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REVIEW ARTICLE

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From MyPlate to "Real Food": Major Reforms, Scientific Controversies, and Public Nutrition Policy Implications of the 2025–2030 Dietary Guidelines for Americans

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Abstract

Objective: To systematically characterize the major changes in the 2025–2030 DGA relative to the 2020–2025 edition, evaluate the consistency of these changes with the 2025 Dietary Guidelines Advisory Committee (DGAC) Scientific Report, assess the consumer-communication implications of the new inverted-pyramid graphic, and draw evidence-based lessons for other national dietary guidelines. Methods: A structured documentary comparative analysis was conducted. Ten a priori analytic dimensions (communication strategy, graphic tool, protein, added sugars, dairy, fat quality, alcohol, degree of food processing, whole grains, and sodium) were coded independently by two analysts using a standardized extraction template; discrepancies were resolved by consensus. Quantifiable recommendations were converted to absolute daily amounts using a 2,000-kcal/d reference diet and a 70-kg reference adult. Consistency with the DGAC Scientific Report was classified as adopted, partially adopted, or divergent for each contested domain. Sources were restricted to the two DGA editions, the DGAC Scientific Report, the Scientific Foundation document, and peer-reviewed or official commentaries. Results: Eight major shifts were identified: (1) consumer-facing advice for the first time in 25 years; (2) an inverted food pyramid replacing MyPlate; (3) a population-wide protein target of 1.2–1.6 g/kg body weight/day for adults and children, a 50–100% increase over the previous 0.8 g/kg benchmark; (4) added-sugar limits tightened from <10% of energy (~50 g/d) to ≤10 g per meal (~30 g/d across three main meals, excluding snacks governed by separate FDA "healthy" claim criteria), with avoidance before age 10; (5) endorsement of unsweetened full-fat dairy (3 servings/d), reversing decades of low-fat/fat-free guidance; (6) alcohol guidance without numeric limits; (7) the first explicit restriction of "highly processed foods"; and (8) retention of the <10% saturated-fat ceiling alongside prominent visual placement of red meat, butter, and beef tallow. The protein target was introduced at the policy stage and was not recommended by the DGAC; recent expert reviews judge the evidence insufficient for a universal population-wide recommendation. The DGAC's calls to prioritize plant proteins and to strengthen alcohol caution were weakened or omitted in the final text. Conclusions: The 2025–2030 DGA represents a substantive, on balance positive reform on added sugars, highly processed foods, and refined carbohydrates, but a mixed or regressive one on alcohol messaging, saturated-fat communication, and the universality of the protein target. Its public health value will be determined by implementation in federal nutrition programs, industry reformulation responses, and longitudinal dietary monitoring. For other countries, the edition offers both a model (per-meal sugar thresholds, explicit processing-level restrictions) and a cautionary lesson (the risks of graphic-visual messaging that outruns the quantitative text).

Keywords Dietary Guidelines for Americans; ultra-processed foods; added sugars; protein; saturated fat; nutrition policy; food-based dietary guidelines

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1. Introduction

Diet-related chronic disease constitutes the heaviest public health burden in the United States: more than 70% of adults have overweight or obesity, and nearly 90% of healthcare spending is devoted to chronic disease treatment; obesity and poor diet increasingly disqualify young Americans from military service [1], a situation the administration has framed as a national health emergency. Against this backdrop, the Dietary Guidelines for Americans (DGA)—jointly issued every five years by the Department of Health and Human Services (HHS) and the Department of Agriculture (USDA) under the National Nutrition Monitoring and Related Research Act—determine the standards for school meals, WIC, SNAP, and other federal programs [2], and serve as a global reference for dietary guideline development.

The tenth edition of the DGA, covering 2025–2030, was released in final form on January 7, 2026 [1,3-4]. Unlike its nine predecessors, which addressed policymakers and professionals, this edition speaks directly to consumers under the banner "Eat Real Food," emphasizing whole, nutrient-dense foods and restricting highly processed foods, added sugars, and refined carbohydrates. Notably, the final text departs from the 2025 DGAC Scientific Report on several contested domains [5], prompting vigorous debate across academia, clinical nutrition practice, and industry.

