



November 17, 2023

Sarah Booth, PhD
Chair, 2025 Dietary Guidelines Advisory Committee
c/o Janet M. de Jesus, MS, RD
Office of Disease Prevention and Health Promotion
Office of the Assistant Secretary for Health
Department of Health and Human Services
1101 Wootton Parkway, Suite 420
Rockville, MD 20852

Re: 2025 Dietary Guidelines Advisory Committee Proposed Systematic Review Protocols (Docket No. HHS-OASH-2022-0021)

Dear Dr. Booth and Members of the 2025 Dietary Guidelines Advisory Committee:

The Center for Science in the Public Interest (CSPI) respectfully submits the following comments on several key protocols posted by the Dietary Guidelines Advisory Committee (DGAC) in May and October 2023. CSPI is a non-profit consumer education and advocacy organization that since 1971 has been working to improve the public's health through better nutrition and food safety. CSPI helped to lead efforts to win passage of the Nutrition Labeling and Education Act, the Healthy, Hunger-Free Kids Act (to improve school food), the Food Safety Modernization Act, menu labeling, and the Food Allergen Labeling and Consumer Protection Act. CSPI publishes *Nutrition Action* (NA) and is supported by the subscribers to NA, individual donors, and foundation grants. CSPI is an independent organization that does not accept any corporate donations.

The recommendations below apply to the following protocols (though they may also be applicable to others):

- **Food Sources of Saturated Fat and Cardiovascular Disease**
- **All protocols pertaining to the relationship between consumption of different beverages and risk of type 2 diabetes**

Recommendation 1: Modify exclusion criteria to avoid confounding by medication use. In the protocol on food sources of saturated fat and cardiovascular disease risk, the population health status criteria exclude studies that exclusively enroll participants with “elevated blood lipids or blood pressure levels that are or should be treated clinically/pharmacologically and only report on the specific outcome of blood lipids or blood pressure, respectively.”¹ This is seemingly to ensure that the studies included in the review can be used to assess the effects of food sources of saturated fat, as opposed to their effects *in combination with lipid-lowering medications*. It is important to isolate dietary effects, because the effects of lipid-lowering drugs on cardiovascular disease risk may interfere with effects from food sources of saturated fat.² We therefore urge the committee to use stricter exclusion criteria and exclude: a) trials that enroll participants who report active use of lipid-lowering drugs; and b) observational studies that do not control for the use of lipid-lowering drugs as a confounder.

There is a similar concern for all protocols pertaining to the relationship between the risk of type 2 diabetes and the consumption of different beverages (i.e., low- and no-calorie sweetened beverages,³ sugar-sweetened beverages,⁴ coffee and tea,⁵ dairy milk and milk alternatives,⁶ and 100% juice⁷), because the proposed criteria allow the inclusion of studies that include participants who are taking medications to

control their blood sugar. For these protocols, we urge the committee to exclude: a) trials that enroll participants who report active use of medications to control their blood sugar, and b) observational studies that do not control for the use of this type of medication as a confounder.

In conducting risk of bias assessments, we also urge the committee to weigh evidence from high-quality randomized controlled trials more strongly than evidence from observational studies.

Recommendation 2: Exclude observational studies that do not control for at least three key confounders. The protocol on food sources of saturated fat and risk of cardiovascular disease specifies that studies (presumably only observational) must control for at least one key confounder listed in the analytic framework: sex, age, race and/or ethnicity, socioeconomic position, physical activity, anthropometry, smoking (adults), alcohol intake (adults), diet quality, and total energy intake.¹ Given the potential strength of these key confounders, we urge the committee to only include observational studies that at a minimum control for three key confounders of particular concern: age, smoking (adults), and anthropometry.

Recommendation 3: Remove publication date criteria. The protocol on food sources of saturated fat and risk of cardiovascular disease specifies that studies published before January 1990 will not be included in the review,¹ but it is unclear why, as other protocols do not use this cutoff date. It is possible that this cutoff is to avoid studies that were conducted before the widespread use of statins, but the 2020 Cochrane Systematic Review on reduction in saturated fat intake for cardiovascular disease found no suggestion of a trend or change in effects of saturated fat reduction on cardiovascular events following wider introduction of statins in the mid-1990s.² Furthermore, high-quality randomized controlled trials with cardiovascular disease endpoints were published long before the 1990 cutoff date, and to our knowledge, the methodology used in randomized controlled trials in this field has not changed substantially enough over time to warrant exclusion. For instance, the 2017 Presidential Advisory from the American Heart Association on Dietary Fats and Cardiovascular Disease⁸ highlighted four core trials published between 1968 and 1979 that used high-quality methods to examine the cardiovascular effects of replacing saturated fat with polyunsaturated fat.^{9,10,11,12} We urge the committee to remove publication date criteria for this protocol.

