Nutrition Evidence Debate Series Toolkit

Purpose

The Nutrition Evidence Debate Series teaches residents how to evaluate polarized nutrition claims using the same evidence-based reasoning applied to other areas of internal medicine. Residents are assigned positions rather than choosing them, analyze a curated evidence packet, defend an interpretation, rebut opposing evidence, and end with a patient-facing recommendation. The goal is not to identify a "winning diet" or ideology. The goal is to teach residents to distinguish mechanism from outcome data, association from causation, nutrient substitution from simple exposure, and scientific uncertainty from clinical indecision.

Standard 60-Minute Debate Format

Time	Activity
5 min	Clinical vignette + audience pre-vote
10 min	Team A opening argument
10 min	Team B opening argument
5 min	Team A rebuttal
5 min	Team B rebuttal
10 min	Audience questions
10 min	Faculty/RDN evidence synthesis
5 min	Two-sentence patient recommendation + post-vote

Common Nutrition Evidence Scorecard

Domain	Question residents must answer
Exposure definition	What exactly is being compared? Is the nutrition exposure adequately defined?
Counterfactual / substitution	What replaces the nutrient or food being removed?
Study design	Mechanistic study, feeding trial, RCT, cohort, meta-analysis, or guideline?
Internal validity	Randomization, adherence, confounding, measurement error, missing data?
Endpoint	Biomarker, weight, HbA1c, cardiovascular event, mortality?
Magnitude	Statistically significant versus clinically meaningful?
Duration	Can a short feeding trial answer a long-term disease question?
Generalizability	Does the study population resemble the patient being counseled?
Heterogeneity	Do source, dose, phenotype, or dietary context modify the effect?
Certainty	Strong, moderate, limited/mixed, or insufficient?
Clinical translation	What should the resident actually recommend tomorrow in clinic?

Debate 1. Seed Oils: Harmful, Helpful, or Mostly Hype?

Debate proposition: For cardiometabolic health, replacing saturated fats with commonly consumed seed oils rich in linoleic acid is beneficial and there is insufficient evidence to advise patients to avoid seed oils.

Clinical vignette

A 49-year-old man with LDL-C 154 mg/dL and hypertension has eliminated canola, soybean, sunflower, and corn oils after hearing that omega-6 fats cause inflammation and oxidation. He now cooks mainly with butter, coconut oil, and beef tallow. He asks whether this will lower his cardiovascular risk.

Team A / Supporting Evidence

Core Article A1: Effect of dietary linoleic acid on markers of inflammation in healthy persons: a systematic review of randomized controlled trials

Johnson GH, Fritsche K. J Acad Nutr Diet. 2012. PubMed / source

Why assigned: Addresses the common mechanistic claim that omega-6 linoleic acid is intrinsically pro-inflammatory; useful for contrasting pathway plausibility with human intervention evidence.

Core Article A2: Dietary linoleic acid and risk of coronary heart disease

Farvid MS, et al. Circulation. 2014. PubMed / source

Why assigned: Introduces substitution analysis and observational evidence linking higher linoleic acid intake, particularly in place of saturated fat, with lower CHD risk.

Supplemental A3: Dietary Fats and Cardiovascular Disease: A Presidential Advisory From the American Heart Association

Sacks FM, et al. Circulation. 2017. PubMed / source

Why assigned: Provides a guideline-level synthesis emphasizing replacement of saturated fat with polyunsaturated vegetable oils.

Team B / Challenging Evidence

Core Article B1: Use of dietary linoleic acid for secondary prevention of coronary heart disease and death: evaluation of recovered data from the Sydney Diet Heart Study

Ramsden CE, et al. BMJ. 2013. PubMed / source

Why assigned: Challenges a simple “more linoleic acid is always better” interpretation and raises questions about historical interventions, food formulations, and clinical outcomes.

Core Article B2: Re-evaluation of the traditional diet-heart hypothesis: analysis of recovered data from Minnesota Coronary Experiment

Ramsden CE, et al. BMJ. 2016. PubMed / source

Why assigned: Shows cholesterol lowering without clear mortality benefit in a historical randomized intervention, useful for discussing surrogate outcomes and generalizability.

Supplemental B3: The effect of replacing saturated fat with mostly n-6 polyunsaturated fat on coronary heart disease: a meta-analysis of randomised controlled trials.

Hamley S. Nutr J. 2017. PubMed / source

Why assigned: Offers a critical meta-analytic interpretation of trials replacing saturated fat with predominantly n-6 PUFA.

