

## **Afternoon Day 2**

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**Dr. Barbara Schneeman:** Great. Welcome back.

Okay, I think we're live now, so welcome back, everyone. We were in the middle of having the report from the Beverages and Added Sugars subcommittee, and Beth, if you don't mind, I'll just see if there are any questions that people wanted to bring up at this point before we go into the alcohol discussion.

**Dr. Elizabeth Mayer-Davis:** Sure.

**Dr. Barbara Schneeman:** Anything from committee members to bring up at this point?

Okay, it sounds like you can proceed. Everyone's anxious to hear about alcohol.

**Dr. Elizabeth Mayer-Davis:** Alright, alright. We'll do it.

Okay, so here is the question that we looked to the literature to address. "What is the relationship between alcohol consumption and all-cause mortality?"

**[0:01:01]** So, and this is our analytic framework, and I wanted to point out a couple of things here that were important in our review of the literature, which is to say, for comparators, our primary comparator had to do with different average alcohol consumption or different patterns of alcohol consumption among current drinkers, in other words, binge drinking as an example of a pattern of drinking.

And we did have, as a secondary comparator, individuals who were never drinkers.

And in our framework, if the comparator group was a combination of never and former drinkers, then we did not look at that, because, as you would well appreciate, individuals who are never drinkers versus those who are former drinkers are really quite different in many respects, and so, they really can't be comingled as a reference group, so that was one type of study that we did actually not look at.

**[0:02:08]** And in terms of endpoint, again, this was all-cause mortality, and we were focusing on adults primarily age 21 and older.

Considering inclusion and exclusion criteria for this literature review, we limited the observational studies to those that enrolled at least 1,000 individuals, and the dates that we worked with were January 2010 through March of 2020.

And so, this is the result of the screening of this literature. We started with about 10,000 articles after removing duplicates, and then after the screening process was complete, we ended up with 55 articles included for this systematic review.

**[0:03:01]** So, these 55 articles, we had no randomized control trials. There was one medallion randomization study, 54 prospective studies. And most of these were quite large in the sample size, over 10,000 participants, and several that were over 100,000 or had a few hundred thousand individuals.

Most of the studies focused on average alcohol consumption, and some though, did look at patterns of consumption, particularly binge drinking. Not very many studies did both, but a few did.

Most of the studies assessed consumption only at one point in time, but there were a couple that looked at lifetime consumption in one form or fashion or repeated the assessment of alcohol intake over time.

And there are a number of challenges, as you can well appreciate, in the measurement of the amount of alcohol consumed.

**[0:04:01]** And in comparing studies against studies from different countries, that was particularly an issue, because a unit of alcohol intake, or a drink, varied in terms of the actual grams of alcohol in the drink from country to country, from 8, or 12, or 14 grams, for example. So, that was just some issues that we had to work through in looking at the literature.

Most of the studies included middle-aged and older participants, but some included younger, which, for this topic of all-cause mortality, is actually—turns out to be important because of the impact of alcohol on basically injury-related deaths in middle age, younger individuals or middle-aged particularly, so that was important here.

And then, for data on current drinkers, again, I already mentioned the issue of non-drinkers, but even for current drinkers, there are quite a lot of limitations in the literature with regard to potential for confounding especially, and so, that was something that we knew or were certainly aware of as we looked at this literature.

**[0:05:14]** So, the one medallion randomization study wasn't as helpful to us, frankly, as we would have hoped, because this was quite a small sample size, 3,000-some as I recall, which, for this type of design, was not nearly as large as you would expect, and the advantage, generally, to this type of study is that you have a much better sense of the actual exposure, and yet, in this relatively small study, lower mortality was observed in those who had low or genetically-predicted alcohol consumption.

And so, that was supportive but not as definitive as an MR study might have been because of the small sample size here.

**[0:06:04]** For the cohort studies, most of the studies found higher mortality in those consuming relatively high volumes of alcohol compared to those consuming relatively low volumes, and generally, there was a consistent dose response relationship.

Among drinkers, studies quite consistently found that binge drinking was associated with increased all-cause mortality compared to not binge drinking, and that more frequent binge drinking was associated with increased risk compared to less frequent binge drinking.

And binge drinking, by the way, was defined as consuming 5 or more drinks for men, or 4 or more drinks for women during a drinking occasion, which is almost—which turns out to be something about along the lines of half of all drinkers, at some point, will report binge drinking.

**[0:07:00]** There are medallion randomization studies that address alcohol and CVD mortality, or cancer. We are going to be taking a look at those to help us with context as we write about this topic of alcohol and all-cause mortality. So, we won't be doing a full review of alcohol in relation to CVD or cancer, but we'll have some context.

So, I'm hearing some very loud beeps that just stopped. Okay, I think we're okay now. I don't know if I was the only one who heard that, but anyway... Okay.

**Dr. Sharon Donovan:** No, I heard it, too.

**Dr. Elizabeth Mayer-Davis:** So, moving on to—okay.

**Dr. Barbara Schneeman:** It is now gone, so... Yeah, I don't know—

**Dr. Elizabeth Mayer-Davis:** It's now gone. Okay.

**Dr. Barbara Schneeman:** Yeah.

**Dr. Elizabeth Mayer-Davis:** Yeah. Okay, anyway...

**[0:07:57]** So, our draft conclusion statements here: moderate evidence finds that high average alcohol consumption is associated with an increased risk of all-cause mortality compared to low average alcohol consumption among drinkers.

And moderate evidence finds that binge drinking, again, 5 for men and 4 for women, during a drinking occasion, is associated with increased risk of all-cause mortality, and that more frequent binge drinking is associated with increased mortality risk compared to less-frequent or no binge drinking among drinkers.

So, the next steps that our subcommittee will take will be to go back and re-review these conclusion statements and grading in order to finalize these, because especially the alcohol work was quite recently done.

And then, as with all of the other subcommittees, the systematic reviews will be peer-reviewed and we'll be, as I've mentioned, collaborating and working with the data analysis and food pattern modeling group for our question areas of beverages, added sugars, and alcohol for context, along with the *Dietary Guidelines* from 2015.

**[0:09:18]** And then, with all of that put together, we will be drafting our report for the topics that we covered.

And I think that is my last slide, isn't it? Yes. Yeah.

Alright. I'm happy to answer any questions. Myself or other subcommittee members can do that.

And others have acknowledged the incredible support of the rest of the team, the NESR team and others, and I want to do the same, particularly because of the amazing good cheer all the time. It's just been a pleasure to work with them. So, thank you.

**[0:09:58]** **Dr. Carol Boushey:** Liz, this is Carol. That slide about three times ago, that gave an amount, gave some amounts, I just want to clarify, if you back about, I think two slides, three slides? The one that gives—you have an amount of—oh, this one.

Okay, so the top conclusion, it was high average. So, was that a descriptive nature? Because some kind of absolute amount could not be—just didn't make sense? Because—

**Dr. Elizabeth Mayer-Davis:** Yeah, I mentioned earlier—

**Dr. Carol Boushey:** Is there any—yeah.

**Dr. Elizabeth Mayer-Davis:** Yeah, so binge drinking is a different phenomenon than average intake. So, you can have the same average intake and have some small amount every day, or you can have that same average with infrequent consumption of a lot of alcohol.

**[0:11:02]** So, this first piece really is about average intake. And as I mentioned earlier, it was a little bit tricky with this literature, because different studies quantified exposure differently. And so, this really is just this general conclusion, again, moderate evidence that higher average consumption was associated with increased risk of all-cause mortality compared to lower average alcohol consumption among drinkers.

The amounts and the conclusion below—

**Dr. Carol Boushey:** Got it.

**Dr. Elizabeth Mayer-Davis:** —relate specifically to binge drinking, yeah, and that's a pattern of drinking as opposed to the average amount.

**Dr. Carol Boushey:** I see. Oh, that must **[indiscernible 0:11:44]**. I see. Thanks.

**Dr. Timothy Naimi:** If I could just add to that, this is Tim Naimi, just like Beth said, the binge amount tends to be defined consistently, whereas across studies, definitions of "light," "moderate," and anything above that, being let's say heavy, vary quite a bit from country to country or even within countries.

