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RE: Docket ID: FNS-2018-0005

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

The Food Research & Action Center (FRAC) appreciates the opportunity to provide comments in response to the U.S. Department of Agriculture's (USDA) and the U.S. Department of Health and Human Services' (HHS) Dietary Guidelines for Americans: Request for Comments on Topics and Questions. FRAC is a research, policy, public education, and advocacy center working for more effective public and private policies to eradicate domestic hunger and improve the nutrition and health of low-income individuals and families. We are offering our comments in the following categories:

- Overall Process and Structure;
- Food Insecurity (including recommendations applicable to all life stages as well as recommendations for specific life stages);
- Cultural and Ethnic Preferences Recommendations Applicable to All Life Stages;
- Food and Nutrient Recommendations Applicable to All Life Stages;
- Additional Recommendations for Infants and Toddlers from Birth to 24 Months; and
- Additional Recommendations for Pregnancy and Lactation.

Section I. Overall Process and Structure

Life Stages Approach

FRAC fully supports the life stages approach to the next edition of the Dietary Guidelines for Americans (hereafter referred to as "Dietary Guidelines.") This is an opportunity to establish

clear, effective guidance to inform policies, programs, and practices that impact the health and well-being of individuals across the lifespan.

We also continue to support the inclusion of comprehensive recommendations in the Dietary Guidelines for pregnant women and infants and toddlers from birth to 24 months. This new addition to the Dietary Guidelines is appropriate and necessary because prenatal and early childhood periods set the foundation for prenatal, physical, social, and emotional health. The work of the USDA/HHS "Pregnancy and Birth to 24 Months Project" provides a logical, scientific-based basis for what should be reviewed as part of the expansion of the Dietary Guidelines. FRAC has supported this initiative and recommends that the Dietary Guidelines Advisory Committee (DGAC) consider reviewing the remaining additional topics and questions included in the USDA-HHS Birth to 24 Months Topic Identification Project's Topic Briefs for Potential Systematic Reviews.

Dietary Guidelines Advisory Committee Selection Process

We do want to acknowledge that DGAC members have historically been leading experts and scholars in nutrition, medicine, maternal and child health, and public health. We urge USDA and HHS to have such expertise be the basis for DGAC member selection in the 2020 Dietary Guidelines as well. FRAC was supportive, and continues to be, of the rigorous DGAC selection process that was established by USDA and HHS.

Topic and Question Selection Process

This comment period is a deviation from past Dietary Guidelines, and we strongly believe that the 2020 DGAC should not be limited to the topics and questions that are generated from this public comment period. But rather, as DGAC members review the existing evidence and as new science emerges during the Dietary Guidelines development process, the DGAC should have the flexibility to address additional topics and questions as they deem appropriate and necessary. In short, the experts chosen for the DGAC should make the decisions regarding any additional topics or questions that need to be covered.

Furthermore, we have concerns about some of the criteria that USDA and HHS propose using to identify topics, and the implications of the criteria for the continuity of the Dietary Guidelines. For instance, the criterion of "importance" suggests 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.

We also have concerns with regard to the "duplication" criterion. Even if a topic is addressed through existing evidence-based federal guidance other the Dietary Guidelines, we believe the topic 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 Dietary 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, as many policies and programs are specifically tied to the recommendations in the Dietary Guidelines.

Proposed Topics and Questions

In terms of the proposed topics and questions, FRAC concludes that, overall, they are acceptable, provide a reasonable starting point for the Dietary Guidelines, and meet the four

criteria outlined in the call for public comment. However, we do propose several additions to, revisions of, and/or expansions of the proposed topics and questions, particularly as they relate to poverty and food insecurity. These recommendations are described more fully in the remainder of this document.

Section II. Food Insecurity

A. Food Insecurity Recommendations Applicable to All Life Stages

For all life stages, the DGAC should answer the following question: *How do the final Dietary Guidelines' recommendations reflect and address barriers to inadequate dietary intake resulting from poverty and/or food insecurity?* This subject matter is not addressed in the proposed list of topics and questions, but is critically important given the millions of Americans struggling with limited resources and/or inadequate food access.

