

Life Sciences Research Office Report

Core Indicators of Nutritional State for Difficult-to-Sample Populations

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SYNOPSIS

Previous expert working groups have concluded that common description and measurements are needed for all types of population groups to provide improved and expanded coverage and comparable and compatible data among surveys monitoring the nutritional and dietary status of the U.S. population. This report summarizes the discussions of an ad hoc Expert Panel charged with identifying core indicators to assess the nutritional status of difficult-to-sample populations. Members of the Expert Panel had wide research experience including survey design, food security, food consumption, nutritional status, health-related conditions associated with nutritional status, and nutrition and public policy. The varied backgrounds of the Panel members led to consideration of the concept of core indicators of nutritional status from a broad perspective.

Early in their discussions the Expert Panel recognized the public health officials and policymakers use information on nutritional status for the purposes of problem identification, program planning and resource direction, and program and policy evaluation. This recognition raised several issues which formed the conceptual framework for subsequent discussions, study conclusions, and research recommendations. These issues centered on the following concepts:

- the purpose for which data are used determines the suitability of indicators;
- the scope of information required varies for the purpose identified above;
- a broad range of indicators is needed to supply information useful for public policy decisions on nutrition; that is, assessment of the nutritional status of populations by measurement of dietary intakes of nutrients and anthropometric, biochemical, and clinical indices can provide only a portion of the information needed for these purposes in the United States;
- nutritional problems in the U.S. general population may signal some, but not all, anticipated nutritional concerns for difficult-to-sample populations; and,
- adequate coverage and suitable sampling methods are overriding concerns for obtaining interpretable data and appear to be a larger issue than suitable measures for nutritional assessment in the case of difficult-to-sample populations.

Guided by consideration of these issues, the Expert Panel recognized that they could not provide a comprehensive design for the evaluation of nutritional status for all difficult-to-sample populations that would be appropriate for all public health and policy purposes. Therefore, the Expert Panel concentrated their discussions on enumeration of the various issues that must be considered in planning any effort to evaluate the nutritional concerns for such populations. Because of the need for comparability and compatibility of data among surveys, consideration of core indicators focused on measures already used in survey and surveillance activities. The Expert Panel recognized that this approach did not allow for consideration of some measures valuable in clinical and research settings as components of core indicators.

This report is intended to be a source for planning the approaches and indicators that might be used to assess nutritional state rather than an encyclopedia of methodology. Therefore, specific methods and criteria for interpretation are not discussed. These aspects of selection and application of indicators are best addressed when a survey is being planned, should be based on the purpose of the survey, and built upon prior and evolving scientific knowledge of methods applicable to survey use.

The report provides an introduction to the concept of nutritional state and the components that must be considered in identifying core indicators for its assessment in difficult-to-sample populations. These components include food security, nutritional concerns, survey coverage, and sampling concerns. Core indicators of nutritional state are suggested in the context of the purposes for which the data are to be used.

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