

U.S. Interest in World Nutrition

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The United States has a sincere interest in world nutrition. Food, nutrition, and health are basic needs of people everywhere, but hungry, underfed, malnourished populations can have little concern for anything but their need for food and well-being. They are subject to the ravages of disease, further diminishing their productive capacity. The result is a vicious revolving chain of physical, mental, and economic hardships.

To break this cycle there are those who advocate the "economic aspect" as the real and only solution to the world's problems. Health and well-being cannot be purchased, however, like a piece of machinery. Certainly the developing countries seek a vigorous economy. But economic vigor will come and be more lasting if it emanates from their own resources and productive capacity.

Education in the broad sense is fundamental to every stage of the search for technical, social, and economic development, which contributes to the improvement of life, liberty, and happiness for all people. Education by "seeing and doing," the so-called extension work or person-to-person approach, brings improvement and lasting benefits through its practical applica-

tion in agriculture, health, transportation, and industry. And development programs must be thought of in terms of decades, not years; not as temporary aid, but rather as long-term investments.

As we review the world's nutrition and health problems, it becomes clearly evident that the more fortunate countries must be willing to share their technical abilities to assist the less fortunate. It is most encouraging to note the wording of the 1958 amendment to the act authorizing U.S. participation in the World Health Organization, which states, "The Congress of the United States, recognizing that the diseases of mankind, because of their widespread prevalence, debilitating effects and heavy toll in human life, constitute a major deterrent to the efforts of many peoples to develop their economic resources and productive capacities and to improve their living conditions" As the late Gen. George C. Marshall so aptly stated, the policy of the United States citizenry and Government is and must be directed against hunger, poverty, desperation, and chaos.

For more than a half century the United States has been engaged in combating world health problems, a notable example being the war against yellow fever by the Medical Corps of the Army. Since then there has been a tremendous expansion in research and aid in world health and nutrition by missionary groups, philanthropic organizations, and U.S. support of the United Nations agencies, Food and Agriculture Organization, World Health Organiza-

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With the Help of Many

The degree of success achieved in demonstrating the interest of the United States in improved standards of nutrition throughout the world must be credited to the many individuals who arranged, assisted, and participated in the program of the Interdepartmental Committee on Nutrition for National Defense.

Special thanks are due Wilfred J. McNeil, former Assistant Secretary of Defense (Comptroller) and former Ambassador William C. Bullitt for their initial support.

The Office of International Security Affairs of the Department of Defense, by adding nutrition to the U.S. military assistance program and placing it in the perspective of a people-to-people approach, gave the words "for national defense" broader meaning—not only military defense of the host country but defense of its life, liberty, and well-being as well.

Nor would this program have been possible without the continuing support and cooperation of the National Institute of Arthritis and Metabolic Diseases, Public Health Service. The vision and plan-

ning of the late Dr. Harold R. Sandstead, first executive director of the committee, gave it direction.

The assistance of the Department of State and the sympathetic understanding of its late Secretary John Foster Dulles, the present Secretary Christian A. Herter, and Walter M. Rudolph, assistant science adviser and ICNND member, deserve a special acknowledgment. The staff of the International Cooperation Administration participated and aided in the initial survey programs and in followup work.

In each of the host countries, the staff of the U.S. Embassy has given noteworthy and continued assistance.

Finally, acknowledgment is made to the many United Nations agencies, such as the Food and Agriculture Organization, the World Health Organization, and the United Nations Children's Fund, for the assistance and guidance given by the staffs of international headquarters and the field missions.

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tion, and United Nations Children's Fund. In addition, U.S. Government agencies, such as the Armed Forces, Public Health Service, and the International Cooperation Administration, assisted in great measure through our university and college staffs, have greatly expanded their activities in world health problems.

Objectives

In early 1955, the Interdepartmental Committee on Nutrition for National Defense (ICNND) was established by a memorandum of agreement by the Departments of State, Defense, Agriculture, Health, Education, and Welfare, and the International Cooperation Administration. The committee was later joined by the Atomic Energy Commission.

The purpose of this committee, as set forth in the memorandum of agreement, is to supply assistance in nutrition problems of technical, military, and economic importance in foreign

countries. The committee is advised and guided by a group of consultants from colleges, universities, government, and private agencies, who are recognized throughout the world as specialists in nutrition, medicine, agriculture, food technology, and biochemistry.