- 1. **Relevance:** This question is well within the scope of the Dietary Guidelines. The 2015 Dietary Guidelines addressed poverty and food insecurity (as well as food access) to some extent in, for example, "Chapter 3. Everyone Has a Role in Supporting Healthy Eating Patterns." The 2020 Dietary Guidelines should build on the socio-ecological approach in the 2015 edition. In addition, food-based recommendations are a critical component of the Dietary Guidelines, but food-based recommendations that are out of reach for millions of Americans are meaningless. Recommendations need to be affordable, accessible, and realistic for families with limited income, food access, time, food storage and preparation space, and transportation.
- 2. **Importance:** Poverty and food insecurity are significant public health concerns given their high prevalence and negative consequences for health and well-being. In 2016, about 40.6 million Americans (12.7 percent of the population) lived in poverty. This included nearly 13.2 million children, or 18 percent of all children. In 2016, approximately 28.3 million adults (11.5 percent of all adults) and 12.9 million children (17.5 percent of all children) lived in food-insecure households. ²

Food insecurity and poverty are associated with some of the most common and costly health problems and behaviors in the U.S. 3 (It is worth noting that the research on the connections between food insecurity and health outcomes, health care utilization, and health care costs has grown considerably since the development of the 2015 Dietary Guidelines.) In addition, neighborhoods with many poor or low-income residents often have fewer resources that promote health (e.g., full-service grocery stores offering affordable and nutritious foods) and have more environmental threats that harm health (e.g., poor air and water quality, poor housing conditions) compared to higher-income neighborhoods. 4,5,6,7

3. **Potential Federal Impact:** The Supplemental Nutrition Assistance Program (SNAP)⁸ and federal Child Nutrition Programs⁹ play a critical role in alleviating poverty, reducing food insecurity, and improving the nutrition, health, and well-being of vulnerable Americans. The federal Child Nutrition Programs include the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); National School Lunch Program; School Breakfast Program; Child and Adult Care Food Program (CACFP); Summer Food Service Program, and Afterschool Nutrition Programs.

These effective anti-hunger and anti-poverty programs – serving millions of children, adults, and seniors – must be consistent with the Dietary Guidelines. For example, SNAP benefits are based on the Thrifty Food Plan, and the latter, in theory, is based on the Dietary Guidelines. (However, an analysis from FRAC concluded that SNAP benefits are inadequate, in part, because they are based on the impractical Thrifty Food Plan, which, among other flaws, does not account for the variety called for in the Dietary Guidelines. ¹⁰) And the meal patterns and nutrition standards in the Child Nutrition Programs, especially for WIC, CACFP, and school meals, are based on the Dietary Guidelines. In short, the federal impact of this question is substantial.

4. **Duplication:** While USDA, in particular, has worked to improve food security in the nation through food assistance, nutrition education, and research, FRAC does not believe our proposed question has been sufficiently addressed through existing federal guidance. Addressing poverty and food insecurity in the Dietary Guidelines has the potential to meaningful support and enhance the efforts of USDA and others.

B. Food Insecurity Recommendations for Infants and Toddlers from Birth to 24 Months

For the infants and toddlers life stage, the DGAC should address the following questions and develop recommendations accordingly: What is the relationship between food insecurity and 1) dietary intake; 2) nutritional risk/deficiency; 3) cognitive development; 4) short and long-term health; 5) obesity risk; and 6) growth, size, and body composition?

