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Ultra-Processed Foods in Food Policy

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What we eat is determined by the food around us. Health experts, campaigners and researchers agree - we need a food system change.

The Obesity Health Alliance and its members strongly advocate for healthy and sustainable dietary patterns for all members of society at all ages. Based on population intakes, we should be eating a nutrient dense diet – that means our average diets should contain fewer calories, with less salt, saturated fat and sugars, high fibre, less red and processed meat, fewer snacks and sweetened drinks and more whole fruit and vegetables. However this is not currently the case for most people.

At a population level, current dietary guidance is not being achieved.

Less than 1 in 3 people have 5 fruit and vegetables a day, ~60% of adults exceed sugar recommendations (>80% of children 12m-5 years, 80% of teenagers), 60% of the population are eating too many calories, and we are eating too much salt and not enough fibre or whole grains.

There is a misinformed sense of competition between two approaches used to define food and drink.

One is a processing approach using the definition of Ultra Processed Foods (UPF) based on the Nova classification. The other is a nutrient-based approach using measures of High Fat, Sugar, or Salt (HFSS), also known as the Nutrient Profiling Model (NPM). The misplaced tension between these two approaches provides fertile ground for exploitation by the food and drink industry to delay, cast doubt, and derail current policy. Nutrient-based and processing-based approaches are complementary and overlapping, and action on both requires a constructive approach if we are to improve our food system.

Processing definitions, such as the Nova classification [Appendix 1], do not compete with the UK Nutrient Profiling Model (NPM) used in UK and international policies.

Likewise, the terms UPF and HFSS are not competing descriptions. The UK NPM (2011) is a tool designed to define the overall likely healthfulness of foods and drinks (HFSS/non-HFSS), and is well designed to categorise individual food and drink products. Nova is a food classification system for measuring the extent to which food is processed in recognition of the prominence of new formulations of ingredients and approaches to processing (requiring sophisticated equipment and technology) in the modern diet. They can work independently, and they can complement each other.

The Nutrient Profile Model (NPM) categorisation overlaps (est.~75-80%) with Nova-defined UPFs.

Some, not all, of the remaining products are UPF but are more 'nutritionally balanced'. Existing government obesity policies based on the NPM are designed to reduce unhealthy food consumption at a category level which has high overlap with UPF (e.g. confectionery, sweet breakfast cereals, yoghurts, soft drinks). Current policies are already limited to processed food categories that contribute the most calories and sugar to children's diets (but not to babies' solid or liquid diets). Therefore, if these planned policies (advertising restrictions for less healthy food before 9pm and online, and on multibuys) are finally

implemented and properly enforced, these policies will address HFSS and overlap with several categories of UPF at a food system level and must be allowed to progress unhindered.

The term 'Ultra Processed Foods' has captured public, media, and political attention.

Like UPF, terms like 'junk food', 'convenience food', 'packaged food', 'unhealthy food' and 'High fat, salt and/or sugar' (HFSS) have always proved contentious. Firstly, nutritional science is not binary when defining dietary patterns or itemised food and drink products that are healthier vs those that are less healthy. Secondly, it is challenging to describe the poor quality of our diets without stigmatising or blaming those with limited options, for financial or other reasons. Thirdly, the powerful food and drink industry refutes that their types of products are linked to any evidence of harm, despite research to the contrary.

Data from research has suggested that, when applying the Nova model, diets high in category 4 Ultra Processed Foods are associated with worse health outcomes.

Our UK diet has been found to be, on average, ~57% Ultra Processed Food. The classification includes everyday foods, some of which may be more nutritionally balanced than others, such as industrially produced bread and breakfast cereals, and the classification excludes a lot of food consumed out of the home that is nutritionally poor. Analysis of dietary patterns in the early years, and of products on shelves, also suggests adolescents, children, and infants consume particularly high levels of UPF.

Current evidence linking Ultra Processed Foods to adverse health outcomes demonstrates a correlation, but evidence remains stronger for individual nutrients.

The quality of the evidence, as is common in nutrition science, is mixed and largely observational (with one Randomised Control Trial). Nutrition studies rely heavily on food frequency questionnaires, which have limitations, e.g. clearly identifying specific products and potentially under-reporting foods known to be less healthy (the impact of these confounders is unknown). However, the associative evidence and the robustness of reporting are growing and suggest a UPF-heavy dietary pattern is harmful above and beyond its nutritive components (i.e. calories, salt, saturated fats and sugars), even if there is still uncertainty around the drivers of this harm. The Scientific Advisory Committee on Nutrition (SACN) has been consistently clear that current dietary patterns in the UK are poor and not aligned with health. In July 2023, SACN evaluated published, peer reviewed observational studies that met their limited criteria on processed food and health (9 systematic reviews summarising numerous studies were deemed robust,) and concluded that the strength of evidence was not yet ready to provoke a policy response. Still, given their concerns and the rapid progression of research awaiting peer-review, the committee will reconsider in June 2024. The evidence for saturated fat, salt and sugars, is strong and, according to SACN, causative.

