with planned progression of support for these objectives (see appendix B for details of financial needs.) At present, there are more applicants in the various categories than can be funded. Specifically, there is need for:

1. Funding of educational programs—both traineeship and institutional support for the entire continuum of public health nutrition and dietetic professions, i.e., undergraduate, internship, master's, and doctoral.
2. Funding for experimental development of undergraduate and graduate professional training in dietetics and community nutrition to prepare staff-level workers.
3. Funding for new programs providing doctoral level training in nutrition, dietetics, and public health nutrition, for the training of teachers in schools of public health, medicine, dentistry, nursing, home economics, and others.
4. Money for training community health aides and technicians to expedite the work of dietitians and community nutritionists.

Recommendation No. 8: NUTRITION TRAINING OF PHYSICIANS, DENTISTS, NURSES, AND ALLIED HEALTH PROFESSIONALS

In view of the fundamental importance of nutrition in normal growth and development and in the maintenance of health, it is essential that all physicians, dentists, nurses and allied health personnel receive some training in basic nutrition and its application in preventive and therapeutic health care. Some of these health professionals will be interested in studying nutrition as a specialty and will require extensive training in basic and applied nutrition science.

The teaching of nutrition in schools of medicine, dentistry and nursing is most inadequate at the present time; in some schools it is almost nonexistent. More information should be obtained as to the present scope and extent of this teaching. (See appendix C.) The number of specialists in nutrition among physicians, dentists and nurses is very limited; a few hundred persons would be an optimistic estimate.

We recommend:

1. That in each of the professional schools in a university such as medicine, dentistry and dental hygiene, nursing, public health, food science and technology, or allied health sciences, an individual or committee should be assigned responsibility for the surveillance of nutrition teaching in that school.

In some professional schools, it will be desirable to teach nutrition in a designated course dealing with basic scientific principles of nutrition and their application to human health. In many schools, nutrition teaching will be incorporated in courses such as biochemistry, physiology and certain clinical specialties. Regardless of the plan of instruction, basic nutrition should be part of the required or core curriculum.

In schools where trained nutrition personnel are not available because of financial restrictions, grants should be established to support nutrition teaching for the categories listed above.

2. In medical centers where more than one professional school exists, it is important that there be pooling of nutrition resources through a nutrition unit or a coordinating committee.

3. Existing programs of nutrition training should be strengthened and new programs should be developed. In schools in which trained personnel are available, nutrition units should be established where advanced training of nutrition specialists can be conducted. This will require additional facilities and adequate support for faculty and staff. Initial financial support of \$100,000 per school for initiating new training programs or aiding those already established is recommended. Establishment of at least 10 such programs would be highly desirable. Funds should be made available for tuition and stipends for graduate and postdoctoral students of medicine, dentistry and nursing, etc. who are receiving advanced training in nutrition. Career development awards should be provided for talented young faculty members. It is anticipated that support of about 100 graduate and postdoctoral students and 10 career development awards will cost about one million dollars a year.
4. Students should work with patients in their homes and community environments preferably over prolonged periods. In so doing they can develop an understanding of and concern for nutritional problems and for the role played by social factors in illness.
5. It will often be desirable to conduct clinical teaching of nutrition in small groups in hospitals, clinics and community centers. An interdisciplinary team approach is most valuable under these circumstances. The team may include physicians, dentists, nurses, nutritionists, social workers, pharmacists and other health workers.
6. It is recommended that units in clinical nutrition be established in teaching hospitals and community centers to demonstrate the value of such units in providing better patient care, in developing preventive medicine programs in nutrition and attracting young physicians and other health workers into the field of human nutrition.
7. Special elective courses in both basic and applied nutrition should be developed in all professional schools. More elective time is available in most curricula now than in the past. Electives that involve participation in programs designed to deliver total health care

in poverty areas are desirable and effective means of training and of developing an interest in nutrition. Electives in a division of nutritional and metabolic research may serve as an introduction to a career in academic clinical nutrition. A most valuable elective opportunity may be provided by overseas programs in countries where serious malnutrition is common.

8. Courses of study leading to advanced degrees in nutrition should be available for students of medicine, dentistry, nursing, food science and technology, and for workers in allied health fields.

In some institutions, plans should be made for curricula in which it will be possible to obtain a master of science degree in nutrition or a master of public health degree with a major in nutrition in conjunction with medical and dental degrees. Combined M.D.-Ph. D. programs in nutrition should be offered also and M.D.-doctor of public health programs. The same combinations should be possible for dental students.

Recommendation No. 9: TRAINING OF TEACHERS OF HOME ECONOMICS AND OF AGRICULTURAL EXTENSION WORKERS

Attention should be given to nutrition training at the undergraduate and graduate level within university units of home economics. Traditionally, such units have been a site of primary importance for the training of nutritional scientists and practitioners. They have been responsible for basic training of dietitians and public health nutritionists and have provided most of the nutrition training for agricultural-extension workers and teachers of home economics at the secondary school level. It is this group of teachers who provide nutrition education for the youth of this country. Extension workers bring nutrition directly to the public and are in the foreground of programs designed to combat malnutrition and improve nutritional health.

Today there is a growing trend toward changing the orientation of home economic programs as well as the name of these academic units. It is essential that continued recognition and support be given to nutrition training within the new programs as they evolve.

There has been a tendency to decrease the financial support and academic position of nutrition in home economics. This trend should be reversed.

The importance of this site for nutrition training should be recognized by both State and Federal Governments.

Recommendation No. 10: HEALTH, PHYSICAL EDUCATION AND RECREATION

Nutrition and physical fitness are very closely associated, good physical fitness status implying good nutrition. Beneficial effects of regular exercise upon physical efficiency, control of obesity, and in preventive and therapeutic medicine are established.

Professional personnel in the fields of health, physical education, and recreation are, in their respective ways, in unique positions to contribute to nutrition education and physical fitness because :

1. In school and out, they have regular contact with the great majority of the Nation's children and youth. Increasingly, the poor, the handicapped and their parents, and the aging are included in health, physical education and recreation programs.
2. Working through their professional organizations, they determine training of new personnel; and they establish policies, prepare widely used curriculum guides and program plans which greatly influence what is taught and what is emphasized.
3. They are committed to the encouraging of attitudes favorable to continuing physical activity, fitness and sound health practices generally.

We recommend :

1. That appropriate health, physical education, and recreation professional organizations hold conferences to determine the extent to which their respective personnel are being prepared to contribute appropriately to nutrition and physical fitness education and to make recommendations as needed.

2. That suitable materials, including literature and audiovisual aids be developed for updating of preprofessional and professional personnel and for use in instruction in nutrition.
3. That research be conducted on such subjects as the interrelationships of nutrition and physical activity.

Finally, if physical fitness needs for all citizens are to be met, many new facilities and opportunities for physical and recreational activities will need to be provided and made readily available to all.

Recommendation No. 11: RESEARCH AND TRAINING IN EFFECTIVE UTILIZATION OF FOOD SUPPLIES

Effective utilization of food supplies in the improvement of nutritional health, especially in areas of poverty, has been hampered by a lack of knowledge concerning many economic, cultural, and social factors that are of extreme importance in the proper selection and distribution of foods. New knowledge concerning the complex relationships between the market availability of foods and their effectiveness in improving nutritional health is urgently needed. Maldistribution of food is probably the most important factor contributing to malnutrition as it exists in the world today.

We recommend: That special emphasis, including financial support, be given to the study of the entire complex of factors of economic, social, and cultural nature that are essential for the effective utilization of existing food supplies for the improvement of nutritional health. Furthermore, such knowledge as does exist in this complex area should be included in teaching programs that are directed toward the improvement of the nutritional health of man.

APPENDIX A—PANEL IV-2

A Proposed National Policy on Nutrition and Nutrition Education

Any proposals about the development of nutrition education must be justified in terms of some human goals. Therefore, it is necessary to define some objectives and criteria to be observed in achieving them before making specific proposals about nutrition education.

HUMAN OBJECTIVES

The intake of appropriate and adequate foods and their effective utilization by the human body is the cornerstone of human growth and development to provide the basis for the maximum fulfillment of each individual's potentials for the following reasons.

1. What a person eats and how his body utilizes it controls physical growth and development. Without adequate nutrition the body and its functional systems may be underdeveloped, neurological mechanisms upon which learning and behavior control must be built may function only at partial capacity, and the person may be more vulnerable to many kinds of illness and dysfunctions. Thus, malnutrition will produce a need for many kinds of expensive remedial health care and impair effective functioning as a person and citizen.
 2. The nutritional habits people develop have major social impact. Inadequate supplies of foods acceptable in a given culture may produce all the problems of undernutrition or malnutrition for individuals, including the birth of poorly developed infants. It may also produce social discord among subgroups within a country or between countries with different levels of availability of necessary foods. This may happen even when alternate food supplies are available but are unacceptable because of cultural traditions or personal attitudes and habits. With inadequate food supplies, life itself is threatened and serious social discord among people may result as they compete for needed food supplies. Malnourished people do not have the energy or positive outlook on life which would enable them to deal with other social problems.
 3. Individuals and families living in a culture of plentiful food supplies may create serious health problems for themselves and limit their capacity for living most fully through faulty habits of nutrition. Malnutrition is not just a problem for the poor. It may be found in all socioeconomic levels and all age groups.
- Therefore, it is clear that an adequate national policy for nutrition must focus not only upon availability of supplies of necessary foods, but also upon the way people use that food to maintain themselves and their families in good health and with their behavioral capacities fully available.

An important investment in an adequate national policy concerning the nutrition of our people may be justified, then, upon philosophical, social and economic grounds.

1. It has always been a national goal of our country to provide the conditions under which each individual may reach his fullest potential and live the most creative, constructive, and satisfying life possible. The foundation for that social objective is a physically healthy population experiencing the most desirable growth and development across the entire life span. The cornerstone of healthy growth and development lies in the nutrients we take into our body from infancy through old age to promote and facilitate our development, our most effective functioning, and to prevent or reduce the rate of decline of our capacities.
2. An adequate nutrition program within our country and among countries could reduce social frictions among populations, cultures or subcultures, and all of the human and economically expensive consequences of those frictions.
3. In the longrun it is probably much less expensive to keep people in good health than to attempt to return them to good health once they have damaged the functioning of their bodies and the neurological structure upon which their intellectual and behavioral capabilities rest. A sound nutrition program must be a key element in a national effort to prevent illness.

A NATIONAL NUTRITION PROGRAM

For these reasons a comprehensive nutrition program as a matter of national policy should be considered a cornerstone of developing and maintaining a healthy population capable of its most creative activity. A corollary benefit would be a reduction in skyrocketing costs in our health care system by reducing the frequency and extent of human illness.

A national nutrition program has several objectives.

1. Its primary focus should be to insure that adequate opportunity for good nutrition and adequate knowledge about how to use available foods effectively for individual and family health is available easily and continually at the community level to people in all walks of life. The primary focus of the national policy should be upon the consumer, the ordinary citizen, and the availability of the necessary information and resources to attain good nutrition.
2. Many different professions are involved with the health, growth, and development of our citizens and have need for up-to-date information about good nutrition which they can use in their service to the

ordinary citizen or consumer. A sound program will make such information regularly and easily available to all professional groups.

3. Knowledge about good nutrition and the availability of different kinds of food materials and their nutritive characteristics will continue to change over time, and therefore the issue of maintaining up-to-date and accurate information and services concerning nutrition must be an integral part of a national policy.
4. While the national policy concerning nutrition must be related to general policies concerning adequate health care for our population, it must also serve many other institutional functions where nutrition knowledge is essential such as in schools, private commercial establishments, and individual families where the major portion of the delivery of food and informal nutrition education takes place.
5. The policy should observe the social objective of preserving and extending individual freedom and self-determination as fully as possible. This means that the policy should be designed to make it possible for people to become knowledgeable enough to design their own nutritional program rather than having to regularly seek (and pay for) consultation with some professional.

A COMMUNITY BASED NATIONAL POLICY CONCERNING NUTRITION

There are basically two alternatives for the formulation of a policy for the distribution of up-to-date nutrition knowledge to a large population. One alternative is to try to adequately train as applied nutritionists the great variety of existing professional personnel who deal with the health, growth, and developmental concerns of people. Such a policy would envision a massive expansion of educational efforts with doctors, dentists, nurses, teachers, food service managers, and the like. It would require extensive continuing education to try to keep them up to date. If one looks at the educational program for these professional personnel, it is immediately apparent that there are already severe strains in trying to include everything in their curricula they need to know to carry out their functions. For example, the competition for time in the medical school curriculum among the various fields that need to be represented in education of a physician is well known, and the same issues may be found in many other professions as well. One or two courses in nutrition will not prepare a person adequately to serve the need of the ordinary consumer for sound, accurate, and effective information about nutrition. Moreover, these people, whose primary focus is in other directions, will not be able to stay up to date as new knowledge develops, and in a short period of time the information being provided the consumer of being utilized in their work will be seriously inadequate or in error.

An alternative policy would be to make available in every community a resource of expertise which could be used by all, professionals and ordinary consumers alike, to further effective use of the foods available to them for

their healthy development. Such a resource could be designed with educative, consultative, and service functions. It would have the virtue of maintaining up-to-date competence in every community, a competence which could then be drawn upon by all those who needed to use it.

