NATIONAL CHICKEN COUNCIL

1152 FIFTEENTH STREET NW, SUITE 430

WASHINGTON, DC 20005

PHONE: 202-296-262

October 23, 2025

Submitted electronically via Regulations.gov

Robert F. Kennedy, Jr.
Secretary
U.S. Department of Health and Human Services

Brooke L. Rollins
Secretary
U.S. Department of Agriculture

Re: Docket No. FDA–2025–N–1793: Request for Information: Ultra-Processed Foods

Dear Secretary Kennedy, Jr., and Secretary Rollins:

The National Chicken Council (NCC) appreciates the opportunity to provide comment on the "Request for Information (RFI): Ultra-Processed Foods" published in the Federal Register on May 14, 2025, by the Department of Health and Human Services' Food and Drug Administration (FDA or "the Agency") and the United States Department of Agriculture (USDA). NCC represents vertically integrated companies that produce and process more than 95% of the chicken marketed in the United States.

Overall, NCC has general concerns about a classification system and contends that FDA and USDA should bolster existing frameworks and consumer education as science evolves instead of pursuing a classification system at all. However, should the Agencies choose to move forward with a classification system, NCC urges the use of a uniform, science-based approach to characterizing foods – one that prioritizes nutritional composition and ingredient function over the number of processing steps or ingredients. Further, should the Agencies decide the science merits the development of a classification system for broader regulatory and policy use, they should do so in accordance with the Administrative Procedure Act.

We urge FDA and USDA to adopt a nutrition-led framework that promotes consumption of safe, affordable, and culturally important proteins like chicken, which millions of families, schools, and food assistance programs rely on for essential nutrition. Should the Agencies choose to pursue a classification system, NCC is committed to working with FDA, USDA, and other stakeholders on a clear, science-driven system that protects public health without unintendedly discouraging consumption of nutrient-dense foods. As discussed further below, the so-called term "ultra-processed foods" ("UPFs") is overly broad and can mislead consumers by implying a food is harmful based solely on how it is made rather than its nutrient content.

In summary, NCC's comments will:

1. Use evidence from peer-reviewed research and government data, including comparisons of nutrient

profiles (protein, vitamins, minerals) for chicken products versus other commonly consumed "UPFs" to emphasize the vital nutritional role that processed chicken products (e.g., frozen chicken patties or nuggets) play in the diets of all Americans by providing high-quality protein and micronutrients in an affordable, accessible form.
2. Highlight concerns with "ultra-processed-focused" classification systems (specifically the NOVA system), including a failure to consider nutrient density, protein quality, and the purpose of processing – and the inconsistent, often misleading categorization that results.
3. Caution against an overbroad use of the term commonly referred to as "ultra-processed" in policy, given that it groups together nutritionally distinct foods (for example, breaded chicken nuggets and candy are both labeled "ultra-processed" despite vastly different nutritional profiles).
4. Propose considerations that emphasize what is in the food – to include nutrient density, protein quality, and ingredients – rather than how it was manufactured.

Note on Terminology: Throughout these comments, NCC uses the term "ultra-processed foods" or "UPFs" only as it relates to the Agencies' RFI. Its use here is solely for clarity and alignment with the language used in the RFI and as discussed throughout the comments, its use is of concern to NCC and our member companies. To underscore this distinction, the term is placed in quotation marks throughout this document.

I. Nutritional Composition Must Be Central to Classification (NCC Response to RFI Question 5a)

Nutritional composition should be a primary consideration and is indispensable to any meaningful classification of foods. A definition of "ultra-processed" (or any category purported to identify unhealthy foods) that ignores nutrient content will inevitably misclassify products and could undermine public health messaging. We strongly urge that nutrient density, protein quality, and other health-related nutrient metrics form the cornerstone of any food classification system, with processing serving as a secondary modifier rather than used to define the product itself.

Here are key nutritional factors and evidence for their importance:

- **Protein quantity and quality.** Protein is a cornerstone nutrient for supporting growth, muscle maintenance, and overall health, yet many Americans struggle to meet both the quantity and quality of protein needed in their diets.[1] Foods commonly considered "UPFs" can contribute positively to diets as they contain high-quality protein. Processed chicken products are exemplary in this regard. Chicken provides roughly 23–30 grams of protein per 100 grams (3.5 oz or 85 g) serving,[2] depending on the cut and preparation. This protein is complete and highly digestible, with all nine essential amino acids in adequate proportions. Chicken meat, including processed chicken products, has a Protein Digestibility-Corrected Amino Acid Score (PDCAAS) of near 1.0 (maximum score) and a Digestible Indispensable Amino Acid Score (DIAAS) above 100 (around 108 for chicken breast), indicating it exceeds the amino acid requirements for young children, which is a hallmark of "high-quality" protein.[3,4] Any food classification intended to inform health should recognize the value of such protein. Yet a pure process-based definition would not; it might label a chicken nugget or patty "ultra-processed" without acknowledging that the core of that product is a high-biological-value protein. We recommend

[1] Moughan PJ, Fulgoni VL 3rd, Wolfe RR. The importance of dietary protein quality in mid- to high-income countries. *J Nutr.* 2024;154(3):804-814.
[2] Connolly G, Campbell WW. Poultry consumption and human cardiometabolic health-related outcomes: A narrative review. *Nutrients*. 2023;15(16):3550.
[3] Forester SM, Jennings-Dobbs EM, Sathar SA, Layman DK. Perspective: Developing a nutrient-based framework for protein quality. *J Nutr.* 2023;153(8):2137-2146.
[4] Marinangeli CPF, House JD. Potential impact of the digestible indispensable amino acid score as a measure of protein quality on dietary regulations and health. *Nutr Rev.* 2017;75(8):658-667.

incorporating protein quality metrics (like PDCAAS or DIAAS) or at least protein quantity in the criteria for differentiating foods should the Agencies continue to pursue this initiative.

