

2020 DIETARY GUIDELINES ADVISORY COMMITTEE

+ + + + +

PUBLIC MEETING

+ + + + +

THURSDAY
 JULY 11, 2019
 DAY 2 OF 2

+ + + + +

The Dietary Guidelines Advisory Committee met in the Jefferson Auditorium, at the headquarter of the U.S. Department of Agriculture, 1400 Independence Avenue, S.W., Washington, D.C., at 9:00 a.m., Barbara Schneeman, Chair, presiding. The meeting allowed for public viewing, both in-person and by Web.

MEMBERS PRESENT

DR. BARBARA SCHNEEMAN, PhD, Chair
 DR. RONALD KLEINMAN, MD, Vice Chair
 DR. JAMY ARD, MD, Member
 DR. REGAN BAILEY, PhD, MPH, RD, Member
 DR. LYDIA BAZZANO, MD, PhD, Member
 DR. CAROL BOUSHEY, PhD, MPH, RDN, Member
 DR. SHARON DONOVAN, PhD, RD, Member
 DR. HEATHER LEIDY, PhD, Member
 DR. RICHARD MATTES, PhD, MPH, RD, Member

DR. TIMOTHY NAIMI, MD, MPH, Member

DR. RACHEL NOVOTNY, PhD, RDN, LD, Member

DR. JOAN SABATE, MD, DrPH, Member

DR. LINDA SNETSELAAR, PhD, RD, Member

DR. LINDA VAN HORN, PhD, RDN, LD, Member

PUBLIC ORAL COMMENTERS

ALBERT LEAR, International Bottled Water
Association

ALEXANDRA LEWIN-ZWERDLING, International Food
Information Council

ALISON WEBSTER, National Potato Council

AMIE HAMLIN, Coalition for Healthy School Food

AMY LANOU, University of North Carolina Asheville

ASHA SUBRAMANIAN, Community Family Physician

AUDREY LAWSON-SANCHEZ, Balanced

BECKY DOMOKOS-BAYS, School Nutrition Association

BECKY GARRISON, American Pulse Association

CAROLINE TRAPP, University of Michigan School of
Nursing

CHRISTIE DEL CASTILLO-HEGYI, Fed is Best
Foundation

CASEY GALLIMORE, North American Meat Institute

CATHERINE SHANAHAN, Family Physician

CHRISTINE NAJJAR, Pounds Transformation

CLARA LAU, National Cattlemen's Beef Association

COLLEN MARSH, University of North Carolina,
Gillings School of Global Public Health

DARLENA BIRCH, National WIC Association

DARREN SCHMIDT, The Nutritional Healing Center of
Ann Arbor

DAYLE HAYES, Nutrition for the Future, Inc.

DIANE WELLAND, Juice Products Association

DOTSIE BAUSCH, Switch4Good

ERIC ADAMS, Brooklyn Borough Hall

ERIC O'GREY, Private Citizen

ERIC SODICOFF, PMA Medical Specialists

FARIDA MOHAMEDSHAH, Institute of Food

Technologists

GALE FERRANTO, Buona Foods and Bella Mushroom

Farms

GARTH DAVIS, Mission Weight Management Center

GEORGIA EDE, Practicing Psychiatrist

GUY JOHNSON, McCormick Science Institute
HAIUYEN NGUYEN, Council for Responsible Nutrition
JAMES BAILES JR., Cabell Huntington Hospital
JAMIE KANE, Zucker School of Medicine at
Hofstra/Northwell
JASMINE WESTBROOKS, EatWell Exchange
JENNIFER LUTZ, True Health Initiative
JESSICA HIXSON, SNAC International
JESSI SILVERMAN, Center for Science in the Public
Interest
JILL NICHOLLS, National Dairy Council
JILLIAN JOHNSON, Private Citizen
JOHN COX, Soyfoods Association of North America
JOHN KELLY, American College of Lifestyle
Medicine
JOY DUBOST, Unilever
KAREN SEALANDER, American Dental Hygienists'
Association
KATHY WEIMER, Grain Chain
KERRY FOLEY, Private Citizen
LAURA ABSHIRE, National Restaurant Association
LUCY SULLIVAN, 1,000 Days
MARIE CAUDILL, Cornell University
MAUREEN TERNUS, International Tree Nut Council
Nutrition Research and Education Foundation
MELISSA MAITIN-SHEPARD, American Institute for
Cancer Research
MEREDITH WHITMIRE, Defeat Malnutrition Today
Coalition
MICHAEL DODDS, Mars Wrigley
MICHAEL GREGER, NutritionFacts.org
MICKEY RUBIN, Egg Nutrition Center
MIQUELA HANSELMAN, National Milk Producers
Federation
MILTON MILLS, Gilead Medical Group, Inc.
MOLLIE VAN LIEU, United Fresh Produce Association
NEIL COOPER, The Southeast Permanente Medical
Group
NICOLE MANU, The Good Food Institute
NINA TEICHOLZ, The Nutrition Coalition

PAMELA POPPER, Wellness Forum Health

PEPIN TUMA, Academy of Nutrition and Dietetics

PRIYANKA WALI, Private Practice Physician

RANDY PHILIPP, Private Citizen

SALLY GREENBERG, National Consumers League

SARAH GOLDMAN, Johns Hopkins Center for a Livable
Future

SARAH HALLBERG, Indiana University

SARAH OHLHORST, American Society for Nutrition

SARAH REINHARDT, Union of Concerned Scientists

SEAN HENNESSY, The Humane Society of the United
States

SHERENE CHOU, Plant Based Foods Association

SUSAN BORRA, Food Marketing Institute

SUSAN LEVIN, Physicians Committee for Responsible
Medicine

SUSAN WOLVER, Virginia Commonwealth University

TAMARA HAZBUN, IU Health Arnett

TAYLOR WALLACE, Produce for Better Health
Foundation

TED BARNETT, Rochester Lifestyle Medicine
Institute

CONTENTS

Opening Remarks. 6
Brandon Lipps, JD, Acting Deputy Under Secretary
Food, Nutrition, and Consumer Services
US Department of Agriculture

Public Comments.13

Adjourn. 267

1 P-R-O-C-E-E-D-I-N-G-S

2 8:31 a.m.

3 DR. STODY: Okay. Good morning and
4 welcome to day 2 of meeting 2 of the 2020 Dietary
5 Guidelines Advisory Committee. I want to welcome
6 the committee and the public. Again, we had over
7 1,000 people who registered for this meeting,
8 around 200 to 300 to register to attend in person
9 and over 700 registered to attend online. And we
10 appreciate your engagement in the Dietary
11 Guidelines process.

12 I'm going to welcome Mr. Brandon Lipps
13 who is our Acting Deputy Under Secretary for the
14 Food, Nutrition and Consumer Services.

15 MR. LIPPS: Thanks, Eve. Good
16 morning, everybody.

17 (Chorus of good morning.)

18 MR. LIPPS: Let's try again. Good
19 morning, everybody.

20 (Chorus of good morning.)

21 MR. LIPPS: Very good. We're going to
22 have a lively bunch today. On behalf of

1 Secretary Perdue, my colleague Dr. Scott
2 Hutchins, and our partners at the Department of
3 Health and Human Services, I want to welcome
4 everybody to day 2 of the second meeting of the
5 Dietary Guidelines Advisory Committee.

6 As Eve said, my name is Brandon Lipps.
7 I serve as the Administrator of the Food and
8 Nutrition Service and as Acting Deputy Under
9 Secretary of the Food, Nutrition and Consumer
10 Services mission area at USDA.

11 We're focused today on giving the
12 public an opportunity to provide oral comments
13 here directly face to face with the advisory
14 committee. While your comments are to the
15 committee, I want you to know that we will have
16 representatives from HHS and USDA here all day as
17 well.

18 This morning is dedicated to hearing
19 from each of you. Your voice matters in this
20 process. We believe this open dialogue is
21 critical to the success of the 2020-2025 Dietary
22 Guidelines. We are so pleased that so many of

1 you chose to participate today and we thank you
2 for the time that you took out of your busy
3 schedules to communicate directly with the
4 committee.

5 We know more people wanted to provide
6 comments today than we had time for, and we wish
7 that we could fit everyone in. The good news is
8 that this round we have a second opportunity.

9 For the first time in the Dietary
10 Guidelines advisory process, there are two
11 opportunities to provide oral comments to the
12 advisory committee. Today, which is the first
13 opportunity to hear from the public early in the
14 committee's work has happened in previous
15 processes.

16 There's now a second opportunity at a
17 later meeting before the committee writes and
18 presents its draft report at its final meeting.
19 That second opportunity to provide oral comments
20 to the committee will be at meeting 4 which will
21 be on January 23rd and 24th in Houston, Texas.
22 It's important to us that we hear from

1 stakeholders across the country. So we thought
2 it was important to get outside the D.C. bubble
3 and speak with the people whose lives could be
4 impacted by these guidelines.

5 In December, be on the lookout for our
6 announcement for the registration for that
7 meeting to provide oral comments. If you haven't
8 signed up at DietaryGuidelines.gov to get our
9 updates, please do that. Our email updates are
10 our primary means to get word to you with
11 announcements as soon as we have them.

12 I would also like to quickly remind
13 you about our ongoing call for public comments to
14 the advisory committee. We opened this call last
15 March, and it will remain open for you to submit
16 your comments to the committee throughout the
17 course of their work into 2020. You can find
18 more information and find that link again at
19 DietaryGuidelines.gov.

20 We do review each and every one of
21 these comments, and we will consider them as we
22 draft the 2020-2025 Dietary Guidelines. So

1 please do visit our website and ensure that your
2 voice is heard in this process.

3 Again, I want to thank everybody for
4 joining us here today in person and for those who
5 are joining us via live webcast for staying
6 engaged in our process to develop the next
7 edition of the Dietary Guidelines for Americans.

8 I want to pause for a moment and thank
9 our committee members who have spent much time
10 working on this process since the last meeting
11 and are here today to hear directly from you.
12 Let's give them a round of applause.

13 (Applause.)

14 MR. LIPPS: And I want to thank the
15 committee specifically who's volunteering their
16 time for this process for agreeing to take time
17 out of their busy schedules, not only to do all
18 of the work of this committee, but very
19 importantly, to hear directly from the public on
20 two occasions this round. So thank you for that.

21 Also thank you to the HHS and USDA
22 staff who put so much time to ensuring that the

1 process for the Dietary Guidelines for America is
2 open and transparent process for the public to
3 participate in.

4 With that, let's get started. We have
5 a very important process today. Somebody is
6 going to lay that out for you. If you're
7 planning to present comments, you need to listen
8 carefully. I would like to welcome Janet de
9 Jesus from our partner at HHS, Office of Disease
10 Prevention and Health Promotion, who will provide
11 more information on today's oral process.

12 Thank you all very much.

13 (Applause.)

14 MS. DE JESUS: Good morning.

15 (Chorus of good morning.)

16 MS. DE JESUS: I'm going to give brief
17 instructions for the oral comment session, and
18 then we can get started. So individuals that are
19 registered to provide oral comments to the
20 committee will be able to provide three minutes
21 total of comments. There are 72 speakers
22 registered to provide comments and another 9

1 individuals on the standby list, that if time
2 permits, will be able to provide their comments.

3 We will move swiftly through the
4 commenters in hopes that everyone will be able to
5 participate. Individuals providing comments are
6 on both sides of the auditorium in their assigned
7 seats with odd numbers on the left and even
8 numbers on the right. We will start with number
9 one on the left, move to number two on the right,
10 and go back and forth.

11 Staff are situated in the auditorium
12 to help with the process. And we have an
13 announcer, Kellie Casavale, that will call your
14 number. Once your number is called, please step
15 forward to the microphone. State your name and
16 affiliation, and proceed with your remarks.

17 A timekeeper seated at the front of
18 the stage will start the three-minute timer.
19 Okay. And when your allotted time is finished,
20 please conclude your remarks. We're really
21 appreciative of that.

22 To keep the process moving

1 efficiently, staff on each side of the auditorium
2 will have three people line up at the tape on
3 each side. So when your number is called, you
4 can step forward to the microphone. Once you are
5 finished, feel free to return to your seat or any
6 other seat designated for the public. Or you can
7 also leave if you wish.

8 On a final note, this is being
9 recorded. The video of this morning's public
10 comment session will be posted on the website at
11 DietaryGuidelines.gov. So thank you for your
12 participation and we can now have the first
13 groups line up and get started.

14 Thank you.

15 DR. CASAVALE: Commenter number 1.

16 MR. WALLACE: Hello. My name is
17 Taylor Wallace with Think Healthy Group in George
18 Mason University, and I'm providing comment on
19 behalf of the Produce for Better Health
20 Foundation, a nonprofit organization focused on
21 fostering an environment where people can enjoy
22 more fruits and vegetables in all forms and

1 varieties at every eating occasion.

2 Fruits and vegetables have
3 traditionally solidified their place in Dietary
4 Guidelines due to their dense micronutrient
5 content and low energy density. However, over
6 the last decade, significant scientific evidence
7 suggest that fruits and vegetables have benefits
8 beyond helping to provide basic nutrient
9 requirements in humans.

10 Therefore, the PBH Foundation
11 commissioned a comprehensive umbrella review to
12 summarize the current clinical and observational
13 evidence on the potential health effects of
14 fruits and vegetables in all forms to inform
15 public research priorities and to offer public
16 health messaging strategies that are reflective
17 of the current science.

18 The expert review authored by myself
19 and 12 other nutrition scientists which just
20 published in Critical Reviews in Food Science and
21 Nutrition this last week has been submitted to
22 the USDA evidence analysis library and examines

1 more than 100 systematic reviews on the topic.
2 Today, I'll briefly address a few of the key
3 findings.

4 The science is clear. Public health
5 recommendations including the Dietary Guidelines
6 should continue to advocate for at least five
7 servings of fruits and vegetables in all forms
8 each day to reduce disease risk.

9 Fruits and vegetables do more than
10 just help people meet basic nutrient
11 requirements. There is strong evidence that
12 shows consuming up to five servings each day as
13 fresh, frozen, canned, dried, and 100 percent
14 juice can help reduce disease risk, particularly
15 cardiovascular disease, the number one killer of
16 Americans.

17 Data from the systematic reviews also
18 support intake of certain types of fruits and
19 vegetables, particularly cruciferous vegetables,
20 dark green leafy vegetables, citrus fruits, and
21 dark colored berries which have superior effects
22 on biomarkers, surrogate endpoints, and chronic

1 disease outcomes. And this is likely due to
2 their bioactive contents. And colleagues, it is
3 really critical that we start to look at
4 bioactives such as flavonoids in our Dietary
5 Guidelines.

6 All forms of fruits and vegetables
7 play a role in health, and there's strong
8 evidence that supports the need for more
9 practical, realistic advice to help people enjoy
10 five or more servings more often. At a time when
11 people are increasingly told what not to consume
12 for a healthy diet, let's encourage them to focus
13 on what could be one of the most important things
14 they can do for their health. Enjoy more fruits
15 and vegetables in all forms for healthier happier
16 lives. Have a plant.

17 DR. CASAVALE: Commenter number 2.

18 MS. REINHARDT: Good morning. My name
19 is Sarah Reinhardt. I'm a public health
20 dietitian. I'm the lead analyst of food systems
21 and health at the Union of Concerned Scientists
22 in Washington, D.C.

1 I want to thank the members of the
2 committee for lending your time and your
3 expertise to this process. Thank you to the
4 staff at USDA and HHS for the work that you do to
5 make this process transparent and accessible to
6 the public.

7 There is vast untapped potential to
8 save lives and health care dollars through better
9 nutrition in this country. Last month, the Union
10 of Concerned Scientists released a report finding
11 that if adults were able to meet current dietary
12 recommendations for fruits and vegetables, we
13 could prevent 110,000 deaths from cardiovascular
14 disease and decrease medical costs by 32 billion
15 in a single year.

16 If adults were drinking one less sugar
17 sweetened beverage per day, we could prevent
18 19,000 deaths from type 2 diabetes and cut 16
19 billion in health care costs each year. And if
20 adults were following science-based
21 recommendations to eat little to no processed
22 meat, we could prevent nearly 4,000 deaths from

1 colorectal cancer and save 1.5 billion in health
2 care spending.

3 Based on these findings, the Union of
4 Concerned Scientists has several key
5 recommendations. One, the USDA and HHS must
6 ensure effective implementation of the Dietary
7 Guidelines to translate science-based
8 recommendations to meaningful results in
9 communities across the country.

10 Currently, there's insufficient
11 investment and enforcement to integrate the
12 Guidelines across all federal agencies carrying
13 out food nutrition programs as required by the
14 National Nutrition Monitoring and Related
15 Research Act.

16 Two, recommendations contained in the
17 committee's scientific report and the resulting
18 Dietary Guidelines must be consistent with the
19 best available nutrition research to protect
20 public health. For example, the current
21 literature supports recommendations to consume
22 little to no processed meat and to limit added

1 sugar to, on average, no more than six percent of
2 total daily calories.

3 Number three, to make decisions based
4 on the best available research, the committee
5 must have access to the best available research.
6 We urge the USDA and HHS Secretaries to allow the
7 committee as in previous cycles to include high
8 quality external systematic reviews and meta
9 analyses in its evidence review process.

10 Lastly, I'll leave you with a
11 recommendation that we plan on addressing in
12 forthcoming research. There is now overwhelming
13 scientific evidence of the link between our diets
14 and our changing climate. And for many, the
15 consequences of climate change are already being
16 felt.

17 It is irresponsible for the Dietary
18 Guidelines to continue to ignore the
19 preponderance of evidence surrounding
20 sustainability and diet. Doing so will threaten
21 public health for generations to come. We urge
22 the committee to carefully review this body of

1 literature and include relating findings in your
2 final report.

3 Thank you.

4 DR. CASAVALE: Thank you. Commenter
5 number 3.

6 MS. HIXSON: Hi. My name is Jessica
7 Hixson, and I'm the Director of Government
8 Affairs for SNAC International. Founded in 1937,
9 SNAC International is the leading international
10 trade association for the snack industry. SNAC
11 represents over 400 companies worldwide,
12 including snack industry suppliers, marketers,
13 and manufacturers in both the traditional and
14 emerging snack categories. SNAC greatly
15 appreciates the opportunity to provide comment to
16 the DGAC.

17 As the leading trade association for
18 the snack industry, we closely monitor snacking
19 trends. According to the Hartman Group, 90
20 percent of consumers snack multiple times per day
21 and seven percent only snack, not consuming any
22 meals at all.

1 According to IRI data, the average
2 consumer snacks more than two and a half times
3 per day. Snacking is even more prevalent in
4 younger generations with 92 percent of
5 Millennials and Generation Z replacing at least
6 one meal per week with a snack with the majority
7 reporting they snack three or more times per day.

8 According to a recently released
9 Nielsen Survey, while satisfying hunger between
10 meals continues to be the top reason to snack,
11 nutritional reasons are a close second. We
12 understand work is underway to review frequency
13 of eating which raises questions about snacking.

14 Given that NHANES studies consider any
15 food or beverage consumed outside a meal to be
16 characterized as a snack and because snacking is
17 an undefined term in the literature. And without
18 a government definition, comparison across
19 studies is very challenging. This sentiment was
20 reiterated in the subcommittee's conversations
21 around key definitions yesterday.

22 While there is research that snacking

1 can increase intake of calories generally, we
2 want to note to the committee that our
3 forthcoming written comments will identify a
4 large number of studies that found snacking or
5 more frequent eating is beneficial to health
6 throughout the life stages as well as a positive
7 contributor to appetite, mood and cognition, and
8 nutrient contribution.

9 A 2017 national study found that due
10 to the driving force of Millennials, better for
11 you snack options are more mainstream and have
12 become widely available nationwide. While 20
13 years ago, it may have been challenging for snack
14 producers to make healthier options taste as good
15 as indulgent options, the snack industry is
16 constantly evolving. And with new technology and
17 flavor profiles, our members are able to provide
18 consumers with nutritious options that taste
19 good.

20 Consumer preferences are changing and
21 health trends are increasingly evident. The
22 increase in snacking occasions can be an

1 opportunity to promote food groups to encourage
2 given that nearly 60 percent of consumers are
3 either highly likely or likely to purchase better
4 for you on the go snacks.

5 Our industry is working to meet new
6 demands for natural minimally processed foods
7 that incorporate real fruits, vegetables, nuts,
8 seeds, pulses, and more. We look forward to
9 providing you with more information of snacks and
10 snacking over the next few months. Again, we
11 want to thank the committee for their important
12 work and we look forward to working with you.

13 DR. CASAVALE: Commenter number 4.

14 MS. MAITIN-SHEPARD: Good morning. My
15 name is Melissa Maitin-Shepard. And on behalf of
16 the American Institute for Cancer Research, thank
17 you for the opportunity to provide comments
18 today. AICR is the leading U.S. authority on the
19 link between diet, weight, physical activity, and
20 cancer prevention and survival.

21 As part of the World Cancer Research
22 Fund International Network, AICR funds, gathers,

1 and comprehensively analyzes global scientific
2 research on the roles of diet, weight, and
3 physical activity and cancer risk and publishes
4 expert reports that are trusted authoritative
5 scientific resources that underpin current cancer
6 prevention recommendations and policy priorities.

7 AICR strongly recommends that the DGAC
8 make full use of existing high quality systematic
9 reviews and meta analysis conducted by
10 researchers and organizations outside of the
11 federal government. We believe that a
12 determination to explicitly exclude the use of
13 scientifically sound external research will
14 reduce the efficiency and effectiveness of the
15 DGAC process.

16 Several of the DGAC's research
17 questions have been addressed by existing high
18 quality reviews and meta analyses and these
19 reports provide particularly important
20 information concerning the relevant dose response
21 relationships.

22 For example, the DGAC's research

1 question on the connection between alcohol
2 consumption and cancer risk can be addressed by
3 meta analyses on the relationship between alcohol
4 consumption and six types of cancer which show
5 that the level of consumption associated with
6 increased risk differs substantially by cancer
7 type. This conclusion may not be reached using a
8 systematic literature review alone.

9 Excluding the use of high quality
10 systematic reviews and meta analyses is an
11 unnecessary and inefficient departure from the
12 evidence review process used by the 2015 DGAC
13 which utilized existing systematic reviews, meta
14 analyses, or reports to answer 45 percent of its
15 research questions.

16 The National Academies' committee that
17 reviewed the process to update the Dietary
18 Guidelines recommended the use of existing
19 research that is relevant, timely, and high
20 quality. Instead of unnecessarily duplicating
21 existing research, we recommend that NESR more
22 efficiently focus its time on updating existing

1 high quality systematic reviews and develop new
2 ones only where they do not already exist.

3 We will be submitting a letter to the
4 docket with this recommendation that has been
5 signed by more than 25 national organizations,
6 including the American Society for Nutrition, the
7 Academy of Nutrition and Dietetics, the American
8 Heart Association, and the American Diabetes
9 Association.

10 And in addition, AICR will provide
11 detailed written comments with recommendations
12 regarding methodology, research conclusions, and
13 their implications for each of the DGAC's
14 scientific questions related to the risk of
15 cancer or excess weight.

16 Thank you for considering our
17 comments.

18 DR. CASAVALE: Commenter number five.

19 DR. DUBOST: Good morning. I'm Dr.

20 Joy Dubost, head of nutrition at Unilever and
21 appreciate the opportunity to provide oral
22 comments.

1 Americans do not always consider
2 beverage intake part of their total caloric
3 intake or dietary pattern. However, we know that
4 beverage consumption has a direct impact on
5 health and we would like to highlight two major
6 points related to beverages.

7 First, we believe there's a gap in the
8 current Dietary Guidelines in providing clear
9 overarching guidance and more specific
10 recommendations on beverage consumption. The
11 current Guidelines are limited by not fully
12 detailing specific types and amounts that should
13 be consumed as part of a healthy dietary pattern.