To assist, one needs to know the problem. The lack of statistics on and definition of the major food and nutrition problems in the developing countries is strikingly evident from a mere glance at the reports and literature presently available. Thus the first step must be to resolve this lack. What are the problems? What preventive and corrective measures can be taken, based on the country's resources? Is immediate corrective assistance required?

In January 1956, official requests from the Governments of Turkey, Iran, and Pakistan to the U.S. Government for assistance led the committee to launch a medical nutrition appraisal program in these countries. From

the beginning, it was evident that, although most essential, the mere definition of major food and nutrition problems would be of little benefit to the country concerned or to its underfed and malnourished people. Therefore, the program was designed to assist countries in using their own resources to the best advantage. The need to bring these problems to the attention of the country's national governing bodies and to obtain support and necessary action was also recognized.

In general, a survey team is composed of the following specialists: physicians, biochemist (laboratory director), two or more laboratory assistants, food-service and nutrition specialists, dentists, food technologist, and agricultural economist. Personnel of the host country are given training by working side by side with U.S. team members on the nutrition survey in the areas of clinical, biochemical, and food and agricultural assessment. A unique opportunity is afforded to acquire new scientific knowledge essential to a better understanding and solution of nutrition deficiency diseases.

The armed forces of developing countries afforded many advantages of logistical ease when initiating a nutrition improvement program. These advantages were: (a) logistical ease in sampling and transportation, (b) ap-

praisal of young, physically active men, fresh from and soon to return to civilian life, (c) food supply, habits, customs, and the like which are usually identical with the local area in most countries, (d) ease of implementing and testing the program for improvement, (e) opportunity to initiate food standards and specifications (often nonexistent) on the largest organized group of consumers, and (f) carryover of benefits and improvements in nutrition into the civilian population. As shown in table 1, the more recent surveys have also included civilian populations.

Last, but perhaps most important, the committee in a followup phase makes consultant service available to assist further in specifically defined problem areas.

Many disciplines are essential in improving nutrition and health. It is vitally important to recognize, cooperate with, and assist the programs of the host governmental agencies responsible for health, agriculture, development, and education, and the participation of the U.S. missions and UN agencies having responsibilities in these areas as well.

By July 1, 1961, the committee's program will have been extended to 16 countries, including 5 in the Far East, 4 in the Near East, 4 in South America, 2 in Africa, and 1 in Europe, and also

Table 1. Countries cooperating in the ICNND nutrition program

Country	Date of survey	Number of other U.S. missions	Number of individuals examined	
			Total ¹	Civilian
Pakistan	January 1956	4	2, 019	
Iran	January 1956	4	1, 730	
Korea	June 1956	2	1, 514	
Philippines	February 1957	2	4, 234	
Turkey	April 1957	4	8, 519	
Libya	June 1957	3	3, 828	1, 629
Alaska ²	February 1958	2	1, 518	805
Spain	April 1958	3	10, 727	
Ethiopia	September 1958	3	6, 400	6, 200
Peru	April 1959	2	8, 194	150
Ecuador	July 1959	2	7, 155	4, 816
Vietnam	October 1959	2	7, 428	4, 556
Chile	March 1960	2		
Colombia	May 1960	2		
Taiwan	September 1960	2		
Thailand	October 1960	2		
Lebanon	February 1961	3		

¹ Includes armed forces and civilians.

² Before becoming a State.

to our new State of Alaska (table 1). The procedures for conducting the surveys have been described in a number of publications (1-18).

In retrospect, it is most encouraging that the armed forces nutrition groups in Iran, Turkey, Pakistan, the Philippines, Korea, and Spain have extended their programs to bring assistance to the civilian population.

The success of these survey missions has been due in great part to the high caliber and dedicated spirit of the members of the nutrition teams, including the host country members. Host country team personnel have usually been supplied from not only the armed forces but from the Ministries of Health and Agriculture and from university staffs. The majority of the U.S. team personnel (numbering over 150) have been most generously supplied by 24 colleges and universities throughout the United States, 10 Government agencies, and more than 10 private or State agencies. The experiences of the team members have amply demonstrated that this is not a "one-way street." They have acquired new knowledge and brought back to their universities and laboratories new problems requiring further research. The surveys have engendered a mutual personal good will and understanding, and returning U.S. team members have joined the "double-duty corps," serving as *ex officio* ambassadors for the countries they visited. As Dr. James A. Shannon, director of the National Institutes of Health, summarized: "The surveys have stimulated and reawakened interest in clinical nutrition."

