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**EDITORIAL** 

## The battle against ultra-processed food consumption in a post-COVID-19 era

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Ultra-processed foods (UPFs) are "formulations of food substances often modified by chemical processes and then assembled into ready-to-consume hyper-palatable food and drink products using flavours, colours, emulsifiers and a myriad of other cosmetic additives". Advances in food manufacturing technology have resulted in UPFs that not only have an extended shelf-life but more importantly, have greater desirable organoleptic properties. These products have gained popularity worldwide as they are "ready-to-consume" or "ready-to-heat" making them very convenient to consumers. They are also readily available, cheap and easy to access.

Sales of UPFs have gained momentum due to their profitability and appeal to consumers.<sup>2</sup> Low- and middle-income countries are particularly vulnerable as they provide lucrative trade and market opportunities for multinational corporations.<sup>5</sup> South Africa is not immune to this as a 2018 study in the Western Cape found that 80% of foods in supermarkets were ultra-processed.<sup>6</sup>

Global consumption patterns have seen a transition that includes larger quantities of ultra-processed food and beverages. These items are likely to be abundant in energy, added sugar, sodium and "unhealthy" fats, while scarce in dietary fibre, protein and micronutrients.<sup>3</sup> As a result, UPFs are fast becoming a global health concern.<sup>2</sup> A high intake of UPFs has been associated with a variety of adverse health effects including the development of non-communicable diet-related conditions such as obesity, metabolic syndrome, type 2 diabetes, cancer, cardiovascular disease, cerebrovascular disease and a greater risk of all-cause mortality.<sup>7,8</sup> Considering this association, the quality of one's diet can be linked to the amount of UPFs consumed.<sup>9</sup>

The COVID-19 pandemic saw low- and middle-income countries faced with what has been referred to as a "tsunami of challenges" specifically regarding the economy, health care system and food security. A Statistics South Africa report revealed that, in 2020, around 24% of South Africans experienced moderate to severe food insecurity, while around 15% experienced severe food insecurity. These numbers had increased from 2019. 11

The lockdowns enforced by the South African government had a negative impact not only on unemployment levels, but also caused disruption to the food supply chain. Food insecurity was exacerbated by unexpected job loss, increased food prices and limited access to food. Although the government introduced a Social Relief of Distress grant as a temporary measure to assist those in need, food insecurity continued and South Africans came to rely on UPFs, particularly because

they were cheap and easier to access. <sup>10,12</sup> The COVID-19 pandemic and the implications of the lockdowns had an adverse effect particularly on patients with pre-existing conditions such as diabetes and obesity, as well as those from the lower socio-economic groups. <sup>10,12</sup>

In higher socio-economic groups, the lockdown periods drastically affected food consumption patterns along with levels of physical activity. Faced with being confined to their homes, many became sedentary and increased the amount of food that they normally consumed during the day, by snacking on UPFs. This increased consumption of UPFs was positively associated with weight gain.<sup>9</sup>

In order to have an impact on the amount of UPFs that are sold and consumed globally, it has been recommended that a variety of public health, food and nutrition policies are implemented. One of these policies includes fiscal measures. An example of a fiscal policy in South Africa is the 2018 implementation of the South African Health Promotion Levy, where sugar-sweetened beverages were taxed based on their sugar content. However, it has been suggested that fiscal policies will only be effective when used in combination with front-of-pack labels (FoPLs). 5,13,14 In order for FoPLs to be effective, their format must be well-designed and tested, to enable them to be easy to understand and use. 4

In this issue of the SAJCN, Hutton and Gresse<sup>15</sup> investigated the objective understanding of five FoPLs among 359 adult consumers at 12 randomly selected urban food retail outlets in Nelson Mandela Bay, Eastern Cape. This cross-sectional exploratory study required participants to use the FoPL to rank food products according to their nutritional quality. The results showed that participants with lower education levels were significantly less likely to rank the products correctly. Differences in the ability to rank products were also observed among the different ethnicities of the participants. Notably, the authors reported that "evaluative" FoPLs in particular, significantly improved the participant's ability to identify healthier food products. This study was limited to consumers within an urban environment.

There is currently a paucity of research surrounding nutrition knowledge and food label use in rural areas of South Africa. However, poverty, unemployment, food insecurity along with a lack of nutrition knowledge may have an impact on the ability of rural consumers to understand and use food labels. <sup>16</sup> Rural consumers are therefore particularly vulnerable to the appeal and affordability of UPFs, thereby increasing their risk of developing non-communicable diet-related

conditions. Due to this vulnerability, it is important that further quantitative and qualitative research is conducted in these areas, focusing on the development of FoPLs that are simple and easy to understand by all South Africans.<sup>15</sup>

The adverse economic effects of the COVID-19 pandemic are likely to persist as South Africa attempts to recover. If the battle against UPF consumption is to be won, particularly in the wake of the pandemic, the most vulnerable consumers must be considered. Those who face food insecurity are least likely to use the information on food labels and more likely to focus on what is cheapest and convenient, resulting in a dietary intake of poor nutritional quality.<sup>17</sup>

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