Current thinking is that consumption of UPF is driven by;

- Palatability (through a combination of fats, salt, sugars, and their chemical alternatives such as high-intensity sweeteners, flavourings, colourings and emulsifiers)
- Purchasing drivers e.g. long shelf life, time and convenience, perceived low price point, wide availability, appealing packaging, aggressive marketing and promotions, and shareholder interest.
- Softness of the food (i.e. ease of eating quickly before satiety hormones are released)
- High energy density of UPF (i.e. calories/100g), likely due to its dryness & lack of fibre as a consequence of disrupting the natural food matrix

Ultra-Processed Foods are not necessary, yet feature heavily in dietary patterns, particularly of those on low incomes.

Due to clever marketing and cultural norms, many UPFs are perceived as appealing, accessible, and affordable foods including for those with financial and time constraints. Non-UPF versions of these foods

can be made or bought, but access is not currently equal. Any future action to rebalance UPF and non-UPF food in our nation's diet must give tangible solutions on how to help people, assessing the consequences, both positive and negative, e.g. for families on low incomes, those with limited access to well-stocked food shops and large supermarkets, those without cooking skills, and those who rely on everyday foods like bread and breakfast cereal for fibre and micro-nutrient intake (NB fortification does not 'make' a food UPF). Healthier foods are over twice as expensive per calorie as less healthy foods. All households should have equitable access to nutrient dense foods that meet their nutritional needs.

The UK's Nutrient Profile Model (NPM 2011, DHSC) is a tool that defines whether a product is HFSS for use in policy, it has been tested and found robust in UK courts.

It considers negative nutrients (calories, salt, saturated fats, and sugars) and positive nutrients such as fibre, protein, nuts, fruit and vegetables. An expert group has reviewed it, the outcome of which has still not been published. Although the NPM is still the OHA's preferred indicator of unhealthy food, and is widely used in current policy, there are some drawbacks:

- It is over 10 years old.
- It focuses on nutrients (making it easy to compare against the nutrient information panel and ingredients lists) but does not consider the extent or purpose of processing.
- It can be easy to 'game' products to pass by e.g. increasing protein or adding a starch to dilute the salt, fats or sugars.
- It is not applicable to food marketed for infants and young children, where the Nutrient and Promotion Profile Model (NPPM), supported by WHO, is the gold standard.

Current UK policies using a nutrient-based approach are:

- Less Healthy Food 9pm and online advertising restrictions (using NPM in legislation, Oct '25)
- Transport for London HFSS restrictions (using NPM, in place)
- Salt, Sugar and Calorie reduction and reformulation* (using single nutrients, in place)
- The Soft Drinks Industry Levy (using single nutrients, in place)
- Multi-buy restrictions in supermarkets (using NPM in legislation, due to come in Oct 25)
- Location / checkouts restrictions in supermarkets (using NPM, in place)
- Calories on menus (using single nutrients, in place)
- Additionally, it is used in models used by businesses and shareholders to assess healthier profiles of companies (using single nutrients/NPM, in place)

*Reformulation should reduce salt, sugar and fat, as well as reduce portion sizes, sweetness, saltiness without replacers, to change palates and high palatability of foods

There is a significant opportunity for research for the public good eg:

- To understand the mechanics driving the associations, and whether some products, categories, or markers of processing may be less harmful than others.
- How the UPF definition can be rigorously applied at either a dietary pattern level or a product level to regulate Ultra Processed Foods (i.e. avoiding legal challenges). NB The Pan American Health Organization (PAHO) NPM captures UPFs plus HFSS, as yet to be implemented.
- Benefits to health of focusing regulation on UPF above and beyond the current Nutrient Profiling Model, i.e. HFSS, plus other markers such as sweeteners, flavourings and/or colourings.
- Exploring the health, economic, cultural and other benefits of increasing non-UPFs.
- How UPF applies where the NPM is known to be lenient eg ready meals, out of home meals.
- To understand how dietary changes will impact key nutrition indicators eg fibre.

We welcome the renewed focus on our food system and support the need for pragmatic policy thinking and action, alongside more research into the impact of UPF on dietary patterns.

