



Debate on ultra-processed foods shouldn't derail good dietary advice

16 September 2024

Cristina Cleghorn, Tegan McGowan, Victoria Egli, Emma Shields , Fa'asisila Savila, Sally Mackay

Summary

Evidence is mounting linking ultra-processed foods (UPF) to risk of chronic disease. Typically, UPF are foods that are energy-dense, high in fat, sugar and salt, low in fibre and with a long shelf life. Examples include biscuits, chips, candy, instant noodles, mass-produced bread, sweetened breakfast cereals, ready-to-eat meals and reconstituted meats.

Dietary recommendations encourage people to eat foods that are 'whole' or less processed. This can be a challenge when our food environments and food supply systems are dominated by UPF.

Categorising foods according to the type and extent of processing can help us understand the healthfulness of individual foods, diets and the food supply system. However, we must still consider the nutritional value, affordability, accessibility, sustainability and cultural acceptability of foods. And in some cases, foods classified as UPF may still be a component of a well-balanced dietary intake—for example, wholegrain bread.

While acknowledging this tension on the margins, there remains a strong case for promoting the consumption of fruits, vegetables, wholegrain and minimally processed foods.

Introduction

The commentary around UPF is complex. Nutrition and public health experts are debating whether categorising UPF according to their level of processing is useful, especially for the public. There is sound scientific evidence for both sides of this debate. This Briefing aims to present the balance of the evidence and debate, navigating the complexities to present a useful position on UPF for Aotearoa New Zealand (NZ).

What are ultra-processed foods?



'Ultra-processed foods (UPF)' refers to 'foods that are made of ingredients that you wouldn't find in your kitchen' such as emulsifiers and stabilisers. The most well-known and studied definition of UPF comes from the Nova classification system¹, where foods are assigned to one of four categories, based on the extent and purpose of processing: 'unprocessed and

minimally processed', 'processed culinary ingredients', 'processed foods' and 'ultra-processed foods'².

A practical way to identify an UPF product is to check if the ingredients list contains at least one item characteristic of the ultra-processed food group. These are either food substances never or rarely used in kitchens, or classes of additives whose function is to make the final product palatable or more appealing². UPF are typically energy-dense foods high in fat, sugar and salt, low in fibre³ and have a long shelf life e.g. biscuits, chips, candy, instant noodles, mass produced bread, sweetened breakfast cereals, ready-to-eat meals, hot dogs and other reconstituted meats and are usually produced by large, global food companies².

These multinational UPF companies have a greater ability to manipulate food products to match human preferences (e.g. taste, mouth feel) to drive over-consumption. They also have marketing power; influence over food supply chains and markets; profitability; and political influence. These features have allowed UPF to thrive in our food supply.

It is hard to know how much UPF New Zealanders are eating due to lack of recent consumption data. However, we do know that our food environments and food supply are dominated with UPF, with research finding that 70% of packaged products in supermarkets in 2019 were considered ultra-processed⁴. Nine manufacturers—including Kellogg's, Sanitarium, Nestle NZ and Unilever—had at least 90% of products categorised as ultra-processed and just 19 food companies had 67% of the NZ market share⁴.

Health and ultra-processed foods

A number of large cohort studies and meta-analyses consistently show an association between high intakes of UPF and a range of adverse health outcomes, including increased all-cause mortality^{5 6}, cardiovascular disease^{7 8} and overweight and obesity^{6 5}. As UPF are high in energy, fat, sugar and salt, it is difficult for studies investigating the health impacts of UPF to differentiate between the health impacts of these nutrients and other aspects of UPF such as processing. Progress in this area include a small randomised controlled trial which matched nutrient composition between an UPF arm and the control arm. The study found a significant increase in energy intake and consequent weight gain in the UPF arm.⁹ On the other hand, a recent study found that the link between UPF consumption and mortality was not as strong once the nutrient quality of the diet was taken into consideration¹⁰. The degree to which the effect of UPF on health is due to nutrient composition or processing is uncertain but it seems clear that having a lower consumption of UPF reduces your risk of chronic disease.

NZ's dietary guidelines¹¹ includes the advice to choose/prepare foods and drinks that are mostly 'whole' and 'less processed'. These guidelines take a strengths-based approach, with the focus on using every opportunity to nourish with core foods such as vegetables and fruit, grain foods high in fibre, some milk products and legumes, nuts, seeds, fish and other seafood, eggs, poultry and some red meat. Some foods that are classified as UPF by Nova are actually recommended by NZ's Eating and Activity Guidelines, including wholegrain mass-produced breads, plant-based milk alternatives, low/reduced fat yoghurts and some high-fibre breakfast cereals.

