

www.eatright.org

120 South Riverside Plaza Suite 2190 Chicago, Illinois 60606-6995 800.877.1600

1150 Connecticut Avenue NW Suite 615 Washington, D.C. 20036 800.877.0877

September 22, 2025

Claudine Kavanaugh
Office of Nutrition and Food Labeling, Human Foods Program
Food and Drug Administration
5001 Campus Dr
College Park, MD 20740
Eve Stoody
Food and Nutrition Service
United States Department of Agriculture
1320 Braddock Place
Alexandria, VA 22314

Dear Ms. Kavanaugh and Ms. Stoody,

The Academy of Nutrition and Dietetics (the "Academy") appreciates the opportunity to provide comments to the Department of Health and Human Services (HHS) and the United States Department of Agriculture (USDA) on Docket No. FDA-2025-N-1793 for "*Ultra-Processed Foods; Request for Information*" published in the Federal Register on July 25, 2025 regarding the development of a uniform definition for ultra-processed foods (UPFs).

Representing more than 112,000 registered dietitian nutritionists (RDNs); nutrition and dietetic technicians, registered (NDTRs); and advanced-degree nutritionists, the Academy is the largest association of food and nutrition professionals in the world and is committed to accelerating improvements in public health and well-being through food and nutrition. Our members have helped conduct, review, and translate nutrition science to help consumers, industry, and government programs adopt dietary patterns that promote health.

As USDA and HHS consider adopting a federal definition of UPFs, it is critical that this definition be grounded in sound science and reflect practical realities. The Academy offers the following comments to inform the approach to defining and addressing UPFs in policy and practice.

Defining Ultra Processed Foods

Defining UPFs remains a challenge due to limited evidence identifying specific aspects of UPFs

that may be responsible for adverse health effects. Although further research is needed to clarify the mechanisms behind these effects, several leading hypotheses have emerged. These include the poor nutrient profiles of many UPFs, displacement of minimally processed foods from the diet, alterations to physical structure that impact how UPFs are consumed, exposure to potentially harmful additives or byproducts, and contaminants from food packaging (Lane et al. 2024). To effectively classify foods as UPFs, we need an operational definition that can be applied consistently and objectively to all foods while also allowing refinement as scientific understanding evolves.

The Nova classification system has facilitated a large body of epidemiological research linking UPFs to cardiovascular disease, type 2 diabetes, obesity, and all-cause mortality (Lane et al. 2024). As defined by the Nova classification system, UPFs are industrial formulations composed of refined ingredients, additives, and minimal to no whole foods (Dicken et al. 2021). The Nova system classifies foods based on the extent and purpose of processing rather than nutrient content (Monteiro et al 2019); however, this system has faced significant criticism due to concern for being overly subjective and inconsistent. Health outcome associations also may vary significantly depending on the dietary assessment tool used (Vitale et al. 2024). Ingredients often characteristic of UPFs may be "of no or rare culinary use" or "additives whose function is to make the final product palatable or often hyper-palatable" (Monteiro et al. 2019). However, many food additives serve multiple functional roles (Trumbo et al. 2024) including extending shelf life, improving food safety or nutritional supplementation, in addition to cosmetic roles as a color or flavor enhancer (e.g., ascorbic acid). This interpretative element introduces ambiguity: deciding whether an ingredient's primary function is sensory, nutritional, or technological relies on subjective judgement, which undermines consistency and reproducibility needed for policy application.

While Nova has provided a foundation for defining UPFs, it remains difficult to operationalize Nova in a way that is transparent, standardized, and practical for policy implementation. Further, implementing Nova-based food policy in the U.S. is complicated by the large proportion of UPFs that make up the diet. UPFs contribute over half of total intake in the U.S., and higher UPF intake has been correlated with low intakes of protective nutrients (e.g., fiber, fat-soluble vitamins, potassium) and high intake of added sugars, saturated fats, and sodium (Aljahdali et al. 2024; Steele et al. 2017), nutrients shown to contribute to chronic diseases when consumed in excess. This evidence supports efforts to reduce the intake of UPFs that are high in added sugars, sodium, and saturated fat, and increasing intake of nutrient-dense foods like vegetables, fruits, whole grains, and lean proteins. Conversely, food additives are often understudied in the context of long-term, cumulative exposure, and there is a growing interest in re-evaluating the Generally Recognized as Safe (GRAS) status of certain additives commonly used in UPFs. Reassessing GRAS additives will further clarify the health implications of certain additives and support efforts to refine and operationalize the definition of UPFs.