- 1. **Relevance:** See Section II.A.1.
- 2. **Importance:** As stated in Section II.A.2., food insecurity is a significant public health concern given the high prevalence and negative consequences for health and well-being. Adequate nutrients are required to support normal growth and development, but food insecurity can compromise this. Research has shown that there is a statistically robust association between household food insecurity and physical health and developmental risk during early childhood, when brain growth is rapid. More specifically, compared to food-secure children, food-insecure children have odds of "fair or poor" health nearly twice as great, and odds of being hospitalized since birth almost a third larger. Even mild nutritional deficits during critical periods of brain growth among infants and toddlers, also known as marginal food security, may be detrimental, as they are associated with higher odds of child fair or poor health status, hospitalizations, and mothers' depressive symptoms and fair or poor health status, compared with children and mothers in food-secure households. This is especially concerning since the adverse effects of food insecurity on health and development in young children occur before the appearance of readily identifiable clinical markers, such as underweight.
- 3. **Potential Federal Impact:** As stated in Section II.A.3., SNAP and the federal Child Nutrition Programs play a critical role in alleviating poverty, reducing food insecurity, and improving the nutrition, health, and well-being of vulnerable Americans. For this life stage, the federal impact of these questions will be substantial because the meal patterns and nutrition recommendations in WIC and CACFP are based on the Dietary Guidelines.
- 4. **Duplication:** While USDA, in particular, has worked to improve food security in the nation through food assistance, nutrition education, and research, FRAC does not

believe our proposed questions have been sufficiently addressed for this life stage through existing federal guidance. Addressing these questions on food insecurity in the Dietary Guidelines has the potential to meaningful support and enhance the efforts of USDA and others in improving the health and well-being of infants and toddlers in food-insecure households.

C. Food Insecurity Recommendations for Children and Adolescents (Ages 2-18 Years Old)

For the child and adolescent life stage, the DGAC should address the following questions and develop recommendations accordingly: What is the relationship between food insecurity and 1) dietary intake; 2) nutritional risk/deficiency; 3) cognitive development; 4) short and long-term health; 5) obesity risk; and 6) growth, size, and body composition?

- 1. **Relevance:** See Section II.A.1.
- 2. **Importance:** As stated in Section II.A.2., food insecurity is a significant public health concern given the high prevalence and negative consequences for health and well-being. While food insecurity has direct and indirect impacts on physical and mental health for people of all ages, food insecurity and even marginal food security (a less severe level of food insecurity)^{15,16} is especially detrimental to the health, development, and well-being of children. ^{17,18,19,20} Research shows a link for children and adolescents between food insecurity and lower health status, ^{21,22} lower health-related quality of life, ²³ lower physical functioning, ²⁴ poor dietary quality, ²⁵ less physical activity, ²⁶ more frequent colds and stomachaches, ²⁷ asthma, ²⁸ developmental risk, ²⁹ and mental health problems (e.g., depression, anxiety, suicidal ideation). ^{30,31,32}
- 3. **Potential Federal Impact:** As stated in Section II.A.3., SNAP and the federal Child Nutrition Programs play a critical role in alleviating poverty, reducing food insecurity, and improving the nutrition, health, and well-being of vulnerable Americans. For this life stage, the federal impact of these questions will be substantial because the meal patterns and nutrition recommendations in WIC, CACFP, and school meals are based on the Dietary Guidelines.
- 4. **Duplication:** While USDA, in particular, has worked to improve food security in the nation through food assistance, nutrition education, and research, FRAC does not believe our proposed questions have been sufficiently addressed for this life stage through existing federal guidance. Addressing these questions on food insecurity in the Dietary Guidelines has the potential to meaningful support and enhance the efforts of USDA and others in improving the health and well-being of young children, school-aged children, and adolescents in food-insecure households.

D. Food Insecurity Recommendations for Adults (Ages 19-64 Years Old)

For the adult life stage, the DGAC should address the following questions and develop recommendations accordingly: What is the relationship between food insecurity and 1) dietary intake; 2) nutritional risk/deficiency; 3) short and long-term health; 4) weight status; and 5) diet-related disease management?

