

Over- and undernutrition: challenges and approaches. 29 June–2 July 2009

EURRECA's General Framework to make the process of setting up micronutrient recommendations explicit and transparent

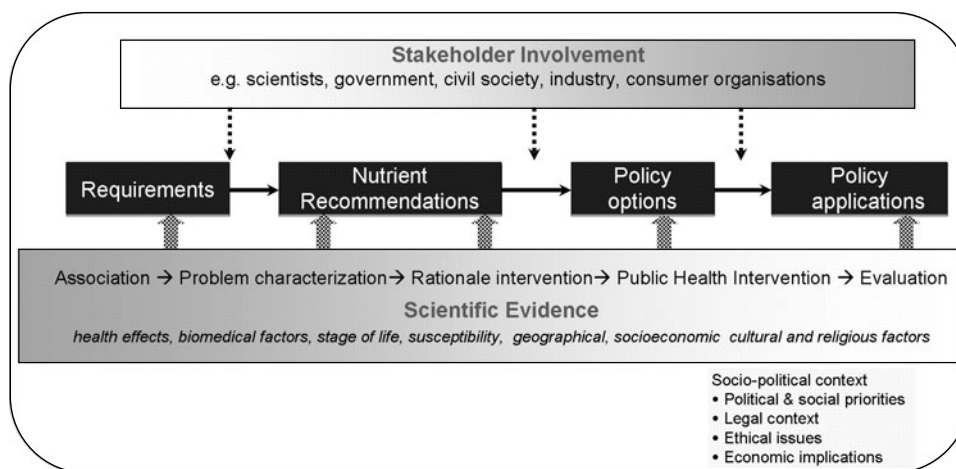
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EURRECA is a Network of Excellence with the objective of addressing the problem of national variations in micronutrient recommendations and working towards a framework of advice to better inform policy-makers. It became apparent that the network needed a framework that puts the process of recommendation setting in the context of science, policy and society.

Although variability in recommendations originates from the scientific evidence-base used and its interpretation (e.g. health outcomes, types and methods of evaluation of evidence, quantification of risk/benefit), the background information provided in the recommendation reports does not easily facilitate the disentangling of the relative contribution of these different aspects because of lack of transparency.

The present report portrays the general framework (see Figure) that has been developed by and for EURRECA in order to make the process of setting up micronutrient recommendations explicit and transparent.



In explaining the link from science to policy applications, the framework distinguishes four principal components or stages (see Figure). These stages are:

a) Defining the nutrient requirements:

A judgement about the (best) distribution(s) of the population requirement is necessary for estimating nutrient requirements. Many assumptions need to be made about the attributes of the population group. Furthermore, several factors (consumer behaviour as well as physiology) are to be included to characterize optimal health.

b) Setting the nutrient recommendations:

All available evidence is needed to formulate recommendations. Incorporating different endpoints provide the basis to formulate an optimal diet in terms of (non-)nutrients and food(group)s.

c) Policy options:

Policy options should be formulated on how the optimal diet can be achieved. They concern the advice of scientist and/or expert committees to the policy makers. Current policy options are setting up a task force, food based dietary guidelines, general health education, educational programme for specific group(s), voluntary or mandatory fortification, labelling, supplementation (general or for specific groups), inducing voluntary action in industry, legislation on micronutrient composition in food products, fiscal change, monitoring and evaluation of intake (via food consumption surveys) and/or nutritional status.

d) Policy applications:

Policies and planning, usually done by government, that lead to nutritional interventions or programmes. They usually require consideration of scientific, legal, regulatory, ethical and cultural issues, economic implications, and political and social priorities.

This framework illustrates three dimensions of the process of setting (micro)nutrient requirements:

- 1) The logical sequence of scientific thinking from setting physiological requirements for nutritional health leading to evidence-based derivation of Nutrient Intake Values.
- 2) In the early stages nutritional and epidemiological science is the dominant source and in the later stages evidence from consumer and social sciences as well as stakeholder influences is used in deriving the options for changing the distribution of nutrient intakes.
- 3) The wider socio-political context: a feedback loop between health perception, actual health and food intake exists and is directly affected by the food industry and many other stakeholders. Moreover, from the viewpoint of policymakers, there are concerns for health promotion and disease prevention because of population health indices, costs of health care, and economic interests in the agro-food sector.

In conclusion: A systematic approach for development and regular review of micronutrient requirements in Europe, transparently based on scientific evidence and best practices, enables national and international authorities/bodies to use the best available information obtained through evidence-based nutrition and accomplish well-considered food policy.