

# 'Warning: ultra-processed' – A call for warnings on foods that aren't really foods

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It's high time that consumers had the opportunity to see ultra-processed foods for what they are: foods that are not real foods, containing nutrients but not real nutrition, pervasively marketed by supranational companies offering choices that are not real choices. Despite the robust evidence that links ultra-processed foods to serious health consequences,<sup>1–4</sup> our research indicates that the public does not fully understand this group of products, and it suggests that they might be in the dark about the urgent actions that could be taken to prevent its dire harms.<sup>5</sup>

Simply put, ultra-processed foods are foods that can't be made in your home kitchen because they have been chemically or physically transformed using industrial processes. They are recognisable on the supermarket shelf as packaged foods that are ready-to-eat, contain more than five ingredients and have a long shelf-life.<sup>6</sup> The industrial processing, as well as the cocktail of additives, flavours, emulsifiers and colours they contain to give flavour and texture, make the final product hyper-palatable or more appealing and potentially addictive, which in turn leads to poor dietary patterns.<sup>6–8</sup>

With more than half the total calories consumed in high-income countries coming from ultra-processed foods and rapid increases in low- and middle-income countries, these products are exposing billions of people to a higher risk of type 2 diabetes, heart disease, stroke, depression and death.<sup>1,4,9</sup> Your grandparents wouldn't have used or even recognised them. In the half century or so since ultra-processed foods became available, diets high in those products have largely displaced traditional and healthier diets, and ultra-processed foods have been among the most aggressively promoted and marketed products in the world.<sup>10</sup> In addition, their intensive marketing has led to rapidly growing sales in low- and middle-income countries.<sup>9,10</sup> Worldwide, palates (and brains) have been trained to crave these foods while the food

## Summary box

- ▶ The health harms of ultra-processed foods are well documented, but consumers are not informed or warned about these risks.
- ▶ Government action and public education should articulate that diets high in ultra-processed foods are harmful, and policies should aim to reduce that harm.
- ▶ Introducing warnings as part of existing or new front-of-package nutrient labels on food packages would specifically identify ultra-processed foods and give consumers important information at the point of purchase.
- ▶ Tobacco-style campaigns on the harms of ultra-processed foods might help to avert the looming threat to consumers' health by quickly building their awareness.

industry invests many millions in formulating and marketing them to be highly desirable.

While the term 'ultra-processed food' has gained much attention in the academic and nutrition community over the past 10 years, many advocates have taken to describing these as 'products', to indicate that they are not 'real' foods but formulations of food substances.<sup>11</sup> Unfortunately, the public remains largely unaware of the risks of consuming them.

What do consumers know about ultra-processed foods?

Surveys and qualitative focus groups in Colombia and Brazil have enabled us to gather some insight into public perceptions of ultra-processed foods (full details in Wang<sup>5</sup>). We found evidence that while people are not familiar with the term 'ultra-processed products,' they recognise the group of products as harmful. That said, these products are also associated with positive emotions, which might be the result of decades of persuasive marketing by the food industry. For instance, a considerable number of people associate the products with satisfying cravings, being tasty and bringing joy. People associate ultra-processed products with family, social



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gatherings, children, ‘ease’ and even breakfast and physical activity. For public health efforts to be successful in reducing harm, it is crucial that the term ‘ultra-processed products’ itself—and the need for their regulation—is clearly and consistently understood.<sup>5</sup>

To date, much of the evidence, policy and public messaging about unhealthy food has focused on specific nutrients—saturated fats, sodium and sugar. Informing the public about the harms of ultra-processed food will be difficult as long as the term is poorly understood. Aside from Brazil, where the level of food processing forms the basis of the Brazil Dietary Guidelines,<sup>12</sup> public exposure to the term is low but growing. Recent notable references have appeared in global news media (BBC, Forbes, etc), in several Latin and Central American countries, and in public education mass media campaigns in Colombia and Brazil.

Much as marketers build a brand, the public health community needs to build meaning around the term ‘ultra-processed’. The best brand names are evocative, but even a bland name can be infused with meaning by a good marketing campaign. While we’ve seen food, alcohol and tobacco companies shamelessly build positive brand images around their harmful products, the public health community has been notoriously negligent of public health messaging and branding. ‘Non-communicable diseases’ is a case in point, a clunky, technical term that defines an important category of diseases—cancer, heart disease, diabetes and more—by what they are not, and is little known outside public health circles.