This study addresses four questions: (1) What substantive changes does the 2025–2030 DGA introduce relative to the 2020–2025 edition? (2) How consistent are these changes with the DGAC Scientific Report and the wider evidence base? (3) What are the likely consumer-cognitive effects of the new communication strategy, particularly the inverted pyramid? (4) What concrete lessons does the edition offer—both positive and cautionary—for other national dietary guidelines, including China's?

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2. Materials and Methods

2.1 Design and data sources

This is a structured documentary comparative analysis (policy analysis). The corpus comprised: (i) the 2025–2030 DGA final text and its Scientific Foundation document [1,6]; (ii) the 2020–2025 DGA (9th edition) [2]; (iii) the Scientific Report of the 2025 Dietary Guidelines Advisory Committee [5]; and (iv) peer-reviewed appraisals and official institutional commentaries published between January and September 2026 [3-11]. Release status and dates were verified against official government sources; the tenth edition was confirmed to be the final, released version (January 7, 2026), not a draft [1,4].

2.2 Analytic framework and extraction procedure

Ten a priori dimensions were derived from the DGA's statutory scope and the structure of prior editions: (1) communication strategy and target audience; (2) graphic/communication tool; (3) protein quantity and framing; (4) added sugars; (5) dairy fat; (6) fat quality and saturated fat; (7) alcohol; (8) degree of food processing; (9) whole grains and refined carbohydrates; (10) sodium.

Two analysts independently extracted every quantitative recommendation and key qualitative statement for each dimension from both editions using a standardized template (recommendation, target population, numeric threshold, food-level exemplars). Extraction discrepancies were discussed and resolved by consensus; because the corpus consisted of two primary documents, a formal inter-rater statistic was not computed, but the dual independent extraction with a fixed template served as the reliability safeguard. Each change was then classified as: strengthened, relaxed, reversed, newly introduced, or unchanged, with the classification justified by direct textual comparison.

2.3 Quantitative conversion

To make changes comparable, quantitative recommendations were converted to absolute daily amounts using a 2,000-kcal/d reference diet (the U.S. Nutrition Facts label reference) and a 70-kg reference adult. For added sugars, the new per-meal cap (≤10 g) was applied to three main meals (≈30 g/d); snacks are governed by separate FDA "healthy" claim thresholds (e.g., ≤2.5 g added sugar per 2/3-cup yogurt equivalent [11]) and are therefore not included in the 30-g figure. For protein, the new range was applied to the 70-kg reference adult and compared with the previous 0.8 g/kg RDA benchmark. All conversions are reported with their assumptions in Table 1 footnotes.

2.4 Consistency assessment against the DGAC Scientific Report

For each contested domain, the DGAC's specific recommendation was extracted verbatim and compared with the final guideline text and the Scientific Foundation document. Consistency was classified as: **adopted** (final text follows the committee), **partially adopted** (final text follows in part but weakens, omits, or re-frames key elements), or **divergent** (final text contradicts or omits the committee's recommendation). Divergences were further characterized by plausible driver (evidence reinterpretation, policy-stage addition, or political/industry influence) based on documented commentary, acknowledging that the DGA statute does not require the agencies to follow the committee's advice.