- **Vitamins and minerals (nutrient density).** Many so-called "UPFs" can still be rich in essential nutrients or have high nutrient-density, while others may be considered "empty calories." This is a crucial distinction. Chicken products provide significant micronutrients: for instance, a recent study found that breaded chicken (white meat) contains bioavailable iron and zinc, nutrients typically under consumed by Americans like potassium or choline, and is an excellent source of B-vitamins like niacin and vitamin B6.[2,5] In fact, a typical serving of chicken nuggets (e.g., 4–6 nuggets, ~85 g) can provide roughly 12 grams of high-quality protein and 13 other essential vitamins and minerals all with no added sugars, a modest amount of sodium that can otherwise fit into the daily allotment of a balanced eating pattern (and many processors now make chicken nuggets with improved sodium profiles), and a ratio of saturated fat to heart-healthy unsaturated fatty acids of about 1:3.2 (2.89 grams of monounsaturated fats and 4.00 grams of polyunsaturated fats in 85 g of chicken nuggets).[2] As illustrated in Table 1, many classic and commonly consumed "ultra-processed" foods (sweet pastries, candy, sugar-sweetened beverages) provide negligible protein or micronutrients, but significant added sugars, fats, or calories, when compared to chicken nuggets or chicken tenders. A definition that fails to capture this difference would be fundamentally flawed. For example, gummy bears and chicken nuggets in this comparison are technically "ultra-processed" by common definitions. Yet, it is clear which one has potential to contribute meaningful nutrients to a higher quality diet. Chicken nuggets provide protein and micronutrients that growing children need, whereas candy or sugary drinks may contribute to excessive sugar intake. This encapsulates why NCC urges a refocus on nutrient density and content as processed chicken products are decidedly nutrient-dense and can be part of a healthy meal (especially if paired with vegetables and whole grains in a meal setting, as school lunches do).

Table 1. Select nutrition comparison of processed chicken products on a 100 g basis to commonly consumed "UPFs" per CDC (based on Williams et al. (2025)).[5]

	Chicken Nuggets, White Meat, Breaded, Precooked, Frozen [FDC ID 172112]	Chicken Tenders, Breaded, Precooked, Frozen [FDC ID 173346]	Cheese Danish [FDC ID 172754]	Lemon-Lime Carbonated Soda [FDC ID 173205]	BBQ Potato Chips [FDC ID 167962]	Gummy Candy [FDC ID 2710359]	Deli Sandwich [FDC ID 170707]	Frozen Pizza [170317]	Brownies [FDC ID 172713]
Calories	261	240	374	41	487	396	151	268	405
Protein (g)	14.4*	14.6*	8	0.09	6.51	0	9.12	10.4	4.8
Total fat (g)	15.4	13.6	21.9	0	31.1	0	2.53	12.3	16.3
Saturated fat (g)	3.4	2.4	6.79	0	4	0	0.626	4.27	4.24
Monounsaturated fat (g)	4.7	4.1	11.3	0	13.2	0	0.763	4.25	8.96
Polyunsaturated fat (g)	6.2	6.2	2.58	0	12.2	0	0.831	1.9	2.26
Carbohydrates (g)	16.2	14.9	37.2	10.4	55.9	98.9	22.9	29	63.9
Total Sugars (g)	1.27	0.57	6.95	10.4	5.47	58.97	3.54	3.57	36.6
Cholesterol (mg)	34	36	23	0	0	0	12	14	17
Sodium (mg)	538	527	417	10	545	44	396	447	286

[5] Beal T, Gardner CD, Herrero M, Iannotti LL, Merbold L, Nordhagen S, Mottet A. Friend or foe? The role of animal-source foods in healthy and environmentally sustainable diets. *J Nutr.* 2023;153(2):409-425.

Vitamin D (µg)	0.1	0.1	0	0	0	0	0.2	0	0
Calcium (mg)	38	39	35	2	32	3	169	179	29
Iron (mg)	1.4	0.8	1.8	0.02	1.36	0.4	1.78	2.27	2.25
Potassium (mg)	281	281	98	1	1190	5	367	152	149
Riboflavin (mg)	0.1	0.1	0.26	0	0.119	0.013	0.243	0.258	0.21
Niacin (mg)	6.7	5.9	2	0.015	4.96	0.01	4.18	2.2	1.72
Pantothenic Acid (mg)	0.9	0.9	0.304	0	0.85	0	0.435	0.219	0.547
Vitamin B6 (mg)	0.3	0.3	0.04	0	0.375	0.005	0.174	0.083	0.035
Vitamin B12 (µg)	0.2	0.2	0.2	0	0	0	0.12	0.78	0.07
Phosphorus (mg)	213	200	108	0	145	1	116	179	101
Magnesium (mg)	35	29	15	1	58	1	20	23	31
Zinc (mg)	0.8	0.6	0.7	0.01	0.98	0	0.88	1.32	0.72
Selenium (µg)	17.0	19.3	18.9	0	0.4	0.8	17.3	21.5	6.3
Choline (mg)	45.5	46.1	20.1	0.4	11.5	0	33.2	14.3	10

*Chicken meat, including processed chicken products, has a Protein Digestibility-Corrected Amino Acid Score (PDCAAS) of near 1.0 (maximum score) and a Digestible Indispensable Amino Acid Score (DIAAS) above 100 (around 108 for chicken breast), indicating it exceeds the amino acid requirements for young children, a hallmark of "high-quality" protein.