COMMUNITY NUTRITION CENTERS

It is recommended that a national policy and program to establish community nutrition centers be developed and implemented. These centers would be staffed by individuals with special training in nutrition. The majority of the staff would have training at the baccalaureate level or below and their work would be coordinated and guided by staff with advanced degrees and with the expertise for program development and maintaining the program up-to-date. Such community nutrition centers might be located in association with medical centers, community hospitals, comprehensive human service centers, universities, or in independent community based operations. Each center should have an advisory counsel composed of representatives of the consumers being served by the Center to monitor the effectiveness of its services and to make suggestions for their improvement.

They would have the following function:

1. *Public Education.*—They would be responsible for developing programs of information using media such as radio, newspapers, television, formal classes, and any other education mechanism they can design (such as packaged multimedia selfguided instructional programs that people can check out and take home as they would a library book). This program component would serve the objective of putting people in control of their own lives more fully by making available to them the resource and the opportunity to maintain their knowledge about good nutritional practices, and to obtain information for special purposes such as control of circulatory illness, or diabetes, or for special conditions of fetal and infant development.
2. *Consultation.*—Such community centers would be available to health personnel such as physicians, dentists, nurses, and for patients referred by medical specialists, to help them design nutrition programs for individuals and families where adequate nutrition is a crucial ingredient in recovery from illness and the prevention of future illness. Consultation would be provided to institutions responsible for extensive food services such as schools, prisons, nursing homes, and hospitals to insure sound nutrition programs in food service. Through this consultative mechanism, a continuing education program for professionals should occur so that they could become and remain knowledgeable enough about nutrition to recognize its role in health problems of the people they are serving. This is an alternative to trying to cram enough nutritional knowledge in while they are in professional training to enable them to do their job. Such knowledge rapidly becomes out of date. This alternative makes the latest knowledge available to such professionals at the time they need it to supplement their basic education in nutrition.

3. Such community centers might provide service to individuals and families struggling with nutritional problems and concerns, such as how to provide a good diet for a low income family using surplus foods.
4. *Training.*—Such centers could be responsible for training programs for nutrition aides, and could serve as settings in which students could get some professional training while working on degrees. Moreover, they might assist public schools in designing ways of including sound nutrition education in their health education program, and of keeping that component of health education up to date.

MANPOWER NEEDS

To implement this kind of national policy would require a major expansion of personnel with competence in the field of nutrition. Such a manpower policy should envision the development of trained personnel functioning at several levels of competence.

1. It should include the training of nutrition aides now underway in many parts of the country. Under regular supervision and training, they can render meaningful service.
2. It should stimulate the development of personnel trained in depth at the baccalaureate level to provide much of the daily service.
3. It should prepare people at the graduate level to plan, develop, and administer community nutrition programs.
4. It should stimulate the development of nutrition scientists to provide the necessary teachers and researchers.

EDUCATIONAL PROGRAMS

Such an approach to the support of educational programs to develop the necessary manpower for the national nutrition program recommended above should have three components.

1. The development of centers of competence in at least one university in each State which could (a) provide top-quality educational programs turning out baccalaureate and graduate level people, (b) develop important research programs, and (c) serve as a regional resource for assisting with the establishment of community nutrition centers and for assisting other universities that want to develop training programs at the baccalaureate and aide level. Any university seeking to become a center of competence would have to accept all three components as equal responsibilities. They would have to accept a community orientation.
2. A program of training grants, including stipends for students, to encourage the development of baccalaureate level training programs in nutrition and to stimulate young people to choose the field of nutrition as an applied biological science and health field.

Once a sizeable flow of young people into this field has developed, the need for training stipends will be less great if there are good employment opportunities for them once they have completed their training. An investment of training grants over a 10-year period might be sufficient to get an adequate flow of students selecting such educational programs.

3. A correlation and expansion of existing training grants for the preparation of nutritionists at the graduate level to provide for leadership of community nutrition programs and for an expansion of the number of teachers necessary for new educational programs.

Along with this kind of funding approach for the development of the necessary personnel, research funds should be made available to focus particularly upon problems of nutrition education, that is, upon the various ways in which the necessary information can be brought to the ordinary citizen to improve the quality of his individual and family nutrition.

This national program should be implemented in phases. Phase I should involve the development of training programs to provide the manpower necessary for Community Nutrition Centers, and the development of a limited number of such community centers on an experimental basis to develop and polish techniques to be used in such centers. Phase II would involve the development of community nutrition centers around the country, as competent manpower became available.

EMPLOYMENT OPPORTUNITIES

It is useless, of course, to develop a manpower policy without simultaneously attending to the job definitions in the agencies and settings which might employ these graduates. Up to this time, almost all employment opportunities for people in the field of nutrition, whether it is in applied (including dietetics) nutrition or nutrition science, have been defined as requiring an advanced degree or its equivalent in years of study and internship. It will be impossible to provide the kind of personnel and resources essential if we are to have a large scale national nutrition program and supply them entirely at the graduate degree level. Therefore, the federal government, states, and cities should be encouraged (perhaps with temporary incentive grants) to redesign their civil service requirements so that people at the baccalaureate or lower levels of nutrition preparation can be utilized in the delivery of nutrition service in public health programs as long as the programs are designed so that nutrition specialists with advanced training are coordinating and supervising the work and designing inservice training programs to keep personnel up to date.

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APPENDIX B—PANEL IV-2

Funding for Training of Public Health and Community Nutritionists and Dietitians

Funds, facilities and staffing for education of dietitians and public health and community nutritionists at various levels of competence are urgently needed and should be immediately provided with planned progression.

At the present time there are about 31,000 prepared to effect nutritional care to people: 30,000 dietitians and 1,000 nutritionists. While data for estimating the number actually needed to provide even moderately adequate services to the American people are not presently at hand, there is common agreement that these numbers should be no less than doubled within five years. There is urgent need for their services in emerging anti-poverty programs, in school health programs, and in providing consultation to patients of private physicians, in addition to the need to fill the increasing number of more traditional posts in health departments, other community agencies, clinics, hospitals and other medical care facilities. Specifically, there is need for:

1. Funding for traineeships and institutional support for post-bachelor's dietetic internships to relieve hospital budgets and encourage development of more internships which can prepare more people. (The American Dietetic Association has expanded the number of internships as well as the number of people in some internships. In September 1968 there were 770 interns in 65 approved internships, whereas in September 1969 there were 815 in 68 internships. There are four newly approved internships for 1970 and more in the organization stage.) Hospitals and universities in which these internships are based are currently carrying the financial cost of internship training. Increasingly, hospitals are finding this a burden and many are already stating that they will be unable to continue internship training without financial assistance.

Estimated minimum amount needed annually to maintain 72 hospital and university based internships (for use of facilities and personnel, including one full-time educational director per internship at a salary of \$14,000) ----- \$1,440,000

Traineeships for dietetic interns: 500 at \$2400 annually, presently funded by hospitals and universities ----- \$1,200,000

This amount will need to be doubled within five years to provide 1,000 traineeships.

2. Increased funding for master's degree training in public health nutrition. Traineeships and institutional funds for public health nutrition have been severely curtailed at a time when the number of institutions, offering such training needs to be increased at once from 16 to 32 or more, and the number of students trained annually at the master's

degree level increased from approximately 100 to 300. Within five years these numbers should be tripled.

(a) Funding for institutional grants within a year, to provide staff and facilities for setting up public health nutrition training programs. Five at \$50,000 each ----- \$250,000
Within five years this should be increased to \$750,000.

(b) Student traineeships per year, within a year—100 at \$3,500 ----- \$350,000
Within five years this should be increased to \$1,050,000.

(c) Reimbursement of field agencies for expenses incurred in providing field experience to students ----- \$10,000

3. Funding for the experimental development of under graduate professional training in dietetics and public health or community nutrition. While positions of major responsibility in these fields will continue to require graduate training, the urgent need for more nutritionists and dietitians at the staff level and the higher level of competence of undergraduate students today make such experimentation not only necessary but also feasible. Guidelines for such training for public health nutritionists have been developed¹ and at least one bachelor's level training program for dietitians already exists. Funding for institutional grants to provide necessary specialized staff and facilities to institutions setting up training programs—annually within one year, five at \$40,000 each ----- \$200,000
Within five years this should be increased to \$600,000.

4. Funding for doctoral level training in dietetics and public health nutrition. Such training is to provide first of all teachers for the training of nutritionists and dietitians in schools of public health, nutritional sciences, home economics and others; also for the teaching of nutrition in medical, dental and nursing schools, teacher training institutions and other colleges. Existing positions in colleges and universities already are not being filled. With the proposed increase in number of training centers and increased emphasis on nutrition in the curricula of health-related professions and teachers, need for teachers with doctoral level training will become more acute. Such advanced training is needed also to provide leaders with depth understanding of problems and

¹ See "Public Health Nutritionists—Their Responsibilities and Qualifications," by the Steering Committee on Roles, Qualifications and Training of Nutrition Workers in Health Agencies, July 1969, p. 20.

programs in nutrition and dietetics and the ability to do research toward advancement of these fields.

(a) Funding for institutional grants to provide needed specialized staff and facilities—annually within one year, three at \$70,000 - \$210,000

(b) Traineeships for doctoral candidates—annually within one year, 12 at \$6,000 ---- \$72,000
Annually for third year, 24 continuing plus 12 additional: \$144,000

Annually for third year, 24 continuing plus 12 additional: \$216,000

Within five years funding for institutional grants and traineeships should be doubled.

5. Money for research on the feasibility of training and using food aides to expedite the work of the public health or community nutritionist. While aides are already being employed by some agencies, there is indication that much remains to be learned before widespread use of them can be recommended. Three projects within one year ----- \$120,000

Within five years this should be increased to eight, for a total of \$320,000.

Part B

The public needs to know about opportunities for careers in dietetics, public health, and community nutrition. Many have not heard of these professions as they have of doctors and nurses. There is need for funding to publicize these careers to the general public and particularly to high school students, their parents and counselors. There seems little doubt that these "people-centered" professions could appeal to present-day youth.

Specifically, there is immediate need for a small number of personnel to give impetus to such publicity with adequate funds to operate effectively. Estimate of amount needed: \$150,000 for each of 3 years (three salaries of \$20,000 each plus materials, travel, use of mass media, etc.).

(N.B. Obviously funding for training is to no avail unless budgeting for positions is assured. Other panels will speak to this point.)

APPENDIX C—PANEL IV-2

Nutrition Teaching in Medical Schools

ADEQUACY OF NUTRITION TEACHING IN MEDICAL SCHOOLS

Only a few formal studies have been made of the adequacy of nutrition teaching in schools of medicine. Such studies have disclosed that :

1. A need for improvement in nutrition teaching is readily acknowledged by many medical schools.
2. Only a few schools have a separate division or department of nutrition.
3. Special courses in nutrition are rare and nutritional material is commonly incorporated in courses in biochemistry and physiology and in the teaching of clinical specialties such as medicine, surgery, pediatrics, and obstetrics.

(a) At the preclinical level, nutritional subject matter is often displaced by more "basic" topics such as enzyme kinetics, and membrane theory. In addition, instructors in biochemistry and physiology not infrequently emphasize their own research interests out of proportion to their relevance to the overall subject and to clinical problems. Often, little attempt is made to provide the student with the basic information about nutrition upon which "clinical nutrition" is necessarily based.

(b) In the clinical department and subspecialties of medicine there has been little or no correlation of nutrition teaching; thus, the student has been offered only a fragmentary selection of aspects of nutrition having particular relevance to various clinical subjects. Such fragmentation inevitably has led to appreciable gaps in nutrition education.

4. A few medical schools offer elective courses on therapeutic diets (medical dietetics), experience in a "nutrition clinic," and in nutritional investigation.
5. Many medical students only learn about florid malnutrition in man when they take electives involving participation in overseas programs based in countries where protein-calorie malnutrition and vitamin deficiencies are common.
6. In medical schools with a good program in nutrition there is usually either a strong division or department interested in nutrition, or professors with a special interest in clinical nutrition or nutritional research.
7. A thorough and definitive survey of nutrition teaching in American medical schools remains to be done.

(a) No objective assessment of the nutritional knowledge acquired by medical students has been made.

(b) Sufficient nutritional questions do not appear on National or State Board examinations to provide a fair test of nutritional knowledge.

(c) Current knowledge of the extent and effectiveness of nutritional teaching necessarily is based in large part on the results of questionnaires distributed to various medical schools and on the impression, observations, and opinions of a relatively few faculty members. These sources give a useful preliminary indication of the state of nutritional teaching in American medical schools; however, the information they contain does not provide a sufficiently strong foundation upon which a national policy with respect to nutritional teaching at the medical school level can be based.

(d) (See addendum No. 1.)