3. Results

3.1 Edition-to-edition comparison

Table 1. Key recommendations in the 2020–2025 and 2025–2030 editions of the DGA

Domain	2020–2025 edition	2025–2030 edition	Nature of change
Core message	Follow a healthy dietary pattern	"Eat Real Food" (whole, nutrient-dense foods)	Reversed: first consumer-facing edition in 25 years
Graphic tool	MyPlate	Inverted pyramid (widest layer at top: protein, vegetables, fruits, dairy, healthy fats)	Reversed
Protein	0.8 g/kg/d (RDA benchmark)	1.2–1.6 g/kg/d for adults and children, prioritized at every meal	Strengthened 50–100%
Added sugars	<10% of energy (≈50 g/d at 2,000 kcal)	≤10 g per meal (≈30 g/d, three main meals); avoid before age 10 (previously age 2)	Strengthened ≈40%
Dairy	Low-fat/fat-free milk and products	Full-fat, unsweetened dairy, 3 servings/d	Reversed
Saturated fat	<10% of energy; limit red meat	<10% ceiling retained, but red meat, butter, and beef tallow listed under "healthy fats"	Mixed (text retained, framing relaxed)
Alcohol	Men ≤2 drinks/d, women ≤1 drink/d	"Drinking less alcohol is better for health"; no numeric limits; abstinence groups specified	Relaxed/made vaguer
Ultra-processed foods	Not addressed as a category	First explicit restriction; artificial colors, sweeteners, and petroleum-based additives named	Newly introduced
Whole grains/refined carbs	Half of grains whole	Whole grains 2–4 servings/d; sharply reduce refined carbohydrates	Strengthened
Sodium	<2,300 mg/d	<2,300 mg/d (age ≥14 y)	Unchanged

Conversions assume a 2,000-kcal/d reference diet and a 70-kg adult. Added-sugar figures cover three main meals only; snacks fall under FDA "healthy" claim criteria and may raise the daily total above 30 g. Protein conversion: 0.8 g/kg × 70 kg = 56 g/d; 1.2–1.6 g/kg × 70 kg = 84–112 g/d.

3.2 Major reforms in detail

(1) Consumer-facing communication and the inverted pyramid. The 2025–2030 edition is markedly shorter than prior iterations and addressed directly to consumers, accompanied by supplementary scientific documents published on a new official government website (realfood.gov) [1,4,12]. The MyPlate icon is replaced by an inverted pyramid whose widest top layer features protein foods, vegetables, fruits, dairy, and healthy fats, with whole grains in a narrower tier and highly processed foods and sugar-sweetened beverages excluded from the pyramid altogether.

(2) Protein. The guidelines set an explicit daily target—stated in the text as "protein serving goals: 1.2–1.6 grams of protein per kilogram of body weight per day, adjusting as needed based on individual caloric requirements"—for adults and children [1,10], alongside advice to prioritize protein at every meal from both animal and plant sources and to prefer baking, broiling, roasting, stir-frying, or grilling over deep-frying. For the 70-kg reference adult this corresponds to 84–112 g/d versus 56 g/d under the previous 0.8 g/kg benchmark. Two qualifications are essential. First, the increase was introduced at the policy stage: the shift "was not included in the 2025 DGAC report." [13] Second, the evidence is strongest in defined subgroups—older adults, individuals with overweight or obesity

undergoing weight management, and active individuals—rather than as a universal target [7]; the American Society for Nutrition's 2026 Perspective concluded that the guidelines "fall short" of the standard required to justify a universal higher-protein recommendation for all Americans. National intake data further temper the change: men aged 19–50 already average about 96 g/d and women about 70 g/d [10], so much of the population already lies within or near the new range, and some experts warn that raising the goal value could encourage excessive intake and unnecessary renal burden in susceptible individuals [14].

(3) Added sugars—the strictest standard to date. The guidelines state that no amount of added sugar or non-nutritive sweetener is considered part of a healthy diet, operationalized as ≤10 g of added sugar per meal, with avoidance recommended before age 10 [1]. Packaged snacks marketed under the FDA "healthy" claim must meet per-serving thresholds (e.g., ≤2.5 g added sugar per 2/3-cup yogurt equivalent) [11].

(4) Full-fat dairy. Unsweetened full-fat dairy is recommended at 3 servings/d [1], formally ending the low-fat/fat-first advice in place since the 1980s.

(5) Expanded population coverage. Chapters are organized by life stage [1] (infancy—including breastfeeding, introduction of potentially allergenic foods at around 6 months, and diluted peanut butter; children and adolescents; pregnancy and lactation; older adults; people with chronic diseases; and vegetarian/vegan populations), with a first-time acknowledgment that lower-carbohydrate dietary patterns may improve outcomes in some chronic conditions, and new content on gut health emphasizing fermented foods and fiber for the microbiome.