- **Absent or limited negative nutrients.** Many "UPFs" are characterized by high levels of added sugar, sodium, and/or saturated fats. These are nutrients that the U.S. Dietary Guidelines recommend limiting.[6] The data in Table 2 show that breaded chicken items like tenders and nuggets provide substantial nutritional value compared to many other commonly consumed foods despite also containing limitations on nutrients such as sodium. These items also deliver three to five times the protein density of pastries, chips, and brownies, and are on par with or better than mixed items like pizza. In this comparison, only a deli sandwich achieves similar protein density. When protein is assessed against sugar, tenders and nuggets stand out, providing 11–26 grams of protein per gram of sugar, compared to the near-zero or even inverted ratios in soda, candy, and sweets. Likewise, they are protein-forward foods, with about 22–24% of calories from protein, far above pastries (8.6%), chips (5.3%), or brownies (4.7%). Finally, when considering sodium, chicken products provide more protein per unit sodium (36–37 mg/g) than many carbohydrate-rich foods, which often "spend" sodium without delivering meaningful protein.

Table 2. Ratios of protein to calories, sugar, and sodium in a 100 g serving of commonly consumed "UPFs" per CDC (based on Williams et al. (2025)).[5]

1. Protein-to-Calorie Ratio	• **Chicken tenders:** 14.6 g per 240 kcal → **6.08 g/100 kcal** • **Chicken nuggets:** 14.4 g per 261 kcal → **5.52 g/100 kcal** • **Cheese danish:** 8 g per 374 kcal → **2.14 g/100 kcal** • **BBQ chips:** 6.51 g per 487 kcal → **1.34 g/100 kcal** • **Frozen pizza:** 10.4 g per 268 kcal → **3.88 g/100 kcal** • **Deli sandwich:** 9.12 g per 151 kcal → **6.04 g/100 kcal**

[6] U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2020-2025. 9th Edition. December 2020. Available at DietaryGuidelines.gov.

	• **Brownies:** 4.8 g per 405 kcal → **1.19 g/100 kcal** • **Soda:** 0.09 g per 41 kcal → **0.22 g/100 kcal** • **Gummy candy:** 0 g per 396 kcal → **0 g/100 kcal** Chicken tenders/nuggets deliver a higher protein density to that of pastry/snack/candy "UPFs" and are competitive with (or better than) mixed items like pizza; only the deli sandwich is in the same range.
2. Protein-to-Sugar Ratio	• **Chicken tenders:** 14.6 g / 0.57 g → **25.61:1** • **Chicken nuggets:** 14.4 g / 1.27 g → **11.34:1** • **Cheese danish:** 8 g / 6.95 g → **1.15:1** • **Frozen pizza:** 10.4 g / 3.57 g → **2.91:1** • **Deli sandwich:** 9.12 g / 3.54 g → **2.58:1** • **BBQ chips:** 6.51 g / 5.47 g → **1.19:1** • **Brownies:** 4.8 g / 36.6 g → **0.13:1** • **Soda:** 0.09 g / 10.4 g → **~0.01:10** • **Gummy candy:** 0 g / 58.97 g → **0** Chicken tenders/nuggets deliver high-quality protein more efficiently, not sugars, unlike soda, candy, and many sweet snacks.
3. % of Calories from Protein	• **Chicken tenders:** 24.3% • **Chicken nuggets:** 22.1% • **Deli sandwich:** 24.2% • **Frozen pizza:** 15.5% • **Cheese danish:** 8.6% • **BBQ chips:** 5.3% • **Brownies:** 4.7% • **Soda:** 0.9% • **Gummy candy:** 0% Chicken tenders/nuggets are protein-forward and deliver high-quality protein compared with refined, carbohydrate-rich "UPFs."
4. Protein per Sodium	• **Chicken tenders:** 36.1 mg/g • **Chicken nuggets:** 37.4 mg/g • **Frozen pizza:** 43.0 mg/g • **Deli sandwich:** 43.4 mg/g • **Cheese danish:** 52.1 mg/g • **Brownies:** 59.6 mg/g • **BBQ chips:** 83.7 mg/g • **Soda:** 111.1 mg/g • **Gummy candy:** 0 mg/g Chicken tenders/nuggets deliver more high-quality protein per unit sodium than many carbohydrate-rich "UPFs" and sweets.

It is important to note that foods like pizza, chips, candy, or soda can all be enjoyed in moderation as part of a balanced eating pattern. The issue is not that these products must be excluded if a diet is to be considered

"balanced" or "healthy," but rather that they should not be considered nutritionally equivalent to protein-rich, micronutrient-bearing foods such as chicken nuggets or tenders. Grouping them together under the same label implies parity where none exists. While a slice of pizza or a handful of chips may fit within a healthy diet when consumed occasionally, these items do not deliver the same essential nutrients per calorie or per unit sodium as processed chicken products. Recognizing this distinction is critical: the presence of high-quality protein, bioavailable iron and zinc, and B-vitamins in chicken products means they can make positive contributions to diet quality in ways that sugar-sweetened beverages or candy cannot.

By making nutritional composition central, FDA and USDA would ensure foods like chicken nuggets are judged more by their actual nutrient contributions than by the fact that they were formed from ground meat. Finally, incorporating nutrition is not just a scientific necessity but a practical one: it aligns the desire for a "UPF definition" with existing U.S. nutrition policy tools. For example, school meal standards, The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) food packages, and front-of-pack labeling all revolve around nutrient criteria and food group equity. If a food classification system conflicted with those by ignoring nutrition, it could create significant policy incoherence, disparity, and confusion.

