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Chapter 13: Assessment of food environments in obesity reduction: a tool for public health action

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- Obesity contributes to millions of deaths globally and, while it may be prevalent in both high-income and low-income countries, it disproportionately affects the poor as obesity is a major risk factor for non-communicable diseases (NCDs).
- Sub-Saharan African countries have undergone a nutrition transition towards a diet high in sugar and saturated fats and low in fibre, which has contributed to the emergence of overweight and obesity as a critical public health problem.
- Non-communicable diseases are now the leading cause of death in South Africa, which has the highest prevalence of obesity among sub-Saharan countries, with 68% of women and 31% of men considered overweight or obese.
- There is currently a global discourse on the introduction of planning laws to regulate the spread of fast-food stores and food environments that are not supportive of healthy eating. 'Food environment' can be defined as the physical, economic and social factors that impact the availability, accessibility and adequacy of food within a region, or as the everyday stimuli that encourage a consumer's food choices in a particular way.
- Various factors influence the choices people make in acquiring and consuming food; these include household income, proximity to food store location, food price, pervasive and persuasive food marketing, and convenience.
- The Modified Retail Food Environment Index (mRFEI) is an environmental indicator of food access or the proportion of 'healthy stores' within a defined neighbourhood relative to all accessible stores. The mRFEI was chosen to quantify the retail food environment because it includes both unhealthy and healthy food outlets in a single measure to give a comprehensive picture of the food environment.
- The mRFEI revealed that Gauteng is a highly obesogenic environment, especially in wards in the City of Johannesburg. The distribution of more healthy food outlets in Gauteng was found to be highly unequal; wards with the highest number of stores with healthier food options were predominantly located in suburban areas. More fast-food outlets were found in predominantly black communities, or there were no formal retail food outlets at all in those communities.
- By assessing food environments using tools such as the mRFEI, food access gaps can be identified, allowing for the development of nutrition-sensitive preventive interventions that prioritise high-risk areas.
- Looking beyond health systems to the broader environment when addressing risk factors for NCDs may help policy makers gain a better understanding of the structural and environmental factors contributing to obesity and poor food choices in communities.

- Policy interventions that limit the number of fast-food outlets in communities and that lower the cost of healthy foods and increase the cost of unhealthy foods, can assist in reversing the environmental drivers of obesity. However, without formal structures and policies similar to the restrictions placed on tobacco, food companies will continue to shape and influence policies that should be controlling them, and the negative trajectory of fast-food expansion will continue to result in collateral health damage.
- The NCD pandemic is wide-spread globally and is emerging as a major public health issue in South Africa. Obesity has been identified as a key driver, yet prevention strategies have targeted individual behaviour-change. Policy makers need to address the structural drivers of obesogenic environments. In addition, the available data are often aggregated at high levels (low granularity, e.g. provincial) thus hiding health disparities at local level.
- The NCD burden can be prevented by addressing diet and creating health-promoting living environments. Government should commit to addressing unhealthy food environments by adopting a wide ranging, health-in-all policies approach.
- Municipalities can play a fundamental role in this by introducing by-laws that limit the number of fast-food outlets in communities. They can also zone land using urban-planning tools and use intentional urban design to promote citizen health. This process will necessitate multi-sectoral collaboration with different departments and industries to ensure that health is not negatively impacted by the success of other sectors such as trade and industry.
- Effective government policies are necessary to increase the healthiness of food environments so that all communities have equal access to healthier food options regardless of where they live or their purchasing power.

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