

HEALTH-RELATED COMPONENTS OF A NUTRITIONAL SURVEILLANCE SYSTEM¹

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Many countries now seek to develop policies and programs that require effective nutritional surveillance. The health sector is in a good position to play a key role in such surveillance—if major changes are made to close important gaps in existing knowledge.

Introduction

Developing countries have recently become increasingly concerned about widespread food and nutrition problems and their impact upon such susceptible groups as mothers and young children. Because the multiple causes of these problems have become better understood, many countries are now striving to frame comprehensive food and nutrition policies and to implement coordinated intersectoral plans and programs that will serve as major components of the national development process.

However, policymakers know that such planning requires reliable data; and unfortunately, with very few exceptions, the countries do not have adequate systems for monitoring health, nutritional, and other trends. Neither do they have institutionalized monitoring systems that can accurately assess progress made in implementing interventions and other social programs; nor do most of them have a real capability to critically evaluate such interventions' impact—in terms of cost-effectiveness and benefits.

For this reason, there is a recognized need for each country to establish simple and reliable means for monitoring the food and nutrition situation and for applying the resulting information to policy decisions and program planning. It would also be desirable for the countries to obtain comparable data, using similar indicators. These data could then be employed internationally so as to provide effective support for those nations most seriously affected by malnutrition.

This was one of the concerns of the World Food Conference held at Rome in 1974 (1). That conference requested coordination of international agencies' surveillance activities so as to assist countries in "monitoring food and nutrition conditions." The World Health Organization was designated as the lead agency for coordinating these interagency efforts within the United Nations.

Following the World Food Conference, a joint FAO/UNICEF/WHO Expert Committee was established to outline a nutritional surveillance methodology. The report of this committee, published in 1976 (2), recognizes that nutritional surveillance should provide ongoing information about nutritional conditions and the factors that influence them. The report also stresses the need to take a multisectoral view of nutritional surveillance, so as to combine information about health, food production, food processing, economics, and other related subjects.

Additional international meetings addressing the subject of nutritional surveillance in-

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cluded the IV Latin American Nutrition Congress (Caracas, 1976), the 8th International Scientific Meeting of the International Epidemiology Association (Puerto Rico, 1977), and the meeting of the World Food Council held at Mexico City in 1978 (3-5). At this latter meeting, the council specifically requested that the world's countries and international agencies establish food and nutrition surveillance systems—in order to provide a basis for planning, monitoring, and evaluating nutrition policies and programs, as well as for the early detection and prevention of any deterioration in nutritional status.

With the assistance of UN agencies, nutritional surveillance programs are beginning to take shape in countries as diverse as Ethiopia, the Philippines, and Tanzania. Meanwhile, efforts in the Western Hemisphere have benefited from the fact that many Latin American and Caribbean countries have developed extensive health, economic, and agricultural data systems that provide a potential base for nutritional surveillance. To further those efforts, PAHO/WHO has joined with UNICEF, FAO, ECLA, and UNESCO in a major collaborative activity seeking to promote nutrition planning and policy-making in the Americas and to stress the importance of nutritional surveillance systems. This collaborative activity is known as the Interagency Project on National Food and Nutrition Policies. The Pan American Health Organization is also working directly with Member Countries through its two major nutrition centers, the Institute of Nutrition of Central America and Panama (INCAP) and the Caribbean Food and Nutrition Institute (CFNI).

At the present time plans are underway to establish national nutrition surveillance systems of an intersectoral nature in Colombia, Costa Rica, and Honduras. Nationally appointed groups in these countries have been examining available data resources in the health, agriculture, and food processing sectors together with available data-processing facilities in order to identify what information may be used to establish and analyze pertinent

indicators of food supplies and nutritional status. The countries have also made rapid progress in establishing pilot nutritional surveillance projects. In addition, the Caribbean territory of St. Kitts-Nevis recently initiated an intersectoral nutritional surveillance system for its entire population that employs all available information facilities. In all of these cases, emphasis is being placed on pregnant women, lactating mothers, and young children, partly because these represent high-risk segments of the population and partly because health care facilities are more likely to have appropriate information available about these groups on a regular basis.

Other countries in the Hemisphere that are actively developing or examining plans for nutritional surveillance systems include Brazil, Chile, Cuba, Haiti, Jamaica, and Venezuela. In all cases the systems are viewed as ongoing monitoring activities that will also permit the impacts of various nutritional, health, and developmental interventions to be evaluated.

