

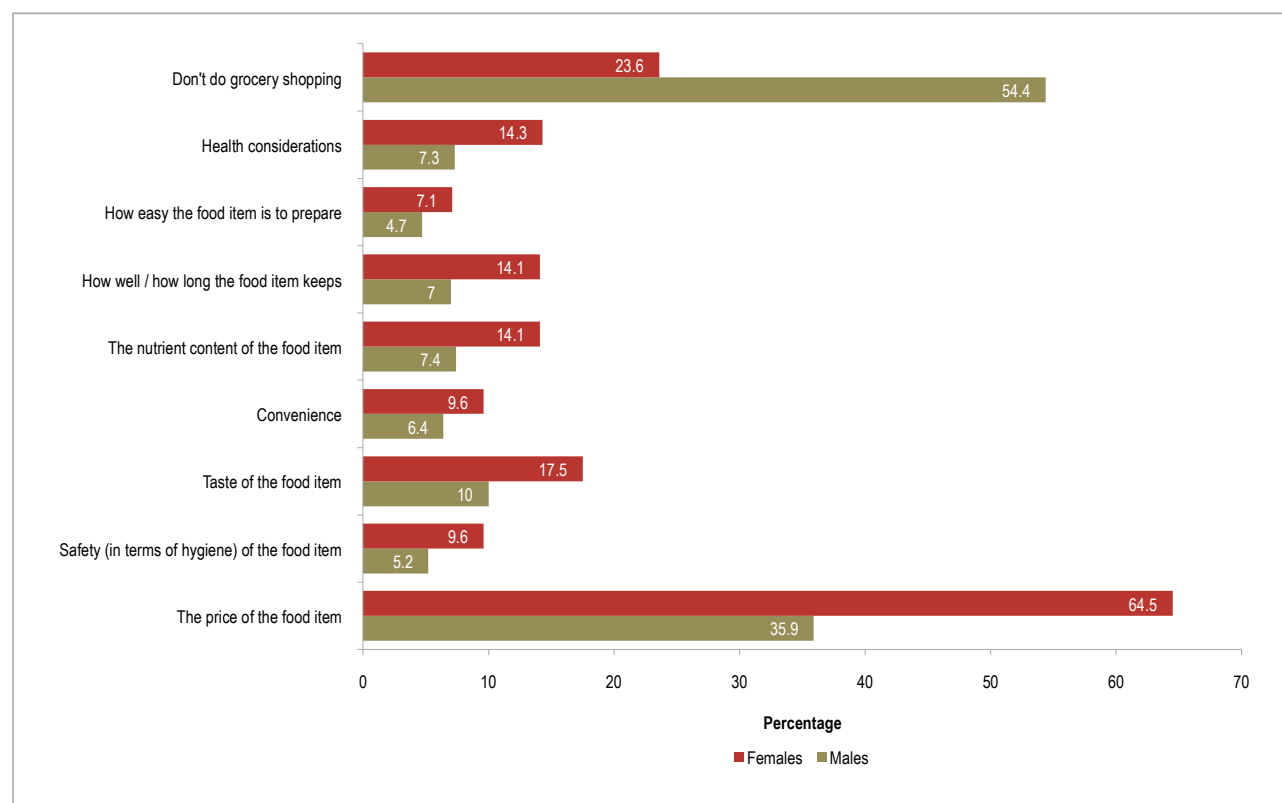
You are what you eat... and you eat what you can afford

Despite the significant improvements in food security recorded since 2008, food security and hunger remains a serious issue in the country. And many do not eat enough healthy food, *Demetré Labadarios*, *Fred Tshitangano* and *Olive Shisana* found when investigated the eating habits of South Africans during the SANHANES-I study.

What do most people look for when they go to buy food? They look at price. Those that buy for taste or for nutritious content are in the far minority (Figure 1). But buying food based solely on price also has its price; the

cheaper the food, the greater the probability that it is starchy food, high in carbohydrates and of poor nutritional quality. The study showed that only approximately one in seven women consider health aspects (14.3%) when buying food.

Figure 1: Factors influencing food choices when grocery shopping.



To put this into context, most South Africans cannot afford to buy nutritious food, and many (14.5%) do not know better because of limited nutritional knowledge.

Dietary intake, knowledge and behaviour

The study went further and looked at how diverse participant's food intake was. The results showed that two out of five participants (39.7%) consumed a diet low in dietary diversity, indicative of a diet of poor nutritional quality.

Almost one out of five participants consumed a diet with a high fat score (18.3%) and high sugar score (19.7%), and one out of four consumed a diet with a low fruit and vegetable score (25.6%). The dietary intake of participants in SANHANES-1 reflects a picture of a country in nutrition transition and urbanisation.

When it came to nutritional knowledge (knowledge that would influence the way people eat), the survey showed that on average, adults had a medium (5.26 out of 9) general nutritional knowledge score, with only one in five (22.6%)

South African National Health and Nutrition Survey (SANHANES-I)

achieving a high score. The majority (62.9%) achieved a medium score and 14.5% achieved low scores. Nearly two thirds of adult females and males (62.1% and 65.8%, respectively) believed they drank and eat healthily and had no need to change their diet.

Household food security

Food security is a condition that exists when all people, at all times, have physical, social and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life' – UN Food and Agriculture Organisation.

SANHANES-I found that overall, 45.6% of the population were food secure, meaning that all members of a household had enough food for an active, healthy life (score of 0 out of 8) at all times. This was a marked increase from the observation of the National Food Consumption Survey (NFCS) in 1999 which reported that only 25% of the population were food secure (Table 1). The same improvement was observed in those experiencing hunger (food insecure), the percentage of which decreased from 52.3% (1999) to 52% (2005), to 26% (2012).