I. OPPORTUNITIES FOR NUTRITION TEACHING TO MEDICAL STUDENTS

No plan designed to improve nutrition teaching to medical students can overlook the striking changes introduced into the curriculums of most medical schools during the past 5 years. These include :

1. Reduction of time spent in laboratory exercises in anatomy, biochemistry, physiology, pharmacology, and other preclinical sciences.
2. Strong efforts made to coordinate teaching of basic science material so that biochemical, physiologic, pharmacologic, and clinical information about the various organ systems of the body is presented to the student in an integrated fashion.
3. Increased emphasis on interdisciplinary teaching with some beginning dissolution of departmental boundaries.
4. Introduction of the student to clinical problems earlier than previously; often in the first year, or early in the second year.
5. More emphasis on elective opportunities for students after they have completed a "core curriculum," usually during the last 18 months of medical school. These elective opportunities include:
 - (a) Assignments to medical facilities in technically underdeveloped countries and to poverty areas in the United States.
 - (b) "Clerkships" in community medicine where problems in the delivery of medical care by the hospital center are given special attention.

II. NUTRITION TEACHING DURING THE PRECLINICAL YEARS

In considering how nutrition teaching can be fitted into and articulated with the medical school curriculum, it must be kept in mind that the time available for basic science courses is being increasingly compressed. Thus, it would seem difficult to add a required course on basic aspects of nutrition during the so-called preclinical years, even though establishment of such a course has been recommended on a number of occasions. However, since there is an increasing emphasis on integration of basic science material, it is possible that the presentation of what is ordinarily considered to be nutritional subject matter can be used to organize biochemical or physiological information. For example, a discussion of the factors affecting nitrogen balance could be used to pull together a great deal of material on protein biochemistry that otherwise might not be related readily to human health problems. A discussion of calorie requirements in man might serve to give relevance to the subject of energy transformations at the cellular level.

It has been pointed out that some medical schools offer courses in clinical correlation or pathophysiology, in which an attempt is made to bridge the gap between basic science and clinical training. In such a course nutritional information can help the student understand the relationship between the clinical picture and the underlying physiologic or biochemical disorder. For example, the symptoms that accompany growth-onset diabetes mellitus can be best understood in terms of the conditioned malnutrition that results from inability to utilize carbohydrate properly.

III. NUTRITION TEACHING IN THE CLINICAL SPECIALTIES

The importance of nutritional considerations in medicine, surgery, pediatrics and obstetrics is acknowledged. Unfortunately (as mentioned previously), the nutrition teaching provided by the various medical specialties is necessarily fragmented, and sometimes superficial. For example, the student may be taught a rule-of-thumb approach to nutritional therapy without being given an understanding of the principles upon which such treatment is based.

It has been suggested that a properly qualified member of the faculty with a strong interest in nutrition could help to coordinate and strengthen the teaching of nutrition in the clinical specialties and, by means of lectures, conferences, clinics, or teaching rounds, fill in any important gaps that remain.

IV. NUTRITION TEACHING IN ELECTIVES

1. Electives that involve participation in programs designed to deliver medical care in poverty areas in the United States or abroad often bring the medical student into direct contact with patients who exhibit florid deficiency states, including protein-calorie malnutrition. Such experiences are far more effective than slides or textbook pictures in convincing the student that malnutrition remains a major world health problem and that clinical nutrition is a subject providing many challenges for the young physician.
2. Clerkships in community medicine are increasingly offered by the various divisions and departments of

community medicine that are developing in medical schools and teaching hospitals throughout the country. In such programs, the medical student can work in a nutrition clinic, participate in nutrition surveys, study the role of nutrition in disease prevention or retardation and learn to work effectively with other members of the "health care team," including the public health nutritionist. This type of training can lead logically into a career in public health nutrition or to a program of graduate training in comprehensive medicine designed to train a new type of specialist for whom the designation "primary physician" has been suggested.

3. An elective in a division where nutritional and metabolic research are conducted can serve as an introduction to a career in academic clinical nutrition. Medical students who participate in such electives may be motivated to obtain 2 to 4 years of post-doctoral training in nutrition and metabolism after completing 1 or 2 years of residency work in a medical specialty.

V. RECRUITMENT

Recruitment of young physicians into clinical nutrition has been extremely difficult and there is a critical shortage of trainees and of teachers and investigators in this field.

Some of the reasons for this situation have been identified. These include the following:

1. A lack of identity for clinical nutrition.
2. Lack of a subspecialty status for clinical nutrition.
3. Dearth of superior training programs in nutrition designed to meet the needs and interests of young physicians.
4. Lack of recognition by medical schools and teaching hospitals of a need for clinical nutrition programs.
5. Debilitating effect on the image of nutrition as a respectable scientific discipline of food faddists, commercially motivated pressure groups, and widespread pedestrian nutritional research.

The problem of an identity for nutrition seems to be inherent in the scope and diffuseness of the word "nutrition." For example, there are no satisfactory terms in the vocabulary of nutrition to distinguish the clinical investigator of nutritional problems from the home economist who is concerned with applied nutrition. A professor of nutrition can be either a dietitian or a medical scientist. Such semantic difficulties have not helped to dispel the cloud of confusion that hovers over the subject as it relates to clinical medicine and medical research. Indeed, many otherwise sophisticated medical school faculty members and administrators tend to identify nutrition inherent in the standards for certification in this field promulgated by the American Board of Nutrition.

Lack of a subspecialty status for clinical nutrition has been an important factor in discouraging many young physicians from entering the field. While hematology, cardiology, gastroenterology, etc., are recognized subspecialties, clinical nutrition is not. This distinction has important financial implications for the house officer who is considering entrance into a subspecialty.

As Mueller has pointed out (Fed. Pros. "167, 1967"): "At the present time there is no clear career future for the young physician in nutrition." He goes on to say that

"* * * it is a well-established truism that the quality of undergraduate training is proportional to that of graduate training. In other words, if the science of nutrition lent itself to a residency training program it would automatically improve the facility for undergraduate teaching."

It must be recognized that there has emerged in medicine a growing number of medical students and young physicians who are placing the concept of service well above considerations of financial remunerations and "success" as it is conventionally viewed. Such individuals are very likely to be attracted to careers in clinical nutrition if they can be shown the enormous benefits to mankind inherent in the prevention and treatment of all forms of malnutrition. However, the exposure that medi-

cal students usually receive to serious nutritional problems in their present medical school setting is ordinarily so minimal that the chances of stimulating their interest in the subject seem small.

ADDENDUM No. 1

It is recommended that funds be made available to permit appropriate voluntary agencies (AAMC, AMA, etc.), to conduct a thorough and definitive survey of nutrition teaching in medical schools. The results of such a survey should be evaluated by an expert panel selected by NAS-NBC in consultation with other national groups concerned with medical education, to determine the adequacy of nutrition teaching in American schools of medicine.

PANEL IV-3: Community Nutrition Teaching

Chairman: Cecile H. Edwards (Mrs. Gerald A. Edwards), Ph. D., Professor of Nutrition and Research and Chairman, Department of Home Economics, North Carolina Agricultural & Technical State University, Greensboro, N.C.

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Panel members

Luise Addiss (Mrs. Edward Addiss), consultant in home economics and nutrition, New York, N.Y.

Rev. Max E. Glenn, Executive Director, Committee on Religion in Appalachia, Knoxville, Tenn.

Luck Hendrix, President-elect, Future Homemakers of America, Metter, Ga.

Maxine Hinton, Ph. D., Director of Dietetic Internship, University of Arkansas Medical School, Little Rock, Ark.

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Mrs. Louisa Whittaker, Chairman, Nutrition Education Committee, Santa Clara County Welfare Program, San Jose, Calif.

Consultants

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REPORT OF PANEL IV-3

PREAMBLE

Every American should have access to knowledge of nutrition and its relation to health as well as to the purchasing power to secure food to meet his nutritional requirements. And yet, in a land of plenty, millions of Americans in this decade are hungry and malnourished. Although the first requirement is an adequate income to insure the resources necessary to procure food, lack of information and ethnic and cultural practices prevent many from achieving good nutrition.

Many Americans are not interested in nutrition and do not know of the benefits good nutrition can bring. Preschool children, young mothers, out-of-school youth and adults, the elderly and low in-

come groups encounter food and nutrition problems which demand new and innovative approaches for solution.

This Panel has addressed itself to the needs of these groups in rural and urban areas. It recognizes the importance of making good nutrition a meaningful phrase at all age levels and in all walks of life and this should be the basis for creating public awareness of nutrition and a national nutrition policy. It is sensitive to the special need for making available adequate food purchasing power and the Panel strongly endorses an income maintenance program. It recognizes the importance of massive Federal action to combat hunger and malnutrition and the urgency for follow-up action to

a person-to-person basis, and these should be priorities of a national nutrition unit.

To these ends, the following recommendations are made with special attention to methods for improving the public knowledge of food and nutrition and the skills for applying such information in their daily living.

ADEQUATE INCOME MAINTENANCE PROGRAM

Background Statement.—Lack of income is the basic cause of hunger and malnutrition. Unless a family can be assured sufficient income to provide a level of adequacy for all basic items of living, nutrition education is predisposed to certain failure. Adequate income raises the expectation of human worth and dignity, changes the approach to learning and sets the stage for a motivational force which creates a healthy climate for nutrition.

Objective.—To develop and make available an adequate income maintenance and related programs that meet basic family needs, support personal dignity and self-respect and allow for participation in community life.

Recommendation: It is recommended that the 91st Congress take immediate action to enact Federal legislation that will develop and make available an adequate income maintenance program.

Recommendation No. 1: PUBLIC AWARENESS

Background.—In opening the White House Conference on Food, Nutrition, and Health, President Nixon said: "This meeting sets the seal of urgency on the national commitment to put an end to hunger and malnutrition due to poverty in America." Therefore, it is necessary to create a climate of aroused public concern and to implement a program to raise levels of public awareness and understanding. Such an effort must set the stage for and go along with efforts designed to extend and improve community nutrition education at all levels.

There are large numbers of people who are neither aware of nor concerned with the relationship of nutrition to good health, the nutritional status of others, nor with the problems of hunger in this country.

There is a lack of public awareness, understanding, and concern that has permitted the development of limited and fragmented programs unable

to cope with many of the urgent nutrition problems.

There is a lack of public awareness, understanding, and concern about nutrition and hunger that has permitted some people to go hungry and others to be afflicted with serious health handicaps because of nutritional deficiencies and malnutrition.

Objective.—To create greater public awareness, understanding, and concern for the poor nutritional status of large segments of the population and the relationship of nutrition to good health. The campaign should be aimed at specific target groups who have different responsibilities for and opportunities to do something about the problem.

Recommendation :

1. It is recommended that a five-year public nutrition information campaign be initiated by using the organizational resources of the executive branch of the Federal Government to augment and coordinate this information campaign to:
 - (a) Create a climate of public concern for the Nation's hunger, nutrition, and undernutrition problems and their causes, which leads to action.
 - (b) Foster an understanding of nutrition and its relation to good health and the fact that many Americans cannot afford good nutrition.
 - (c) Continuous dissemination of information concerning existing food programs, and criteria for participation.
 - (d) Promote better food-use habits within individual cultural patterns and with special references to low income persons.
 - (e) Create a climate of public support for innovative approaches and for the need of adequate income maintenance for the solution of nutrition problems at the local, State and Federal levels with special reference to low income persons. Hunger workshops at the community level could be effectively used.
2. This sustained impact nutrition campaign should be launched in January 1970—
 - (a) By the President declaring a state of national emergency. There are enough persons in this country who are hungry or severely malnourished to create a crisis situation.

- (b) By each Governor convening a conference in his State on Food, Nutrition, and Health with special emphasis on hunger and malnutrition.
- (c) By communicating the results of nutrition studies and the proceedings of this White House Conference through the appropriate State agencies to the State legislatures.
- (d) By encouraging the private sector and community voluntary organizations to mobilize their resources in support of this public awareness campaign. Especially should the food industry be encouraged to increase nutritional information on labels and in promotional activities.
- (e) By funding special programs that provide training and salaries for professionals and paraprofessionals that bring nutrition awareness into the areas of education, health, and welfare.
- (f) By encouraging and funding, through private and public sources, programs which may include novel communication vehicles such as songs, rhymes, games, TV soap operas, church or community workshops, and radio messages from folk and athletic heroes to alert the general public or special groups.

Priority.—Immediate.

Proposed Date of Accomplishment.—Initiate immediately. Accomplish in five years.

Recommendation No. 2: COMMUNITY FOOD AND NUTRITION EDUCATION

Background.—Extensive malnutrition exists among our people, especially the poor. Lack of resources, as well as lack of knowledge and skills, have been responsible for this condition. In any long-term plan to combat malnutrition and promote good health, out-of-classroom informal education must play a vital role.

However, our present community programs are understaffed, underfunded, and fragmented. Although there is a need for sharing of knowledge and skills among all who are concerned with community nutrition education, there is no effective system for this sharing. New methods need to be found to reach effectively all citizens, but especially those in greatest need. In order to do the job needed in community nutrition education, there must be

a greater involvement of all segments of the community, along with the individuals in the community to be reached. Intensified efforts must be made to involve grassroots organizations of the poor to build their ability to participate in the development, implementation, and evaluation of programs which affect them.

It is essential that families know how to buy, prepare, and store food. In particular, low-income families need information on (a) family meal planning to provide nutritious, satisfying meals at least cost, (b) how to buy food to get the most nutritive value for the money spent, (c) how to prepare food to preserve nutritive value while appealing to family tastes and considering cooking facilities, (d) safe and sanitary methods of storing, handling and serving food, and (e) the availability of local food programs and how to make the best use of them.

