

# **2020 DIETARY GUIDELINES ADVISORY COMMITTEE MEETING 3**

*Convened by the*  
**U.S. Department of Agriculture (USDA)  
U.S. Department of Health and Human Services (HHS)**

**October 24 and 25, 2019**

## **Dietary Guidelines Advisory Committee members present:**

Dr. Barbara Schneeman (Chair)  
Dr. Ronald Kleinman (Vice-Chair)  
Dr. Jamy Ard  
Dr. Regan Bailey  
Dr. Lydia Bazzano  
Dr. Carol Boushey  
Dr. Teresa Davis  
Dr. Kathryn Dewey  
Dr. Sharon Donovan  
Dr. Steven Heymsfield  
Dr. Heather Leidy  
Dr. Richard Mattes  
Dr. Elizabeth Mayer-Davis  
Dr. Timothy Naimi  
Dr. Rachel Novotny  
Dr. Joan Sabaté  
Dr. Linda Snetselaar  
Dr. Jamie Stang  
Dr. Linda Van Horn (October 24 only)

## **Also present:**

Mr. Brandon Lipps, Deputy Under Secretary, Food, Nutrition, and Consumer Services, USDA  
(October 24 only)  
Dr. Scott Hutchins, Deputy Under Secretary, Research, Education, and Economics, USDA  
(October 24 only)  
Dr. Brett P. Giroir, ADM, U.S. Public Health Service and Assistant Secretary for Health, HHS  
(October 25 only)  
Ms. Jackie Haven, Deputy Administrator, Center for Nutrition Policy and Promotion, USDA  
Dr. Eve Stoody, Center for Nutrition Policy and Promotion, USDA, Designated Federal Officer  
and Co-Executive Secretary  
Dr. David Klurfeld, Agricultural Research Service, USDA, Co-Executive Secretary  
Dr. Richard Olson, Office of Disease Prevention and Health Promotion, HHS  
Ms. Janet de Jesus, Office of Disease Prevention and Health Promotion, HHS

The Advisory Committee met at the USDA headquarters, 1400 Independence Avenue, Washington, DC, Barbara Schneeman, Chair, presiding. The meeting allowed for public viewing, both in-person and by webcast.

***The following is a summary of Day 1 of Meeting 3. Please see videos and/or transcripts on the [Meeting 3 page](#) at [DietaryGuidelines.gov](#) for details.***

## **WELCOME AND OVERVIEW**

The 2020 Dietary Guidelines Advisory Committee (“Committee”), Meeting 3, was convened at 9:00am on Thursday, October 24, 2019, at the Jefferson Auditorium, USDA South Building, Washington, DC. Dr. Eve Stody, Designated Federal Officer of the 2020 Dietary Guidelines Advisory Committee and a Lead Nutritionist in the USDA Center for Nutrition Policy and Promotion, introduced herself, welcomed everyone to the meeting, and introduced Brandon Lipps, the Deputy Under Secretary of USDA’s Food, Nutrition, and Consumer Services mission area.

Mr. Lipps welcomed all those watching in person and online, thanked HHS for its continuing partnership on the Dietary Guidelines, and thanked the Committee for its ongoing dedication and expertise. Mr. Lipps underscored USDA’s and HHS’ commitment to ensuring that the Dietary Guidelines process be transparent, inclusive, and science driven. He emphasized that the central role of nutrition to overall health across the lifespan is why the Committee’s independent and rigorous review of current evidence is so important. He then introduced Dr. Scott Hutchins, Deputy Undersecretary for USDA’s Research, Education, and Economics.

Dr. Hutchins welcomed everyone to the meeting. He stated that USDA Secretary Perdue’s emphasis on “doing right and feeding everyone” is highly relevant for the Committee. Dr. Hutchins then briefly reviewed the work of USDA’s four science agencies—the Economic Research Service, the National Agricultural Statistics Service, the National Institute of Food and Agriculture, and the Agricultural Research Service—which are supported by the Office of the Chief Scientist. He reiterated that USDA works in partnerships to provide evidence-based research and noted that USDA and HHS co-chair the Interagency Committee on Human Nutrition Research. Dr. Hutchins emphasized USDA’s dedication to providing clear and transparent evidence and to supporting public health and the evolution of scientific progress.