If a food classification system does not differentiate a protein-rich, nutrient-dense chicken nugget from a bag of gummy bears, that classification system is not serving the needs of public health. Nutritional composition is the differentiator that must be included.

II. Limitations of the NOVA Classification and Other Process-First Systems, and Thoughts on Terminology (NCC Response to RFI Question 1)

The most widely cited system to classify "UPFs" is NOVA, which categorizes foods into four groups based on the extent and purpose of processing. While NCC is concerned about a food classification system in general, we urge FDA and USDA to approach NOVA with extreme caution due to significant shortcomings in its process-first approach:

- **Over-generalization and false equivalence.** NOVA Group 4 ("ultra-processed foods") sweeps nutritionally disparate items into the same bin.[7] This over-generalization can mislead both policymakers and the public. It implies all "Group 4" foods are equally insufficient nutritionally, obscuring the important differences in nutrient density and health impact between a breaded chicken product and a soda, for example. In reality, some Group 4 foods are far more nutrient-dense than others, as even the Academy of Nutrition and Dietetics has pointed out that hummus made with a stabilizer (thus "ultra-processed" by NOVA criteria) is nutritionally superior to a donut or candy bar (also considered "ultra-processed" by NOVA criteria).[8] By ignoring nutrient value, following the NOVA classification can perversely label healthy options as "ultra-processed" while some nutrient-poor foods (e.g., those just under a threshold of ingredients) escape that label. This could have the unintended consequence of promoting the consumption of less healthy foods.

- **Lack of nutritional criteria (nutrient density, protein quality).** The NOVA system does not account for nutrient density, protein quality, or the presence of essential vitamins and minerals. A growing body of evidence indicates that diet-related health outcomes are driven by nutrients and overall diet patterns,

[7] Drewnowski A. Matters Arising: Food Compass novelty and NOVA category assignments. *Nat Food.* 2022;3(8):581-583.
[8] Examining the Nova Food Classification System and the Healthfulness of Ultra-Processed Foods. Eat Right Pro website. https://www.eatrightpro.org/news-center/practice-trends/examining-the-nova-food-classification-system-and-healthfulness-of-ultra-processed-foods. Accessed September 4, 2025.

not processing per se.[9] For example, a recent study constructed a diet composed of >80% NOVA-classified "ultra-processed foods" that still met all the recommendations of the Dietary Guidelines for Americans yielding a Healthy Eating Index (HEI) score of 86 out of 100 (far above the U.S. average of ~59).[10] This demonstrates that it is entirely possible for a diet high in "ultra-processed" foods to be nutritionally balanced and health-promoting, if those foods are formulated to be nutrient-dense. Conversely, a diet based on minimally processed foods could be poor in quality if composed of refined but NOVA "Group 1" ingredients. For example, a diet of brown rice, butter, and fresh pressed fruit juice would be low in protein and several micronutrients despite involving no "ultra-processed" items. In sum, any classification considered by FDA and USDA should integrate nutritional composition. A system that classifies foods with no regard to their actual nutritional value will not effectively serve the nutritional health of the American people.

- **Inconsistent and subjective classification.** Research on NOVA's application has found low inter-rater reliability. Even experts often disagree on how to classify certain foods.[11] In one study, over 150 nutrition professionals were asked to categorize foods by NOVA criteria; Fleiss' kappa for agreement was only ~0.3, indicating poor consistency.[12] A kappa value of ~0.3 falls into what statisticians consider the "poor" range of agreement, meaning that experts were barely more consistent than if they had been classifying foods at random. In practice, this shows that even trained nutrition professionals cannot reliably apply NOVA in the same way, underscoring how vague or contradictory the criteria are and why this undermines its credibility as a scientific or regulatory framework. The criteria leave too much room for interpretation (e.g., what constitutes "industrial use" of an additive or the line between Group 3 and Group 4), leading to confusion. This weakens the utility of NOVA as a regulatory tool since it yields inconsistent results when applied by different people making the system a poor basis for policy. FDA and USDA should be wary of basing any future policy on a classification scheme that "works on paper" but fails when confronted with the diversity of real-world food products.

- **Failure to consider proportion of whole ingredients.** NOVA assigns a product wholly to Group 4 if it contains any ingredient deemed "cosmetic" or highly processed, even if that ingredient is a tiny fraction. This binary approach does not account for the predominance of unprocessed ingredients in many foods. For instance, breaded chicken nuggets are comprised mostly of Group 1 foods (chicken meat, water, perhaps whole grain breading) with perhaps 1–2% seasoning, leavening, or preservatives. Yet NOVA would label the entire food as "ultra-processed." A "non-UPF food" can still be of low nutrient quality and result in excess intake of saturated fat, sodium or sugars, of which may lead to adverse health consequences.[12] If used, any classification system should consider the percentage of ingredients by weight in the final product, as well as the finished product's overall nutrient profile, before making any type of categorical assignment. This would help avoid situations where nutrient-dense foods are misclassified based on a minor ingredient or a necessary processing step.