Recommendation 4: Evaluate trials that provide key foods separately from those that solely provide dietary advice. In the protocol on food sources of saturated fat and risk of cardiovascular disease, all intervention/exposure criteria involve consumption of food sources of saturated fatty acids.¹ In trials, it is important to ensure participants are adhering to their assigned intervention/exposure; results from trials in which adherence was very low are not useful to inform dietary recommendations. Because adherence is not always measured rigorously (e.g., using self-report, or not measured at all), we urge the committee to evaluate trials separately based on whether they provided key foods to participants (higher likelihood of adherence to the intervention) versus whether they solely provided dietary advice (lower likelihood of adherence to the dietary intervention).

For more information, contact:
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¹ Hoelscher DM, Anderson C, Booth S, Deierlein A, Fung T, Gardner C, Giovannucci E, Raynor H, Stanford FC, Talegawkar S, Taylor C, Tobias D, Obbagy J, Kim JH, Kingshipp BJ, Raghavan R, Higgins M, Butera G, Terry N. Food Sources of Saturated Fat and Risk of Cardiovascular Disease: A Systematic Review Protocol. October 2023. U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion, Nutrition Evidence Systematic Review. Available at: <https://nesr.usda.gov/protocols>

² Hooper L, Martin N, Jimoh OF, Kirk C, Foster E, Abdelhamid AS. Reduction in saturated fat intake for cardiovascular disease. *Cochrane database of systematic reviews*. 2020(8).

³ Hoelscher DM, Anderson CAM, Booth SL, Deierlein AL, Fung TT, Gardner CD, Giovannucci E, Raynor HA, Stanford FC, Talegawkar SA, Taylor CA, Tobias DK, Obbagy J, Cole NC, Kingshipp B, Webster A, Higgins M, Butera G, Terry N. Low- and No-Calorie Sweetened Beverages and Risk of Type 2 Diabetes: A Systematic Review Protocol. May 2023. U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion, Nutrition Evidence Systematic Review. Available at: <https://nesr.usda.gov/protocols>

⁴ Hoelscher DM, Anderson CAM, Booth SL, Deierlein AL, Fung TT, Gardner CD, Giovannucci E, Raynor HA, Stanford FC, Talegawkar SA, Taylor CA, Tobias DK, Obbagy J, Cole NC, Kingshipp B, Webster A, Higgins M, Butera G, Terry N. Sugar-Sweetened Beverages and Risk of Type 2 Diabetes: A Systematic Review Protocol. May 2023. U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion, Nutrition Evidence Systematic Review. Available at: <https://nesr.usda.gov/protocols>

⁵ Hoelscher DM, Anderson CAM, Booth SL, Deierlein AL, Fung TT, Gardner CD, Giovannucci E, Raynor HA, Stanford FC, Talegawkar SA, Taylor CA, Tobias DK, Obbagy J, Cole NC, Kingshipp B, Webster A, Higgins M, Butera G, Terry N. Coffee and Tea and Risk of Type 2 Diabetes: A Systematic Review Protocol. May 2023. U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion, Nutrition Evidence Systematic Review. Available at: <https://nesr.usda.gov/protocols>

⁶ Hoelscher DM, Anderson CAM, Booth SL, Deierlein AL, Fung TT, Gardner CD, Giovannucci E, Raynor HA, Stanford FC, Talegawkar SA, Taylor CA, Tobias DK, Obbagy J, Cole NC, Kingshipp B, Webster A, Higgins M, Butera G, Terry N. Dairy Milk and Milk Alternatives and Risk of Type 2 Diabetes: A Systematic Review Protocol. May 2023. U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion, Nutrition Evidence Systematic Review. Available at: <https://nesr.usda.gov/protocols>

⁷ Hoelscher DM, Anderson CAM, Booth SL, Deierlein AL, Fung TT, Gardner CD, Giovannucci E, Raynor HA, Stanford FC, Talegawkar SA, Taylor CA, Tobias DK, Obbagy J, Cole NC, Kingshipp B, Webster A, Higgins M, Butera G, Terry N. 100% Juice and Risk of Type 2 Diabetes: A Systematic Review Protocol. May 2023. U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion, Nutrition Evidence Systematic Review. Available at: <https://nesr.usda.gov/protocols>

⁸ Sacks FM, Lichtenstein AH, Wu JH, Appel LJ, Creager MA, Kris-Etherton PM, Miller M, Rimm EB, Rudel LL, Robinson JG, Stone NJ, Van Horn LV. Dietary fats and cardiovascular disease: a presidential advisory from the American Heart Association. *Circulation*. 2017 Jul 18;136(3):e1-23.

⁹ Controlled trial of soya-bean oil in myocardial infarction. *Lancet*. 1968; 2:693–699.

¹⁰ Leren P. The Oslo Diet-Heart Study: eleven-year report. *Circulation*. 1970; 42:935–942.

¹¹ Dayton S, Pearce ML, Hashimoto S, Dixon WJ, Tomiyasu U. A controlled clinical trial of a diet high in unsaturated fat in preventing complications of atherosclerosis. *Circulation*. 1969; 40(suppl II):II-1–II-63.

¹² Turpeinen O, Karvonen MJ, Pekkarinen M, Miettinen M, Elosuo R, Paavilainen E. Dietary prevention of coronary heart disease: the Finnish Mental Hospital Study. *Int J Epidemiol*. 1979; 8:99–118.