- 1. **Relevance:** See Section II.A.1.
- 2. **Importance:** As stated in Section II.A.2., food insecurity is a significant public health concern given the high prevalence and negative consequences for health and well-being. Food insecurity even marginal food security is associated with some of the most common and costly health problems and behaviors among adults, including fair or poor self-rated health status, ³³ diabetes, ^{34,35} obesity (primarily among women), ^{36,37,38} hypertension, ³⁹ and depression (including maternal depression). ^{40,41} Because of limited financial resources, households that are food insecure also may use coping strategies to stretch budgets that are harmful for health, such as engaging in cost-related medication underuse or non-adherence, ^{42,43} postponing or forgoing preventive or needed medical care, ^{44,45} or forgoing the foods needed for special medical diets (e.g., diabetic diets). Food insecurity and coping strategies such as these can exacerbate existing disease and compromise health.
- 3. **Potential Federal Impact:** As stated in Section II.A.3., SNAP and the federal Child Nutrition Programs play a critical role in alleviating poverty, reducing food insecurity, and improving the nutrition, health, and well-being of vulnerable Americans. For this life stage, the federal impact of these questions will be substantial because SNAP benefits are based on the Thrifty Food Plan, and the latter is based on the Dietary Guidelines. In addition, the Dietary Guidelines help inform nutrition messages in SNAP-Education.
- 4. **Duplication:** While USDA, in particular, has worked to improve food security in the nation through food assistance, nutrition education, and research, FRAC does not believe our proposed questions have been sufficiently addressed for this life stage through existing federal guidance. Addressing these questions on food insecurity in the Dietary Guidelines has the potential to meaningful support and enhance the efforts of USDA and others in improving the health and well-being of young adults and adults in food-insecure households.

E. Food Insecurity Recommendations for Pregnancy and Lactation

For the pregnancy and lactation life stage, the DGAC should address the following questions and develop recommendations accordingly: What is the relationship between food insecurity and 1) dietary intake in pregnancy and up to one year postpartum; 2) pregnancy outcomes (e.g., pregnancy weight gain, iron status); 3) birth outcomes (e.g., birth weight); 4) postpartum weight retention and health (in the first year postpartum); and 5) breastfeeding initiation and duration?

As suggested in these questions, we also recommend **expanding this life stage to include the first year postpartum** for both lactating and non-lactating women given this critical period for maternal and infant health. More specifically, we recommend renaming this life stage to, "Pregnancy, Lactation, and Postpartum."

- 1. **Relevance:** See Section II.A.1.
- 2. **Importance:** As stated in Section II.A.2., food insecurity is a significant public health concern given the high prevalence and negative consequences for health and well-being. Inadequate dietary intake during pregnancy and early childhood which may be a consequence of household food insecurity can increase the risk for birth defects, anemia, low birth weight, preterm birth, and developmental problems. 46.47,48 Of

particular concern is the risk of mothers, especially for food-insecure mothers, entering pregnancy with insufficient iron stores and with low folate diets. Poor iron and folic acid status are linked to preterm births and fetal growth retardation, respectively. ^{49,50} 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. ⁵¹

Children born to mothers who were food-insecure during pregnancy also are at increased risk of birth defects, including cleft palate, d-transposition of the great arteries, tetralogy of Fallot, spina bifida, and anencephaly. Finally, research shows 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 the phenomenon of prenatal nutritional programming. ⁵³

- 3. **Potential Federal Impact:** As stated in Section II.A.3., SNAP and the federal Child Nutrition Programs play a critical role in alleviating poverty, reducing food insecurity, and improving the nutrition, health, and well-being of vulnerable Americans. For this life stage, the federal impact of these questions will be substantial because SNAP benefits are based on the Thrifty Food Plan, and the latter is based on the Dietary Guidelines. In addition, the Dietary Guidelines help inform nutrition messages in SNAP-Education. Furthermore, the food packages and nutrition recommendations in WIC are based on the Dietary Guidelines.
- 4. **Duplication:** While USDA, in particular, has worked to improve food security in the nation through food assistance, nutrition education, and research, FRAC does not believe our proposed questions have been sufficiently addressed for this life stage through existing federal guidance. Addressing these questions on food insecurity in the Dietary Guidelines has the potential to meaningful support and enhance the efforts of USDA and others in improving the health and well-being of pregnant, lactating, and postpartum women in food-insecure households.