The Concept of Nutritional Surveillance

Traditionally, nutritionists and those concerned with nutritional well-being have relied on occasional surveys to obtain data on the status of particular groups or populations. These surveys typically use anthropometric, clinical, and biochemical data to assess current nutritional status or to indicate prior nutritional problems that may adversely affect growth and development. Dietary assessments are often included to help pinpoint food consumption patterns that contribute to identified deficiencies.

However, such surveys are limited in scope and have often proved unrepresentative of the total population involved. While providing useful information about problems and possible actions, they do not provide trend data that would permit anticipation of impending problems or evaluation of intervention efforts. Furthermore, the complexity and cost of these

surveys generally precludes their frequent repetition.

In contrast to such nutritional surveys, nutritional surveillance is a continuous process. It is based on regularly gathered data supplied by various government agencies concerned with the production, supply, distribution, and consumption of food; the nutritional health of the population; and the functional consequences of nutritional insufficiency. A key feature of nutritional surveillance is regular dissemination of data and interpretations to data users and responsible agencies. The aims of collating and analyzing these data (2) should be:

- 1) to describe the nutritional status of the population and define high-risk subgroups;
- 2) to provide information that will contribute to analysis of malnutrition's causes and associated factors—so as to permit selection of preventive measures that may or may not be nutritional;
- 3) to promote government decisions about priorities and the resources needed for both normal development and emergencies;
- 4) to permit predictions about the probable evolution of nutritional problems; and
- 5) to monitor and evaluate the effectiveness of nutrition programs.

Nutritional surveillance is commonly viewed as something that should draw upon information from the ministries of health, agriculture, commerce, and education, among others. Theoretically, this information can then be combined so that the causes, processes, and consequences of malnutrition can be assessed by means of appropriate indicators.

In practice, however, this ideal has proven elusive. Very few countries have systems for regularly collecting data of sufficient quality from all these sources. Methods of transmitting, collating, analyzing, and interpreting the data remain to be developed. Suitable intersectoral indicators have not been identified or tested. And the organizational framework for assuring that the data will be used to monitor or modify national programs remains untried in all but a few countries.

Nutritional surveillance has become a "buzz word" in the international arena. Countries with limited resources are being encouraged to explore the establishment of global systems as part of the planning process. International agencies, both advisory and financial, include nutritional surveillance among their priorities and requirements.

Recently, a great deal of attention has been focused on national-level multisectoral nutritional surveillance systems. This has undoubtedly made an important contribution to frequently reported cases of information indigestion. At the same time, this concentration on problems at the national level has diverted attention from ways that incoming information could be used at the community or provincial levels—where immediate solutions or modifications may best be undertaken. Obviously, detailed and complex analyses cannot and need not be done at this level. Nevertheless, there are many decisions that can be made to improve conditions quickly if local leaders are informed and prepared to recognize problems as they arise.

Therefore, in many cases it would seem best to turn the process around: identify the program or intervention to be implemented and design the surveillance strategy around appropriate indicators—indicators that can be expected to change or to provide essential information about the success of the program or intervention. Where good-quality, representative, and regular data are limited to one sector, start there, adding other sectors as experience is gained and the system becomes accepted. In short, there are many cases in which a step-by-step approach would appear the most appropriate at the present time.

The Role of the Health Sector

The health sector is responsible for providing comprehensive medical care for the community as a whole. This encompasses disease prevention, control, and treatment; rehabilitation; and promotion of healthy behavior—

including promotion of satisfactory food and nutrition practices for both families and individuals. Also, nutritional evaluation of young children and their mothers depends heavily upon anthropometric data most commonly obtainable through the health system. And medical epidemiology provides information about births, diseases, and mortality that can be used to derive useful indicators of improving or deteriorating nutritional status. Furthermore, community health centers often serve as a principal means of introducing changes likely to benefit nutritional status, and desire for better health may also provide the motivation for community participation in decision-making and development activities relating to nutrition. Thus, the health sector has special responsibility for incorporating ongoing nutritional surveillance into all levels of the health structure, most particularly as a part of maternal and child health services.