Within the family there are groups requiring special nutritional consideration: the infant, the preschool child, the school age child, the teenager, the adult, the pregnant woman, the aged, and family members under medical treatment. Public health agencies can provide leadership in interpreting the use of special diets recommended in conjunction with medical treatment, but the basic nutrition information should be readily available to combat the misinformation and unfounded claims bombarding the public through quackery, faddism, and product promotion. This leads to waste of money and may even be damaging to health.

Objective.—To help people in the community meet their food and nutrition needs within individual and cultural patterns with special reference for low-income persons and with attention to food selection, purchase, preparation, and storage.

Recommendation: It is recommended that a unified and intensified thrust in community nutrition education is needed involving all segments of the community, and that legislation be enacted to fund, and support out-of-classroom efforts to strengthen good food habits and to eliminate hunger and malnutrition in all segments of the population. Elements should include:

1. Cooperative planning and program implementation for an interagency nutrition education planning council at the State or regional level which would develop and evaluate com-

prehensive community nutrition education programs, coordinate existing educational efforts and foster the development of new programs to fill gaps. Members of the council will include representatives of professional workers from community agencies with nutrition service as well as consumer groups. Special emphasis would be given to coordinating the education of parent groups with nutrition teaching in the schools.

2. Exploration, testing and evaluation of new approaches and methods of taking the food and nutrition message to the people especially to those in poverty. (See appendix for some examples).
3. Applied research to be conducted by community agencies, educational institutions, and nonprofit organizations. Such research should be related to community nutrition education, primarily in poverty areas. Examples of such research are:
 - (a) Factors affecting food patterns, their formation, and most effective techniques for bringing about needed changes.
 - (b) Evaluation of various approaches to programs with community action and involvement to determine their effectiveness in motivating participation and changes in eating habits.
4. Information to the public on the availability of food programs and local level nutrition education for food program participants.
5. A national center for providing resource materials and training programs for community education.

Such a clearinghouse, if linked to universities or agencies, might draw resources from them.
6. A simple slogan with a color coded symbol related to nutrient content should be developed and used in community nutrition education programs. Such techniques will assist the menu planner and food shopper to make wise food choices.
7. Information for the public on food purchasing, meal planning, menus and recipes, food preparation and storage, and other related information adapted to the regional and local food situations.

Priority.—This recommendation should have high priority because nutrition education is basic to the long-term eradication of malnutrition and the positive promotion of health.

Proposed Time of Accomplishment.—Nutrition education will need to be ongoing and become an integral part of educational programs at all levels both in and out of school. To make nutrition education effective basic information needs to be constantly refreshed and reinforced.

Some examples of methods of taking nutrition education to the people:

1. Training paraprofessional workers, aides, and volunteers how to adjust to the people they will be teaching basic nutrition concepts.
2. Family life education programs based on group work methods and focused on food and nutrition.
3. Mobile nutrition units equipped and staffed to provide nutrition education to people of various levels and backgrounds. Such units also would serve as a central base for teams of food aides and other community volunteers.
4. Food fairs including cooking demonstrations, movies, question and answer sessions. These would provide an opportunity to reach the public with nutrition education in an entertaining way.
5. Educational television programs on nutrition in an entertaining and dramatic way, with followup discussion of application and information with homemaker groups conducted by a paraprofessional worker. This would assure reaching a fairly large group at one time with sound nutrition information.
6. Use of games for developing skills in selecting foods which provide the greatest returns in nutrition and family satisfaction for the money spent.
7. The nutrition education component of portable meals and group feeding programs for the elderly should be expanded.

Recommendation No. 3: FOOD AND NUTRITION EDUCATION MANPOWER

Background.—The need for effective community nutrition education (out-of-school) has never been more critical for all people. With the increasing

scope of programs to provide access to food for low-income families, this need is intensified. There must be provided basic information on food and its effect on how we live, grow and keep healthy, if people are to make wise food choices.

The major responsibility for this full-time nutrition education in urban and rural areas is now principally centered in programs of the Cooperative Extension Service and the official State and local health agencies. There are, however, a number of other agencies and private organizations who have nutrition education programs, for example, Office of Economic Opportunity, Red Cross, Adult Vocational Home Economics programs, and voluntary health agencies.

Currently those employees of official health agencies who have this full time responsibility are extremely limited in number. In November 1968, there were only 475 budgeted positions for nutritionists in official State and local health agencies. Approximately 400 additional budgeted nutrition positions were located in maternal, infant, children and youth projects. This number averages less than 20 persons per State responsible for the health of mothers, chronically ill, aging, and for consultation to nursing homes, day care centers, etc. Services are not limited to the poor.

A similarly critical situation exists with regard to nutrition manpower in Cooperative Extension Service programs. At present, about 4,000 extension home economists located in 2,800 counties spend nearly 25 percent of their time directly in food and nutrition education. They are supported by some 90 food and nutrition specialists located on land grant university campuses. Services are not limited to poor.

Since November 1968, approximately 3,800 man years of indigenous aides have been employed to teach the hard-to-reach poor. These are in 650 localities. More than 600 of the above 4,000 Cooperative Extension home economists now spend full-time training and supervising aides. Funds appropriated for fiscal year 1970 will permit some program expansion.

As greater public awareness of the importance of nutrition to health is generated, the demand for the knowledge and skill necessary for achieving good nutrition will be increased. Present professional staffing of nutritionists and home economists is not adequate to meet these potential demands even when the most modern methods and communicative techniques are used.

For example, to meet the nutrition employment needs for out-of-hospital medical and health services by 1975, the Department of Labor has estimated that, with population increases, new program developments to serve the total population, and with usual attrition, there will need to be approximately 7,000 nutrition personnel by 1975.

The most critical audience, the hard-to-reach poor and near-poor, requires person to person intensive education efforts, often for extended periods of time, before behavior changes are effected. Nonprofessional personnel well trained and supervised by a professional staff can and are filling this need at less cost and in many instances with greater empathy.

Pilot projects in Cooperative Extension Service indicate that if a full-time aide works with the hardest to reach, individually and in groups, she can be expected to reach and teach about 100 families per year. For the aide to be effective she must be well trained and supervised by professionals. One professional is needed for each 20 aides.

If we concentrate on the 14 million poor and near-poor households in the country, a minimum of 500 administrative personnel for program development and evaluation, and supervision of 140,000 aides will be needed.

Objective.—To have in every community sufficient trained workers to effectively reach all the people with sound food and nutrition information that will provide every American with knowledge, motivation and skills to apply this information in daily living.

Recommendation :

1. It is recommended that agencies and organizations concerned with food, nutrition, health, and welfare at the Federal, State and community levels be funded to adequately staff their programs with professionals, paraprofessionals and community aides to carry out effective nutrition education. To provide the needed manpower for these positions, there must be:
 - (a) Establishment of a desirable ratio of staff to population.
 - (b) Further exploration of potential manpower to optimize the competencies of the professional nutritionist. This should include a review of the training programs for community aides—the

effectiveness of the aides, and opportunities for their career development.

- (c) The expansion of the existing mechanisms that provide funds to institutions and agencies for training persons to fill the above positions.
- (d) Provision for financial support for students at the undergraduate levels and for on-the-job continuing education.

2. The use of volunteers such as youth groups, college students, women, church, fraternal and service organizations to supplement full-time professional staff is recommended.

Priority.—Immediately.

Proposed Date of Accomplishment.—Fiscal 1971.

Recommendation No. 4: THE NUTRITION MESSAGE

Background.—The function of nutrition education is to provide the knowledge to guide each person in choosing the foods essential for his health and well-being. Decisions must therefore be made about the information that should be available and communicated. The Interagency Committee on Nutrition Education developed basic concepts on the minimum nutrition information needed for wise food selection based on research and our newer knowledge of nutrition.

Recommendation:

1. It is recommended that the "Basic Concepts for Nutrition Education" developed by the Interagency Committee on Nutrition Education be used as the basis for nutrition education for all people.
 - (a) Nutrition is the food you eat and how the body uses it. We eat food to live, to grow, to keep healthy and well, and to get energy for work and play.
 - (b) Food is made up of different nutrients needed for growth and health; All nutrients needed by the body are available through food; Many kinds and combinations of food can lead to a well-balanced diet; No food, by itself, has all the nutrients needed for full growth and health; Each nutrient has specific uses in the body; Most nutrients do their best work in the body when teamed with other nutrients.

This committee represents all Federal Government and quasi government organizations with responsibility for nutrition education.

- (c) All persons, throughout life, have need for the same nutrients, but in varying amounts; The amounts of nutrients needed are influenced by age, sex, size, activity, and state of health; Suggestions for the kinds and amounts of food needed are made by trained scientists.
 - (d) The way food is handled influences the amount of nutrients in food, its safety, appearance and taste. Handling means everything that happens to food while it is being grown, processed, stored, and prepared for eating.
2. In addition to physiological concepts, there are many socio-economic and cultural factors which influence food choices. These have particular relevance to content and method of nutrition education.
 - (a) **POVERTY:** *Those who have the least often are expected to know the most.*—Low-income families face special problems in providing an adequate diet since the demands of feeding the best food at lowest cost, frequently with inadequate equipment for storage, preparation and serving food, require greater knowledge and effort. Food often becomes the flexible item in the budget when limited resources necessitate giving priority to shelter, clothing, and other family needs.
 - (b) **PLEASURE:** *We eat for pleasure and satisfaction as well as to meet physiological needs.*
 - (c) *The home and family are crucial.*—The family provides its members with adequate food, helps to make food and mealtime a significant component of family life, and by precept and example, helps develop good food habits and regard for good nutrition. The quality of family life will be affected by the emphasis on food and nutrition in the home and vice versa.
 - (d) *Sociocultural and psychological preferences.*—Food patterns already established are the starting point for nu-

trition education. The goal of nutrition education is to support the family culture and food practices and within this framework to give help and guidance to increase nutritive quality and to decrease costs in time, energy and money when these are relevant.

(e) *Personal factors influence food choices.*—Personal aspects of food likes and dislikes, attitudes, social pressures and influence of peer groups are among the factors which lead people to choose the food they do, and which need to be taken into account if nutrition education is to have relevance.

3. Food plays an important role in the physical and psychological health of society or a nation just as it does for the individual and the family.

(a) The maintenance of good nutrition for the larger units of society involves many matters of public concern, such as: peace; social and economic stability; healthful environment; food production, processing, and distribution; and education.

(b) Nutrition knowledge and social consciousness enable citizens to participate intelligently in the adoption of public policy affecting the nutrition of people around the world.

Recommendation No. 5: COMMUNITY INVOLVEMENT

Background.—Effective communication, an essential ingredient of nutrition education, is based on:

1. Respect for people and a belief in their capacity to change.
2. Working *with* people, not telling or doing *for* them, but leaving them to make decisions for themselves.
3. Education, practical, realistic and relevant to the needs of the learner, his psychosocial and economic environment, his stage in the life cycle.
4. Participation of teacher and learner in the learning process.

People learn by doing and are most concerned with what is their own. Appropriate community

nutrition education, adapted to customary diets and living conditions as well as nutritional needs, is inseparably intertwined with community involvement.

Objective.—To assure active community involvement in all phases of community nutrition education programs.

Recommendation: It is recommended that identification and analysis of local needs and decisionmaking responsibility for program development implementation and evaluation be shared in a partnership between the potential recipients or their elected representatives and the appropriate professionals.

Recommendation No. 6: NUTRITION EDUCATION MEDIA CENTER

Background.—Out-of-classroom informal education is recognized as an important factor in the solution of hunger and malnutrition problems in this Nation. Educational approaches in the informal learning environment of a community are different from more structured settings, and less is known about effective approaches. There is a need for sharing of expertise among out-of-classroom educators—professionals, paraprofessionals, community leaders such as public health workers, social workers, extension home economists, nurses, program aides, and volunteer groups.

There is no complete system for this sharing. Learning resources to be used with diverse audiences exist, but are not readily available. Many need further development to communicate with the indigent, the obese, pregnant mothers, adolescents, legislative decisionmakers, and medical professionals.

Out of-classroom educators need consultation regarding methods to motivate people to seek knowledge and develop skills to improve their nutritional status, how to improve teaching skills and technical knowledge, how to create awareness and increase knowledge of nutrition among key decisionmakers.

If educators are to be effective in changing the behavior of people in regard to food selection, preparation, and consumption, they must know how to bring about changes as well as recognize needed changes. This information should be based on valid research focused on the specific problem: How do we enable and motivate a person to eat enough of the foods needed to have good health?

Statements in Support of a National Nutrition Policy

Objective.—To establish a learning media center to provide resource materials and training programs for community nutrition education. The center would have a four-fold function:

1. **INFORMATION RETRIEVAL SYSTEM:**
Goal.—To enable a complete information search on any problem that may be posed relative to community nutrition education.
2. **INFORMATION DELIVERY SYSTEM:**
Goal.—To make the full resources of the center readily available to persons involved in community nutrition education.
3. **TRAINING LABORATORY:**
Goal.—To provide a laboratory for training interested persons in the latest innovative and effective techniques of communicating nutrition information and teaching nutritional practices to specific audiences (ethnic groups, geographic areas, etc.) via informal information channels.
4. **RESEARCH AND DEVELOPMENT:**
Goal.—To fund and carry out research and development projects which would support, promote, and implement community nutrition education.