14 With this, we encourage the committee
15 to include a comprehensive analysis of types and
16 amounts of beverages within dietary patterns and
17 their impact on specific health outcomes based on
18 clinical consequences. This would include
19 beverages that not only achieve nutrient and food
20 group recommendations but also bioactives such as
21 flavonoids which have demonstrated clinical
22 significance. We recommend that USDA and HHS

1 provide healthy beverage guidelines including
2 those that deliver bioactive components
3 associated with optimal health.

4 Second, we know beverages have an
5 important role in optimizing health. An example
6 of this would be unsweetened tea which is the
7 second most commonly consumed beverage in the
8 world. The current preponderance of evidence
9 suggests that long-term consumption of tea
10 flavonoids may provide health benefits with the
11 strongest associations being the promotion of
12 cardiovascular health which is important as
13 cardiovascular disease is the leading cause of
14 death in the U.S.

15 Of the many dietary sources, tea is
16 the major flavonoid source in the American diet.
17 A new systematic review and meta analysis
18 recently accepted with edits into the Annals of
19 Internal Medicine indicates a linear dose
20 response relationship between tea flavonoid
21 intake levels and risk of all-cause mortality.

22 The linear meta regression model

1 showed that with each cup of daily green or black
2 tea consumption, there was a two percent reduced
3 risk for all-cause mortality. There was also a
4 linear dose response relationship between tea
5 flavonoid intake levels and risk of
6 cardiovascular mortality. The linear meta
7 regression models showed that with each cup of
8 daily green or black tea consumption, there was a
9 three to four percent reduced risk for
10 cardiovascular mortality.

11 Overall, the preponderance of
12 scientific evidence supporting the role of
13 unsweetened tea in a healthy dietary pattern is
14 strong based on clinical evidence. This data is
15 robust and supports a case that unsweetened tea
16 can be included as a beverage to encourage as
17 part of a healthy dietary pattern.

18 We recommend that USDA and HHS help
19 shape Americans' beverage consumption by
20 recommending unsweetened tea as a primary
21 beverage option. We look forward to engagement
22 in the Dietary Guidelines process.

1 Thank you.

2 DR. CASAVALE: Commenter 6.

3 MS. GARRISON: Good morning. My name
4 is Becky Garrison, and I'm a registered dietician
5 speaking on behalf of the American Pulse
6 Association and our U.S. pulse industry
7 affiliates. We appreciate the hard work that
8 goes into developing the Dietary Guidelines and
9 welcome this opportunity to comment today.

10 The U.S. pulse industry implores all
11 parts of the U.S. government who are responsible
12 for initiatives, programs, policies, and dietary
13 guidance to use the correct terminology when it
14 comes to pulses.

15 By definition, the term pulse refers
16 to the dry edible seed of a legume pod. Pulses
17 include lentils, chickpeas, dried peas, and dried
18 beans. Pulses are nutritionally unique in that
19 they are an excellent source of folate and
20 dietary fiber as well as a good source of
21 potassium, iron, protein, magnesium, and zinc.

22 Compared to other legumes, pulses

1 often have a higher protein and fiber content
2 while maintaining a lower fat content.
3 Additionally, pulses are harvested dry which
4 makes them economically accessible and contribute
5 to food security at all levels.

6 Despite the clear and distinct
7 definitions for the terms, legumes and pulses,
8 the DGA have referred to the legumes category in
9 a variety of ways over the past 15 years. The
10 most recent edition in 2015 uses the category
11 nomenclature legumes with beans and peas in
12 parentheses. And with the exception of soy
13 beans, all foods listed in this current category
14 are more specifically pulses.

15 Additionally, the current category
16 does not include foods such peanuts and fresh
17 beans that the broader name of legumes would
18 denote. Therefore, pulses or pulses and soy
19 beans would be the correct terminology being
20 referred to by the language currently used in the
21 DGA.

22 Along with multiple terminology

1 changes over the last 15 years, the consumption
2 amounts recommended for pulses have consistently
3 decreased also. Based on a review of the
4 literature, we struggle to understand the
5 scientific basis for the DGA decreasing
6 consumption of this category.

7 In 2005, the DGA recommendation for
8 this category was set at three cups a week for a
9 2,000 calorie diet. In 2010, it dropped to 1.5
10 cups a week for a 2,000 calorie diet and three
11 cups a week for a 3,000 calorie diet. Then in
12 2015, the recommendation continued at 1.5 cups a
13 week for a 2,000 calorie diet, but no
14 recommendation for the higher calorie category
15 was made.

16 In summary, we ask that the DGAC
17 correct and standardize the food category
18 terminology in its upcoming report from legumes
19 with beans and peas in parentheses to pulses and
20 soy beans. And in the interest of the public, we
21 strongly recommend the DGAC clearly defines
22 pulses and recognizes the benefits of pulses

1 within the report.

2 Lastly, we recommend that DGAC update
3 its dietary pattern recommendation to include
4 three cups of pulses per week for all Americans
5 as it was in 2005.

6 Again, the American Pulse Association
7 and our affiliate groups greatly appreciate the
8 opportunity to comment and strongly support this
9 forthcoming initiative.

10 Thank you.

11 DR. CASAVALE: Commenter 7.

12 MS. MANU: Good morning, committee
13 members. And thank you for the opportunity to
14 speak today. My name is Nicole Manu, and I'm
15 from The Good Food Institute. GFI is a
16 Washington, D.C. based nonprofit organization
17 supporting the market of plant-based and cell-
18 based meat, eggs, and dairy.

19 The health benefits of a diet rich in
20 plant-based food are supported by overwhelming
21 scientific and medical evidence. Therefore, the
22 committee should recommend a stronger emphasis on

1 plant-based foods in the 2020 Dietary Guidelines
2 for Americans.

3 In particular, a range of new and
4 innovative plant-based foods are now in the
5 market that can make it easier for the public to
6 make healthy food choices. Additionally, the
7 Guidelines should encourage a consumption of
8 nonanimal-based proteins to all Americans rather
9 than only highlighting them in the healthy
10 vegetarian eating pattern.

11 Plant-based meats present one
12 opportunity for the committee to recommend a
13 greater variety of plant-based foods in the
14 upcoming Guidelines. Plant-based meats provide a
15 direct replacement for animal meat. They include
16 both products that seek to replicate the taste
17 and texture of animal meat as well as plant
18 products that serve as functional meat
19 replacements.

20 Many plant-based meats have just as
21 much or more protein than animal meat while
22 containing less sodium and saturated fat. For

1 example, both wheat-based seitan and soy-based
2 tempeh have over 20 grams of protein per 100
3 grams and minimal or no saturated fat. USDA
4 recently credited tempeh in child nutrition
5 programs noting that the update will allow
6 program operators to diversify menus.

7 Several brands of plant-based meat
8 that closely mimic the taste and texture of
9 animal meat also contain high amounts of protein
10 and even significant amounts of dietary fiber
11 which is not present in animal meats.

12 Plant-based milks present another
13 opportunity for the committee to recommend a
14 greater variety of plant-based foods in the
15 upcoming Guidelines. There are many more widely
16 available plant-based milks today than there were
17 five years ago.

18 For example, hemp milk, oat milk, and
19 pea milk are typically fortified with calcium and
20 vitamin D to levels comparable to cow's milk.
21 Pea milk also contains more potassium than cow's
22 milk with the same amount of protein.

1 And in addition to these, water lentil
2 milk, an emerging plant-based milk option, is
3 expected to have considerable amounts of
4 naturally occurring calcium and iron. Including
5 a broader range of plant-based foods in the
6 Dietary Guidelines will be beneficial to all
7 Americans, but especially to groups who do not
8 eat animal products because of health concerns or
9 ethical or religious beliefs. And many of people
10 of color who commonly cannot consume conventional
11 dairy because of lactose intolerance.

12 We urge the committee to be guided by
13 the plentiful scientific and medical evidence
14 highlighting the health benefits of plant-based
15 foods to strengthen the Guideline's emphasis on
16 these foods.

17 Thank you again for the opportunity to
18 speak today, and we look forward to participating
19 in the future as the 2020 Dietary Guidelines for
20 Americans continue to be developed.

21 Thank you.

22 DR. CASAVALE: Commenter 8.

1 DR. WOLVER: Good morning. My name is
2 Dr. Susan Wolver, and I'm a general internist
3 practicing primary care and obesity medicine at
4 Virginia Commonwealth University in Richmond
5 speaking on my own behalf. Thank you for
6 allowing me the opportunity to speak, and thank
7 you for your commitment to improving the health
8 of our nation.

9 I am here to implore you to consider
10 the mounting evidence in support of a low
11 carbohydrate diet as a viable and necessary
12 approach in the new Dietary Guidelines. I've
13 been practicing medicine for 30 years.

14 The first 24 were a cycle of seeing
15 patients with their uncontrolled chronic
16 conditions, tweaking medications while watching
17 them gain weight and their diseases worsening.
18 That was in spite of my continually recommending
19 exercise and a diet of whole grains, fruits,
20 vegetables, lean meats, and low fat dairy. But
21 it never worked, and I mean never.

22 In those 24 years, two people lost

1 weight and one gained it back. And then when I
2 got to be middle aged and that same advice no
3 longer worked for me, I realized that my advice
4 might be wrong. I tried a low carb ketogenic
5 diet, lost weight effortlessly, and tried it with
6 my patients who were desperate for help.

7 Patients like a young woman with newly
8 diagnosed out of control diabetes. She ate
9 perfectly according to the Guidelines, and
10 standard advice would have been to eat less, move
11 more, and start insulin. She would have been
12 relegated to a lifetime of needles, weight gain,
13 and the psychological impact of living with a
14 chronic disease. Instead, I taught her a low
15 carb diet. And in just three months, she was
16 barely in the pre-diabetic range, lost 25 pounds
17 and was overjoyed.

18 More than 90 percent of the patients
19 who come to me on insulin are able to discontinue
20 it. In April, the American Diabetes Association
21 said, and I quote, reducing overall carbohydrate
22 intake for individuals with diabetes has

1 demonstrated the most evidence for improving
2 glycemia.

3 But a low carb diet is beneficial not
4 just for patients with established disease. A
5 recent study by the University of North Carolina
6 showed that a full 88 percent of the nation has
7 at least one of the five components of the
8 metabolic syndrome. Results from my patients and
9 studies like the A to Z Trial prove that a low
10 carbohydrate diet not only has better weight loss
11 than standard dietary advice but better
12 improvement in every component of the metabolic
13 syndrome.

14 Nearly 1,500 people have come through
15 my weight loss clinic over the past six years
16 with an average weight loss of 12 percent at nine
17 months and have kept it off for at least 18
18 months with a reduction in medication burden,
19 improvement in blood pressure, fatty liver
20 disease, sleep apnea, arthritis, and enhancement
21 in quality of life.

22 I was so burned out from doing the

1 same thing over and over and not getting results.
2 I am now excited about practicing medicine again
3 knowing I can help my patients improve their
4 health. But we are tired of having to defend a
5 low carbohydrate diet as a valid dietary choice.
6 It is working for us, is supported by irrefutable
7 medical evidence, and demands a place in the
8 Guidelines.

9 Thank you.

10 DR. CASAVALE: Commenter 9.

11 MR. HENNESSY: Morning. My name is
12 Sean Hennessy. I'm here today representing The
13 Humane Society of the United States, the nation's
14 most effective animal charity.

15 Humane Society represents cats and
16 dogs, but we also help all other animals,
17 including farm animals. One of our major goals
18 is to create a more humane food system. So The
19 Humane Society promotes the three Rs, reduce the
20 amount of animal products you eat, replace those
21 animal products with plant-based foods, and
22 refine any remaining animal foods to pick more

1 humane options like cage free and free range
2 eggs.

3 Today, I'd like to give you three
4 reasons to promote a high fiber healthful diet to
5 fuel Americans. First, as a former USDA staff
6 member, I'm proud to applaud the USDA for their
7 recent decision to credit tempeh as a meat
8 alternative in the child nutrition programs.

9 I also commend USDA for naming the
10 protein section in MyPlate as a protein section
11 rather than a meat section as well as including
12 plant-based milk as an option in the dairy
13 section. The 2015 to 2020 Guidelines include a
14 healthy vegetarian eating pattern and specify it
15 can be vegan too.

16 But given our staggering obesity rate,
17 a plant-based diet should be the default option
18 with animal products as an alternative, not the
19 other way around. Further, nutrition experts at
20 the Harvard School of Public Health recommend
21 that USDA adopt Harvard's version of MyPlate by
22 replacing the dairy section with a water section.

1 Second, The Guardian reported China is
2 working on reducing meat consumption 50 percent
3 by 2030 through Dietary Guidelines to improve
4 public health. And my colleagues at Humane
5 Society International just praised Canada for,
6 quote, letting evidence, not industry, inform the
7 latest food guide, end quote. Canada is
8 encouraging their citizens to eat a higher
9 proportion of fruits, vegetables, grains, and
10 legumes. We should do the same.

11 And third, plant powered diets rich in
12 fiber are becoming very popular including for
13 athletes performing at the highest levels such as
14 tennis star Serena Williams and Olympic weight
15 lifter Kendrick Farris. We need to give our kids
16 a fighting chance at growing up to be just as
17 strong as them. And we need to stop telling
18 Americans to eat foods that will make them obese.
19 Please clearly recommend more plants and less
20 meat.

21 Thank you for your work in creating a
22 better future for all of us.

1 DR. CASAVALE: Commenter 10.

2 MS. SILVERMAN: My name is Jessi
3 Silverman. Thank you for the opportunity to
4 share comments on behalf of the Center for
5 Science in the Public Interest.

6 CSPI is a nonprofit consumer advocacy
7 organization that provides science-based food and
8 nutrition advice and led efforts to secure the
9 nutrition facts panel and added sugar disclosures
10 on that panel, calorie labeling on chain
11 restaurant menus, elimination of artificial trans
12 fat from food, improvements to school lunches,
13 and the removal of sugary drinks from schools
14 amongst other things.

15 CSPI will submit detailed written
16 comments on many of the questions that the DGAC
17 will address. Today I will briefly make five
18 points.

19 First, strong evidence supports the
20 dietary pattern recommended by the 2015 DGAC
21 which is a diet, quote, higher in vegetables,
22 fruits, whole grains, low or nonfat dairy,

1 seafood, legumes and nuts, moderate in alcohol
2 among adults, lower in red and processed meat,
3 and low in sugar sweetened foods and drinks and
4 refined grains. That dietary pattern is likely
5 to reduce the risk of heart attacks and strokes
6 as well as type 2 diabetes and some cancers.

7 Second, the strongest evidence
8 consistently has found that replacing saturated
9 fats with unsaturated fats reduces the risk of
10 heart disease and the best evidence does not
11 justify a switch from low fat to high fat dairy.
12 That evidence includes high quality observational
13 data and randomized controlled trials that
14 measure both heart disease outcomes and LDL
15 cholesterol, a well established cause of
16 cardiovascular disease.

17 Third, while every Dietary Guidelines
18 since 1980 recommended limiting sugar, the 2015
19 Guidelines set a target of no more than 10
20 percent of calories from added sugars. That
21 advice should continue because sugary drinks lead
22 to weight gain in children and adults in

1 randomized controlled trials and are linked to a
2 higher risk of heart disease, type 2 diabetes,
3 and tooth decay.

4 In addition, excessive consumption of
5 sugary foods and beverages make it difficult to
6 meet nutrient and food group recommendations
7 without exceeding calorie needs.

8 Fourth, a variety of diets, including
9 low carbohydrate, DASH, and Mediterranean, can
10 lead to weight loss. That conclusion is
11 supported by numerous trials and by health
12 authorities like the American Heart Association,
13 American College of Cardiology, and the Obesity
14 Society.

15 Finally, the obesity epidemic is not
16 a result of the wrong dietary advice as some
17 assert. Rather, poor public health is largely
18 due to our toxic food environment which surrounds
19 us 24-7 with super size burgers, fries, shakes,
20 pizzas, nachos, cookies, and sodas. Not just at
21 restaurants but at movie theaters, shopping
22 malls, gas stations, convenience stores, and

1 elsewhere.

2 As it has in previous editions, the
3 committee should provide recommendations for
4 policies and food system changes to support the
5 ability of families and individuals to eat
6 according to its recommendations.

7 Thank you.

8 DR. CASAVALE: Commenter 11.

9 MS. HAMLIN: Good morning. Thank you
10 for your work and this opportunity. I am Amie
11 Hamlin, Executive Director of the Coalition for
12 Healthy School Food. We help schools around the
13 country introduce plant-based foods to cafeteria
14 menus and provide nutrition education. We are
15 proud to have a formal partnership with New York
16 City, the nation's largest school district.

17 The USDA school meal programs are
18 based on the U.S. Dietary Guidelines. Thus,
19 positive changes to the Guidelines will influence
20 the 30 million meals served each day in our
21 nation's schools.

22 First, I want to emphasize the

1 importance of meat alternatives, especially
2 beans, lentils, tofu, and tempeh and request that
3 the Guidelines place more emphasis on plant-based
4 main dishes.

5 Plant-based entrees are a healthy
6 choice for all children, but most schools are not
7 offering any other than PB&J. What is common on
8 school menus is processed meat such as deli
9 slices, pepperoni, sausage, and hot dogs. But
10 processed meats are classified as Group A
11 carcinogens by the World Health Organization.
12 They have no place in our diet.

13 Since many children count on school
14 meals for their nourishment and children are more
15 susceptible to carcinogens than adults, we ask
16 the committee to discourage the consumption of
17 processed meats and plainly state that they cause
18 cancer.

19 Second, we urge you to remove dairy as
20 a food group. Schools are required to offer
21 milk, but research shows that milk does not build
22 strong bones. What's more, people of color have

1 high rates of lactose intolerance. Humans simply
2 have no need for milk past the age of weaning,
3 much less milk from another species. For our
4 Guidelines to be encouraging consumption by
5 people whose normal biology does not tolerate it
6 is frankly a form of racial bias.

7 Another common problem is chronic
8 constipation in children from undiagnosed dairy
9 allergies. So we encourage you to remove the
10 dairy as a food group and add a calcium group and
11 encourage greens, beans, and other high calcium
12 plant foods as well as exercise for bone
13 strength. At the very least, the Guidelines
14 should promote the inclusion of nondairy milks
15 wherever cow's milk is offered.

16 Third, we recommend the Guidelines
17 address the issue of processed foods because
18 unfortunately limits on calories, sodium, and fat
19 still leave too much room for artificial and
20 fiber deficient ingredients. Virtually all foods
21 displayed at school food expos are processed.

22 At a recent conference where we served

1 main dishes made from scratch, one employee of a
2 food company said to me, I don't mean to be a
3 wise guy, but you're actually cooking food. What
4 are you selling? I told him we're selling good
5 health.

6 Finally, I want to urge the committee
7 to consider the role of animal agriculture on the
8 climate crisis in your recommendations.

9 Thank you for your attention to these
10 important matters which could make a huge
11 difference for all people in United States,
12 especially our nation's children.

13 DR. CASAVALE: Commenter 12.

14 MS. LEVIN: My name is Susan Levin.
15 I'm a registered dietitian at the nonprofit
16 Physicians Committee for Responsible Medicine and
17 the nonprofit primary care clinic, Barnard
18 Medical Center.

19 I am here today to ask the committee
20 and ultimately the USDA to follow the path of
21 evidence-based guidelines that have been improved
22 upon, but not perfected by recent iterations of

1 the committee's report. More diligence for facts
2 and scrutiny against the pressures of industry is
3 needed.

4 One of the most outdated
5 recommendations by the Dietary Guidelines is its
6 commercially-oriented push for Americans to
7 consume dairy. What may have started as an
8 attempt to stabilize dairy prices has become a
9 serious health problem for many and has
10 justifiably been criticized as racist practice
11 for two reasons.

12 First, dairy products are not well
13 digested, if digested at all by most people who
14 are not white. And further, as the leading
15 source of saturated fat in the diet, dairy
16 products contribute to chronic diseases including
17 heart disease and prostate cancer that
18 disproportionately harm or kill people of color.

19 In later childhood or early adulthood,
20 the majority of Black, Asian, and Native American
21 people lose the lactase enzymes that digest the
22 lactose sugar in milk and other dairy products.

1 Commonly referred to as lactose intolerance, this
2 is not a disease but is rather the normal human
3 condition.

4 Due to the prevalence of lactose
5 intolerance and the symptoms it causes, milk
6 consumption should not be recommended. Americans
7 are well past accepting northern European centric
8 dietary recommendations that do not work well for
9 most people. The Dietary Guidelines need to
10 reflect and respect that change.

11 The American Medical Association's
12 official policy is that the USDA should, quote,
13 include culturally effective guidelines and
14 recognize that lactose intolerance is a common
15 and normal condition among many Americans. And
16 then go on to say that the Dietary Guidelines for
17 Americans should clearly indicate that dairy
18 products are optional.

19 As a dietician who has repeatedly
20 corrected ailing patients' misconceptions about
21 the necessity of milk in the diet, I ask you to
22 make that information available to all as soon as

1 possible. This should not be suppressed
2 information that protects industry while harming
3 people.

4 Let us look to our neighbors to the
5 north. Canada's decision to remove milk from a
6 prominent position in the Canadian food guide is
7 a testament to that nation's ability to support
8 and respect science and its multi-cultural
9 population. America should be no less aware and
10 no less accountable to all of its people.

11 Thank you.

12 DR. CASAVALE: Commenter 13.

13 DR. WALI: Good morning to everyone in
14 the committee and thank you for this opportunity
15 to speak. I'm Dr. Priyanka Wali. I'm a
16 practicing physician from California who
17 specializes in obesity medicine. I have treated
18 thousands of patients who suffer from obesity and
19 obesity related complications such as diabetes
20 and metabolic syndrome.

21 I work on the front lines, and I use
22 nutritional plans as a therapeutic tool for my

1 practice every day. I'm here because I'm very
2 concerned that the current nutritional guidelines
3 do not reflect the current health status of our
4 nation.

5 If laughter was the best medicine,
6 then the nutritional guidelines are best practice
7 because they're a joke. A joke that's fallen
8 flat. And I believe that's because the committee
9 has forgotten the number one rule when it comes
10 to joke writing, know your audience.

11 Well, let me tell you about your
12 audience. One in five Americans has diabetes.
13 One in three has pre-diabetes. This is a disease
14 that will kill you slowly by eating away at your
15 brain, your vision, your vital organs. We
16 suspect that 50 percent of Americans right now
17 have pre-diabetes. They just don't even know it.

18 These are diseases caused by high
19 insulin levels which is caused by eating
20 carbohydrates. And I doesn't matter if it comes
21 from whole grain or cane sugar or 100 percent
22 fruit juice. A carb is a carb is a carb.

1 If you have pre-diabetes or diabetes,
2 you are essentially carbohydrate intolerant.
3 Meaning when you put carbs in your body, it
4 becomes affecting your hormones. You become
5 hormonally imbalanced and you become sick. These
6 are the medical facts.

7 The current Guidelines advise that
8 consuming no more than 10 percent of calories
9 from excess sugar. How can we make this
10 recommendation if we know that half the country
11 is carbohydrate intolerant. It's like if you
12 know someone had a life threatening food
13 allergen, you wouldn't tell them, well, avoid the
14 food allergen but you can eat up to 10 percent of
15 your calories of that allergen.

16 You would tell them no. Avoid this
17 allergen at all costs. So why would it be any
18 different with sugar if there are people in this
19 country who are carbohydrate intolerant and
20 that's half the country?

21 Please change the excess sugar limit
22 recommendation from 10 percent to zero percent.

1 Please reduce the recommended carbohydrate intake
2 by half to reflect the current health status of
3 our nation.

4 The Guidelines are a joke now, but
5 they don't have to be. The Guidelines should be
6 medicine because food is medicine. I've seen it
7 in my practice with my patients. And right now,
8 we are prescribing the wrong medicine for our
9 country.