Dr. Stody thanked Mr. Lipps and Dr. Hutchins. She noted that 19 of the 20 Committee members were present for the day’s meeting. Dr. Taveras was not able to attend but would join the meeting online to the extent possible. Dr. Stody noted that a quorum of the Committee was present. She then reviewed the charge to the Committee and the process by which questions for the Committee were selected and prioritized. She noted that although Meeting 3 did not include an opportunity for public comments or questions, the public is always encouraged to submit comments through the written public comment process and to follow the work of the Committee on [DietaryGuidelines.gov](#). Dr. Stody concluded her remarks and turned the meeting over to Dr. Barbara Schneeman, Chair of the Dietary Guidelines Advisory Committee.

## **CHAIR REMARKS**

Dr. Schneeman thanked Mr. Lipps and Dr. Hutchins and welcomed the Committee and members of the public. She briefly explained how the Committee is conducting its work and emphasized that all final decisions by the full Committee will be made in its public meetings.

She then explained that the Committee is using three approaches to examine the evidence—data analysis, food pattern modeling, and systematic reviews. Each of these approaches has its own rigorous protocol-driven methodology and plays a unique and complementary role in examining the science. She reminded participants that the Committee is not using existing systematic reviews conducted by other organizations, but noted that the Committee’s report will discuss how its findings relate to existing reviews and guidance, as appropriate.

Dr. Schneeman then reviewed the analytic frameworks and inclusion and exclusion criteria for NESR systematic reviews and the analytic plans that would be presented for the data analyses. She also reviewed progress since Meeting 2. She concluded her remarks by reviewing the agenda for both days of the meeting, noting that Subcommittees would be presenting new and updated protocols as well as some initial findings and conclusions.

## **NUTRITION EVIDENCE SYSTEMATIC REVIEW (NESR) SYNTHESIS OF THE EVIDENCE**

Dr. Julie Obbagy, a nutritionist with USDA’s Center for Nutrition Policy and Promotion and the 2020 NESR lead, provided an overview of the NESR systematic review methodology. She began by reiterating NESR’s mission, which is to conduct systematic reviews on food and nutrition topics that can be used to inform U.S. federal guidance and programs. She defined systematic reviews as a research project that answers a clearly formulated scientific question by searching for, evaluating, analyzing, and synthesizing nutrition evidence.

Dr. Obbagy then reviewed the steps of the systematic review process, noting that it is routinely evaluated and updated to remain a state-of-the-art process. She also emphasized that the Committee drives the process by establishing the protocols, reviewing the studies obtained, deliberating on and synthesizing the body of evidence gathered, and writing and grading the conclusion statements. The NESR staff supports the Committee’s review by providing expertise on the methodology and by searching for and screening the studies, extracting the data, creating tables summarizing the evidence, and conducting risk of bias assessments for the Committee’s consideration. Each step of the systematic review process is designed to provide a structured, transparent, and reproducible approach for obtaining and assessing evidence in a scientifically rigorous way. Dr. Obbagy concluded her remarks by encouraging the public to visit NESR’s updated [website](#) to learn about the systematic review process and the tools that are being used to support the 2020 Committee’s work.

In response to a question, Dr. Obbagy clarified that a number of methodologies exist to grade the strength of evidence. NESR’s approach is based on considering the risk of bias, consistency, directness, precision, and generalizability of the evidence as well as the study design of the studies included in the review.

In response to another question, Dr. Obbagy noted that approximately 200,000 articles are currently being screened to answer the Committee’s questions, with more searches to come.

## **DIETARY PATTERNS SUBCOMMITTEE UPDATE**

Dr. Carol Boushey, chair of the Dietary Patterns Subcommittee, provided a status report on the Subcommittee’s questions. She noted that the Subcommittee is developing the plan for five NESR systematic reviews, which examine the relationship between dietary patterns and: (1) body composition/obesity; (2) cardiovascular disease; (3) type 2 diabetes; (4) certain types of cancer; and (5) bone health. In addition, Dr. Boushey reported that the Subcommittee has

begun to implement NESR systematic reviews for three protocols presented previously. These protocols are examining the relationship between dietary patterns and: (1) sarcopenia; (2) all-cause mortality; and (3) neurocognitive health. Dr. Boushey defined the term “dietary patterns,” and noted that the Subcommittee updated the inclusion and exclusion criteria for all of the protocols presented at the July meeting based on the Committee’s discussion and consideration of public comments.

