

Why do we still need to worry about ultra-processed foods - aren't GLP-1 agonists the answer?

Introduction

We hear an awful lot about the obesity epidemic with the global prevalence of overweight and obese adults rising from 25% in 1990 to 43% in 2022. In the United Kingdom by 2022 61% of adults were overweight or obese, and in the United States 72% of adults have a BMI greater than 25^[1].

The consumption of ultra-processed foods (UPFs) has increased exponentially in some geographies and globally accounts for 50% of dietary energy in high-income countries^[2].

So, is there a link between the high levels of UPF consumption and the percentage of overweight or obese adults?



Let's start by looking at what constitutes an UPF. In the most basic sense, UPFs are manufactured food stuffs made mostly or entirely from extracted, refined or synthesized ingredients. They can also contain additives which are designed to enhance flavour, texture, shelf-life and palatability^[3].

The NOVA classification system developed by the University of Sao Paulo places foods into four groups:

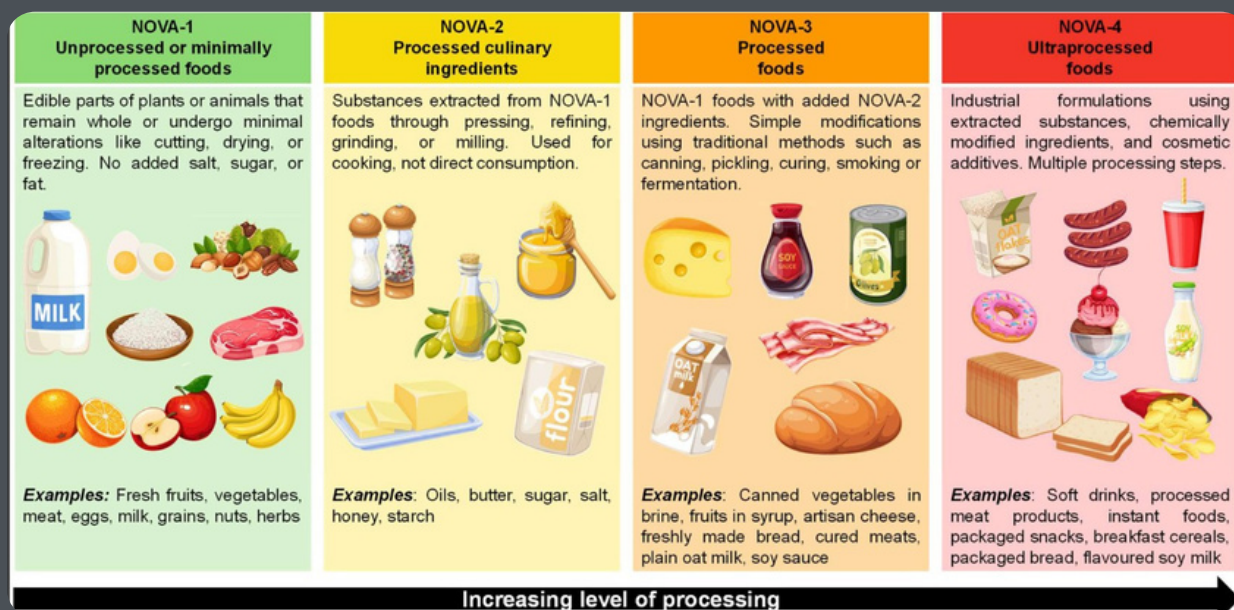
- Group 1: unprocessed or minimally processed foods
- Group 2: processed culinary ingredients, e.g. butter, cooking oils
- Group 3: processed foods, e.g. canned fruit and vegetables
- Group 4: ultra-processed foods (UPFs), e.g. carbonated drinks, reconstituted meat products, frozen ready meals.

UPFs are considered as being harmful because of the way in which they interact with our physiology and behaviour, resulting in:

- Nutritional dilution and energy density causing high glycaemic variability, poor satiety signalling and positive energy balance

- Hyper-palatability and reward circuit hijacking
 - UPFs are engineered to provide a precise combination of sugar, fat, salt and flavour enhancers which increases the pleasure of eating
- Gut microbiome reduction
 - reduced microbiome diversity, mucus layer disruption, increased intestinal permeability, low-grade systemic inflammation; chronic inflammation is implicated in multiple disease processes including cardiovascular disease, diabetes and cancer
- Cardiometabolic risk and mortality
 - several large cohort studies^[4-8] have shown dose-dependent associations between the consumption of UPFs and:
 - cardiovascular disease
 - hypertension
 - colorectal cancer
 - all-cause mortality

UPFs are cheap and readily available, as well as being widely marketed. This means they have the capacity to alter dietary habits at a population level.