10 Thank you.

11 DR. CASAVALE: Commenter 14.

12 MS. GALLIMORE: Good morning. I'm
13 Casey Gallimore, Director of Regulatory and
14 Scientific Affairs at the North American Meat
15 Institute whose members produce the vast majority
16 of beef, pork, lamb, and poultry in the United
17 States.

18 Consumer health and safety are the
19 driving forces in the production of meat and
20 poultry products. Our industry is committed to
21 offering nutrient dense protein food products
22 while working continuously to produce safe and

1 wholesome food. The Meat Institute appreciates
2 the opportunity to provide comment in the 2020
3 Dietary Guidelines Advisory Committee.

4 Protein is an essential nutrient and
5 is critical for development. Meat and poultry
6 products provide consumers with a convenient,
7 direct, and balanced dietary source of all
8 essential amino acids. Per serving, meat,
9 poultry, and fish provide more protein than
10 dairy, eggs, legumes, cereals, vegetables, or
11 nuts.

12 Protein is critical for developing,
13 maintaining, and repairing strong muscles, is
14 vital for growth in brain development in
15 children, and is essential to prevent muscle loss
16 in the aged.

17 Meat and poultry products are
18 important sources of micronutrients such as iron,
19 zinc, selenium, vitamins B12, B6, thiamine,
20 riboflavin, niacin, and potassium, nutrients
21 essential in all life stages including the first
22 critical 1,000 days growth and development

1 periods like childhood and adolescence,
2 throughout adulthood, and older years to maintain
3 physical function, enhancing quality of life.

4 The iron and zinc in beef, pork, lamb,
5 poultry, and fish are more bioavailable than from
6 other sources, meaning they are more easily
7 absorbed and utilized by the body. The high iron
8 content in meat and poultry products is important
9 to certain subpopulations including teenage girls
10 and pregnant women who are at higher risk for
11 anemia. Although iron supplements may be an
12 option, the heme iron in meat is the most
13 absorbable form.

14 It is clear meat and poultry play in
15 an integral role in ensuring adequate vitamin and
16 mineral intake. The superior nutrient
17 contributions in meat and poultry products must
18 be recognized relative to plant-based protein
19 sources. It is inappropriate and a disservice to
20 the public to consider beans or tofu as
21 equivalent to meat and poultry products from a
22 nutrition and health perspective because they're

1 not.

2 Americans would need to consume many
3 more calories to reach the level of nutrients
4 found in meat and poultry products define the
5 responsible portion size notion. Nutrient dense
6 foods like lean meats and poultry contribute to
7 meeting food group recommendations within calorie
8 and sodium limits and enable consumers to more
9 easily meet their macronutrient needs.

10 Although the Meat Institute supports
11 including meat and poultry in the diet, it's
12 understood that those products can be a part of
13 the diet, not the entire diet. Balance, variety,
14 and moderation in the dietary pattern in
15 combination with an active lifestyle are the keys
16 to positive health outcomes.

17 The Dietary Guidelines are the
18 foundation for nutritional policies and are
19 intended to measurably improve the health of
20 Americans. The Meat Institute supports dietary
21 guidance that is practical, achievable, and
22 affordable. The Meat Institute looks forward to

1 submitting more detailed comments through the
2 committee's deliberations.

3 Thank you.

4 DR. CASAVALE: Commenter 15.

5 DR. LAU: Good morning. I'm Clara Lau
6 -- Dr. Clara Lau, Director of Human Nutrition
7 Research for the National Cattlemen's Beef
8 Association, a contractor to the Beef Checkoff
9 which oversees research funded by beef farmers,
10 ranchers, and importers to understand beef's role
11 in healthy lifestyles.

12 Beef is a foundational food that
13 nourishes and optimizes health at every life
14 stage. Beef is a nutrient rich high quality
15 protein food Americans enjoy eating as part of a
16 healthy diet. While the RDA for protein which
17 was developed to meet minimum requirements,
18 evidence suggests that protein intake higher than
19 the RDA but within the AMDR may help adults
20 achieve and maintain a healthy weight, muscle
21 mass, and reduce the risk of sarcopenia.

22 During pregnancy and the early years

1 of life, beef delivers the necessary protein,
2 zinc, choline, B vitamins, and iron which leading
3 health organizations such as AAP recognize for
4 supporting physical growth and neurocognitive
5 development in infants and children.

6 Americans eat beef within Dietary
7 Guidelines. In fact, Americans eat an average of
8 1.7 ounces of beef per day. And beef is leaner
9 than ever before with more than 38 cuts meeting
10 USDA's definition for lean.

11 As more Americans are overweight and
12 obese, we need every calorie to count. Americans
13 are getting fewer calories and less fat from
14 nutrient rich beef which contributes five percent
15 of total calories and 15 percent of total protein
16 to daily diets. No other protein food delivers
17 the same package of 10 essential nutrients at 10
18 percent or higher than their respective daily
19 values per serving.

20 Beef can be the principle protein food
21 in heart healthy diets such as DASH and the
22 Mediterranean style pattern. Over 20 gold

1 standard studies have shown that beef contributes
2 favorably to heart health and other positive
3 health outcomes.

4 There is a need to systematically
5 review the totality of evidence using best
6 practices that are thorough, transparent, and
7 relevant. Reliance on dietary patterns have
8 limited ability to discern individual food
9 recommendations. And in 2015 resulted in the
10 exclusion of randomized clinical trials or RCTs
11 of beef and heart healthy diets. On the other
12 hand, data from well designed RCTs where beef is
13 included in healthy diets can balance this
14 challenge.

15 People follow dietary guidance that
16 recognizes personal preferences, habits, and
17 cultural beliefs. Americans have enjoyed beef
18 for centuries, and it's part of most Americans'
19 diets, traditions, and celebrations.

20 To close, beef is a foundational food
21 that nourishes at every life stage. Calorie for
22 calorie, no other protein food delivers the same

1 package of essential nutrients. Beef is the top
2 protein choice for most Americans, yet they are
3 not overconsuming, but rather eating within
4 Guidelines.

5 High quality evidence shows there's an
6 opportunity to help Americans enjoy more beef and
7 healthy dietary patterns. Thank you.

8 DR. CASAVALE: Commenter 16.

9 MS. SANCHEZ: Good morning. My name
10 is Audrey Lawson-Sanchez, and I'm here on behalf
11 of the public health and nutrition advocacy
12 organization I run called Balanced. But there
13 are a few things I could say as a professional
14 that many of my colleagues will say later or have
15 already said.

16 So I stand here in my most important
17 role and that's as a mother. I don't think it's
18 an overstatement to say it is exceptionally
19 difficult to parent in 2019. And I'm sure many
20 of you understand the challenges. And in no
21 places are those challenges more pronounced than
22 at the kitchen table or the lunchroom.

1 And I know you all know how hard it is
2 to teach children what to eat, how to eat, and
3 how to develop those lifelong healthy skills.

4 And arguably it is harder now than it has ever
5 been or than it has been in recent history
6 because as our diets have become -- as our food
7 system and our diets have become increasingly
8 imbalanced, our children and our families have
9 grown increasingly less healthy.

10 Our children and our families are
11 overconsuming ultra processed foods, foods high
12 in cholesterol, saturated fat, sodium, sugar in
13 excess but empty calories. And I don't have to
14 tell you that our families are experiencing
15 unprecedented rates of diet related disease and
16 they're affecting our children younger and
17 younger with this generation of children being
18 the first in over 200 years to have a predicted
19 life span shorter than that of their parents.

20 And listen, I'm a realist. I
21 understand the limitations that the Dietary
22 Guideline recommendations have on the behavior of

1 everyday Americans. But I also understand the
2 profound impact the Dietary Guidelines have in
3 places that matter so much like schools and
4 hospitals when we're talking about what our most
5 vulnerable populations eat or have access to on a
6 regular basis.

7 And so now is not the time to settle
8 for the status quo or to build a consensus around
9 minimally good enough. It's certainly not the
10 time to allow any part of the food industry to
11 influence Dietary Guidelines. Now is a time for
12 bold evidence based Dietary Guidelines that put
13 the health of our children and our families
14 first.

15 And so I ask you today as you develop
16 and build these Guidelines to think about your
17 own families, to think about your own children,
18 and build the Guidelines that you would want for
19 them, the guidelines that you live by, the
20 guidelines that dictate the sort of food that you
21 eat. Because I promise you this. What you want
22 for your families, everyone wants for their

1 family. And that is a long, healthy, nourished
2 lives.

3 Thank you.

4 DR. CASAVALE: Commenter 17.

5 MS. VAN LIEU: Good morning. My name
6 is Mollie Van Lieu, and I'm with the United Fresh
7 Produce Association. Thanks to each of you on
8 the committee as well as the staff at USDA and
9 HHS for your dedication to this process.

10 First, I will of course emphasize the
11 evidence continues to support dietary patterns
12 recommended by earlier Guidelines around eating a
13 diet higher in fruits and vegetables.

14 Unfortunately, we know that the fact is that most
15 Americans struggle to meet the Dietary
16 Guideline's recommendations. Nevertheless, they
17 are important.

18 The good news is there is evidence
19 showing success when the Guidelines are followed.
20 Recent data shows that two to four year olds
21 participating in the WIC program since 2010
22 showed declining rates of obesity after a steady

1 rise in earlier decades.

2 In 2009, WIC updated its food package
3 to align with the Dietary Guidelines including a
4 voucher enabling recipients to purchase a wide
5 variety of fruits and vegetables. Further data
6 shows that these families are maintaining their
7 healthy shopping habits when their families age
8 out of the WIC food package.

9 Beyond WIC, CDC data indicates that
10 there has been a 67 percent increase in
11 children's consumption of fruits in forms that
12 are consistent with the DGA recommendations. And
13 in the national school meals program with its
14 updates to nutrition standards in 2012 to align
15 with the DGA, evaluation data shows that children
16 are eating more fruits and vegetables in the
17 program than they were pre-standards. The
18 Federal Fresh Fruit and Vegetable Program also
19 has proven to increase consumption in children.

20 So we know that change is possible,
21 particularly institutionally. But there is still
22 more we need to understand and appreciate the

1 broad range of questions being considered. One
2 in particular that is being asked by the data
3 analysis in food pattern modeling cross cutting
4 working group is around how dietary intake and
5 patterns track across life stages.

6 For fruits and vegetables in
7 particular, we know that in the early years of a
8 child's life, they meet or are closer to meeting
9 intake recommendations than older youth and
10 certainly more than adults. Understanding which
11 foods are instead being consumed throughout these
12 transition and life stages and why could help us
13 implement systems changes needed to increase
14 consumption and better assure alignment with
15 recommendations.

16 We strongly encourage the committee to
17 consider these needs. Thank you.

18 DR. CASAVALE: Commenter 18.

19 MS. LANOU: Good morning. My name is
20 Amy Lanou. I am the Executive Director of the
21 North Carolina Center for Health and Wellness at
22 University of North Carolina Asheville. I'm here

1 on behalf of myself.

2 As a nutrition professional and a
3 university professor, I've been giving oral
4 comments to this esteemed body for 20 years. And
5 each time I have urged the committee to focus on
6 foods rather than nutrients, to improve the
7 usability of the Guidelines, to emphasize plant-
8 based and vegan dietary patterns for prevention
9 of chronic disease, and to reduce the emphasis on
10 milk and to warn about dangers of recommending
11 high protein and carbohydrate restricted diets.

12 I am delighted to hear the committee
13 addressing questions about dietary patterns and
14 considering foods as well as nutrients. In
15 keeping with tradition, here are my
16 recommendations for 2020.

17 The 2020 Guidelines should make a
18 clear distinction between whole foods that
19 contain healthy carbohydrates, fruits,
20 vegetables, beans or pulses, and whole grains,
21 and those that contain highly processed
22 carbohydrates, the added sugars, white flour, and

1 foods made from them.

2 Perhaps we need two different words to
3 describe these categories of carbohydrates.

4 Consumers clearly need help distinguishing
5 between disease promoting diets that are built
6 from processed white bread topped with cancer
7 causing processed meats covered with highly
8 salted fatty dairy slices served with sugar laden
9 water, and those that are health promoting and
10 built from fruits, vegetables, legumes and
11 pulses, and whole grains.

12 These latter diets, vegetarian, vegan,
13 and whole food plant-based dietary patterns are
14 high in carbohydrates, fiber, and are nutrient
15 dense. They also contain appropriate amounts of
16 protein, and as you will be reminded by your
17 systematic review, are health supporting.

18 Second, avoid recommending low
19 carbohydrate diets. Traditional dietary patterns
20 of China, Japan, Hawaii, and Native Americans
21 have been shown to reduce chronic disease risk.
22 Traditional diets are typically centered around a

1 grain or a starchy vegetable. However, the idea
2 that a return to the diet of a paleolithic man
3 would somehow be helpful to recommend to the
4 general public to try to keep their bodies in a
5 ketogenic state to burn fat is irresponsible.

6 A focus on whole or minimally
7 processed foods is well substantiated. But the
8 avoidance of all or most grains, starchy
9 vegetables, and legumes is a recipe for disaster.
10 While low carb diets may have specific
11 applications for certain adult groups, they are
12 contraindicated for children and for the general
13 population.

14 And finally, dairy products should be
15 replaced by a healthful beverages group because
16 cow's milk is not necessary in the human diet. I
17 was pleased to learn yesterday that studies on
18 beverages will be systematically reviewed
19 together, hopefully lumping, quote, lacteal
20 secretions of bovine mammals together with water,
21 alcohol, soda, coffee, tea, and other fluids will
22 decrease cow's milk's stronghold on U.S.

1 nutrition policy.

2 Thank you very much for this
3 opportunity to give expert oral testimony to this
4 esteemed body.

5 DR. CASAVALE: Commenter 19.

6 MS. SULLIVAN: Good morning. My name
7 is Lucy Sullivan and I'm the Executive Director
8 of 1,000 Days, the leading nonprofit organization
9 working to ensure that women and children
10 everywhere have the healthiest first 1,000 days.

11 As you know, the first 1,000 days
12 between a woman's pregnancy and her child's
13 second birthday are a window of opportunity to
14 set the trajectory for a person's lifelong health
15 and to build the foundation of a baby's brain and
16 their future potential.

17 The first 1,000 days are also a period
18 when food preferences and eating habits begin to
19 take shape. It's why we at 1,000 days believe
20 the B-24 Dietary Guidelines can play a critical
21 role in building a healthier future for America.
22 And not only are these the first ever set of

1 Dietary Guidelines for pregnant women and
2 children under two in the U.S., they are actually
3 the first ever set of Dietary Guidelines of these
4 kind anywhere in the world, so no pressure.

5 This is why the committee must ensure
6 that the Guidelines are based on the best
7 independent science and that these Guidelines are
8 protected from industry influence and
9 interference. There is simply too much at stake
10 for these particular guidelines to become a tool
11 of private profit over public health. The
12 integrity of these guidelines along with the
13 transparency in the process to develop them are
14 of paramount importance.

15 It's critical that the guidelines
16 cover the following three areas. First,
17 nutrition during pregnancy and lactation, and
18 this includes both foods to choose and foods to
19 avoid and a message around eating twice as
20 healthy, not twice as much. Expectant mothers
21 want to know what foods are best for their
22 health, not just the nutrients.

1 Second, consistent with the
2 longstanding recommendations from public health
3 authorities such as the World Health
4 Organization, the American College of
5 Obstetricians and Gynecologists, the American
6 Academy of Pediatrics.

7 The guidelines must reinforce that
8 breastfeeding is the best possible source of
9 nutrition for infants and that infants should be
10 breastfed exclusively for the first six months
11 followed by continued breastfeeding to at least
12 one year with the addition of appropriate
13 nutritious complementary food.

14 If breastfeeding is not available,
15 human donor milk is the next best alternative,
16 followed by infant formula if neither
17 breastfeeding nor human milk feeding are
18 available.

19 It's essential that the guidelines
20 also speak to the extraordinary health benefits
21 of breastfeeding to mothers, reducing the risk of
22 breast cancer, ovarian cancer, type 2 diabetes,

1 and high blood pressure. Breastfeeding also
2 plays a critical role in reducing this nation's
3 scandalous infant mortality rate as breastfeeding
4 reduces the rate of sudden infant death syndrome,
5 a leading cause of death among infants,
6 particularly black infants in the United States.

7 Third, clear guidance on introducing
8 a diverse diet of fruits, vegetables, meats, and
9 other complementary foods and the transition to
10 the family diet.

11 We know that the committee members
12 share our commitment to ensuring that every child
13 in America has a healthy first 1,000 days, and we
14 trust that the committee will carry out their
15 work with the upmost integrity and transparency.
16 Thank you to all of you for your service, and
17 thank you for the opportunity to provide comment.

18 DR. CASAVALE: Commenter 20.

19 DR. TRAPP: Hello. My name is Dr.
20 Caroline Trapp. I'm a nurse practitioner and
21 doctor of nursing practice who specializes in the
22 care of people with type 2 diabetes. And I'm an

1 adjunct faculty member of the University of
2 Michigan School of Nursing.

3 I've traveled here today from Michigan
4 to speak to you about underconsumption of a
5 nutrient of concern for public health, fiber. My
6 number one concern is number two. Yes, I want to
7 talk to you about constipation.

8 We nurses are knowledgeable and
9 practical clinicians, and our patients talk to us
10 about this medical issue. In underserved
11 populations with limited access to fresh fruits,
12 vegetables, and whole grains, it is common to
13 have patients report having a bowel movement only
14 once or twice a week.

15 These are the same people who are at
16 risk for obesity, colorectal cancers, heart
17 disease, and type 2 diabetes -- all diseases that
18 are linked to overconsumption of meat and highly
19 processed foods and underconsumption of pulses
20 and other plants.

21 Constipation is not limited to people
22 with food insecurity. The CDC estimated in 2017

1 that only one in 10 adults eat enough fruits and
2 vegetables. Walk into any pharmacy or large
3 grocery across the U.S. and you will see multiple
4 shelves filled with laxatives.

5 Constipation is not the only concern
6 of too little fiber. Foods are packaged and
7 foods high in fiber such as fruits, vegetables,
8 pulses, and whole grains also are high in other
9 critically important nutrients. Given the
10 nutrient density of plant foods, the only source
11 of dietary fiber, this committee could vast
12 improve the health of Americans in this way.

13 Summarize your 800-plus page report to
14 the USDA, HHS with just one sentence. All
15 Americans are advised to consume a fiber rich
16 diet, aiming for 30 to 40 grams of fiber per day
17 from whole foods. Studies have shown that the
18 more fiber the better. Less risk of developing
19 obesity, heart disease, type 2 diabetes,
20 depression, colorectal cancer, and even early
21 mortality.

22 Why are Americans eating too little

1 fiber? One reason is that industry has promoted
2 a fear of carbohydrates. We know that type 2
3 diabetes is not a result of eating too many
4 apples or sweet potatoes or even whole wheat
5 bread. But I have patients who have been led to
6 believe that all carbs are bad and that somehow a
7 greasy burger without a bun will save them.

8 I ask you to help reduce the nutrition
9 confusion and prioritize foods that are naturally
10 full of fiber. Replace the healthy vegetarian
11 pattern with a healthy whole food plant-based
12 pattern. Let's make America go again.

13 (Laughter.)

14 DR. CASAVALE: Commenter 21.

15 MS. BORRA: Thank you. Hard act to
16 follow. Well, good morning. My name is Sue
17 Borra. And as a registered dietitian, I
18 appreciate the opportunity to provide comments to
19 you this morning on behalf of the Food Marketing
20 Institute.

21 We're the trade association
22 representing the entire retail food industry. We

1 have single-owner grocery stores and large
2 multi-chain stores along with online operators.
3 In total, our FMI member companies operate or
4 sell about \$800 billion worth of groceries every
5 year as well as we have about 33,000 stores that
6 our consumers shop at.

7 For the 2020 Dietary Guidelines, FMI
8 does support both the focus of a life stages
9 approach as well as the continued focus on what
10 we eat and drink over time. While we know
11 dietary guidance must be science based and
12 practical but more importantly, they must be
13 practical for consumers to apply to their
14 lifestyles in order to really achieve these
15 recommendations.

16 As this process moves forward, an
17 important question must be asked. How will the
18 Dietary Guidelines encourage and support
19 adherence to dietary patterns that are identified
20 as being most helpful for Americans? This is a
21 topic very near and dear to FMI members.

22 As the supermarket industry has long

1 been committed to helping consumers achieve and
2 maintain a healthy balanced diet, retailers have
3 created a marketplace for nutrition and health
4 information. They continually strive to find new
5 and innovative ways to facilitate healthy choices
6 in their stores, and this will help improve
7 eating behaviors among our shoppers.

8 In fact, 95 percent of supermarkets
9 currently employ registered dieticians who assist
10 in identifying healthful choices at point of
11 purchase. They support the preparation of
12 nutritious meals through demonstrations, meal
13 kits, and much more.

14 All this positions food retailers in
15 a unique situation to really help consumers
16 achieve their health goals. However, we all know
17 adherence to the recommended patterns is as
18 important as the patterns themselves, which makes
19 it necessary for us to explore how and where
20 foods and meals that comprise dietary patterns
21 are consumed.

22 With that in mind, to improve the

1 health of Americans, policy must include guidance
2 related to building healthy habits which starts
3 at the breakfast, lunch, and dinner table.

4 Existing research including FMI research
5 indicates that those who eat and cook at home eat
6 more fruits and vegetables and consume fewer
7 calories, fats, and sugars.

8 Furthermore, emerging research
9 indicates that children and adolescents that
10 share family meals at home are more likely to be
11 in a normal weight range and have healthier
12 dietary eating patterns as well as emotional
13 health benefits.

14 Two, previous additions of the Dietary
15 Guidelines provide suggestions to eat at home as
16 a way to lower calories. And FMI strongly
17 encourages this for the future. The committee
18 could also consider the importance of consuming
19 family meals at home based on existing and
20 emerging research.

21 In conclusion, the next frontier to
22 benefit public health is truly identifying

1 science-based approaches to increase adherence to
2 dietary guidance and encouraging family meals
3 consumed at home through guidance as a logical
4 approach to consider when developing guidance
5 that facilitates healthy lifestyles.

6 Thank you.

7 DR. CASAVALE: Commenter 22.

8 MS. HAYES: Thank you for the
9 opportunity to address the future Dietary
10 Guidelines for Americans. My name is Dayle
11 Hayes. I'm a registered dietician and president
12 for Nutrition for the Future, based in Montana.

13 As a consultant, I work with USDA
14 programs for pregnant women, infants, childcare,
15 and school-based nutrition programs as well as
16 agricultural commodity groups. In 2018, I was
17 the lead author for the Academy of Nutrition and
18 Dietetics position and practice papers on school
19 nutrition services.

20 My comments today specifically address
21 the work of the dietary pattern subcommittee and
22 the food pattern modeling working group, focused

1 on accepted solutions and marketplace
2 implementation strategies that have shown success
3 helping to increase vegetable consumption.

4 We know that across all age groups,
5 consumers fail to meet the recommended minimum
6 daily servings of vegetables. Vegetable
7 consumption relative to recommendations is lowest
8 among boys 9 to 13 and girls 14 to 18. We also
9 know that there has been little significant
10 change in consumption over the past decade.

11 However, school nutrition programs are
12 collaborating with food manufacturers and USDA
13 foods to increase student consumption of
14 vegetables and pulses while reducing sodium.
15 School meals based on the Dietary Guidelines are
16 served to more than 30 million students at lunch
17 daily and to another 14 million students at
18 breakfast.

19 School meal planners have learned how
20 to balance student acceptance with enhanced
21 nutrition, lowering fat, cholesterol, and sodium
22 by serving cost effective, flavorful entrees that

1 blend meat proteins with vegetables like
2 mushrooms, peppers, onions, and pulses.

3 This follows a strategy suggested in
4 the 2015 Dietary Guidelines. One realistic
5 option is to increase the vegetable content of
6 mixed dishes while decreasing the amounts of
7 other food components that are often over
8 consumed.