Recommendation: It is recommended that a National Nutrition Education Media Center be created, funded, and staffed to support out-of-classroom educational efforts designed to resolve problems of malnutrition and elimination of hunger.

Priority.—Immediate.

RESOLUTION

Whereas, there are enough citizens in this country who are hungry or malnourished to create a crisis situation; and

Whereas, many programs that have been developed to supply food and/or money have proven inadequate to meet and solve the food and nutritional needs of these persons;

Therefore, we, the members of panel IV-3, recommend that the President declare today a state of emergency in the area of hunger and malnutrition in the United States, and that he utilize all of his emergency powers to get food to every hungry person immediately by such means as broad dissemination of free food stamps, or food to the hungry and impoverished included in those counties which do not have food assistance programs.

Realizing that the state of emergency is limited in time duration, we recommend that provision be made during this time for permanent measures to ensure the eradication of hunger and malnutrition.

It is a fact that widespread hunger and malnutrition exists in America today. Food is one of the major factors influencing man's destiny, providing for his growth and development, serving as a source of energy for work and recreation, and of nutrients for all metabolic processes. Food—nutrition—is essential. It is one element in the total environment necessary for man to achieve his maximum potential and his God-given dignity.

Every American not only should have access to knowledge of nutrition and its relation to health, but also to the purchasing power to secure food to meet his nutritional requirements. And yet, in a land of plenty, millions of Americans in this decade are hungry and malnourished.

In appointing Dr. Jean Mayer as special consultant to the President to organize the White House Conference on Food, Nutrition, and Health, President Richard Nixon, in a portion of his statement on June 11, 1969, said: "I shall ask the Conference to prepare specific goals . . . goals for private industry, for Government policy and for needed research. Its conclusions and its goals will not be neatly bound and placed on a library shelf and forgotten. They will be the basis for action by this Administration and the beginning of a national commitment—to put an end to malnutrition and hunger among the poor, to make better use of our agricultural bounty and nutritional knowledge, and to ensure a healthful diet for all Americans."

We call upon the President to immediately declare to Congress and to the American people that a national emergency exists.

We call upon the President and the Congress to immediately give top priority to: A national nutrition policy which commits this Nation to making available an adequate diet, and nutrition education for all persons; the importance of good nutrition and well being to the productiveness of the Nation.

We call upon the President and the Congress for immediate enactment of such other powers and appropriations as are needed to carry out the national nutrition policy reaching from national to State and local levels.

National food and nutrition education programs have been seriously reduced in effectiveness by

fragmentation among agencies at different levels of government, and by the forms of the programs themselves. Nutrition education, without sufficient national priority, staffing, and funding in either the public or private sector, has had little impact.

Essential to eliminate the present national disgrace of hunger and malnutrition is a national office to establish and implement a national nutrition policy, develop more effective solutions, coordinate existing food and educational programs, and in general to serve as a catalytic national force. This office should have adequate consumer and professional representation and adequate authority and funding to permit maximum effectiveness. It should have authority to—

Propose necessary legislation to the President and the Congress as well as evaluate all legislative proposals pertaining to food, health, and social programs.

Conduct periodic dietary surveys, conduct and coordinate nutritional status investigations and related research on population groups in the Nation.

Provide consultation and assistance to the food industry in developing more nutritious food, as well as its food product advertising and nutrition education programs, and in development of food product labels which provide nutritional information in a form easily understood by the buying public.

Stimulate food and nutrition education programs of State and local nutrition coordinat-

ing committees, set standards, and provide resources and materials for their use.

Prepare and distribute a national nutrition directory which provides information on resources in the area of food and nutrition at the national, State, and local levels.

Make provision for a nutrition education media center and clearinghouse for the development of nutrition education materials and methods, and to provide for the training of nutrition personnel.

Provide for research leading to the development and marketing of a greater variety of enriched foods.

Provide grants to colleges, universities, and agencies, both public and private, for programs to train allied health workers in nutrition and development of innovative nutritional education techniques.

Evaluate nutrition education and plan periodic national food, nutrition, and health conferences.

It is recommended that there be created immediately a national nutrition unit to assume leadership and responsibility for the total food and nutrition needs of the Nation with immediate attention to the alleviation of hunger and malnutrition and with adequate funds and authority to implement our national nutrition policy and other recommendations of the White House Conference on Food, Nutrition, and Health.

PANEL IV-4: Popular Education and How to Reach Disadvantaged Groups

Chairman: Philip L. White, Sc. D., Secretary, Council on Foods and Nutrition, American Medical Association, Chicago, Ill.

Chairman (Subpanel on Deception and Misinformation): Felix Forte, Associate Judge of the Supreme Court, Commonwealth of Massachusetts, Boston, Mass.

Panel members

Elsie B. Fetterman (Mrs. Irving Fetterman), Family Economist and Management Specialist, Cooperative Extension Service, College of Agriculture, University of Connecticut, Storrs, Conn.

Donald Jones, producer and consultant in television, New York, N.Y.

Richard K. Manoff, President and Chairman, Richard K. Manoff, Inc., New York, N.Y.

Grace Olivarez, law student, University of Notre Dame, South Bend, Ind.

Robert R. Pauley, President, Mutual Broadcasting System, New York, N.Y.

A. L. Powell, Director of Communications, The Pillsbury Co., Minneapolis, Minn.

Charles L. Sanders, Managing Editor, Ebony Magazine, Chicago, Ill.

Saul Schur, Educational Consultant, Seventeen Magazine, New York, N.Y.

Bishop Fulton J. Sheen, Bishop of Rochester, Rochester, N.Y.

Jesse Walker, Editor, Amsterdam News, New York, N.Y.

Subpanel members

Chairman: Felix Forte, Associate Judge of the Supreme Court, Commonwealth of Massachusetts, Boston, Mass.
Janet Beigle, Cleveland Plain Dealer, Cleveland, Ohio.
Ronald M. Deutsch, author, Laguna Beach, Calif.

Oliver Field, LL.B., Director of Research, Department of Investigation, American Medical Association, Chicago, Ill.

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Consultants

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REPORT OF PANEL IV-4

PREAMBLE

The task of the Panel is twofold:

1. To propose immediate steps to increase awareness of present nutritional problems in America—on a national scale, and in a way that will motivate many groups and individuals to actions; and
2. To propose additional steps to improve understanding of good nutrition by all Americans, including the disadvantaged.

The panelists feel that one basic right of individuals in our society is the right to proper food. But in order to exercise this right effectively, every citizen must know enough about foods and nutrition to choose for himself those foods which will supply his nutritional needs.

It is clear that a great many of our citizens lack this necessary knowledge—both rich and poor, educated and uneducated—despite the great range and influence of our educational system, and our communications media. In fact, the gaps in our public knowledge about nutrition, along with actual misinformation carried by some media, are contributing seriously to the problem of hunger and malnutrition in the United States. We feel that the Nation does not have the coordinated, stimulating program of nutrition education we need in order to see to it that our citizens are well fed. It's time we had one.

We, therefore, propose several specific steps to engage the power of our communications and education systems, particularly the so-called mass media, to improve the nutritional knowledge of the general public, including the disadvantaged.

The job of education is one for the entire country, in many places and on many levels, involving both public and private groups, and including the communications industries, but not limited to them. Funds and action will be needed from many sources. The motive force for this new program needs to come first of all from a sense of national urgency and from specific actions on the part of the executive branch. These are suggested below.

The educational task is a difficult one, complicated by the great variety of America's cultural patterns, eating habits, and emotional prejudices; by the complexities of nutrition science; and by the rapid changes taking place in food technology and marketing. Most particularly, the problem centers on the question of how to make people want to learn—the problem of motivation. As things stand, people are notoriously uninterested in nutrition education. Not only must their interest be aroused, but many of their deep-seated behavior patterns must be changed.

In this sort of public education, the media of mass communications have a powerful role. Such a medium as television, for example, is an intimate part of most people's lives and is a major factor in affecting their attitudes, in bringing them information, and in setting their life styles.

The so-called mass media have several points in common: They attract audiences. They reach people on the emotional level from which their motivations spring. They can bring the facts of good nutrition directly to audiences "where they're at"—in front of the television set, reading the daily newspapers, listening to the radio, watching movies. They can use the popular elements of drama, entertainment, human interest, audience involvement, visual impact.

Professional specialists in communications are expert in choosing the media that are most efficient in reaching their intended audiences, and packaging the information in the forms that are most effective for these audiences. The specialists can often be helped greatly by close contact and collaboration with their audiences, for example, among the disadvantaged.

Some of the target audiences are relatively small and localized by national standards of mass media, but nevertheless can be effectively reached by mass communications techniques. The mass media, as we interpret the term, will therefore include not only the giant media of television, radio, newspa-

pers, and magazines, but also many informal media, some of which involve direct personal contact with the audience, such as cooking contests, church bazaars, health fairs. (See addendum to recommendation No. 2.)

The central recommendation of this panel, recommendation No. 2, is a mechanism by which the skills and techniques of the best professional people in communications can be brought to bear on America's problems in nutrition education, viewing these problems on a national basis, and seeing to it that the country's educational efforts are truly effective.

We feel that the program of education should be started at once, but should be thought of not as a crash campaign of limited duration but as a long-range undertaking—in fact, a continuous process that should go on indefinitely, with continual reassessment as audiences change, conditions change, knowledge changes, and the media change. For full effectiveness, the program should include a system of surveillance that will spot problems in nutrition education as they emerge, locally or nationally, and see to it that the problems are taken care of promptly.

Education is not a substitute for food; and the Panel is well aware that educational programs directed to the disadvantaged will have a negative effect unless the disadvantaged have the food they need in order to live a proper life. Indeed, education programs without food would be insulting. Food is the first priority.

But to feed themselves properly, our citizens need more than food. They need also enough knowledge to make the right food choices. This is the task of education we face.

Recommendation No. 1: ADEQUATE FOOD SUPPLIES FOR THE POOR ARE ESSENTIAL BEFORE GOOD NUTRITION IS POSSIBLE

We cannot realistically recommend educational and mass communication actions without also adding our voice to those that have been raised in behalf of more adequate food supplies for the poor.

Nutrition education for those who cannot afford to buy the necessary foods merely adds a further hurt to the terrible pain of their poverty. It insults still further what little may be left of human dignity among these poor. It beclouds the real problem of the poor, which is food supply, because

before there can be adequate nutrition, there must first be food.

Nutrition education without food for everyone would reduce our concern to an effort for only part of the population—those who can afford the foods which nutrition wisdom will, hopefully, lead them to buy. It will leave undone the more urgent task of proper nutrition for the poor and leave the erroneous impression that the job is being done.

Thus, ironically, the more effective the nutrition education program, the more obscure may become the urgent need for food supplies for the poor.

We urge that proper action must therefore be taken to assure that adequate food supplies are available to all as soon as possible so that the nutrition education program will be universally effective.

We recommend: That the President and Congress immediately take the necessary actions to guarantee that the poor are given the means to buy their own food supplies in amounts and of the quality deemed necessary to assure proper nutrition.

We recommend therefore:

1. That the President of the United States declare a state of national emergency for hunger;
2. That the President and the Congress should take the necessary steps to guarantee an income which provides at least the living standards reflected in the low-income family budget of \$5,915 reported by the Bureau of Labor Statistics in 1967, and is also consistent with the philosophy that the people should have freedom of choice in their purchasing decisions;
3. That the necessary food reforms in the food stamps and commodity programs be accomplished to insure that no Americans go hungry;
4. That a national child feeding policy be declared—such as a universal free lunch program;
5. That the operation of food aid programs be taken out of the Department of Agriculture and transferred to the jurisdiction of the Department of Health, Education, and Welfare.

Recommendation No. 2: THE PRESIDENT SHOULD ESTABLISH A PERMANENT TASK FORCE TO DEVISE AND EXECUTE A PROGRAM FOR NUTRITION EDUCATION THROUGH THE MASS MEDIA

The development of a bold, vigorous program in popular education in nutrition is imperative to assure that everyone in America has the best possible knowledge of how to feed himself properly. This program would seek to—

1. Create awareness of basic concepts of good nutrition in all Americans. Different forms of malnutrition exist at all income levels. The disadvantaged will reject programs directed solely at them.
2. Focus as sharply as possible on the segments of our population that are nutritionally the most disadvantaged.
3. Motivate them to want to do something about it.
4. Plan for coordinated followup by informed local contacts and programs that provide put-into-practice information (such as recipes, menus, and grocery buying lists.)

We recommend:

That the President appoint a special task force of top representative communications professionals to plan, devise, and execute an immediate and continuing program of mass communications in behalf of nutrition education. All arts and techniques of advertising, promotion, and public relations should be employed for the campaign. The task force should stimulate and coordinate the efforts of other groups as well as devise programs of its own.

The task force should be organized immediately, not later than March 1, 1970.

One primary action goal is to motivate people to want and seek out nutrition education where it is available or to welcome it when provided, in the case of our most disadvantaged groups. One basic purpose of this program is to assist existing nutrition agencies to improve their educational and informational materials and to create greater demand for their efforts and services.