Further, processing-based classifications can yield conflicting assessments of diet quality. For instance, a recent study (Hess et al. 2023) demonstrated that an eating pattern composed of more than 80% UPFs could achieve a score of 86/100 on the Healthy Eating Index (HEI), a score that indicates high adherence to Dietary Guidelines. In contrast, the average HEI score for the U.S. population over age two in 2017-2018 was 58 (USDA), suggesting that most Americans are not meeting the recommendations of the Dietary Guidelines regardless of how processed their foods may be. This disconnect between processing level and diet quality illustrates the difficulty of

defining UPFs in a way that is both scientifically sound and practically useful. Given the resulting confusion, there is a pressing need to empower consumers with practical tools, such as clear front-of-package labeling, to help consumers make informed choices.

The Academy has supported mandatory front-of-package labeling efforts to enhance consumer awareness of nutrients to limit (e.g., saturated fat, added sugars, sodium), as well as additive use (e.g., low-/no-calorie sweeteners) to discourage industry additive reformulation. Further, transparency in included ingredients and reason for additive use may also improve both trust and ability of consumers to make choices based on their values and needs. It is also imperative that changes to package labeling be accompanied by a consumer education campaign.

In response to broad nutrition confusion, the Academy has launched the "Nutrition Fact Check" initiative to develop evidence-based summaries of the current state of science on high-interest topics, accompanied by consumer-friendly materials designed to support informed decision-making. Our summary of the science on UPFs provides an overview of the Nova classification system and limitations of available evidence on UPFs (https://www.eatrightpro.org/news-center/practice-trends/nutrition-fact-check-ultra-processed-foods). We also provide materials making it easy for practitioners to communicate about UPFs with consumers.

Several U.S. states have begun developing their own UPF definitions as part of proposed policies aimed at improving food environments, school nutrition standards, and consumer labeling. However, the lack of a standardized, nationwide definition risks creating inconsistency in policy implementation and public messaging. UPF policy may benefit from a phased approach, starting with an emphasis on limiting foods that are also high in saturated fat, sugar, and salt (HFSS), and developing as evidence elucidates additional mechanisms by which UPFs may impact health. As UPF-related policies and definitions take shape, public education will be essential to ensure consumers correctly interpret and apply this information.

Considerations for Incorporating UPF Classifications

Broadly labeling UPFs as harmful risks overlooking important nuances, as some UPFs may be neutral or even beneficial to health. While many UPFs are energy dense and high in saturated fat, salt, and added sugars (Dicken et al. 2021), others such as some low sugar whole grain breakfast cereals, canned vegetables and beans, and non-fat yogurts may be considered good sources of essential nutrients (Hess et al. 2023). An analysis of UPF consumption from the Nurse's Health Study found that when UPFs were divided into subcategories, the meat/poultry/seafood based ready-to-eat food group showed a particularly strong association with mortality outcomes, followed by sugar-sweetened and artificially sweetened beverages, dairy-based desserts, and ultra-processed breakfast foods (Fang et al. 2024). Further sensitivity analysis showed that including whole grain UPFs weakened the association, suggesting a protective effect (Fang et al. 2024). Similarly, meta-analysis conducted by Kim et al 2024 found that UPF subgroups of cereals and breads and packaged savory snacks were inversely associated with type 2 diabetes risk. UPFs also provide several individuals with dietary variety and sustenance that may otherwise not be feasible due to physical or physiological limitations (e.g., thickened nutritional supplements for individuals with dysphagia, gluten-free products for those with Celiac disease, soymilk for those with dairy allergies) (Weaver et al. 2014). Thus, applying a broad or overly simplistic definition of UPFs risks stigmatizing nutritionally beneficial products and may inadvertently restrict access to fortified or shelf-stable foods that are essential for individuals relying on specialized diets or government nutrition assistance programs.

Incorporating UPF classification into policy cannot be implemented without consideration of the impact on food assistance programs. Defining and restricting UPFs has major implications for programs like the National School Lunch Program (NSLP), the Supplemental Nutrition Assistance Program (SNAP), and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), which rely heavily on ready-to-eat (RTE) or ready-to-heat convenience foods to ensure affordability, scalability, and food safety. If these foods are categorized as UPFs and excluded, these programs will be challenged to replace these foods with alternatives that are nutritionally comparable and not classified as UPFs. Supplying fresh or minimally processed replacements will require significantly more funding, investment in kitchen infrastructure, distribution, and storage. Further, it is not always feasible for households to simply substitute "healthier" options. Access to fresh produce is not uniform across communities; food deserts and affordability barriers limit availability, and even when produce is present, it does not always translate into improved health outcomes without parallel efforts to ensure affordability. Furthermore, children with autism or avoidant/restrictive food intake disorder (ARFID) often exhibit severe food selectivity and may only accept very specific brands or products (Baraskewich et al. 2021). Nutrition guidance should prioritize equity and practicality while promoting meaningful, sustainable improvements in diet quality. Federal policy restrictions on UPFs risks fueling nutrition assistance programs with the very foods deemed harmful by the government or, if excluded, reducing access to affordable options and exacerbating hunger and malnutrition among vulnerable populations.

