# EO N-1-25: CA Department of Public Health Input Form

## Dairy Council of CA Public Comments - Ultra-Processed Foods

### February 6, 2025

**What should CDPH consider in examining the role or impact of ultra-processed and food ingredients with respect to public health?**

According to the recently released the Scientific Report of the 2025 Dietary Guidelines Advisory Committee, most Americans across all age groups have poor quality diets, underconsume recommended food groups (fruits, vegetables, whole grains and dairy) and ultimately experience nutrient shortfalls that are of public health concern (calcium, potassium, vit D and fiber). The interest in addressing ultra-processed foods (UPF's) through policy, regulation and guidelines is an increasingly timely topic, yet many scientists and health organizations express caution to ensure credible scientific research and data drives decision-making. Currently, there is not a standardized definition for UPF's in use in nutrition research, although many thought-leader dialogues are in progress with the aim to ultimately reach a consensus.

Not all processed foods are created equal, and some are shown to be beneficial to health. People often choose food that might be considered UPF's for a variety of important reasons, including convenience, affordability, longer shelf life, ease of preparation, food safety and even optimizing nutrient content. To improve the nutritional profile of foods and beverages, food companies have innovated, reformulated and introduced new foods to reduce the content of sodium, sugar or saturated fat, as well as include certain nutrients and/or food groups to encourage increased consumption. This reformulation has required application of many technologies and processes which play a role in improving public health, yet these advances are not often considered in current classifications for UPF's.

Using dairy products as an example, processing is critical to ensuring raw milk is pasteurized to ensure safety and quality of fluid milk, and ultimately usable in making many nutritious products such as yogurt, kefir, cheese and more. Most people over the age of nine fall short of consuming the recommended three servings of dairy each day. The presence of isolated nutrients, such as added sugar, sodium or saturated fat, does not make these foods less nutrient-dense, but rather these processing methods create a

wider variety of products available to meet people's individual needs for taste, cost, accessibility and cultural traditions.

Reducing ultra-processed food consumption is one singular approach to addressing the rising rates of chronic disease, but if not done with proper science-based efficacy, it may not improve diet quality and may ultimately reduce intakes of key nutrients and further reduce overall diet quality. Additionally, recommendations that are solely based on processing levels rather than nutrient-density could negatively affect federal nutrition assistance programs, widening the gap in nutrition security for low-resourced communities and vulnerable populations.

**What do we need to know more about? Are there gaps in evidence or literature?**

Within the past decade, various food classification systems have been developed to categorize foods based on what degree of processing they undergo, but these categorizations typically refer less to steps of processing and more to formulation (such as specific ingredients, added nutrients or additives). Despite growing interest in limiting the consumption of UPFs, there remain significant gaps in understanding the mechanisms by which this broad category of foods may play a causal role in health. Efforts to create policies and regulations based on subjective systems such as NOVA, being the most well-known, could result in consumer confusion and a negative perception of nutrient-dense foods as it neglects well-established science concepts from the food science perspective. NOVA is based on a flawed assumption that all commercially manufactured foods have lower nutritional value and ultimately lead to poor health outcomes based on the presence of specific components (such as salt, added sugar, etc.). This categorization system also assumes that consumers do not add sugar, salt or fat to unprocessed food at home, thus oversimplifying how people eat and cook in general. It dismisses the proven health benefits of dietary patterns that consist of the right balance of nutrient-dense foods at all levels of processing. From a food science perspective, food processing serves many purposes such as to improve taste, improve or preserve nutritional content, preserve product integrity and quality and confer other food attributes (both potentially positive and negative).

In a review by the Academy of Nutrition and Dietetics, nutrition professionals are encouraged to "*question the simplicity of the NOVA system as a tool to denote healthful foods based only on processing and not also considering the nutritional quality of the foods… With food prices remaining high, it is important for nutrition professionals to communicate science-based information to patients or clients and the public on how to incorporate all types of healthful, affordable foods including canned, frozen and packaged foods — even those that may be categorized as ultra-processed by the NOVA system — into their eating pattern.*"