Major Nutrition Problems

In many parts of the world, one may be misled at first sight by the good physiques of the people, but it is not unusual to find that life expectancy is short and mortality among children extremely high. The weak or malnourished are not seen walking down the roads and streets. Wherever malnutrition exists, it is always the children who suffer most.

In comparing the results in 14 countries recently surveyed by similar procedures (table 2), it becomes clear that although there are many similarities in nutrition problems, each country, and more often areas within the country, must be considered separately and prac-

tical recommendations advanced for the specific area. In comparing the generalizations given in table 2, one must keep in mind that some of the surveys involved only military populations. As would be expected, the greater number of nutrition problems existed in the vulnerable civilian population, particularly among children and pregnant or lactating women.

Inadequate riboflavin nutriture was the most prevalent general finding in seven countries and a special area or group problem in four. Next in frequency of indicator lesions suggestive of suboptimal nutrition was lack of vitamin A (general in three countries, in special areas of seven); vitamin C (general in one, in special areas of nine); and thiamine (general in three, in special areas of six). Endemic goiter was found in eight of the countries; however, it was usually confined to specific areas. Protein malnutrition and caloric deficit, although a serious problem in the Korean military in 1953, has been alleviated. A survey in Haiti (19), conducted under the auspices of the Williams-Waterman Fund, revealed protein malnutrition to be one of the major problems. As usual, the groups most seriously afflicted were infants, children, and pregnant and lactating women. Anemia of unspecified origin was noted in special groups in seven countries, also, particularly prevalent in mothers and young children and often associated with parasitic infestation. At the time of the Ethiopian, Libyan, and Haitian surveys, the general caloric intake was appraised as suboptimal.

Although we have discussed malnutrition in only a general way, the seriousness of acute nutritional disease has been brought vividly to the attention of the medical profession. As an example, Dr. Oomen (20) has stated, "Xerophthalmia has been the most bitter pill for me to swallow during 18 years of doctor's work in Indonesia. The repeated experience of discovering a child recently blinded in the arms of the mother, having to tell her that I now could do nothing more to save the eyesight, remembering that I could have done so with a few spoonfuls of cod liver oil some days ago, these things still enter my nightmares. . . . More printing space nowadays is devoted to a few cases of hypervitaminosis A, induced by an irresponsible vitamin racket, than to the thousands of small

children who die or go blind every year due to the lack of a handful of vitamin A units. What on earth is nutritional science good for, even in the atomic age, if it is not capable of counteracting one of the foulest consequences of bad nutrition?"

Another personal experience was reported to the authors by former Ambassador William C. Bullitt. A young Chinese boy in Taiwan was suffering from night blindness and early stages of xerophthalmia. His doctor informed him that the disease was so far advanced that blindness was inevitable. This young man was befriended by Ambassador Bullitt, employed in his household, and given vitamin A therapy. He recovered his eyesight, is now a sergeant in the Marines, and qualified recently in rifle marksmanship.

Accomplishments

Iran

An Armed Forces Nutrition Committee and Institute was formally established in Iran following the medical nutrition survey in early 1956. Research is in progress on the stability

of vitamins and the nutritional evaluation of local foods before and after processing. A modern food and nutrition laboratory was completed in late 1959. The nutrition team of the Iranian Armed Forces has conducted surveys in numerous areas of the country and at various seasons of the year. These surveys revealed evidence of the vast improvement in nutrition and health which followed implementation of the recommendations of the 1956 appraisal. A significant contribution was the modernization and reopening in the fall of 1956 of the Shahi food canning plant, which now supplies canned meat, fruit, and vegetables to the armed forces and civilians. The first Iranian Armed Forces "field-type" ration has been developed using these products. Technical assistance was given by the U.S. International Cooperation Administration's Operations Mission. In the first year of operation, local farmers received an added cash farm income of more than \$250,000. A second food cannery is under construction.

The rations for the armed forces now include fish and an increased variety of local vegetables

Table 2. Prevalence of nutrition problems in 13 countries and Alaska, as revealed by ICNND surveys

Country	Ribo-flavin	Vitamin A	Vitamin C	Thiamine	Goiter	Anemia	Protein	Caloric deficit
<i>Military</i>								
Pakistan (5)-----			C		B			
Iran (6)-----	A	B	B					
Turkey (7)-----	A	A	B		B			
Korea (10):								
1953-----	A	A	A	B		B	A	A
1956-----	A	B				B		
Philippines (11)-----	A			A				
Peru (15)-----			B	C		B		
Spain (17)-----	B	B	B	B	B			
<i>Civilian</i>								
Ethiopia (8)-----	C	A	B	B	B		B	A
Haiti (19)-----	A	B			B	B	A	A
<i>Civilian and military</i>								
Libya (9)-----	B	B	A	A	B	B	B	A
Taiwan (12, 13)-----	A	A	B	C		B		
Vietnam (14)-----	A	C		A	B	B		
Ecuador (16)-----	B	C		B	B	B	B	
Alaska (18)-----		C	C	C				

NOTE: Numbers in parentheses are references.