When we realize that the nutritional aspects of health go far beyond individual clinical concerns and have a powerful influence on community well-being, then it becomes evident that an epidemiologic approach to nutritional surveillance is essential. Although the fundamental approach to health and disease—including diagnosis, treatment, and prognosis—is essentially the same for the individual and the community, community epidemiology emphasizes the need for a multicausal interpretation of health problems arising from people's changing needs and stresses imposed by the biological, physical, social, and cultural environment.

There is substantial public health experience in using epidemiologic approaches to deal with communicable diseases. What is now needed is for the existing experiences and scientific skills to be extended and applied to surveillance of nutritional problems.

Clearly, the geographic and social individuality of nutritional problems requires that there be careful evaluation of local circumstances, people, and environments (6). Nevertheless, properly implemented nutritional surveillance can serve as a dynamic form of epidemiology with clear operational implications

for the conduct and control of community food and nutrition services. It can thus promote new activities and interventions, and can permit more comprehensive and refined definition of programs for delivery of appropriate services at the grass-roots level.

At the same time, nutritional surveillance can enable the health sector to evaluate its overall nutrition services, determine the usefulness of a particular intervention, and tell how it might be impaired by changing conditions affecting individuals or the environment—changes such as population growth, rising infectious disease problems, rapid migration, a shift from subsistence farming to dependence on cash income, and poor sanitary conditions resulting from such things as natural disasters or rapid establishment of marginal urban settlements. Well-designed nutritional surveillance will also provide information about people's failure to participate in programs, so that more thorough studies can be made of what is causing the failure and what options the programs have. In addition, such surveillance can help to identify defects in existing programs, so that their design and execution can be improved (7).

The ministries of health are trying to better define and clarify the health sector's role in formulating and implementing national intersectoral food and nutrition policies and programs. This subject received in-depth analysis at two recent technical meetings of the governing bodies of the World Health Organization (8) and the Pan American Health Organization (9). At those meetings, representatives of the two organizations' Member Governments addressed the food and nutrition problem and agreed to strengthen national activities directed at control of specific deficiency diseases—including endemic goiter, hypovitaminosis A, and nutritional anemias—and at reduction of protein-energy malnutrition. In these efforts, nutritional surveillance will be the fundamental tool used to assess problems and trends and to evaluate the programs involved.

There are, however, several constraints on epidemiologic data sources that need to be

removed if a reliable nutritional surveillance system is to be established within the health sector. Most epidemiology units neither seek nor receive information on pregnant women's health, infant birth weights, child growth, clinical nutrition, symptomatology, etc. And even if data on, say, birth weights are collected, they may be kept separately, by personnel outside the epidemiology unit. This means that when data are gathered, they are often slow to arrive and are apt to be of questionable relevance, incomplete, or insufficient. Moreover, even death records in developing countries tend to yield unreliable numbers; a physician's certification of death is often not required; and deaths from malnutrition are commonly ascribed to other causes. As might be supposed, data on reported malnutrition cases generally have even less value (10).

The resulting difficulties were clearly demonstrated by the PAHO Inter-American Investigation of Mortality in Childhood, which studied 35,095 deaths of children under 5 years of age in 15 different areas of the Americas. By and large, the official mortality statistics failed to reveal the real magnitude of health problems. In fact, only 52.5 per cent of the death certificates examined cited the same underlying causes of death determined by the investigation on the basis of additional information obtained from hospital and autopsy records and from interviews conducted in the homes of deceased children (11).

Obviously, it is impractical to base health planning and nutrition programs on such incomplete data. Therefore, there is an overriding need to establish nutritional surveillance activities, to make these activities a basic component of the health information system, and so to identify and close the important gaps in our existing knowledge.

Nutritional Surveillance within Health Information Systems

Health planners and programmers require trend data on the changing health situation of

a given country, as well as data on available resources and their utilization, so that priorities can be established for the delivery of services. In other words, dynamic information is needed at all levels of the health structure to make programs operate rationally and thereby benefit those in greatest need of comprehensive care.

Until recently, planners and programmers focused primarily on mid-term and long-term national plans. They did not give the necessary consideration to short-term plans, since appropriate methodology for programming local health activities was lacking. Therefore, the national health plan became more a political enunciation of long-range objectives than a statement of specific goals to be accomplished for the immediate benefit of the population.