Dr. Boushey then presented the analytic frameworks for the questions concerning the relationship between dietary patterns and: (1) certain types of cancer, and (2) bone health. She described the intervention/exposure, comparators, and endpoint outcomes; specified the populations of interest, and listed key confounders and other factors to be considered. She also reviewed the inclusion and exclusion criteria, noting which of these criteria have been modified from the standard criteria to fit the unique circumstances of each Dietary Patterns review.

Dr. Boushey concluded her presentation by summarizing the Subcommittee’s next steps, which are to complete the protocols for the cancer and bone health questions; implement the protocols for the body composition/obesity, cardiovascular disease, and type 2 diabetes questions; and continue the search and screening process for the three systematic reviews already underway. In addition, as the Subcommittee gets further into its reviews, it plans to meet with the Data Analysis and Food Pattern Modeling Working Group to determine how the work of each group can inform that of the other.

During the discussion that followed, Subcommittee members clarified that the update of the inclusion criteria to capture diets that fall outside of the Acceptable Macronutrient Distribution Range (AMDR) was an attempt to capture studies of low carbohydrate or high fat diets which at a minimum must describe the entirety of the macronutrient distribution in the pattern. These criteria are separate from the dietary patterns criteria, which at a minimum must include the foods and beverages consumed to be included in a review. In response to a question about looking at the NOVA processed foods system and its relationship to health outcomes, Dr. Boushey replied that the Subcommittee was not tasked with looking at this specific question, but noted they had discussed including it as an area for consideration by future Committees. Dr. Boushey added that if a study used the NOVA system or other processed food classification and met all of the inclusion criteria, it could be included within one of the Subcommittee’s systematic review questions. Another member asked about the extent to which the NESR searches are able to capture both macronutrients and specific food components and whether a hierarchy is used in the searches or assessments of the body of evidence. NESR staff answered that terms used in the literature search strategy are designed to cast as wide a net as possible and that all data on macronutrients and food components reported are extracted. Dr. Boushey responded that the evidence is not evaluated according to a hierarchy. Dr. Schneeman acknowledged that multiple conclusion statements may be needed based on how the questions were addressed and the findings of the review.

Note: The Dietary Patterns Subcommittee protocols discussed are available at [DietaryGuidelines.gov](https://www.dietaryguidelines.gov).

## **DIETARY FATS AND SEAFOOD SUBCOMMITTEE UPDATE**

Dr. Linda Snetselaar, chair of the Dietary Fats and Seafood Subcommittee, noted that the Subcommittee presented NESR systematic review protocols for all seven of its questions at the July meeting. She reviewed the current status of these questions. Draft conclusion statements have been completed for portions of the question about the relationship between seafood

consumption during pregnancy and lactation and neurocognitive development of the infant. Systematic reviews for questions concerning the relationship between seafood consumption during childhood and adolescence and: (1) neurocognitive development and (2) cardiovascular disease are underway. The review of the question on the relationship between dietary fat consumption and all-cause mortality also is underway. The reviews for the three remaining questions on the relationship between dietary fat consumption and: (1) cardiovascular disease; (2) neurocognitive development/health; and (3) cancer will be conducted in the near future. She also described a change to the approach to address the question on the relationship between types of dietary fat consumed and risk of cardiovascular disease. The Subcommittee will build upon the 2015 Dietary Guidelines Advisory Committee review of dietary fat and CVD, which included studies dating from the 1960s as well as conduct a de novo NESR systematic review of dietary fats and CVD for more recent studies.

Dr. Snetselaar presented draft conclusion statements for selected outcomes (i.e., attention deficit disorder, attention deficit hyperactivity disorder, and autism spectrum disorder) of the question on the relationship between seafood consumption during pregnancy and lactation and neurocognitive development of the infant. Dr. Snetselaar noted that the Subcommittee met with the Birth to 24 Month and Pregnancy and Lactation Subcommittees and also obtained feedback from external neurocognitive experts. She provided key definitions, presented the analytic framework, and reviewed the inclusion and exclusion criteria. She presented the literature search and screening results and the draft conclusion statements, and described the evidence supporting these statements.