**[0:12:10]** So, but I mean on the good side, see, there's a consistent finding that if you pretty much compare kind of light or moderate drinkers to people who drink more than that, regardless of where that cut point falls, it's a pretty, pretty generally solid conclusion across all those different levels.

In the context, in the paragraphs we write up describing this, we will be kind of drilling down into more—into the details about different kind of levels of average consumption.

Because in many cases, it's also challenging, because they tend to be categorical, and in some cases, include rather broad categories. So...

**Dr. Carol Boushey:** Thanks for both of those explanations, not having participated in this, thanks for that.

**[0:13:00] Dr. Barbara Schneeman:** Other committee comments or questions?

Okay. I'm hearing none. We can move forward with the—with the agenda. And so, we're actually, on the agenda, we're going to move to the next slides to the next steps.

And for the committee.

And I just want to remind you, I'm going to remind everyone that the way that we're looking at the evidence is across three different types of evidence – the data analysis, the food pattern modeling, and the NESR systematic reviews.

**[0:14:03]** And as I think, Beth, you did a good description of showing how, while answering a question might rely on one type of approach, say the systematic review, as we work into the reports themselves, we need to be integrating across the different types of analysis—analytical frameworks that we've been using.

And that integration will be a part of our making our final recommendations.

Also, as the systematic reviews are finished, they do undergo peer review. That's a new step for the *Dietary Guidelines* process. And so, it's been, really, I think adding some value to the overall process.

**[0:14:55]** And the first round of systematic reviews went to peer review after the—after Meeting 3, and the final round will occur after this particular meeting. That peer review is being coordinated by USDA's Agricultural Research Service, and we really appreciate their stepping up to coordinate this aspect of the committee's process.

And the draft conclusion statements will be posted online, but after that peer review has been completed in the process.

So, to describe and give a little bit more background on the peer review of the committee's systematic review, David Klurfeld, who's the National Program Leader at the Agricultural Research Service, Dr. Klurfeld has been coordinating this effort of peer review. And so, we've asked him to make a few comments about the process and how it's being handled.

**[0:16:00]** So, Dr. Klurfeld, I'll turn it over to you.

**Dr. David Klurfeld:** Okay, thanks very much, Barbara.

It was a recommendation from the National Academy of Science, Engineering, and Medicine review of the *Dietary Guidelines* process that a peer review step should be added, but there were really no guidelines for this.

So, a lot of this just fell to me to determine, based on many years as associate editor of the American Journal of Clinical Nutrition, how this would be handled.

And one of the things I decided early on is that the peer reviewers should wait to receive the systematic reviews until the draft DGAC conclusions were available.

So, we've done maybe a dozen completed reviews to date, and the flood gates will open after this meeting to get the rest of them handled.

**[0:17:00]** And we're only asking federal scientists to participate in this, and they're serving in a totally anonymous fashion. So, there are two reviewers assigned to each systematic review, and those two people don't know who the other reviewers are.

And I will point out that I've excluded scientists from USDA's Food and Nutrition Service, since CNPP is part of FNS. I didn't want there to be any appearance of a conflict of interest.

So, there are a number of other federal scientists from other agencies assisting in the DGA process. None of them are being asked to participate in the peer review system.

So, the agencies, scientists are from—and I'm going to not just use the alphabet soup of abbreviations, since I know the public is listening to this.

**[0:17:58]** So, we have NIH, the National Institutes of Health, ARS, the Agricultural Research Service, FDA, the Food and Drug Administration, CDC, Centers for Disease Control and Prevention, VA, the

Veterans Administration, the Department of Defense, and the Economic Research Service of USDA, are all participating in this.

I want to point out an important factor that—you haven't been in Washington now for several version of the *Dietary Guidelines*. I will tell you that no political appointee from any agency has contacted me about this process. My boss, the administrator of the ARS, has, on occasion during this process, asked me if I need any protection or political cover, and I've told her everything's good.

So, and nobody from the food industry has contacted me either. That's another thing I hear all the time, that the guidelines say what the food industry wants us to say.

**[0:19:03]** And there's been zero contact from anybody who shouldn't be talking to me.

I will tell you that I did get one email from a university faculty member volunteering to help with the peer review process, and I sent an email back saying, "Thanks, but no thanks. Only federal scientists are doing this."

The reviews are not agency positions. They're based on the personal expertise of the reviewers selected to do this, and there is no specific format. I basically asked reviewers to treat this just like they would review a journal manuscript.

And the reviews have varied from one paragraph to several pages, but I have to tell you, I've been really impressed with the care and the detail expressed in the vast majority of the reviews. So, they've been very helpful.

**[0:19:57]** And I've sent the—once I get the 2 reviews, I send them back to Dr. Obbagy, and her staff is actually preparing responses to the reviewers. I'm assuming we're not going to make those public, just the way when a draft manuscript is submitted to a journal, you don't have draft number one and the reviewers comments and the response, you only see the final manuscript, and that's what I expect will be made public.

In the cover email that we sent to reviewers, along with the systematic review, we actually suggested that they focus on several components of the systematic review, and I will give you those of order of priority, with the most important being the conclusion statement and the grade to be sure that that represents the strength of evidence supporting the conclusion statement and that it's coherent with the findings of the systematic review.

**[0:21:00]** The summary of the evidence, the bullets that provide the key points.

The description and the synthesis of the evidence, and all the text, the tables, and the figures that you folks saw were sent to the reviewers.

So, there was inclusion/exclusion criteria, the reasons for excluding certain studies, the evaluation of the risk of bias, consistency, precision, generalizability, all of that was provided.

If there were research recommendations, based on gaps and limitations identified, that was included.

And then, the list of all the articles, either included or excluded, was provided.

In addition, each document included components of the protocol used in conducting the systematic review, which viewers have seen today and yesterday, such as the analytical framework, the inclusion/exclusion criteria, the search strategy, and the screening results, so the flow charts that were shown by the subcommittee chairs were provided to the reviewers.

**[0:22:12]** And as part of the preparation for this activity, Julie Obbagy presented a 1-hour webinar, and we have about 86, I think it is, reviewers. We had 70 people on live. Dr. Obbagy recorded the webinar, and we sent the link out to the scientists, and we know that a number of people who weren't available during the initial presentation did log on to view it.

And her remarks were actually similar to the remarks she gave to the DGAC 2 or 3 meetings ago.

**[0:22:55]** Reviewers were asked to return their comments within 14 days, and almost everybody made that time. I was actually pleased to see quite a few folks return their reviews early.

We've sent those comments to the NESR staff already. They obviously were working overtime to get you folks to where we are today. So, they will be sending me back responses to the reviewers, which will be distributed by me to all of them.

And if they actually disagree with the reviewer comments, they will provide a rationale for that. And if the reviewer disagreed with the draft conclusion, that will come back to the DGAC as well.

So, I made the decision not to review those questions for which a conclusion of no available evidence was found, and Julie sent me 13 questions like that, and there was 1 yesterday on neurocognitive development that there was no evidence from Dr. Donovan in a Pregnancy and Lactation subcommittee.

**[0:24:21]** So, as of now, we have 14 with no evidence, and I just—we just heard that there were, in the Beverages and Added Sugars subcommittee, there are a couple of questions that it appears will not be reviewed.

I don't know if there's a systematic review or not, but it all—it's all relevant for juggling assignments of the remaining reviewers and getting things done.

I will tell you that a number of federal agencies are beginning to tele-work for 1 day to 1 month, so that should affect timing, but if somebody has to print something out for review, it may affect the timing.

**[0:25:03]** We actually have finished our assignments for the Frequency of Eating subcommittee. There were 2 questions that had no evidence, and the remaining 4 questions have been peer-reviewed. We haven't gotten back the response from the NESR staff.

So, we're hoping to get the remaining questions available for the reviewers about 2 weeks from today, and I will send them out within a couple of days of receipt of that.

And so, that's the end of my prepared remarks. I'm happy to take any questions from the committee.

**Dr. Barbara Schneeman:** Great. Thank you, David. And we really appreciate the effort that, not only you in coordinating this, but all of the scientists who are contributing.

**[0:26:03]** **Dr. Rachel Novotny:** This is Rachel Novotny. I have a question. Did I understand that, so the committee will only see the reviews if there is a disagreement with the conclusion? Is that how I understood the process to go?