LEGEND: A, general nutrition problem; B, problem in specific areas of the country or in special groups; C, evidence manifested by clinical or biochemical or dietary evidence in special areas or groups.

and fruits. Vegetable oils are being fortified with vitamin A. The director of the nutrition laboratory established a poultry (broiler) raising industry which proved successful and served to stimulate private enterprise. Poultry raised by the armed forces is issued as a special supplement for hospital diets.

Specifications and quality control for purchasing and processing foods have been and are being developed. At the Shahi cannery, veterinary officers of the Imperial Iranian Armed Forces serve as food inspectors regardless of whether the consumers are the armed forces or civilians. At the Seventh Iranian Medical Congress in 1959, devoted to nutrition, the Armed Forces Nutrition Committee presented their research findings and a practical program for nutrition improvement. The committee also endorsed the need for a nutritional appraisal of the civilian population. Arrangements have been completed by the committee to have a clinician and a biochemist receive advanced training in nutrition in the United States.

Iran organized the First Armed Forces Inter-Nation Nutrition Conference, held in Teheran, November 1956, and attended by delegates from Pakistan, Turkey, Iraq, the United Kingdom, and the United States.

Pakistan

An Armed Forces Nutrition Service advisory group of consultants and specialists was established in Pakistan as recommended after the nutrition survey of 1956. Laboratory equipment and supplies were transferred by ICNND and used to equip a newly formed Armed Forces Institute of Nutrition. The advisory group, through the institute, initiates, directs, and advises on nutritional research problems affecting the armed forces and their families.

Local foods have been analyzed, especially for riboflavin and vitamin C, to determine their value in supplementing the diet. Study is underway to develop a guava powder as a possibly excellent and cheap source of vitamin C. Studies of vitamin C cooking losses, and methods of minimizing them, have been carried out. New areas and groups, including two civilian schools, have been surveyed. A special study on the prevalence of iron deficiency in

recruits, soldiers, and their families was completed and recommendations made for treatment of the anemia; further investigations on ascorbic acid deficiency were made, and study of the goiter problem in the Muzaffarabad area is underway.

Food processing has expanded rapidly in Pakistan and excellent progress has been made, in cooperation with the Armed Forces Nutrition Institute, in developing a cracker-type field ration.

Pakistan sponsored the Third Armed Forces Inter-Nation Nutrition Conference in October 1959, attended by delegates from Iran, Turkey, Libya, Great Britain, FAO, and the United States.

The Pakistan Armed Forces have established liaison with civilian agencies, and a member of the Armed Forces Council on Medical Research serves with the governing body of the Pakistan Medical Research Council.

Lt. General W. A. Burki, who was Surgeon General of the Armed Forces at the time of the 1956 survey, is now Minister of Health and Labor. He has indicated a desire to extend the nutrition program to the civilian population.

Turkey

The Turkish Armed Forces Nutrition Institute (TANI) was officially established. A new ration law, enacted by the Government of Turkey, was followed by menu and ration issue changes which resulted in a nutritionally improved diet. Numerous nutrition surveys have been carried out in different areas and at various seasons since the initial survey in 1956. A progressive nutrition research and development program is underway, which includes food analysis, food technology, biochemistry, and medicine. Schools for training cooks, bakers, and mess officers have been established. Co-operative studies with the staffs of the universities, FAO, and the U.S. Operations Mission are being conducted in numerous civilian schools and institutions.

A field trial to evaluate the practicability and effectiveness of enriching bread with riboflavin for both civilian and military personnel is in progress. Two members of the TANI staff have received additional training in the United

States, one in nutrition and biochemistry, and the other in quartermaster subsistence techniques.

Turkey, with technical assistance from ICA, established a modern meatpacking plant, the supervisors and technicians receiving their training in the United States.

Turkey was host to the Second Armed Forces Inter-Nation Nutrition Conference in Ankara, April 1958, attended by delegates from Iran, Pakistan, Iraq, the United Kingdom, and the United States. The proceedings were published in both Turkish and English (21).