Dr. Snetselaar concluded her presentation by summarizing the Subcommittee's next steps, which are to complete the evidence portfolios and conclusion statements for the two questions about seafood intake and neurocognitive development, complete screening and data extraction for the systematic review question on seafood during childhood/adolescence and cardiovascular disease and dietary fats and all-cause mortality, and begin screening for the remaining three questions that are examining dietary fats and cardiovascular disease, cancer, and neurocognitive development and health.

During the discussion that followed, members agreed that the relationship between seafood consumption during pregnancy and outcomes in the infant is an emerging area and that these findings do not change overall recommendations about seafood consumption during pregnancy. A member asked what criteria the Subcommittee is using to ensure it is capturing customary intakes in the question on seafood consumption in childhood and adolescence and later cardiovascular disease. Dr. Snetselaar responded that it is including studies that involve both parents and children reporting intakes. Other members asked whether studies considered other issues, such as the mercury content of seafood or whether studies distinguished among different types of seafood and fish. Dr. Snetselaar and staff noted that if the information is reported, the data are extracted for the Subcommittee to consider in its review. However, the body of literature is small and not all studies report this information.

Note: The Dietary Fats and Seafood Subcommittee protocols discussed are available at [DietaryGuidelines.gov](https://www.dietaryguidelines.gov).

## **BEVERAGES AND ADDED SUGARS SUBCOMMITTEE UPDATE**

Dr. Elizabeth Mayer-Davis, chair of the Beverages and Added Sugars Subcommittee, provided a status report on the Subcommittee's questions. Dr. Mayer-Davis presented protocols for three NESR systematic reviews examining the relationship between added sugars consumption and:

(1) risk of cardiovascular disease; (2) risk of type 2 diabetes; and (3) growth, size, body composition, and risk of overweight and obesity. She also presented two protocols for systematic reviews on the relationship of added sugars consumption during pregnancy and gestational weight gain, and added sugars consumption during lactation and postpartum weight loss. Finally, she presented the protocol for a review on beverage consumption during lactation and human milk composition and quantity. Dr. Mayer-Davis presented a chart categorizing types of beverages considered by the Subcommittee in answering all non-alcoholic beverage questions, including the protocol for human milk composition and quantity. For all protocols presented, she defined key terms, described inclusion and exclusion criteria, and presented the analytic frameworks.

Dr. Mayer-Davis also reviewed the search and screening results for the question concerning beverage consumption during pregnancy and birth weight, standardized for gestational age and sex and described work underway on the Subcommittee's questions related to the relationship between alcohol consumption and various outcomes. She outlined how the Subcommittee is considering defining the alcohol exposure and inclusion and exclusion criteria.

Dr. Mayer-Davis concluded her presentation by summarizing the Subcommittee's next steps, which are to complete the protocols on the alcoholic beverages questions, finish screening the questions currently underway and synthesize findings, and continue cross-cutting discussions with the Data Analysis and Food Pattern Modeling Working Group and the Birth to 24 Months Subcommittee.

During the discussion that followed, Dr. Mayer-Davis acknowledged that total energy intake can sometimes be considered a mediator and sometimes a key confounder and explained for that reason, it is listed as another factor to be considered. In response to questions about study designs that would be included in questions examining beverage consumption, Dr. Mayer-Davis noted that studies would need to isolate the effect of particular beverages to be included and clarified that the comparator for these questions is a different amount or physical form of a beverage. The discussion finished with agreement among the members that some aspects of the analytic framework, such as inclusion and exclusion criteria, comparators, and key confounders, can be quite complex for the beverages and added sugars questions.

Note: The Beverages and Added Sugars Subcommittee protocols discussed are available at [DietaryGuidelines.gov](http://DietaryGuidelines.gov).