Table 2. Consistency of the final 2025–2030 DGA with the 2025 DGAC Scientific Report on contested domains

Domain	DGAC Scientific Report	Final 2025–2030 DGA	Classification
Alcohol	Evidence indicates risk at all intake levels; tighten caution	"Drinking less is better for health"; no numeric limits; abstinence groups listed	Divergent (weakened)
Protein sources	Encouraged prioritizing plant proteins for cardiometabolic health	Animal and plant proteins treated similarly; red meat visually prominent	Divergent (weakened)
Protein quantity	No universal increase recommended	1.2–1.6 g/kg/d population target for adults and children	Divergent (strengthened beyond committee)
Ultra-processed foods	Limit UPF (high-convergence evidence)	First explicit UPF restriction; named additives	Adopted (strengthened)
Added sugars	<10% of energy	≤10 g/meal; avoid before age 10	Adopted (strengthened; per-meal method lacks methodological justification)
Saturated fat	Maintain <10% of energy	Ceiling retained but animal fats framed as "healthy fats"	Partially adopted (mixed signal)
Full-fat dairy	Context-dependent; benefits mainly fermented products	Full-fat dairy 3 servings/d broadly endorsed	Partially adopted (overgeneralization risk)

4. Discussion

4.1 Consumer communication: promise and cognitive risk

The decision to address consumers directly is arguably the edition's boldest innovation, and the per-meal sugar threshold is a genuinely operational metric that prior percentage-of-energy advice lacked. However, graphic design itself functions as policy signal. Placing protein foods in the pyramid's widest, topmost layer risks a "more is better" misreading—particularly concerning given that most Americans already meet or exceed the old benchmark [14]—while demoting grains and visually elevating red meat, butter, and beef tallow can be read as license to increase saturated-fat intake even though the quantitative <10% ceiling remains in the text [9]. Critics have accordingly warned that the inverted pyramid "could be misinterpreted by the public, potentially encouraging extreme dietary choices rather than balanced, evidence-based nutrition." The quantity-over-quality framing compounds this: present evidence associates plant proteins and fish with more favorable outcomes than diets high in red meat [9], yet the graphic grants animal and plant proteins equivalent prominence. Future consumer-testing research should verify whether pyramid readers can correctly reconcile the visual hierarchy with the numeric ceilings.

4.2 Consistency with the DGAC Scientific Report

Sources: DGAC column summarized from the Scientific Report [5]; final-DGA column from the guideline text [1] and the Scientific Foundation document [6].

The pattern is asymmetrical: where the DGAC urged restriction (alcohol, red meat, plant-protein priority), the final text weakened or omitted; where stronger public health action was defensible and commercially tolerable (added sugars, ultra-processed foods), the final text went beyond the committee. Peer-reviewed appraisals characterize the protein increase as extrapolation of subgroup and therapeutic evidence to the general population, and the per-meal sugar limit as lacking methodological justification [8]. These divergences matter because the DGA statute requires the guidelines to be based on the preponderance of current scientific knowledge; visible policy-stage departures from the advisory committee's advice—whatever their substantive merits—erode the procedural legitimacy on which guideline adherence depends.

4.3 The saturated-fat/protein internal tension

If consumers pursuing the 84–112 g/d protein target draw disproportionately on the pyramid's most prominent animal-fat-bearing foods, saturated fat intake could rise toward or beyond the retained 10% ceiling, simultaneously increasing LDL cholesterol and cardiovascular risk [8-9]. The text never resolves this tension; the practical mitigation must come from implementation standards (school-meal pattern specifications, procurement rules) that de facto restore source prioritization that the text abandoned.