Source: Louie JCY. Are all ultra-processed foods bad? A critical review of the NOVA classification system. Proceedings of the Nutrition Society 2025;1 – 9.

So, can the advent of GLP-1 agonists help?

Well, maybe is the answer....

While GLP-1 agonists can improve appetite regulation, increase satiety and therefore result in weight loss by a reduction in caloric intake, they cannot change behaviour per-se.

Some individuals using GLP-1 agonists do report a reduction in the desire for high-fat and high-sugar foods, and better appetite control may make it easier to adhere to a healthier diet, it may also affect food purchasing habits[9].

Despite the widespread publicity around the use of GLP-1 agonists and their possible effects on the obesity epidemic, their use is not widespread. Many health organisations only prescribe them as a treatment for obesity when an individual meets very specific criteria.

It is, of course, possible to access GLP-1's in some geographies for a fee, but at the time of writing they are not cheap. However, this may be set to change in the very near future.

In early 2026, the patent for semaglutide (Ozempic/Wegovy) expires in Canada and India, and as India is a significant contributor to the world pharmaceutical market, this could drive down prices and increase availability^[10].

As with any pharmaceutical treatment, side effects may occur. Commonly there is nausea, vomiting, diarrhoea, constipation, indigestion or abdominal pain. Individuals may also experience headaches, fatigue or dizziness^[11].

Less common, but more severe side effects can include pancreatitis and gall bladder disease (cholecystitis)^[12].

Weight loss can lead to a reduction in muscle mass and bone density, and this is of particular concern in the elderly.

It is important that individuals are managed closely when taking GLP-1's with proper guidance on reducing treatment when a target weight is met. Many users report that on ceasing treatment, they have significant hunger, which could lead to weight gain, possibly exceeding that of their starting BMI.

In conclusion, although GLP-1 receptor agonists have demonstrated significant effects on appetite regulation and energy intake, their growing use is unlikely to eliminate the consumption of ultra-processed foods.

Dietary behaviour is shaped by far more than biological appetite alone. Ultra-processed foods are engineered to maximise palatability, convenience and affordability, making them deeply embedded within modern food environments and daily routines.



Even when pharmaceutical appetite suppression occurs, the structural drivers of ultra-processed food consumption remain largely unchanged. Factors such as aggressive marketing, widespread availability, time constraints, socioeconomic inequalities, and habitual eating patterns continue to influence food choices.

In addition, ultra-processed foods often serve emotional, social or cultural roles that extend beyond hunger satisfaction. As a result, individuals may still choose these foods despite reduced appetite or altered satiety cues.

References

1. <https://ourworldindata.org/obesity> (Accessed 16 March 2026).
2. <https://www.sciencedirect.com/science/article/pii/S2772566925002241> (Accessed 16 March 2026)
3. Ruggiero E, Dinu M et al. Ultra-processed foods consumption, Mediterranean diet adherence and sociodemographic correlates in an Italian adult population: The UFO Survey. *Nutrients* 2025;17:3651.
4. Chen X, Chu J et al. Associations of ultra-processed food consumption with cardiovascular disease and all-cause mortality: UK Biobank. *Eur J Public Health* 2022;32(5):779-785.
5. Gauci S, Lotfaliany M et al. Exposure to ultra-processed food and risk of cardiovascular mortality: a prospective cohort study. *Eur J Prev Cardiol* 2025;32(16):1564 – 1572.
6. <https://www.acc.org/latest-in-cardiology/articles/2025/05/13/10/05/ultra-processed-foods-may-be-associated-with-adverse-health-outcomes> (Accessed 19 March 2026)
7. <https://bmjgroup.com/consistent-evidence-links-ultra-processed-food-to-over-30-damaging-health-outcomes> (Accessed 19 March 2026)
8. Fang Z, Rossato SL et al. Association of ultra-processed food consumption with all-cause and cause specific mortality: population based cohort study. *BMJ* 2024;385:e078476.
9. <https://www.prnewswire.com/news-releases/new-lifsum-survey-glp-1s-reduce-cravings-for-ultra-processed-foods--but-nutrition-remains-key-302586268.html> (Accessed 19 March 2026)
10. <https://www.iqvia.com/locations/emea/blogs/2025/07/off-patent-semaglutide> (Accessed 19 March 2026)
11. <https://www.droracle.ai/articles/663960/what-are-the-side-effects-of-glucagon-like-peptide-1-glp-1> (Accessed 19 March 2026)
12. <https://www.gov.uk/government/news/mhra-reminds-healthcare-professionals-to-advise-patients-of-the-side-effects-of-glp-1-agonists-and-to-report-misuse> (Accessed 19 March 2026)