## **FREQUENCY OF EATING SUBCOMMITTEE UPDATE**

Dr. Steven Heymsfield, chair of the Frequency of Eating Subcommittee, reported on the status of the Subcommittee's NESR systematic reviews. He stated that the Subcommittee has begun to implement all of the previously presented protocols, including three on the relationship between frequency of eating and: (1) growth, size, body composition, and risk of overweight and obesity; (2) cardiovascular disease; and (3) type 2 diabetes. The Subcommittee will also examine frequency of eating during pregnancy and gestational weight gain, and frequency of eating during lactation and postpartum weight loss using systematic reviews. He also noted that the Subcommittee had updated the protocols for all of its questions.

Dr. Heymsfield then presented a draft conclusion statement on the relationship between frequency of eating and all-cause mortality. He presented the analytic framework for the question, and reviewed the inclusion and exclusion criteria. He presented the literature search and screening results, noting that all 18 articles that were screened using full-text articles were

excluded, leaving 0 articles. He explained that three articles would have been included except that they had only one dietary collection time-point, and the Subcommittee had determined that more than one data collection time point was required to achieve a reliable measure of typical frequency. As a result, the draft conclusion statement was that no evidence was available to draw a conclusion. Dr. Heymsfield concluded his presentation by summarizing the Subcommittee's next steps, which are to complete the screening of articles for the five remaining questions.

During the discussion that followed, members discussed how multiple time points of dietary data collection could be handled in different study designs and whether those approaches would fulfill the objective of obtaining a reliable measure of typical frequency of eating. One member noted that Frequency of Eating is the only Subcommittee to consider this issue of the adequacy of exposure. Another suggested that this might not be applied as an inclusion or exclusion criterion but could be considered in determining the strength of evidence grade; and that is how other Subcommittees are addressing it.

Note: The Frequency of Eating Subcommittee protocols discussed are available at [DietaryGuidelines.gov](https://www.dietaryguidelines.gov).

## **DISCUSSION**

Following a short break, Dr. Schneeman noted that in light of the fact that all of the subcommittees are well into their work, it would be helpful to discuss the end product of the Committee's work, which is the Committee's report to the Secretaries of USDA and HHS. She asked Dr. Stoodly and Ms. de Jesus to provide an overview of the report structure and content.

Dr. Stoodly stated that a proposed outline of the report's structure has been developed for the Committee's consideration and described the report's major components. Dr. Stoodly also described the proposed structure for chapters that present the questions and evidence reviews. The chapters will include an introduction of the topic, a list of questions, brief summaries from the systematic reviews for each question, and a discussion section that summarizes and discusses the impact of the chapter's findings.

Dr. Schneeman noted that organizing the report around life stages will require some integrating work across subcommittees, but it is consistent with the aim of this 2020-2025 Dietary Guidelines process. She asked for Committee comments. One member asked how questions might be grouped by topic area and another asked where the data analysis and food pattern modeling questions would be placed. One member stressed that maintaining a focus on diet early in life is critical to maintaining a high quality of life over the long term. Much more data will emerge on this issue in coming years, but this report could set the stage with a focus on long-term prevention throughout the life course, starting even in utero.

One member asked how the life stages would be divided, and Dr. Stoodly replied that though the report is divided into very broad age stages, the analytic frameworks for individual questions focus on more discrete age group divisions. Members discussed whether to break up the 2 Years and Older section into discrete age groups. In response to a question, Dr. Stoodly noted that the Dietary Guidelines are not written by stage of life although the USDA Food Patterns are organized into 12 patterns at different calorie levels. Additionally, certain nutrients are of concern for particular age groups.

To provide context for this discussion, Dr. Bailey stated that the age groups for data analysis depend on DRIs or NHANES sampling framework but in general they are: birth to 24 months, 2-5 years, 6-12, 13-18, and 18 or 19 and older. Older adults are 65 years and older in some reports and 71 and older in others. Women who are pregnant or lactating are generally grouped as 20 to 44 years. Dr. Katrina Piercy, Office of Disease Prevention and Health Promotion, HHS, explained that the Physical Activity Guidelines for Americans are organized by broad age group (children and adolescents [3-5 years, 6-17], adults [18-64], older adults [65 and older], and selected populations [women who are pregnant, people with chronic health conditions, people with disabilities]). She noted that the physical activity guidelines for older adults are essentially the same as for other adults, with several additional specific considerations.