Of concern was that 28.3% were at risk of hunger (score of 1-4 out of 8) which was a slight increase in the proportion of those at risk of hunger, a prevalence that varied among the provinces (Figure 2). Combining those at risk of hunger and those who experienced hunger, it was apparent that 54.3% of South Africans were not food secure, which is a concern that needs urgent action.

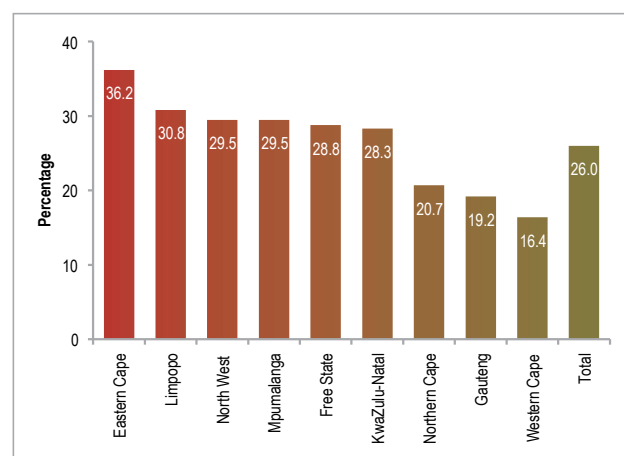
Table 1: Scores for food security, risk of hunger and experience of hunger (food insecurity) using data from four national surveys, South Africa 2012

Variable (Score out of 8)	NFCS 1999 (n = 2 735)	NFCS 2005 (n = 2 413)	SASAS 2008 (n = 1 150)	SANHANES 2012 (n = 6 306)
	%	%	%	%
Food security (0)	25.0	19.8	48.0	45.6
At risk of hunger (1-4)	23.0	27.9	25.0	28.3
Experiencing hunger (>5)	52.3	52.0	25.9	26.0

Sources: NFCS, SASAS, SANHANES.



Figure 2: Prevalence of food insecurity (experiencing hunger) by province, SA 2012



The role of micronutrients in food security

Food insecurity has been reported as a significant predictor of nutritional outcomes among adults. Among non-elderly adults, food insecure individuals have a less healthy diet and are more likely to be low in serum nutrients. Poorer self-reported health status among food insecure adults has also been reported.

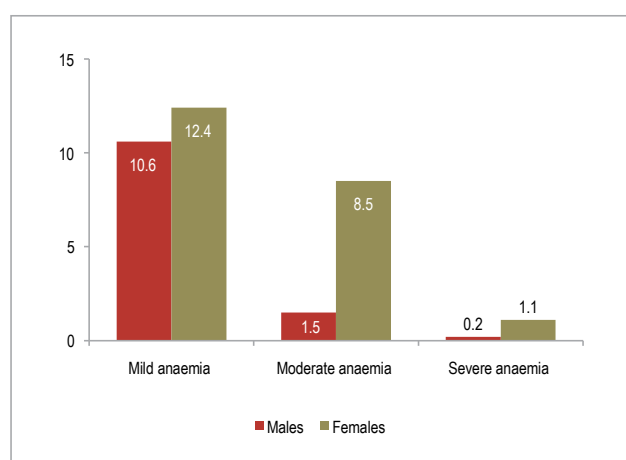
With regard to serum nutrients, poor micronutrient status is known to be associated with food insecurity. In the South African context, poor iron and vitamin A status as well as anaemia, was reported to be a serious concern in 2005 in the country. SANHANES-1 selectively included the assessment of the current status of these two micronutrients and anaemia among the high-risk group of women of reproductive age.



Overall, the prevalence of anaemia in all participants older than 15 years of age was 17.5%, with female participants having almost double the occurrence (22.0%) when compared with males (12.2%), as shown in Figure 3. Anaemia in women of reproductive age was 23.1%; iron deficiency was found in 5.9%; and iron deficiency anaemia was present in 9.7% of women of reproductive age.

About 13.3% of women of child-bearing age also did not get enough vitamin A. Notable, however, was that there was a significant improvement in this regard since 2003, which was ascribed to the government's food fortification programme, implemented by the Department of Health in 2003.

Figure 3: Prevalence of anaemia by sex, SA 2012



What to do?

The SANHANES team recommended the following, among others:

- The introduction of policies that discouraged, and/or banned, the explicit or covert promotion of foods known to be associated with increasing the risk of disease with priority being afforded to weight management. It recommended that such foods display appropriate warning labels to increase the awareness of potential or real harm would be increased. This practice would balance current claims on food packages extolling the advantages, real or imagined, of the nutrient content of foods.
- A concerted effort to increase nutritional knowledge to encourage marginal dietary diversity among the population.

In relation to food security:

- Actions related to food security in all its dimensions must be prioritised and co-ordinated in collaboration with all other relevant government departments. Multi-stakeholder discussions should be the basis upon which a road map is formalised for the immediate-, medium- and longer-term future.

In relation to micronutrient status the team recommends:

- Retain but reappraise the Food Fortification Intervention programme in conjunction with the Salt Iodation programme, not only in terms of compliance but also in terms of the currently legislated fortifications, and levels thereof, particularly iron and zinc. ■

Authors: Professor Demétré Labadarios, executive director, Population Health, Health Systems and Innovation (PHHSI) programme; Mr Fred Tshitangano, deputy director, GIS, PHHSI; Dr Olive Shisana, CEO of the HSRC.

The full report is available on <http://tinyurl.com/klvx5ud>