**Dr. David Klurfeld:** Yes, that's the correct interpretation. And that was a plan that I came up with simply to not burden you folks with lots of additional reviews that you need to do.

**Dr. Rachel Novotny:** Mm-hmm. Okay. Thank you.

**Dr. Barbara Schneeman:** Okay, any other questions or comments for David?

**[0:26:58] Dr. Eve Stody:** This is Eve. I was just going to note, too, for the subcommittee—the committee members. So, as Dave noted, the NESR staff, and all of you, were very engaged in preparing for this meeting, and I will just note, Dr. Obbagy is not on the line. So, I'm kind of speaking on her behalf.

But the—Dave did send Julie the peer review comments that have been completed to date, and actually, in the last day, has shared them with the respective NESR staff. And I think there will be—definitely things that would require a change will definitely come back to the subcommittees, come back to the committee.

I think if it's some kind of editorial or something like that, they can help support that and track changes and show it, but it's really the discussion items more around things that there's a change, or there wasn't clarity in the description, or something like that, that would come back to the committee.

**[0:28:03] Dr. David Klurfeld:** I'm glad—this is Dave. I'm glad to hear Frequency of Eating is under review and on the way.

**Dr. Barbara Schneeman:** Great. Well, if there are no other comments or questions for Dave right now, again, thank you for coordinating this. It's something new, and it's a major effort, given the size and scope of the evaluations that are coming forward for the scientists to review. So, thank you very much.

And I know we have to do a little bit of reshuffling to get everyone back on discussion.

But what we want to talk about now are some of the next steps beyond the peer review.

**[0:29:00]** And so, I'm going to start by talking about the committee report itself.

**Dr. Eve Stody:** And actually, if you'll just make sure your line is on mute. There's a little bit of feedback. Thanks.

**Dr. Barbara Schneeman:** I'm not going to put my line on mute.

So, we'll talk first about the outline of the committee's report, and then I want to talk a little bit more about the integration chapter to get some input and discussion from the committee.

So, the committee discussion we'll have—we'll do after I go through these particular slides.

So, the overall outline for the scientific report, I think we've all seen this before.

The Executive Summary, Setting the Stage and Integrating the Evidence, the Methodology, the Evidence on Diet and Health, Future Directions, and then the Appendices that support our work.

**[0:29:59]** So, if we look a little bit more at how we're organizing the Evidence on Diet and Health section, the committee has recommended, and we're focused right now on organizing by life stage, beginning with Pregnancy and Lactation through Birth to 24 Months, and then 2 years and older.

And the topic area chapters that will provide the Part D: Evidence on Diet and Health include the conclusion statements, summary of evidence, the links to the NESR.USDA.gov, the relevant data analysis, food pattern modeling reports. So, some things will be in the physical report, some things will be handled through links.

And then, discussion of our findings in relation to the 2015 committee's work, and the summary of evidence related to the topic area with recommendations to the Departments based on our review.

**[0:31:06]** So, this just outlines a chapter template that will be used for that Evidence on Diet and Health: Introduction, List of Questions, Methodology, Review of the Science, Discussion, Summary, and References.

And I know as you've given the subcommittee reports, you've been talking when is something in a conclusion, what are some of the elements you want to make sure are part of your discussion as you're finding things in conclusion.

So now, I want to shift and talk about the Part B, the Setting the Stage and the Integration Chapters. And just to remind you, that the purpose of this Integration chapter is to synthesize the major themes and findings from our report, and really, provide an overview or kind of big picture of our advice to the Departments for the upcoming edition of the *Dietary Guidelines for Americans*.

**[0:32:07]** In terms of a process, this is something that Dr. Kleinman and I have been working on. And so, we decided that it would be useful to have a working group that would work with myself and with Dr. Kleinman to draft the chapter.

And the working group members that we've identified are—that have agreed to serve, Jamy Ard, Teresa Davis, Richard Mattes, Jamie Stang, Elsie Taveras, and Linda Van Horn.

And we think they'll be able to bring perspectives from the various subcommittees to help in crafting the Integration chapter so that it will reflect a synthesis of the work of the committee as a whole.

I would note that Dr. Kleinman and I have been keeping notes from the discussions at each of the public meetings, and of course, we have the minutes from each of our meetings.

**[0:33:03]** However, we do know that, over the past few weeks, everyone has been involved in a hands-down full-out intensive work at the subcommittee level to complete the work prior to this meeting, to complete as much as possible, and so, we've deferred having a discussion with our working group until after this public meeting. And so, we will start that process later this month.

So, what I'm going to do in the next few slides is highlight some of the themes and issues that we have compiled to date. Some of it is probably still at a high level, but I think it would be very useful to me, and certainly to the working group, to get your input. This is intended to reflect our work as a committee. And so, your input is very valuable as we proceed.

**[0:34:02]** So, if we focus on some of the major themes under discussion, I think part of Setting the Stage for our report is to identify the public health challenges. And these—particularly those public health challenges that are diet-related and for which improvements in the American diet can have an impact on promoting health and reducing risk of disease.

The prevalence of overweight and obesity across life stages has certainly been an overriding challenge, and I think for most of the topics and questions that the committee has reviewed, and for which we've looked for evidence, we've seen it related to this particular area.

And the committee has also repeatedly brought up the concern that the prevalence of overweight and obesity can in fact be a driver for the prevalence of chronic diseases in the American population.

**[0:35:04]** And we know that these chronic diseases are associated with diet and lifestyle and that this is another major public health challenge that our committee has examined in its evidence reviews. Clearly, diseases such as type 2 diabetes, CVD, certain cancers, are known to be among the leading causes of morbidity and mortality in the US.

In addition, we are certainly learning that dietary factors that influence pregnancy outcomes, as well as dietary factors that impact the health during infancy and early childhood are also important public health challenges for us to consider.

The other aspect of Setting the Stage is looking at the typical dietary patterns among Americans.

**[0:35:56]** So, in addition to the health outcomes, our work has determined the nutrients and food group consumption patterns that are of public health concern.

We've used a systematic approach to identify nutrients that are either underconsumed or overconsumed and associated with the public health problems that we've documented, as well as this notion of problems in food choices or food groups that can result in public health problems, that overall feeding into the dietary pattern thinking.

So, and as a part of our analysis of dietary patterns, we've come to understand that it's important to understand how the typical food choices for many Americans within the food groups can limit the nutritional quality of the dietary pattern, and we certainly heard that earlier today.

**[0:36:58]** So, another part of then our major theme is, obviously, the theme of life stages, and for this cycle of the *Dietary Guidelines*, it will be the first time that a full picture of life stages will be used as an important organizing principle.

And we've been discussing how making healthful food choices carries across all life stages, and that introducing foods into an eating pattern early can influence choices over the lifetime.

We've discussed key transitions in dietary patterns, beginning with infancy and dependence on a single food, and then building a variety of foods throughout childhood, as well as more independence in making food choices as children develop, become adolescents, their sort of metabolic changes that are important, and then the importance of building awareness and

acceptance of food choices that promote health and reduce risk of overweight, obesity, and chronic disease over the life span.

**[0:38:07]** Within adults, we've discussed the importance of meeting for pregnancy and lactation, as well as understanding how to adapt dietary patterns for special dietary needs or food choices, including the importance of making adjustment for the needs of older Americans as well.

In addition to the transition in diets between life stages, each life stage contains its own unique transition points, and this was discussed quite a bit at the Houston meeting.

Some examples include children moving into daycare or school, adolescents or younger adults, with a transition from living at home to more independent living, variations in physical activity, as well as special nutrient needs or dietary patterns that are important for accommodating specific nutrient needs, health status, and lifestyle.

**[0:39:05]** So, the other major theme for organizing has clearly been the focus on dietary patterns. We certainly recognize that previous Dietary Guideline Advisory Committees, DGACs, and subsequent *Dietary Guidelines*, have focused on the importance of dietary patterns as a framework for the *Dietary Guidelines*.

And we're also now seeing from our work that using this focus is then important within and across life stages.

And I think of particular importance, and has been noted in the subcommittees, the expansion of literature and evidence related to dietary patterns in this area has really been very valuable for the work of our committee building on previous reviews.

