

Field-testing of food-based dietary guidelines

Mieke Faber*  and Anniza de Villiers

Non-Communicable Diseases Research Unit, South African Medical Research Council, Tygerberg, South Africa

*Correspondence: Mieke.Faber@mrc.ac.za

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Food-based dietary guidelines (FBDGs) translate nutrition recommendations based on the best available scientific evidence into messages that are short, easy to understand, realistic and easy to apply in everyday settings. Development of the guidelines usually follows a structured and transparent process and applies methodology that balances rigour and pragmatism. The first phase in the development of FBDGs involves identification of (i) diet-health relationships, (ii) country specific diet-related health problems, (iii) nutrients of public health importance, (iv) foods relevant for FBDGs and (v) food consumption patterns. The developed FBDGs should then be tested and optimised, whereafter graphical illustrations of the guidelines should be developed. FBDGs provide a basis for public health programs and policies and are therefore country-specific, locally developed, and should be regularly revised.¹⁻⁴ In instances where guidelines developed in one country are adapted to be used in other settings, cultural and social diversities as well as differences in dietary habits should be considered.³

Development of guidelines is guided by current nutritional and public health concerns within a specific country. While FBDGs are therefore mostly based on evidence regarding associations between nutrients and disease, there is the belief that this approach often neglects the complex implications that dietary recommendations have on society, the economy and the environment.⁵ It is now believed that conceptualisation of FBDGs should be broadened to include a wider range of dimensions related to healthy diets,² and in particular environmental sustainability.⁶ The Brazilian dietary guidelines is an example of country specific guidelines that have taken the step to incorporate these dimensions. The second edition of these guidelines considers environmental, economic and sociocultural sustainability, as well as the degree of food processing.⁷ It has even been suggested that in future, target group-specific and individualised FBDGs could be produced by mathematical optimisation methodology. Applying these modelling methods could achieve guidelines that optimise non-communicable diseases (NCD) reduction, nutrient and energy supply, as well as aspects of sustainability while at the same time limiting contaminant intakes and deviations from usual dietary habits.² Dietary guidelines need to be responsive to evolving public health challenges, changes in the modern food system, as well as the increasing concerns with environmental sustainability. The FAO is currently revising the global methodology for developing FBDGs to ensure that the guidelines promote sustainable healthy diets and support positive changes in food systems.⁴

Even though underpinned by a rigorous scientific process, and regardless of how FBDGs were conceptualised, effective communication of nutrition and health messages depends on

whether the consumer correctly interprets and understands the message(s). To enable consumers to use dietary guidelines, concrete behavioural examples and messages are needed that take the consumer's point of view into consideration rather than simply be based on the scientific standpoint.⁸ For example, *remove chicken skin* is more understandable than *eat less fat*. Also, visual description of a food is more understandable than the technical terminology (e.g. solid fat and oils, rather than saturated and unsaturated fat).⁸ Furthermore, the use of ambiguous words, phrases or statements (with several possible meanings and interpretations) should be avoided. Consumers may also have difficulties in understanding abstract concepts and specific ideas such as portion sizes and quantities.⁸ Misunderstanding of certain words, for example "thick foods" and "consistency", was also observed in the field-testing of the revised, draft South African Paediatric FBDGs.⁹ Nutrition messages may furthermore be interpreted differently in different population and different language groups.

In the South African context, it is important that FBDGs translate well into the eleven local languages. Linguistic equivalence between the translated and the original message is important, with other words, the meaning of the translated message should be the same as the meaning of the original message.¹⁰ Translated FBDGs should be culturally familiar and nutrition messages need to be interpreted correctly and understood by the target audience. Direct translation is not always possible, and in some cases certain concepts should be explained in a linguistically familiar way in the target language,¹⁰ highlighting the importance of involving local people during the verification process. Consumer (field) testing of translated dietary guidelines in various settings is therefore important. Applying focus group methodology in testing the guidelines provides the developers with a structured opportunity.

Comprehension of nutrition messages or nutrition knowledge will not necessarily translate into healthy eating practices. In a study in the Eastern Cape for example, NikNaks was perceived as unhealthy for children, yet it was the second most common food given to children under two years.¹¹ Various factors affect food choices, which may result in low acceptance and adherence to dietary guidelines. For FBDGs to lead to improvements in diets, foods promoted must be available, affordable and acceptable; and in some instances, additional strategies are needed to increase the food availability and accessibility.¹²

South Africa is one of few countries in the continent or the world that have specific FBDGs for children under five years of age, although these are still in draft format, which have recently been revised. These guidelines include messages on exclusive breastfeeding for the first six months of life and continued

breastfeeding up the age of two years or beyond.⁹ Rates of exclusive breastfeeding and continued breastfeeding in South Africa are low,¹³ and a concerted effort is needed to ensure that these guidelines are achieved. Social circumstances and cultural beliefs may however influence breastfeeding and infant and young child feeding practices, as was shown in the Eastern Cape.¹¹

The revised, draft South African Paediatric FBDGs were recently tested for appropriateness and comprehension in the Western Cape and Mpumalanga. Perceived barriers for implementing the guidelines were also assessed. The study sample included diverse groups of language, culture and socio-economic status. Field-testing of the guidelines was done through focus group discussions (FGDs).⁹

Using focus groups to test the guidelines provides the developers with a widely used and scientifically sound methodology to explore how consumers interpret and understand the guidelines. There are several advantages to using focus group in understanding how consumers interact with a specific issue and one of these are that the group process helps people to identify and clarify their views.¹⁴ It also allows the developers to interact with consumers purposively selected from different language and cultural background to test their understanding. FGDs further allow participants to suggest alternative wording(s) for concepts that are misunderstood, as was the case in the field-testing of the revised, draft South African Paediatric FBDGs.⁹ According to some participants, visual portrayal of the messages could improve their understanding of the messages, and it is encouraging that subsequent to the field-testing, graphic illustrations of the messages were developed.⁹

Du Plessis and coworkers recommend that the reworded South African Paediatric FBDGs be adopted by the National Department of Health. These guidelines can then be used as an education tool; and be used to guide implementation of nutrition education strategies and be incorporated into existing programs.⁹ Integration of FBDGs within a range of sectoral policies and programs is important, as sustainable healthy diets need to be available, accessible, and affordable.⁴ Ultimately, information on the effectiveness of the implementation of FBDGs is needed.⁸ Information on implementing and evaluating of the FBDGs to improve dietary intake and health is however lacking. The FAO is currently working towards developing guidelines on the processes of implementation, monitoring and evaluation of FBDGs.⁴

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ORCID

Mieke Faber  <http://orcid.org/0000-0002-8878-254X>

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