Aspects of a comprehensive global response to the proliferation of ultra-processed foods and beverages can be learnt and adapted from other strong public health efforts to deal with the equally devastating harms of dangerous products. Look no further than tobacco control to see where the public health community has achieved huge policy wins and strong public understanding of the consequences of consuming a dangerous product. Much of this success is a result of using tried and tested marketing techniques coupled with a faithful adherence to the science of tobacco’s harms.

If we are to stave off the devastation to our food system and our health, governments with the support of the global public health community need to urgently implement effective strategies that lead to decreasing consumption of these unhealthy products and enable healthier choices. One such strategy would be to establish the image of ultra-processed foods—those glossily packaged, alluringly marketed, ready-to-eat, convenient and tasty products—as the vector for obesity and a risk factor for serious diseases alongside tobacco, alcohol and other unhealthy commodities. It’s time to invest in establishing the negative brand identity that ultra-processed foods and beverages deserve. We could start by taking lessons learnt from tobacco control to build public awareness and campaigns that reveal the true nature of these products and the looming threat to consumers’ health.



**Figure 1** Proposed warning label for ultra-processed food (Vital Strategies).

Another approach is to warn consumers on the packaging itself. A number of countries have introduced or propose to introduce front-of-package warning labels on unhealthy food as they look for policy levers to improve population nutrition status in an effort to reduce the unsustainable burden of poor diets on individuals, governments and society. These existing efforts warning about foods that are high in saturated fat, salt and sugar could be further strengthened by incorporating an ‘ultra-processed’ warning label to signal an independent, additional measure of unhealthiness. Such a label would enhance consumers’ existing knowledge about harmful single nutrients to a broader understanding of unhealthiness based on the level of food processing. Imagine a label on the front of a box of cookies, packet of cereal or bag of crisps that says: ‘Warning: this product is ultra-processed AND it is high in (saturated fat/salt/sugar)’ (figure 1).

For those countries that have already adopted front-of-package labels and for those that see the enormous public health potential of nutrient warning labels, our proposal is not to ‘throw the baby out with the bathwater’ but to build on successes and consider incorporating ultra-processing *and* strong public education campaigns into future updates as an acknowledgement of the current strength and growing breadth of evidence.

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## REFERENCES

- 1 Pagliai G, Dinu M, Madarena MP, *et al*. Consumption of ultra-processed foods and health status: a systematic review and meta-analysis. *Br J Nutr* 2021;125:308–18.

- 2 Baker P, Machado P, Santos T, *et al*. Ultra-processed foods and the nutrition transition: global, regional and national trends, food systems transformations and political economy drivers. *Obes Rev* 2020;21:e13126.
- 3 Monteiro CA, Lawrence M, Millett C, *et al*. The need to reshape global food processing: a call to the United Nations Food Systems Summit. *BMJ Glob Health* 2021;6:e006885.
- 4 Popkin BM, Barquera S, Corvalan C, *et al*. Towards unified and impactful policies to reduce ultra-processed food consumption and promote healthier eating. *Lancet Diabetes Endocrinol* 2021;9:462–70.
- 5 Wang S. Public perceptions of ultra-processed products: findings from studies of adults in Brazil and Colombia. *Vital Strategies* 2021 <https://www.vitalstrategies.org/resources/public-perceptions-of-ultra-processed-products>
- 6 Monteiro CA, Cannon G, Levy RB, *et al*. Ultra-processed foods: what they are and how to identify them. *Public Health Nutr* 2019;22:936–41.
- 7 Scrinis G. *Ultra-processed foods and the corporate capture of nutrition*. BMJ, 2020: m4601.
- 8 Gearhardt AN, Hebebrand J. The concept of "food addiction" helps inform the understanding of overeating and obesity: debate consensus. *Am J Clin Nutr* 2021;113:274–6.
- 9 Moodie R, Bennett E, Kwong E, *et al*. Ultra-processed profits: the political economy of countering the global spread of ultra-processed foods - a synthesis review on the market and political practices of transnational food corporations and strategic public health responses. *Int J Health Policy Manag* 2021. doi:10.34172/ijhpm.2021.45. [Epub ahead of print: 24 May 2021].
- 10 Monteiro CA, Moubarac J-C, Cannon G, *et al*. Ultra-processed products are becoming dominant in the global food system. *Obes Rev* 2013;14(Suppl 2):21–8.
- 11 Marti A. Ultra-processed foods are not "real food" but really affect your health. *Nutrients* 2019;11:1902.
- 12 Monteiro CA, Cannon G, Moubarac J-C, *et al*. Dietary guidelines to nourish humanity and the planet in the twenty-first century. A blueprint from Brazil. *Public Health Nutr* 2015;18:2311–22.