



National Association of County & City Health Officials

The National Connection for Local Public Health

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Re: Topics and comments to be examined in the review of the scientific evidence supporting the development of the 2020-2025 Dietary Guidelines for Americans; Docket No. FNS-2018-0005-0001

Dear Dr. Wright, Mr. Lipps, and Ms. Koegel:

On behalf of the National Association of County and City Health Officials (NACCHO), I am writing to provide comments in response to the proposed topics for the 2020-2025 Dietary Guidelines for Americans (DGAs.) NACCHO represents the nation's nearly 3,000 local governmental health departments. Local health departments develop policies and create environments that make it easier for people to be healthy and safe, including advising the public on healthy eating practices, increasing access to affordable healthy foods, and ensuring food safety.

NACCHO would like to underscore that in the past, the process for developing the Guidelines has been driven by strong science, and previous Dietary Guidelines Advisory Committees have



exhibited expertise and scientific integrity. The DGA recommendations have remained relatively consistent over the years—encouraging a diet rich in fruits, vegetables, and whole grains, while limiting excess sodium, saturated fat, and sugars. NACCHO appreciates the U.S. Departments of Agriculture’s (USDA) and Health and Human Services’ (HHS) efforts to strengthen the process for developing the Guidelines in response to the reports issued by the National Academy of Medicine and the expansion of the Guidelines to offer recommendations for pregnant women and infants and toddlers up to 24 months of age in response to the Agriculture Act of 2014.

However, NACCHO is concerned that determining topics and questions before appointing the Dietary Guidelines Advisory Committee (DGAC) has potential pitfalls. Of greatest concern, it is not clear whether the final Dietary Guidelines for Americans report will include only those topics identified by the agencies. We urge USDA and HHS to include topics of public health importance that are not reviewed by the 2020 DGAC by carrying over advice from the 2015 DGAs. Furthermore, we urge USDA and HHS to amend its proposed topics as follows:

- Review the evidence on sodium, alcohol, and cholesterol—topics that have been addressed by all previous DGAs. If the DGAC is unable to examine the evidence for these topics, it should incorporate advice from other expert panels or the 2015 Dietary Guidelines for Americans.
- Ask the DGAC to continue to issue quantitative recommendations for sodium, whole grains, vegetables, fruits, saturated fat, and added sugars to provide actionable advice to the public and to ensure that those recommendations can be translated into nutrition programs.
- Examine the impact of replacing saturated fats with unsaturated fats on the risk of cardiovascular disease.
- Include questions for all relevant life stages: Examine the link between saturated fat and cardiovascular disease in children aged 2–18 and in adults older than 65; the link between dietary patterns and the risk of osteoporosis in adults aged 19–64; and the link between dietary patterns and the risk of obesity, cardiovascular disease, type 2 diabetes, and cancer in children ages 2–18.
- Provide advice on how to reduce or avoid dietary exposures to substances of concern, especially during pregnancy and early in life, including to substances known or reasonably anticipated to cause cancer or affect the developing brain in recognition of increased susceptibility and exposures during these time periods. While evaluating the evidence on carcinogenicity and/or toxicity for many individual substances is beyond the scope of the DGAC, we request that the Committee advise the public regarding how to prevent or reduce exposures to substances of concern.

I. Introduction

The Dietary Guidelines for Americans for 35 years has provided life-saving advice to consumers who want to lower their risk of diet-related disease. This advice has never been more critical. Two out of three American adults¹ and one out of three children² are overweight or obese.

Nearly half of adults have diabetes or prediabetes,³ and roughly half of adults have high blood pressure,⁴ a major risk factor for heart disease and stroke. Furthermore, 13 cancers, including breast, colorectal, esophageal, and uterine, are linked to overweight or obesity.⁵

However, the Guidelines offer more than advice for individual consumers. The Guidelines are used as the basis for standards for programs such as the National School Lunch and School Breakfast Programs, the Child and Adult Care Food Program, and senior meals through the Older Americans Act. They also are used by state and local governments and health departments across the country as the basis for many of their nutrition policies and programs, including to establish guidelines for healthier food that is sold or served on public property. This broad spectrum of uses makes it essential that the Guidelines provide clear, quantitative recommendations for a healthy diet. Vague advice to consume less saturated fat or added sugar is far less valuable than a recommendation to get less than 10 percent of calories from saturated fat or added sugars. Similarly, recommendations to aim for an intake of saturated fat or sodium within a given range is of limited use. Precise quantitative recommendations are both more understandable to consumers and more useful in setting standards.