9 These efforts are influencing student
10 eating patterns at school and beyond. Blending
11 meat and vegetables also helps to reduce overall
12 food waste in schools and to establish an early
13 foundation for the healthy eating patterns that
14 are known to help reduce the burden of chronic
15 diseases.

16 A shining success story comes from
17 Cincinnati public schools, where Director Jessica
18 Shelly and her team serve nearly four million
19 school lunches yearly which includes over 178,000
20 blended beef and mushroom burger patties from an
21 Ohio-based food processor. All Cincinnati public
22 school lunches also include a salad bar with a

1 variety of fruits and vegetables, another Dietary
2 Guideline strategy allowing students to choose a
3 green salad or a vegetable as a side dish.

4 Thanks again for the opportunity to
5 illustrate how school districts are implementing
6 real world strategies to increase vegetable
7 intake by following dietary guidance.

8 DR. CASAVALE: Commenter 23.

9 MS. FERRANTO: Hi. Good morning. My
10 name is Gale Ferranto, and I am the President of
11 Buona Foods and Bella Mushroom Farms, a third
12 generation mushroom producer from Kennett Square,
13 Pennsylvania, the mushroom capital of the world.

14 The U.S. mushroom industry has spent
15 the past two decades investing in scientific
16 research to better understand the nutrient
17 composition and benefits of mushrooms. One
18 result of that research has been the creation of
19 a very practical culinary concept we call the
20 blend.

21 The idea that combining ground meat
22 with finely chopped mushrooms creates more

1 nutritious, delicious versions of iconic American
2 dishes such as burgers. A study published in the
3 Journal of Food Science explored the flavor
4 enhancing properties of mushrooms and found that
5 blending finely chopped mushrooms with ground
6 meat enhances flavor and nutrition.

7 For example, a traditional ground meat
8 recipe prepared with 50 percent mushroom and 50
9 percent meat can reduce calorie, saturated fat,
10 and sodium intake; add nutrients like vitamin D,
11 potassium, B vitamins, and antioxidants; and
12 enhance overall flavor thanks to mushrooms'
13 natural umami.

14 If the 2020 Dietary Guidelines once
15 again aimed to guide Americans to increase their
16 vegetable consumption while decreasing saturated
17 fat and sodium intake, I'd like to offer the
18 mushroom industry's blended concept as
19 inspiration.

20 It's a real life solution that now has
21 been adopted by hundreds of schools and colleges
22 and even embraced by fast food chains such as

1 Sonic Drive-ins, which is the first national
2 chain to adopt the blended burger to their menu.
3 Sonic is the nation's largest drive-in
4 restaurant, serving over three million customers
5 per day.

6 Americans want to enhance healthier
7 eating patterns, and simple ideas such as the
8 blend can make a positive impact by helping make
9 our favorite foods as nutritious as they are
10 delicious.

11 Thank you for your exploration and
12 consideration of solutions such as the blend and
13 mushrooms to guide Americans towards healthier
14 eating patterns.

15 DR. CASAVALE: Commenter 24.

16 MS. GOLDMAN: My name is Sarah
17 Goldman, and I am a researcher at the Johns
18 Hopkins Center for a Livable Future based at the
19 Bloomberg School of Public Health and the
20 Department of Environmental Health and
21 Engineering. The opinions expressed here today
22 are my own.

1 The Center for a Livable Future
2 investigates the interconnections among diet,
3 food production, public health, and the
4 environment. We recognize the important role
5 that the Dietary Guidelines for Americans plays
6 in promoting health, advising nutrition choices,
7 and informing policies and programs across the
8 United States.

9 Today I will discuss a few comments on
10 the questions included in the subsection
11 addressing dietary patterns and provide
12 additional recommendations related to the
13 integrity of the Dietary Guidelines development
14 process. More details and evidence related to
15 this comment will be submitted through our
16 written comments.

17 The Dietary Guidelines Advisory
18 Committee should explore the relationship between
19 dietary patterns high in red and/or processed
20 meats and chronic disease health outcomes,
21 particularly in comparison to dietary patterns
22 rich in fruits, vegetables, and plant-based

1 proteins.

2 The committee should publish
3 guidelines recommending limited consumption of
4 red and/or processed meats. There is strong
5 evidence from perspective studies and meta
6 analyses that moderate to high consumption of red
7 meat and/or processed meat is associated with
8 risk of stroke, diabetes, heart failure,
9 colorectal cancer, and hypertension. However,
10 dietary patterns high in plant-based foods and
11 lower in animal-based foods can help prevent
12 these chronic disease conditions and promote
13 health.

14 The Dietary Guidelines Advisory
15 Committee should also explore the other benefits
16 of diets higher in minimally processed
17 plant-based foods and lower in animal source
18 foods with a specific focus on the future of food
19 security and publish guidelines that incorporate
20 the role of sustainable diets in assuring that
21 all Americans have future access to healthy
22 nutritious foods.

1 In 2015, the Dietary Guidelines
2 Advisory Committee found that a dietary pattern
3 high in plant-based foods such as vegetables,
4 fruits, whole grains, legumes, nuts, seeds, and
5 lower in animal-based foods is more health
6 promoting and is associated with less
7 environmental impact than is the current average
8 U.S. diet. The Dietary Guidelines for Americans
9 should also incorporate the role of sustainable
10 diets and assuring future access to healthy foods
11 for all Americans.

12 Finally, the Dietary Guideline should
13 identify complementary programs and policies that
14 support healthy food access and address the root
15 causes of diet related health disparities.

16 Finally, the Dietary Guidelines
17 Advisory Committee, USDA, Department of Health
18 and Human Services, and the U.S. Congress should
19 take the necessary steps to ensure the integrity
20 of the Dietary Guidelines for all Americans.

21 Thank you.

22 DR. CASAVALE: Commenter 25.

1 MS. MARSH: My name is Colleen Marsh.
2 I'm here on behalf of myself and those less
3 informed. The topic of added sugar has brought
4 me here from North Carolina. As a retired
5 athlete and disabled veteran, I can attest to the
6 positive effects reducing dietary sugar has on
7 inflammation and chronic pain.

8 As a pharmaceutical rep, I've
9 witnessed the degenerative effects of diabetes.
10 And now as a public health master's student, I
11 have a voice to advocate. Literature reviews
12 from reputable sources show a correlation between
13 sugar intake and disease such as diabetes,
14 cardiovascular disease, and cancers.

15 It would be naive to single out sugar
16 as the only dietary contributor to poor health,
17 but it is a contributor to the development of
18 chronic disease --- a contributor Americans are
19 woefully uneducated about.

20 I'm here to ask that the 2020
21 Guidelines list the recommendation for sugar as
22 they do the other contributors to metabolic

1 disease by listing the grams allowed per day.
2 Page 15 of the Guidelines' key recommendations
3 state, sugars should be limited to 10 percent of
4 caloric intake.

5 Listing the recommendations in this
6 way requires a knowledge of a 2,000 calorie diet
7 to then begin a two-step math problem.

8 Calculating the 10 percent of a 2,000 calorie
9 diet gives you 200 calories from sugar a day.

10 But since the nutrition labels report sugar
11 content in grams, we now need to know how many
12 grams are equal to 200 calories.

13 After calculating that multiple step
14 math problem, we find the USDA recommendation is
15 no more than 50 grams of sugar per day. The
16 American Heart Association recommends 25 grams
17 for women and 36 for men. The average 20 ounce
18 soda contains well over the 50 grams of sugar
19 recommended by the USDA Guidelines.

20 Many people know sugar is not good for
21 them, but most will never be able to quantify
22 exactly how poor a decision a 20 ounce soda is

1 because the recommendations for sugar are
2 obscured by the manner in which the Dietary
3 Guidelines presents them.

4 The American Diabetes Association
5 states every 21 seconds another individual is
6 diagnosed with diabetes in the U.S. The Dietary
7 Guidelines should simplify the public's ability
8 to limit choices which develop chronic
9 preventable disease.

10 I'm asking the committee to be bold,
11 show leadership in the midst of external
12 pressures. I'm asking you to prioritize the
13 health of your fellow Americans and do it by
14 clearly listing the daily limit of sugar in grams
15 to demystify the key recommendations for healthy
16 eating patterns.

17 Thank you.

18 DR. CASAVALE: Commenter 26.

19 MR. ADAMS: Good morning. My name is
20 Eric Adams. I am not a dietician, not a doctor,
21 not a nutritionist. I'm a retired member of the
22 New York City Police Department.

1 For 22 years, I wore a bulletproof
2 vest and protected the children and families of
3 New York City. Three years ago I woke up and I
4 could not see the alarm clock. I found out later
5 that I was blind in one eye and I was going to
6 lose my sight in the other.

7 After visiting five doctors, I learned
8 the diagnosis was type 2 diabetes. I had what
9 was considered to be permanent nerve damage in my
10 hands and feet, and I was told I was going to
11 lose some limbs.

12 Not believing that and told that I was
13 going to be on medicine the rest of my life, I
14 decided to do research on my own. I had one
15 skill and that was knowing how to do
16 investigations, and I knew how to read. I
17 learned from organizations such as PCRM that
18 there was a way not only to live with chronic
19 disease but to reverse chronic disease.

20 After three weeks of going on a whole
21 food plant-based diet, my eyesight returned.
22 Three months after my A1C went from a 17 to a

1 5.7, the nerve damage in my hands and feet went
2 away. No medicine. No insulin. Only food.

3 My mother pursued and followed the
4 same whole food plant-based diet that I embraced.
5 Eighty years old, two months on it, 15 years
6 diabetic, seven years on insulin. Mother is now
7 off her insulin and has reversed her diabetes as
8 well. She was taking nine medicines during that
9 time, and she's now off those nine medicines.

10 The real drug dealers are not those
11 who are wearing baggy blue jeans on our corners.
12 I've learned that the pharmaceutical companies
13 that have our parents addicted to drugs.

14 Each time I try to reverse this
15 condition, I'm told about the guidelines that you
16 give. I represent 2.6 million people. New York
17 City has followed me, and now we no longer serve
18 processed meat in our schools. We have a program
19 at Bellevue Hospital which 600 people have signed
20 up for and starting the process of reversing
21 their condition.

22 It has never been my DNA. It was my

1 dinner. It's time to heal and not live with
2 disease but reverse disease. Let's make
3 Americans healthy again.

4 Thank you.

5 DR. CASAVALE: Commenter 27.

6 MS. OHLHORST: Good morning. I'm
7 Sarah Ohlhorst with the American Society for
8 Nutrition. ASN is a scientific professional
9 society with more than 6,500 members who enhance
10 scientific knowledge and quality of life through
11 excellence in nutrition research and practice.

12 ASN appreciates the life stage
13 approach and suggests that the evidence review
14 include the impact of diet on the metabolic and
15 physiological changes that occur over the life
16 course and during life stage transitions such as
17 with neurocognitive health.

18 ASN supports the continued use of a
19 strong evidence-based approach, emphasizing a
20 rigorous scientific process and transparency
21 throughout, including the systematic review of
22 all evidence considered on key topics.

1 ASN encourages the DGAC to include
2 existing high quality systematic reviews and meta
3 analyses outside of those conducted using NESR
4 and the evidence review if they meet standards
5 established by USDA and HHS.

6 ASN appreciates the subcommittee's
7 efforts to standardize and harmonize your work
8 and suggests that sleep and screen time be
9 considered along with the diet and health impact
10 of eating occasions, frequency, and timing.

11 ASN recommends broadening the dietary
12 patterns considered and going beyond providing
13 guidance solely for specific nutrients. ASN
14 recommends addressing multicultural dietary
15 patterns to better include our diverse society,
16 including the role acculturation has on diet and
17 health. The DGA should advise Americans not just
18 on what to eat but provide guidance to help
19 individuals understand how to change their eating
20 and food behaviors in order to improve their
21 health.

22 ASN sees opportunity for the 2020 DGAs

1 to continue to promote chronic disease prevention
2 and ensure nutritional sufficiency. ASN supports
3 the consideration of diet and nutritional
4 biomarkers for chronic disease endpoints when
5 developing guidance that addresses health and
6 disease.

7 However, the development of
8 recommendations should not be hindered or delayed
9 by the ongoing process of discovery and
10 validation of nutritional biomarkers for diet
11 related disease risk.

12 It's essential for the committee to
13 consider the role that dietary supplements play
14 and dietary intake of micronutrients and how
15 individuals may translate dietary guidance into
16 supplement usage, which could have both positive
17 and negative repercussions given that more than
18 50 percent of U.S. adults report using a dietary
19 supplement.

20 ASN appreciates your continued focus
21 on highlighting research needs. More
22 recommendations on how to implement the Dietary

1 Guidelines in order to move Americans toward
2 compliance are needed, and ASN is happy to be a
3 collaborator with the USDA and HHS on that
4 process.

5 Thank you.

6 DR. CASAVALE: Commenter 28.

7 MS. TEICHOLZ: My name is Nina
8 Teicholz. I'm a science journalist and author of
9 the book, *The Big Fat Surprise*, the culmination
10 of a nearly ten-year full-time investigation into
11 the scientific basis for U.S. nutrition policy.

12 The failures of science and
13 policymaking that I discovered through that
14 investigation compelled me to create *The*
15 *Nutrition Coalition*, a nonprofit group dedicated
16 to the public interest. It receives no industry
17 support and is committed to ensuring that
18 Americans' Dietary Guidelines are based on solid
19 rigorous evidence. In other words, that they are
20 evidence based and trustworthy.

21 I have two main points today. First,
22 the Dietary Guidelines issued by USDA and HHS are

1 not based on the most rigorous evidence since
2 this evidence has -- since the launch of the
3 guidelines -- been ignored and/or excluded.

4 This fact is validated by an article
5 I wrote in the BMJ which was peer reviewed more
6 than once. It established that the Dietary
7 Guidelines for the past 35 years have ignored
8 clinical trial evidence largely funded by our
9 government on more than 75,000 people tested in
10 experiments lasting up to 12 years.

11 This data from clinical trials is
12 considered the gold standard because it can
13 uniquely demonstrate causality. Unfortunately,
14 instead of informing our nation's nutrition
15 policy, this gold standard evidence has been
16 ignored.

17 Why? Once can only speculate. The
18 fact that none of these trials could confirm the
19 basic tenets of the Dietary Guidelines is indeed
20 a factor. Multiple trials did not confirm that a
21 diet restricted in fat or saturated fat could
22 protect against diet related diseases.

1 More recently, trials have shown that
2 the guidelines' high level of carbohydrates is
3 actually harmful for people with diet related
4 diseases. These bodies of evidence all imply
5 that the Guidelines needed to walk back some of
6 its basic advice. Yet the Guideline experts
7 ignore the evidence and carried on without
8 change.

9 During this time, rates of diet
10 related diseases have risen to epidemic
11 proportions, now afflicting at least 60 percent
12 of all Americans. Ignoring scientific evidence
13 is not okay.

14 In fact, the National Academies of
15 Science Engineering and Medicine did the first
16 ever outside peer review of the Dietary
17 Guidelines and said in 2017 that the process
18 established in the guidelines was not using the
19 best practices for conducting systematic reviews
20 and "lacked scientific rigor." The Academies
21 advise that the USDA adopt one of the
22 international standards for reviewing the

1 science.

2 USDA chose the Grade standard, and
3 this is my second point today. The cofounder of
4 Grade, distinguished professor Dr. Gordon Guyatt
5 who is one of the world's top experts in
6 evidence-based medicine recently submitted a
7 public comment to USDA.

8 His point was USDA are not following
9 the standards of Grade in fundamental ways. Most
10 importantly, you are not making important
11 distinctions between high and low quality
12 evidence. Guyatt urged USDA not even to use the
13 word, "Grade," because doing so would give the
14 appearance of rigor where it did not exist. It
15 would be illusory, he wrote.

16 Further, he cautioned that if USDA
17 were to continue without proper methods for
18 evaluating the evidence, this would result in
19 recommendations that are "unlikely to be
20 trustworthy."

21 In sum, our current Dietary Guidelines
22 are not trustworthy. They are based on weak

1 evidence and experts writing them have excluded
2 nearly all the rigorous evidence to the contrary.
3 USDA has been admonished by the National
4 Academies of Sciences and encouraged to improve.
5 And unfortunately, the Guidelines currently are
6 not on track --

7 DR. CASAVALE: Thank you. Commenter
8 29, please.

9 MS. TEICHOLZ: -- to repeat the same
10 mistakes of the past.

11 DR. SCHMIDT: Hi. My name is Dr.
12 Darren Schmidt. I have a practice in Ann Arbor,
13 Michigan called The Nutritional Healing Center of
14 Ann Arbor. I speak on my own behalf.

15 So I've been teaching low carb to my
16 patients since 1998 and ketosis in the last four
17 years. And I quit taking insurance in 2005. I
18 actually have to get my patients well or else
19 they won't come and see me because they're paying
20 cash out of their pocket.

21 So I sat with you guys all day
22 yesterday, and I understand the complexities that

1 you're dealing with and all the moving parts.
2 And I thought, what can I share with you to help
3 you out with your job? So Heather, you had some
4 good points yesterday about low carb and
5 intermittent fasting. And Lydia, you said some
6 good things too. So let me share this with you.
7 Maybe this will help you out.

8 So there's an equation that I learned
9 like 15 years ago and it's this. It's quantity
10 plus quality equals vitality. Or quantity plus
11 quality equals health.

12 So initially with my care, I tell
13 people, eat these foods and eat that food. And
14 they would say, what about bananas or what about
15 pork? And I stopped answering the questions and
16 I said, fit your macros into these guidelines so
17 you can be plant based, you can be meat based,
18 whatever.

19 And so the quantity comes first in
20 that equation. The quantity of the macro
21 nutrients. So then quality comes second. So
22 lowering the carbs is vital. When you look at

1 our current health situation, obesity and all
2 that. And then people have to match what they
3 need for protein to be adequate protein or maybe
4 more. And then their fat grams can go up and
5 down. Of course, it's going to be healthy fat.

6 So that's what I want to share with
7 you. Quantity comes first, then quality equals
8 vitality. So that way people can choose whatever
9 foods that they're going to -- what they want to
10 match their lifestyle with.

11 And then when you do that, you're not
12 liable to upsetting special interests and also
13 then you look at the macros in the research with
14 the randomized control trials, the clinical
15 trials as opposed to epidemiology. You get the
16 causes with the RCTs and you'll see, for example,
17 the Public Health Collaboration of the UK. They
18 have investigated all these RCTs regarding low
19 carb versus low fat. And they show that low carb
20 wins 32 to nothing.

21 So when you work with a low carb
22 ideology, it's easier just to talk with the

1 macronutrients. I hope this helps you out. And
2 if you want to discuss with me, I'm available to
3 you.

4 Thank you.

5 DR. CASAVALE: Commenter 30.

6 MS. WEBSTER: Good morning. And thank
7 you for the opportunity to comment as you work to
8 inform the next Dietary Guidelines for Americans.
9 My name is Alison Webster, and I'm a registered
10 dietitian here today on behalf of the National
11 Potato Council which provides a unified voice for
12 U.S. potato growers and represents the interest
13 of the U.S. potato industry on national issues.

14 Potatoes are an important part of the
15 American diet at every life stage. As a
16 vegetable, they provide essential nutrition, have
17 the ability to be purchased in shelf stable forms
18 and can be prepared in a wide variety of ways for
19 consumption by the general population, including
20 those both young and old.

21 Although potatoes are a vegetable,
22 they have been historically stigmatized in past

1 editions of the Dietary Guidelines. In the 2015
2 DGAC report, white potatoes are specifically
3 classified as a starchy vegetable, which has
4 become a disparaging term with repercussions
5 across many federal feeding programs.

6 For example, the Special Supplemental
7 Nutrition Program for Women, Infants, and
8 Children, also known as WIC, as well as the
9 National School Lunch and School Breakfast
10 Programs have been quick to remove or disparage
11 white potatoes. This is discouraging given that
12 white potatoes are high in both fiber and
13 potassium, two nutrients of public health concern
14 due to underconsumption as outlined in the past
15 edition of the Dietary Guidelines.

16 Additionally, potatoes provide a
17 number of other nutrients that are important to
18 human health, including protein and
19 carbohydrates, minerals such as iron, calcium,
20 and magnesium, as well as vitamin C and B6.

21 We are pleased to see the committee is
22 taking a life stage approach for this edition, as

1 potatoes are helpful across all life stages. In
2 fact, it has been found that the consumption of
3 white potatoes improves potassium intake for both
4 women and children, which is important to note
5 because potassium continues to be an
6 underconsumed nutrient for nearly all WIC
7 demographics.

8 Further, an analysis of National
9 Health and Nutrition Examination Survey data
10 suggest that women between the ages 19 and 50
11 have less than optimal intake of vegetables,
12 which in turn leads to the lower than recommended
13 intakes of important nutrients. White potatoes
14 included as part of a healthy diet are noted as
15 one way to make up for these nutrient shortfalls,
16 especially in women of childbearing age.

17 Potatoes are a food enjoyed by the
18 American public, allowing them to serve as a
19 gateway vegetable and thereby having the ability
20 to increase overall vegetable consumption. The
21 Dietary Guidelines should represent
22 recommendations and promote dietary patterns that

1 can be achieved by the American public in order
2 to lead to a healthier nation. Further support
3 for potato's role in the Dietary Guidelines can
4 be found in the comments of the National Potato
5 Council.

6 Thank you for your consideration.

7 DR. CASAVALE: Commenter 31.

8 DR. DOMOKOS-BAYS: Good morning. I am
9 Dr. Becky Domokos-Bays, a registered dietitian
10 nutritionist and recently retired director for
11 Loudoun County Public Schools in Virginia. As
12 the past president of the School Nutrition
13 Association, I am pleased to comment on behalf of
14 our 58,000 members.

15 We invite the committee to visit our
16 school cafes. They are the best places to see
17 how the DGAs are shaping children's current and
18 lifelong eating habits. School nutrition
19 professionals provide approximately 5 billion
20 lunches and 2.5 billion breakfasts as well as
21 dinner, snacks, and summer meals to students.

22 Federal rules require these meals to

1 be prepared in accordance with the DGAs.

2 Students select meals that expose them to a wide
3 variety of fruits, vegetables, whole grains, lean
4 protein, and dairy options they might not
5 otherwise experience.

6 The committee should know the
7 implementation of the DGAs the school nutrition
8 programs has presented some challenges. The 2015
9 edition of the DGA states, "The Guidelines embody
10 the idea that a healthy eating pattern is not a
11 rigid prescription but rather an adaptable frame
12 work in which individuals can enjoy foods that
13 meet their personal, cultural, and traditional
14 preferences and fit within their budget."

15 In practice, today's school nutrition
16 standards are extremely complex and have proven
17 to be overly prescriptive for schools.

18 Implementation of the DGAs has been challenged by
19 many factors including limited funding,
20 inadequate equipment or facilities, and
21 increasing labor cost. Students seldom have time
22 to consume their meals at school, thus

1 contributing to wasted food.

2 Planning appealing nutritious menus
3 that balance strict calorie, fat, and sodium
4 limits while meeting daily and weekly component
5 and item requirements is like assembling an
6 elaborate puzzle. Schools must follow different
7 meal patterns for breakfast, lunch, snack,
8 supper, and summer meals.

9 Each of these meal patterns have
10 varying requirements for different grade or age
11 groups. Meanwhile, entrees and sides sold a la
12 carte must meet still different, equally complex
13 smart snack standards. While school nutrition
14 standards have saturated fats, smart snacks
15 limits total fat. As a result, healthy items
16 such as hummus and guacamole are prohibited on a
17 la carte menus.

18 Multiple sets of standards drive up
19 costs for school nutrition programs, both in food
20 and resource allocation. School nutrition is a
21 narrow niche in the food supply chain.
22 Production of food items that must meet various

1 standards is a burden. Small and rural schools
2 often have limited access to a full line of items
3 that meet all the standards and appeal to
4 students.

5 Two million fewer students each day
6 receive a healthy school lunch since updated
7 standards took effect, an unfortunate loss in
8 light of research showing school meals are
9 significantly healthier than lunches from home or
10 elsewhere.