- **Ignoring the purpose of processing.** NOVA's framework largely ignores why food processing is used, yet the purpose of processing is highly relevant to public health.[13] Some processes are designed to enhance

[9] Robinson E, Johnstone AM. Ultraprocessed food (UPF), health, and mechanistic uncertainty: What should we be advising the public to do about UPFs? *PLoS Med.* 2024;21(10):e1004439.
[10] Hess JM, Comeau ME, Casperson S, Slavin JL, Johnson GH, Messina M, Raatz S, Scheett AJ, Bodensteiner A, Palmer DG. Dietary Guidelines meet NOVA: Developing a menu for a healthy dietary pattern using ultra-processed foods. *J Nutr.* 2023;153(8):2472-2481.
[11] Braesco V, Souchon I, Sauvant P, Haurogné T, Maillot M, Féart C, Darmon N. Ultra-processed foods: how functional is the NOVA system?. *European Journal of Clinical Nutrition.* 2022;76(9):1245-1253.
[12] Wang X, Sun Q. Ultra-processed foods and the impact on cardiometabolic health: The role of diet quality. *Diabetes Metab J.* 2024;48(6):1047-1055.
[13] A guide to meat processing. Meat Institute website. https://www.meatinstitute.org/sites/default/files/documents/GuidetoMeatProcessing_final.pdf. Accessed September 4, 2025.

nutrition (fortification), safety (pasteurization, fermentation), or accessibility (freezing vegetables for year-round availability). Others may indeed primarily enhance palatability at the expense of nutrition (e.g., adding sugars, fats for taste). A nuanced policy should not treat all processing as equal. As the Agencies' RFI itself recognizes, the "nature, extent and purpose" of processing should be considered.

Our strong recommendation is that nutritional criteria and ingredient predominance must moderate any process-based classification to ensure common-sense results. Under no circumstance should a food like a chicken breast suddenly be deemed "unhealthy" or "Group 4" simply because it is breaded or chopped and formed into a nugget with a few spices.

Additionally, food processing encompasses a wide spectrum of methods, from washing, cutting, and freezing to more complex formulation, all aimed at ensuring safety, palatability, and shelf-life. How a product is manufactured says little about its nutritional value.[14] A chicken breast remains the same source of complete protein whether it is served whole, sliced into strips, ground and shaped into a nugget, or cooked in a soup. The extent of processing or number of steps used in manufacturing should not be conflated with "unhealthiness" in the absence of nutritional analysis.[15] For example, simply grinding or blending a food (mechanical processing) does not inherently reduce its nutritional quality.

Furthermore, we caution against using confusing and value-laden terms like "ultra-processed" or invoking "industrial processing technologies" in official definitions. Such language inaccurately carries a negative connotation that can be confusing to even nutrition experts let alone consumers, and can bias consumers against foods that may in fact be wholesome.[12,16] Large-scale manufacturing does not equate to poor nutrition, and many foods prepared in so called "industrial settings" are nutritionally equivalent to those made at home.[17] Conversely, foods made in the home are not nutritionally better or safer than those made in large-scale manufacturing facilities.[18] In summary, we believe that terminology matters. The commonly used term "ultra-processed" is too broad and imprecise.[19]

III. Processing Techniques – Do Not Conflate Safety or Traditional Methods with "Ultra-Processing" (NCC Response to RFI Questions 3a–3d)

We urge FDA and USDA to carefully differentiate common food processing techniques, many of which have been used for decades or centuries, from the concept of "ultra-processing" often portrayed in literature. Physical processes such as cutting, grinding, mixing, forming, breading, baking/frying, and freezing are routine in both home and industrial kitchens. Biological processes like fermentation or enzyme use, and chemical techniques like pH adjustment or curing have established roles in ensuring food safety, palatability, and preservation.[14] These methods, per se, do not determine whether a food is nutritionally good or bad.

NCC contends that no processing method should be used to automatically categorize a food without context. For example:

---

[14] Louie JCY. Are all ultra-processed foods bad? A critical review of the NOVA classification system. *Proc Nutr Soc.* 2025:1-9.
[15] Ahrné L, Chen H, Henry CJ, Kim HS, Schneeman B, Windhab EJ. Defining the role of processing in food classification systems—the IUFoST formulation & processing approach. *npj Science of Food*. 2025;9(1):56.
[16] Processed foods. IFIC website. https://ific.org/resources/toolkits/processed-foods/. Accessed September 4, 2025.
[17] Astrup A, Monteiro CA. Does the concept of "ultra-processed foods" help inform dietary guidelines, beyond conventional classification systems? NO. *Am J Clin Nutr.* 2022;116(6):1482-1488.
[18] Pellegrini B, Strootman LX, Fryganas C, Martini D, Fogliano V. Home-made vs industry-made: Nutrient composition and content of potentially harmful compounds of different food products. *Curr Res Food Sci.* 2024;10:100958.
[19] PromSchmidt C, Villano D, Hess J. Perspectives on ultraprocessed food research: critical questions and next steps. *Nutrition Today.* 2025;60(2):53-58.

- **Grinding or forming meat.** Turning chicken meat into ground chicken, patties, or nuggets is primarily a physical modification for texture and convenience. It does not inherently reduce the protein quality or micronutrient content of the chicken and could even enhance essential amino acid availability.[14,20,21] In fact, the protein remains the same complete protein with all essential amino acids, only the physical form has changed.[2] Thus, grinding or emulsifying a chicken breast should not relegate it from a "whole food" to some "less superior" or "harmful" food. However, if the NOVA system were adopted, such products would be classified as such simply due to the change in structure. This illustrates why focusing on the content and nutrient value rather than the process is critical.

- **Battering/breading and frying/baking.** Coating a food in batter or breading prior to cooking is a traditional culinary practice. In the context of chicken, breading adds carbohydrates and possibly some fat (from frying oil), which, of course, affects the nutritional content of the finished product. However, these changes are quantifiable and would be communicated via the Nutrition Facts Panel (e.g., does it still meet nutrient targets?) rather than assumed to confer a negative classification status. The presence of a breading step does not mean the product is akin to a sugary dessert; it remains a protein-based food, often with zero sugars and a meaningful amount of micronutrients (iron, B-vitamins from enriched flour, etc.). FDA and USDA should thus consider processing methods as far as they alter nutritional parameters (for instance, frying increases fat content, which can be measured), rather than as an automatic disqualifier.