We believe the body of science today is insufficient to support the hypothesis that lower consumption of ultra-processed foods will result in improved diet quality; one might argue that avoiding these foods could cause health inequity by reducing the intake of key nutrients. For example, according to research published in the *Journal of Nutrition*,

implementing the NOVA system in dietary recommendations could omit several nutrient-dense foods recommended in the Dietary Guidelines for Americans (DGA). This proof-of-concept study provided 91% of calories from UPF's (within the NOVA category 4) while fitting within a healthy dietary pattern as recommended from the 2020 DGA's. The Healthy Eating Index (HEI) score resulted in an 86 out of a possible 100 points, which is significantly higher than the current average Americans HEI score across age groups. The study was paramount in concluding that healthy dietary patterns can include calories from UPF's, still receive a high diet quality score and contain adequate amounts of most macro- and micronutrients.

There are multiple reasons why an individual, family or institution may choose to purchase, prepare and/or eat food considered ultra-processed, including but not limited to, convenience, time and expertise to prepare foods, food safety, storage, affordability, accessibility, flavor preferences, nutrition and lowering food waste. To determine adequate Supplemental Nutrition Assistance Program benefit allowances, United States Department of Agriculture's Thrifty Food Program demonstrates that both processed and unprocessed foods make up a nutritious, practical, cost-effective diet prepared at home for a family of four. As these programs are critical to support nutrition security, caution needs to be exercised when considering food processing classification systems for the purpose of policy and dietary guidance as it could price families out of otherwise healthy food options due to processing alone.

The Federal Food, Drug and Cosmetic Act defines different types of food ingredients based on how they are intended to be used, including as ingredients that are generally recognized as safe. Direct food additives are those that are added to a food for a specific purpose and must be authorized by the U.S. Food and Drug Administration (FDA) before it can be used in food. For every food additive the FDA approves, the agency issues a regulation that authorizes the uses of the food additive that meets the safety standard for food use. These regulations may specify the types of foods in which the food additive can be used, the maximum amounts to be used in those foods and how it should be identified on food labels. Manufacturers are also required to limit the amount of food additives to the level necessary to achieve the desired effect. Determining acceptable daily intake levels includes a built-in safety margin that accounts for potential uncertainties in the data and known variability within the population and vulnerable populations, such as children and people who are pregnant. To ensure consumer transparency, FDA also manages and maintains a public inventory where food additive petitions under active review are listed. Based on the rigorous food safety process already in place, further evidence is needed to understand what additives might be harmful and if current federal safety protocols and regulations align with these findings. If California's goal is to ban certain potentially harmful additives above and beyond what the FDA has approved, a rigorous process is needed to make these determinations.

**Prioritized evidence that supports your responses above?**

1. ATNI discussion paper "Classification of Processed Foods: Opportunities and Gaps" (April 2024) (https://accesstonutrition.org/app/ uploads/2024/04/ATNI-Discussion-Paper-Classification-of-Processed-Foods-Final-1.pdf)

2. SACN Statement on Processed Foods and Health (July 2023) (https://www.gov.uk/government/publications/sacn-statement-on-processed-foods-and-health/sacn-statement-on-processed-foods-and-health-summary-report)

3. Dietary Guidelines for Americans 2020-2025 https://www.dietaryguidelines.gov/sites/default/files/2021-03/Dietary_Guidelines_ for_Americans-2020-2025.pdf

4. Scientific report of the 2025 Dietary Guidelines Advisory Committee https://www.dietaryguidelines.gov/2025-advisory-committee-report

5. BNF Position on UPF (April 2023) https://www.nutrition.org.uk/media/ swdophda/upf-position-statement-april-2023.pdf

6. Trumbo, P., et al. Front. Nutr., July 2024 "Toward a science-based classification of processed foods to support meaningful research and effective health policies." https://doi.org/10.3389/fnut.2024.1389601

7. Blake, J. August 2024. "Examining the NOVA Food Classification System and the Healthfulness of Ultra-Processed Foods." https:// www.eatrightpro.org/news-center/practice-trends/examining-the-no¬va-food-classification-system-and-healthfulness-of-ultra-processed-foods

8. Braesco, V., et al. Ultra-processed foods: how functional is the NOVA system?. Eur J Clin Nutr 76, 1245–1253 (2022). https://doi. org/10.1038/s41430-022-01099-1

9. O'Connor, L., et al. International Journal of Epidemiology. October 2024. "Handle with care: challenges associated with ultra-processed foods research." https://doi.org/10.1093/ije/dyae106

10. Hess J., et al. J Nutr. August 2023. "Dietary Guidelines Meet NOVA: Developing a Menu for A Healthy Dietary Pattern Using Ultra-Processed Foods." 10.1016/j.tjnut.2023.06.028.

