

The school food environment: shaping the future health of the nation

A healthy school environment, including healthy food environments within schools, has been a focus area in the global health arena for a number of decades. During the 1990s, the World Health Organization (WHO) published a series of technical documents that focused on the various aspects thereof.¹ The aim of the WHO's Global School Health Initiative was to help schools to improve the health of students, staff, parents and community members. However, the rising tide of noncommunicable diseases (NCD)² shifted the focus from general health promotion to an interest in schools as settings for NCD prevention, especially with regard to nutrition and physical activity behaviour.³ The dramatic increase in the prevalence of obesity in children around the world resulted in even greater interest being paid to school-based obesity prevention programmes.⁴ A 2011 *Lancet* series on obesity identified the key action that international agencies, the private sector, civil society, health professionals and individuals need to perform to combat the obesity epidemic. Creating a healthy school food, and physical activity, environment, was included as a priority action for individuals.⁵

It was argued in the 2015 *Lancet* series on obesity that progress in obesity prevention has been "patchy". A "reframing of obesity that emphasises the reciprocal nature of the interaction between the environment and the individual" was proposed.⁶ It has been suggested that presently, food environments "exploit people's biological, psychological, social and economic vulnerabilities", making it easier for them to eat unhealthy food. This, in turn, increases the preference and demand for food of poor nutritional quality, and creates even an more unhealthy food environment.⁶ Although people have a personal responsibility for their own health, making healthy choices is challenging within a food environment that is dominated by nutrient-poor and energy-dense food, ultra-processed food, large portion sizes, attractive packaging, the strategic placing of food in supermarkets, as well as highly visible marketing strategies.⁶

Food policies have an important role to play in reducing the prevalence of overweight and obesity. Hawkes et al⁷ proposed four mechanisms through which food policies can affect diet, i.e. they can:

- Provide an enabling environment in which healthy preferences can be learnt from a very young age.
- Overcome the barriers that prevent people from expressing healthy preferences.
- Influence the price, availability and presentation of healthier options to encourage people to reassess their unhealthy preferences and to make healthier choices.
- Stimulate a food-systems response.

Policies within the school setting may work through these mechanisms to create a school environment that is conducive to healthier food choices, and which enables children to overcome barriers to the selection and consumption of healthy food. Including food standards that facilitate the availability of healthy food, and restricting the availability of unhealthy foods through these policies would create an enabling environment in which healthy food choices can be made.⁷ Implementing, regulating and monitoring strong nutritional standards for all food and beverages sold or provided through schools is a strategy recommended by the Institute of Medicine's Committee on Accelerating Progress in Obesity Prevention in the USA.⁸

Schoolchildren buy food from a variety of sources in South Africa, including tuck shops, food vendors on or outside the school premises, and shops near to the school. The study in the Bloemfontein region by van den Berg and Meko⁹ in this issue of the *SAJCN* points to the need for the creation of enabling food environments on and in the immediate vicinity of schools. The principals at each of the 10 participating schools indicated that sweets, crisps and high-fat foods such as pies, *vetkoeks* and burgers were sold at or in close proximity to the schools. Only one principal indicated that wholewheat bread was available. The ready availability of refined, energy-dense food in school environments is important in view of the 2008 National Youth Risk Behaviour survey,¹⁰ which found that nearly 45% of surveyed high school learners bought food at least four times a week from the school tuck shop or from vendors. Chips, sweets and chocolate were most frequently bought. Also, the South African National Health and Nutrition Examination Survey¹¹ found that more than half (51.1%) of children aged 10-14 years did not take a lunch box to school, and of the 51.3% of children who indicated that they took money to school, nearly half of them did this on a daily basis.

Although food purchases should be seen in the context of the total diet consumed, which may or may not be of poor nutritional quality, they point to a need for a policy environment that will assist schools in providing a food environment that will make it easier for children to make healthy choices, and also encourage them to reassess their existing unhealthy preferences. The latter is important as the peer group often plays an important role in the food choices of adolescents, and many of these food choices are made outside the immediate school environment in the South African context.^{12,13}

It is important to recognise that many factors, other than the school environment, influence what children eat. The availability and accessibility of healthy foods, frequency of family meals and parental intake and practices are important influences on a child's dietary choices within the home environment.¹⁴ The ability of households

to access healthy food does not only depend on economic access, but also on the food environment within their communities. Easy access to retail food stores, fresh food markets (stalls), fast food outlets and vendors selling street food, all play a role in people's food choices. It may well be that some children prefer to eat healthy foods, but their ability to access healthy food is a barrier to doing so, particularly in low socio-economic communities.¹⁴ Therefore, a comprehensive approach is required to instil healthy eating habits in children, in which improving the school food environment is an important, but not the only, component. Three broad domains in which policy actions can be taken have been identified by The Food Policy Framework (also referred to as the NOURISHING framework) to enable a healthy diet and the prevention of obesity and diet-related NCDs. These are the food environment, the food system and behaviour-change communication.⁶ Regulatory action from governments and increased effort from industry and civil society are necessary to effectively address the global epidemic of obesity within each of these three domains.⁶

A policy framework to achieve a healthy school food environment exists in South Africa in the form of the Integrated School Health Policy (ISHP).¹⁵ This policy is located within a legislative framework, and deals with all aspects of school health. Therefore, interventions in the food environment at schools would have to fall within a framework that encompasses many different kinds of health interventions, and which aims to address the multiple health needs of schoolchildren across an age span of 12 years.¹⁶ The ISHP is also a joint initiative between the National Departments of Health and Basic Education. Therefore, nutritionists aiming at working towards the creation of healthier school food environments will have to find their way in a complex policy environment in which there are many stakeholders. However, this should not deter the nutrition community from making attempts to improve the nutritional health of current schoolgoers, and by proxy, that of future generations.

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