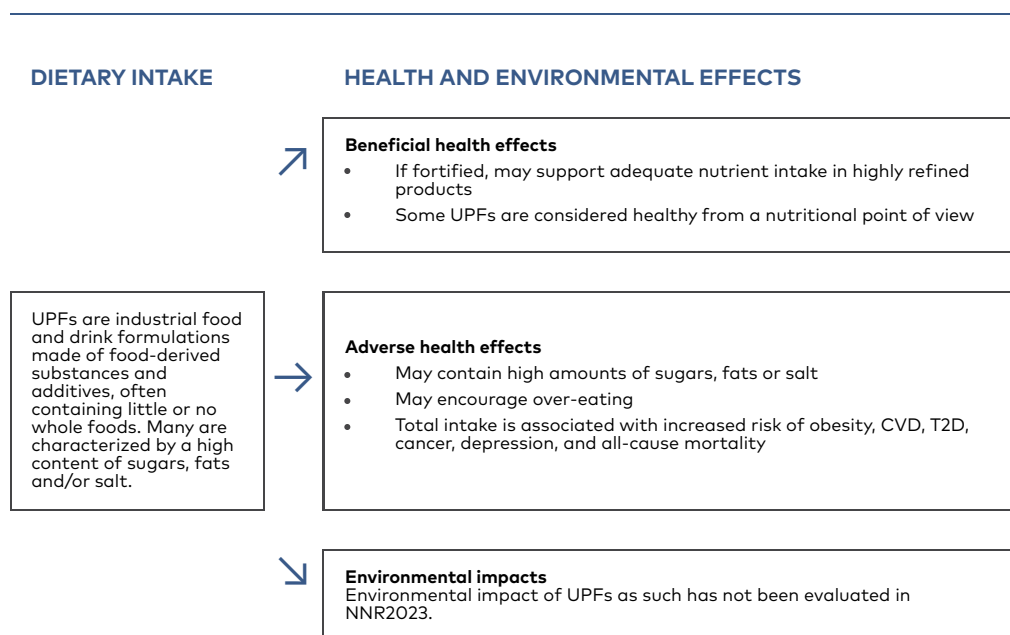


Ultra-processed foods (UPFs)



Science advice: Despite the observed association between ultra-processed food and health outcomes, the NNR2023 Committee decided not to formulate any specific recommendations on ultra-processed foods. NNR2023 includes several recommendations related to specific processing of foods. The NNR committee's view is that the categorization of foods as ultra-processed foods does not add to the already existing food classifications and recommendations in NNR2023. For more details, please see the section on food processing.

For more information about the health effects, please refer to the background paper by Filippa Juul and Elling Bere (Juul & Bere, 2023) For more information about the environmental impacts, please refer to the following background papers (Benton et al., 2024; Harwatt et al., 2024; Meltzer et al., 2024; Trolle et al., 2024).

Dietary sources and intakes. According to the NOVA classification, ultra-processed foods are defined as ready-to-eat/heat formulations whose manufacture involves several stages and various processing techniques and ingredients, mostly of exclusive industrial use. Examples of ultra-processed

foods include SSBs and other soft drinks, sweet and savoury, packaged snacks, ice cream, potato chips, pizza, commercial breads, cakes and biscuits, confectioneries, sweetened breakfast cereals, margarine, hamburgers, hot dogs and many ready-to-eat products. Most ultra-processed foods are energy dense products, high in added or free sugars, salt and total fat/saturated fat, and low in fibre and micronutrients. In the NOVA framework many foods such as infant formulas, industry produced baby foods, industry- or bakery produced whole grain breads, yoghurt, fish-, fruits and vegetable products, and many other products are also classified as ultra-processed foods depending on their formulation and processing. Several studies suggest that the intake is increasing and might be around 50 percent or more in the Nordic and Baltic countries (Juul & Bere, 2023).

Health impacts. No qualified SRs are available on the health effect of UPF.

As discussed in the background paper by Juul and Bere (Juul & Bere, 2023), there is strong evidence for an association between ultra-processed foods as a group and weight gain and obesity. Evidence from a limited number of studies (primarily observational) suggest that diets high in ultra-processed foods are associated with an increased risk of hypertension, cancer, type 2 diabetes, depression and premature death. Diets high in ultra-processed foods tend to be nutritiously unbalanced and are less likely to adhere to the overall NNR2023 recommendations than minimally processed foods.

Environmental impact. Environmental impact of ultra-processed foods as such has not been evaluated in NNR2023. Ultra-processed foods is a heterogenous group of foods with varied environmental impact associated mainly with the production of the raw material, but also with energy use during food processing, packaging and transports, as for all foods. In general, processing of foods may have a positive environmental impact by reducing waste and utilization of by-products. For information on the environmental impacts, please see other summaries for example for beverages, sweets and confectioneries, fats and oils.

Main data gaps. More data are needed on the mechanisms for the observed health effects of ultra-processed foods, and the various types and degrees of processing. More data are also needed to define whether the NOVA classification of ultra-processed foods add value compared to the conventional food categorizations used in the NNR2023 FBDGs.

Risk groups. Intake of ultra-processed foods is linked to social inequalities and deprived groups.

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