

# Food-based dietary guidelines for South Africans: an under-utilised tool for improving nutritional well-being.

CA Browne\*

Independent Nutritionist, Kite Consulting, South Africa

\*Correspondence: [carol@kiteco.co.za](mailto:carol@kiteco.co.za)



The global burden of malnutrition continues to persist at extremely high levels. The magnitude of the nutrition related health challenges that must be addressed in South Africa are described by Shishana et al in the report on the South African National Health and Nutrition Examination Survey, SANHANES–1. The country has a high burden of infectious diseases such as HIV and TB and an increasing prevalence of diet related non-communicable diseases. Undernutrition, such as stunting in young children and micronutrient malnutrition, also remain part of the nutrition related health priorities that must be addressed.<sup>1</sup> Stats SA notes that the proportion of the South African population who are 60 years and older is increasing.<sup>2</sup> This ageing population will continue to increase the disease burden related to chronic conditions.

Food-based dietary guidelines (FBDGs) were proposed as an approach to nutrition communication by the Food and Agriculture Organization of the United Nations (FAO) and World Health Organization (WHO), following the International Conference on Nutrition, convened in Rome in 1992. They recommended that dietary guidelines should be based on improving current dietary practices, rather than being based on nutrient requirements.<sup>3</sup> The Second International Conference on Nutrition (ICN 2), ratified the importance and potential of FBDGs through its framework for action.<sup>4</sup> The FAO continues to advocate for country specific guidelines. The FAO also helps countries to use their dietary guidelines to develop supply-side policies and measures (e.g. increasing variety in vegetable production), and demand-side programmes (e.g. nutrition labelling education), in pursuit of achieving healthier diets by using the FBDGs.<sup>5</sup>

South Africa was one of the first countries to develop country specific food-based dietary guidelines, as recommended by the FAO and the WHO. These guidelines were adopted by the Department of Health in 2002. The guidelines were supported by technical papers and were consumer tested for understanding.<sup>6</sup> They should be the basis of public health nutrition communication for the promotion of optimal nutrition; they are health promoting and contribute to the prevention of disease. The 2002 guidelines were updated in 2013, incorporated recent research findings and reflected on the ongoing relevance of each message. Updated technical support papers were published that year.<sup>7</sup> A separate working group used the same process to develop the Paediatric Food-based Dietary Guidelines.<sup>8</sup>

The health status of older South Africans is not as well documented as that of infants and children is. Internationally, malnutrition in otherwise healthy older persons has been shown to

have many negative consequences, including deteriorating psychological status, increased susceptibility to infections and increased dependency and care needs.<sup>9</sup>

This edition of the SAJCN publishes the technical support papers which motivate and support the proposed food-based dietary guidelines for the elderly. This follows on from previously published results on the testing of consumer understanding of the guidelines.<sup>10</sup> Using the process recommended by the FAO/WHO, the authors considered the food and nutritional needs of people in South Africa at this stage of the life cycle,<sup>3</sup> which has become a growing need as the life expectancy of South Africans increases. Older adults, generally, have lower dietary energy needs, but similar or increased nutrient needs compared to younger adults. Factors that contribute to these differences are lower levels of physical activity, changes in metabolism or age-related loss of bone and muscle mass. The nutrient needs of this population are also affected by the prevalence of chronic health conditions, with the consequent possible chronic use of multiple medicines.

These guidelines, for the elderly, are an important addition to the country specific nutritional advice available to South African nutrition professionals and to those who care for the elderly. UNICEF (2020) conducted a review of national FBDGs and associated guidance for infants, children, adolescents and pregnant and lactating women.<sup>11,12</sup> They recognise that the FBDGs educate consumers on healthy diets and have a role in directing programmes and policies to promote healthy diets for all. Considering the importance of the unique, age specific nutritional needs of children, UNICEF explored the role of this topic as part of their work on 'putting the needs of children first'. The survey identified countries that had guidelines targeting the general population, published after 2010. Three countries in Africa were identified, namely Kenya, Sierra Leone and South Africa. Their review considered the guidelines from Kenya and Sierra Leone as these included information on the nutritional needs for all stages of the life cycle in the same document as those for the general population. In these African case studies in the review, advice on the elderly was included in the Kenyan Dietary Guidelines but not in those for Sierra Leone.<sup>11,12</sup> In concluding the review the authors noted that while FBDGs remain an essential tool, achieving improvements in dietary patterns is easier in the context of transformation of food systems. This will help consumers to make diets nutritious, safe, affordable and sustainable.

A possible increase in nutrition communication in South Africa will be seen when the policy on National Food and Nutrition Security (NFNS) for the Republic of South Africa is fully implemented.<sup>13</sup> Following the publication of this policy, a

multisectoral National Food and Nutrition Security Plan [(NFNSP) 2018–2023] has also been developed.<sup>14</sup> This plan aims to improve food security and reduce malnutrition in all its forms. The actions in the plan are guided by six strategic objectives. Strategic objective five seeks to ‘influence people across the life cycle to make informed food and nutrition decisions through an integrated communications strategy’. The NFNSP is supported by a communication strategy (2018–2023), which focuses on strategic objective five, and which aims to reduce the double burden of malnutrition through positively affecting the consumption of nutritious foods and through promoting healthy lifestyles.<sup>15</sup> While specifying that this communication is to be targeted ‘through the life cycle’, no mention is made of communication focused on the nutritional needs of older people.