Korea

The first opportunity to evaluate the benefits resulting from a nutrition survey came in 1956 when a resurvey was made of the Korean Armed Forces after an initial survey in 1953 conducted by the office of the Surgeon General of the U.S. Army. This resurvey revealed that there was indeed a measurable improvement in the nutritional status of the troops. Following this finding, a central food service committee was established.

There has been continued improvement in the ration planning and issue system. A list of food substitutes to be used as a guide for ration purchase and distribution has been developed. A food laboratory is actively engaged in the development of emergency field-type rations based on indigenous foods. A local gardening and agricultural program has been instituted, one of the most successful examples in the world of agricultural extension work through the armed forces. The improvement in the ration planning and distribution system has consistently reduced overall costs and at the same time enabled the issue of a better balanced ration. A school for training mess officers and cooks has been added to the regular quartermaster training courses.

The improvements in nutrition and health in Korea have been outstanding, combining the various disciplines of education, agriculture, transportation, economics, sanitation, and health.

Taiwan (the Republic of China)

The initial nutrition survey of the Republic of China, Taiwan, was conducted in the fall of

1954 under the auspices of the Surgeon General of the U.S. Army. The ICNND has been requested by the Government of China to reappraise the nutritional status of the armed forces in Taiwan in order to evaluate the effectiveness of the program they have instituted. This survey is planned for September 1960.

The committee assisted in followup work after the 1954 survey by preparing a report on the need for rice enrichment. Two rice enrichment plants, supplied under the Military Assistance Program, have now been in operation for over 2 years. This program, as assessed by the Chinese, is indeed a successful one. It is envisioned that this will be extended to the civilian population. Dr. John B. Youmans, member of the ICNND, made a trip to Taiwan recently and reported: "The Chinese National Armed Forces have an active nutrition program well underway. It appears to be of good quality and indeed effective."

The armed forces, through their excellent vegetable gardening, have made a remarkable contribution to the overall food production of Taiwan. This program not only assists in supplementing the ration with a variety of vegetables and other foods, but also serves as an agricultural training ground for soldiers who will be returning to civilian life.

The Philippines

A nutrition survey was conducted in the Philippines in 1957. In 1959, the ICNND was requested by the Philippine Government and the U.S. Operations Mission to supply a nutritionist and a food technologist to give further assistance in improving nutrition.

The former Philippines Institute of Nutrition has been reorganized so that it is now the Food and Nutrition Research Center of the National Science Development Board. The director of the Food and Nutrition Research Center is a member of the newly organized Armed Forces Central Food and Nutrition Board. Through this board and in cooperation with the nutrition laboratory, an active program has been organized to implement the recommendations of the 1957 survey report. A training course for officers in food service has been prepared and will be ready for operation by July 1, 1960, with an instructional staff drawn primarily from the

Food and Nutrition Research Center. Improvements are being made in ration planning and food distribution. The board has recommended that the use of enriched rice in the armed forces be mandatory. This procedure itself may contribute greatly to the eventual use of enriched rice by the civilian population of the Philippines.

Spain

A nutrition laboratory for the armed forces has been established in Spain's University of Madrid School of Medicine. The ICNND Manual for Nutrition Surveys was translated into Spanish, increasing its usefulness in Spanish-speaking countries. Nutrition survey techniques and programs have been extended to the civilian population by the armed forces and the Ministry of Health. Recommended changes in the ration distribution system have been made and an active program of education has been established for personnel involved in food and nutrition.

Libya

The U.S. Operations Mission in Libya was hopeful of establishing a nutrition group to work initially in the child and maternal health clinics following the ICNND survey in 1957. This has not yet materialized, and a laboratory established at the time of the survey is currently on a standby basis.

However, progress has been made through the followup program of FAO in improving the feeding of school children. During the past year Dr. M. R. Barakat, FAO nutrition education specialist, established two nutrition education centers for headmasters and school teachers. The courses lasting approximately 1 month, were attended by a total of 62 Libyan teachers. A book on nutrition for Libyan primary school teachers was written and translated into Arabic. FAO is greatly encouraged by the progress made in nutrition education and the improved diet of school children.

Ethiopia

Immediately following the initial nutrition survey in Ethiopia in the fall of 1958, another survey of 6,000 school children was conducted by the counterpart members of the original

team. A therapeutic test is still in progress to determine whether the observed eye lesions (Bitot's spots), with vitamin A deficiency the suspected cause, will respond to vitamin A therapy (22), and also to determine the effectiveness of vitamin C in counteracting the high incidence of gingival lesions noted in the school children.