11 We appreciate USDA's efforts to
12 provide flexibility in the standards, and we
13 believe these changes will result in more
14 students consuming nutritious meals at school.
15 To succeed, the Guidelines must be practical,
16 affordable, and achievable too. Foods provided
17 to students must be taste appealing. Otherwise,
18 they won't eat them. Extreme limitations on
19 sodium nearly at therapeutic levels have less
20 students --

21 DR. CASAVALE: Thank you for your
22 comments.

1 DR. DOMOKOS-BAYS: -- asking for more
2 foods. Thank you.

3 DR. CASAVALE: Commenter 32.

4 DR. RUBIN: Good morning. I'm Dr.
5 Mickey Rubin, Executive Director of the Egg
6 Nutrition Center, the Science and Education
7 Division of the American Egg Board representing
8 America's egg farmers.

9 ENC supports research on the role of
10 eggs in human nutrition. Thank you for the
11 opportunity to offer comments as you review the
12 latest science in the next edition of the Dietary
13 Guidelines, including topics related to nutrition
14 from birth to 24 months and neurocognition.

15 As stated by the American Academy of
16 Pediatrics 2018 recommendations on improving
17 nutrition in the first 1,000 days, failure to
18 provide key nutrients during this critical period
19 of brain development may result in lifelong
20 deficits. Key nutrients to support brain health
21 identified by the AAP include protein, long chain
22 polyunsaturated fatty acids, iron, zinc, folate,

1 iodine, selenium, vitamins A, D, B6, and B12 as
2 well as choline.

3 Eggs have varying amounts of each of
4 these nutrients and are one of the most
5 concentrated sources of choline in the American
6 diet. Most Americans are well below the adequate
7 intake recommendation for choline, with only
8 about 8 percent of adults and 8.5 percent of
9 pregnant women meeting the AI. The 2015 DGA
10 listed choline among several underconsumed
11 nutrients, for which shifts to more healthy
12 eating patterns can help close nutrient gaps.

13 Maternal choline intake supports fetal
14 brain and spinal cord development and is
15 associated with reduced risk of neural tube
16 defects. And recent research has shown maternal
17 choline intake is associated with favorable
18 neurocognitive outcomes in children. In fact, a
19 recent clinical trial showed improved cognitive
20 performance in children of mothers that
21 supplemented choline during the third trimester
22 of pregnancy.

1 Furthermore, research from
2 observational cohorts has shown how choline
3 intake throughout life may have lasting effects
4 on cognition and prevention of cognitive decline.

5 Unfortunately, a recent survey
6 performed by the research firm Ipsos and
7 commissioned by Egg Nutrition Center show low
8 levels of awareness of choline among both new and
9 expecting mothers and the health professionals
10 who care for them. Over 60 percent of these moms
11 and over 40 percent of OB-GYNs and pediatricians
12 were unfamiliar with choline.

13 The 2015 DGA listed eggs among other
14 foods in food groups that are nutrient dense.
15 Eggs are a good or excellent source of eight
16 essential nutrients and are one of the few
17 natural food sources of vitamin D, a nutrient of
18 public health concern.

19 Eggs are also a bioavailable source of
20 the carotenoids, lutein and zeaxanthin. In
21 infants, the observation that lutein is
22 preferentially taken up by the developing brain

1 suggests a role in neurodevelopment while
2 emerging research also links lutein status to
3 cognitive performance in children and reduced
4 risk of mild cognitive impairment in middle aged
5 and older adults.

6 Finally, recent studies show that
7 pairing eggs with vegetables can increase the
8 absorption of carotenoids and vitamins compared
9 to consuming vegetables alone. As Americans are
10 increasingly using eggs as a carrier for
11 vegetables, these recent studies suggest a
12 benefit of this combination beyond simply
13 encouraging more vegetable consumption.

14 We look forward to providing you with
15 additional information through written comments.

16 Thank you.

17 DR. CASAVALE: Commenter 33.

18 DR. DEL CASTILLO-HEGYI: My name is
19 Dr. Christie del Castillo-Hegyí. I represent
20 over 700,000 supporters of the Fed is Best
21 Foundation. A nonprofit organization's mission
22 is to advocate for safe breastfeeding practices.

1 We do this to prevent the
2 complications of insufficient infant feeding,
3 namely dehydration, excessive jaundice, and
4 hypoglycemia, all known causes of brain injury,
5 disability, and rare deaths. Jaundice and
6 dehydration are the leading causes of newborn
7 hospitalization in the U.S., making up to 78
8 percent of readmissions.

9 The leading risk factor for jaundice
10 and dehydration is exclusive breastfeeding before
11 full milk production, which primarily results
12 from insufficient breast milk supply. Twelve to
13 35 percent of exclusively breastfed newborns will
14 develop excessive jaundice, one in seven losing
15 excessive weight and one in 25 requiring
16 readmission.

17 These complications are commonly
18 accompanied by hypoglycemia and hypernatremia, a
19 brain threatening form of dehydration. Ten
20 percent of exclusive breastfed newborns develop
21 detrimental levels of hypoglycemia by six hours
22 of life at levels known to reduce fourth grade

1 academic proficiency by 50 percent and increase
2 the risk of neurodevelopmental disabilities by
3 200 to 400 percent.

4 Among breastfed newborns screened for
5 hypernatremia, 36 percent were hypernatremic
6 which occurred by five percent weight loss.
7 Breastfed newborns who develop symptomatic
8 hypoglycemia have been shown to have extensive
9 brain injury on MRI.

10 Decades of research have shown these
11 complications can lead to attention deficits,
12 cognitive and developmental impairments, and even
13 global disability. These preventable outcomes
14 are among the most devastating in all of
15 medicine.

16 Why in 2019 are we failing to safely
17 breastfeed newborn babies? In 1991, the Baby
18 Friendly Hospital Initiative was launched under
19 the WHO 10 steps to successful breastfeeding.
20 Step 6 recommends to give no food or water other
21 than breast milk unless medically indicated.
22 This policy was created with minimal attention to

1 the high incidence of insufficient breast milk
2 the days after birth and no data demonstrating
3 safety or efficacy.

4 Newborns who are crying and nursing
5 for hours from hunger commonly do not get
6 supplemented until they have developed medical
7 emergencies. Mothers are advised to avoid
8 supplementation with no education of the
9 consequences of doing so if breastfeeding is not
10 enough. They are not told until complications
11 are obvious, by which time brain injury may have
12 already occurred.

13 This failure in patient education
14 results in approximately 190,000 admissions a
15 year, costing the U.S. approximately 2.7 billion
16 dollars and millions more per child to sustain
17 its brain injury over their lifetime.

18 We ask the committee to educate the
19 public and health professionals on the importance
20 on safe and sufficient infant feeding on the
21 minimal nutritional requirements of infants and
22 the harmful effects of dehydration and jaundice

1 and hypoglycemia. We ask for a responsible
2 public health message that respects all the ways
3 required to provide optimal infant feeding and
4 prioritize the safety for every child regards of
5 a mother's ability or decision to breastfeed.

6 Thank you.

7 DR. CASAVALE: Commenter 34.

8 DR. GREGER: My name is Dr. Michael
9 Greger with NutritionFacts.org. This month a
10 paper was published in the Journal of the Academy
11 of Nutrition and Dietetics have found essentially
12 there's been no change in processed meat
13 consumption over the last 20 years or so, which
14 represents just an abject failure of all of us in
15 the public health community to warn people about
16 the very real risks of processed meat -- bacon,
17 ham, hot dogs, lunch meats, sausage. These are
18 known human carcinogens.

19 The official 2018 IARC report couldn't
20 have been clearer. "Consumption of processed
21 meat causes cancer of the colorectal." That's
22 our second leading cancer killer of men and women

1 combined.

2 We know these foods cause cancer, and
3 we try not to smoke around our kids. Why would
4 we send them to school with a bologna sandwich?
5 That's not hyperbole. According to the Surgeon
6 General, living with a smoker increases the risk
7 of lung cancer 15 percent. So the cancer risk of
8 second hand smoke is comparable to the 16 or 18
9 percent increase risk of colorectal cancer, even
10 the equivalent of a single sausage link a day.

11 The 2015 Dietary Guidelines really
12 appear to drop the ball on this issue, saying
13 processed meat could be accommodated as long as
14 sodium and saturated fat limits were within
15 limits. But that's ignoring the cancer risk,
16 which we've known at least back since 2007 when
17 the first comprehensive analysis was published by
18 the American Institute for Cancer Research.

19 In fact one of their top 10
20 recommendations for cancer prevention, avoid
21 processed meat, full stop. American Cancer
22 Society also encouraged people to minimize the

1 intake of processed meat. We cannot allow the
2 billion dollar meat industry to continue to
3 subvert the science when so many million lives
4 are at stake.

5 The global burden of disease study,
6 largest study of disease risk factors in history
7 funded by the Bill and Melinda Gates Foundation,
8 found that the number one cause of death in these
9 United States is the American diet. Since
10 bumping tobacco to number two, this committee now
11 has control over our number one killer.

12 1964 was the peak year of smoking in
13 the U.S. before declining basically every year
14 since. What happened in 1964? The science
15 hadn't changed. We have studies going back to
16 the '30s linking lung cancer to smoking. What
17 changed is the Surgeon General's report. Just
18 this public acknowledgment by the powers that be
19 of this link between smoking and cancer.

20 You now have this mantel to make a
21 difference by just informing the American public
22 about the risk of cancer with processed meat.

1 God speed.

2 DR. CASAVALE: Commenter 35.

3 MS. TERNUS: Good morning. I'm
4 Maureen Ternus, Executive Director of the
5 International Tree Nut Council Nutrition Research
6 and Education Foundation or INCNREF. And I'd
7 like to thank you for the opportunity to present
8 comments today.

9 INCNREF is a nonprofit organization
10 that represents nine tree nuts including almonds,
11 brazils, cashews, hazelnuts, pecans, pistachios,
12 pine nuts, macadamias, and walnuts. I'd like to
13 comment specifically on the committee's work
14 regarding the current healthy U.S. style, healthy
15 Mediterranean style, and healthy vegetarian style
16 eating patterns in the 2015-2020 Dietary
17 Guidelines for Americans.

18 All three patterns recommend between
19 two and a half and three and a half ounces of
20 nuts, seeds, and soy products per week. Compare
21 those to the 10 and a half ounces per week
22 recommended in the FDA qualified health claim for

1 nuts and heart disease.

2 According to USDA ERS data, consumers
3 eat about 1.3 ounces of tree nuts per week.
4 Increasing the recommended amount of nuts and
5 healthy food patterns can help consumers lower
6 their risk for chronic disease and potentially
7 improve overall health.

8 In the last five years, there has been
9 a dramatic increase in the number of studies
10 showing the positive impact of nuts on cardio
11 metabolic health, weight and satiety. More than
12 seven epidemiological and clinical mixed nut
13 studies have shown that net consumption is not
14 associated with higher body weight. Over 45
15 research articles have shown that mixed nuts can
16 help reduce the risk of heart disease, diabetes,
17 and metabolic syndrome.

18 In a systematic review and meta
19 analysis of 61 controlled intervention trials,
20 tree nut intake lowered total cholesterol, LDL
21 cholesterol, ApoB, and triglycerides. The major
22 determinant of cholesterol lowering appears to be

1 nut dose rather than nut type.

2 Another systematic review and meta
3 analysis of 40 randomized control trials,
4 consumption of nuts significantly decreased
5 insulin resistance and fasting insulin,
6 suggesting that nut consumption may improve
7 insulin sensitivity.

8 I'd like to comment on another topic
9 being addressed by the committee, frequency of
10 eating. Research shows snacks provide about 25
11 percent of daily calories. When it comes to the
12 role of nuts, approximately 60 percent of the
13 nuts consumed are as snacks. In a recent study,
14 researchers looked at data from the 2009-2012
15 NHANES and found that replacing between meal
16 snacks with tree nuts led to more nutrient rich
17 diets that were lower in empty calories and
18 sodium and had more favorable fatty acid
19 profiles.

20 Replacing snacks high in refined
21 carbohydrates which is one-third cup of nuts per
22 day could have a positive impact on the nutrient

1 density of the diet.

2 In summary, consumers are eating well
3 below both USDA Dietary Guidelines and FDA
4 recommendations for nuts. The DGAC, through its
5 review of the ever growing body of evidence on
6 nut consumption and subsequent inclusion of
7 dietary relevant quantities and its recommended
8 food patterns, can help consumers understand the
9 benefits of regular nut consumption.

10 INCNREF looks forward to providing
11 this evidence to the committee throughout the
12 comment period. Thank you.

13 DR. CASAVALE: Commenter 36.

14 DR. KELLY: Madam Chair and committee
15 members, thank you for the opportunity to speak
16 on behalf of the nonprofit American College of
17 Lifestyle Medicine and its more than 3,000 member
18 clinicians who specialize in treating chronic
19 disease with lifestyle evidence-based
20 interventions including diet.

21 I'm Dr. John Kelly. I had the
22 privilege of being the founding president of the

1 college over 15 years ago. I am certified in
2 preventative medicine and as a lifestyle medicine
3 specialist. That's my practices as a lifestyle
4 medicine specialist.

5 I want to address your work, how your
6 work can help us prevent and treat type 2
7 diabetes. But I first have to make a comment
8 after sitting here and hearing all this wonderful
9 advice that you're getting. I thought when I was
10 getting ready to make my comments, I had more
11 advice than I've ever had in my life. But I
12 realize you have far more than I do.

13 But anyway, and seriously, lifestyle
14 medicine clinicians find poor diet to be one of
15 the most important risk factors for type 2
16 diabetes. And whole food plant strong diets to
17 be one of the most important interventions for
18 its treatment and remission.

19 The college's official position
20 statement on diet and disease reads thus, "For
21 the treatment, reversal and prevention of
22 lifestyle related chronic disease, the college

1 recommends an eating plan based predominately on
2 a variety of minimally processed vegetables,
3 fruits, whole grains, legumes, nuts, and seeds."

4 Now much evidence exists for the
5 positive impact of a whole food plant strong diet
6 and the primary prevention of type 2 diabetes
7 including numerous large cohort studies, Nurses'
8 Health Study, Health Professional Study, et
9 cetera, EPIC cohorts, Avenel cell study 1 and 2,
10 that consistently find that a plant strong diet
11 is associated with reduced incidence and
12 prevalence of type 2 diabetes.

13 In addition, numerous randomized
14 trials demonstrate plant strong whole food diets
15 are effective in treating type 2 diabetes and
16 other chronic conditions. And I want to say that
17 as an evidence based group of physicians and
18 clinicians, we recognize one size does not fit
19 all. I'm not in any way seeking to invalidate
20 the fact that apparently for some individuals,
21 different macronutrient balance is more effective
22 than other macronutrient balances. The college

1 embraces the fact that we're not all the same.

2 But we do find that the greatest
3 danger in our lifestyle medicine treatment is
4 usually not sufficiently reducing medications. I
5 personally have had the experience --

6 DR. CASAVALE: Thank you for your
7 comments.

8 DR. KELLY: Thank you.

9 DR. CASAVALE: We need to move on.
10 Commenter 37, please.

11 DR. SUBRAMANIAN: Hello. I am Dr.
12 Asha Subramanian, a community family physician
13 who is here to represent my own patients as well
14 as the millions of Americans, particularly
15 children, who will be directly affected by this
16 committee's decisions.

17 I thank the committee for the
18 opportunity to speak today. Based upon the
19 scientific evidence, I would like to urge you to
20 rethink the prominent role of dairy in the
21 upcoming 2020 Guidelines.

22 Dairy products are the number one

1 source of saturated fats in the American diet,
2 and scientific evidence has clearly tied dairy
3 consumption to heart disease and high
4 cholesterol. Moreover, milk and other dairy
5 products have consistently been shown to increase
6 the risk of breast, ovarian, and prostate cancers
7 through the mechanisms of IGF-1 and estrogen
8 dominance.

9 Research has closely linked dairy to
10 female reproductive diseases, acne, ear
11 infections, asthma, and allergies. In addition,
12 due to the mechanisms of molecular mimicry, there
13 is also strong scientific evidence on the
14 relationship of Type 1 diabetes, celiac disease,
15 rheumatoid arthritis, and other autoimmune
16 conditions from dairy consumption and childhood.

17 Lactose intolerance per the NIH
18 affects us to 50 million Americans, results in
19 diarrhea, bloating, gas, and abdominal pain.
20 Eighty to hundred percent of Asian Americans,
21 African Americans, Native Americans, and Latino
22 Americans are affected by lactose intolerance,

1 yet dairy is still a staple of the National
2 School Lunch Program and is served daily to
3 school children often from these very
4 populations.

5 This racial and ethnic disparity of
6 dairy consumption and its health repercussions
7 have never yet been addressed by the Dietary
8 Guidelines. Dairy, whether it's derived from
9 industrial agriculture or grass-fed cows,
10 contains high levels of estrogen, pus, feces, and
11 other contaminants. In fact, the main source of
12 animal derived estrogen in the human diet is from
13 dairy products.

14 Furthermore, there has been mounting
15 scientific evidence that the dairy industry has
16 contributed to climate change and its dangerous
17 effects through industrial agriculture. It's a
18 heartbreaking industry that takes a mother's milk
19 away from her baby cow to funnel it for human
20 consumption under the false pretense that it's
21 healthy for humans.

22 The USDA has served for years in a

1 conflicting role, protecting the public health
2 while at the same pushing agricultural products.
3 At what cost? Americans are increasingly and
4 clearly aware that milk does not do a body good.
5 Plant-based milks alone are now over a \$1.6
6 billion market.

7 I am not here to profit financially or
8 to represent big plants. I am here as a front
9 line evidence-based physician advocate for my
10 patients and for all Americans, and my five year
11 old daughter who's going to be starting
12 kindergarten in a few months.

13 Let's eliminate dairy in the 2020
14 Guidelines and really stand up for our nation's
15 health. Thank you.

16 DR. CASAVALE: Commenter 38.

17 MS. ABSHIRE: My name is Laura
18 Abshire. And I'm the director of food and
19 sustainability policy at the National Restaurant
20 Association. We are the leading association for
21 the restaurant industry representing over 1
22 million locations nationwide.

1 The restaurant industry has
2 dramatically increased its focus on nutrition and
3 wellness in recent years, developing a wide range
4 of strategies to help Americans live healthier
5 lives.

6 Restaurants throughout the country are
7 offering a variety of helpful options, including
8 more fruits and vegetables, lean protein, whole
9 grains, low fat dairy, healthy fats, and plant
10 based foods.

11 Additionally, many new brands have
12 centered their entire businesses on nutritious
13 options. While some restaurants have formally
14 pledged to make positive changes through public
15 commitments, others have chosen to take a stealth
16 health approach through their changes in menus.

17 The restaurant industry is also
18 committed to providing nutrition information.
19 This is why we came together with the public
20 health community to support the menu labeling
21 nutrition disclosure standard. This standard has
22 been implemented in restaurants across the

1 nation, ensuring that customers have the
2 information they need to make healthier choices.

3 Our industry is also looking to
4 experts for help in achieving healthier menus by
5 employing more registered dietitians than ever
6 before. In fact, we currently have 220
7 professionals that are a part of our nutrition
8 executive study group.

9 Our commitment to health and wellness
10 is also evident through our participation in a
11 number of programs like the Associations' Kids
12 Live Well program, which provides parents with
13 healthful children's menu choices. Kids Live
14 Well is now located in every state and includes
15 over 150 national, regional, and local restaurant
16 brands, representing over 42,000 locations.
17 Building on this success, we are currently
18 revising the criteria as we prepare to launch
19 Kids Live Well 2.0.

20 We are also participating in the
21 Portion Balance Coalition in conjunction with
22 Georgetown University. We are excited about the

1 opportunities to shape, co-create, and implement
2 change in this area with a diverse group of
3 multisector players.

4 Finally, many of our members are
5 engaged in the Culinary Institute of America's
6 Healthy Menu R&D Collaborative. Through this
7 effort, more produce, less sodium, fewer
8 calories, and higher quality proteins are now
9 being offered through its collective offering of
10 38 million meals a day.

11 These efforts are clearly having an
12 impact. The Association recently surveyed a
13 sample of 2,000 adults. And the results
14 indicated that 72 percent believe restaurants
15 have made it easier to monitor calorie intake.
16 Fifty percent agree that restaurants have made an
17 effort to balance portion sizes. And 40 percent
18 report more options for lower calorie beverages.

19 The restaurant industry is truly
20 committed to taking a long-range proactive
21 approach to meeting evolving science-based
22 nutrition evidence, as well as consumer needs and

1 attitudes towards nutrition.

2 We appreciate the opportunity to
3 provide comments today, and would direct you to
4 our forthcoming written comments. Thank you.

5 DR. CASAVALE: Commenter 39.

6 MS. WELLAND: My name is Diane
7 Welland, and I'm the nutrition communications
8 manager for the Juice Products Association, known
9 as JPA. JPA is a trade association representing
10 processors, growers, and distributors to the
11 juice industry.

12 We support the current 2015-2020
13 Dietary Guidelines for Americans' recommendations
14 around juice which state, 100 percent juice
15 contributes beneficial nutrients and should be
16 one of the primary beverages consumed. One-
17 hundred percent juice is part of the fruit and
18 vegetable group. One-hundred percent juice in
19 appropriate amounts can be included in a healthy
20 dietary pattern.

21 I'd like to share three evidence based
22 reasons that support 100 percent juice as a

1 nutrient dense helpful beverage in the diets of
2 Americans. 100 percent juice delivers
3 significant beneficial nutrients such as valuable
4 vitamins, minerals and bioactives to the diets of
5 children and adults.

6 More specifically, 100 percent juice
7 is a source of potassium, vitamin C, and numerous
8 health promoting plant compounds like polyphenols
9 and flavonoids. It's an important contributor to
10 folate, magnesium, thiamine, riboflavin, and
11 niacin. Fortified juices also provide vitamin D
12 and calcium.

13 One-hundred percent juice -- number
14 two is 100 percent juice is nutritionally similar
15 to fruits and vegetables and can help all
16 Americans meet fruit and vegetable group
17 recommendations. On a gram for gram basis, fruit
18 and its 100 percent fruit juice counterpart is
19 similar in their nutritional profiles.

20 Today more than 75 percent of
21 Americans fall short when it comes to meeting
22 recommended amounts of daily fruit servings.

1 While JPA recognizes whole fruits should be the
2 majority of fruit consumed by children, 100
3 percent juice does play a significant role in
4 helping children meet suggested intakes.

5 Research shows that children who
6 consume 100 percent juice have higher intakes of
7 whole fruit than those children who don't. This
8 suggests that fruit juice is complementary and
9 not competitive with whole fruit intake, and may
10 actually encourage the intake of whole fruit in
11 the diet. Furthermore, data shows that 100
12 percent fruit juice drinkers, both children and
13 adults, have better diet qualities than non-fruit
14 juice drinkers.

15 Number three, drinking 100 percent
16 juice is not associated with weight status and
17 does not increase risk of chronic illness. In
18 fact, it may even protect against certain
19 conditions. The majority of science on obesity
20 in children overwhelmingly shows no association
21 between drinking 100 percent juice and trends in
22 weight gain.

1 A 2018 study systematically reviewed
2 the current evidence associated with 100 percent
3 fruit juice consumption and various chronic
4 health conditions in children and adults. The
5 study found no significant associations between
6 juice and weight gain in children or adults and
7 concluded that no adverse health effects were
8 found to be associated with 100 percent juice
9 consumption related to diabetes, cardiovascular
10 disease, and blood pressure. Emerging evidence
11 indicates drinking 100 percent fruit juice can
12 support cardiovascular health and may be
13 associated with improved cognitive function.

14 In conclusion, JPA supports making
15 dietary choices that include a variety of foods
16 that contribute to a healthy overall diet,
17 including 100 percent fruit juice consumed in
18 appropriate amounts.