- **Extrusion and other modern techniques.** Some processes like extrusion, high-pressure processing, or use of texturizers are often flagged as hallmarks of "ultra-processing." It is important to recognize that these techniques can be used for very different purposes. Extrusion, for example, is used to make puffed snacks and sugary cereals, but also to make high-protein soy analogues and fortified blended foods for malnutrition interventions. The mere use of an extruder does not inherently make a food unhealthy; it depends on what ingredients are being extruded and what the nutritional profile is after processing. A fiber-rich, low-sugar bran cereal extruded into a pellet shape could be very nutritious, whereas an extruded corn puff coated in frosting is not – yet both involve "extrusion." Therefore, we recommend FDA and USDA do not blacklist specific processing steps in the definition. Instead, assess whether the processing in question leads to a final product high in added sugars, refined starch, unhealthy fats, or additives with no nutritive value. If not, then the technique alone is not problematic.

- **Extent of processing alone does not seem to drive observed overconsumption of or health risks tied to "UPFs."** The extent of processing alone does not appear to drive overconsumption or adverse health outcomes often attributed to "ultra-processed foods."[14] Emerging research suggests that certain sensory characteristics of foods, particularly texture and the rate at which a food can be eaten, may help explain differences in energy intake observed in some studies.[14,22] For example, softer or more liquid foods tend to be consumed more quickly than firmer or more viscous foods, resulting in faster energy intake rates (kcal/min) and less time for satiety signals to develop. Conversely, studies and meta-analyses indicate that foods with greater texture or structure can slow eating rate and promote satiation, even when nutrient composition and acceptability are equivalent.[14] Importantly, this does not imply that only less palatable or "tough" foods should be encouraged, nor that texture alone determines

[20] Matthews JJ, Arentson-Lantz EJ, Moughan PJ, Wolfe RR, Ferrando AA, Church DD. Understanding dietary protein quality: Digestible indispensible amino acid scores and beyond. *J Nutr*. 2025:S0022-3166(25)00428-6.
[21] Bailey HM, Mathai JK, Berg EP, Stein HH. Most meat products have digestible indispensable amino acid scores that are greater than 100, but processing may increase or reduce protein quality. *Br J Nutr.* 2020;124(1):14-22.
[22] PRESS RELEASE: Eating rate has sustained effects on energy intake from ultra-processed diets. Restructure Project website. https://restructureproject.org/press-release-eating-rate-has-sustained-effects-on-energy-intake-from-ultra-processed-diets/. Published June 2, 2025. Accessed September 4, 2025.

health outcomes. Overconsumption of any food, regardless of processing level, can contribute to unhealthy weight gain if overall energy balance and physical activity are not considered. Rather, these findings suggest that food structure and texture are modifiable factors that can complement broader strategies for maintaining healthy dietary patterns and energy balance.

To summarize, processing alone is not a proxy for nutrition. Most methods used in preparing chicken products (chilling, cutting, grinding, marinating, cooking, freezing) are aimed at food safety and quality assurance, and are not fundamentally different from home food preparation aside from scale. We recommend FDA and USDA emphasize the outcomes of processing (nutrient content, presence of any harmful substances, etc.) rather than the presence of certain techniques. We also encourage the use of neutral descriptors in any definition (e.g., say "uses various unit operations (blending, heat treatment, etc.)" rather than loaded phrases like "industrial processing" or "chemical alteration," which ascribe a negative intention rather than simply stating the process).

IV. Ingredient Lists and Additives – Emphasize Function and Amount, Not Presence (NCC Response to RFI Questions 2a, 2b, 2c)

The use of ingredients, especially food additives, is a central focus of the "ultra-processed" concept. However, we caution that the mere presence of an ingredient, or a longer ingredient list, should not automatically classify a food as "ultra-processed." Instead, policy makers should consider the function of and inclusion rate of each ingredient in the product:

- **Distinguish functional, minimal additives from bulk ingredients.** Many processed foods (including processed chicken products) contain minor ingredients such as herbs and spices, leavening agents, acidity regulators (vinegar, citric acid), or natural flavors. These often constitute <2% of the product by weight and serve specific functional roles such as enabling the product to rise or bind, enhancing palatability in lieu of adding more sugar or salt, or deterring microbial growth.[14] Such ingredients, especially in miniscule amounts, should not automatically deem a food as "ultra-processed." A chicken patty that includes a dash of rosemary extract or ascorbic acid (vitamin C used as a preservative) is still fundamentally a protein-dense and iron-rich chicken product. Simply put, a product's nutritional value is not undone by the addition of an FDA and/or USDA approved safe ingredient at 0.1% proportion. A product that is 98% chicken and whole grains, 2% seasoning and leavening, is significantly different than a product that is 0% whole food and comprised of sugars, refined starches, and oils. However, a simplistic rule based on ">5 ingredients" or "contains maltodextrin" would group them together.

- **Contextualize so-called "cosmetic" additives.** One critique in defining "UPFs" is the use of additives "to imitate sensorial qualities of unprocessed foods" (e.g., flavors, colors). While it is true that some foods rely heavily on such ingredients, others use them minimally. For example, a touch of natural flavor in a breading is different from a hard candy that is essentially nothing but flavoring and color in a sugar base. We urge FDA and USDA to avoid any system where a single class of ingredient (like an artificial flavor) automatically classifies a food with no regard to inclusion rate or added context. Instead, the Agencies should consider whether the additive meaningfully changes the nutritional profile. In many cases, it does not.