The Medical Advisory Council and the Minister of Health approved and established recently a nutrition council composed of technical and administrative personnel of the Government agencies responsible for health, agriculture, and education. A nutrition consultant, acting as secretary to the Nutrition Council, is to be assigned for the purpose of integrating nutrition into the programs of the Public Health School at Gondar, the Agriculture Schools at Jimma and Alemaya, the School of Nursing in Asmara, and the University of Addis Ababa. A nutrition laboratory, equipped by the ICNND, has been established at the Pasteur Institute. Personnel have been assigned and a program outlined to enable appraisal by a small epidemiological team of specific nutrition problems as they occur throughout the country.

One of the U.S. team members, Dr. Lester J. Teply, organized a group of Ethiopian students at the University of Wisconsin to discuss individual student problems and to give thought to ways and means by which students, after being trained in other countries, could return to Ethiopia and contribute to the overall improvement, well-being, and health of their people. This idea was expanded by the students themselves and has culminated in the formation of an Ethiopian Student Association, which includes nearly 50 students attending colleges and universities in the United States and Canada.

Peru

An Armed Forces Institute of Nutrition was promptly established in Peru. The counterpart team members have extended the appraisal of the nutritional status of their armed forces by conducting an excellent survey of over 1,600 troops in Peru. Their nutrition and food control laboratories have been combined by the armed forces in order to pursue an active, encompassing nutrition program.

Ecuador

Although the nutrition survey has been completed only recently in Ecuador, sincere interest has been expressed by Government officials, including the Ministries of Defense, Health, and Agriculture, the U.S. Operations Mission, and the U.S. Military Assistance Group, in joining forces to improve nutrition in the entire population of Ecuador. Laboratory equipment and supplies were transferred by the ICNND to the National Institute of Nutrition of Ecuador. The present World Health Organization/Pan American Sanitary Bureau nutrition adviser to Ecuador was a team member of the ICNND survey.

Vietnam

The Vietnam survey having just been completed, it is too early to evaluate accomplishments. However, the key people who served as counterpart personnel on the nutrition survey have been retained in the newly established nutrition laboratory and are actively engaged in assisting local hospitals in diagnosing malnutrition. The excellent cooperation received from the President of Vietnam, the Minister of Health, the Minister of Defense, and the U.S. Mission team leaves little doubt that nutrition will be improved in Vietnam.

Summary

The Interdepartmental Committee on Nutrition for National Defense (ICNND), established in 1955, is an expression of the interest of the United States in world nutrition. Representatives of the Departments of State, Defense, Agriculture, and Health, Education, and Welfare, the International Cooperation Administration, and the Atomic Energy Commission are members of the committee and participate in its work.

The committee supplies, on request, technical assistance to foreign countries in assessing and improving nutritional health. Consultants from colleges, universities, Government, and private agencies give advice and guidance to the committee in nutrition, medicine, agriculture, food technology, and biochemistry. U.S. nutrition teams composed of specialists in these disciplines work side by side with a counterpart team of specialists from the country surveyed,

and suggest methods which will effect improvement using available resources.

The nutrition studies sponsored by the committee are a cooperative, scientific, training, and people-to-people program.

Progressive action has been taken to improve the nutrition of the armed forces and the civilian population in 12 countries following ICNND surveys. By July 1, 1961, the committee's operations will have been extended to 16 countries, including 5 in the Far East, 4 in the Near East, 4 in South America, 2 in Africa, and 1 in Europe, and to Alaska, the 49th State.

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Latest Nutrition Surveys

Teams of specialists completed the 13th ICNND survey in Chile in June and the 14th in Colombia in August 1960. Future surveys are scheduled to begin in Taiwan in September 1960, in Thailand in October 1960, and in Lebanon in February 1961.

The surveys, which lasted for approximately 70 days in the two Latin American nations, were requested by the respective governments to assess the nutritional status of large sections of the civilian and military populations. The teams of clinicians, biochemists, nutritionists, dentists, food technologists, and others from various institutions in the United States worked with counterpart Chilean or Colombian personnel in conducting physical examinations, biochemical studies, and dietary surveys. The purpose of the work was to formulate practical recommendations for improvement of nutrition consistent with the resources of the countries and to assist in developing standard ration requirements and local nutrition services.

After the surveys, laboratory equipment and supplies sent to the countries were turned over to the Governments of Chile and Colombia to be used in operating permanent nutrition services.