

## Healthy ageing: Is it achievable?

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The world's population is ageing. According to the WHO<sup>1</sup> the number of people aged 60 and over is expected to double between 2000 and 2050, resulting in more than one in five people being 60 years or older in 2050, with 80% living in low- and middle-income countries. In South Africa, the estimated proportion of people over 60 rose with 1.34% for the period 2002–2003 to 3.0% for 2016–2017, with approximately 8.1% of the population being 60 years and older in 2017.<sup>2</sup>

The ageing of the world's population has implications for all sectors of society. A 2015 United Nations Report<sup>3</sup> argues that it is important to prepare for the economic and social changes associated with this demographic shift to ensure progress in achieving the goals outlined in the 2030 Agenda for Sustainable Development. The goals on ensuring healthy lives and well-being at all ages are particularly important to the nutrition community because of the key role of nutrition in achieving optimal health through all life stages. Increased longevity does not necessarily mean that the additional years are lived in good health as older people are particularly vulnerable to malnutrition and at increased risk for multiple health disorders.

The vulnerability of older persons within the South African context is reflected by results of the *Study on global ageing and adult health (SAGE)*, which showed that approximately 70% of older adults (> 50 years) in South Africa have at least three out of seven selected risk factors for non-communicable diseases, with the highest ranked risk factors being self-reported hypertension (78.0% of individuals), insufficient vegetable and fruit intake (68.4%), central obesity (63.9%) and low level of physical activity (59.7%).<sup>4</sup> The high prevalence of people living with human immunodeficiency virus (PLWHIV) in South Africa adds additional urgency to ensuring that older people adhere to high quality diets, rich in nutrient-dense foods. Treatment for PLWHIV is becoming more accessible and effective, and as a result this population is ageing, with some evidence that they may be at higher risk of chronic disease and geriatric syndromes, even if the condition is well controlled.<sup>5</sup> In addition to a higher survival rate of PLWHIV, the HIV epidemic is also “ageing” and Hontelez et al<sup>6</sup> report that HIV acquisition rates (other than previously thought) continue in older people, with the number of HIV infections in the elderly expected to increase by about 50% in the next 15 years. The authors suggest that this group

will soon need special attention, adding impetus to healthy ageing becoming a key area of interest for nutritionists working in all public health spheres.

The WHO defines “Healthy Ageing” as the “process of developing and maintaining the functional ability that enables well-being in older age”.<sup>1</sup> Functional ability is determined by intrinsic capacity (the physical and mental capacities of an individual) and the extrinsic world (the environment that forms the context of an individual's life). Functional ability is influenced by certain key health characteristics of the ageing process. These should be considered when interpreting health trends in older age.<sup>1</sup> At a biological level, ageing is characterised by a progressive accumulation of molecular and cellular damage that results in increasing impairment in many body functions and an increased vulnerability to environmental onslaughts. Strength in musculoskeletal function, sensory functions (such as hearing and sight), and some cognitive functions all decline as people age. Sensory impairments may result in poor appetite, while poor oral health can lead to difficulty in chewing and a low-quality monotonous diet. Older people's loss of mobility may furthermore affect their ability to shop and prepare food. Ageing may also be associated with psychosocial and environmental changes, such as isolation, loneliness, depression and inadequate finances, all of which may adversely impact on the diet of older individuals and increase the risk of malnutrition.<sup>1</sup> For older persons in South Africa who participated in the SAGE study, social capital (as measured with components such as having a partner, social action, sociability, trust and solidarity and civic engagement) was shown to be significantly associated with health status and cognitive functioning,<sup>7</sup> highlighting the importance of the social environment in healthy ageing.

The role of nutrition in healthy ageing is multifaceted. Good nutrition may assist in the prevention or delay in onset of chronic conditions, but good nutrition care and dietary practices are also important in maintaining good nutritional status despite the physiological changes brought about by ageing. The importance of healthy eating is reflected in the results of a recent systematic review which showed that in the elderly, a Mediterranean-type diet is associated with a lower likelihood of cardiovascular events, cognitive decline and frailty. Also, eating at least three servings of

vegetables daily was shown to be associated with reduced cognitive decline.<sup>8</sup>

The practical application of healthy eating recommendations in lower socio-economic environments may, however, not be easy. Food prices may be a barrier for healthy eating,<sup>9</sup> more so for older persons who rely on old-age pensions, thus raising questions on the relevance of the food-based dietary guidelines (FBDGs) for this nutritionally vulnerable group.<sup>10</sup>

Despite the challenges to good nutrition in resource-poor environments, the FBDGs, using a life course approach, could assist policy makers and healthcare providers in offering appropriate nutrition services to older people. This potential role is supported by the findings of a review covering more than 130 countries pointing out that there is a low priority within health policy to the challenges of this demographic transition and low levels of training for health professionals in geriatrics and gerontology.<sup>11</sup> The guidelines by Napier and co-workers<sup>12</sup> are thus a first and important step in starting a discourse and a possible research agenda focusing on nutrition and healthy ageing in South Africa.

The suggested FBDGs for the elderly, in their current format however highlight the challenges when dealing with guidelines for older people as they do not adequately deal with the diverse population that comprises the elderly or older people. As ageing is only loosely related to a person's chronological age and there being no "typical older person", the WHO recommends that interventions for older people should be adapted to their levels of capacity as "the second half of life is characterised by great heterogeneity in trajectories of intrinsic capacity". Within any population of older people, many individuals will experience periods of high and stable capacity, declining capacity, and a significant loss of capacity.<sup>1</sup> Each of these three periods requires different responses that need to be emphasised. FBDGs should, therefore, be responsive to the needs of older people as they progress on this trajectory. The guidelines put forward by Napier et al in this issue of the SAJCN<sup>12</sup> could be a starting point from which more comprehensive guidelines addressing different levels of capacity could be developed.

An important point raised by the WHO, is that ageing often requires the need to make significant lifestyle changes and that older people may have compelling motives for making these changes such as not wanting to be a burden to their families.<sup>1</sup> Although health professionals therefore in some instances may be dealing with a more motivated population, it is important that health messages for older people must

reach them in acceptable and understandable ways. The WHO provides guidelines on how to achieve these such as using communication processes appropriate for older people: making messages relevant to older people; consider using positive messaging; tailoring messages; managing emotional distress and considering older people's social support.<sup>1</sup> Napier et al<sup>12</sup> have included some of these in their guideline development process. Additional work however needs to be done before these guidelines can be implemented on a wider scale. This is imperative as recommendations for improved nutrition and healthy living in older people need to consider the heterogeneity of older people and the various physiological, psychological and socioeconomic factors that may impair food intake or reduce nutrient utilisation while at the same time attending to issues of affordability for healthy eating in population groups with limited financial means.

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