**[0:40:02]** So, the work of our committee has found that dietary patterns can be characterized in various ways and have different names and descriptions. However, it seems that the most important characterization of the patterns are the foods to encourage within the patterns and those to limit within each of the eating patterns or dietary patterns. So, the patterns remain the focus.

I would observe that, related to this characterization, we have discussed that characterizing only a macronutrient profile, doing that alone does not seem to be enough to evaluate the value of a dietary pattern to promote health and reduce risk.

**[0:40:55]** It's knowing the quality of the underlying food choices, that's what seems to be most important to provide an assessment of quality.

In other words, a reductionist approach may help us to tease apart certain dietary components related to health and disease risk, but we need to have a bridge from that knowledge to dietary patterns to understand those components in the context of the full pattern.

And I just want to give a couple of examples that I think come out of the discussion today and previous meetings.

So, if, for example, we've addressed a food component, such as added sugars, as a food component to limit in the diet, but the bridge to the dietary pattern is the evidence that highlights the importance of limiting foods that are top sources of added sugars – the sugar-sweetened beverages, sweets and desserts, for example.

**[0:41:56]** On the other side of something to get enough of, we know that few Americans achieve or exceed the AI for dietary fiber intake, which highlights the food component. However, a dietary pattern that addresses fiber will focus on whole grains, fruits, vegetables, legumes, and other plant foods.

Even in examining the saturated fatty acids, we've had that discussion that it's important for us to consider the type of dietary patterns that result in a pattern that enables replacing saturated fatty acids with polyunsaturated fatty acids.

So, some of the other topics that are more general, that I want to highlight because I think they are going to be important to pull out.

**[0:42:56]** For several of the topics and questions that our Advisory Committee has been focused on, we've been providing an update to the evaluation of—that was done in 2015, or sometimes, even earlier. In some situations, we have concurred with the evaluation of the 2015 Advisory Committee, and in some cases, we've been able to update their work by adding more evidence to that review.

Often, we've seen that this may be strengthening the nature of the recommendation, but certainly, pointing the way to where we still need some additional evidence.

So, these are topics then that should be carried forward from the 2015-2020, and those will be addressed in the report itself.

We also have noted in our discussion that there's some topics that have been a part of the *Dietary Guidelines* and remain of public health importance, but our committee was not asked to review new evidence. Those weren't the topics and questions we were asked.

**[0:44:08]** However, because of the public health importance, it is important that these areas remain a part of the *Dietary Guidelines*.

And just to give some examples that have come out of our discussion, certainly trans fatty acids, dental carries, the importance of physical activity as part of a healthful lifestyle, and I think there are probably others that have been identified in the subcommittees.

In our report, we also have discussed the importance of acknowledging comments from the public, as well as our own committee discussions on the implications related to the food system and food environment for the *Dietary Guidelines for Americans*.

Such topics have touched on areas such as sustainability, food insecurity, access to healthful dietary patterns, aspects of food environment that influence choice, as well as the importance of understanding approaches to encourage behavior change to better meet the recommendations in the *Dietary Guidelines*.

**[0:45:16]** We recognize that we have not evaluated evidence related to these topics, so we're—they're not part of our conclusions and recommendations, but certainly, I note, and I think we can note, that in the National Academies report on the *Dietary Guidelines* process, there was a specific recommendation to the Secretaries of USDA and HHS to commission research and evaluate strategies to develop and implement a systems approach into the *Dietary Guidelines*, and that the selected strategies should then begin to be used to integrate systems mapping and modeling into the DGA process.

**[0:46:00]** So, again, it's something that we can point to.

Okay, next slide.

So, and then, there are also emerging topics related to the *Dietary Guidelines for Americans*, and I think that the Integration chapter should reflect some of the discussion that the committee has had on these types of topics. I think the depth of this topic will be covered in the Future Directions, but there's some overarching themes that should be considered here.

So, several of the questions that begin—that we’ve been tackling, trying to tackle, begin to address topics related to how we eat, not just what we eat, and I think we often found that there was insufficient evidence to tackle some of those questions.

**[0:47:06]** But it’s likely that, prior to the next cycle, there may be more evidence available. So, we don’t think it’s a topic that should go away, but something where new research can help us understand if there are recommendations that are needed in this area.

I think we should be able to highlight areas of consistency across cycles of the *Dietary Guidelines for Americans*, and such consistency, I think can strengthen the message of the importance of nutrition and food choices in health promotion and disease risk—disease prevention, prevention of chronic diseases.

Illustrating this consistency is important to support the motivation for changing behavior, and since the body of evidence can provide some motivation to improve dietary choices, such motivation needs to be coupled with opportunity and ability to change behavior.

**[0:48:09]** Throughout our discussion, we have highlighted the values of certain resources to provide data and the evidence for updating and adding to the scientific base that supports the *Dietary Guidelines*.

Certainly, examples include the Dietary Reference Intakes. We, as a committee, have benefited from updates to sodium, potassium, calcium, and vitamin D, but as we’ve continued our work, I think we’ve become aware of the needs for updates related to macronutrients, and certainly, the nutrient requirements in infancy and childhood, including the upper levels for certain nutrients.

And of course, a key research, a very key and important resource is the research that addresses the topics and questions of high priority for the *Dietary Guidelines* that we’ve been identifying throughout our report, and I think we had some discussion earlier of ways that we can help magnify the importance of that research.

**[0:49:16]** So, that’s sort of my run-through of just, again, sort of high level. I want to have some opportunity for comments from the members of the committee, but I’d like to first turn to Dr. Kleinman for any additional comments or perspectives that you would like to add.

**Dr. Ronald Kleinman:** I think you’ve done a wonderful and complete job, Barbara. So, I really don’t have anything additional to add.

**Dr. Barbara Schneeman:** Okay, well, we will open it up.

**[crosstalk 0:49:57]**

**[0:49:59] Dr. Elizabeth Mayer-Davis:** This is Beth Mayer-Davis. Somebody else jumping in? Go ahead.

**Dr. Steven Heymsfield:** Steve Heymsfield. I'll wait for you to do it.

**Dr. Elizabeth Mayer-Davis:** Okay. So, I'm just really pleased to hear that, not only will you be addressing integration across the specific work that our various subcommittees have done, but that you're really thinking so broadly about public health issues, about context, about issues related to diet and chronic disease that are very relevant in terms of health equity or health inequity, you know, thinking about issues of food access, thinking about all of the many, many issues that you outlined, that I know you're going to cover.

So, I think that'll provide a really full context for the report, which I think will be extremely helpful. So, I just wanted to make that comment, and thanks for the breadth of your thinking for this chapter.

**[0:50:59]** I think it's really, really important.

**Dr. Steven Heymsfield:** Okay, this is Steve Heymsfield. I think this Integration chapter's a wonderful idea. I just want to mention a few things, and I'm not sure they need to be in the chapter.

But in my world, I was President of the Obesity Society last year. There are a lot of issues swirling around that sort of—in orbit around the *Dietary Guidelines*, and people come to me and ask me about, and I'll just give you a few examples.

The environmental impact of the foods we eat and grow, things like that seem to be coming center-stage now.

Things like high- versus low-carbohydrate diets, keto diets, time-restricted feeding, these are all issues that we didn't deal with, at least in the committee I was on, two committees I was on, and I just wonder, I know you don't want to take up a lot of space in that document, but I think these are topics that are hard to ignore, and I think a lot of people in the public are interested in them.

**[0:52:06]** I just wonder, is there any way these topics might be alluded to in some way, Barbara?

**Dr. Barbara Schneeman:** Yeah, thanks, Steve. Yeah, thanks for the comment. Certainly, our—my point that we need to acknowledge those comments and acknowledge our discussion, while we haven't been the body to look at the evidence, I think we can point to the Academy recommendation of the importance of a food systems approach, which begins to pull in, certainly, the environmental impact.

And also, you know, there are other federal agencies that could be—at a government level, there could be the opportunity to start working amongst federal agencies on some of those topic areas.

**[0:53:02]** Again, it's not something where we're making a recommendation, because we haven't reviewed the evidence, but we can point to the fact that this is something we observed from the comments we've received and the discussion.