The Committee agreed that the life stage approach was a good one and discussed a number of issues that would be relevant to pursuing this approach.

Before adjourning for the day, Dr. Schneeman asked members for any final comments. Members expressed a desire to work within the NESR systematic review approach but still reflect the preponderance of available evidence and a hope that scientific conclusions and recommendations from existing reports can be acknowledged. Another member noted that some elements of the analytic frameworks are still inconsistent and that the Committee's task is to achieve a balance between including relevant studies and including only the highest quality studies. A member suggested that the Committee needs to develop clear rationales when it chooses not to consider an issue that may be within its scope. Articulating research gaps also will be an important contribution of the report. Another member mentioned the National Academies recommendation that the Dietary Guidelines process include a food systems approach; this will be hard to do but would be useful to keep in mind.

Dr. Schneeman thanked the members for their participation throughout the day, asked the public to submit any comments on the presentations to [DietaryGuidelines.gov](https://www.dietaryguidelines.gov) by November 7, and adjourned the meeting at 3:27pm.

***The following is a summary of Day 2 of Meeting 3. Please see videos and/or transcripts on the [Meeting 3 page](#) at [DietaryGuidelines.gov](https://www.dietaryguidelines.gov) for details.***

Day 2 of the 2020 Dietary Guidelines Advisory Committee ("Committee"), Meeting 3, was convened at 9:00am on Friday, October 25, 2019, at the Jefferson Auditorium, USDA South Building, Washington, DC, Barbara Schneeman, Chair, presiding. The meeting allowed for public viewing, both in-person and by webcast.

## **WELCOME AND OVERVIEW**

Janet de Jesus, Office of Disease Prevention and Health Promotion, HHS, welcomed everyone back to Meeting 3 and introduced Admiral Brett Giroir, Assistant Secretary of Health, HHS.

Dr. Giroir welcomed everyone to the meeting and warmly thanked the Committee, acknowledging the difficulty and the importance of their work. He also thanked the USDA and HHS staff who are supporting the Committee. Dr. Giroir noted that nutrition and physical activity are the "dynamic duo," the foundation of health and that they are critically important in light of current rates of obesity, chronic disease, and lack of fitness. Dr. Giroir noted the potential for nutrition and physical activity to improve the health of all Americans and expressed his firm support for the work of the Committee.

Dr. Schneeman thanked Dr. Giroir, reviewed Day One of the meeting and provided a preview of the Day Two agenda.

## **BIRTH TO 24 MONTHS SUBCOMMITTEE UPDATE**

Dr. Kathryn Dewey, chair of the Birth to 24 Months (B-24) Subcommittee, reported on the status of the Subcommittee's NESR systematic reviews. She first explained the complexity of the B-24 systematic review task by noting that B-24 topics are being addressed by four subcommittees, and that a number of questions have multiple questions embedded in them.

Dr. Dewey noted that the Subcommittee has begun to implement several systematic review protocols presented at the July meeting, including the human milk and infant formula systematic reviews and the nutrients from supplements and fortified foods systematic reviews. The B-24 Subcommittee also has been meeting with the Data Analysis and Food Pattern Modeling Working Group, the Beverages and Added Sugars Subcommittee, and the Dietary Fats and Seafood Subcommittee to discuss cross-cutting topics.

Dr. Dewey concluded her presentation by summarizing the Subcommittee's next steps, which are to continue implementing the protocols already presented, continue working with other subcommittees on cross-cutting topics, and develop the Subcommittee's remaining protocols. These protocols will describe how to use existing systematic reviews on complementary foods and beverages completed during the Pregnancy and Birth to 24 Months Project.

Note: The Birth to 24 Months Subcommittee protocols discussed are available at [DietaryGuidelines.gov](http://DietaryGuidelines.gov).