It should be an independent group financed with funds from a variety of public and private sources. It is estimated that the task force would require

an appropriation of \$1½ million in order to initiate and execute its activities for the first year. Contributions from other sources, including time and space equivalents from the media, will be worth many times this.

It should have a long-term existence and its programs should be sufficiently flexible to take account of changing nutrition problems among the population, changing foods, and changing media.

It should concentrate particularly on the needs of the nutritionally disadvantaged and the more vulnerable groups, such as infants, youth, pregnant women, the aging, minority groups, and immigrants, but should be flexible enough in its programs to handle the educational problems of other groups as well.

The task force should be guided in its work by the following stipulations:

1. The task force should maintain a continuous, close contact with all activities in nutrition information and education, particularly in problem areas, linked to a program of action where action is needed.
2. The task force should offer expert advice to independent groups and governmental agencies in connection with programs they operate.
3. The task force should have available the advice of nutrition scientists, social scientists, including students of motivation, of educators, and of specialists in communications, marketing, and advertising. Of paramount importance, it should consult with and be guided by representatives of the racial and cultural groups to be reached. It should establish and maintain close contact with such central information services as the Federal Inter-Agency Media Committee, the Inter-Departmental Committee on Nutrition Education, and the National Audio-Visual Center (National Archives).
4. The task force should enlist the support and cooperation of food companies and their industry groups, foundations, and other private donors.
5. The problems of good nutrition being of national concern, the group should function on a national scale. However, it should certainly have close contact with local and particular situations and should devise special programs to deal with special problems.

6. Since educational materials and resources already developed are widely scattered throughout the country, with no central repository, the task force should establish a national information service to see to it that the most effective educational materials (including audiovisual materials) are available for the use of all involved with nutrition education at any level. Periodical listings should be published.
7. The task force should enlist the interest of important popular personalities to help where they can in spreading good nutrition information in the media in which they appear: sports figures, actors and entertainers, and disc jockeys, particularly those who are popular among the nutritionally vulnerable groups.
8. The program can have an identity in the form of a copyrighted graphic symbol and a slogan to aid in its popularization. The idea of good nutrition must be easy to identify wherever it is written about, or wherever it is talked about or exhibited.
9. The task force should address itself to the need for the reconciliation of some basic concepts and techniques in nutrition education. There is need for an evaluation of the general applicability of the stylized four-group, daily food guide. Variations of food groupings may be required to suit different audiences.

For further detail on the activities of this task force, see the addendum and the supplementary report appended hereto.

Recommendation No. 3: STRENGTHEN THE LAWS REQUIRING PUBLIC SERVICE TIME ON RADIO AND TELEVISION

It is impossible for the American people to obtain proper nutrition education without the planned availability of the mass media of public information and entertainment—radio and television.

Their effective use for the education of the people is severely hampered by the fact that such media as radio and television are operated and managed by private interests with almost total control over their air time, though they are licensed by the Federal Government. Radio and television licenses do require that a portion of the broadcast time be devoted to public service pro-

grams but the decision as to which public service effort is to be given air time is left to station management. So is the decision as to which time is to be given. So is the decision as to how much.

Nutrition education, as the President has said repeatedly, is a matter of first priority. Therefore, it cannot be cast in a beggar's role with radio and television stations for air time which is the people's property to begin with.

Any nutrition education program must have the assurance that it will have at least as much exposure to the people through their mass media as is received by any selling effort on radio and television in behalf of major cigarette brands, automobiles, or airlines or other major consumer product selling efforts. These are not impugned. We merely say that nutrition education should get at least as much mass media support.

The educational programs to attack malnutrition and hunger are too critical to be built on the traditional haphazard basis of soliciting, hat in hand, the cooperation of radio and television outlets.

The time has come when such cooperation must become an unequivocal obligation.

Mass media of communication to the people must be restored, at least in part, to obligatory service to the people. Such service must not be at the station's discretion either as to the amount of time or as to its quality.

To a lesser extent, the print media should be expected to fulfill a similar obligation even though they are privately owned and are not licensed by the Government. Nevertheless, privileges like the second-class mailing permit are sufficient grounds to require obligatory use of a certain amount of space for the nutrition education effort.

No question of freedom of the press is involved nor is any infringement of that basic right intended. We are not talking program control or content censorship.

We are talking time and space. We are saying that the present loose arrangement with respect to "public service" time be formalized and taken out of the hands of those who operate the air waves for profit under license from the people and be made an absolute obligation in behalf of such efforts as nutrition education.

We would be fooling ourselves and the people if we permitted the belief that formidable mass media efforts can be executed in any other way.

Everyone who has ever marketed a product or an idea knows this. It is time we acknowledged it as public policy.

We recommend:

That the President should take and/or recommend the actions necessary to require of all radio and television station licensees that they prescribe that 10 percent of their broadcast time be set aside for obligatory public service communications programs of the Federal Government, such as the recommended nutrition education effort.

That the stations and networks should cease to exercise their present controls over which time period or how much time is to be allotted. The 10 percent suggested should be pro-rated over the various time periods on the basis of 10 percent of each time period.

That appropriate safeguards be established so that rights of station operators are not infringed, that an appropriate certification procedure be set up by which communications programs in the public interest can be approved and protected from bias or political distortion or expropriation.

This would require an examination of existing legislation and other regulations governing the licensing of radio and television stations to determine if the recommended action is possible now. If not, then the President is urgently requested to recommend such necessary legislation and/or regulations to achieve it in the shortest possible time.

We consider this to be a matter of prime national urgency.

Recommendation No. 4: USE OF MASS MEDIA FOR TRAINING NEIGHBORHOOD LEADERS

The importance of leaders with whom the disadvantaged communicate and with whom good rapport is established is not to be underestimated. The cadres of people in between the professionals and the target groups that must be reached play a most important role in conveying the message from one group to the other.

Neighborhood leaders must be trained so that the communications gap between the experts and the disadvantaged will be lessened.

One particularly effective medium is closed-circuit television with "talk balk," which provides:

1. Involvement of neighborhood leaders;
2. Immediate answers to questions without the use of a telephone or microphone;
3. Bilingual approach (leaders can ask questions in Spanish, English, or other appropriate languages).
4. Immediacy (problems dealt with immediately; not pretaped; does not have to fit into a structured time slot nor a neat package);
5. Glamour and appeal of show biz—developing personalities who are potential leaders seeing themselves on television;
6. Identification with neighborhood leaders they know;
7. Dialog without travel.

The technique of closed-circuit television involves a central broadcast facility (such as the University of Connecticut Radio-Television Center) which permits two-way audio with or without television. All locations are wired for microwave transmission. Viewers can ask questions spontaneously and don't have to use a microphone or a telephone. Dialog is possible with viewers all over the State (or beyond). Immediate problems can be dealt with. Closed circuit is really very "open" since there is no time limit and open dialog is afforded everyone.

We recommend: That professional centers be established for the training of neighborhood leaders in the subjects of foods and nutrition, using modern media wherever possible, such as the program of closed-circuit television at the University of Connecticut, and calling on the cooperation of such groups as the Cooperative Extension Service and the Corporation for Public Broadcasting.

Recommendation No. 5: FOOD DELIVERY SYSTEMS AS AIDS IN EDUCATION

"The propaganda of events is stronger than the propaganda of words," a wise communicator once observed. The best education is education by example, with the learner directly involved in the experience.

Every current and future food program should serve not only as the means to deliver the appropriate food to special target groups but also as a demonstration to these people of what proper nutrition is.

The school lunch program, for example, should also be employed as an opportunity to make the child aware of the nutritional reasons for serving the particular combination of foods he finds in his lunch. Over time, this information, coupled with the actual eating experience will do much to increase the nutrition knowledge of our future adult population, particularly among those who come from disadvantaged families.

We recommend: That all food delivery systems and programs, including the food stamp program and school lunch program, should contain some form of nutrition education insofar as possible without hampering the delivery of foods.

Recommendation No. 6: CONTINUATION OF STAFF POSITIONS—WHITE HOUSE CONFERENCE ON FOOD, NUTRITION, AND HEALTH

The feeling of the panel is that the White House Conference on Food, Nutrition, and Health has already established a high degree of public consciousness of the challenges of hunger and the need for better public understanding of good nutrition, and in view of the urgency of these problems, feels that the momentum accomplished by the conference should not be lost. This momentum should in fact be used as the beginning of the full-scale national education effort described in this report.

We recommend: That a sufficient nucleus of the White House staff which so effectively organized the conference be retained in the executive branch to implement the recommendations of the conference and to facilitate the appropriate actions of the various agencies of the Government and other cooperating groups in carrying out these recommendations.

SUPPLEMENTARY REPORT

During the deliberations of this Panel, many ways of reaching the target groups have been described and discussed. Many have great merit and are described in the following pages.

RADIO, TELEVISION, NEWSPAPERS, MAGAZINES, AND BOOKS

These mass media of communications have, in the past, devoted a very considerable effort to programs on food and nutrition, and have contributed

in a major way to our national awareness and understanding of good nutrition and of our current nutritional problems. Writers on such subjects as cooking, home economics, wise shopping and infant care have made some of our most notable contributions to public education. Certain magazines and newspapers have extended their activities to include excellent programs of lectures and demonstrations. Television and radio stations have contributed effective programs on such subjects. Documentary radio and television programs, on commercial and public networks and stations, have helped to acquaint their particular audiences with some of our current food crises.

The Panel commends such efforts, and hopes that they can be broadened and strengthened in the future.

Two specific new functions might be considered in this connection, perhaps as an assignment for the task force in communications referred to in recommendation No. 2:

1. An advisory service for the writers or producers of television and radio programs, and perhaps for other media, to provide them with reliable information on food and nutrition that they can weave into their programs. Similar advisory services (on different subjects) are provided by such groups as the Atomic Energy Commission, the Coast Guard, the Red Cross, and the Public Understanding of Science program of the American Association for the Advancement of Science, as well as the public relations representatives of many business firms. In some cases, the advisory services extend to the suggestion of ideas or specific materials for programs or to actual collaboration in the preparation of shows.

Entertainment shows such as television soap operas, for example, frequently use plot ideas drawn from factual sources. These might well be drawn on occasion from the subject matter of nutrition, providing that subject matter can be presented in clear and dramatic form, e.g. depicting possible actions to correct specific cases of malnutrition. The situation serials, the quiz shows, and the interview shows are standard entertainment for many of our most important audiences, particularly among women. Children's programs, both commercial and noncommercial, are important outlets for nutrition information.

2. Enlisting the interest of important popular personalities to help where they can in spreading good nutrition information in the media in which they appear: Sports figures, actors and entertainers, and disc jockeys (particularly those who are popular among the nutritionally vulnerable groups).

MOTION PICTURES

While theatrical entertainment films are made and marketed in a commercial framework different from that of the media listed above, the film medium can nevertheless have a very powerful effect on its audiences. Three important possible uses of the film medium are:

1. Short movies on nutrition for movie theatres in Spanish-speaking neighborhoods. The films might be made in a style similar to that of television commercials and circulated through motion picture advertising channels.
2. Educational films for schools (including loop films, slide films, and strip films as well as motion pictures).
3. Special films for special groups (such as community gatherings and demonstrations). For example, a film on good, basic cooking, emphasizing nutrition problems, in which the performers are Negroes and which is therefore particularly acceptable to Negro audiences.

ADVERTISING

The Panel recognizes the power of advertising in molding public attitudes and strongly endorses the idea of a national campaign by the Advertising Council to drive home to the general public the importance of good nutrition. Donors, all private, to the Advertising Council during its 27 years—have contributed four billion dollars worth of services and facilities to causes for the public good, and resulted in many famous slogans—from "A Slip of the Lip can Sink a Ship" to "Keep America Beautiful."

Following past practice the Advertising Council campaign might be expected to use mainly the formal media of advertising: Television and radio spot commercials; television slides; posters; billboard; car cards; print advertisements in magazines, newspapers, company publications, and the business press; lapel buttons and bumper stickers;

and on some occasions, perhaps cartoon books and licensing arrangements for dolls.

The Panel suggests that the Advertising Council campaign, if initiated, should for best effect continue over a considerable period of time. The campaign of the Advertising Council can help set the stage for many other activities that are mentioned in other parts of this report.

As to reaching the nutritionally most vulnerable groups, including the poor, aging, and special-case minority groups, one Panel member says:

These specific population groups gravitate principally to two media, television and radio. They are mostly non-readers. Neither newspapers nor magazines do the job. Rather they are heavy viewers of television and complement this TV habit with radio, particularly the new music stations. In order to speak to these people, I would suggest an important use of spot television and radio—spots in those shows that have a high preponderance of lower income, less educated audiences—disc jockeys who have great following among the ethnic segments. The job is not an easy one, so the Panel pleads for quite a bit of frequency. TV and radio spots telling our story over and over again until that message becomes a part of their thinking. Separate campaigns should be considered for each segment of the target group.

Two advertising techniques—the graphic symbol and the catchy slogan—are singled out by the Panel as having special promise in drawing public attention to the nutrition campaign.

GENERAL PUBLIC EDUCATION

Neither the formally recognized mass media nor advertising can in themselves do the entire job of public education. In fact, the field of informal public education (outside of the mass media and the formal curricula of schools) is so vast and so filled with activity, and works through so many channels, governmental and nongovernmental, that it is probable that the most important phase of the nutrition education program will take place in these informal channels.