Furthermore, NACCHO has concerns about some of the criteria that USDA and HHS propose using to identify topics and their implications for the continuity of the Guidelines. For instance, the criterion of “importance” states that there might need to be “new, relevant data” to warrant a new review of the evidence. This may be a misapplication of the relevant recommendations: while the National Academy of Medicine’s report suggested that some topics may not warrant a detailed review every five years, it did *not* recommend that such topics be omitted from the Dietary Guidelines for Americans.

Moreover, NACCHO has concerns with regard to the “duplication” criterion. Even if a topic is addressed through existing evidence-based federal guidance other than the Dietary Guidelines, we believe it should be included in the Dietary Guidelines if it can help guide individual consumers or institutional policies towards healthier diets. If key topics are omitted at this stage of the process, it is unclear how they would be addressed in the 2020 Guidelines, potentially leaving significant gaps in evidence-based federal guidance for food and nutrition. It is therefore more useful to consumers and agencies to have key nutrition recommendations in one place, and many policies and programs are specifically tied to the recommendations in the Dietary Guidelines.

II. Topics that should be addressed across the lifespan.

The Dietary Guidelines should not omit critical topics that were addressed by earlier DGA and apply to all age groups.

a. Sodium

It is troubling that USDA and HHS include no questions on sodium when expert guidelines⁶ classify roughly one out of two adults as hypertensive, and new data from the CDC indicate that the average American adult consumes 4,000 mg of sodium per day, well above the 2,300 mg

per day recommended by the National Academy of Medicine.⁷ Furthermore, a convincing body of evidence demonstrates that reducing sodium intake can lower blood pressure and the risk of cardiovascular disease, despite confusion created by studies that do not measure sodium intake accurately.⁸ As the Academy is in the process of revising the Dietary Reference Intakes (DRIs) for sodium, the DGAC should defer to the substantive outputs of that process, if available. In short, the Guidelines should either include the DRI committee’s advice or—if the DRIs are not available before the 2020 Guidelines must be finalized—include advice on sodium from the 2015 Guidelines.

b. Whole Grains

Previous Guidelines have advised Americans to “make half of all grains whole grains,” yet the Departments’ proposed list of questions lacked any reference to whole grains. That message is critical, given that all age and sex groups fail to meet recommended intakes of whole grains and nearly all exceed recommended intakes of refined grains.⁹ Since the publication of the 2015 Guidelines, the evidence supporting advice to replace refined grains with whole grains has grown. For example, in 2016 researchers examining 45 studies reported that people who typically consume three servings of whole grains a day have about a 20 percent lower risk of dying of heart disease and a 15 percent lower risk of dying of stroke or cancer than those who consume no whole grains.¹⁰ The DGAC should either provide a quantitative recommendation for whole grain intake, or continue to advise the public in reliance on the 2015 DGA’s sound and scientific advice to make at least half of the grains consumed be whole grains.

c. Vegetables and Fruit

The 2015 Guidelines recommend a healthy eating pattern with 2½ cup-equivalents of vegetables and 2 cup-equivalents of fruit a day (for a 2,000-calorie diet) and advise consumers that “research has shown that vegetables and fruits are associated with a reduced risk of many chronic diseases, including CVD [cardiovascular disease], and may be protective against certain types of cancers.” Since the publication of the 2015 Guidelines, there is additional evidence that intake of vegetables and fruit protects health.¹¹ The Departments should either ask the DGAC to provide a quantitative recommendation for vegetable and fruit intake or continue to support the 2015 DGA’s well-founded advice for vegetable and fruit intake.