Present health planning and programming activities give due consideration to problems, alternate strategies, available resources, technical feasibility, and viability in terms of health and national development priorities. It is recognized that there must be rational use of human and physical resources, improved allocation of financial resources, and utilization of the most appropriate available technology. Thus, it now makes more sense to plan short-range and mid-range programs at the local level, to provide better definition of goals and specific objectives, to effectively monitor what happens, and to quantify the results. Obviously, however, without an adequate information system the sound management of such programs is almost impossible.

The basic purpose of an information system is to monitor and control all of the program implementation process, and to feed information back to the users or decision-makers so that they can make any necessary adjustments or modifications. It is not enough to collect, analyze, and publish data. The data must be interpreted and used regularly for monitoring the program's execution and impact. Indicators must be reexamined to assure their appropriateness and usefulness at all levels of the delivery system. And it must be the users of the system, in the last analysis, who assume

responsibility for data interpretation and decision-making.

It cannot be emphasized strongly enough that a health information system that will encompass the area of nutritional surveillance warrants development. Such a system proves its real value when it is designed to support a rational decision-making process that will assess program results in relation to defined goals and performance standards. Nutritional surveillance without a concomitant action program would become merely an academic exercise designed to obtain information.

Essentially, the contribution of a well-defined nutritional surveillance system within a health information system is two-fold. First, it provides information needed for specific health program operations—including promotional and preventive activities aimed at reducing protein-energy malnutrition, preventing and controlling specific nutritional deficiencies, and managing problems related to overweight and obesity. Second, it serves as a permanent source of reliable information for other sectors concerned with overall food and nutritional surveillance—sectors including agriculture, education, labor, commerce, and so forth.

To assist the performance of both functions, the health information system is responsible for the following nutrition-related activities (12):

- Collecting and processing all data required by national, provincial, and local levels of the health structure.
- Producing statistical reports and indicators serving specific needs. For example, primary health care services need information to be used as a basis for immediate action. The intermediate level of the health system needs information permitting regular supervision of ongoing activities and indicating whether specific objectives are being achieved. And the upper (national) level needs information required for policy decisions and orientation of the national nutrition plan.
- Transmitting these data to the various users and helping those users to employ the information in an appropriate manner.
- Designing, implementing, and controlling

primary statistical record systems, report sub-systems, and program and project profiles.

- Designing and updating data sources and files to expedite delivery of nutritional services.
- Maintaining an updated analysis of secular trends—including trends in population growth, vital statistics, the resource inventory, the extent of health care delivery, and so forth.

A system of this nature cannot be organized by merely changing the function of the traditional statistical unit or establishing a coherent reporting system. Rather, wholesale reorientation of the prevailing operating philosophy is needed in order to spark active participation in the development process; and this in turn requires profound modification of planning, programming, and managerial procedures used to operate and control the health system.

Since ideal conditions for establishing such an information system are not often present, it is essential to wisely adapt the system's requirements to the actual resources available and to existing health services development. In this vein, it is possible to design a system that can be established progressively and that can direct much initial attention to the primary health care level—where most malnutrition cases are encountered and where community participation is most likely to permit implementation of action programs to meet community needs (13).

Research Needs

The research needed in the area of nutritional surveillance is most pragmatic. It should ask: What are the simplest measures that can be used to indicate change, and how should these be interpreted using the various degrees of skill available at different levels of the proposed surveillance system? This is not to say that the research does not need to be done carefully and in accord with accepted standards. Nevertheless, one must constantly keep practical, field-oriented goals in mind so as to develop methods that will not impose excessive time and training constraints, will not

overburden the system, and therefore will have a fair chance of success.

Let us look first at physical growth, the most widely accepted measure of nutritional adequacy. The World Health Organization has established growth standards with which the height and weight changes of growing children can be compared (14,15). Health workers at all levels are being encouraged to take the height and weight of children on all clinic visits as a means of diagnosing malnutrition and of demonstrating the child's progress. Some countries strive to measure children monthly during the first year and one or more time a year thereafter. Obviously, the data from these measurements could be useful for nutritional surveillance purposes. On the other hand, obtaining such data requires time and appropriately trained or informed manpower—all of which are in short supply in many parts of the world. Furthermore, if all of the data were forwarded to one preliminary interpretation unit, that unit would require an extensive staff and computer support to be effective; and again, such resources are often unavailable.