What Residents Must Distill

- “Seed oils” is not a scientifically uniform exposure; oils differ substantially in fatty-acid composition.
- Mechanistic plausibility does not establish that normal dietary linoleic acid causes clinically meaningful inflammation.

- Replacement nutrient matters: replacing saturated fat with unsaturated fat is a different intervention from adding oil to an energy-surplus diet.
- Historical safflower/corn-oil interventions are not necessarily equivalent to modern culinary use of canola/soybean/high-oleic oils.
- Repeated high-temperature frying, oxidation, and ultra-processed food context are separate questions from intrinsic toxicity of linoleic acid.

Faculty Synthesis

Current human evidence does not support advising patients to avoid seed oils simply because they contain omega-6 linoleic acid. Historical trials raise legitimate questions, but the more clinically defensible recommendation is to prefer unsaturated fats over major sources of saturated fat while focusing on overall dietary pattern and food context.

Two-Sentence Patient-Facing Bottom Line

You do not need to avoid seed oils because they contain omega-6 fats. For heart health, replacing butter and other saturated fats with unsaturated fats is generally preferable; the overall dietary pattern matters more than avoiding every food containing canola or soybean oil.

Required Team Deliverables

- Evidence grid: maximum 6 studies with PICO, study design, effect size, limitations, and certainty.
- One-slide Evidence Verdict: Strong / Moderate / Limited-Mixed / Insufficient, with one-sentence rationale.
- Two-sentence patient recommendation at approximately an eighth-grade reading level that acknowledges important uncertainty.
- “What Would Change My Mind?” statement identifying one future study or piece of evidence that would materially change the team’s conclusion.

Debate 2. High-Protein Diets: Optimal Health Strategy or Overprescribed Trend?

Debate proposition: For most adults at cardiometabolic risk, protein intake above the 0.8 g/kg/day RDA should be routinely encouraged.

Clinical vignette

A 67-year-old woman with obesity is starting a GLP-1 receptor agonist. She has normal renal function but low grip strength and eats approximately 55 g of protein daily. Her daughter says she should consume 130 g/day and drink two protein shakes because "everyone over 60 needs high protein."

Team A / Supporting Evidence

Core Article A1: Effects of energy-restricted high-protein, low-fat compared with standard-protein, low-fat diets: a meta-analysis

Wycherley TP, et al. Am J Clin Nutr. 2012. PubMed / source

Why assigned: Quantifies modest advantages of higher-protein diets for fat loss, lean-mass preservation, and resting energy expenditure during weight loss.

Core Article A2: A systematic review, meta-analysis and meta-regression of protein supplementation on resistance training-induced gains

Morton RW, et al. Br J Sports Med. 2018. PubMed / source

Why assigned: Demonstrates that protein is most clinically meaningful when paired with resistance exercise and when the outcome is muscle adaptation.

Core Article A3: Evidence-based recommendations for optimal dietary protein intake in older people: a position paper from the PROT-AGE Study Group

Bauer J, et al. J Am Med Dir Assoc. 2013. PubMed / source

Why assigned: Introduces age- and disease-specific protein targets and exceptions such as severe CKD.

Team B / Challenging Evidence

Core Article B1: Effects of high-protein diets on renal function and body composition in adults without chronic kidney disease: a systematic review and meta-analysis of randomised trials

Teixeira Silva PR et al., 2026. PubMed / source

Why assigned: Highlights that short-term trials generally do not show overt kidney injury in adults without CKD, while long-term certainty remains limited.

Core Article B2: Association of animal and plant protein intake with all-cause and cause-specific mortality

Song M, et al. JAMA Intern Med. 2016. PubMed / source

Why assigned: Shows why protein source may matter as much as total quantity.

Supplemental B3: Association between plant and animal protein intake and overall and cause-specific mortality

Huang J, et al. JAMA Intern Med. 2020. PubMed / source

Why assigned: Reinforces the importance of source and substitution when interpreting "high protein."

What Residents Must Distill

- The RDA is an adequacy benchmark, not necessarily the optimal intake for every clinical circumstance.
- Protein needs differ in aging, weight loss, sarcopenia, acute illness, CKD, and dialysis.
- Protein source matters; beans, lentils, nuts, fish, yogurt, poultry, processed meat, and supplements are not equivalent exposures.
- Higher protein may be particularly relevant when energy intake is falling, including during GLP-1 therapy.

- Protein alone does not replace resistance exercise for preservation of muscle function.