And with respect to what you've pointed out on the different dietary patterns, high/low-carbohydrate, keto, we certainly have seen that a lot of comments have addressed those types of diets, and oftentimes, they are being presented in the context of treatment for chronic disease, such as type 2 diabetes, or as a part of a weight loss program.

And so, certainly, our focus has been on maintaining health, reducing risk. I think we can point to the fact of the interest in this area and the need for the federal government perhaps to start thinking about what is the process to deal with it.

**[0:54:07]** If it's not the *Dietary Guidelines*, where else can it be dealt with?

**Dr. Steven Heymsfield:** Yeah, those are great points.

**Dr. Sharon Donovan:** So, this is Sharon Donovan. Thank you, Barbara. I think that was a really good summary of a lot of discussions across many subcommittees. I have just a couple comments.

One, I think that our research recommendations, as you've noted, are going to be critically important for us to help inform the next process, which as we've talked about in many meetings, needs to be funded by the research, and to do those randomized control trials so

we're not so dependent on prospective cohort studies, are very expensive, and they require time. And they're not appropriate, obviously, for some outcomes.

**[0:54:59]** So, I hope that, just like we saw from the initial B24, that there will be some requests for applications. That can help us to fill in some of this evidence.

The other thing I was thinking about, in the saturated fats discussion, and I think it makes sense, from this idea, this concept you talked about, bridging from nutrients to food patterns is perhaps some thinking about the food matrix, and this is something that I've heard, for example, Arnie Astrop talk about, in terms of saturated fat.

It's like all saturated fat is not equal, right? Not only in a fatty acid composition, but the food matrix in which they exist.

And so, there is some evidence comparing, for example, dairy saturated fat with meat saturated fat, or with butter, with cheese.

**[0:55:57]** And I'm not sure, in the evidence, if it's sufficient to analyze that, but at least, perhaps to bring that into the fact that it's—I totally agree with the *Dietary Guidelines* taking a food-based approach, but I think that, to fully flesh that out, to think about the matrix in which these nutrients exist.

And certainly, in the infant, the B24, we think about that a lot in terms of the nutrients as they exist in human milk versus infant formula, which are typically in very different forms and concentrations.

So, just something that I thought that maybe we could, if we don't have the evidence to support it, then at least maybe park—mention it in the discussion, because there are some reviews and systematic reviews that have actually attempted to investigate that.

**[0:56:57]** **Dr. Barbara Schneeman:** Great. Thanks.

**Dr. Kathryn Dewey:** This is Key Dewey.

**Dr. Linda Van Horn:** Barbara, this is Linda—oh, sorry. Go ahead.

**Dr. Kathryn Dewey:** Okay. Yeah, I just wanted to mention that it may be useful to include some discussion of physical activity, not in depth, but when the Integration chapter is discussing

prevalence of overweight and obesity and chronic diseases, making sure not to forget about the physical activity side of the equation I think is important.

And then, I'm assuming that, at some point today, we'll have a chance to maybe talk a little bit more about the nitty-gritty of the chapters. I have a couple questions about getting those written, but this is probably not the right time right now.

**[0:57:56] Dr. Barbara Schneeman:** Sure. We can come back to that. That's a good point.

**Dr. Linda Van Horn:** Barbara, this is Linda Van Horn. And I would just echo the accolades. You're very comprehensive overview of this Integration chapter and all of the details related to it. And I certainly support everything that you said.

But I'm wondering if, just in terms of organization of this approach, while we consistently talk about building from the *2015 Guidelines*, etcetera, I would love for us to sort of highlight the totally new direction that this report is taking in the sense that we really are initiating a life course overview of diet and health for the first time.

**[0:58:57]** And I think that the emphasis that we have, you started out, I believe, I don't see the slide in front of me right now, but you very appropriately started out with overweight and obesity as being a major public health problem, but I think that now that we are at a point where we recognize that the origins of overweight and obesity actually do start very early in life, in fact potentially, in utero, I would love that we were able to fully capture the importance of starting with healthy diet behaviors that are supported and continue throughout life for prevention of chronic disease and recognizing that, again, our current or traditional approach of dealing—diagnosing and treating a problem after it's developed is not necessarily in the public's best interest if we know, more and more, that these, again, origins begin with early diet behaviors, and taking the opportunity to fully support and encourage a life course view of these dietary recommendations.

**[1:00:25]** So, it's not anyway different from what you were saying, as much as maybe capturing why this is a unique set of recommendations based on this new view that we've included.

**Dr. Barbara Schneeman:** Great, thanks.

**Dr. Rachel Novotny:** This is Rachel Novotny.

**[1:00:56]** I'm very pleased to see the range of topics and ideas that you're thinking about for that chapter. It sounds like a lot of what we've talked about is there.

One thing that I'm wondering about, and I'm wondering out loud, is if it goes there, it goes in the report at all, and where any comments from us about the process, since the process has changed, and a few things are being developed as we go.

For example, as we just heard from Dr. Klurfeld, about the review process, whether—and perhaps in the context of thinking about DGAC cycles, and if whether that will be there, or if you've given that any thought as to whether we comment on that, whether you think it's appropriate?

**[1:02:02] Dr. Barbara Schneeman:** It's a good point, Rachel, because certainly, I've thought about that, and I know Jamy Ard and Carol Boushey and I were on that National Academy committee. And so, we've sort of been sensitive to where recommendations have come into play.

I think there probably could be an opportunity in the Future Directions to highlight some of those things. And the challenge is we don't have a formal discussion about that, but certainly, in working with that drafting group, we may be able to pull together some ideas that we would want reflected.

I think—my hope is it would be useful to the Departments, too, as they've instituted a lot of new things.

**[1:02:58]** So, we'll figure out a way—

**Dr. Rachel Novotny: [crosstalk 1:02:58]** Yeah, and also, that there just seems to be a lot of, I don't know, misunderstandings about what the process is, so to kind of lay it out, use this opportunity to lay out what is and isn't, and so on. It just seems like an opportunity, but, yeah, thanks.

**Dr. Teresa Davis:** And this is Teresa Davis—

**Dr. Barbara Schneeman:** Yeah.

**Dr. Teresa Davis:** I think it's important to consider, for the next *Dietary Guidelines*, that if possible, the process would start a little bit earlier, because we've been rather limited in the amount of time that we've had to evaluate all this evidence. So, I don't know if it's appropriate

to put into the chapter, but certainly, I think if the next Dietary Guidelines Advisory Committee could be given a little bit more time, it would be helpful in coming to some of the conclusions and evaluating the evidence.

**[1:04:00] Dr. Barbara Schneeman:** Yeah, good point. I did want to—I think some things we can also make sure are in the Methodology. That may be a way to address part of this.

And Teresa, to your point, I have to tell you part of my sense is just recognizing how valuable it was to have the B24 Working Group and have that feed into our process as opposed to having to start all of that from scratch.

So, I think we can illustrate some examples where there can be things in place that help the committee in its work.

**Dr. Jamy Ard:** This is Jamy Ard. Thanks, Barbara, for providing a really nice overview of kind of where that work is going to go.

**[1:05:04]** One thing I think that's interesting to think about, that struck me today, after sort of summing up all of the presentations, especially related to dietary fats and sugar-sweetened beverages and alcohol, so when we look at those in isolation versus what comes out of the subcommittee around dietary patterns, where there are very consistent sort of recommendations around reducing intake of added sugars and sugar-sweetened beverages in those patterns, or inclusion or exclusion of alcohol or lower intake of saturated fats.

I think one of the things that we will need to be thinking about is how do we integrate or reconcile what seemed to be, on face value, sometimes conflicting results, where we say, "Well, the dietary pattern showed reduction in cardiovascular disease risk with this type of food grouping and pattern," versus when we start to look at these different nutrients or food components in isolation.

**[1:06:22]** Maybe the data aren't as always consistent, or as strong as they might have been when we think about them being included in a pattern.

And it feels to me like that's an important piece for us to communicate very clearly, because that can be confusing when it feels like we're saying two different things based on the evidence that we have available.

And I don't believe that we ultimately are, but it just—I think we need to really help people understand how to put that together and have a clear way of, as you said, helping people understand what you get from a reductionist view versus a sort of holistic systematic view.