4.4 Overall assessment

Weighing the evidence, our overall judgment is as follows. On **added sugars, ultra-processed foods, refined carbohydrates, and consumer-directed clarity**, the 2025–2030 edition is a clear advance and arguably the strongest DGA yet on processing-level concerns; the ≤10 g/meal threshold and the named-additive restrictions create direct policy levers through FDA "healthy" claims and federal program standards. On **alcohol**, removing numeric limits is a regression that severs the guidance from the evidence that risk rises with any consumption. On **saturated fat**, retaining the 10% ceiling while visually celebrating animal fats is an unresolved internal contradiction. On **protein**, the new target is directionally defensible for older adults and people in weight management but overextended as a universal population goal for adults and children alike, and its provenance outside the DGAC process weakens its legitimacy. Net direction: a meaningful reform whose main risks are communicative rather than substantive, provided implementation rules compensate for the text's ambiguities.

4.5 Implementation and monitoring agenda

Four evaluation tracks are proposed: (1) revision of school-meal, WIC, and SNAP standards within 12–24 months of release; (2) industry reformulation responses to the per-meal sugar threshold and "healthy" claim criteria; (3) NHANES-based monitoring of saturated fat, added sugar, and UPF energy-share trends; and (4) experimental consumer-cognition studies of the inverted pyramid, testing whether readers correctly integrate the visual hierarchy with quantitative ceilings.

4.6 International implications: specifics, not generalities

China. The Dietary Guidelines for Chinese Residents (2022) already operate a "1+9" life-stage system (nine specific-population guidelines, including a newly added advanced-elderly chapter), so the DGA's life-stage architecture is convergent rather than novel. Concrete, transferable elements are: (i) a per-meal or per-snack sugar threshold—China currently specifies added sugar <50 g/d, preferably <25 g/d, whereas the U.S. per-meal metric translates to ≈30 g/d over main meals and links directly to front-of-pack and claim regulation; (ii) an explicit processing-level category—China's 2022 text restricts "highly processed meat products" but has no standalone UPF chapter; and (iii) multi-tool visualization (pagoda, plate, and children's abacus), which offers a natural experiment against which the U.S. single-pyramid strategy can be compared. One practice to avoid: the 2022 Chinese guidelines retained a quantitative alcohol ceiling (≤15 g/d of pure alcohol for adults who drink), and the U.S. retreat from numeric limits illustrates the cost of abandoning such anchors.

Japan and Korea. Japan's food guide spinning top—an inverted cone, coincidentally similar in geometry to the new U.S. pyramid—already advises moderating highly processed snacks, confectionery, and sugar-sweetened beverages, but stops short of a UPF chapter [16]; Japan therefore illustrates the same definitional caution that constrained earlier DGA editions. Korea's 2025 Dietary Reference Intakes (released December 31, 2025) independently moved in the same direction as the new DGA—lowering the acceptable carbohydrate range (55–65% to 50–65% of energy), raising protein (7–20% to 10–20%), and adding explicit sugary-drink reduction advice [17]—demonstrating that the macronutrient drift is regional, not uniquely American. Notably, Korea chose an energy-percentage route for protein rather than a g/kg population target, an alternative the DGA might have adopted to avoid the universal-recommendation controversy.

Singapore. Singapore's approach—approximately 0.8 g/kg/d for adults aged 18–49 and 1.2 g/kg/d for those 50 and older [18]—exemplifies age-tiered protein guidance and stands as a direct counterpoint to the DGA's flat range spanning children to older adults; the contrast sharpens the question of whether one protein target can responsibly cover anabolic resistance, growth, and kidney-risk heterogeneity simultaneously.

The overarching lessons are threefold: (1) "ultra-processed foods" has crossed from academic construct into official guidance, but boundary definitions remain a shared technical challenge; (2) graphics are policy instruments and require pre-release evidence review of their cognitive effects; and (3) procedural legitimacy—visible consistency between advisory committee advice and final text—underpins public trust, a principle that applies with equal force to China's next revision cycle.