19 Thank you for this opportunity.

20 DR. CASAVALE: Commenter 40.

21 MS. WESTBROOKS: You're halfway there,
22 Committee. My name is Jasmine Westbrooks and I'm

1 a registered dietician with a Master's in
2 Nutrition Education and a founder of a non-profit
3 called EatWell Exchange, where we help provide
4 access to healthy and affordable foods in low
5 social economic communities.

6 About 23.5 million people live in food
7 deserts. Half those people live in low-income
8 areas, while the other half are among the general
9 population, so this affects you, this affects
10 your family and your community.

11 A food desert is a community that
12 lacks access to full-service grocery stores,
13 where fresh produce and other healthy foods are
14 scarce or non-existent.

15 Residents living in food deserts also
16 had a hard time finding foods that were
17 culturally relevant that meet their dietary
18 restrictions, according to the White House Task
19 Force on Childhood Obesity.

20 So my question for you all today is,
21 how can we improve a community without the tools
22 to make a positive and healthy change? About 34

1 percent of Americans are from diverse nations,
2 which have their own cultural values, food, and
3 traditions.

4 To impact these communities, we must
5 first be knowledgeable of the foods and how we
6 can use them to satisfy a healthy Dietary
7 Guideline based on our culture.

8 To see a change in the eating patterns
9 of all Americans, the Dietary Guidelines should,
10 first, recruit Dietary Guideline ambassadors from
11 diverse neighborhoods and promote culturally
12 relevant healthy foods.

13 This is a need to implement and teach
14 low social economic communities the Dietary
15 Guidelines for Americans. These nutrition
16 ambassadors will have a cultural connection to
17 the lifestyle and an ability to produce
18 respectful changes, for example, the goals of the
19 nutrition education will be to bridge the gap
20 between the Dietary Guidelines recommendations
21 and what foods that community is familiar with.

22 Second, provide nutrition education to

1 individuals in low social economic communities
2 about how and why to pick these choices along
3 with increasing availability of healthier foods.

4 Evidence demonstrates that creating
5 change for food habits involves increased
6 knowledge about how and why these dietary changes
7 are important.

8 Research has shown that nutrition
9 education programs, encouraged from a quasi
10 experimental study, show four out of eight
11 nutrition programs conducted by the USDA and
12 Nutrition Service resulted in significant
13 improvement of fruit and vegetable consumption
14 from nutrition education by the Supplemental
15 Nutrition Assistance Program.

16 So it is important to realize this is
17 not a personal or individual problem, this is a
18 systematic problem. We need to eat like our
19 ancestors to prevent and treat chronic
20 conditions.

21 For example, the Southern diet is
22 often referred to as a traditional diet for

1 African-Americans, however, the real traditional
2 model truly eaten by Africans consists of high
3 fiber-rich leafy greens, and beans, and legumes.

4 Dietary Guidelines and our variations
5 in our cultures cannot be ignored. The foods we
6 eat, the way we live, and the resources that we
7 have access to impact our overall health. Thank
8 you.

9 DR. CASAVALE: Commenter 41.

10 MR. TUMA: I'm Pepin Tuma with the
11 Academy of Nutrition and Dietetics. America
12 faces a debilitating health crisis that is
13 largely of our own making. Rates of obesity and
14 diet-related chronic diseases are on the rise.
15 Our diets are killing too many of us and they're
16 making too many of us sick.

17 More than ever, we need these
18 evidence-based guidelines, but we also need
19 strategies, and funding, and a unified commitment
20 to implement them so that all Americans can make
21 healthier decisions for ourselves and for our
22 families.

1 The Academy of Nutrition and Dietetics
2 represents 108,000 credentialed women and men
3 committed to evidence-based practice, who are
4 making a difference, producing lifestyle change,
5 and improving health in communities throughout
6 the country, in schools, hospitals, as
7 researchers, and in private practice.

8 We have confidence in this particular
9 Dietary Guidelines Advisory Committee, as a body,
10 and in the individual members selected to serve
11 on it.

12 Having observed the discussion
13 yesterday, and at the first public meeting, all
14 Americans should feel confidence in this
15 committee's abilities, approach, and astuteness
16 in answering the scientific questions before you
17 and you being able to fulfill the charge outlined
18 in the charter.

19 Sometimes, rarely actually, our
20 Dietary Guidelines get it wrong. Whether it's
21 the unintended consequences of a focus on total
22 fat or political decisions that reject, weaken,

1 or rewrite recommendations in the scientific
2 report to make them more anodyne, it happens.

3 And we learn from it, and we dig
4 deeper, and we work to ensure that the guidelines
5 evolves as the science evolves. This advisory
6 committee, and USDA, and HHS scientists, working
7 alongside you, are well-suited to the task of
8 distilling the science from the silliness.

9 The nature of science is iterative and
10 we have confidence that this DGAC will not miss
11 the forest through the trees. We continue to
12 support a focus on dietary patterns over
13 individual nutrients and taking a systems
14 approach, reflecting the need to think about
15 nutrition as a biological variable.

16 This requires a willingness to see
17 topics and questions anew and cast off guidelines
18 and theories that assume too much, or overly
19 reliant on surrogate endpoints that may matter
20 less than we originally thought.

21 The Academy of Nutrition and Dietetics
22 will follow-up with specific comments on proposed

1 protocols and processes and the purposes of the
2 guidelines, and the complexities of nutrition
3 science, but in the remaining time allotted, I
4 want to emphasize three salient points.

5 First, transparency. The committee
6 and the Departments to date have worked to
7 implement and incorporate the National Academy's
8 recommendations, but where the rubber meets the
9 road is that period and process between the
10 submission of your scientific report and the
11 issuance of the final guidelines.

12 And we are committed to ensuring that
13 the final Dietary Guidelines reflect science and
14 not politics in accordance with the statutory
15 requirements.

16 Second, timing. The Dietary
17 Guidelines charter was issued in October of 2018
18 for a period of two years. Take the entire two
19 years.

20 Take until October 2020. You have new
21 and added responsibility of the B to 24
22 recommendations and significant new evidence in

1 the literature. Take all the time you're
2 allotted and get it right rather than getting it
3 artificially and arbitrarily fast.

4 DR. CASAVALE: Thank you for your
5 comments. We'll need to move on.

6 MR. TUMA: Thank you.

7 DR. CASAVALE: Commenter 42, please.

8 MS. CAUDILL: Good morning. My name
9 is Marie Caudill and I'm a Choline Researcher in
10 the Division of Nutritional Sciences and Cornell
11 University. Thank you for the opportunity to
12 provide comments on this important scientific
13 review.

14 To start, although choline is an
15 essential nutrient for all ages and stages of
16 life, only one of 10 U.S. adults meet target
17 intake levels.

18 The best dietary sources of choline
19 are animal source foods like eggs and meat,
20 however, consumers are often advised to limit
21 these foods in their diet.

22 With public health calls to shift

1 eating patterns away from animal-based foods, a
2 potential unintended consequence is a further
3 lowering of choline intake.

4 It thus appears that choline needs
5 will be most easily met in the United States
6 through a combination of food and supplements,
7 particularly amongst special populations like
8 pregnant and lactating women who have an
9 increased choline requirement.

10 Low choline intakes throughout the
11 perinatal period are of concern because choline
12 is required for proper brain development and
13 function. Research shows that supplementing the
14 maternal diet with additional choline elicits
15 better cognitive outcomes, like improved fat
16 processing speed and attention in infants, and
17 better visual memory in seven-year-old children.

18 Higher maternal choline intakes are
19 also associated with a reduced risk of having a
20 baby with a neural tube defect, and may protect
21 against certain neural insults, like fetal
22 alcohol syndrome.

1 Authoritative bodies are now beginning
2 to recognize choline as a nutrient needed for
3 optimal health during development and in infancy.
4 For example, the American Medical Association
5 recommended choline be a component of all
6 prenatal vitamin supplements and the American
7 Academy of Pediatrics issued a policy statement
8 calling out choline as a key brain-building
9 nutrient.

10 In addition to the pregnant and birth
11 to 24-month populations, choline is important for
12 health across the life stages. Choline supports
13 brain health and function among older adults, it
14 also helps move fat out of the liver, keeping
15 this vital organ healthy and functioning
16 properly, and potentially preventing non-
17 alcoholic fatty liver disease, a leading health
18 concern in the United States.

19 Thus, it seems of critical importance
20 that future dietary guidance elevate awareness of
21 choline and choline-containing foods. We hope
22 the committee will consider reviewing the data

1 around this important nutrient. Thank you.

2 DR. CASAVALE: Commenter 43.

3 MS. SEALANDER: Good morning. I'm
4 Karen Sealander for the American Dental
5 Hygienists Association. ADHA represents the
6 nation's more than 200,000 dental hygienists who
7 work with individuals and groups across the
8 lifespan to ensure people realize the importance
9 of adopting routine oral health preventive
10 practices, to not only curb dental caries, tooth
11 decay, but also, to promote a healthy diet.

12 Why are healthy teeth important to
13 healthy diets? Painful and missing teeth can
14 limit dietary intakes of fruits, vegetables,
15 whole-grain breads, and other foods that require
16 chewing.

17 Studies have found that individuals
18 with partial or full dentures have lower
19 consumption of 20 key nutrients. Poor oral
20 health is also associated with serious systemic
21 medical conditions, including diabetes, heart
22 disease, and stroke.

1 What is the scope of the problem?

2 Rates of dental caries match or exceed rates of
3 obesity in individuals at all ages, demonstrating
4 that caries is a major chronic disease across the
5 lifespan.

6 Indeed, dental caries is the most
7 common chronic condition among children, five
8 times as prevalent as asthma.

9 Importantly, unlike medical maladies,
10 virtually all dental disease is fully preventable
11 through proper dietary intake and oral health
12 preventive practices.

13 Including the importance of oral
14 health preventive practices in the Dietary
15 Guidelines will ensure that guidance in how to
16 ensure healthy teeth can make for healthy meals
17 reaches more Americans.

18 Today, more than half of all children
19 do not receive instruction on self-care oral
20 hygiene in a given year. Routine oral healthcare
21 also helps prevent periodontal disease, which
22 impacts over 17 percent of seniors and can lead

1 to tooth loss and subsequent poor dietary
2 intakes.

3 Preventing dental caries early and
4 throughout life can also improve social
5 interaction, school performance, military
6 readiness and effectiveness, and job
7 opportunities.

8 Education about the benefits of oral
9 health preventive practices will help all
10 Americans avoid the negative effects of tooth
11 loss and painful teeth.

12 ADHA and our partners request that the
13 2020-25 Dietary Guidelines recommend,
14 "Individuals of all ages should follow a daily
15 oral hygiene routine, which includes brushing
16 their teeth with fluoridated toothpaste, cleaning
17 between their teeth where possible, chewing
18 sugar-free gum for 20 minutes after meals or
19 snacks, if possible, drinking fluoridated water,
20 and limiting intake frequency of dietary
21 fermentable carbohydrates."

22 This is essential because oral health

1 preventive practices have significant dietary
2 benefits for all Americans. Thank you for the
3 opportunity to provide comments on behalf of the
4 American Dental Hygienists Association and
5 additional supporting organizations listed in our
6 written testimony. Thank you.

7 DR. CASAVALE: Commenter 44.

8 DR. SHANAHAN: My name is Dr. Cate
9 Shanahan. I'm a family physician from Florida.
10 I'm here on behalf of myself. I wrote a book
11 about 10 years ago about how families used to
12 raise healthy children using the resources they
13 had available to them in their environment; whole
14 foods, basically.

15 The book is called Deep Nutrition: Why
16 Your Genes Need Traditional Food. And what it
17 does is, basically, take a look at the obvious
18 changes that have happened in the past 100 years
19 to our food supply and the way we feed ourselves,
20 that amount, essentially, to a massive
21 nutritional and dietary experiment involving
22 hundreds of millions of participants in this

1 country alone over hundreds of years.

2 And the obvious is that 100 years ago,
3 people were self-sufficient in their food, to a
4 degree that we can't even really comprehend
5 anymore, because people hunted, people fished,
6 people had a garden, whenever that was possible,
7 people raised their own animals.

8 They cared about the health of the
9 animals that they raised. They cared about the
10 soil. It was their job to bring up healthy
11 children, because if they didn't do it, the
12 government wasn't going to help them out.

13 And so what has changed over the past
14 100 years is that now, we have very few people
15 who have any of those skills. We have lost the
16 skills of gardening, of farming, of cooking, of
17 knowing even how to combine flavors in a tasty
18 way.

19 We've lost the knowledge of culinary
20 skills that used to be considered essential.
21 Making stock, using the whole animal or the whole
22 plant. We've lost so much. We've lost

1 knowledge, we've lost time, we've lost health
2 over the past 100 years. So much has changed.

3 And one of the most important changes,
4 I think that the fact that so many things have
5 changed, actually, is important to point out
6 because it is very confusing to understand what
7 we really should be doing, given the degree of
8 alteration of our food supply.

9 But what I want to share with you is
10 that the most important change, in my opinion as
11 a Cornell-trained biochemist, is that we now eat
12 80 percent of our fat calories from refined,
13 bleached, deodorized vegetable oils, and only 20
14 percent of our fat calories come from any kind of
15 whole foods.

16 These vegetable oils include soy,
17 corn, and canola, and they are nobody's friend.
18 I've heard nobody up here talking about how we
19 need refined bleached, deodorized vegetable oils.

20 They are unhealthy because they
21 deteriorate in our body in ways that promote
22 inflammation, that promote DNA damage,

1 mitochondrial damage, and are associated, that
2 kind of damage is associated with every disease.

3 DR. CASAVALE: Thank you for your
4 comments.

5 DR. SHANAHAN: Thank you.

6 DR. CASAVALE: Commenter 45.

7 MS. LEWIN-ZWERDLING: Hello. My name
8 is Alex Lewin-Zwerdling and I'm the Vice
9 President for Research and Partnerships at the
10 International Food Information Council
11 Foundation.

12 The IFIC Foundation is a non-profit
13 organization with a mission to effectively
14 communicate science-based information about
15 health, nutrition, and food safety for the public
16 good.

17 Our focus is on helping Americans make
18 informed choices and understanding what motivates
19 and informs consumers so that they can lead an
20 increasingly healthful lifestyle.

21 One of the primary objectives of the
22 IFIC Foundation is commissioning and conducting

1 consumer research. I would like to highlight
2 today, a subset of our findings from our 2019
3 Food and Health Survey, released just this past
4 May.

5 This marked our 14th consecutive
6 annual survey tracking American's perceptions
7 around food and diets, eating habits, and trends.
8 Consumer habits are changing, including the
9 alignment of one's values with the foods they
10 consume.

11 This year's survey found that 38
12 percent of consumers reported following a diet
13 over the past 12 months, with clean eating being
14 the most widely cited diet. Not far behind was
15 intermittent fasting.

16 At the same time, consumers are
17 reporting eating healthier compared to 10 years
18 ago. The top two changes people say they've made
19 to improve their diets was limiting sugar intake
20 and increasing consumption of fruits and
21 vegetables.

22 The survey also explored American's

1 snacking habits and found that nearly everyone
2 snacks at some point during the week, with
3 roughly 1/4 saying they snack multiple times a
4 day.

5 Plant-based diets have garnered
6 widespread media attention as well, but the ways
7 people define plant-based diets varies. Our
8 survey found that consumers' definitions ranged
9 from vegan, to vegetarian, to one that focuses on
10 minimally processed foods.

11 Over half of consumers want to learn
12 more about plant-based diets. At the same time,
13 consumption of plant-based protein is on the
14 rise, with roughly 1/4 of consumers saying that
15 they eat more plant-based protein now compared to
16 only one year ago.

17 In 2019, the top health benefits
18 consumers are seeking from food include weight
19 loss and maintenance, energy, and digestive
20 health. When it comes to feeding newborns and
21 infants, parents face specific challenges.

22 Our 2018 B to 24 research showed that

1 parents are focused on feeding their children
2 nutritious diets, but concerns remain. These
3 include choking hazards, allergic reactions, what
4 foods to introduce and when, as well as where to
5 find reliable advice.

6 We encourage the committee to explore
7 this study's results in more detail. In summary,
8 dietary guidance must reflect the motivations and
9 attitudes of consumers and IFIC Foundation
10 consumer research can be used to help inform this
11 process.

12 As members of the committee, we
13 encourage you to keep the pulse of the consumer
14 central to your discussions and nutrition
15 recommendations. Thank you for your time today
16 and we welcome further discussions about any of
17 the IFIC Foundation data I referenced during my
18 comments.

19 DR. CASAVALE: Thank you for all of
20 the comments. We will now take a break and we'll
21 reconvene promptly at 11:00.

22 (Whereupon, the above-entitled matter

1 went off the record at 10:49 a.m. and resumed at
2 11:01 a.m.)

3 DR. CASAVALE: All right. We're going
4 to resume. Commenter 46, please.

5 MS. NAJJAR: Hello. I am Christine
6 Najjar. I'm a nutritional medicine physician at
7 Pounds Transformation in West Hartford,
8 Connecticut. I have my training in internal
9 medicine, primary care, a Bachelor's in
10 Biochemistry, and a Master's in Human Nutrition,
11 and I want to thank the Committee for taking on
12 the daunting task of sifting through the ever-
13 expanding body of nutritional literature.

14 But I am here today to bring to your
15 attention a substantial class of Americans that
16 are not currently being evaluated. These are
17 Americans with hyperinsulinemia.

18 The hyperinsulinemia syndrome is
19 extremely broad and includes endpoints such as
20 obesity, cardiovascular disease, type 2 diabetes,
21 liver disease, certain cancers, polycystic
22 ovarian syndrome, and Alzheimer's Disease.

1 Dare I suggest that this is one of the
2 primary drivers of the current American
3 healthcare crisis. Now, prevalence for
4 hyperinsulinemia will not be found accurately in
5 the literature because it's not routinely
6 screened for in primary care.

7 Most clinicians have never even heard
8 of a craft assay. This test can diagnose type 2
9 diabetes decades earlier than our current
10 diagnostic standards.

11 CDC estimates upwards of 100 million
12 Americans are suffering. Now, clinicians who do
13 evaluate for and diagnose hyperinsulinemia find
14 that the treatment is quite simple with a low
15 carbohydrate or well-formulated ketogenic diet.

16 And I understand these guidelines are
17 not for the prevention of -- or for the
18 prevention of disease and not treatment, however,
19 I was wondering if the committee has put any
20 thought into how they are going to address these
21 new healthy Americans who have recovered from
22 hyperinsulinemia and require adherence to a low-

1 carbohydrate lifestyle to stay healthy.

2 Clinically, if these Americans consume
3 any of the dietary patterns currently available
4 in upwards of 50 to 55 percent of their daily
5 calories from carbohydrates, disease will recur.
6 So much for prevention.

7 These Americans require a low-
8 carbohydrate dietary pattern, and with numbers
9 like 100 million, I'm not too sure giving a
10 blanket statement about how much starch and sugar
11 we should all be consuming is a great idea.

12 And to help define what low carb is,
13 I suggest familiarizing yourself with a
14 physiological concept called personal
15 carbohydrate tolerance, and perhaps maybe the
16 first step towards effective change is to step
17 away from nutritional epidemiology and start
18 engaging in open discussions with clinicians who
19 are already treating and successfully preventing
20 hyperinsulinemia.

21 And perhaps maybe then screening for
22 and treating for hyperinsulinemia will be

1 incorporated into primary care, and together, we
2 can all make Americans healthy again. Thank you.

3 DR. CASAVALE: Commenter 47.

4 MS. WHITMIRE: Hi. I'm Meredith
5 Whitmire, policy director for the Defeat
6 Malnutrition Today Coalition, a group of 90
7 national, state, and local organizations and
8 agencies fighting older adult malnutrition.

9 The framework and approach outlined
10 for the 2020-2025 Dietary Guidelines highlight
11 the important of guidelines to improve the
12 nutritional intake of Americans across the
13 lifespan.

14 As older adults represent a growing
15 proportion of the United States, including
16 Dietary Guidelines relevant to an aging
17 population is important.

18 In fact, older adult malnutrition is
19 a growing crisis in America today. 1 in 2 older
20 adults face the threat of malnourishment.
21 Malnutrition is pervasive, costly, and
22 contributes to disability and slower recovery,

1 however, is has not yet been addressed by a
2 systematic consistent approach throughout the
3 continuum of care, including in our communities.

4 We were very excited to see the focus
5 question on the relationship between dietary
6 patterns consume and sarcopenia. Malnutrition is
7 the leading cause of sarcopenia and many cases of
8 severe sarcopenia could have been prevented with
9 an adequate diet.

10 Relatedly, in your work researching
11 nutrients of public health concern, we ask you to
12 closely consider necessary intake of protein in
13 older adults.

14 Studies show that older adults need a
15 substantially higher amount of protein to
16 maintain their muscle mass and prevent
17 sarcopenia, and yet, the reference intakes are
18 the same for all groups, aged 14 and older, male
19 and female.

20 This should be reevaluated. We are
21 also excited that you're studying the current
22 prevalence of nutrition-related chronic health

1 outcomes. In your evaluations, we ask you to
2 consider the presence of malnutrition when you're
3 examining chronic health outcomes, since poor
4 nutrition causes some conditions and exacerbates
5 many others.

6 Ultimately, older adult malnutrition
7 is preventable, but to defeat it, we must first
8 address it. The work of the advisory committee
9 can and should lead the way on this effort.

10 Thank you for having me and thank you for your
11 important work.

12 DR. CASAVALE: Commenter 48.

13 MS. MOHAMEDSHAH: I'm Farida
14 Mohamedshah with the Institute of Food
15 Technologists. IFT, a global organization of
16 over 16,000 individual members from over 100
17 countries, brings together professionals from
18 academia, government, and industry to apply the
19 science of food and technology to solve the
20 world's greatest food challenges. We believe
21 that science is essential to ensuring a global
22 food supply that is sustainable, safe,

1 nutritious, and accessible to all.

2 We appreciate the opportunity to
3 provide input on the 2020 Dietary Guidelines for
4 Americans. Dietary Guidelines are inspirational
5 in nature, however, they should be realistic and
6 practical. IFT emphasizes that the DGA should be
7 based on science and include recommendations for
8 dietary changes that enable implementation and
9 maximize adoption in a sustainable manner.

10 Therefore, consideration of the role
11 of food science and technology is crucial, as
12 nearly all available food products have been
13 developed through the application of these
14 disciplines.

15 However, food scientists and
16 technologists, and their perspectives, are not
17 currently represented in the Dietary Guidelines
18 advisory committee.

19 Food scientists and technologists
20 formulate and produce food products that are
21 safe, nutritious, accessible, palatable, and
22 affordable, and help consumers meet their

1 nutrient, dietary, and health needs, and cultural
2 references.

3 It is important to recognize that
4 without a safe and sustainable food supply,
5 efforts to improve nutrient and diet quality are
6 fruitless, thus, attention to formulation,
7 processing, packaging, ingredients, and supply
8 chain innovations, efficient use of natural
9 resources, as well as advances in science and
10 technology to address food safety, nutrition,
11 food loss and food waste are critical as we move
12 to 2020 and beyond.

13 Food scientists and technologists
14 employ various approaches to formulate and
15 produce food products to meet the nutritional
16 needs of consumers across all stages and social
17 economic strata.

18 We have been successful in addressing
19 nutrient deficiencies, such as folate and vitamin
20 D, increase levels of nutrients and food groups,
21 such as dietary fiber and whole grains, and
22 decrease sodium, sugar, and saturated fats, for

1 example.

2 Application of food science and
3 technology allows formulating of food products
4 that are affordable and convenient for meal
5 preparation for all demographics and enables
6 consumers to embrace personal dietary
7 preferences, such as cultural, ethnic, and
8 religious.

9 Recent consumer research shows that
10 food purchasing decisions are driven by taste,
11 price, helpfulness, and convenience, with taste
12 and price being the primary drivers.