Faculty Synthesis

Moderately higher protein intake can improve satiety and help preserve lean mass during weight loss and aging, but “eat more protein” is not a universal prescription. Targets should be individualized to age, kidney function, energy intake, activity, nutritional status, and protein source.

Two-Sentence Patient-Facing Bottom Line

A higher protein target may make sense for you during weight loss, especially because preserving muscle is important. We should set a target based on your body size, kidney function, food preferences, and resistance exercise rather than automatically adding multiple protein shakes.

Required Team Deliverables

- Evidence grid: maximum 6 studies with PICO, study design, effect size, limitations, and certainty.
- One-slide Evidence Verdict: Strong / Moderate / Limited-Mixed / Insufficient, with one-sentence rationale.
- Two-sentence patient recommendation at approximately an eighth-grade reading level that acknowledges important uncertainty.
- “What Would Change My Mind?” statement identifying one future study or piece of evidence that would materially change the team’s conclusion.

Debate 3. Obesity: Calories vs. Insulin Resistance

Debate proposition: The carbohydrate-insulin model provides a more clinically useful explanation and treatment target for common obesity than the energy-balance model.

Clinical vignette

A 42-year-old patient says, “My previous doctor told me obesity is just calories in versus calories out. Another doctor said insulin makes me store fat, so calories do not matter. Which one is right?”

Team A / Supporting Evidence

Core Article A1: The carbohydrate-insulin model: a physiological perspective on the obesity pandemic

Ludwig DS, et al. Am J Clin Nutr. 2021. PubMed / source

Why assigned: Provides the strongest modern articulation of the carbohydrate-insulin model and its causal predictions.

Core Article A2: Effects of a low carbohydrate diet on energy expenditure during weight loss maintenance

Ebbeling CB, et al. BMJ. 2018. PubMed / source

Why assigned: Provides trial evidence often cited in support of CIM predictions and is useful for discussing energy-expenditure measurement.

Team B / Challenging Evidence

Core Article B1: Obesity Energetics: Body Weight Regulation and the Effects of Diet Composition

Hall KD, Guo J. Gastroenterology. 2017. PubMed / source

Why assigned: Explains the modern energy-balance framework and adaptive physiology rather than a simplistic willpower model.

Core Article B2: Effect of a plant-based, low-fat diet versus an animal-based, ketogenic diet on ad libitum energy intake

Hall KD, et al. Nat Med. 2021. PubMed / source

Why assigned: Controlled inpatient crossover trial showing lower spontaneous intake on a high-carbohydrate, low-fat diet despite greater insulin exposure.

Core Article B3: Effect of low-fat vs low-carbohydrate diet on 12-month weight loss in overweight adults: DIETFITS

Gardner CD, et al. JAMA. 2018. PubMed / source

Why assigned: Shows similar average 12-month weight loss across healthy low-fat and healthy low-carb patterns and no clear insulin-secretion subgroup advantage.

What Residents Must Distill

- Energy balance is a physical accounting identity; it is not itself a complete behavioral or biological explanation for why intake and expenditure change.
- Human biology influences hunger, satiety, energy expenditure, food reward, and nutrient partitioning.
- The strongest versions of the carbohydrate-insulin model make causal predictions that can be experimentally tested.
- Diet composition may alter spontaneous intake and metabolic responses without making calories irrelevant.
- A good clinical model should explain both physiology and why a particular eating pattern is sustainable for the patient.

Faculty Synthesis

Body weight necessarily obeys energy balance, but this does not mean obesity is simply a failure of willpower. Diet composition can influence hunger, satiety, glycemia, and spontaneous intake; current evidence does not establish dietary carbohydrate-driven hyperinsulinemia as the dominant cause of common obesity.

Two-Sentence Patient-Facing Bottom Line

Calories ultimately influence weight, but that does not mean weight control is simply about counting calories or willpower. Different foods affect hunger, fullness, glucose, and how easy it is to sustain an energy deficit, so we should choose a high-quality eating pattern you can maintain.

Required Team Deliverables

- Evidence grid: maximum 6 studies with PICO, study design, effect size, limitations, and certainty.
- One-slide Evidence Verdict: Strong / Moderate / Limited-Mixed / Insufficient, with one-sentence rationale.
- Two-sentence patient recommendation at approximately an eighth-grade reading level that acknowledges important uncertainty.
- “What Would Change My Mind?” statement identifying one future study or piece of evidence that would materially change the team’s conclusion.