F. Food Insecurity Recommendations for Older Adults (Ages 65 years and Older)

For the older adult life stage, the DGAC should address the following questions and develop recommendations accordingly: What is the relationship between food insecurity and 1) dietary intake; 2) nutritional risk/deficiency; 3) short and long-term health; 4) weight status; and 5) diet-related disease management?

- 1. **Relevance:** See Section II.A.1.
- 2. **Importance:** As stated in Section II.A.2., food insecurity is a significant public health concern given the high prevalence and negative consequences for health and well-being. In 2016, 2.8 million food-insecure households included a senior aged 65 or older. ⁵⁴ Among older adults, food insecurity has been linked with poor or fair health status, ⁵⁵ diabetes, ⁵⁶ depression, ⁵⁷ congestive heart failure, ⁵⁸ hypertension, ⁵⁹ obesity (primarily among women), ⁶⁰ lower cognitive function, ⁶¹ and lower intakes of calories and key nutrients (e.g., protein, iron, calcium, vitamins A and C). ⁶² And as stated in Section II.D.2., households that are food insecure also may use coping strategies to stretch

limited budgets that are harmful for health, such as choosing food over medicine or vice versa.

- 3. **Potential Federal Impact:** As stated in Section II.A.3., SNAP and the federal Child Nutrition Programs play a critical role in alleviating poverty, reducing food insecurity, and improving the nutrition, health, and well-being of vulnerable Americans. For this life stage, the federal impact of these questions will be substantial because SNAP benefits are based on the Thrifty Food Plan, and the latter is based on the Dietary Guidelines. In addition, the Dietary Guidelines help inform nutrition messages in SNAP-Education.
- 4. **Duplication:** While USDA, in particular, has worked to improve food security in the nation through food assistance, nutrition education, and research, FRAC does not believe our proposed questions have been sufficiently addressed for this life stage through existing federal guidance. Addressing these questions on food insecurity in the Dietary Guidelines has the potential to meaningful support and enhance the efforts of USDA and others in improving the health and well-being of older adults in food-insecure households.

Section III. Cultural and Ethnic Preferences Recommendations Applicable to All Life Stages

For all life stages, the DGAC should answer the following question: **How do the final Dietary Guidelines' recommendations reflect and address the cultural and ethnic preferences of the current U.S. population?** This subject matter is not addressed in the proposed list of topics and questions, but is critically important given the diversity of the American population.

- 1. **Relevance:** This question is well within the scope of the Dietary Guidelines. The 2015 Dietary Guidelines addressed acculturation to some extent in, for example, "Chapter 3. Everyone Has a Role in Supporting Healthy Eating Patterns."
- 2. **Importance:** The United States is highly diverse. With the rapidly changing racial and ethnic profile, non-Hispanic whites will no longer be the racial/ethnic majority group by 2055. ⁶³ The breakdown by that year is estimated to be 48 percent White, 23 percent Hispanic, 12 percent Asian, and 13 percent Black.
 - There are religious and racial/ethnic differences and influences in dietary practices across the lifespan. Therefore, it is crucial that the Dietary Guidelines be culturally congruent with the population of the U.S. This can help ensure optimal dietary intake across the population and eliminate disparities in health.
- 3. **Potential Federal Impact:** As stated in Section II.A.3., the Supplemental Nutrition Assistance Program (SNAP) and federal Child Nutrition Programs play a critical role in alleviating poverty, reducing food insecurity, and improving the nutrition, health, and well-being of vulnerable Americans. The Dietary Guidelines are the nutrition foundation for the federal nutrition programs, which serve infants, children, adolescents, adults, and seniors from a wide range of cultural and ethnic backgrounds. These programs can better serve all participants by, for example, offering culturally appropriate foods in the WIC food package and school meals programs. Overall, addressing cultural and ethnic preferences in the Dietary Guidelines has the potential to meaningful support and

- enhance the efforts of USDA and others who are developing policies, programs, and materials that are responsive and appropriate for Americans from diverse backgrounds.
- 4. **Duplication:** FRAC does not believe our proposed question has been sufficiently addressed through existing federal guidance.