The Departments should amend a number of the proposed topics and questions and consider them for all age groups.

a. Beverages

The 2020 DGAC should examine the evidence on added sugars and sugar-sweetened beverages (SSB) together, because SSBs are the largest source of added sugars in the average American’s diet.

b. Added Sugars

The 2015 Guidelines recommends that people consume less than 10 percent of calories from added sugars to meet their food group and nutrient needs. In addition, the Guidelines noted

that an eating pattern that reduces the risk of chronic disease is low in added sugars. The 2015 DGAC examined the evidence on added sugars and SSBs together in part because SSBs are the greatest source of added sugars in the average American’s diet (contributing almost half of intake) and in part because SSBs are easier to use in randomized controlled trials and easier to examine in observational studies than are added sugars. The 2020 DGAC should similarly evaluate added sugars and SSBs together.

c. Saturated Fats

The Departments proposed that the DGAC would examine the relationship between saturated fats and risk of cardiovascular disease for adults aged 19–64. Instead, the 2020 DGAC should examine the effect of replacing saturated fatty acids with polyunsaturated fatty acids (and monounsaturated fatty acids) on the risk of CVD for children aged 2–18 and adults aged 19 and over. It is not possible to evaluate the effect of saturated fats on the risk of CVD without considering which nutrients would replace it. As a 2017 Presidential Advisory from the American Heart Association explains, studies that did not take the replacement nutrient into account have mistakenly concluded that saturated fat intake had no significant effect on CVD risk.^{12,13,14} The 2015 Guidelines recommends that “intake of saturated fats should be limited to less than 10 percent of calories per day by replacing them with unsaturated fats.” Furthermore, the DGAC should examine the evidence on saturated fats and CVD for everyone aged 2 or older, not merely for adults 19–64, because atherosclerosis begins in childhood and continues beyond age 64.

The Departments should add topics regarding substances to avoid or minimize for all age groups, especially during critical windows of susceptibility.

People of all ages are exposed to substances that can disrupt health and development. However, some populations receive greater dietary exposures than others, including developing children, in part because they have higher food and fluid intake per pound of body weight than do adults. Furthermore, it is widely recognized that exposures early in life, during “windows of susceptibility,” when certain tissues and organ systems are developing, are of paramount importance to health. Exposures during pregnancy and early in life are increasingly linked to health outcomes later in life, including cancer, obesity, diabetes, cardiovascular disease, fertility, and neurodevelopmental disease or dysfunction.^{15,16,17}

The American College of Obstetricians and Gynecologists, the American Society for Reproductive Medicine, and others are calling for action to identify and reduce exposure to toxic environmental agents, recognizing that an important outcome of pregnancy is a healthy newborn, as well as a person biologically predisposed to be healthy from birth to old age.¹⁸ In particular, it is well established that the developing brain is exquisitely sensitive to toxic insults. In cases where there is ample data, such as with certain heavy metals and alcohol, no “safe” levels for the developing brain have been identified.^{19,20,21} Similarly, the susceptibility to

^{i i} For example, the entire issue of *Reproductive Toxicology* 2017;68:1-214 is devoted to the environment and Developmental Origins of Health and Diseases.

carcinogens from exposures during pregnancy and early in life is a well-recognized public health concern.

Thus, in addition to ensuring good nutrition early in life, every effort should be made to avoid or minimize potentially harmful dietary exposures. While the current Dietary Guidelines address alcohol and provide general advice on caffeine, many other dietary exposures of concern have not been addressed. The decision to provide advice at different life stages in the 2020 Dietary Guidelines provides an opportunity to address this topic for the first time. Consumers need comprehensive advice on to help them avoid dietary exposures of concern and to provide science-based recommendations.

For each life stage, and in particular during pregnancy and early in life, USDA and HHS should add the topic “Avoiding or minimizing dietary exposures of potential concern,” and the question “How can possible dietary exposures of concern be avoided or minimized at this life stage?”, including for:

- a. Contaminants such as lead, arsenic, and persistent pollutants which cause or are reasonably anticipated to cause cancer and/or other toxic effects (e.g., to the developing brain);
- b. Naturally occurring and added caffeine (especially during pregnancy, childhood, adolescence, and young adulthood);
- c. Additives that cause or are reasonably anticipated to cause cancers, according to U.S. government authorities, including Red 3, BHA, and certain flavors;
- d. Additives that pose risks to certain individuals, including synthetic food dyes;
- e. Pathogens such as *Salmonella* and *Cronobacter*; and
- f. Other substances indirectly added to food from packaging, processing, or cooking, such as acrylamide, polycyclic aromatic hydrocarbons, heterocyclic amines, and phthalates and other plastic-related chemicals that cause or are reasonably anticipated to cause cancer and/or other toxic effects (e.g., to the developing brain).