- **Ingredient count is a poor proxy for healthfulness.** It might seem intuitive that foods with very long ingredient lists are "suspect." However, the number of ingredients alone is not a reliable indicator of nutritional quality of a product or meal.[11] A product can have many ingredients and still be nutritious (for example, a multigrain bread or a hearty soup might list 15 ingredients, including vegetables, spices, whole grains, and added vitamins). Conversely, some snacks that are otherwise high in fat, sodium, or

calories might have just a few ingredients. Further, to replace an ingredient that has multiple functions in a food may take more than one ingredient to provide the same total function. Setting an arbitrary ingredient count threshold could encourage counterproductive reformulation (manufacturers might consolidate additives under proprietary blends or remove beneficial added nutrients or ingredients to stay below a number). We recommend FDA and USDA focus on ingredient types and their purpose rather than sheer count.

- **Use neutral terminology for additives with safety functions.** In both public discourse and some academic definitions, words like "acid," "emulsifier," or "preservative" are used pejoratively. This overlooks that many of these substances are common food-derived agents and critical for food safety. It is important that these "functional ingredients" are not considered as negative food components. For instance, calling vinegar or citric acid an ingredient for "acidity control" accurately describes its role and avoids scaring consumers with scientific names. We appreciate FDA and USDA's attention to how terminology may affect understanding and suggest adopting language that emphasizes the safety and stability roles these minor ingredients play.

NCC encourages the Agencies to focus on the core ingredients that make up the bulk of the food and determine its nutritional profile. By adopting this nuanced view, FDA and USDA can avoid penalizing products for prudent use of ingredients that ensure safety (for example, the use of lactates or cultured dextrose to inhibit pathogens in a chicken sausage) or improve nutrient delivery (adding a lipid source to help vitamin absorption, etc.), while still identifying products where additives are used excessively to mask a lack of nutritious whole foods.

V. Implications for Federal Food Programs and Equity Considerations (NCC Response to RFI Question 6)

We strongly advise that FDA and USDA carefully evaluate the downstream effects of any processing-based definition on federal nutrition assistance programs (such as the National School Lunch Program, School Breakfast Program, Child and Adult Care Food Program, Supplemental Nutrition Assistance Program (SNAP), WIC, and food distribution programs. An overly broad or misapplied definition could have unintended negative consequences for food access and nutrition security, especially among children and low-income populations.

Key considerations:

- **Do not inadvertently stigmatize or exclude nutrient-dense staples from programs.** Onsite school kitchen may have limited equipment to prepare, cook, and serve food. In many school systems, food is prepared in central kitchen and distributed for re-heating onsite. School meals and other programs routinely use some amount of "processed" foods to meet nutritional and practical needs. For example, school cafeterias often serve items like breaded chicken patties or nuggets, whole-grain enriched rolls, fortified breakfast cereals, and flavored milks. These items are popular with children (ensuring intake) and are fortified or paired with other foods to meet strict USDA meal pattern requirements. According to one recent study, the most popular school lunch items in 11 of 50 states is some form of chicken product (chicken nuggets, chicken sandwich, etc.) that might otherwise be considered a so-called "UPF" if classified by the NOVA system. On average, each state consumes over 280 million chicken nuggets per year.[23, 24] If a food processing classification led policymakers to discourage or even disallow "highly processed" items, there is a risk that many healthful, economical foods would be swept up in that net. For instance, imagine a school avoiding serving a chicken sandwich because the bread or the chicken

[23] The State of School Lunch Report: An Analysis of America's School Lunches. ProCare website. https://www.procaretherapy.com/blog/the-state-of-school-lunch-report-an-analysis-of-americas-school-lunches/. Published April 16, 2024. Accessed September 8, 2025.
[24] Chicken nugget trend overview. Tastewise website. https://tastewise.io/foodtrends/chicken/nugget. Accessed September 8, 2025.

patty might be labeled "ultra-processed" – the result could be children missing out on protein. Or a food bank might decline donations of canned soups or stews that are lifesaving for families, due to a misconception that any mixed packaged food is "ultra-processed" to avoid. This would be a tragic outcome. We caution that broad-brush limits on processed foods in programs could reduce participation or nutrient intake, as beneficiaries may reject unprocessed substitutes or simply not get enough to eat.

- **Cultural and economic realities.** Processed foods, including processed chicken products, play an important role in many cultures and in making healthy diets achievable within time and cost constraints. A blanket demonization could disproportionately impact working families who rely on convenient protein options, or communities where traditional dishes involve processed elements (like tortillas, breads, canned beans, etc.). It is vital to balance processing concerns with practical nutrition. For example, families in underserved areas might rely on frozen chicken or fish sticks as affordable protein that children will eat, especially if fresh meat is expensive, cold storage scarce, or kitchens are limited. If messages or policies imply these are "bad foods" to avoid, we may inadvertently push those families toward less nutritious alternatives or simply lesser intake. We also must ensure that nutrition policies do not inadvertently shame the foods that are accessible to low-income households while idealizing foods that are expensive or labor-intensive to prepare. Another critical factor that must inform FDA and USDA's consideration of a food classification framework is cost and convenience, particularly for families and nutrition programs that operate under tight resource constraints.

    - Recent USDA-led research comparing more- and less-processed Western menus demonstrates that diets emphasizing less-processed foods do not necessarily improve nutrient density, but they do impose significantly higher financial and time costs.[11,25] For example, one study found that a less-processed menu costs $15.91 per person per day, compared with $9.85 per day for a more-processed menu, despite comparable HEI scores (44 vs. 43). In addition, the less-processed menu had a much shorter median shelf life (35 days vs. 120 days), increasing the risk of spoilage and food waste. Chicken items featured as part of the processed menus included breaded chicken patties, chicken strips, and breaded chicken tenders. These findings are especially important in the context of food insecurity and public feeding programs, where cost and shelf stability directly impact nutrition access.