**[1:07:16] Dr. Barbara Schneeman:** Great. Thanks.

I would like to hear from all the committee members, if possible. I can call names, but the feedback is important, and you're also talking to the working group members who will be a part of the discussion.

**[1:07:59] Dr. Lydia Bazzano:** This is Lydia Bazzano. I just want to second what has been brought up already by Barbara, and also by Jamy, and the idea that this is—and also Linda, how complex the task is, and that we're going to explain, and also hopefully, prepare for our future guidelines.

**Dr. Barbara Schneeman:** Great, thanks.

I'm just—Regan, or Carol, do you want to comment?

**Dr. Regan Bailey:** No, I really liked your—this is Regan. I really liked your outline and ideas for the Integration approach. I think it's really holistic and really brings together the nutrients and foods in a nice kind of way, and I really appreciate the concept of having some legacy *Dietary Guidelines* that—just to continue to stress the importance of certain things that we are no longer examining evidence for.

**[1:09:16]** So, thank you for all the thought you've put into that, Barbara.

**Dr. Carol Boushey:** Hi, Barbara. This is Carol. And I just have to echo the ideas from others. And I do really—I really like this emphasis on foods and how they come together. We have a long history of referring to nutrients, and it's interesting, because nutrients, you can't see, whereas food is something you can see, and you can touch.

And of course, you can see nutrients when they're done as supplements, but food, when you put it all together, to try to make people appreciate and understand that there are these components in those foods, and some better than others, that really do have been associated with a more healthful diet, and therefore, a more you, yourself, have a better health and have less complications, and may even live longer.

**[1:10:22]** So, I really like this. I'm just such a proponent of being very food-based, and I thank you for the work that you've done in putting together your thoughts and ideas.

**Dr. Barbara Schneeman:** So, Heather and Rick?

**Dr. Joan Sabate:** Joan Sabate.

**Dr. Barbara Schneeman:** Oh, great.

**Dr. Joan Sabate:** No, I can wait.

**Dr. Richard Mattes:** Yeah, this is Rick Mattes. I couldn't agree more with everybody's views, that context is critical in interpreting anything that we find.

**[1:11:01]** So, we'll do our best to provide that background, to bring it all together and make sense.

**Dr. Heather Leidy:** This is Heather. I just wanted to reiterate a big thanks to Barbara. I thought the outline and framework of the Integration chapter and the Next Steps were super helpful. It gives us a good direction going further.

Then, I also really liked Linda's discussion about highlighting how we are building upon the *2015 Dietary Guidelines*, it's not that we're reiterating, but there's—we're branching out in many different aspects, and I think highlighting that would be also really helpful.

So, that was just the two points that I had.

**Dr. Barbara Schneeman:** Great.

**[1:12:00]** So, Joan, did you want to jump in?

**Dr. Joan Sabate:** Yes, I just wanted to reiterate what has been said, especially I appreciate your thoughts and your, I would say, quite detailed outline of what is going into this Integration chapter. And I think that will pull together many aspects on these questions that we had throughout these months.

I don't know if it's in this chapter or in the Introduction, or in some place, I think there are two themes that are repeated in the many comments that we received from the general public, and I think they are of great interest for Americans right now, and it would be a missing opportunity

if we don't address them with a little bit of detail and the reasons why they were not taken into consideration in this iteration of the *Dietary Guidelines*.

**[1:13:12]** One is the issue of the low-carb diets and obesity, given that a big segment of the American public is obese, and this is an issue that is of high interest.

And the other one is the issue of the sustainability. We can recommend ways to eat, but I'm saying if these are not sustainable, then probably in the long range, is not going to work.

I know this will be tackled in the systems approach, but I'm saying, within quite a lot of explanations on how to proceed, especially in future *Dietary Guidelines*, that will be very helpful.

**[1:14:02]** And I think is something that the general public would like to know more about this, and it has to be, if not addressed this time, probably in 5 years.

**Dr. Barbara Schneeman:** Great. Thanks. So, let me see. Tim and—yeah, Linda Snetselaar. Thanks.

**Dr. Timothy Naimi:** I can start. Thanks, Barbara. That was really nice. And this Integration chapter makes me think. Obviously, by the nature of the Advisory Committee report, is doing a lot of our work is very granular and very detail-oriented and very much in the weeds. But I think at the end of the day, the—the *Dietary Guidelines*, if anything, are still not easy to access and to understand for the American public and need to be boiled down into a reasonable number of relatively simple things, where the evidence allows.

**[1:15:10]** And I think all the presentations over the past couple of days, and the Integration chapter, will hopefully provide the detail, but then, the Integration chapter is a nice pivot towards helping to kind of package it up into some clearly discernible, relatively straightforward messages about how to improve the American diet, both in terms of what they eat and what they drink.

**Dr. Barbara Schneeman:** So, we're seeing that, it looks like Jamie Stang is having trouble getting heard. Jamie, are you there now?

I can—I see she's provided us some comments that echo those of, especially Carol Boushey, "Focus on patterns and food intake are especially useful as we think about dietary guidance that can apply across the life span, and that can be tailored for various racial/ethnic preferences and socioeconomic levels."

[1:16:14] Okay, great. Thanks.

**Dr. Elizabeth Mayer-Davis:** And this is Beth. I just wanted to pick up a little bit on what Tim was saying, that really has to do with accessibility, ultimately, of the final guidelines, which is that our brains are in patterns, but when we're thinking about dietary patterns, you might think about a Mediterranean pattern, you might think about the DASH diet, or you might think about patterns that are data-driven and derived in some way statistically.

But at the end of the day, for this to have meaning to public health, we still have to back-translate it to foods and servings of foods, just because that's what people understand.

[1:16:57] I mean I don't know how many conversations, and I'm sure everybody else in the virtual room has had, with regard to Mediterranean diet and how that relates to culture. In fact, I know there's been work done on something called the Med Diet South, for example, to try to figure out how to translate such a dietary pattern for the American South.

So, all that to say that I think that, for this to have real public health impact, we do need to find a way, and I think the Integration chapter's a great place for this, to translate that into food, particularly in terms of food relative to food security and accessibility.

Thinking about cost and availability of food, again, so that people know how to make choices that will be consistent with the guidelines in a way that is practical and reasonable in a day-to-day life.

[1:17:56] **Dr. Barbara Schneeman:** Great. Thanks. And let me say, I think Linda Snetselaar and Elsie Taveras?

**Dr. Linda Snetselaar:** Yes, I apologize. I was also having some trouble getting off mute. But I want to congratulate you on a wonderful presentation and feel that the idea of moving to this focus on foods and food patterns is incredibly important.

My feeling is, too, that some of what my committee is doing with dietary fats can also play into food patterns, and so, I think that whole integration concept around food patterns, where we're looking at things in a variety of ways, but yet, very much focused on food patterns, the whole concept of replacement, if we're thinking about foods and dietary patterns can be very important.

**[1:19:06]** And incredibly important, I think, from a public health impact point of view. So, thank you again, Barbara.

**Dr. Barbara Schneeman:** Great, thanks, Linda. And Elsie, are you on?

**Dr. Elsie Taveras:** I am, and sorry, I was on mute. I just wanted to echo how—just how important the practical aspects of what our messaging is going to be, how important that component is.

And really helpful to see the outline of the Integration chapter. I can't stress enough, one of the things that you mentioned, Barbara, of how helpful it was to have, at least for the B24 work group, to have some of the findings and the reviews that happened prior to the work of our committee.

**[1:20:03]** That was especially helpful, given the limited time that we had for—the truncated time this time around for the committee.

But really, just echoing what others have said, and thank you all again for all the work and the integration.

**Dr. Barbara Schneeman:** Great. And Kay, did you want to comment?

**Dr. Kathryn Dewey:** Yeah, thank you, Barbara. I had one more comment. I really liked the slide on emerging topics, and the first bullet point there was understanding how we eat as well as what we eat.

And I wanted to just mention, again, that for birth to 24 months, we didn't have any questions given to us on the how.

**[1:20:56]** So, it's important to mention that that wasn't covered this time. But issues like responsive feeding, and exposure to a variety of vegetables and fruits on a repeated basis, those are really critical for building healthy eating habits and the ability to self-regulate.

So, I just want to make sure that that's mentioned in the Integration chapter, because we won't have a chance to really cover it in the other one. Thanks.