Section IV. Food and Nutrient Recommendations Applicable to All Life Stages

For all life stages, the DGAC should **issue specific recommendations for whole grains, vegetables, fruits, sodium, saturated fat, dietary cholesterol, and added sugars** to provide actionable advice to the public and to ensure that those recommendations can be translated into nutrition programs. These recommendations could be added under the topic of "dietary patterns" for children and adults, and to "additional calorie needs" for pregnancy and lactation. (Added sugars recommendations are currently included in the proposed topics for children and adults, but need to be added to the other life stages.)

- 1. **Relevance:** These topics are well-within the scope of the Dietary Guidelines as they have been included in prior editions of the Dietary Guidelines.
- 2. **Importance:** Americans from all income groups fall short of meeting current federal dietary guidance consuming diets too low in fruits, vegetables, whole grains, and low-fat dairy, and consuming diets too high in added sugars, sodium, and solid fats. ^{64,65,66} In general, poor dietary intake (e.g., excess saturated or *trans* fat intake, a diet low in fruits and vegetables) has been linked to a number of diseases and chronic conditions, including cardiovascular disease, Type 2 diabetes, some types of cancer, and osteoporosis. ^{67,68} In addition, inadequate dietary intake during pregnancy and early childhood which may be a consequence of food insecurity can increase the risk for birth defects, anemia, low birth weight, preterm birth, and developmental problems. ^{69,70,71,72} Poor dietary intake also contributes to obesity, which is associated with many serious physiological, psychological, and social consequences for children and adults. To improve the dietary intake of people across the lifespan, specific recommendations are needed so that they can be easily understand and readily applied by consumers.
- 3. **Potential Federal Impact:** As stated in Section II.A.3., SNAP and the federal Child Nutrition Programs play a critical role in alleviating poverty, reducing food insecurity, and improving the nutrition, health, and well-being of vulnerable Americans. The nutrition recommendations and guidance for these programs is based on the Dietary Guidelines. Precise, quantitative recommendations are more useful in setting standards for these programs, especially for WIC and school meals.
- 4. **Duplication:** These topics were addressed by earlier Dietary Guidelines (except for the newly added life stages covering pregnant, lactating, and postpartum women and infants and toddlers) and apply to all age groups. Therefore, their inclusion would provide an update to or expansion of existing federal guidance.

Section V. Additional Recommendations for Infants and Toddlers from Birth to 24 Months

For the "duration" and "frequency and volume" topic areas related to infant feeding, we suggest expanding the questions to include short- and long-term

health outcomes, neurocognitive development, self-regulation, taste preference formation, infection risk, and immunity. For example, "What is the relationship between the duration of exclusive human milk or infant formula consumption and ... short- and long-term health outcomes?" The DGAC should also provide clear recommendations on breastfeeding timing and duration.

Under the "complementary foods and beverages" topic for this life stage, we recommend expanding, "What is the relationship between complementary feeding and 1) micronutrient status;...?" to include short- and long-term health outcomes, neurocognitive development, self-regulation, and taste preference formation. We also suggest adding the following new question to this topic, "What are the negative health impacts of early introduction of solid foods?

We also recommend adding "feeding styles" as a new topic area for this life stage that includes the following questions: What is the relationship of parental and caregiver feeding practices and styles to infant and toddler 1) growth; 2) physical development; 3) overweight/obesity risk; and 4) eating behaviors? The feeding practices and styles should include control, pressure, restriction, responsive/intrusive/indulgent, and responsiveness to satiety and hunger cues.