11. 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.

12. Petrus, R. R., Sobral, P. J. do A., Tadini, C. C., & Gonçalves, C. B. (2021). The NOVA classification system: A critical perspective in food science. *Trends in Food Science & Technology, 116*, 603–608. https://doi.org/10.1016/j.tifs.2021.08.010

13. Hitchcock, B. "Food Safety: 'Ultra-Processed' Food Saves Lives, Feeds Billions." Food Processing. March 2024. https://www.foodprocessing. com/food-safety/article/33038329/food-safety-ultra-processed-food-saves-lives-feeds-billions

14. International Dairy Federation. March 2023. "Linking Food Processing to Health Outcomes: A Simplistic and Dangerous Approach."

15. USDA Food and Nutrition Service- SNAP and the Thrift Food Plan https://www.fns.usda.gov/snap/thriftyfoodplan.

16. US Food and Drug Administration- https://www.fda.gov/food/food-additives-and-gras-ingredients-information-consumers/understanding-how-fda-regulates-food-additives-and-gras-ingredients.

**How should UPF's be defined and/or categorized for the purpose of responding to the Executive Order?**

Various schemes to identify foods classified as UPF's have been developed with the intent of improving the nutritional quality and healthfulness of dietary patterns. However, terminology and description of each category within these classification systems varies. The inconsistency and wide variability in definition and classification of UPF's impacts our overall understanding of the research conducted thus far, as well as its implications on human health. For example, a food considered minimally processed according to other definitions may be classified as an UPF in the NOVA system simply because it contains a food additive. According to NOVA, the intention and function of food additives is taken into consideration when classifying foods, however, the differences in function of an additive would not likely result in significant difference relevant to disease risk.

The lack of definition for UPF's in the current body of evidence was recently highlighted in the Scientific Report of the 2025 Dietary Guidelines Advisory Committee which ultimately could not provide a recommendation for the DGA's on the relation between UPF's and health outcomes. Furthermore, multiple organizations and subject matter experts have noted the weak evidence underpinning current UPF research and the need for food processing classification systems to be treated with caution.

As such, we advise a comprehensive review of classification systems that use a sophisticated approach in analyzing the complexity of food products, rather than relying on simple categorizations. One example of a novel system is GroceryDB, an initiative led by Northeastern University, Harvard Medical School, University of Copenhagen and other leading research institutions. We also recommend convening a multi-disciplinary group of experts representing various sectors, including community representation, to reach an agreed upon definition for UPF's that ultimately address the complexities, risks and benefits associated with categorizing foods and beverages under this umbrella.

**Prioritized evidence that support definition(s) provided.**

1. Trumbo, P., et al. Front. Nutr., July 2024 "Toward a science-based classification of processed foods to support meaningful research and effective health policies." https://doi.org/10.3389/fnut.2024.1389601

2. Scientific report of the 2025 Dietary Guidelines Advisory Committee https://www.dietaryguidelines.gov/2025-advisory-committee-report

3. O'Connor, L., et al. International Journal of Epidemiology. October 2024. "Handle with care: challenges associated with ultra-processed foods research." https://doi.org/10.1093/ije/dyae106

4. Center for Food as Medicine: Ultra-Processed Foods: Understanding New Research and a New database: GroceryDB and TrueFood

5. International Dairy Federation. March 2023. "Linking Food Processing to Health Outcomes: A Simplistic and Dangerous Approach."