What then are the true minimum data needed to maintain nutritional vigilance? At what ages do deviations from the norm become most indicative of later functional or health impairments? Can we reduce the frequency with which we obtain data without significantly reducing its usefulness for monitoring or evaluation? How accurately must height and weight be measured, keeping in mind that we are not doing growth studies but rather are monitoring growth trends? Do we need some simple measure of body fatness or head circumference to add important dimensions to surveillance efforts, or should these be viewed primarily as clinical diagnostic tools? Clearly, developing answers to questions such as these would require years if we depended on the data system being developed. Fortunately, however, stores of extensive longitudinal data exist in several places (including PAHO's Institute of Nutrition of Central America and Panama) so that answers can be

more readily obtained. Studies designed to find these answers are underway.

The previously mentioned WHO growth standards represent ideals—the presently accepted goals based on the best available knowledge. Unfortunately, large numbers of children cluster at the lower end of the WHO spectrum. Given this circumstance, is there any reason to consider country-specific interim standards against which population changes might be seen more easily? Or does it really make any difference what standard is used for nutritional surveillance as long as real data (weights, heights, etc.) are collected and analyzed rather than ratios or classifications (such as the Gómez classification) that have been established for other purposes.

Pregnant women and young infants are universally recognized as high-risk groups in need of special attention. How do we monitor programs for pregnant women? We currently rely on birth weight as an indicator of maternal nutrition, but that is an after-the-fact measure, and by the time it is obtained the damage has been done. Some investigators are exploring the possibilities for using the mother's weight gain during pregnancy. Another possibility might be to develop appropriate measures of maternal fatness. In both cases, due consideration should be given to prior maternal health and perhaps to genetic factors. Similarly, standards appropriate for more favored populations may not apply to the rural poor or to those living in urban shanty-towns. Various biochemical blood or blood cell measures have also been suggested, but these would probably be too complicated for field use. All in all, continuing research directed at developing practical indicators of a mother's nutritional status during pregnancy and lactation is badly needed.

Because breast-feeding is a very important contributor to early child growth and health, information on breast-feeding and weaning practices should be employed within the network. It would not seem necessary to seek monthly data, but the results of a very simple "yes/no/what-other-foods" type of question-

naire at specific infant ages (e.g., 3 and 6 months) might be useful—assuming this questionnaire were geared to prevailing national or local practices. A few studies would help to develop an appropriate approach and would show whether certain response patterns tend to indicate future problems.

In the past, most attention has been focused on assessing changes due to protein-energy malnutrition. This is, of course, appropriate for the vast numbers of people without sufficient food. It is amply apparent, however, that deficiencies of specific nutrients such as vitamin A, iron, and iodine are also widespread. Thus, for dealing with such deficiencies, simple diagnostic and reporting techniques usable in minimally equipped health centers need development.

Overall, the choice of indicators showing changes and of methods for interpreting such indicators is of overriding concern in developing nutritional surveillance. The literature refers often to indicators, but very little has been said about the selection, use, and interpretation of such indicators under real-world conditions.

Indicators, of course, may range from such “simple” things as mean birth-weight or the proportion of newborns weighing less than 2,500 g to estimates of available calories or other nutrients per person per day (16). In contrast to medicine’s more common epidemiologic systems, in which normal variations are well-established and deviations can be identified quickly, nutritional surveillance systems have little or no indicator-related experience on which to draw. Levels at which action should stop or at which corrective intervention is needed have not yet been established; they must be deduced by logic or determined on the basis of what information is available in the aforementioned longitudinal data files. In addition, whatever levels are established may need modification as national development proceeds and the likelihood of significant or demonstrable changes is reduced.

Operational research is needed to promote

proper organization, transmission, and interpretation of nutrition-related data. Epidemiologic systems for developing communicable disease data are already established in many countries, so that the main need is to assure that nutrition-related diseases are identified. It is also true, however, that epidemiologic data does not usually include information on the use of services, and this is an important factor in evaluating the impact of such services upon nutrition.

In the case of anthropometry—as well as other measures of food use and nutrition status—new data transmission systems will need to be established. Again we must ask how frequently and at what points in time should data be collated and forwarded; and what kinds of interpretations should be made at the community or provincial level so that immediate steps to improve service delivery or utilization can be taken? Here practical guidelines need to be written and tested. Clearly, as one moves up the surveillance ladder toward the national policy level, more complicated intersectoral approaches to data utilization and interpretation are required; but again, experience is lacking. We suggest that the needed experience can best be gathered in conjunction with specific new intervention programs using discrete indicators and limited data flows. Thereafter, as confidence is gained, broader monitoring systems can be developed.