Finally, we recommend adding "dietary quality" as a new topic area for this life stage that includes the following questions: What is the relationship between diet quality and 1) excessive weight gain; 2) short- and long-term health outcomes; and 3) micronutrient status?

- 1. **Relevance:** These new topic areas and questions are well within the scope of the Dietary Guidelines given the importance of diet on the health of infants and young children in the short and long terms.
- 2. **Importance:** Good nutrition and positive feeding practices throughout the first two years of life help to lay the foundation for a child's health well into adulthood. 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. Providing clear dietary and feeding recommendations will assist families as well as health care providers who often are the messengers for such recommendations in improving the diets and health of infants and young children.
- 3. **Potential Federal Impact:** As stated in Section II.A.3., SNAP and the federal Child Nutrition Programs play a critical role in alleviating poverty, reducing food insecurity, and improving the nutrition, health, and well-being of vulnerable Americans. For this life stage, the federal impact of these questions will be substantial because the meal patterns and nutrition recommendations in WIC and CACFP are based on the Dietary Guidelines.
- 4. **Duplication:** The diet of children up to 2 years of age is not addressed through existing evidence-based federal guidance, so these Dietary Guidelines provide an opportunity to fill a gap in terms of what we know about the impact of diet on infant and toddler health.

Section VI. Additional Recommendations for Pregnancy and Lactation

For this life stage, we recommend **expanding**, "What is the relationship between specific dietary patterns... consumed among women who are pregnant...?" to

include "maternal health" as an outcome of focus (in addition to the existing emphasis on gestational diabetes, hypertensive disorders, gestational age, and birth weight). This emphasis on maternal health should also be incorporated into the existing question, "What is the relationship between specific dietary patterns... consumed among women who are lactating...?"

For this life stage, we also recommend **adding "dietary quality" as a new topic area** that includes the following questions:

- For Pregnant Women: What is 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; 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?
- For Postpartum Women: What is the relationship between diet quality of postpartum women and 1) excessive weight gain; 2) the short- and long-term health of mothers; and 3) micronutrient status?

Finally, as noted in Section II.E., we recommend **expanding this life stage to include the first year postpartum** for both lactating and non-lactating women given this critical period for maternal and infant health. The nutritional and dietary needs of pregnant women differ from those of lactating and non-lactating postpartum women.

- 1. **Relevance:** This new topic area and additional questions are well within the scope of the Dietary Guidelines given the importance of maternal diet. The food that a woman eats before, during, and after pregnancy and while breastfeeding has a substantial impact on the health of her infant as well as on her own short- and long-term health and well-being.
- 2. **Importance:** It is clear that diet plays a critical role in the health and well-being of women, both before, 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. The U.S. has the highest maternal mortality rate of any wealthy industrialized country in the world⁷⁴ questions highlighting women's health outcomes in relation to dietary patterns and quality will provide opportunities to better understand and address the nutritional needs of women in and around pregnancy.
- 3. **Potential Federal Impact:** As stated in Section II.A.3., SNAP and the federal Child Nutrition Programs play a critical role in alleviating poverty, reducing food insecurity, and improving the nutrition, health, and well-being of vulnerable Americans. For this life stage, the federal impact of these questions will be substantial because the Dietary Guidelines inform the Thrifty Food Plan and SNAP-Education, as well as the food packages and nutrition recommendations in WIC.
- 4. **Duplication:** The diet of pregnant and postpartum women is not addressed through existing evidence-based federal guidance, so these Dietary Guidelines provide an opportunity to fill a gap in terms of what we know about the impact of diet on maternal health.

Section VII. Conclusion

We appreciate this opportunity to share our comments, and look forward to providing additional feedback during future public comment periods related to the Dietary Guidelines.

Sincerely,

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