## **DATA ANALYSIS AND FOOD PATTERN MODELING WORKING GROUP UPDATE: BIRTH TO 24 MONTHS QUESTIONS**

Dr. Regan Bailey, chair of the Data Analysis and Food Pattern Modeling Working Group, described the current status of work on the B-24 elements of the Working Group's protocols. She explained the national data sources used, provided key definitions, and reviewed the analytic frameworks for the B-24 elements of the questions on: (1) current intakes of food groups and nutrients; (2) nutrients of public health concern; and (3) current dietary patterns and beverage consumption. Dr. Bailey concluded her presentation by summarizing next steps, which are to integrate data on nutrient intakes from dietary supplements into the review on current intakes of food groups and nutrients, review and summarize data analysis results, draft conclusion statements, and draft the food pattern modeling protocols.

During the discussion that followed, a member asked about how the B-24 Subcommittee was going to handle the evolving literature on early exposure and risk of food allergy. Dr. Dewey responded that the Subcommittee would be updating the previous Pregnancy and Birth to 24 Month project initial review of that topic. In response to another question, Dr. Bailey clarified that the Data Analysis Working Group is looking at a limited number of beverages for B-24, with a focus on milk and milk substitutes, 100 percent fruit juices, and beverage sources of added sugars. Dr. Dewey noted that the B-24 Subcommittee also would be looking closely at infant milk sources and timing of introduction of other foods and beverages.

## **PREGNANCY AND LACTATION SUBCOMMITTEE UPDATE**

Dr. Sharon Donovan, chair of the Pregnancy and Lactation Subcommittee, reported on the status of the Subcommittee's NESR systematic reviews. She noted that she would be presenting protocols for seven new systematic reviews. Three protocols concern dietary patterns during pregnancy and lactation and: (1) human milk composition and quantity; (2) infant developmental milestones, including neurocognitive development; and (3) maternal micronutrient status. Three protocols concern the relationship between nutrients (vitamin B12, omega-3 fatty acids, and vitamin D) from supplements and/or fortified foods consumed before and during pregnancy and lactation and: (1) micronutrient status; (2) risk of gestational diabetes; (3) risk of hypertensive disorders during pregnancy; (4) human milk composition and quantity; and (5) infant developmental milestones, including neurocognitive development. The final protocol concerns the relationship between maternal diet during pregnancy and lactation and risk of infant and child food allergies and atopic allergic diseases. For each of these protocols, Dr. Donovan defined key terms, presented the analytic framework, and discussed inclusion and exclusion criteria.

Dr. Donovan then presented draft conclusion statements for two questions, which concern the relationship between folic acid from supplements and/or fortified foods consumed before and during pregnancy and lactation and: (1) human milk composition; and (2) risk of gestational diabetes. For each question, she presented the analytic framework, the literature search and screening results, description and summary of evidence, and draft conclusion statements and strength of evidence grades.

Dr. Donovan concluded her presentation by noting that the Pregnancy and Lactation Subcommittee has met with the Dietary Patterns and the Dietary Fats and Seafood Subcommittees. They also have met jointly with the Data Analysis and Food Pattern Modeling Working Group and B-24 Subcommittee. In addition, the Pregnancy and Lactation Subcommittee has provided assistance to the Beverages and Added Sugars Subcommittee on questions pertaining to women who are pregnant or lactating.

During the discussion that followed, Dr. Donovan agreed to revisit the definitions of "before pregnancy" and "pre-pregnancy" to ensure they are clear and to revisit the key confounders for hypertensive disorders and gestational diabetes to review for consistency. She also agreed to consider addressing biological mechanisms in questions concerning the relationship between supplements and/or fortified foods and outcomes and to be more explicit that the folic acid conclusion statement refers to populations that already have relatively high folate levels. Further, she agreed with other members about the importance of ensuring, to the extent possible, that methodologies for human milk collection are similar across studies. Finally, she agreed that it would be useful for her Subcommittee to meet with the Dietary Fats and Seafood Subcommittees to discuss overlapping interests in dietary fat intake from diet and supplements.

Note: The Pregnancy and Lactation Subcommittee protocols discussed are available at [DietaryGuidelines.gov](https://www.dietaryguidelines.gov).