Debate 4. Saturated Fat: How Much Does It Matter for Cardiovascular Risk?

Debate proposition: Reducing dietary saturated fat should remain a central strategy for ASCVD prevention.

Clinical vignette

A 55-year-old patient with LDL-C 175 mg/dL eats a low-carbohydrate diet rich in butter, cheese, full-fat dairy, coconut oil, eggs, and red meat. He says saturated fat has been "exonerated" because some meta-analyses show no association with cardiovascular disease.

Team A / Supporting Evidence

Core Article A1: Reduction in saturated fat intake for cardiovascular disease

Hooper L, et al. Cochrane Database Syst Rev. 2020. PubMed / source

Why assigned: Synthesizes randomized evidence and emphasizes that cardiovascular effects depend on the replacement nutrient.

Core Article A2: Dietary Fats and Cardiovascular Disease: A Presidential Advisory From the American Heart Association

Sacks FM, et al. Circulation. 2017. PubMed / source

Why assigned: Summarizes evidence favoring replacement of saturated fat with PUFA rather than refined carbohydrate.

Core Article A3: Saturated Fat Intake and the Prevention and Management of Cardiovascular Disease in Adults: An Academy of Nutrition and Dietetics Evidence-Based Nutrition Practice Guideline

Johnson et al., 2023 guideline. PubMed / source

Why assigned: Provides a contemporary guideline perspective and graded evidence for saturated-fat reduction and substitution.

Team B / Challenging Evidence

Core Article B1: Meta-analysis of prospective cohort studies evaluating the association of saturated fat with cardiovascular disease

Siri-Tarino PW, et al. Am J Clin Nutr. 2010. PubMed / source

Why assigned: Shows why observational analyses of total saturated-fat intake can yield null associations and sets up the substitution problem.

Core Article B2: Minnesota Coronary Experiment reanalysis

Ramsden CE, et al. BMJ. 2016. PubMed / source

Why assigned: Raises questions about historical randomized replacement trials and the relationship between cholesterol lowering and hard outcomes.

Core Article B3: Sydney Diet Heart Study reanalysis

Ramsden CE, et al. BMJ. 2013. PubMed / source

Why assigned: Challenges simplistic interpretation of n-6 PUFA substitution in a historical secondary-prevention setting.

What Residents Must Distill

- There is no nutrient-reduction experiment without a replacement nutrient.
- Replacing saturated fat with PUFA is different from replacing it with refined starch or sugar.
- Food matrices matter: cheese, yogurt, butter, processed meat, chocolate, and coconut oil are not identical exposures merely because they contain saturated fat.
- LDL-C is a meaningful causal risk factor, but trials should still be interpreted in relation to clinical outcomes and overall dietary pattern.

- The most useful counseling question is “what will replace this food?” rather than “is saturated fat good or bad?”

Faculty Synthesis

The most defensible clinical recommendation remains to preferentially replace major sources of saturated fat with unsaturated fats and high-quality whole-food carbohydrate sources rather than refined carbohydrate. The magnitude of benefit depends on the replacement food and baseline risk.

Two-Sentence Patient-Facing Bottom Line

Saturated fat is not a toxin, but replacing some butter, fatty processed meats, and coconut oil with foods rich in unsaturated fats can improve LDL-related cardiovascular risk. What you replace those foods with matters.

Required Team Deliverables

- Evidence grid: maximum 6 studies with PICO, study design, effect size, limitations, and certainty.
- One-slide Evidence Verdict: Strong / Moderate / Limited-Mixed / Insufficient, with one-sentence rationale.
- Two-sentence patient recommendation at approximately an eighth-grade reading level that acknowledges important uncertainty.
- “What Would Change My Mind?” statement identifying one future study or piece of evidence that would materially change the team’s conclusion.

Debate 5. Ultra-Processed Foods: Causal Driver of Disease or Marker of an Unhealthy Lifestyle?

Debate proposition: Ultra-processed food consumption is itself an important causal contributor to obesity and chronic disease and should be a specific target of physician counseling.

Clinical vignette

A 38-year-old patient eats whole-grain packaged bread, flavored yogurt, protein bars, breakfast cereal, frozen vegetarian meals, diet soda, chips, and occasional fast food. A nutrition app labels most of her diet "ultra-processed." She asks whether she should eliminate all of these foods.

Team A / Supporting Evidence

Core Article A1: Ultra-processed diets cause excess calorie intake and weight gain: an inpatient randomized controlled trial

Hall KD, et al. Cell Metab. 2019. PubMed / source

Why assigned: Provides rare randomized causal evidence that an ultra-processed dietary pattern can increase ad libitum intake and weight gain.