13 Aspiration dietary guidance that
14 ignores these drivers will not be readily adopted
15 or successfully implemented. Food scientists and
16 technologists are integral in delivering against
17 the rapidly changing multiple demands of safe,
18 nutritious, palatable, affordable, and
19 convenient, and abundant food supply.

20 IFT and its members look forward to
21 furthering the committee's understanding of the
22 role of food science and technology in meeting

1 the goals of the Dietary Guidelines.

2 IFT urges that the committee and the
3 Departments of Agriculture and Health and Human
4 Services to engage food scientists and
5 technologists in the deliberation process to
6 develop recommendations that are science-based,
7 practical, and realistic to improve the diet and
8 health of Americans. Thank you.

9 DR. CASAVALE: Commenter 49.

10 DR. POPPER: Thank you. My name is
11 Dr. Pam Popper. I'm from Wellness Forum Health
12 in Columbus, Ohio and I thank you for the
13 opportunity to talk to you today.

14 We've been in business for almost 25
15 years and we've worked with about 100,000 people
16 who have contacted us because they want to regain
17 or maintain their health.

18 Most of these people have chronic
19 degenerative conditions, like type 2 diabetes and
20 coronary artery disease. We've seen a couple of
21 really disturbing trends. One is lower and lower
22 ages of onset of disease.

1 We have 2nd graders with type 2
2 diabetes, high school kids with rheumatoid
3 arthritis, and of course, the population's
4 getting fatter and sicker. It's rare to see a
5 normal-weight person in our office today.

6 Poor diet's always a contributing
7 factor. It's often the thing that has caused
8 these people to be sick. Most of our people have
9 eaten a diet high in fat and protein, too much
10 animal food, too much dairy, too much processed
11 food.

12 Standard procedure in our office, we
13 put these people on a low-fat, high-fiber, plant-
14 based diet, and they get better. In fact, they
15 get better so quickly that they have to be
16 medically monitored because the drops in blood
17 pressure and glucose levels mean that medications
18 have to be reduced and sometimes withdrawn within
19 a few days.

20 One of the most common things that
21 people ask us at the end of this process is, why
22 didn't I know about this? They tell us

1 routinely, I would have converted to this diet if
2 I knew I could have prevented diabetes and I
3 certainly would have done it if I thought that I
4 could have reversed my disease. So why aren't we
5 telling people this?

6 Well, there's a lot of confusion about
7 diet, some of it's been sowed here, people
8 advocating high-fat diets, and I personally take
9 offense to anybody who would come up here and say
10 that the Dietary Guidelines are a joke. That's
11 my opinion.

12 I think it's offensive, but if you
13 take a look at high-fat diets, low-carb diets,
14 the measurements, short-term, show that the
15 benefits are there. People lose weight and their
16 numbers come down, but if the only thing we're
17 going to do is consider short-term benefits,
18 there are a lot of things that cause people to
19 lose weight and have good biomarkers.

20 One's cocaine addiction. I've never
21 had a fat cocaine addict in my office and I've
22 never had one with high cholesterol or high

1 fasting glucose levels.

2 Now, I'm being facetious, of course,
3 but the point is, if the only thing that counts
4 is short term, a lot of things are short-term
5 good, bad in the long term, because it takes a
6 long time for cancer to develop in response to a
7 high-fat diet, for example, or a high-protein
8 diet.

9 A plant-based diet, low in fat, high
10 in fiber, is the one consumed by the healthiest
11 people on the planet, like the Okinawans, who
12 didn't get the memo that high-carb, starch-based
13 diets are bad for you, so I strongly encourage
14 the committee to take a very strong stance on
15 this issue and recommend a whole foods plant-
16 based diet. Thank you very much.

17 DR. CASAVALE: Commenter 50.

18 MS. HANSELMAN: Good morning. My name
19 is Miquela Hanselman and I am the manager of
20 regulatory affairs at the National Milk Producers
21 Federation. As the committee begins to put
22 together its report, first and foremost, I would

1 like to emphasize the need to maintain dairy's
2 current position as a distinct food group, as
3 well as a recommendation that consumers, ages
4 nine and older, receive free servings of dairy a
5 day.

6 Dairy foods are nutrient-rich products
7 and irreplaceable in the diet if we want to meet
8 the DGA recommended nutrient requirements. Dairy
9 foods are one of the top sources of calcium,
10 protein, phosphorous, magnesium, potassium,
11 vitamins A, B12, D, and riboflavin in children's
12 diets.

13 In fact, it was determined in 2015
14 that 42 percent of individuals over the age of
15 one don't get enough calcium or vitamin D. Two
16 micronutrients that dairy products are full of.

17 If dairy were removed from the diet,
18 people would fall significantly below the
19 estimated average requirement. In 2015 Dietary
20 Guidelines Advisory Committee report, the
21 committee compared the nutritional value of dairy
22 foods and non-dairy alternatives.

1 In this analysis, it was found that
2 while some non-dairy alternatives have been
3 fortified to match the levels of calcium and a
4 few other nutrients in milk, there was always at
5 least one nutrient that was negatively impacted.

6 As stated in the 2015 analysis, no
7 dairy alternatives, aside from soy, provide a
8 similar enough nutrient profile in terms of
9 essential nutrients to be considered and for
10 inclusion in the dairy group.

11 Because of this, the committee should
12 continue to only include real dairy products in
13 the dairy category. One of the key attributes
14 which makes dairy products such a nutritious
15 option is the protein impacts with each serving.

16 On average, a glass of milk offers
17 eight grams of a complete protein. Almond
18 beverages have only one to two grams, and like
19 all plant-based beverages, the proteins provided
20 are incomplete.

21 Across various measurement tools, the
22 protein quality of animal proteins is higher than

1 plant proteins because of the high content of
2 essential amino acids they contain. Animal
3 proteins have been proven to have higher skeletal
4 muscle anabolic response due to the
5 bioavailability of the amino acids.

6 Leucine, which has high anabolic
7 properties, is especially found in high amounts
8 in milk. These protein properties, coupled with
9 the micronutrient package milk offers, makes it
10 invaluable in an American's diet.

11 The most recent research on the
12 benefits of dairy consumption continue to show
13 dairy's role in reducing the risk of chronic
14 disease, including a reduced risk of type 2
15 diabetes and cardiovascular disease.

16 With all the nutritional benefits
17 dairy has to offer, and the accessibility across
18 income classes it has, it is a no-brainer to keep
19 dairy as a staple in the Dietary Guidelines, in
20 their own category, encouraging people to consume
21 three servings daily, especially when considering
22 it is a vital source of micronutrients that

1 Americans have a hard time meeting the daily
2 requirements of. Thank you for your time.

3 DR. CASAVALE: Commenter 51.

4 MS. GREENBERG: Yes. Good morning.
5 Thank you for a fascinating morning. This has
6 been great. My name is Sally Greenberg. I'm
7 executive director of the National Consumers
8 League and we are here to comment on -- to this
9 advisory committee and focus our comments on one
10 issue that we think is being overlooked, and
11 that's the issue of portion balance as a strategy
12 for achieving greater health for all Americans in
13 the 2020-2025 U.S. Dietary Guidelines.

14 In February 2019, my organization,
15 along with two national consumer advocacy groups,
16 and six leading food industry trade associations,
17 joined together to call on the USDA and the HHS
18 to highlight the importance of portion balance in
19 the new Guidelines.

20 Throughout our 120-year history, the
21 National Consumer League has focused on food
22 safety and nutrition. At the turn of the 20th

1 century, in fact, our founders advocated for the
2 need for safe drinking water, and safe milk, and
3 protecting consumers against adulterated foods.

4 Today, the issues are different, but
5 every bit as pressing. Obesity continues to take
6 its toll on the overall health of Americans and
7 is projected to affect 115 million adults by year
8 2030.

9 This projection is due in large part
10 to an increase over the last four decades in the
11 portion sizes of meals, snacks, and beverages.

12 One promising, and we think, underutilized
13 strategy for tackling the obesity epidemic is
14 helping consumers understand and implement
15 appropriate portion balance.

16 In a 2014 report, the McKinsey Global
17 Institute found that interventions to control
18 portion size, such as reducing the size of
19 packaged foods, fast food, and high-calorie
20 beverages could be the single most effective
21 measure leading to reduced obesity.

22 Unfortunately, while the current

1 version of the Dietary Guidelines mentions
2 portion size, it appears to be mostly an
3 afterthought among the various strategies to
4 improve diet and fight obesity.

5 Portion balance is not mentioned in
6 the Guideline's executive summary, in fact, and
7 this is despite the fact that larger portion
8 sizes have greatly contributed to the problem of
9 overweight and obesity.

10 We, therefore, urge the Dietary
11 Guidelines Advisory Committee to include portion
12 balance as a key strategy to addressing the rise
13 of obesity and to make education about portion
14 balance a cornerstone of the Guidelines, as the
15 Dietary Guidelines Advisory Committee continues
16 its work.

17 We hope to do some surveying around
18 this issue as well. Finally, I'd enlist First
19 Lady -- former First Lady Michelle Obama, to
20 spread the word. She was my favorite role model
21 when it comes to food. She talks about the joy
22 of eating, which we shouldn't forget, but also

1 talks about, you can eat healthy most of the
2 time, but you can also have ice cream, French
3 fries, and cake once in a while.

4 Not every day, but as a part of a
5 healthy diet. I guess what we're saying is,
6 portion balance means everything in moderation.
7 We welcome the opportunity to work with you in
8 the future and thank you so much for holding this
9 meeting.

10 DR. CASAVALE: Commenter 52.

11 MS. WEIMER: Hi. My name is Kathy
12 Weimer and I'm registered dietician. And on
13 behalf of the Grain Chain, a farm-to-table grain
14 coalition that brings innovative and healthful
15 foods to consumers, I thank you for the
16 opportunity to comment today.

17 Our written comments list our members.
18 The Grain Chain endorses maintaining the 2015
19 Dietary Guideline recommendation of carbohydrate
20 intake between 45 and 65 percent of calories, and
21 at a minimum, the recommended six servings daily
22 of traditional grains, with at least half as

1 whole grains.

2 Further, given that Americans continue
3 to underconsume whole grains, we support an
4 increase in daily recommended whole grain
5 servings, while maintaining at least three
6 servings of enriched grains.

7 At least 95 percent of refined grains
8 in the U.S. are enriched and fortified and are
9 labeled as such, therefore, consuming a refined
10 grain that has not been enriched or fortified is
11 highly improbable.

12 The body of scientific evidence
13 continues to support grain consumption because of
14 its substantial nutritional contributions and
15 positive impact on health outcomes, and can serve
16 as a cornerstone for a plant-based diet.

17 Cumulatively, research shows that a
18 variety of grain choices contribute to nutrient
19 density and the total diet and have the potential
20 to increase consumption of shortfall nutrients,
21 particularly dietary fiber, folate, and iron for
22 all age groups.

1 Since folic acid fortification became
2 required, the prevalence of American babies born
3 with neural tube defects has decreased by 35
4 percent, leading the CDC to deem folic acid
5 fortification one of the top 10 public health
6 achievements of the first decade of the 21st
7 century.

8 Furthermore, based on our recent
9 study, there is potential for increased risk of
10 neural tube defects in infants born to women who
11 consume a low-carbohydrate diet.

12 We believe it is premature to
13 recommend low carbohydrate dietary patterns to
14 the U.S. population. Research data for low-carb
15 diets is inconsistent for both diabetes, and
16 weight loss, or maintenance outcomes.

17 Also, a new meta-analysis, suggests
18 that low and very high carbohydrate diets are
19 associated with increased risk of all-cause
20 mortality, whereas, consuming a diet with 50 to
21 55 percent of calories as carbohydrate reduces
22 the risk.

1 We ask that the committee carefully
2 examine carbohydrate levels in low-carb studies,
3 since the amounts often classified as low may
4 actually be within recommended DGA levels.

5 Related to chronic disease risk,
6 multiple meta-analyses evaluating grain
7 consumption show little to no association with
8 all-cause mortality, coronary heart disease, type
9 2 diabetes, and certain cancers.

10 These meta-analyses separately address
11 total grain, whole grain, and refined grain
12 consumption and reinforce the important role that
13 grains play in health outcomes.

14 Additionally, the health benefits of
15 cereal fiber are well established from at least a
16 half dozen meta-analyses.

17 We support the committee's proposed
18 systematic review of protocols for folic acid and
19 other topics as outlined, and we encourage the
20 committee to include fortified and enriched foods
21 within the research evaluation related to iron
22 and pregnancy and lactation protocols.

1 DR. CASAVALE: Thank you for your
2 comments.

3 MS. WEIMER: Thank you.

4 DR. CASAVALE: Commenter 53.

5 MS. BIRCH: Good morning. I am
6 Darlena Birch, a registered dietician and the
7 senior public health nutritionist at the National
8 WIC Association.

9 NWA is the non-profit education arm
10 and advocacy voice of the WIC program, the over
11 seven million mothers and young children served
12 by WIC, and the 12,000 service provider agencies
13 who are the frontlines of WIC's public health
14 nutrition services for the nation's nutritionally
15 at risk mothers and young children.

16 The WIC food package and nutrition
17 education are the cornerstones of WIC, both of
18 which are shaped by the Dietary Guidelines for
19 Americans.

20 Because the 2020 through 2025 DGAs
21 will be the first to provide recommendations for
22 pregnancy and birth through 24 months of age, it

1 is imperative that they take into account factors
2 that impact the WIC population.

3 As the DGAC continues its work, NWA
4 asks that the committee consider the following.
5 For the pregnancy life stage, we would like to
6 bring attention to three topics. They are
7 dietary supplements, diet during pregnancy, and
8 risk for food allergies and seafood.

9 Number one, dietary supplements, we
10 ask that the committee address and provide
11 recommendations for iodine, choline, vitamin D
12 and DHA/omega-3 fatty acid supplementation.

13 For omega-3 fatty acids in particular,
14 we urge the committee to review the efficacy and
15 consider the differences in quality between fish
16 oil and microalgae oil, if such a supplementation
17 is recommended.

18 Number two, diet during pregnancy and
19 lactation, and risk of food allergy in the
20 infant. We ask that the committee share the
21 latest research on the link between foods
22 consumed during pregnancy and lactation and food

1 allergies in infants.

2 Number three, seafood. We ask that
3 the committee provide practical approaches to
4 help pregnant women determine the approach -- the
5 appropriate amount of seafood to consume.

6 For the children 2 through 18 life
7 stage, we urge the committee to focus on dietary
8 fats and to clarify the role of dairy fats, such
9 as one percent milk, in brain development.

10 We ask that the committee continue to
11 examine the research on providing children two
12 years and older with low-fat milk options, which
13 was adopted by the NASCENT Food Package in its
14 2017 report.

15 However, if the science has evolved
16 since the publication of the 2015 through 2020
17 DGAs, the WIC Food Package should reflect what
18 new evidence may suggest.

19 For the infants and toddlers life
20 stage, there are two topics that we would like
21 the committee to focus on, they are complementary
22 feeding and dietary supplements.

1 Number one, complementary feeding.
2 WIC participants turn to WIC staff for guidance
3 on a variety of complementary feeding topics and
4 questions. Therefore, we urge to review the
5 appropriateness of baby-led weaning versus
6 traditional weaning practices, provide
7 recommendations on rice consumption, due to
8 arsenic concerns, perform research to support the
9 link between the use of sippy cups and child
10 weight, dental health, and juice/milk
11 consumption, discourage the use of food pouches,
12 provide clear recommendations for beverage intake
13 for infants and children, and provide
14 recommendations for the introduction of allergy-
15 induced foods and the first year of life.

16 Number two, dietary supplements, we
17 urge the DGAs to provide recommendations for
18 vitamin D intake as a means to reinforce its
19 importance. The DGAs provide a standard by which
20 WIC and many other communities measure nutrition
21 adequacy within populations.

22 We commend the committee for their

1 hard work and look forward to the continued
2 participation in the review process to update the
3 DGAs. Thank you.

4 DR. CASAVALE: Commenter 54.

5 DR. EDE: Good morning. My name is
6 Dr. Georgia Ede. I'm a psychiatrist practicing
7 in Massachusetts. Thank you all for your time
8 and expertise to these important questions; for
9 dedicating your time.

10 I'm here because I share your
11 conviction that a healthy body and mind begin
12 first and foremost with a healthy diet. It
13 doesn't make sense to me that one in six Americans
14 should need psychiatric medication.

15 I specialize in nutritional psychiatry
16 so that I can focus on addressing root causes of
17 mental illness rather than simply controlling
18 symptoms with drugs.

19 Most neuropsychiatric conditions share
20 many root cause mechanisms. Nutrient
21 deficiencies, inflammation and oxidation,
22 imbalances in hormone and neural transmitters

1 driven by unstable blood sugar and insulin
2 levels, and cerebral glucose hypometabolism,
3 that's sluggish brain glucose processing,
4 strongly correlated with insulin resistance and a
5 key feature of Alzheimer's, and now often
6 referred to as type 3 diabetes.

7 My strategy for optimizing brain
8 health is straightforward. I focus on eating --
9 getting people to eat foods that best deliver
10 essential nutrients to the brain and exclude
11 foods that place the brain at risk.

12 I'd love to point them proudly to our
13 guidelines, but how can I do that when our
14 guidelines explicitly recommend refined grains,
15 refined carbohydrates, powerful promoters of
16 inflammation, oxidation, and insulin resistance,
17 all root causes of brain dysfunction, when our
18 guidelines explicitly recommend industrially
19 produced seed oils, which tilt our systems too
20 far towards inflammation, when our guidelines
21 explicitly warn against the consumption of red
22 meat, grounded almost exclusively in

1 epidemiologically-based hypotheses, about
2 potential health risks that aren't supported by
3 anthropology, physiology, or human clinical
4 trials.

5 The science is clear that including
6 animal foods is the most reliable way to obtain
7 most micronutrients in their most bioavailable
8 form, including some which are difficult or even
9 impossible to obtain from plant foods.

10 When our guidelines recommend we base
11 our diets on grains and legumes, starchy staples
12 which are low in nutrients and less fortified,
13 high in anti-nutrients, and too high in
14 carbohydrate to be safe for the growing majority
15 of us with insulin resistance.

16 So instead, I recommend a whole foods
17 pre-agricultural diet as a starting point or in
18 cases of compromised insulin brain glucose
19 metabolism, a ketogenic diet. These work very
20 well in clinical practice.

21 The current guidelines cause my
22 patient's families and healthcare teams to worry

1 that that same diet, which is helping their ADHD,
2 bipolar disorder, chronic anxiety, or early
3 Alzheimer's, is somehow dangerous.

4 I don't envy your task. The nutrition
5 literature is vast. It's heavily influence by
6 politics, money, and the strong personal feelings
7 we all have about food.

8 However, I sincerely hope that you
9 will stay intellectually curious, ask fresh
10 questions, challenge assumptions, and acknowledge
11 the limitations of the science rather than
12 presenting it as settled, to allow clinicians and
13 patients the freedom to discover what works best
14 for them within their dietary pattern of choice.

15 Thank you for your work and best of
16 luck. We're all counting on you.

17 DR. CASAVALE: Commenter 55.

18 DR. DAVIS: Hi. My name is Garth
19 Davis. I'm the medical director of Weight
20 Management in Asheville, North Carolina, though
21 I'm not here on part of my city, which would
22 probably ask you to replace the milk

1 recommendation with beer.

2 I am a board-certified weight loss
3 surgeon and medical weight loss doctor. I've
4 been treating obesity for 18 years and I am
5 begging this committee to please put me out of
6 business.

7 I am tired of cutting people open for
8 obesity and rearranging their intestines, and I
9 think it's absolutely ridiculous that it's 2019
10 and we have a group of very smart people in this
11 room, yet, we are asking what we should be
12 eating. It's absolutely crazy.

13 And I'll tell you what, my patients
14 are confused. They're confused by the
15 guidelines, and they're confused by the
16 discussions here, and they're confused by bad
17 science. So I ask you to look at the science
18 very carefully, because I did.

19 I wrote a book saying, we should be
20 eating protein first and we should be on ketosis
21 diets, but you know what happens to these ketosis
22 patients? They end up eventually on my operating

1 table when they fail this diet over and over
2 again. We talk about it all the time.

3 So I eventually went back and said,
4 why am I failing the ketosis diet and why are my
5 patients failing, and I studied this extensively.
6 And I looked around the world, because you know
7 what? You've heard people here tell you that
8 carbs cause diabetes, and yet, when you look at
9 the blue zones, they eat extremely high
10 carbohydrate diets.

11 When you look at the EPIC database,
12 fructose is associated with a decrease in
13 diabetes, and in fact, taking five percent of
14 your saturated fatty acid and changing it to
15 fructose decreases your diabetes risk by 30
16 percent.

17 People say insulin resistance and
18 acting as if carbs cause insulin resistance.
19 That is not true. Animal protein and animal fat
20 causing intramyocellular fat, causing ceramide
21 toxicity, causes insulin resistance.

22 But our patients don't know that, so

1 all they hear is protein carbs, protein carbs, I
2 think it's crazy that I have to go and order a
3 salad, complete with beans and all kinds of
4 things, and the waiter asks me if I would like
5 protein with my salad.

6 Well, how ridiculous is that? There's
7 protein in my salad. The poor teenager who then
8 hears me ask these questions to him, just says,
9 hey, look, I'm working a summer job, but this is
10 what all my patients are dealing with.

11 They don't know whether to go low
12 carb, they don't whether to go low fat, they're
13 petrified of a banana, you could hold up a bank
14 with a piece of bread, people are so scared of
15 carbs.

16 And it's ridiculous when you go to
17 Okinawa and they're eating sweet potato and rice,
18 and I'll tell you that my practice, with my life,
19 has changed over the years. Why I no longer tell
20 people they're not allowed to come in and tell me
21 what macronutrient they're eating, they only tell
22 me what plants they're eating, what foods they're

1 eating.

2 I want a whole food plant-based diet.
3 So I ask the committee to get rid of the
4 recommendation for a protein and rather, focus on
5 whole foods.

6 The questions out there are
7 complicated, but the answer is simple, and I
8 refer to Michael Pollan, eat real foods, mostly
9 plants, not too much. Thank you.

10 DR. CASAVALE: Commenter 56.

11 MS. NICHOLLS: Good morning. I'm Jill
12 Nicholls. I oversee scientific and regulatory
13 affairs at National Dairy Council, and this
14 morning I'd like to share three points for the
15 committee's consideration.

16 First, milk, cheese, and yogurt
17 contribute nutritional value to the food supply.
18 Americans who consume the recommended amounts of
19 dairy foods are better able to meet nutrient
20 recommendations, including for calcium, vitamin
21 D, and potassium.

22 In the 2015 DGA healthy U.S. style

1 pattern for 2000 calories, three servings of
2 low-fat or fat-free dairy foods provide almost 70
3 percent of the calcium, 65 percent of the vitamin
4 D, 29 percent of the protein, 21 percent of the
5 potassium, and more than 20 percent of six other
6 nutrients in the diet, at only about 12 percent
7 of the calories.

8 It's difficult to replace the nutrient
9 package of dairy foods, even with
10 calcium-equivalent foods or beverages. See the
11 2015 DGAC report for more information on that.

12 The value of dairy foods extends to
13 very young children. Cheese and yogurt are
14 important complementary foods that make
15 nutritional contributions and offer unique
16 sensory experiences to the developing older
17 infant.

18 As infants age into toddlers, with the
19 allowance of milk at one year, dairy nutrients
20 continue to support growth and development,
21 including building strong bones.

22 Second, dairy food consumption is

1 linked to multiple health benefits. The 2015 DGA
2 states that dairy foods are linked to better bone
3 health, especially in children and adolescence,
4 it also states that healthy eating patterns
5 containing low-fat or fat-free dairy foods are
6 associated with reduced risk for cardiovascular
7 disease, based on strong evidence, and type-2
8 diabetes, based on moderate evidence.

9 The evidence linking dairy foods
10 consumption and these health outcomes has
11 continued to grow since the 2015 DGAC evidence
12 review.

