Quality Food Composition Data - Key for Health

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The collection of information on dietary intake is essential to the design and implementation of public health policies for the reduction of the double burden of malnutrition and overweight. The evolution of the food system and the rapid changes in lifestyle have globalized the challenge of obesity and non-communicable diseases and information is needed for all countries. Prevention efforts are directed towards balancing the intake of different nutrients, a goal that can also be achieved by manipulating the composition of foods. Thus, the absence, incompleteness or outdatedness of food composition data are an obstacle to the implementation of public nutrition policies.

The paper will describe a series of key actions in public health nutrition that require the presence of good quality food composition data.

Good data are first of all required for epidemiology and surveillance. Correct assessment of the adequacy of intakes is needed for the purpose of identifying and prioritizing key nutrition issues. A clear gap can be seen in the comprehensiveness of micronutrient composition data.

Insufficient data also hamper the establishment of dietary goals and monitoring their achievement. Dietary indicators for nutrition surveillance should include at least the main nutrients that are associated to risk of chronic diseases, e.g. saturated and polyunsaturated fat, trans fatty acids, sugars and fibre. Trans fatty acid information is urgently needed in some regions of the world.

Good data are then needed for the design of nutrition interventions that involve information to consumers and improved supply of food with healthier nutrition profile. The majority of countries has now food based dietary guidelines, that remain a cornerstone of national nutrition policies and of information campaigns. In addition, systems to provide a nutritional rating of individual foods have been developed in some countries and are further needed to better guide people’s choice as well as producers’ recipes. Detailed nutrient composition information is required for this rating and even for the preliminary testing of validity of existing profiling methods.

Product labelling is another application where food composition data are required. Availability of such information is also an element to decide whether the presence of a nutrient on a label should be optional or mandatory.

Given the increasing dependence on manufactured food products, the nutritional improvement of food products through decreased content of salt, trans and saturated fat, free sugars, as well as the addition of micronutrient, is seen as an important public health measure. Good composition data are needed to benchmark different categories of products and to map the progress towards product specific targets.

A third area where gaps in food composition data affect our capacity to progress is the study of the relationship between diet and health. The rapid expansion of the scope of available products makes the understanding of these connections difficult in absence of adequate composition data. For example, our understanding about the role of bioactive compounds in protecting health is hampered by the extreme variability of dietary content of several families of compounds.

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Quality Food Composition Data - Key for Trade and Codex

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Food trade has emerged in recent years as one of the more important and demanding of the sectors involved in food composition activities. Technical food composition issues related to food trade include identification of foods, food ingredients, and processes; identification of components; sampling and statistics; methods of analysis and laboratory quality assurance and quality control; units of measures and serving sizes; minimum/maximum nutrient contents of foods; and nutrition labeling, nutrition claims and health claims.

The Codex Alimentarius, a "code of food standards for all nations," was established by the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO) in 1961/62, in order to "... guide and promote the elaboration and establishment of definitions and requirements for foods, to assist in their harmonization and, in doing so, to facilitate international trade." Food composition is a key technical area and relevant topics are discussed in several Codex Committees. Recent topics in the Codex Committee on Nutrition and Foods for Special Dietary Uses have included the definition of dietary fibre and its associated methods of analysis, and conditions for nutrient contents. In the Codex Committee on Food Labelling, agenda items for the last meeting included nutrient declarations and nutrition claims. At its July 2009 meeting, Codex Committee on Methods of Analysis and Sampling reviewed Draft Guidelines for Evaluating Acceptable Methods of Analysis and Analytical Terminology. The outcomes of these processes are regulatory guidelines with direct applications and implications for food composition. The food regulatory community would benefit from more involvement from the community of food composition scientists, in the efforts to achieve harmonization in food trade, for the benefit of all consumers.

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