Conclusions

- A uniform definition of UPFs is critical but must be developed carefully to avoid oversimplification and misclassification, as most current classification systems are inadequate on their own.
- Ongoing research is needed to identify which characteristics of UPFs most strongly predict adverse health outcomes; this may include re-evaluating the GRAS status of certain additives.
- A phased policy approach is likely most effective, beginning with foods high in saturated fat, added sugars, and sodium before expanding to broader UPF criteria. Simultaneously, resources need to be allocated to increase accessibility to nutrient-dense foods such as vegetables, fruits, whole grains, and lean proteins.
- Policy implementation must strike a balance between public health goals and equity considerations, ensuring that strategies do not disproportionately impact vulnerable populations.

Sincerely,

Kelly D. Horton, MS, RDN Senior Vice President

Kelly D. Horton

Public Policy and Government Relations

Rachel Newman

Rachel Newman, PhD, MS, RDN, LDN Nutrition Researcher

Evidence Analysis Center

References

- 1. Lane, M. M., Gamage, E., Du, S., Ashtree, D. N., McGuinness, A. J., Gauci, S., ... & Marx, W. (2024). Ultra-processed food exposure and adverse health outcomes: umbrella review of epidemiological meta-analyses. *BMJ*, *384*.
- 2. Dicken, S. J., & Batterham, R. L. (2021). The role of diet quality in mediating the association between ultra-processed food intake, obesity and health-related outcomes: a review of prospective cohort studies. *Nutrients*, *14*(1), 23.
- 3. Monteiro, C. A., Cannon, G., Levy, R. B., Moubarac, J. C., Louzada, M. L., Rauber, F., Khandpur, N., Cediel, G., Neri, D., Martinez-Steele, E., Baraldi, L. G., & Jaime, P. C. (2019). Ultra-processed foods: what they are and how to identify them. *Public health nutrition*, 22(5), 936–941.
- 4. Vitale, M., Costabile, G., Testa, R., D'Abbronzo, G., Nettore, I. C., Macchia, P. E., & Giacco, R. (2024). Ultra-processed foods and human health: a systematic review and meta-analysis of prospective cohort studies. *Advances in Nutrition*, *15*(1), 100121.
- 5. Trumbo, P. R., Bleiweiss-Sande, R., Campbell, J. K., Decker, E., Drewnowski, A., Erdman, J. W., Ferruzzi, M. G., Forde, C. G., Gibney, M. J., Hess, J. M., Klurfeld, D. M., Latulippe, M. E., O'Connor, L. E., Reimers, K. J., Rolls, B. J., Schulz, J., Weaver, C., & Yu, L. (2024). Toward a science-based classification of processed foods to support meaningful research and effective health policies. *Frontiers in nutrition*, 11, 1389601.
- 6. Aljahdali, A. A., Rossato, S. L., & Baylin, A. (2024). Ultra-processed foods consumption among a USA representative sample of middle-older adults: a cross-sectional analysis. *British Journal of Nutrition*, *131*(8), 1461-1472.
- 7. Steele, E.M., Popkin, B. M., Swinburn, B., & Monteiro, C. A. (2017). The share of ultra-processed foods and the overall nutritional quality of diets in the US: evidence from a nationally representative cross-sectional study. *Population health metrics*, *15*, 1-11.
- 8. Hess, J. M., Comeau, M. E., Casperson, S., Slavin, J. L., Johnson, G. H., Messina, M., ... & Palmer, D. G. (2023). Dietary guidelines meet NOVA: developing a menu for a healthy dietary pattern using ultra-processed foods. *The Journal of nutrition*, *153*(8), 2472-2481.
- 9. U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion. 2023. Average Healthy Eating Index-2020 Scores for the U.S. Population Total Ages 2 and Older and by Age Groups, WWEIA, NHANES 2017-2018
- 10. Fang, Z., Rossato, S. L., Hang, D., Khandpur, N., Wang, K., Lo, C. H.,... & Song, M. (2024). Association of ultra-processed food consumption with all cause and cause specific mortality: population based cohort study. *Bmj*, *385*.
- 11. Kim, Y., Cho, Y., Kim, J. E., Lee, D. H., & Oh, H. (2025). Ultra-Processed Food Intake and Risk of Type 2 Diabetes Mellitus: A Dose-Response Meta-Analysis of Prospective

- Studies. *Diabetes & metabolism journal*, 10.4093/dmj.2024.0706. Advance online publication.
- 12. Weaver, C. M., Dwyer, J., Fulgoni III, V. L., King, J. C., Leveille, G. A., MacDonald, R. S., ... & Schnakenberg, D. (2014). Processed foods: contributions to nutrition. *The American journal of clinical nutrition*, *99*(6), 1525-1542.
- 13. Baraskewich, J., von Ranson, K. M., McCrimmon, A., & McMorris, C. A. (2021). Feeding and eating problems in children and adolescents with autism: A scoping review. *Autism: the international journal of research and practice*, 25(6), 1505–1519.