Certainly, the informal channels are vital in reaching the many who don't read or don't watch television or listen to the radio or who don't get the information they need by any of the standard routes.

A few of the countless informal media are listed here, without any attempt at categorization:

Cooking contests

Cook books, especially for economy cooking

Cartoon books

Street fairs

Educational theater

Puppet shows

Juke box records and other records, especially for teenagers

Supermarket displays and demonstrations

Teenage social programs

Church bazaars

Women's club lectures

Visiting nurses' associations, especially of practical nurses

Teaching programs for pre-school youngsters and their mothers

Stuffers in cereal boxes

Home study kits

The activities of private groups of all kinds are contributing to the education process, from small country churches to food manufacturers and food industry associations. The television and radio commercials advertising food products can frequently blend in good nutrition information without upsetting the sales message, especially those featuring recipes.

A mass education campaign should see to it that these many media are used as effectively as possible. This means a mechanism for continual monitoring of promising activities around the country. The monitoring should certainly include some attention to school curricula and to extracurricular school activities. Most importantly, there should be a prompt pinpointing of the most serious gaps in popular education and an immediate effort to do something about them. For instance, if an area is found where there is a serious problem, a "test market" campaign might be run using all forms of communication. If successful, this can serve as a prototype for similar efforts elsewhere.

As expert and imaginative workers apply themselves to the education problem, new ways of communicating will be developed, and even new media. To illustrate, here are a number of activities that have been suggested by panel members, some perhaps already in effect.

1. Work with top management in factories where some of the disadvantaged are employed to give "time on the job" to see and hear meaningful programs with discussion after the presentation in the plant.
2. Buildings or centers offered to the disadvantaged where they can come and present their problems.

3. Informational materials passed out at point where food stamps are distributed, emphasizing the essentials of a balanced diet.
4. Programs to educate the operators of nursing homes on the importance of nutrition in the well-being of their patients.
5. Educational materials for midwives on the importance of good nutrition—midwives being a major influence on the food habits of many new mothers and expectant mothers among the disadvantaged.
6. Educational programs for migrant workers.
7. A central source of prepared radio materials on good nutrition to be broadcast for small ethnic groups—e.g., in the Navajo language or in Eskimo language. For example, radio station KCOR AM-FM in San Antonio has given a great deal of public service time to its own messages on nutrition, prepared with local experts, directed to the Mexican-American community, who tend to live on corn and beans. There are many “ethnic” stations with lesser resources that cannot afford to prepare such messages; they would welcome outside help. The KCOR messages are of limited use, for example, among the Puerto Ricans in New York, who like different foods.
8. Aid in distributing educational materials already prepared, e.g., a series of 3-minute educational spots done at ETV station KLRN, San Antonio, under the title “Tia Luisa,” with support from the Moody Foundation. Can these be used elsewhere?
9. Good educational materials for grade schools and high schools on the biochemistry of nutrition, e.g., films or books on the design of life support systems for space travelers might interest youngsters.
10. A house magazine or newsletter to be circulated to all the different groups working in the field of nutrition education, public and private, telling them what’s new in nutrition, what’s new in the media they’re using, and what the new problems (gaps) in public understanding are, based on the findings of the task force.

11. Informational materials on good buying practices made available free in grocery stores and supermarkets.
12. Prizes or other recognition for successful programs in nutrition education.

MEASURING RESULTS

Most intelligently-conceived programs of education have built into them a system of checking to let the educators know how well their work is succeeding and particularly where their efforts need to be improved or intensified. It is a tremendous task to check results in a mass education effort like the one we are discussing. We are not in a position to give quizzes or final examinations or to check on the changes in everyone’s behavior; and will need to rely on statistical measurements and on the kind of surveillance system mentioned earlier in this report.

Nevertheless, we need to assign ourselves the task of measuring results, if we are really to raise the level of nutrition education to the point where our population is no longer in jeopardy from malnutrition. It is worth repeating here that the program of education needs to be a continual one over a long period of time; hence the measurement of results, too, will need to be a continual process.

HOW PEOPLE LEARN

Tone, manner, and feeling are crucial to the success of this task in public education. The panel has a number of informal recommendations about the general style of the campaign. Too often in the past, nutrition education has carried with it an air of dullness, didacticism, and condescension—an attitude of “do this or else”—that actually antagonizes the audience. Future programs should avoid this pitfall.

When teachers have important information to pass on to others who don’t have it, there is an inevitable temptation to act the pedagogue—a temptation that must be resisted in this campaign. The biggest job in nutrition education is to look at the problems through the eyes of the people who need to learn, remembering that they may not realize their need. To do this, one needs to start on the student’s own level of interest, and to talk to him in terms with which he is familiar and comfortable.

Some of the Panel suggestions are noted below :

1. Any approach to the nutritional problem should be on a personal basis and not on the basis of ethnic groups and categories. Don't generalize "from the top". Be concrete, personal, immediate. The problem is not "malnutrition". The problem is *this* child, *this* man, *this* old person.
2. Avoid invidious comparisons between groups: well-fed vs. ill-fed, black vs. brown vs. white. People want to be judged not by facts outside of themselves or by the way other people live but by their own worth.
3. To engage people's attention, create events that will attract them on the basis of their own interests.
4. Make our "comfort" groups more conscious of their responsibility to society to avoid waste. We throw enough food into the garbage pails of the United States each week to feed millions. "Avoid waste" might in itself be a good national campaign.
5. Relate the entire nutrition program to other matters of serious human and social concern: physical fitness, heart disease, alcoholism, narcotics and crime, consumer education.
6. Involve the disadvantaged people themselves in the educational program. Get them to express their own needs and desires and to work out their own ideas. At the same time, seek out those who are in need of education but do not come to look for it.
7. Use existing groups as agents in the educational process—neighborhood groups, black associations, athletic groups, church groups.
8. Work through the leaders with whom the disadvantaged communicate and have rapport.
9. Work through children. Reach people through their children.
10. Find a new word to use instead of "nutrition," which sometimes sounds tired and unappealing.
11. Repeat the message over and over. The audience is always changing, and the more any one person hears our message, the greater the impression it will make on him.

A final suggestion is to emphasize the positive aspects of nutrition more than the don'ts, the "no-nos" and the terrors. Good nutrition * * * good eating * * * not only is enjoyable in itself, it is also the basis for the better, more enjoyable life we all aspire to. An emphasis on the rewards of good nutrition can be one of the most powerful appeals in the educational campaign.

CURRENT PROGRAMS INDICATE OF NEW ACTIVITIES IN NUTRITION EDUCATION

A pilot research project at the University of California in Berkeley designed to educate the "hard to reach" poor families and to "help improve the nutritional quality and adequacy of individual and family diets within the economic means of the family." The project (headed by Dr. Ralph D. Smith, an extension communications specialist) is working with poverty-stricken blacks, with Mexican-Americans, and with low-income white families. It employs 360 women from poverty areas as part-time aides in nutrition education.

A "children's centers program" sponsored by the State Department of Education in California, providing educational supervision and instruction for children between the ages of two and six.

Research with Negro families in Beaufort County, S.C., being conducted by the University of South Carolina, to learn how best to educate them about the essential facts of good, nutritious food.

A study of the best methods of providing nutrition education for the poor people in the lower Mississippi region, being conducted by Dr. Joseph Beasley of Tulane University.

Research on nutrition education of the needy, which has provided new information on how to help poor people spend their money more wisely, being conducted by Quaker Oats Co. in the black ghettos of Chicago. This project includes a free 10-week course conducted by a Negro home economist and presumably has revealed a great many things that neither the marketing people nor the local welfare people knew before.

The testing of a new "doubly enriched" nutritive product in a big city ghetto, a nonprofit program being done by Pillsbury Co. for the Office of Economic Opportunity, in an attempt to tell what types of advertising appeal to the various racial groups in these areas.

Three pilot television programs for nutrition

education of the needy being prepared by the educational television station in Boston.

An educational program by the Food and Drug Administration to make people more aware of the labeling and quality of the foods they purchase. This service, in Harlem, provides telephone counseling service in both Spanish and English.

A series of three half-hour television programs by National Educational Television, intended for boys and girls, emphasizing basic food groups. It is supported by the Nutrition Foundation.

A television program called "Katie's Place," produced by the Alabama ETV network under a grant from the Extension Service of the U.S. Department of Agriculture.

Addendum—Recommendation No. 2

The following suggestive outline is for the information of those who may study Recommendation No. 2, but may not be familiar with the areas of activity in which communications professionals function.

For instance, choice of a medium of communication is decided by the particular message and the audience. Simple nutrition facts offered by a Mexican guitarist being interviewed by a radio disc jockey might have particular appeal for a Spanish-speaking audience.

THE MEANS OF COMMUNICATION

1. Print:

(a) Newspapers and magazines. A massive campaign would reach daily, weekly and monthly publications with appropriate audiences. Magazines and large newspapers would be encouraged to develop their own nutrition stories. The foreign-language press and other small papers might prefer ready-to-use materials:

(1) Accurate recipe and menu columns; related buying information (in pictures and appropriate languages, where needed).

(2) Nutrition information columns—simple.

(3) Short "filler" material.

(b) Materials normally used by the Advertising Council:

(1) Advertising in the above media (also television and radio—see below).

(2) Billboards, posters, car cards, buttons, etc.

(c) Books and pamphlets, large-type flip charts.—Prepared by working with community groups so that materials relate to local community needs and interests coordinate with messages on mass media.

2. Radio and television:

(a) Spot announcements on radio and television, the latter using a graphic campaign identity symbol.

(b) Dramatic programs and serials where nutrition information can be used effectively in script form.

(c) Interview shows, "talk" shows, panel shows.

(d) Children's programs.

(e) Women's interest programs.

(f) Closed-circuit telecasts into neighborhood centers, with a phone hookup so viewers can call in questions, get answers in their own languages.

3. Film:

(a) Shorts for neighborhood theaters, perhaps in foreign languages.

(b) Loop films, slides, strip films and motion pictures for use in school, in clinic waiting rooms, etc.

(c) Special films for special groups as on cooking.

4. Person-to-person contacts: Neither formally recognized mass media nor advertising can do the entire job of public education. The informal channels of communication have great importance. They can be used alone but are especially effective used with the mass media.

(a) Followup recipe, menu, and buying tips pamphlets.

(b) Street fairs, puppet shows, educational theater.

(c) Neighborhood social programs.

(d) Supermarket displays and demonstrations.

(e) Simple nutrition teaching coordinated with lunch in day-care centers; information programs for parents.

- (f) Informal education from visiting nurses, etc.
- (g) Lectures and other programs for women's clubs, church groups and other organizations such as PTA's.
- (h) Programs for Scouts, Future Homemakers, etc.
- (i) Help in developing or presenting programs for such groups as Rotary, Kiwanis, Elks.
- (j) Home study kits.
- (k) Cooperative promotions with industry.
- (l) Seminars in factories, using films and discussions.

THE MESSAGE TO BE COMMUNICATED

The mass media should be used to reach the television viewer, radio listener, newspaper and magazine reader—even the nonviewer and non-reader, with:

1. Specific points of basic nutrition.
2. Motivation to obtain and apply this information.
3. Emphasis on what malnutrition is—at all income levels.
4. Scope of nutrition as it relates to physical fitness, heart disease, alcoholism, narcotics, crime, mental health, consumer buying, etc.

Report of Subpanel on Deception and Misinformation

A SUMMARY OF THE PROBLEM

No other area of the national health probably is as abused by deception and misinformation as nutrition. Many travesties cheat the public of enormous sums of money, and of good health as well. Yet the American people falsely believe they are well protected, both by Government and by the ethics of commerce.

In many cases, the lie is a promise of extraordinary health value in some special food or system of eating. Scientists agree that the usual American diet is adequate for health. And Federal experts and agencies concur.

In many cases, labels, advertising and packaging imply a quality, quantity or content that is false. Here those who cannot afford poor food choices are especially exploited. The poor, in particular the old, the ill and the least educated, are cruelly victimized as they spend meager food dollars for needless high-priced supplements and "health" foods. Or they are lured by advertising that suggests falsely that certain cheap, widely sold products, because they contain a few added vitamins or minerals, can replace usual foods or even whole meals.

Often, proper medical care is delayed by a mistaken expectation that food can cure or prevent disease. This can be outright quackery. Or it can be the irresponsible spread of misinformation as in the many specious plans for reducing that are foisted on the 20 percent of our population whose health is threatened by overweight.

The total medical and financial damage is unknown. It must be measured. But even while such measurement is being made, certain defense actions are urgently needed. And they are many years overdue.

The problem is complex. It ranges through the Nation's entire food and marketing system and blends with such fields as publishing and broadcasting. Yet in one view, it is simple, resting with three basic rights of the consumer, long denied:

The right to know.

The right to be heard.

The right to be protected from hidden exploitation.

The following recommendations seek to guarantee these rights, without impinging either on the freedoms of expression or the free competition of the open marketplace. But it is emphasized that this guarantee is not a job for government alone. For each right also implies a responsibility—to know, to voice complaint, and to help protect the rights of fellow citizens. The recommendations also seek to make possible the exercise of these responsibilities.