Future National and International Action

Several factors appear especially important for future development of nutritional surveillance systems.

We believe one key point to be that nutritional surveillance can be based on existing data resources and information systems, assuming that the objective is to make these more efficient, less repetitive, and more closely tied to policy and program management.

We also believe that national approaches must be developed in order to establish and

maintain nutritional surveillance systems that will be of significant value to individual countries. Although we feel that health must be a major component of nutritional surveillance, it seems essential that such surveillance be intersectoral, and that all relevant national agencies be involved from the initial planning stage to the implementation and utilization of the ultimate surveillance system.

In addition, considerable research and testing are still needed to: (a) establish various models for surveillance systems under unique national conditions; (b) identify appropriate indicators of change or of unresolved nutrition problems; (c) clarify how data may be analyzed, interpreted, and utilized for decision-making purposes; and (d) develop ways for the information system to be utilized at the local, provincial, and national levels.

A critical problem facing establishment of new systems is lack of adequately trained personnel. In this vein, training provided to top-level administrators and middle-level supervi-

sors concerning the importance, methodologies, and uses of nutritional surveillance will be vital to the success of future surveillance efforts.

There is a need for an ongoing working group to coordinate the efforts of nations actively involved in establishing nutritional surveillance systems. The aims of this group should be to exchange news of successes, failures, and other experiences that can help to advance all the programs more rapidly. Efforts are now underway to establish a working group for the Americas, it being recognized that this Hemispheric work will need to be coordinated with similar efforts in other parts of the world. Ultimately, it would be desirable for all countries' accumulated nutritional surveillance data to be brought together, assembled on a worldwide basis, and applied for the benefit of national and international food, health, and nutrition programs around the globe.

SUMMARY

Many countries are now seeking to develop comprehensive food and nutrition policies and programs. However, for such policies and programs to be effective, nutritional status must be monitored, and such monitoring requires nutritional surveillance. For this reason, Colombia, Costa Rica, Honduras, and St. Kitts-Nevis are now establishing nutritional surveillance systems, and that same step is being actively considered by Brazil, Chile, Cuba, Haiti, and Venezuela.

Currently, a great deal of attention is being focused on "multisectoral" nutritional surveillance systems incorporating data from ministries of health, agriculture, commerce, and so forth. Nevertheless, in many cases such ministries are not producing regular flows of appropriate data; and even if they were, the task of combining such data would divert attention away from the data's short-term application at the provincial or local level. Therefore, where good-quality, representative, and regular data are limited to one sector, it is often best to start there, adding data from other sectors as experience is gained and the system becomes accepted.

Virtually everywhere, the health sector has considerable experience in using epidemiologic approaches to deal with communicable diseases, and the advantages to using such experience for nutritional surveillance are very clear. Nevertheless, several constraints on epidemiologic data sources need to be removed if a reliable nutritional surveillance system is to be established within the health sector. Specifically, most epidemiology units neither seek nor receive information on pregnant women's health, birth weights, child growth, clinical nutrition, and other nutrition-related subjects; and both morbidity and mortality records in many areas tend to be inaccurate or incomplete. All this makes it essential to establish special nutrition surveillance activities, to make those activities an integral part of the health information system, and so to locate and close the important gaps in our existing knowledge.

Since ideal conditions for establishing a nutritional surveillance system are not often present in the health sector, it is essential to adapt the system's requirements to available resources and to the fea-

tures of the existing health services. In this manner it is possible to design a system progressively and to focus initial attention on the primary health care level—where most malnutrition cases are encountered and where community participation can best contribute to action programs able to meet community needs.

Overall, it appears that the health sector should play a major role in nutritional surveillance; but it also seems important that such surveillance come to be intersectoral in nature. At the same time, considerable research and testing are needed to identify appropriate indicators of nutritional status; to de-

termine how the data obtained can be analyzed, interpreted, and applied; to see how models of the surveillance system work in different places; and to develop ways for the surveillance system to be used at the local, provincial, and national levels.

At the international level, efforts are now underway to establish a nutritional surveillance working group for the Americas. Ultimately, it would be useful to consolidate all countries' accumulated nutritional surveillance data and to apply those data for the benefit of food, health, and nutrition programs around the world.

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