**Dr. Carol Boushey:** This is Carol. This is Carol, and I just want to follow up on that, because you had—I wrote down this sentence, "Understanding how we eat, as well as what we eat, is

important to consider,” and really, we had the—we had a group addressing that, and there was really not—there really was little available.

So, it’s something that we—it’s neat. We thought of it, but needed to put it in. And there really is very little out there.

**[1:22:01]** So, it really has to be emphasized.

**Dr. Barbara Schneeman:** So, and as we continue to work on this, I’ll probably do a little bit more work to share with the working group before the first meeting toward the end of the month, and then they will have the opportunity to have some dialogue back and forth with the subcommittees.

But I know that the subcommittees have huge tasks ahead of them also, in terms of pulling everything together for the chapters, and I think Kay had asked if we could talk a little bit more, so Eve’s nodding her head, ready to go.

So, any other comments about where we are with the integration?

**[1:22:57]** Okay. Go ahead.

**Dr. Eve Stody:** I would just be—Kay, this is Eve. You noted just that you had some questions. I’m happy to talk through those as much as we can with the information that we have, and then if we need to coordinate a call with Ann Rogers, I’m happy to do that as well. But if you would have questions raised, we’re happy to try to deal with it now.

**Dr. Kathryn Dewey:** Okay, thank you very much. I guess the first thing that would be helpful is just if we could be sent, again, the overall outline of the report so we have the most recent version. It’s sometimes hard to find in the folders.

And then, specifically, I had a question about what we do when a particular question did not actually get reviewed.

So, for example, in one of our chapters, we were supposed to look at human milk and infant formula and developmental milestones and neurocognitive development, and that review did not occur due to time.

**[1:24:02]** So, there’s a placeholder in the chapter outline, and I’m not sure what we do there.

And then, I'm also not exactly sure what we write when we did a review and there was no evidence. I'm guessing that we would say that, but then, when it comes to the discussion, there's not a whole lot to say.

So, it would be helpful to get some advice on that. Thanks.

**Dr. Carol Boushey:** For the latter one, I would say Steven Heymsfield's probably the expert at that right now.

**Dr. Steven Heymsfield:** Thanks. I'll take that compliment.

**Dr. Eve Stoddy:** So, for the first overall chapter outline, absolutely, we can share that. I think that, yes, we talked about it, there was a revision, and it's been a while.

**[1:24:59]** So, now that we're—we've hit this meeting and that's going to be really the priority for the remaining months, I think, yes, we'll follow up shortly with the chapter—excuse me, the report outline, the chapter outline, the guidance that the science writer had prepared.

So, definitely, we'll follow up with that information.

For the questions not answered, I think this is, in hearing—in continuing to hear the discussions, both in the subcommittee calls and at the public meetings, just there's so much you all have covered, and there's so much evidence that you have reviewed.

And so, I think acknowledging questions that weren't completed, I think there is—we have talked a bit about having—if there's something that you want to point to that might be helpful resources for the Departments in developing the *Dietary Guidelines*, we would welcome you to do that.

**[1:25:55]** So, you're not answering the question but acknowledging that this is a topic area and providing references that may be out there, existing reports or guidance that may be useful.

So, I don't know if you had something particular in mind that you wanted to talk about, but I think you're welcome to speak to these topics. I do know for—there might be—there's been some discussion within Beverages and Added Sugars of perhaps having some contextual conversation around a few different topic areas.

So, I think we were seeing that more in the discussion area, or in the introduction, rather than “Here is a question, here is an answer to that question,” but more in the introduction, discussing how, for example, you “focused your efforts on the human milk/infant formula and growth, size, body composition question. These developmental milestones is an important topic. Here’s some potential resources related to that,” but then, the focus of your discussion really being on the growth, size, body comp, and other—the existing work from the PB24 project that y’all are using.

**[1:27:08]** So, I think it could be set up as part of your introduction or also included as part of your discussion, but—so essentially, not a part of the list of questions with conclusion statements, but more contextually either in the introduction or the discussion, but happy to talk about that more if you had additional thoughts.

For the reviews with no evidence, there still is—there’s still a question, and it’s still a conclusion statement, and there will still be summary bullets, and there will still be the portfolio at NESR.USDA.gov.

Now, what that means for—at the end of the day, so when you write your chapter, you’ll, as Barbara noted, have a discussion and a summary. I think it would be helpful to say, “So, what does that mean for the development of the guidelines?”

**[1:28:00]** And I think, in some cases, for like dietary patterns, you’re looking at a series of 8 outcomes. And so, kind of bringing it all together.

So, for pregnancy and lactation, you may have—you have a series of questions on dietary patterns. Some of those have no evidence, but some of them do have evidence. And when you look at across those, kind of bringing it all together, I think it would be helpful in the discussion or summary, and I think the summary is where it’s noted to kind of have this discussion about “So, what does it mean that there’s no evidence?”

Does it mean that more research is needed? Does it mean that this isn’t an area of—that—an area of interest in developing the *Dietary Guidelines*? What kind of—what does it mean at the end of the day? Or does it mean we didn’t have evidence for this outcome, but we had evidence for 4 outcomes, and so, collectively, this is what we would recommend.

**[1:29:04]** So, those are just some thoughts. I do agree. I mean the Frequency of Eating has started—it has started working on their report, if not come close to being pretty drafted. So, if they have guidance around that piece, that would be—open that up as well.

But I don't know if that helped or if you have additional questions. Happy to continue to discuss it.

**Dr. Kathryn Dewey:** That was very helpful. Thank you.

**Dr. Steven Heymsfield:** Yeah.

**Dr. Barbara Schneeman:** So, let me just—are there other questions about next steps, where we go from here? I think that was a good perspective on drafting the chapters, but that—we're sort of shifting modes from doing the systematic reviews to now integrating across the various data sets, and also—

**[1:29:04]** Okay, and Jamie, my understanding is you're now connected. Is that true?

**Dr. Jamie Stang:** I think so.

**Dr. Barbara Schneeman:** Oh, great. Do you have anything you want to add in at this point? That'll be great.

**Dr. Jamie Stang:** No, just thanks for reading my comments that I typed in, Barbara.

**Dr. Barbara Schneeman:** Okay. Great. I'm sorry, go ahead.

**Dr. Rachel Novotny:** Barbara, this is Rachel Novotny. Just this was—I know we're all jamming now with lots of writing to do. I am wondering a little bit, in particular, about the timeline, thinking about the Integration chapter and kind of hoping we'll all have a chance to review it and contribute a little bit.

**[1:31:02]** But I know you kind of need—that group needs input from—it would benefit them, that effort to have more from each of the groups. I'm wondering about how you're envisioning the whole timeline working at this point.

**Dr. Barbara Schneeman:** I wish I had a crystal ball. So, again, we have the first meeting scheduled with that discussion group at the end of the month, and so, my thought is, they will have something that they're starting to look at from Ron and myself, to start providing input.

But they will have that ability to come back into a subcommittee to discuss certain issues, or if the subcommittee has some particular thoughts on one particular topic, to identify that it's important for that person to look at where it is in the full report.

**[1:32:05]** So, I think there'll be a certain amount of back and forth, but the working group are the people who are coming out of the subcommittee process, so they should be able to reflect the work of those groups, and how it relates to that integration and overall picture.

And in terms of the final report, the committee's going to see the report as a whole before it is released, and Eve can maybe speak a bit to that timeline.

**Dr. Eve Stoddy:** Yeah, as we get closer to the report meeting, there certainly will be opportunities for y'all to see. I mean it is your—it's the full committee's report. And so, the intent is that everybody has the opportunity.

The timeline, I think is a good question. But yes, there will be opportunity to review before it's—obviously before it's released, but even before it's discussed at the May 11<sup>th</sup> meeting.

**[1:32:05] Dr. Barbara Schneeman:** Right, right. So, I think we'll be seeing pretty much the whole of what's available. May 11<sup>th</sup>, there's still not a public version of the report out. That's our making a presentation and—with the idea that, by the end of May, the report, the final report will be submitted to the Secretaries.

And I always like to emphasize that everything we've talked about in our public meetings is always draft until we submit that final report. The feedback we get is important.