It is not necessary for the DGAC to review evidence for each potential exposure of concern. Rather, the focus should be on providing practical, actionable advice and guidance to minimize exposures at the most sensitive times during windows of development. Moreover, if the DGAC declines to address areas of potential exposures of concern, it should publicly indicate that it is not addressing them, so that consumers are aware that the list provided it not exhaustive.

III. Infants and Toddlers

a. Introduction

Good nutrition throughout the first two years of life helps to lay the foundation for a child’s future health well into adulthood. New research in the fields of neuroscience and the early origins of adult health is shedding light on how infants’ brains develop, how children and adults

become susceptible to diseases, and how capacities and skills are either nourished or thwarted, beginning during pregnancy and through the first two years of life.

A growing body of scientific research indicates that the foundations for lifelong health—including predispositions to obesity and certain chronic diseases—are largely determined during pregnancy and the first two years. Emerging research also indicates that the effects of poor nutrition early in life impact not only a child’s health but also that of the child’s offspring. In this way, the damaging effects caused by poor nutrition in early life have the potential to cascade down through generations of children and lock families into a cycle of poor health.

b. Age groupings

There are many differences in the nutritional and dietary needs of infants younger than six months and those between the ages of six months and two years. In particular, infants younger than six months should be exclusively fed breastmilk (and/or receive infant formula). Infants who are not fed complementary foods may also have different supplementation needs than do older infants fed complementary foods. For this reason, the DGA topics should be considered separately for infants zero to six months than for those aged seven to 24 months.

The DGAC should consider the following additional topics for infants and toddlers.

a. Feeding Styles

The period of time from birth to age two represents a highly sensitive period of time for children to learn to accept and like healthy food.²² The DGAC should examine the impact of feeding patterns and responsive feeding practices on cognitive development, short- and long-term health, growth, size, and body composition, and future obesity risk.

b. Food Insecurity

The DGAC should consider the relationship between food insecurity and 1) dietary intake; 2) nutritional risk or deficiency; 3) cognitive development; 4) short- and long-term health; 5) obesity risk; and 6) growth, size, and body composition. Food insecurity during pregnancy and the critical first years of a child’s life can impair child development in both the short- and long-term, hindering adult achievement, health, and productivity. Adequate prenatal nutrition is critical to ensure normal development of children’s bodies and brains.²³ Inadequate dietary intake during pregnancy and early childhood—which may be a consequence of food insecurity—can increase the risk of birth defects, anemia, low birth weight, preterm birth, and developmental problems.^{24,25,26}

The Departments should amend the following proposed topics and for infants and toddlers.

a. Duration of exclusive human milk or infant formula feeding

The DGAC should consider the short- and long-term health and developmental outcomes of exclusive human milk feeding on neurocognitive development, taste preference formation, self-regulation, childhood origins of adult disease and obesity, infection risk, and immunity. The

DGAC should also consider when to recommend that mothers discontinue exclusive breastfeeding and/or infant formula feeding.

b. Complementary Foods and Beverages

In a 2013 study, nearly 40 percent of mothers in the U.S. first gave their babies solid foods before their babies were 4 months of age.²⁷ There is confusion regarding recommendations of when babies should be introduced to solid foods, as parents face conflicting messages from doctors, infant and toddler food companies, and others. If breast milk or formula is replaced by complementary foods too early, babies are at risk for poorer nutrition. The relationship between complementary feeding and short- and long-term health outcomes, neurocognitive development, self-regulation, and taste preference formation should also be considered by the DGAC.

The DGAC also should address beverages, including fruit juice and sugar-sweetened beverage consumption, for children and toddlers. The DGAC should consider impacts on short- and long-term growth, obesity risk and excessive weight gain; diet quality; micronutrient status; short- and long-term health outcomes; taste preference formation; growth, size and body composition; and self-regulation.

IV. Pregnancy and Lactation

Topics should be evaluated separately for pregnant and postpartum women. The nutritional and dietary needs of pregnant women differ from those of lactating and non-lactating postpartum women. For example, for food safety reasons, pregnant women are advised against consuming some types of cheese or processed meats, but those foods are acceptable for postpartum women, even if they are breastfeeding. Further, pregnant women need different nutrient supplements than postpartum lactating women or non-lactating women.

