

Revised food-based dietary guidelines for South Africa: challenges pertaining to their testing, implementation and evaluation

Food-based dietary guidelines (FBDGs) are brief, positive dietary recommendation messages that are used to inform consumers how to choose food and beverage combinations that will lead to a diet that is adequate, that meets nutrient need and that is, at the same time, prudent, for example, which lowers the risk of noncommunicable diseases (NCDs).¹ FBDGs are based on the best available scientific evidence on the relationship between what we eat and our health. Furthermore, country-specific FBDGs are influenced by prevailing eating patterns and public health problems within the country.¹

This special supplement in the current issue of the *SAJCN* publishes the technical support papers which motivate and explain each of the recently revised South African FBDG messages.

The revisions were executed for the following reasons:

- Firstly, when the South African FBDGs were initially designed and adopted by the Department of Health as "official" dietary recommendations for South Africa, it was advised that they should be revised regularly to assess if they still reflect the most recent available scientific evidence on the influence of dietary intake on health and disease.²
- Secondly, the Department of Health, Chief Directorate: Health Promotion and Nutrition, recently developed the first country-specific food guide for South Africa, and wanted to ensure that the FBDGs and the food guide were aligned, so that the latter could be used with confidence to implement the FBDGs in efforts to educate consumers about healthy eating.
- Thirdly, reports from practising dietitians and nutritionists indicated that some of the FBDGs in the first set, especially the alcohol FBDG,^{3,4} might be misinterpreted by consumers.
- Finally, the Department of Health requested that the existing paediatric FBDGs for South Africa⁵ should be revisited, so that they could become an integral part of the general recommendations for healthy eating.

The main purpose of the South African FBDGs, together with the food guide and education material that must be developed based on the technical support papers published in this supplement, is to inform, educate and empower South African consumers to change their eating behaviour.

Changed eating behaviour is necessary to address the double burden^{6,9} of nutrition-related public health problems in the country. This double burden is characterised by persistent food and nutrition insecurity⁶⁻⁷

and undernutrition^{6,8} in segments of the population, while overweight and obesity, and the consequent risk of NCDs, are on the increase.^{6,7,9} The rapid nutrition transition,⁷ an outcome of the present economic development, urbanisation and modernisation of South African society, is a major contributor to this double burden. Therefore, the challenge is to use the FBDGs to guide undernourished and overnourished consumers towards behavioural change that will lead to optimal nutrition. This challenge dictated the format of the FBDGs, ensuring that they were user friendly to a wide variety of consumers.

The aim of changed behaviour will only be reached if the FBDGs are used in nutrition programmes and interventions that are holistic and transdisciplinary, and which take into account factors that influence dietary choice. These factors include which food and beverages are available, affordable and preferred, and are themselves influenced by numerous other factors. Factors relate to poverty and food insecurity, lack of care, illness, and possibly the absence of knowledge among the undernourished about the best food and beverage choices to make within the confines of a low budget. Clearly, there is a need to help consumers adopt better child feeding practices and to choose more adequate diets.

At the same time, the consequences of overnutrition, associated with a high intake of energy from highly processed, energy-dense, micronutrient-poor, oily and salty take-away convenience foods and beverages, are major contributors to morbidity and mortality in South Africa.⁹ The many factors leading to this unfortunate modern eating pattern of a population in economic transition probably relate to complicated social, psychological and biological interactions. Clearly, there is a need to influence dietary behaviour towards a more prudent diet.

The South African FBDGs were developed to address both dietary adequacy and prudence. When the dietary recommendations are followed, the result should be optimum nutrition, commensurate with optimum physical and mental development, a lowered risk of NCDs, and health and well-being throughout the life course.

Therefore, the way in which the FBDGs are used to inform consumers about healthier eating behaviour will differ, depending on the needs of the target group. This is probably the biggest challenge with regard to implementation of the FBDGs: to change the consumer behaviour of people with the same nutrient requirements, but with very different social, economic and biological

circumstances, as well as very different food preferences and eating behaviours. The global epidemic of obesity, in the face of the hundreds of millions who go to bed hungry at night, attests to the worldwide failure to attain the goal of optimal nutrition for everyone.

FBDGs can be a powerful tool in helping to achieve this worthy goal if they are applied with care and sensitivity, while taking into account traditional and existing eating patterns, available food and beverages, affordability and the inter-related factors that drive eating behaviour. This is supported by recommendations that emanated from the recently published South African National Health and Nutrition Examination Survey (NHANES),⁶ that FBDGs should be used as a tool to educate the population to adopt healthier eating and activity patterns. This requires the development of targeted educational material and well-designed implementation programmes. Such programmes will have to use marketing principles to motivate consumers to change their behaviour. Furthermore, they should include evaluation components¹⁰ to monitor processes and outcomes, and both the short-term and long-term impact of the FBDGs. The results of such evaluations should be used to adapt the FBDG messages when, and where, indicated.

But, first, as indicated in many of the technical support papers published in this supplement, some testing of the formulated FBDGs needs to be performed as a matter of urgency. The previous set of general,¹¹ as well as some of the paediatric,⁵ FBDGs were tested for comprehension.

At this stage, it is recommended that further testing of the guidelines should include:

- *Testing for adequacy and prudence:* Linear programming,¹² or other models, can be used to test how well different combinations of food and beverages, as recommended by the FBDGs, comply with standards for an adequate and prudent diet.
- *Testing for comprehension:* It is important that before education material is developed for specific target groups, the understanding of the meaning of the FBDG messages by members of the target groups must be examined. Such testing could also assess barriers to implementation in the target groups, and should assist with decisions on how to overcome these barriers.

The first suggested testing is a theoretical exercise, and is ideal for postgraduate studies in nutrition or dietetics. The second suggested testing may be a daunting task. However, with good planning and coordination, this can be carried out at national level by researchers and postgraduate students at South Africa universities that train dietitians and nutritionists, in a series of repeated studies in the target groups. Such groups could include health, agricultural and other professionals who are involved in advising people on what to eat, mothers and caregivers of infants and children, primary school children, adolescent girls and boys, sports men and women, homogenous consumer groups (adult men and women),

pregnant and lactating women, and the elderly. Within these groups, there will be subgroups from different socio-economic backgrounds.

From reading the technical support papers in this supplement, it is obvious that great care was taken in designing FBDGs for South Africa. The process of developing the FBDGs took into account many relevant factors, as advised by the Food and Agriculture Organization of the United Nations and the World Health Organization.¹ It is recommended that with the implementation of these FBDGs, the same level of care should be taken to ensure that they will impact on dietary behaviour and better nutritional health for the population. The latter approach would also be in line with the South African NHANES⁶ recommendations. Therefore, it is also recommended that the use of the FBDGs should be continuously monitored and evaluated to assess their potential impact. The Department of Health must ensure that the necessary human resources and funding are in place to test, implement and evaluate the revised FBDGs for South Africa.

The volunteers participating in the national working group and serving on specific working groups for individual FBDGs, as well as the authors and co-authors of this series of technical support papers, must be thanked and congratulated on a task well done!

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