In general, it may be said that food and nutrition deception and misinformation can be virtually eliminated in the United States at a price that appears to be only a fraction of its annual cost to the Nation today.

Recommendation No. 1:

In general, Federal laws are adequate to protect the American from being deceived or misin-

formed. But these laws are not being obeyed or enforced as they should be. Certain bottlenecks must be removed.

Particularly, the involved Federal agencies are handcuffed by certain administrative policies, and by lack of staff, funds and facilities of a relatively minor order. These flaws often result in poor coordination of agencies, wasted effort, weak surveillance and months or years of delay in action, which permit impunity for violators and a constant barrage of deception for consumers.

The following subrecommendations are made to give the laws and the agencies the force and effectiveness that the public expects them to have:

1. At present, the involved Federal regulatory agencies (especially the Post Office, Food and Drug Administration, Federal Trade Commission, Department of Agriculture, etc.) coordinate their work in a very informal manner. Sometimes there is a failure to exchange needed investigative information.

A coordinating body is urgently needed. That body seems already to exist in the Office of Consumer Affairs.

The Office of Consumer Affairs should be charged with coordinating the activities of those agencies that regulate food deception and misinformation. It should hold regular meetings of agency representatives so that these representatives can decide on jurisdiction of questionable cases and complaints. It should follow up investigations and prosecutory actions to make sure they are promptly taken care of. It should have free access to records of the agencies to make certain there are no needless delays of action and no delays in the free exchange of information and expertise. It should channel complaints from Congress, from citizens and other agencies. Above all, it should be charged by the Office of the President with expediting defenses against deception and misinformation and have the full support of that Office. In general, it should serve as a watchdog to report regularly on slowdowns or inefficiencies that might be corrected by better administration, budget additions, executive orders or legislation.

Finally, it should seek to foster cooperation between the agencies and the Department of Justice, which prosecutes the resulting cases,

and be alert for any failure of the protective system at this juncture. Sufficient budget must be provided to enable the OCA to perform these functions.

2. All pertinent agencies report that the prosecution of cases involving food and nutrition has been given a low priority. In view of the constant distortion of the public's understanding of nutrition, the great size of the public cheat (as reported by several agencies for at least a decade) and the hazard to the public health, a higher priority for food matters is urgent. It is respectfully suggested that the Office of the President should so state in messages to the appropriate agencies.

Such priority, however, should not be at the expense of other important matters. Additional responsibility should not be assigned without suitable additions to budget. Since the entire Food and Drug Administration budget is now less than 40 cents per capita per year, such additions should not be a burden to the economy. The dollars saved for the consumer should be far greater than the pennies of additional cost for the consumer.

3. The Federal Trade Commission has in recent years done very little to control deceptive and misleading food advertising. It has had neither sufficient staff, nor budget, nor facilities to do very much more than meet its other responsibilities.

It has been recommended by a floor vote of panel participants that the food-advertising responsibilities of the Federal Trade Commission be transferred to the Food and Drug Administration, on the model in which prescription drug-advertising was transferred and for much the same reasons of efficiency and economy. The panel urges that a study of this proposal should be made by an appropriate office of the administration.

4. If No. 3 of this section is not implemented, it is urged that the FTC budget for the control of food advertising deceptions be enlarged, to provide for needed staff and other needed facilities.
5. If No. 3 of this section is not implemented, the Federal Trade Commission should be enabled to act on all pertinent matters affecting

interstate commerce. Many studies have shown this need.

6. The Food and Drug Administration, in the course of its work, is sometimes handicapped because it cannot require the appearance of witnesses at administrative hearings.

It is recommended that the FDA be given subpoena power within appropriate limits, as further study shall determine; if this power will result in more effective consumer protection, it should be given to them.

7. One of the problems reported by regulatory agencies is their difficulty in obtaining clearance in making consumer type surveys, often a most important intelligence-gathering and evidence-gathering device.

It is therefore urged that the Bureau of the Budget study what can be done to expedite the clearance of such surveys. If present bottlenecks cannot be cleared within the existing Federal Reports Act, it is recommended that the act be amended to this purpose.

8. Under present FTC law, the sole penalty for false and misleading advertising, made without intent to defraud or mislead, is to be forced to desist from such advertising. It is felt that this is not a sufficient deterrent to deceptive promotional practices.

It is recommended that the Congress be asked to consider the institution of other penalties for advertising adjudged by due process of law to be false and misleading, especially if the advertiser has been guilty of past offenses in these matters.

Recommendation No. 2:

Since the informed consumer is best defended against deception and misinformation, immediate steps should be taken to expand the information about foods and nutrition that is available to the consumer.

The following subrecommendations are made:

1. The Subpanel earnestly calls attention to the recommendations of its main Panel on popular education of the disadvantaged groups, since a general nutrition education program is here presented.
2. The combating of misinformation depends upon the availability of correct information

first of all. Yet there is no central repository for nutrition data in the United States.

It is suggested that a nutrition archive or data bank be established similar to that established in the field of tobacco smoking, funded by the Federal Government, and under the supervision of the Department of Health, Education, and Welfare.

Such a center would supply information at levels appropriate to the sources of inquiry and the purposes of the inquiry. It would actively seek information and supply bibliographies but need not assemble the actual sources themselves.

3. Because there is not now and probably never will be complete agreement as to fact in nutritional science, there is also need for a source of the best current nutritional opinion. Such a source would aid, for instance, in a Government agency prosecuting a nutrition fraud, a manufacturer preparing an advertisement, or a publisher reviewing a manuscript for publication.

It is recommended that the President call upon all organizations with an interest in nutrition to federate in a National Nutrition Council to be supported by private funds solicited from its members.

Under the Council's aegis, leading nutrition experts could be assembled to discuss nutritional issues and develop by majority some practical decisions about questions of food and health. (An example of such questions is the current cholesterol confusion.) The Council might also maintain a permanent staff to promulgate the currency of opinion. Having such a source would encourage industry, advertising, publishing, and broadcasting to seek factual background for information going to the public.

It is also hoped that such a council could become a forum for the informal exchange of views among scientists, communicators, businessmen, and Government officials to help develop a spirit of cooperation in disseminating nutritional ideas of accuracy and value. It is further hoped that such discussions would foster the improvement or development of codes of ethics for those who spread ideas about nutrition, thus obviating some enforcement effort.

The Council is not seen as a purely national body. Rather it is envisioned as having parallel local groups, comprised of representatives from local organizations. Among its members would be professional and scientific groups, voluntary health agencies and trade organizations, unions, welfare and service groups.

4. Surveys show that food labels still cause confusion in the marketplace. Conformance to the law does not alleviate the problem for two reasons: (1) Not enough information appears on labels to satisfy consumers in all cases; and (2) the language required by law is often meaningless to anyone but an expert.

Food label requirements must be expanded in the light of what the consumer actually needs and wishes to know and couched in language which is meaningful enough so that the consumer may make an intelligent choice in a free marketplace. More specifically:

- (a) The Food and Drug Administration, the Agriculture Department, and other Government agencies concerned with labeling should assemble advisory committees of consumers, industry, and the food sciences to develop new principles and methods of labeling which will give real meaning to the information borne by the Nation's foods.
- (b) While participants from the general conference who joined the Panel voted for the inclusion of all ingredients on all labels, even including those for which standards of identity have been set, the matter is considered to be a subtle one and should be further studied. However, the principle invoked is recommended to appropriate Government agencies, to wit: That all foods should be labeled in such a way as to reassure the most skeptical consumer that he is not being deceived by omissions.
- (c) Similarly, it was voted that the word "imitation" not be removed from food labels. It is understood that Panel III-2 reviewed this subject with far more care and expertise. However, we recommend that our floor vote be considered in any final decision as further evidence of the consumer's wish to

know clearly what he is buying and eating.

5. Because many Government actions that bear on the consumer's interest in deception and misinformation are listed only in the Federal Register, and because few citizens are aware of the content of the Register (and fewer still are able to interpret its often technical statements) it is recommended that a Consumer's Federal Register also be published by the Government. This register should explain the actions taken or to be taken in simple lay language, as has been recommended by the Office of Consumer Affairs.

Recommendation No. 3:

The consumer's right to be heard is often neglected. This is so largely because there is little provision for channeling his voice to the appropriate agency in matters of food and nutrition. Congressmen traditionally have probably been the most conscientious Government group in seeing that complaint and opinion go to the proper recipient and are acted upon. But their staffs cannot be expected to handle the volume of communication.

It is recommended: That since the Office of Consumer Affairs is proposed to be the coordinating body in matters of food and nutrition deception and information, it also be staffed and structured so that it can become known as the best recipient, screener, and director of complaints in this field.

1. One way of hearing the consumer's voice in such matters is to study, on a continuing basis, the nature and extent of deception and misinformation and the reaction of the consumer to it. It is recommended that the Government initiate and support such research in order to learn better what must be done to combat the problem.
2. Often the consumer is not heard because his complaint is best expressed as a legal matter, one which he cannot afford to press. It is recommended that such groups and agencies as legal aid bureaus, defender organizations, and the Office of Economic Opportunity be enlisted for this purpose, using such techniques as class actions and seeking other means of legal relief. Where the law so

provides, Government funds should help support such efforts.

The panel has also voted to recommend against any OEO legislation that gives the Governor of the State a veto power over OEO functions in this regard.

3. On the State level, it is recommended that model consumer-aid groups be established similar to the strike forces instituted to combat crime. Such units would concentrate on consumer fraud.
4. Since State and local consumer protective agencies are increasingly in evidence, and are sometimes most familiar with local problems, the field offices of Federal regulatory agencies should be instructed to give all possible cooperation and information. For the consumer is turning more and more to his local consumer protection agency for relief. Such liaison will also open up another excellent source of local intelligence for the regulatory arms of the Federal Government.
5. It is recommended that, before the Food and Drug Administration holds hearings in which the consumer should be heard (for example, hearings on food standards) the agency should seek consumer opinion and advice.

Recommendation No. 4:

It is strongly urged that the Federal Government constantly search for law and procedures that have not traditionally been thought of as weapons in the war against deception and misinformation, or which lately have been overlooked to some extent. Such a search might be conducted as a research project of the Office of Consumer Affairs.

Recommendation No. 5:

In accordance with the consumer's right to be protected from hidden deception, the Bureau of Standards' role should not be overlooked. Few citizens realize that problems in weights and measures, for example, are still serious and that new ones arise with each change in industrial practices.

For example, comments from the Bureau indicate that automatic filling equipment often works a serious economic cheat. Milk-carton shortages are common. The charges for prepackaged meat packaging materials are commonly made at the

price of expensive meats. In many instances, the cheats are said to deprive the consumer of 8 percent of this purchase. While this sum is not as urgent a matter for the middle-class individual purchaser, it is a serious loss for the poor. And in the aggregate, it nets industry large sums. The panel is informed that good weight-and-measure surveillance would cost only an additional 6 to 8 cents per capita per annum. This sum is small compared to the amount believed to be lost.

True, such problems often lie within the jurisdiction of local agencies. But the Federal Government, perhaps through the cooperation of the Bureau of Standards and the Office of Consumer Affairs, should educate the public to the need and the potential saving, and should cooperate with and encourage local regulatory agencies, to insure that the full pound and the full quart are the rule of the American food market.

Recommendation No. 6:

It has come to the attention of the Panel that the inspection of foods is not always adequate to justify the public's feeling of trust in what it buys to eat.

It is recommended:

That those systems of inspection under which industry pays the inspector be abolished to avoid undue influence. Also inspectors should be rotated to avoid the pressures of long-term associations with particular plants and processors.

Moreover, the inspection system should always be supplemented with spot-checking to insure the impartiality and efficiency of the inspectors. The cost should be low and the health value high.

COMMENTS OF THE CONSUMER TASK FORCE

Panel IV-4: Popular Education (Subpanel on Deception and Misinformation)

A problem does exist in deception and misinformation about food and nutrition by radio, television, and printed media. This area needs attention without endangering our long-established freedom of expression.

COMMENTS OF COMMUNITY ORGANIZATION TASK FORCE

PANELS IV-1, IV-2, IV-3, and IV-4

The task force chose originally to respond to the four Panels together.

The nutrition education Panels failed to heed the task force's general disclaimer on nutrition teaching and nutrition education. Specifically, the statement that said "Although the greatest need exists among the economically disadvantaged and ethnic minorities (and meeting this need must have first priority), we believe that national policies must be inclusive of all groups, races, and ages in our country," was not stressed as it should have been. The poor should not be singled out as recipients of nutrition education.

The task force statement that "We feel strongly that it is a mistake to assume that the primary

cause of the problems related to hunger and malnutrition is a lack of education," did not receive the emphasis we felt it should receive.

The task force repeats its critique that a new scheme of national health insurance associated with the development of a new national health delivery plan be adopted as soon as possible.

The task force continues to feel that there is a particularly urgent need in education of traditional health professionals and in the creation and training of and support for new health careers. The overall health of the Nation is dependent not only on new scientific techniques but upon an adequate number of health and related personnel to deliver those services.

The task force feels that continuing education for all professionals is necessary; and that re-evaluation of the health profession's licensing procedures must take place.