So, other questions or comments about the report itself or where we go from here?

**[1:34:00]** So, hearing no further comments, I just—if we close the meeting, it will be closed at that point. But I just want to make sure, if anyone has any additional comments, please bring them up now.

**Dr. Steven Heymsfield:** This is Steve—

**Dr. Elizabeth Mayer-Davis:** Yeah, Barbara, I just have a question.

**Dr. Steven Heymsfield:** Go ahead.

**Dr. Elizabeth Mayer-Davis:** So, this is just a practical question about interim timelines related to the draft report. Will there be such? Because I'm feeling a little bit uncertain about how much progress at what point in time for that to unfold. I'm not sure how many iterations of review within the committee we'll have and that kind of thing.

**[1:35:08] Dr. Eve Stoody:** So, Beth, you're asking for a timeline to think about milestones in deliverables by—kind of drafts by this date? We can certainly do that. That hasn't been done, but I think now we're at the point, kind of working backwards in the different pieces. We can definitely do that.

**Dr. Elizabeth Mayer-Davis:** Right. Okay, that's helpful. Thanks.

**Dr. Barbara Schneeman:** Yeah, in our remaining time, we really have to focus on making sure we get the report done.

**Dr. Elizabeth Mayer-Davis:** Yes, we do.

**Dr. Barbara Schneeman:** And Steve, I think you had comment/question?

**Dr. Steven Heymsfield:** Well, maybe I was just thinking out loud. We finished our report fairly early. Frequency of Eating had very few papers to review. So, it's a fairly simple report.

**[1:35:54]** But just in retrospect, for others who might be interested, I think the guidelines we got on how to write this report were extremely clear, from I guess the administration, I'll call it, very clear, very simple, very straightforward.

And so, I drafted something fairly rudimentary and I sent it around to my committee—subcommittee members, and they chimed in and really refined it. And then, the whole process went very fast.

So, I think the sort of front piece of the report itself is not really that hard to write for any of these committees, and maybe I'm oversimplifying it, but I'd be happy to help if anybody gets lost in doing it.

But the bulk of the actual chapters are largely done, the tables and summaries and so on. So, I think it's something that should go pretty fast. That's my thought.

**[1:37:00] Dr. Barbara Schneeman:** Eve, I would just say, I—

**Dr. Linda Snetselaar:** Steve, this is Linda—

**Dr. Steven Heymsfield:** Yeah?

**Dr. Linda Snetselaar:** This is Linda Snetselaar. I was just wondering if we might possibly get a copy of your outline and your finished report just as kind of a template for what we might do?

**Dr. Steven Heymsfield:** Sure, sure. Elizabeth or Ashley, they continued to edit beyond what we submitted. So maybe we could get them to send a draft. I'm sure it's fine.

**Dr. Linda Snetselaar:** Thank you.

**Dr. Richard Mattes:** This is Rick. I'll just say we've all thanked the NESR team for everything they've done with the systematic reviews, but you all have seen nothing yet. Wait till you see how much they help with writing the paper itself. This isn't a high-stress situation. It really will flow easily once you get the data together.

**[1:38:00] Dr. Steven Heymsfield:** That's exactly what I was trying to say, Rick. You're—that's right.

**Dr. Carol Boushey:** Yeah, it's not to be underestimated, but it isn't like you're putting together your thesis.

**Dr. Richard Mattes:** No, no.

**Dr. Eve Stoady:** Steve, I think—this is Eve. Maybe be careful what you offer. But I think you have a lot of takers on assistance.

But just note, that's helpful to note, it was our science—we do have a science writer who prepared the—really took the lead on developing the outline for the committee's report and all of the guidance, and she's helped with the Dietary Guidelines Advisory Committees for our last two committees.

And so, that's been great to have that kind of history in kind of thinking about and pulling together those templates and those outlines. So, thanks for that feedback.

**[1:39:02] Dr. Barbara Schneeman:** But it sounds like people need that template that she provided sent out again as well.

**Dr. Eve Stody:** Yep.

**Dr. Barbara Schneeman:** So, that'd be useful.

Okay, great. Other—Steve, it looks like everyone's going to be quite happy to fill up your remaining time, so not to worry.

Yeah, no, I appreciate your comments and your willingness to help. It is valuable.

So, other comments or questions?

So, are you going to—okay, I'm going to turn it back to Eve, and you'll be sure and repeat the dates for comments and whatnot, too? So, I'm going to **[audio issue 1:39:57- 1:39:59]**

**[1:39:59] Dr. Eve Stody:** —Barbara, and thanks to all the members, too, and for the public in this changed venue and plan. Just really, thanks for all the flexibility.

So, that is, as we like to say, that's a wrap. That's a wrap for Meeting 5.

I do want to note that meetings from this—excuse me, materials from this meeting will be archived on our website. So, we'll try to get those materials up as quickly as possible, at a minimum, we'll move to trying to get the recording available as quickly as possible, which is what we did for Meeting 4 as well.

We will send out a message through our Listserv as soon as materials are posted. We know a lot of content was presented over the last 2 days and there's a lot of interest in—I know people would like to provide input on that. And so, we'll make sure that we get that up as quickly as possible and let—send you a notification as to when that is available.

**[1:40:57]** We hope that you will join us for the committee's report meeting on Monday, May 11<sup>th</sup>, and as we've mentioned before, that this will be the first time for the committee to hold a meeting that will focus on discussion of its draft report to the Departments.

So, this is another thing we'll provide more information as we get closer, but for now, if you'll just hold the date.

So, as Barbara noted a few times as well, just a couple of notes around dates of interest, specifically related to the public comments.

If you have comments related to the discussion at this meeting, you're asked to submit them within the next 2 weeks. And so, 2 weeks is Friday, March 27<sup>th</sup>. As she has noted, comments to the committee are welcome anytime, but to be most useful for the committee's discussion as they move into this—into finalizing these systematic reviews, please try to submit them within the next 2 weeks.

**[1:41:55]** Also, as we announced yesterday, we've had an ongoing public comment period that's been open since March of last year, and that comment period will close on Friday, May 1<sup>st</sup>. And so, just a note to keep in mind.

And so, that is to give the committee enough time. You submit—the public will submit your comments. That'll give the committee enough time to consider those as they go about finalizing their report before the end of May.

As always, we do like to really have appreciated the committee acknowledging the staff, and we have a really fantastic team from across USDA and HHS who do everything from supporting the NESR systematic reviews, teams supporting the data analysis and the food pattern modeling analysis, supporting—just making things happen within the subcommittees and helping with the—keeping things straight with as the committee develops its report, and with the meeting planning and more.

**[1:42:57]** So, there—they've—y'all have noted that the staff supporting the committee's work in preparing for this meeting. It was a large amount of work for the staff, and also a huge amount of work for the committee as well.

So, the staff really works to kind of ensure a systematic approach is used in identifying literature, and then the committee is really responsible for reviewing and coming to their conclusions.

And so, it's really been a group effort, and a large one.

I do want to note, just a couple of people, as you know, we made a decision pretty—not as in advance—it would have been great to know a couple months ago that we were doing a webcast, but I mean I'm happy that we had this flexibility in these circumstances.

But I do want to note that we, just a quick acknowledgement to Claire Brown and Gene Aultman on our team, who really was like “We’re going to do a webcast,” and they, all of a sudden, just took a crash course in a platform that we’ve absolutely never used.

**[1:44:05]** And so, really just appreciate our nutritionists, who are also supporting subcommittees, kind of jumping in and being willing and very capable in helping to make this happen.

And then, we have three staff at USDA, Kevin Connor, Mandy Pullin, and Mike Johnson, who work with our downtown staff, and as you can imagine, they’re with our IT team, they are also getting suddenly a lot more interest and need to move things into web platform, and they were extremely helpful to us in making this happen. So, just a quick acknowledgment to them as well.

So, with that, again, just thank you for committee for all of your work in getting to this point. We know it’s huge. We know that there’s a lot to come, but thank you. We hope everybody has a work-free weekend, and we look forward to coming altogether again on May 11<sup>th</sup>.

**[1:45:04]** So, thank you.

And we’ll call it a day. Goodbye.

**Dr. Ronald Kleinman:** Thank you. Bye-bye.