The DGAC should consider the following additional topics for pregnant and/or postpartum women.

a. Diet Quality

It is clear that diet plays a critical role in the health and well-being of women, both during and after pregnancy. Diet quality is related to the micronutrient status and weight of women, factors that are intrinsically linked to birth outcomes and the health of mothers. Among U.S. women giving birth in 2014, half were overweight or obese before becoming pregnant.²⁸ Being overweight or obese can create or exacerbate complications, such as preeclampsia and gestational diabetes, which lead to higher-risk pregnancies. Similarly, key nutrients play important roles in women's health during and after pregnancy.

Specifically, the DGAC should evaluate the relationship between diet quality during pregnancy and 1) risk of gestational diabetes; 2) risk of hypertensive disorders during pregnancy; 3) gestational age at birth; and 4) birth weight standardized for gestational age and sex; 5) the risk of excessive weight gain during pregnancy; 6) the micronutrient status of the mother and infant; 7) the long-term health of both mothers and infants; and 8) the infant's predisposition

to chronic disease later in life. In addition, the DGAC should consider the relationships between diet quality of postpartum women and 1) excessive weight gain; 2) the short- and long-term health of mothers; and 3) micronutrient status.

b. Food Insecurity

The DGAC should consider the relationship between food insecurity and 1) dietary intake; 2) pregnancy outcomes (e.g., pregnancy weight gain); and 3) breastfeeding initiation and duration. Of particular concern is the risk for food-insecure mothers who enter pregnancy with insufficient iron stores and with low-folate diets. Poor iron and folate status are linked to preterm births and fetal growth retardation, respectively.^{29,30} Prematurity and intrauterine growth retardation are critical indicators of medical and developmental risks that affect not only children's short-term well-being, but also extend into adulthood.³¹

Children born to mothers who were food-insecure during pregnancy may also be at increased risk of birth defects.³² Finally, research suggests that women who were marginally food insecure and had restricted their eating in an unhealthy way prior to becoming pregnant are more likely to gain excessive weight during pregnancy, which puts the mother at risk for gestational diabetes and obesity postpartum, and can predispose the baby to chronic disease through prenatal nutritional programming.³³

The Departments should amend the following proposed topics and for the DGAC for pregnant and/or postpartum women.

a. Dietary patterns and maternal health

The DGAC should not only consider the relationship between dietary patterns during pregnancy and risk of gestational diabetes, risk of hypertensive disorders during pregnancy; gestational age at birth; and birth weight, but also the relationship of dietary patterns during pregnancy and lactation to maternal health.

b. Dietary supplements

The DGAC should consider not only the impact of micronutrient status on infants and the composition and quantity of breastmilk, but also the impact on the short- and long-term health and micronutrient status of the mother.

c. Beverages

As mentioned in Section II, the DGAC should consider added sugars and sugar-sweetened beverages together. The DGAC should consider the relationship between the consumption of added sugars and sugar-sweetened beverages by postpartum women and 1) maternal health; 2) weight gain; and 3) micronutrient status. For pregnant women, the relationship between sugar-sweetened beverages and added sugars and excessive weight gain should be considered.

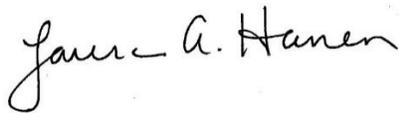
V. Adults

While we are pleased that the Guidelines will offer recommendations to a broader, more diverse population through the lifespan approach, the proposed age groups and topics fail to address issues in all relevant life stages. Therefore, sodium, whole grains, fruits and vegetables, alcohol, dietary cholesterol, saturated fats, added sugars and beverages, and dietary exposures should be considered for all age groups aged two and older, as addressed in Section II above.

VI. Conclusion

Thank you for the opportunity to provide comments on the proposed topics for the 2020 DGAC. Access to credible nutrition information is important to the ability of Americans to make choices that support good health.

Sincerely,



Laura A. Hanen, MPP

Interim Executive Director & Chief of Government Affairs

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⁵ Centers for Disease Control and Prevention. Cancers associated with overweight and obesity make up 40 percent of cancers diagnosed in the United States. 2017 October. Available at <https://www.cdc.gov/media/releases/2017/p1003-vs-cancer-obesity.html>.

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