

Older people at risk for malnutrition



Author: Irene Labuschagne

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Ageing is associated with changes in nutrient requirements and dietary habits, which increase the risk of nutritional deficits, especially in poor communities and food insecure households. In poorer communities elderly people, particularly women, who share their pension income with other household members, may be at risk of inadequate dietary intake as they often skip meals in order to feed their grandchildren.

According to Statistics South Africa's Social Profile of Older Persons 2011-2015 report, the elderly account for 8,1% of the population. The proportion of older persons in the population increased from 7,3% in 2001 to 8,1% in 2016.

The risk of non-communicable diseases in the elderly, such as hypertension, diabetes, strokes and heart disease, is on the rise in South Africa. The elderly (people older than 60 years) are usually more dependent on healthcare services than the rest of the population. When malnutrition is prevalent in this group, disease and death rates are likely to increase. Energy and protein deficiencies lead to changes in body composition and functions, such as impaired muscle function, decreased bone mass, delayed wound healing, reduced cognitive and immune function, and anaemia.

There is a lack of national data on the nutritional intake of the elderly population in South Africa. The elderly are generally considered a high-risk group for nutritional deficiencies, yet little is known about their dietary intake. Currently only small-scale regional studies are available, and more research is needed about malnutrition in the elderly, particularly in poor communities.

Why are the elderly at risk of poor nutrition?

Chronic illness, medication, poor dental health and depression are some of the factors that may cause a lack of appetite and reduced food intake among the elderly. They may also suffer from poor absorption, gastro-intestinal malabsorption, chronic pain, poor fitting dentures and changes in taste and smell perception. Elderly persons also have a lower thirst perception and are at high risk of dehydration. Furthermore poverty, economic hardship, low levels of education, low functional status and the inability to shop for food may all contribute to malnutrition in the elderly.

Although social grants have made a difference in poor households, food prices are rising steadily and poor families are being forced to buy cheaper, less nutritious food that is high in starch and low in protein, and fewer vegetables and fruit.

Food purchases determined by prices rather than nutritional value, tend to be energy-rich and nutrient-poor. These include foods like refined cereals, added fats and sugars, that provide a higher dietary energy at a low cost, but a lower content of other nutrients. A typical "low quality" meal consists of mostly mealie-meal, bread or rice, with very little animal protein or vegetables. The meal is also usually prepared with cheap oil and lots of salt. This has resulted in many South Africans, even

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those who are overweight, experiencing high levels of nutrient deficiencies, including vitamin A, iron and other minerals and vitamins.

Social grants are also used for non-food items. Even if they could afford a nutritious diet, poor people have other needs apart from food. A study of how social grant money is spent by women recipients in the Western Cape, found that food was the first priority for recipients of the Child Support Grant (CSG), the Older Person's Grant (OPG) and the Disability Grant (DG). Education costs were the second priority for CSG recipients, followed by clothing and transport. For OPG and DG recipients, funeral cover policies were second priority, followed by education.

Nutrition considerations for older people and/or their caregivers

Recommendations and conclusions based on the available literature:

- Stay hydrated by drinking plenty of clean water. Dehydration can cause tiredness, dizziness, constipation, poor mood and confusion, among other things. As a general guide, people should drink eight glasses of water a day.
- Eat a variety of healthy foods, and avoid high-energy, low-nutrient foods that contain a lot of sugar and fat, but few nutrients. These include chips, cookies, cool drinks and alcohol.
- Aim for five servings of fruit and vegetables each day. These can be fresh, frozen, tinned or dried.
- Great sources of protein include lean meat, poultry and fish. Tinned sardines, tuna and pilchards are packed with heart-healthy omega 3 fats. Eating beans, eggs and nuts are also a good way of boosting the protein in your diet.
- Pulses and legumes are rich and affordable sources of good quality protein, carbohydrates, dietary fibre, vitamins and minerals and phytochemicals. They are low in energy, fat and salt and can improve diet quality and protect against lifestyle diseases.
- Use less salt. Too much salt in the diet can contribute to high blood pressure, which can lead to strokes or heart disease.
- Drink three cups of fat-free or low-fat milk throughout the day. If you cannot tolerate milk, try small amounts of yogurt, butter milk, hard cheese or lactose-free foods. Drink water in stead of sugary drinks.
- An elderly person consuming less than 6 300 kJ (1 500 kcal/day), may need multivitamin and mineral supplementation at Recommended Dietary Allowance (RDA) levels.
- If poor appetite or low food availability is a problem, meal replacement drinks or nutrient-dense foods such as enriched or fortified foods should be recommended. Alternatively, multivitamin and mineral supplements are recommended. Single nutrient supplementation (with the exception of calcium) is not recommended if there is not a clinical deficiency.
- Chronic diseases may increase the need for supplementation. These include diabetes, Crohn's disease, HIV and ulcerative colitis.
- Elderly people who smoke cigarettes or overuse alcohol may need additional nutrients.
- Medication may increase the need for certain nutrients – these should be addressed by the medical professionals prescribing the drugs.
- Calcium supplementation at RDA levels (1 200 mg) is indicated in elderly patients who do not consume three portions of dairy per day. Calcium citrate is more reliably absorbed in achlorhydric patients, and so may be more effective.
- Supplementation with vitamin D-3 (400 IU to 800 IU) plus calcium (500 mg to 1 200 mg), may be beneficial in reducing the incidence of fractures in institutionalised older adults.

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- Healthy postmenopausal women and adult men should generally not take iron supplements.
- Smokers should avoid supplementation with beta carotene.

Choices for a restricted budget: getting better value for money

- Dried legumes are not only good substitutes for meat, fish, eggs or cheese, but can be used to stretch foods (meat extenders).
- It is not necessary to eat meat everyday. Meat alternatives, which are more affordable, can be used as substitutes or to bulk up meals.
- Add cooked dried beans to stewed meat.
- Mix mashed, cooked, dried beans with mince or fish to prepare meat loaf, fish cakes or meatballs.
- Soya beans have been processed to form textured soya proteins that resemble meat in taste and look, and can therefore be used as meat substitutes.
- Textured soya protein products (e.g. Toppers, Knorrox and Imana) can be used to stretch mince in bobotie, fricadels and other meat or chicken dishes.
- A kilogram of dried beans yields 33 portions, while a kilogram of meat yields 9 portions (1 cup dried beans, raw, yields \pm 8 cups cooked).

Access the South African food-based dietary guidelines and recommendations for healthy eating and weight loss at:

<http://www.sun.ac.za/english/faculty/healthsciences/nicus/how-to-eat-correctly>.

For more information, please contact NICUS or a dietitian registered with the Health Professions Council of South Africa

<https://www.sun.ac.za/english/Lists/news/DispForm.aspx?!D=5169>