The UPF debate

It is at the border of the UPF classification that the debate centres. Some experts are concerned that some of these UPF can actually contribute to a well-balanced dietary intake

and they are not confident that these foods are contributing to the association between UPF and chronic disease. Additionally, these relatively healthy foods may play an important part of dietary intake in NZ, especially for those living in poverty. They can help prevent food insecurity as they tend to be cheaper, have longer shelf lives and require less preparation than less processed foods. Some of these foods also provide dietary fibre, a nutrient which has low intake in NZ¹².

Given this tension, health professionals need to think carefully when talking about UPF. Public Health Nutritionists can continue to promote consumption of fruits, vegetables, wholegrain and minimally processed foods. We can continue to advocate for policy to improve the food environment and shift the balance of available and affordable foods away from processed food high in fat, sugar and salt produced by large multinational corporations. Research into the mechanisms of the health impact of UPF and the potential value of the UPF concept being incorporated into messaging and policy should continue.

We also want to see Government action to address the lack of food industry regulation and economic inequality in NZ. This will help to prioritise the health of New Zealanders above industry profits, working to enable all whānau/families to access affordable, culturally appropriate, healthy foods.

What this Briefing adds

- This Briefing brings together diverse perspectives on UPF in order to outline a common way forward for nutrition and public health researchers and advocates.

Implications for policy

- Promoting consumption of fruits, vegetables, wholegrain and minimally-processed foods remains the most sensible advice for a healthy dietary intake.
- Public health researchers and advocates need to continue to advocate for policy to improve the food environment and shift the balance of available and affordable foods away from energy dense UPF high in fat, sugar and salt.

Author details:

[Dr Cristina Cleghorn](#), Department of Public Health, University of Otago Wellington.

Tegan McGowan, Registered Nutritionist, Independent

[Associate Professor Victoria Egli](#), Te Huataki Waiora - School of Health, The University of Waikato, Hamilton

Emma Shields (RD), Cancer Prevention Policy Lead, Cancer Society of New Zealand

[Dr Fa'asisila Savila](#), Department of Pacific Health, University of Auckland.

[Dr Sally Mackay](#), School of Population Health, University of Auckland

This article is endorsed by the Food Policy Expert Group at the Health Coalition Aotearoa. Future briefings on UPF will be published by the Group

References

1. Monteiro CA, Cannon G, Lawrence M, et al. Ultra-processed foods, diet quality, and health using the NOVA classification system. *Rome: FAO* 2019;48
2. Monteiro CA, Cannon G, Levy RB, et al. Ultra-processed foods: what they are and how to identify them. *Public Health Nutrition* 2019;22(5):936-41.
3. De Amicis R, Mambrini SP, Pellizzari M, et al. Ultra-processed foods and obesity and adiposity parameters among children and adolescents: a systematic review. *European Journal of Nutrition* 2022;61(5):2297-311.
4. Mackay S, Eyles H, Gontijo de Castro T, et al. Which companies dominate the packaged food supply of New Zealand and how healthy are their products? *PLoS One* 2021;16(1):e0245225.
5. Lane MM, Gamage E, Du S, et al. Ultra-processed food exposure and adverse health outcomes: umbrella review of epidemiological meta-analyses. *BMJ* 2024;384
6. Lane MM, Davis JA, Beattie S, et al. Ultraprocessed food and chronic noncommunicable diseases: a systematic review and meta-analysis of 43 observational studies. *Obesity Reviews* 2021;22(3):e13146.
7. Qu Y, Hu W, Xing C, et al. Ultra-processed food consumption and cardiovascular events risk. *European Heart Journal* 2023;44(Supplement_2):ehad655. 2389.
8. Pant A, Gribbin S, Machado P, et al. Association of ultra-processed foods with cardiovascular disease and hypertension in Australian women. *European Heart Journal* 2023;44(Supplement_2):ehad655. 2388.
9. Hall KD, Ayuketah A, Brychta R, et al. Ultra-processed diets cause excess calorie intake and weight gain: an inpatient randomized controlled trial of ad libitum food intake. *Cell Metabolism* 2019;30(1):67-77. e3.
10. Fang Z, Rossato SL, Hang D, et al. Association of ultra-processed food consumption with all cause and cause specific mortality: population based cohort study. *bmj* 2024;385
11. McIntyre L, Dutton M. Eating and activity guidelines for New Zealand adults. *Ministry of Health* 2015
12. University of Otago, Ministry of Health. A Focus on Nutrition: Key findings of the 2008/09 New Zealand Adult Nutrition Survey. Wellington Ministry of Health, 2011.



Public Health Expert Briefing (ISSN 2816-1203)

Source URL:

<https://www.phcc.org.nz/briefing/debate-ultra-processed-foods-shouldnt-derail-good-dietary>

-advice