It is important that due attention is given to addressing the health harms of UPF heavy diets alongside, and without undermining, efforts to reduce the consumption of HFSS. At this moment in time, we must use the attention on UPF to progress HFSS policies and to inform future policy action.

Future policy recommendations should incorporate both HFSS and markers of processing.

Whilst the best current evidence remains with HFSS, policymakers should, and with a sense of urgency, develop a framework that creates a shift towards dietary patterns that support optimal health. This should include actions for the government to help incentivise industry, action to to help support individuals move towards healthier options, and for helping research into future policy development. This should include a timeline of how and when each element could be introduced, and how it will be independently funded, which may include:

Actions for government:

- Implement the planned 9pm and online, and multi-buy, restrictions, on Less Healthy Food
- Extend fiscal measures (eg. the Soft Drinks Industry Levy) to broader categories of food and drink that have made little to no progress under the reformulation programmes - for retail, manufacturing and out of home, to fund access to nutrient-dense foods for low-income families.
- Regulations for infant food composition and marketing to be brought in based on a suitable classification for infant food, eg the NPPM.
- Mandatory and properly enforced public sector procurement guidelines to incorporate minimal processing (E.G Nova classifications 1-3), including school, nursery, prison and hospital food.
- Extend restrictions to other forms of marketing, including sports sponsorship, cartoons on packs - and to consider incorporating HFSS plus other markers of processing as seen in Latin America.
- Encourage governments to prioritise public health in policy-making by limiting the influence of the food industry, e.g. by publishing all meeting minutes and attendees, declaring all conflicts of interest, before then consulting with the food and beverage industry on implementation.

Actions to help individuals

- Review the EatWell Guide/front of pack labelling to consider markers of processing.
- Better Health campaign or improvements in the Food scanner app, Change4Life (Education).
- Support policies aimed at increasing consumption of nutrient-rich unprocessed and minimally processed foods, e.g. enabling breastfeeding support, Healthy Start.

Actions to help future policy development

- Mandatory reporting of healthier/less healthy sales to include NPM-level and processing-level data, e.g via the Food Data Transparency Partnership - for retail, manufacturing and out of home
- Collect markers of processing in NDNS for ease of classification in research.
- Release the updated 2018 Nutrient Profile Model.
- Review the updated 2018 Nutrient Profile Model in line with more recent evidence on markers of processing, eg to give negative points for the presence of non-sugar sweeteners in beverages.

OHA Recommendation:

It is the OHA's view that products that meet clearly defined 'unhealthy' criteria, using the Nutrient Profile Model to define HFSS foods, have the best evidence of harm and should remain the priority. Further work should be done to determine how best to integrate markers of harmful processing into the existing NPM. However, this must not stand in the way of immediate action to increase consumption of nutrient-dense, less processed foods.

Those with vested interests are trying to delay, cast doubt, derail current policy, and discourage the government from making lasting changes to improve our food environment. We should collectively use the momentum from UPF to focus on stopping the food industry from further undermining nutrition policy and improving our food system.

Appendix 1

The Nova food classification system, adapted from Monteiro, C.A., Cannon, G., Lawrence, M., Costa Louzada, M.L. and Pereira Machado, P. 2019. Ultra-processed foods, diet quality, and health using the NOVA classification system. Rome, FAO. https://www.fao.org/3/ca5644en/ca5644en.pdf

The term 'ultra-processed foods' comes from the Nova food classification system, developed by researchers at the University of São Paulo, Brazil.

- Group 1: Unprocessed and minimally processed

Unprocessed foods are what we usually consider as whole foods. They have no added ingredients and haven't been altered from their natural state. Minimally processed foods have only gone through very simple processes like the removal of inedible parts, grinding or freezing.

For example: Fruit, vegetables, eggs, fresh meat and grains.

- Group 2: Processed culinary ingredients

This includes foods which are added to other foods rather than eaten by themselves.

For example: Sugar, salt, butter, honey, oils and vinegar.

- Group 3: Processed foods

These are foods that are made by combining foods from groups 1 and 2 to preserve them or make them more palatable.

For example: Freshly made bread, tinned fruits and vegetables, salted nuts, bacon, canned fish and cheese.

- Group 4: Ultra-processed

These are ready-to-eat or ready-to-heat foods. They generally have a long shelf life and tend to include additives and ingredients that are not typically used in home cooking, such as preservatives, emulsifiers, sweeteners, and artificial colours and flavours.

For example: Ice cream, sandwich ham, crisps, plant-based meat substitutes, mass-produced bread, breakfast cereals, biscuits, carbonated drinks, fruit-flavoured yogurts and instant soups.