5. Conclusion

The 2025–2030 DGA delivers substantive, largely beneficial reform on added sugars, ultra-processed foods, and refined carbohydrates (≈40% tightening of daily added-sugar allowance; first-ever UPF restrictions), alongside a communication strategy of genuine ambition. However, the universal protein target (introduced without DGAC endorsement), the removal of alcohol limits, and the unresolved saturated-fat visual-textual contradiction temper the achievement. Its public health value will be decided in implementation: federal program standards, industry reformulation, longitudinal monitoring, and consumer-cognition research. For guideline developers worldwide, the edition is simultaneously a model and a cautionary tale.

CRediT authorship contribution statement

Q.W. conceived the framework and drafted the manuscript. H.Y. contributed to the assurance requirements and evidence synthesis. Y.Z. contributed to the sports-medicine integration and clinical validation discussion. All authors revised and approved the final manuscript.

Declaration of generative AI and AI-assisted technologies in the writing process

The free version of Grammarly was used for spell-checking and grammar correction. After using this tool, the authors reviewed and edited the content as needed and take full responsibility for the content of the publication.

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Declaration of competing interest

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References

1. U.S. Department of Health and Human Services; U.S. Department of Agriculture. *Dietary Guidelines for Americans, 2025–2030* (10th ed.). Washington, DC: HHS/USDA; January 7, 2026. https://cdn.realfood.gov/DGA.pdf
2. HHS; USDA. *Dietary Guidelines for Americans, 2020–2025* (9th ed.). Washington, DC: HHS/USDA; 2020.
3. Mozaffarian D. The 2025–2030 Dietary Guidelines for Americans. *JAMA*. 2026;335(7):575–577. doi:10.1001/jama.2026.0283.
4. Covington & Burling LLP. *Release of the 2025–2030 Dietary Guidelines for Americans* (regulatory update). 2026.
5. Dietary Guidelines Advisory Committee. *Scientific Report of the 2025 Dietary Guidelines Advisory Committee*. Washington, DC: HHS/USDA; 2025.
6. HHS; USDA. *The Scientific Foundation for the Dietary Guidelines for Americans*. Washington, DC: HHS/USDA; 2026. https://www.realfood.gov
7. Pasiakos S, et al. Perspectives on the protein recommendations in the 2025–2030 Dietary Guidelines for Americans. *J Nutr*. 2026 (published July 24, 2026). American Society for Nutrition.
8. Papandreou C. A critical narrative review appraisal of the 2025–2030 Dietary Guidelines for Americans. 2026. PMC13074671.
9. Harvard T.H. Chan School of Public Health, The Nutrition Source. *Dietary Guidelines for Americans 2025–2030: Progress on added sugar, protein hype, saturated fat*. January 9, 2026.
10. MedlinePlus (U.S. National Library of Medicine). *Dietary Guidelines for Americans 2025–2030*. February 9, 2026.
11. Perkins Coie LLP. *2025–2030 Dietary Guidelines for Americans: Regulatory Update and Key Changes*. February 4, 2026.
12. HHS; USDA. Official portal: *Dietary Guidelines for Americans*. https://www.realfood.gov; https://www.dietaryguidelines.gov
13. American College of Cardiology. Commentary on the 2025–2030 DGA protein shift (as cited in GLP Winner regulatory analysis, August 9, 2026).
14. Teachers College Columbia University, Tisch Food Center. *The 2025–2030 Dietary Guidelines for Americans: Let's digest this!* 2026.
15. Chinese Nutrition Society. *Dietary Guidelines for Chinese Residents (2022)*. Beijing: CNS; April 26, 2022.
16. FAO. *Food-based dietary guidelines—Japan*. FAO Nutrition Education and Consumer Awareness Group. https://www.fao.org/nutrition/education/food-dietary-guidelines/regions/countries/japan/en/
17. Ministry of Health and Welfare, Republic of Korea; Korean Nutrition Society. *2025 Korean Dietary Reference Intakes*. Seoul; December 31, 2025.
18. Health Promotion Board, Singapore. Recommended Nutrient Intakes for Singapore adults (age-specific protein requirements). Singapore: HPB.