## Rising food prices and household food security

For many South Africans a healthy, balanced diet is elusive. Food security in both urban and rural South Africa is heavily dependent on cash incomes for household purchase of food for consumption,1 which, in a context of high unemployment, is largely reliant on social grants.2 This safety net does not reach all those eligible for such grants including those defined as "seriously hungry".3 Rising food prices can exacerbate poverty, inequality and food insecurity when the poor are net food consumers (consume more than they produce),4 which is the case for the majority of South Africans.

In South Africa, from January 2014 to January 2015, the cost of a basic food basket increased from R485 to R514. Expressed as a proportion of average monthly income, the increase in the cost of a basic food basket represents an increase from 45.3% to 48.0% for the poorest 30% of the population, versus 1.8% to 1.9% for the wealthiest 30% of the population.5 The question, thus, is "how do poor households cope with these increases in food prices?"

In this issue of the SAJCN, Mkhawani et al.6 report on the effects of rising food prices and coping strategies of 60 female-headed households residing in the Runnymede Village in the Greater Tzaneen Local Municipality of the Mopani District in the Limpopo Province. These women were single, divorced or widowed, 53% were unemployed, 43% depended on social grants and 55% spent less than R500 on food per month. Although the results of this study cannot be viewed as representative of all rural households, they nevertheless highlight the detrimental effect of the high food prices on the poor and provide valuable insight into coping strategies adopted by households in response to the increase in food prices.

The poor are particularly vulnerable to the effects of the rising food prices. In turn, the quality of the diet is affected by a rise in food prices. Available data show that higher dietary quality is associated with higher dietary cost. Rehm and co-workers,7 for example, using data from the National Health and Nutrition Examination Survey (NHANES) for the US population, showed that higher consumption of vegetables, fruit and legumes was associated with higher costs. In general, energy dense foods such as fats and oils, added sugar, and refined grains have lower energy costs (expressed as cost per 100 kcal), while foods with low energy-density, such as lean meat, fish, vegetables and fruit have higher energy costs, as noted in a systematic review.8 The rise in food prices will most likely result in a reduction in demand for animal source foods including meat, fish and dairy; but will have less impact on demand for staple foods such as cereals.9 Bouis and co-workers10,11 argue that the decreased intake of non-staple foods due to the increase in food prices may lead to a decrease in micronutrient intake, which is a major challenge for alleviating micronutrient malnutrition in developing countries.

Rising food prices affects the purchasing and eating behaviour of particularly the poor. Mkhawani et al.6 report that in Runnymede Village, 57% of the study participants changed their purchasing patterns because of higher food prices. They stopped buying certain food items, bought cheaper brands such as store brands, and some bought food in foreign-owned shops because they believed the prices to be cheaper. Overall, the study by Mkhawani et al.6 relates to the South African National Health and Nutrition Examination Survey (SANHANES), which showed that price is the main driver behind food choices when food shopping.12

Mkhawani et al.6 argue that rising food prices negatively affected participants because they were forced to buy cheaper generic store brands, which, according to the participants, tend to have an unpleasant taste due to the poor quality of the ingredients used. A study in the UK, however, showed that generic store brands are not nutritionally inferior to the branded products. 13 Consuming cheaper food products with a poor nutritive value makes it impossible for many households to eat a healthy, balanced diet. This resonates with the findings of a recent systematic review, which noted that low-income groups do not necessarily buy less meat because of its cost, but buy cheaper and fattier cuts.8 These alterations in food consumption may have health implications. Results from the Seattle Obesity Study showed that higher diet costs were associated with dietary intake of nutrients commonly associated with a lower risk of chronic diseases, which was in contrast to lower diet costs associated with higher dietary intake of nutrients associated with higher disease risk.14

Variability in diet costs may help explain why lower income groups fail to comply with dietary guidelines.<sup>14</sup> The financial barrier to healthy eating was demonstrated in a meta-analysis of 27 studies from 10 countries which showed that, in general, healthier diets are more expensive than less healthy diets.<sup>15</sup> A more varied diet costs more; a study done in Taiwan, for example, showed that a higher dietary diversity score was associated with higher total food expenditure.<sup>16</sup> In South Africa, lower dietary diversity in the lower living standard measure (LSM) groups 17,18 reflects poor people's inability to access a large variety of foods. Rural households in the Limpopo Province are particularly vulnerable to the high food prices. The SANHANES showed that of the nine provinces in South Africa, Limpopo Province had the highest number of respondents with a low dietary diversity.<sup>12</sup> In essence, it is argued that a healthy diet is unaffordable for the large majority of the South African population.19

How are people coping? A number of short- and long-term coping strategies were documented by Mkhawani et al.6 These include buying food in bulk, making shopping lists, sending children to



neighbours and relatives in order for them to have meals more often, and turning to broader natural resources. Some coped by eating indigenous, traditional foods that grew in the wild. In terms of the latter, foods growing in the wild should be seen as a source of nutrition, rather than being associated with poverty. Approximately 50% of participants started planting vegetable gardens for food availability and subsistence. This reiterates the importance of home gardens for food security through mitigating the negative effects of rising food prices.20

What are the implications of these issues for policy response? The authors argue for subsidizing food, not only the price of staple foods, in order for the poor to afford adequate food.6 This, however, is not necessarily feasible in a context of broader financial austerity in the country. Indeed, the State faces many competing demands including increasing the value of social grants and extending VAT rebates onto more food items.

What is needed is a systemic approach that considers the symptoms of food price increases as part of the underlying causes of hunger and malnutrition within the whole food system. Part of this challenge is the better understanding of a dominant food system, which primarily generates profit and not adequate nutritious food. Shifting from this approach requires diversification into many sources of food as well as building on some of the documented coping strategies, such as own production and natural resource harvesting. Strengthening and linking smallholder farmers to local food systems is another such approach. Relying too heavily on purchased food from too few sources is clearly making people vulnerable to hunger. Improving access to good quality, diverse and affordable diets requires innovation in food, nutrition and broader agricultural policies.

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