## **DATA ANALYSIS AND FOOD PATTERN MODELING WORKING GROUP UPDATE**

In the second of her two presentations Dr. Regan Bailey, chair of the Data Analysis and Food Pattern Modeling Working Group, reported on the status of the Working Group's analysis for the 2 years and older populations. She stated that the Working Group is implementing the protocols presented in July on: (1) current intakes of food groups and nutrients; (2) prevalence of nutrition-

related chronic health conditions; (3) nutrients of public health concern; (4) current dietary patterns and beverages; and (5) tracking of dietary intake, particularly dietary patterns, across life stages. Following these, the Working Group will address the food pattern modeling analyses. She also provided some updates to the specifics of the protocols presented in July, reiterated the life stages and demographic subgroups included, and national-level data sources used, and she defined key terms.

Dr. Bailey then reviewed several new data analysis protocols. The first concerns the relationship between achieving food group and nutrient recommendations and: (1) frequency of eating; (2) beverage consumption, including alcohol consumption; and (3) added sugars consumption. The second involves a description and evaluation of nutrients of public health concern. For each protocol, she reviewed key definitions and the analytic framework.

Dr. Bailey concluded her presentation by summarizing next steps, which are to integrate data on nutrient intakes from dietary supplements into the review on current intakes of food groups and nutrients, review and summarize data analysis results, draft conclusion statements, and draft the food pattern modeling protocols.

In the discussion that followed, Dr. Bailey noted that in its evaluation of nutrients of public health concern, the Working Group is using Dietary Reference Intakes recommendations to establish consistent and transparent thresholds upon which to conduct the analyses and then to link dietary intakes that are considered of concern to a biomarker or clinical endpoint. In response to a question, Dr. Dewey explained how the Working Group is addressing nutrients of public health concern for the B-24 age stage and how the analysis will contribute to food pattern modeling for that age stage. In response to another question, Dr. Bailey agreed that providing clarity around when snacks are consumed and how snacks are defined for different age groups is important. Members also discussed the utility of using the term “dietary components” rather than “nutrients” so as to be able to encompass a broader range of bioactive elements in foods, and the need to conceptualize the term in similar ways across Subcommittees.

Note: The Data Analysis and Food Pattern Modeling Working Group protocols discussed are available at [DietaryGuidelines.gov](https://www.dietaryguidelines.gov).

## **DISCUSSION**

During the meeting’s final discussion session, members expressed a desire to understand more clearly the reasons why articles are included and excluded during the search and screening process and how these reasons may be related to study design. Another asked whether the criteria for including or excluding studies on similar outcomes needs to be more consistent across subcommittees. One member noted that the risk of bias assessment phase plays a critical role in helping subcommittees determine which studies to emphasize in its final review of the evidence.

Dr. Schneeman asked Dr. Julie Obbagy to respond, and she explained that NESR has not established standard inclusion and exclusion criteria for some study elements because good empirical evidence does not exist for establishing these criteria. She agreed that consistency was desirable but that some tailoring may be appropriate for selected topics, with justification. Dr. Obbagy also explained that NESR does document, and will provide the Committee members with, the reasons why studies are excluded during the search and screening process. She also said that the elements of the strength of evidence grading process can help in assessing limitations across a body of evidence. Dr. Schneeman suggested, now that

subcommittees are at the point of looking at the evidence for their questions, that they may reexamine the risk of bias assessment tools to determine whether they address the key issues related to the design and conduct of studies that the exclusion criteria were intended to address.

Members also discussed how the B-24 and Pregnancy and Lactation questions supplements fit in with the overall emphasis on foods and food patterns in the Dietary Guidelines. A member responded that these questions were included because of the frequent use of supplements by women who are pregnant or lactating and discussions about whether supplements are necessary for infants. Dr. Stody agreed, adding that historically, the Dietary Guidelines have focused on individuals ages 2 years and older and on meeting nutrient recommendations through foods and that is why no specific questions on supplements were included for other populations.

## **MEETING ADJOURNMENT**

Dr. Stody reminded participants that the fourth meeting of the Dietary Guidelines Advisory Committee will be held in Houston, TX, on January 23-24, 2020, and will include an opportunity for oral comments from the public. The meeting will be available for public viewing, both in person and by webcast. She also encouraged the public to continue following the work of the Committee on [DietaryGuidelines.gov](https://www.dietaryguidelines.gov). She then thanked the Committee, staff, and the public and adjourned the meeting.