It is surprising that the FBDG have not been used as an important component of the NFNSP and the communication strategy. The process to develop the FBDGs, and their characteristics, are in line with the aims listed in the policy and the plan, and like the policy and the plan, the FBDGs aim to improve current dietary practices and prevailing diet related public health challenges. The South African FBDGs, including those for children and the elderly have been developed through considerable financial and time investments by nutrition and food professionals, over decades. Representation from Government, United Nations Agencies, Non-Governmental Organisations, academia and individuals have resulted in a set of messages that describe the eating patterns needed for optimal health. They appear to have been ignored in favour of messages that do not necessarily ensure that the key target audiences (households, families) will be well informed and empowered to take appropriate action about their food and nutrition situation.

Another gap in the NFNSP is that it also appears to lack in attention to/emphasis on the impact of human diets on planetary health. Globally 20–30% of greenhouse gas emissions are from agriculture. Willet et al explored this topic noting that ‘food systems have the potential to nurture human health and support environmental sustainability, however they are currently threatening both.’ The authors recognise that achieving healthy diets from sustainable food systems for everyone is going to require major shifts in eating patterns.<sup>16</sup>

The South African FBDG are closely aligned to the EAT: Lancet recommendations. This is primarily because the foods that are recommended are mostly from plant based sources, are mostly unprocessed or minimally processed and only small quantities of animal source foods are included. Compared to the EAT: Lancet healthy reference diet, the currently recommended South African eating pattern for families in the FBDGs is higher than recommended for starchy staples, and lower for legumes, soya and nuts and seeds. Until nuts and seeds are available at affordable prices, recommendations cannot be made to encourage their consumption. Promotion of legumes and soya, in the NFNS communication plan, can assist in increasing the production and consumption of these foods. The communication plan of the NFNS plan should surely be taking this aspect of food systems into account before the plan is finalised and communication materials produced.

Finally, the South African food and nutrition community have an important advocacy role to play to ensure that the FBDG continue to be the central point for nutrition communication in South Africa. Development of messages for school age children, pregnant and lactating women are needed. The proposed guidelines for the elderly should be accepted for implementation. These additional guidelines should be science driven, and be based on the core guidelines. Messages for people at all stages of the lifecycle should be compiled in one document, or interlinked documents easily available on the internet. It is hoped that in the future the NFNSP and communication strategy will base their messages and actions on the FBDGs for different age groups, including the elderly.

## References

1. Shisana O, Labadarios D, Rehle T, et al. National Health and Nutrition Examination Survey (SANHANES-1). Cape Town: HSRC Press; 2013.
2. Statistics South Africa. Mid-year Population Estimates 2018. Report No. P0302.
3. FAO/WHO. Preparation and Use of Food-based Dietary Guidelines. Report of a Joint FAO/WHO Consultations. Cyprus: FAO/WHO; 1996.
4. FAO/WHO. Second international conference on nutrition. Conference outcome document: Rome Declaration on Nutrition 2014.
5. FAO's work in dietary guidelines. <http://www.fao.org/nutrition/education/food-dietary-guidelines/background/fao-work-dietary-guidelines/en/>. Downloaded 11 August 2021.
6. Vorster HH, Love P, Browne C. Development of food-based dietary guidelines for South Africa – the process. *S Afr J Clin Nutr.* 2001;14(3). (Supplement, S1 – S80).
7. Vorster HH, Badham JB, Venter CS. An introduction to the revised food-based dietary guidelines for South Africa. *S Afr J Clin Nutr.* 2013;26(3):S1–S164.
8. du Plessis LM, Daniels LC, Koornhof HE, et al. Overview of field-testing of the revised, draft South African Paediatric Food-Based Dietary Guidelines amongst mothers/ caregivers of children aged 0–5 years in the Western Cape and Mpumalanga, South Africa. *S Afr J Clin Nutr.* 2021. <https://doi.org/10.1080/16070658.2020.1769334>.
9. Marais ML. Malnutrition in older persons: underestimated, underdiagnosed and undertreated. *S Afr J Clin Nutr.* 2017;30(2):4–6.
10. Napier CE, Oldewage-Theron WH, Grobbelaar HH. Testing of developed Food-based Dietary Guidelines for the elderly in South Africa. *S Afr J Clin Nutr.* 2018;31(3):55–61.
11. Government of Kenya. *National guidelines for healthy diets and physical activity*. Nairobi: Ministry of Health.
12. United Nations Children's Fund. Review of national Food-Based Dietary Guidelines and associated guidance for infants, children, adolescents and pregnant and lactating women. New York: UNICEF; 2020.
13. Government Gazette. Department of Agriculture, Forestry and Fisheries. The national policy on food and nutrition security for the Republic of South Africa. No. 637. 22 August 2014.
14. Government of South Africa. National food and nutrition security plan for South Africa 2018–2023. November 2017.
15. Government of South Africa. National food and nutrition security communication strategy for South Africa. Department of Planning, Monitoring and Evaluation (DPME), Republic of South Africa in collaboration with UNICEF, South Africa.
16. Willet W, Rockstrom J, Larken B, et al. Food in the Anthropocene: the EAT-Lancet Commission on healthy diets from sustainable food systems. *The Lancet.* 2019;393:447–92.