Core Article A2: Ultra-processed food consumption and human health: an umbrella review of systematic reviews with meta-analyses

Barbaresko J, et al. BMJ. 2024. PubMed / source

Why assigned: Summarizes the broad epidemiologic literature and allows residents to discuss certainty and residual confounding.

Core Article A3: Ultra-processed food consumption and all-cause mortality: updated meta-analysis

Liang et al., 2025 meta-analysis. PubMed / source

Why assigned: Provides updated mortality evidence and substantial heterogeneity for critique.

Team B / Challenging Evidence

Core Article B1: Ultra-processed foods in human health: a critical appraisal

Gibney MJ, et al. Am J Clin Nutr. 2017. PubMed / source

Why assigned: Raises conceptual and classification concerns with treating processing category as a uniform causal exposure.

Core Article B2: Does the concept of "ultra-processed foods" help inform dietary guidelines? NO

Astrup A, Monteiro C debate perspective, Am J Clin Nutr. 2022. PubMed / source

Why assigned: Argues that energy density, fiber, nutrient composition, texture, and food matrix may be more mechanistically useful than processing category alone.

Core Article B3: Are all ultra-processed foods bad?

Louie JCY. 2025 review. PubMed / source

Why assigned: Highlights heterogeneity within NOVA category 4 and the risk of treating all UPFs as nutritionally equivalent.

What Residents Must Distill

- NOVA classification may function as both an exposure and a proxy for other dietary characteristics.
- Randomized evidence supports a causal effect of at least some ultra-processed dietary patterns on excess intake.
- Processing-related mechanisms may include texture, eating rate, energy density, palatability, and food matrix.

- Not all category-4 foods are clinically equivalent; fortified whole-grain bread and sugar-sweetened beverages should not automatically receive identical counseling.
- Food cost, access, convenience, and food insecurity matter when translating UPF evidence into clinical advice.

Faculty Synthesis

There is increasingly strong evidence that diets dominated by certain ultra-processed foods facilitate overconsumption and are associated with adverse outcomes. It remains uncertain whether "ultra-processing" itself is the causal characteristic shared by every food in the category. Counseling should focus on highly processed foods that are easy to overconsume while avoiding unnecessary stigmatization of all packaged foods.

Two-Sentence Patient-Facing Bottom Line

You do not need to eliminate every packaged food. A useful priority is to reduce foods that are easy to overeat and low in fiber or nutrient density while keeping convenient packaged foods that still support an overall healthy pattern.

Required Team Deliverables

- Evidence grid: maximum 6 studies with PICO, study design, effect size, limitations, and certainty.
- One-slide Evidence Verdict: Strong / Moderate / Limited-Mixed / Insufficient, with one-sentence rationale.
- Two-sentence patient recommendation at approximately an eighth-grade reading level that acknowledges important uncertainty.
- "What Would Change My Mind?" statement identifying one future study or piece of evidence that would materially change the team's conclusion.

Debate 6. Diet Wars: Is There a Best Diet?

Debate proposition: One dietary strategy should be preferentially recommended for long-term cardiometabolic health rather than allowing patient preference and adherence to drive diet selection.

Clinical vignette

A 54-year-old woman has BMI 34 kg/m², HbA1c 7.4%, triglycerides 240 mg/dL, LDL-C 128 mg/dL, hypertension, and MASLD. She has attempted calorie counting multiple times and asks, “Just tell me the best diet.”

Team A / Supporting Evidence

Team 1 - Low-carbohydrate / ketogenic: Efficacy and safety of low and very low carbohydrate diets for type 2 diabetes remission

Goldenberg JZ, et al. BMJ. 2021. PubMed / source

Why assigned: Supports short-term glycemic and remission benefits while inviting discussion of durability and medication safety.

Team 2 - Intermittent fasting / time-restricted eating: Calorie restriction with or without time-restricted eating in weight loss

Liu D, et al. N Engl J Med. 2022. PubMed / source

Why assigned: Tests whether adding time restriction provides benefit beyond energy restriction over 12 months.

Team 3 - Predominantly plant-based: Effect of a low-fat vegan diet versus a Mediterranean diet on body weight and cardiometabolic outcomes

Kahleova H, et al. J Am Coll Nutr. 2021. PubMed / source

Why assigned: Shows different cardiometabolic tradeoffs across two high-quality dietary patterns.