    - A separate proof-of-concept study further showed that it is possible to construct a nutrient-adequate, high-quality diet where over 90% of calories came from so-called NOVA-defined "ultra-processed foods," with an HEI-2015 score of 86 out of 100 – substantially above the U.S. population average of ~59. Importantly, the foods used in this study included chicken strips, chicken sausage, and deli-style chicken, which served as affordable, protein-rich anchors of the menu. These items provided complete, highly bioavailable protein alongside key vitamins and minerals, all while remaining cost-effective and acceptable to consumers, and also serving as a vehicle for increased intake of vegetables.

    - Collectively, this evidence reinforces that processing level is not a reliable proxy for affordability, accessibility, or nutrition. More-processed chicken products can play a vital role in reducing preparation time, extending shelf life, lowering costs, and ensuring children and families consume sufficient high-quality protein. For federal feeding programs, excluding such foods on

[25] Hess JM, Comeau ME, Scheett AJ, Bodensteiner A, Levine AS. Using less processed food to mimic a standard American diet does not improve nutrient value and may result in a shorter shelf life at a higher financial cost. *Curr Dev Nutr.* 2024;8(11):104471.

the basis of processing alone could unintentionally raise costs, shorten product shelf life, and reduce the practicality of meal preparation – ultimately undermining nutrition security. Instead, FDA and USDA should recognize that nutrient-dense processed foods like chicken products are indispensable tools for meeting dietary guidance within the financial and logistical realities of U.S. households and public programs.

- **Avoiding unintended consequences.** NCC believes it is best to avoid a scenario where well-intentioned policy around processed foods may lead to schools cutting back on entrée options like chicken strips or patties, and, as a result, kids fill up on protein-limited meals or snacks or skip meals altogether. The net nutritional impact must be considered. The same goes for SNAP: if certain convenience foods are disfavored, will participants be able to replace them with equivalent nutrition easily? We encourage FDA and USDA to consult with child nutrition experts, school foodservice operators, emergency food providers, and community organizations to gauge how a food classification system might be interpreted on the ground. NCC's perspective is that we must not compromise the successes we have had in improving nutrition in programs by focusing only on processing. There is a reason these programs have moved toward nutrient-based standards over many decades – because that targets health outcomes more directly.

- **Support for continuous improvement.** Rather than binary inclusion/exclusion of "ultra-processed foods" in programs, we recommend policies that incentivize reformulation and nutritional improvement of processed foods. For example, if some combination foods used in school meals are high in sodium or low in whole grains, the answer is to set reformulation targets (as USDA has done for sodium reduction in school meals) and provide technical support to industry to hit those targets, not to vilify the entire category.

NCC cautions that an inflexible or overly broad food classification definition in policy could inadvertently harm the nutritional well-being of the very vulnerable populations we aim to help. Children, in particular, benefit from convenient, appealing foods that deliver protein and essential nutrients – many of which may be considered traditional "UPFs" under the NOVA system (like a whole-grain chicken nugget or a cheese stick). We urge that any integration of a processed food classification system into programs be done in a nuanced way that does not reduce diet quality or deter participation. Policymakers should emphasize overall dietary patterns (as measured by tools like HEI) and incremental improvement of foods rather than blanket exclusions.

VI. Conclusion

In closing, while NCC has reservations regarding the classification of foods, we believe that focusing on nutrient density, protein quality, and overall diet quality is the most constructive path forward. This approach will protect public health and promote consumption of nutrient-dense foods by steering consumers toward healthier choices, while avoiding undue stigma on safe, affordable, and culturally familiar foods, like chicken, which contribute importantly to nutrition, especially for children and underserved populations.

The current discourse around so-called "ultra-processed foods" is at a crossroads: it has raised valid concerns about poor-quality diets, but it also risks oversimplifying a complex issue. FDA and USDA have the opportunity to craft a definition and identify critically needed research to inform future policy frameworks that address the core problems (excess sugars, low nutrients, overconsumption of calorie-dense snacks) without casting a net so wide that it ensnares nutrient-dense foods produced for safety and convenience. We have argued that terms matter, that classification schemes like NOVA have limitations if unadjusted, and that any effective system must integrate nutritional criteria. We also highlighted the practical implications for food programs and the

importance of not undermining nutritional security.

NCC supports the Agencies' commitment to further research and dialogue in this area and urges that any definition developed under this RFI be limited for use in directing scientific research. Should the Agencies decide the science merits developing a definition for broader regulatory and policy use, they should do so through the notice and comment rulemaking process, in accordance with the Administrative Procedure Act. This will ensure that all interested parties are provided a meaningful opportunity to understand the Agencies' thinking and to formally comment on this important topic.

NCC appreciates the thoughtful consideration of these comments. We stand ready to provide further data, expertise, and collaboration as FDA and USDA navigate this definitional challenge, and we share the goal of improving Americans' diet quality and health outcomes, especially for children. Importantly, a definition that incorporates nutrient considerations can better guide consumers and policymakers in recognizing the differences between foods that may undergo processing but still deliver meaningful nutrition and those that offer little benefit to health.

We appreciate the opportunity to provide feedback on this critical topic, and we hope our perspective, representing NCC members that feed millions daily, provides useful insights into how a nutrition-focused classification can be achieved.

Respectfully submitted,

Ashley B. Peterson, Ph.D.
Senior Vice President, Scientific and Regulatory Affairs
National Chicken Council