

Food based dietary guidelines

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There is a gathering momentum for a shift towards a more integrated way of describing the human diet, linking this to health outcomes, and making recommendations accordingly.

This approach has come to be known as Food Based Dietary Guidelines (FBDG). To address it in practical and policy terms, a World Health Organisation working party met in Cyprus on 2-7 March 1995.

There were two Australian members, **Professors A.S. Truswell and M.L. Wahlqvist**. The so-called "Cyprus declaration" at the conclusion of the meeting was:

- FBDG are developed in cultural context, recognising the social, economic and environmental aspects of foods and eating patterns.
- Public health issues should determine the relevance of dietary guidelines.
- Dietary guidelines need to reflect food patterns rather than numeric goals.
- Dietary guidelines need to be positive and encourage enjoyment of appropriate dietary intakes.
- Various diets and food patterns can be consistent with good health.

For this declaration to be at all possible, several developments are required:

- (1) A broad socio-cultural approach to food and health, with sensitivity to food traditions and beliefs.
- (2) Major advances in food science which allow an appreciation of food component complexity and its implications for human biology.
- (3) Scientific studies which show that food patterns, food scores (like variety, traditionality and acculturation), and not simply nutrient intakes, are predictive of health outcomes and are amenable to useful change in their own right.
- (4) The ability to handle large data bases of food intakes, health outcomes and trends in those variables with time - the new discipline of nutrition information applied to nutritional epidemiology.
- (5) An appreciation of the ecological implications of dietary guidelines.

FBDG can be culturally specific, relate to the particular public health concerns and acknowledge excess, deficiency or combination of these errors in food intake. There are at least four possible approaches to the assessment of nutritional quality in the development and evaluation of FBDG:

Food pattern

Assessing the health outcomes of adherence to a particular food pattern with a favourable health relationship is one way of evaluating the nutritional soundness of an envisaged DG approach. This is most likely to be a traditional food pattern of people with longevity, low morbidity and low prenatal and infant mortality rates (eg Scandinavian, Japanese, Mediterranean), through tradition or through cultural adaptation. In most of these populations other factors such as health care, educational system, safe water and socioeconomic development also play important roles in favourable health outcomes.

Negative effects following changes in dietary patterns also indicate food patterns to be avoided.

Tracking health indices in populations in accordance with food intake patterns has so far, been the most valuable evidence on which to base FBDG.

Food variety indices

While the value of increased food variety in either ensuring essential nutrient adequacy or decreasing the risk of food toxicity (adverse health factors in food are generally diluted where foods eaten are varied) has been understood for some time, measuring food variety as a predictor of health outcome is a relatively recent approach. Enough evidence is available to justify its inclusion in the methodologies for development of FBDG as a technique to reduce morbidity and mortality whilst awaiting further scientific studies on how it operates.

In deriving indices of food variety, decisions are required about both the categories of foods and the time over which variety in food choices is achieved.

Nutrient requirements and recommendations

The numbers vary somewhat for the various nutrients although the implications of these differences for the establishment of DG are small. Countries that have the technical capacity may develop their own Recommended Nutrient Intakes (RNI), otherwise the review of existing recommendations can be used to define which are most suited to the given national reality. FBDG should be structured to enable the population to meet RNI that are critical for diet related public health problems.

The group recommended that FAO/WHO undertake the review of existing reports for all relevant nutrients since the last time this task was completed was in 1974.

Use of nutrient densities in establishing and evaluating FBDG

Using nutrient densities to evaluate dietary quality involves expressing existing RNI values provided by the diet. The conditions for this model are that if a diet provides for the energy needs of individuals it will also satisfy the RNI for all essential nutrients. This approach permits the simplification of age and gender RNI figures since if these figures are expressed per 1000 kcal the values differ minimally. In addition, for the purpose of establishing DG for the general population, precise gender and age specific RNI are not needed. The figures presented should be interpreted as a way to assess dietary quality.

Individuals within a family group usually form the basic unit for food consumption. Thus, if there is enough food at the family or household level all members can consume a diet with the recommended nutrient densities and meet their specific RNI. The problem of intrafamily distribution needs to be considered since children and women may not receive a proportional part of foods with higher nutrient density. This should be considered both in establishing general DG and those specifically addressing the needs of vulnerable groups in the community.

(These four points are cited from the Cyprus report)

The World Health Organisation report on FBDG provides a plan for re-orientation from nutrients to food in dietary guidelines. The paradigm shift is likely to be a significant contribution to human health, the maintenance of cultural diversity, and to optimal nutritional status in a sustainable environment.

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