Team 4 - Mediterranean: Primary prevention of cardiovascular disease with a Mediterranean diet

PREDIMED investigators. PubMed / source

Why assigned: Provides hard cardiovascular outcome evidence and supports a pattern-based approach.

Team B / Challenging Evidence

Counter-evidence for universal low-carb superiority: DIETFITS randomized clinical trial

Gardner CD, et al. JAMA. 2018. PubMed / source

Why assigned: Shows similar average 12-month weight loss across healthy low-fat and healthy low-carb diets.

Cross-cutting counterpoint: Long-term secondary prevention of cardiovascular disease with a Mediterranean diet and a low-fat diet

Gardner et al., . PubMed / source

Why assigned: Residents must argue that trial efficacy is inseparable from feasibility, medication safety, cultural adaptation, and patient preference.

What Residents Must Distill

- Dietary quality is a recurring feature across successful patterns.
- Different dietary strategies may have different strengths: glycemia/triglycerides, LDL-C, BP, hard CVD outcomes, simplicity, or cultural fit.
- Adherence is part of effectiveness, not an afterthought.

- Comorbidities can change the preferred strategy: CKD, frailty, insulin use, eating disorders, pregnancy, severe hypertriglyceridemia, ASCVD, and food insecurity.
- The best diet in a trial is not necessarily the best diet for the patient in front of you.

Faculty Synthesis

There is no single universally superior diet for every cardiometabolic outcome and every patient. A Mediterranean or other minimally processed, plant-predominant pattern provides a strong evidence-based default, while lower-carbohydrate or time-restricted approaches can be useful in selected patients. Clinical choice should incorporate evidence, comorbidities, safety, culture, access, and adherence.

Two-Sentence Patient-Facing Bottom Line

There is not one best diet for everyone. We can choose an evidence-based pattern that fits your diabetes, cardiovascular risk, food preferences, culture, medications, and what you can realistically sustain.

Required Team Deliverables

- Evidence grid: maximum 6 studies with PICO, study design, effect size, limitations, and certainty.
- One-slide Evidence Verdict: Strong / Moderate / Limited-Mixed / Insufficient, with one-sentence rationale.
- Two-sentence patient recommendation at approximately an eighth-grade reading level that acknowledges important uncertainty.
- “What Would Change My Mind?” statement identifying one future study or piece of evidence that would materially change the team’s conclusion.

Debate Grading Rubric

Criterion	Points
Appropriate use of evidence hierarchy	5
Accurate interpretation of studies	5
Recognition of limitations/confounding	5
Appropriate counterfactual/substitution reasoning	5
Effective rebuttal of opposing evidence	5
Avoidance of overclaiming	5
Translation to clinical recommendation	5
Patient-centered communication	5
TOTAL	**40**

Moderator Guidance

- Do not declare a “winner” based on ideology or rhetorical style.
- Reward residents who correctly say that a study cannot answer a specific question.
- Explicitly separate what is known with reasonable confidence, what remains uncertain, and what should be recommended clinically.
- Ask residents to identify the relevant counterfactual or replacement food/nutrient before accepting any causal claim.
- For every debate, require the clinical recommendation to be safe for patients with common comorbidities and medications.
- Update evidence packets annually and replace superseded reviews or guidelines while preserving landmark trials for teaching methodology.

HHS Competency Alignment

The debate series directly reinforces HHS nutrition competencies related to integrating evidence-based nutrition into patient care (#30), critically evaluating and translating dietary guidance (#49), disease-specific dietary strategies for metabolic disease (#57), and integrating food-based approaches into chronic disease prevention and treatment (#60). Individual debates also reinforce competencies related to minimally versus highly processed foods (#7), healthy dietary patterns (#11), hormonal regulation through food composition (#16), GLP-1 nutrition counseling (#55), nutraceutical/anti-inflammatory claims (#58), and food-quality determinants (#69).

Implementation Notes for National Dissemination

- Faculty requirement: one physician moderator plus an RDN or nutrition-trained faculty co-moderator when available.
- Resident preparation: evidence packets distributed 1-2 weeks in advance; positions assigned rather than self-selected.
- Scalability: each debate can be run in 30, 45, or 60 minutes by shortening opening arguments and audience discussion.
- Assessment: retain the same evidence scorecard and grading rubric across all debates so performance can be tracked longitudinally.
- Adaptability: vignettes can be modified for local populations, cultural dietary practices, and community priorities without changing the core evidence-appraisal framework.