**Would you like to submit a recommendation for action/ intervention with respect to this EO?** <mark>Yes/</mark> No

**Action/ Intervention Name #1**
  ➢ Research on UPF's

**Approach #1** (Further research and report)
  a. There is a need for a consensus definition of UPF, with consistency in classification as it relates to various processing methods, nutrient density, presence of specific components, food additives and their purposes (both positive and negative).
  b. There is a need for longer-term studies on UPF, as well as studies that reflect the nuances between various UPF, processing impacts on the food matrix and differing associations with health outcomes (both positive and negative).
  c. There is a need for further exploration of the mechanisms behind UPF, with questions about energy density, hyper-palatability, non-nutritive ingredients and degree of processing.
  d. There is a need to consider inclusion of UPF-specific characteristics in dietary assessment methods and federal databases.
  e. There is a need to conduct further research on food additives, to determine whether current safety regulations and review protocols are sufficient or could be improved. Additionally, as these determinations it is important to build in transitional timelines and identify safe alternatives and ensure cost containment is considered.
  f. There is a need to evaluate the impacts of UPF policy on federal nutrition assistance programs and their ability to provide nutrition security to the population they serve understanding impacts on cost, convenience and time.

**Justification for Approach #1**

The consequences of implementing policy or dietary guidance to limit all intakes of foods currently classified as UPF's under systems such as NOVA, requires additional evaluation to fully understand the impact on people's ability to meet daily nutrient recommendations to support health without compromising food access, affordability and safety. More research is needed to better understand the potential beneficial and adverse effects of different food processing levels and methods on nutrition and health.

Processing may also have an impact on the food matrix, for which there is emerging evidence of relevance for nutrient delivery, biological response and potentially consumption behavior. A stronger evidence base, consisting of both observational studies and randomized control trials, will allow for a more balanced and critical review of how foods subjected to various processes influence human health to inform future evidence-based dietary guidance and impactful policies.

Although a nutrient-dense and balanced diet could theoretically be prepared at home each day, practical challenges such as time, cost, convenience, consumer education, storage and preparation facilities and accessibility must be considered. Factors essential to a global and equitable food supply, including food safety, waste reduction and sustainability—should be addressed in research and guidance on the classification of UPF's and the inclusion or exclusion of specific food categories in the diet.

Ensuring broad stakeholder representation is essential for creating equitable and effective food policies. It is crucial to include voices from underrepresented groups, particularly those impacted by food access challenges. Their perspectives bring valuable insights that can shape inclusive solutions, enhance community well-being and foster sustainable food systems. A truly representative decision-making process must prioritize diversity to address the needs of all constituents.

**Prioritized evidence that supports the approach provided:**

1. Trumbo, P., et al. Front. Nutr., July 2024 "Toward a science-based classification of processed foods to support meaningful research and effective health policies." https://doi.org/10.3389/fnut.2024.1389601

2. Scientific report of the 2025 Dietary Guidelines Advisory Committee https://www.dietaryguidelines.gov/2025-advisory-committee-report

3. O'Connor, L., et al. International Journal of Epidemiology. October 2024. "Handle with care: challenges associated with ultra-processed foods research." https://doi.org/10.1093/ije/dyae106

**Alignment with criteria** (Low        Medium        High)
      a. Impact on population (High)
      b. Equity (High)

    c.  Feasibility (Medium)
    d.  Cost (High)

**Would you like to submit another recommendation?**  (Yes/ No)

The 2022 White House Conference on Hunger, Nutrition, and Health provided core pillars meant to help identify actions that can be taken by all sectors — including the federal government; local, state, territory and Tribal governments; nonprofit and community groups; and private companies to ensure all Americans have a safe, healthy, equitable food supply. These pillars are interrelated to how we ultimately define, classify and regulate processed foods, including:

- Improve food access and affordability: End hunger by making it easier for everyone — including urban, suburban, rural and Tribal communities — to access and afford food.
- Integrate nutrition and health: Prioritize the role of nutrition and food security in overall health, including disease prevention and management.
- Empower all consumers to make and have access to healthy choices: Foster environments that enable all people to easily make informed healthy choices, increase access to healthy food, encourage healthy workplace and school policies and invest in public messaging and education campaigns that are culturally appropriate and resonate with specific communities.
- Enhance nutrition and food security research: Improve nutrition metrics, data collection, and research to inform nutrition and food security policy, particularly on issues of equity, access and disparities.

This conference determined a whole societal commitment is needed to improve nutrition and health. Convening a diverse group across disciplines, sectors and members from the population most impacted is needed in the approach taken to address UPF's in the food supply, and ultimately to achieve the goals outlined by this historic White House Conference.