13 In addition, emerging research on
14 dairy foods indicates it's difficult to predict
15 dairy's health outcomes based simply on their
16 content of single nutrients, like fat.

17 Most studies have found the higher
18 consumption of dairy foods, often regardless of
19 fat content, are neutral or beneficial regarding
20 these health outcomes.

21 Third, dairy foods are appealing,
22 accessible, and affordable. A new study found

1 that milk and dairy foods were the lowest cost to
2 dietary sources of calcium and vitamin D in the
3 U.S. diet, and the second lowest cost sources of
4 potassium, magnesium, and vitamin A.

5 So in addition to contributing
6 essential nutrients, dairy foods are also
7 inexpensive sources of several of those
8 nutrients.

9 So in closing, dairy foods are
10 nutrient-dense, affordable, and responsibly
11 produced. As part of healthy eating patterns,
12 they can help Americans across the lifespan meet
13 nutrient needs and reduce the risks for chronic
14 diseases of major public health concern. Thank
15 you.

16 DR. CASAVALE: Commenter 57.

17 MR. JOHNSON: The word for today is
18 opportunity. Hi, everybody. I'm Guy Johnson
19 from the McCormick Science Institute. So what
20 would you say if I told you there was a magic
21 ingredient, that was natural, affordable, had no
22 fat, sugar, sodium, or calories, and could do the

1 following things, increase vegetable consumption
2 among high school kids at a cafeteria by 15 to 20
3 percent without even telling them about it,
4 decrease the sodium intake by about 1,000
5 milligrams a day among free-living adults, after
6 about five months, partially or fully compensate
7 for the loss of flavor in foods lower in fat and
8 saturated fat by 60 to 65 percent, do the same
9 thing in foods with appreciably less added sugar,
10 and what if I told you there was peer-reviewed
11 science to support all of these what-ifs?

12 Would you be interested? Well, the
13 secret ingredient is flavor. Flavor from spices
14 and herbs in this case. It's no secret, though,
15 that flavor is really the most important factor
16 about why people eat the foods that they do.
17 IFIC has data that goes back decades showing that
18 the number one reason people make the choices
19 they do is the way that foods taste.

20 So the opportunity is simply to think
21 about the fact that flavor is what drives Dietary
22 Guidelines. If they're not implemented, they're

1 just an academic exercise.

2 Now, there's a good start in the
3 current Guidelines, which talk about using spices
4 and herbs instead of salt to add flavor to foods,
5 so why not build on that in this upcoming set of
6 guidelines?

7 You could use it for vegetables, you
8 could use it for foods lower in added fat, or
9 saturated fat, and sugars, you could use it for
10 healthy dietary patterns, and you don't need new
11 systematic reviews to enable you to do this
12 because what you're doing is talking about
13 enabling recommendations that are already there
14 and not creating new ones.

15 CNPP does a great job of helping
16 people figure out how to make healthier choices,
17 but you can give them really powerful tools by
18 just talking about the importance of flavor in
19 your report to the Departments.

20 The opportunity is now. Thank you.

21 DR. CASAVALE: Thank you. I believe
22 commenter 58 is not present, so we'll move on.

1 Commenter 59.

2 DR. BAILES: Thank you. I'm Jamie
3 Bailes. I'm a pediatrician and pediatric
4 endocrinologist from Huntington, West Virginia.
5 I've been in practice for 25 years and I've
6 referred a lot of patients get referred to me
7 because of overweight and obesity in children.

8 In the first five years of my practice
9 I followed the American Academy of Pediatrics
10 guidelines that have placed all these children on
11 low-fat diets, encouraging more fruits and
12 vegetables, encouraging whole grains and more
13 exercise.

14 And one of our pediatric residents did
15 a research project and he looked at 75 patients
16 that I've placed on these low-fat diets and
17 referred them all to dieticians, and what he
18 found was stunning to me.

19 He found that none of them lost
20 weight; not one. And they all gained weight at
21 the same rate and some gained weight even faster.
22 Well, this was confusing. I thought I was doing

1 a pretty good job.

2 And so as a good pediatrician, I was
3 sure that these patients just weren't following
4 my guidelines. And so after some reflection
5 though, and actually doing some research, I came
6 to a different conclusion; perhaps that fat
7 wasn't the problem.

8 And physiologically, it makes sense.
9 Carbohydrates and sugar stimulate insulin
10 secretion and then insulin is the hormone that
11 stimulates fat storage, so 20 years ago, I
12 started a different approach.

13 And I was skeptical, I didn't know if
14 it would work, but the first patient I saw was a
15 10-year-old girl and she lost 14 pounds in two
16 months, 24 pounds at four months, and she
17 continues to lose -- she continued to lose weight
18 until she reached her ideal weight, a total of 50
19 pounds.

20 I have since gone on to see hundreds
21 and hundreds of growing children lose
22 life-changing amounts of weight by restricting

1 sugar and carbohydrate intake.

2 To a tee, the parents tell me, the
3 kids feel better, they have more energy, they're
4 less hungry, and they end up actually eating
5 less.

6 I have seen several growing kids lose
7 over 100 pounds. Talk about life-changing and
8 self-esteem improvements.

9 Now, about a year ago this September,
10 I had a 16-year-old patient referred to me. He
11 was nearly diagnosed with type 2 diabetes. He
12 was 5 foot 2, weighed 265 pounds, his hemoglobin
13 A1C was 11.9. He was autistic, mentally
14 challenged, and his entire family was fairly low
15 I.Q.

16 In 10 minutes, I was able to teach his
17 family what foods to eat and what foods to avoid.
18 In four months, his hemoglobin A1C came down to
19 5.4, without medication. In 12 months, he lost
20 102 pounds and he's maintained his weight loss to
21 this day.

22 Now, I know these Dietary Guidelines

1 are not geared for weight loss, but if we take
2 these guidelines and we turn them upside down,
3 and we increase our fat, and we cutout our
4 carbohydrate intake, we see tremendous weight
5 loss.

6 So our goal should be to prevent
7 obesity and it starts with a more balanced
8 approach. Thank you.

9 DR. CASAVALE: Commenter 60.

10 MR. PHILLIP: Hi. My name is Randy
11 Phillip and I'm speaking for myself. I'm a type
12 2 diabetic. I'm obese, but let me take you on a
13 journey. I went to my doctor, my A1C was 8.4 and
14 the next time I saw him, he said, well, if it
15 doesn't improve, we're going to start you on
16 insulin, which I really didn't want to do.

17 Picked up -- I picked up Jason Fung's
18 book, the Obesity Code, and actually listened to
19 it as I was driving to the Poconos and back. And
20 after that, I started a protocol of ketogenic
21 diet, and intermittent fasting, and my A1C went
22 down to 7.8. Six months later it was 5.7. And

1 then six months later after that, it was 5.7
2 again.

3 It's really helped me. I mean, I look
4 at things like the theory of gravity. It's very
5 well understood and we don't know exactly how --
6 what causes gravity, but we understand it to the
7 point where we can actually describe, actually,
8 how things work in the universe.

9 And when it comes to nutrition, I
10 think we should try to aspire to get that level
11 of understanding. I mean, there are lots of
12 theories that I think we really should go out and
13 start questioning, like the cholesterol lipid
14 hypothesis, the calories in, calories out model.

15 I mean, Jason Fung is -- talks more
16 based on a hormonal model and I think it's a lot
17 more useful to me than doing calories in,
18 calories out, and also, the hormonal model 2
19 compartment model that Jason Fung has talked
20 about, actually explains the problems with the
21 calorie in and calorie out model.

22 What I'd like to do is, I'd like to

1 ask you to really think about all the theories
2 that you're basing the Dietary Guidelines on and
3 really consider, like, what is the current
4 science out there?

5 I mean, what exactly are the current
6 theories and start questioning them. Start
7 really evaluating the science behind it. I mean,
8 look in terms of like, observational studies
9 really provide correlation, but they really don't
10 provide any causation.

11 And I could sit here and list crazy
12 correlations you have that are completely
13 meaningless, like -- excuse me, but that's what
14 I'm concerned about, but thank you for your time
15 and I hope you take this in the appropriate
16 light. Thank you.

17 DR. CASAVALE: Thank you. Commenter
18 61.

19 MR. COX: Good morning. I'm John Cox
20 with the Soyfoods Association of North America.
21 Our member companies suggest that the committee
22 consider recent developments in three areas.

1 Number one, increasing consumer
2 interests in plant-based foods and unique role of
3 soy as a high-quality plant-based source of
4 protein. Number two, data supporting soy milk as
5 the best alternative for cow's milk. And
6 finally, the opportunity to encourage greater
7 consumption of soy protein for its heart health
8 benefits.

9 First, soy and increasing interests in
10 plant-based foods. Evidence is mounting
11 supporting the health and environmental benefits
12 of plant-centric diets. The U.S. Government can
13 join other leading global organizations in
14 encouraging increased consumption of plant-based
15 foods that can positively impact consumer health
16 and the planet.

17 Soy foods play an important role in
18 helping consumers embrace plant-based eating in a
19 way that is nutritious and provides variety. Soy
20 is unique among plant-based proteins because of
21 its protein quality and extensively studied
22 health benefits.

1 Soy protein is a high-quality source
2 of protein comparable in protein quality to milk,
3 meat, and egg protein, making it unique among
4 plant proteins.

5 The versatility of soy contributes
6 lean protein to many nutritious and tasty meals,
7 snacks, and beverages. Our second point is that
8 soy milk is the best alternative for replacing
9 cow's milk. Americans are also increasingly
10 interested in plant-based non-dairy milks.

11 In a 2018 publication in the Journal
12 of Food Science and Technology, Canadian
13 researchers examined the nutritional attributes
14 of a variety of plant milks and concluded that
15 soy milk is the best alternative for replacing
16 cow's milk in the human diet.

17 Almond milk, rice milk, and coconut
18 milk each have about one gram of protein per
19 serving, whereas, soy milk typically has about
20 seven grams.

21 There will always be a place in
22 American grocery stores for cow's milk, but an

1 increasing number of consumers are turning to
2 plant-based milks for a variety of reasons.

3 And finally, soy is heart healthy.

4 There is agreement across numerous studies that
5 soy lowers cholesterol with both intrinsic and
6 extrinsic effects. The studies demonstrate that
7 soy has a positive replacement or extrinsic
8 effect when incorporated in a balanced diet, but
9 soy also has an intrinsic ability to lower
10 cholesterol.

11 The totality of evidence continues to
12 support the inclusion of 25 grams of soy protein
13 a day as part of a diet low in saturated fat and
14 cholesterol to reduce the risk of heart disease.

15 In closing, there's opportunity
16 through the Guidelines to help consumers make
17 better dietary choices that can positively impact
18 personal health and the environment.

19 We hope that the committee will use
20 your important platform to help Americans
21 understand that soy is the preferred source of
22 plant protein. Thank you.

1 DR. CASAVALE: Commenter 62.

2 DR. COOPER: Good morning. Neil
3 Cooper with the Southeast Permanente Medical
4 Group, speaking for myself. First of all, thank
5 you for the important work that you have pursued
6 on behalf of all Americans. I'm a physician and
7 have no financial support from the food or
8 nutrition industry.

9 Today I represent frontline physicians
10 who deal with the epidemic of chronic disease
11 every day. Lifestyle disease accounts for 81
12 percent of hospital admissions, 91 percent of all
13 prescriptions, and 76 percent of all physician
14 visits.

15 Chronic diseases are responsible for
16 70 percent of deaths in the U.S. I'm here today,
17 not to point to the scientific papers that you
18 are already reviewing, I'm here to simply testify
19 that when patients eat more plants and less
20 animals, there's an absolute decrease in
21 morbidity and a frontline win against the chronic
22 disease battle.

1 As a certified lifestyle medicine
2 physician, I have the opportunity to work with
3 patients making dietary transitions to a whole
4 food plant-based diet.

5 I work with a large medical group
6 practice helping institute plant-based wellness
7 challenges for hundreds of providers and support
8 staff.

9 I witness a patient with multiple
10 sclerosis, whose white matter plaques completely
11 resolved after six months on a plant-based diet.
12 I have seen the patient with refractory psoriasis
13 clear their skin completely after 21 days of a
14 whole food plant-based diet.

15 I have seen the patient whose
16 rheumatoid symptoms resolved after instituting a
17 plant-based diet. And the patient whose total
18 cholesterol dropped from 300 to 180 in 21 days of
19 a plant-based diet.

20 After my own myocardial infarction, I
21 converted to a whole food plant-based diet and
22 have personally experienced the benefits,

1 normalization of all inflammatory biomarkers, no
2 medication requirement, and feeling more
3 energetic than ever.

4 Healthcare providers today are better
5 educated about the importance of prescribing a
6 proper dietary pattern, but the plethora of
7 opinions regarding what constitutes a healthy
8 diet is confusing and often contradictory. We
9 need strong guidelines.

10 Using the current science that
11 rigorously review, do not hesitate, do not
12 hesitate, to set the Dietary Guideline bar at a
13 high level, more plant-based, and less processed
14 and animal foods.

15 The argument that vegetarian dietary
16 patterns are not practical for Americans is
17 illogical and paternalistic. No one wants to be
18 sick. When sick patients are given proper
19 information and Dietary Guidelines, the majority
20 make a change.

21 As you review the preponderance of
22 evidence demonstrating that a diet rich in

1 fruits, vegetables, whole grains, pulses, nuts,
2 and seeds, confers population health benefits,
3 please remember that the science translates to
4 successful health outcomes on a one-to-one
5 frontline experience every day. Thank you.

6 DR. CASAVALE: Thank you. I believe
7 commenter 63 is not present, so we'll move on to
8 commenter 64.

9 DR. HALLBERG: Hello. My name is Dr.
10 Sarah Hallberg and I work for Indiana University
11 Health, and Virta Health, and I am pleased to be
12 here today.

13 I have worked in the obesity field for
14 almost 25 years. I want to start out with a
15 really critical issue that as discussed
16 yesterday, which is that a low-carbohydrate diet
17 may potentially be defined as less than 45
18 percent of calories from carbohydrates.

19 Let me be very clear, as one of the
20 foremost experts in this field, that is not a
21 low-carbohydrate diet. The scientific literature
22 strongly suggests that there are no advantage to

1 that degree of carbohydrate restriction in either
2 keeping people well or restoring health.

3 A low-carbohydrate diet is under 30
4 percent of calories from carbohydrates and the
5 best results in metabolic disease and obesity is
6 with a very low carbohydrate intake, which is
7 under 50 grams of carbohydrates a day, or around
8 10 percent of calories.

9 I worked for years as an internal
10 medicine physician in primary care, and I
11 instructed my patients to follow the Dietary
12 Guidelines. My patients brought back their food
13 records, talked of their new exercise programs,
14 and got sicker and more obese.

15 I got more despondent as a provider.
16 I was not helping them at all. Then I spent a
17 year scouring the scientific literature on how I
18 was going to solve the unsolvable problem.

19 I discovered a low-carb eating pattern
20 and the hardest thing for me to do was make peace
21 with the fact that despite my best intentions, I
22 had previously been making my patients worse, not

1 better, with my advice.

2 I founded the obesity program at
3 Indiana University Health Arnett as a
4 low-carbohydrate program almost a decade ago.
5 The results we saw were almost unbelievable.
6 People losing weight, regaining their health,
7 reversing hypertension, fatty liver disease,
8 lipid disorders, and type 2 diabetes.

9 I am now the P.I. on the largest and
10 longest controlled clinical trial ever, to look
11 at very low-carbohydrate nutrition interventions
12 for type 2 diabetes and here are our results.

13 At one year, 60 percent of the 262
14 intervention patients had reversed their
15 diagnosis of type 2 diabetes. At two years, this
16 number remained at 54 percent and our patients
17 have lost an average of 12 percent of their body
18 weight; an average of 30 pounds, while improving
19 their 10-year cardiovascular risk score.

20 Let me repeat, 54 percent of patients
21 with a diagnosis of type 2 diabetes had reversed
22 out of this disease. Compare this with the

1 Women's Health Initiative, which tested the
2 Dietary Guidelines and found that they did
3 nothing to prevent diabetes, or cardiovascular
4 disease risk reduction, and resulted in less than
5 five pounds of weight loss at a year.

6 I think it is very important to review
7 the enormous body of clinical trial evidence for
8 a low-carbohydrate eating pattern in obesity and
9 early metabolic disease.

10 Did you know that a very
11 low-carbohydrate eating pattern does not change
12 plasma-saturated fat, yet, a high-carbohydrate
13 diet increases it?

14 DR. CASAVALE: Thank you for your
15 comments. We need to move on.

16 DR. HALLBERG: This is one of a number
17 of studies that cannot be ignored.

18 DR. CASAVALE: Commenter 65.

19 DR. LEAR: Good morning. I am Albert
20 Lear, director of science and research for the
21 International Bottle Water Association, known as
22 IBWA. IBWA represents all segments of the bottle

1 water industry, including spring, artesian,
2 mineral, sparkling, and purified bottled waters.

3 Founded in 1958, IBWA members
4 companies include domestic and international
5 bottlers, distributors, and suppliers. IBWA
6 represents small, medium, and large companies,
7 including many family-owned businesses.

8 Water, including tap, filtered, and
9 bottled, plays a vital role in supporting
10 nutritional health. IBWA applauds the 2015
11 Dietary Guidelines for recognizing the importance
12 of water in a healthy diet.

13 Inclusion of all beverages, including
14 water, as one of the topics to be considered by
15 the 2020 Dietary Guidelines Advisory Committee
16 will allow the committee to consider relevant
17 research and information on the important
18 contribution water has to healthy dietary
19 patterns among all age groups.

20 Not only is drinking water strongly
21 encouraged, but health experts widely recognize
22 water as a preferred source of hydration that

1 contributes to good health.

2 Scientific research shows that
3 drinking water positively influences overall
4 well-being in a number of healthy bodily
5 functions and organs.

6 The Centers for Disease Prevention and
7 Controls Drinking Water Fact Sheet, recommends
8 the following, adults and youth should consume
9 water every day. And points out that drinking
10 enough water every day is good for overall
11 health, as plain drinking water has zero
12 calories, it can also help with managing body
13 weight and reducing caloric intake when
14 substituted for drinks with calories, like
15 regular soda.

16 Drinking water can prevent
17 dehydration, a condition that can cause unclear
18 thinking, result in mood change, cause your body
19 to overheat, constipation, and kidney stones.

20 Since the 2020 Dietary Guidelines will
21 also focus, for the first time, on children from
22 birth to 24 months, it is important to consider

1 that the development of chronic diseases start at
2 an early age, and so do good drinking habits.

3 Breast milk or infant formula, along
4 with the introduction of water, for children
5 between six and 12 months old is consistent with
6 CDC recommendations for drinks to encourage.

7 In terms of consumer education, it is
8 worth noting that the importance of water in a
9 healthy diet is recognized by governments
10 throughout the world. Currently, 48 countries
11 promote water consumption in their nutrition
12 guidance graphics.

13 However, water is noticeably absent on
14 the most prominent educational tool that the
15 United States Government uses to promote a
16 healthy diet, the MyPlate nutritional guidance
17 graphic.

18 Water, in addition to the presence of
19 --

20 DR. CASAVALE: Thank you for your
21 comments.

22 DR. LEAR: Thank you.

1 DR. CASAVALE: We need to move on.
2 Commenter 66, please.

3 MS. BAUSCH: Hi. Thank you for
4 keeping eyes wide open for the last speakers.
5 I'm Dotsie Bausch, executive director of the
6 non-profit, Switch4Good.

7 As a silver medal winning Olympian, I
8 am deeply concerned about the USDA's
9 profit-driven recommendation that Americans
10 consume dairy foods. And believe me, for 35
11 years of my life, I never thought I would be
12 standing here today.

13 I drank milk, I had ice cream from
14 time to time, I ate yogurt, it all seemed
15 harmless enough to me at the time. I mean, even
16 the United States Olympic Committee told me that
17 I should drink cow's milk to stay strong and
18 healthy, but it just didn't make sense to me.

19 So I began to dig deep and look at the
20 research on a quest to become a better athlete,
21 and I learned how noxious it is to drink the
22 mother's milk from another species, and I also

1 became saddened and a little enraged that the
2 dairy industry continued to use me and my peers
3 as pawns in their marketing schemes for profit.

4 For athletes and non-athletes alike,
5 the destructiveness of dairy is multilayered.
6 Cow's milk proteins, particularly casein, which
7 makes up 80 percent of cow's milk, had been shown
8 to increase mucous production in the gut and in
9 the respiratory tract, impaired breathing,
10 asthma, and chronic runny nose can all be
11 exacerbated by drinking cow's milk.

12 By regularly consuming dairy products
13 as a means of a recovery fuel, an athlete's acute
14 inflammation and oxidative stress can become
15 chronic, leading to prolonged recovery, muscle
16 fatigue, cell damage, and even elevate one's
17 risks of chronic diseases.

18 65 percent of the global population is
19 lactose intolerant, according the National
20 Institute of Health. This number is even higher
21 among non-White populations, such as Asians,
22 Blacks, and Hispanics, which you've all heard

1 here today.

2 Those who cannot effectively digest
3 the lactose in cow's milk, they experience really
4 painful symptoms, like abdominal pain, bloating,
5 gas, nausea, diarrhea, constipation, why on earth
6 does the USDA have a have a food category on the
7 Dietary Guidelines for Americans that makes over
8 half of us sick, uncomfortable, and unable to
9 breathe?

10 For the USDA to continue to put its
11 stamp of approval on a product that is
12 unnecessary and unhealthy and rooted in a highly
13 oppressive system is unconscionable.

14 We have an opportunity today to prove
15 that the U.S. cares about its constituents. Its
16 constituents, by the way, are your mothers, and
17 fathers, and daughters, and sons who have been
18 afflicted by type 2 diabetes and hormonal-based
19 cancers, like prostate, ovarian cancer, and
20 breast cancer, which dairy foods perpetuate.

21 I stand up here today as one of your
22 constituents. I represented the U.S. when I

1 stood on the podium and accepted my Olympic medal
2 and now today I'm asking you to represent me,
3 using your podium, and please remove dairy as a
4 food group from the Dietary Guidelines. Thank
5 you.

6 DR. CASAVALE: Commenter 67.

7 DR. BARNETT: Ted Barnett, Rochester
8 Lifestyle Medicine Institute. I am a physician
9 from Rochester, New York where I have been
10 practicing medicine for over three decades. I'm
11 here to make the case that the next Dietary
12 Guidelines should acknowledge that most of the
13 suffering and cost associated with our current
14 epidemic of chronic disease could be eliminated
15 if we all adopted a whole food plant-based diet.

16 Twenty eight years ago, like any good
17 parents, my wife and I decided to perform an
18 experiment on our children. We adopted a vegan
19 diet. The experiment was a success. All five of
20 us are still thriving, are kids are now young
21 adults enjoying happy and healthy lives without
22 the consumption of dairy, meat, fish, or eggs.

1 I majored in biology at Yale and was
2 a medical student and radiology resident at
3 Tufts. I am board-certified in diagnostic
4 imaging as well as in vascular and interventional
5 radiology, a high-tech field utilizing
6 image-guided procedures, such as angioplasty and
7 stent placement.

8 In addition, two years ago I took the
9 inaugural examination of the American Board of
10 Lifestyle Medicine and became board-certified in
11 a new specialty of lifestyle medicine, which
12 emphasizes, low-tech treatments and holds as one
13 of its principles, the use of a predominantly
14 plant-based diet to help prevent, arrest, and
15 reverse most of the chronic conditions affecting
16 Americans.

17 With board certification in both
18 interventional radiology and lifestyle medicine,
19 I am known as the high-tech doctor with low-tech
20 solutions.

21 We began the non-profit Rochester
22 Lifestyle Medicine Institute for the purpose of

1 treating patients utilizing a plant-based diet
2 and other low-tech environmentally friendly
3 sustainable interventions.

4 Our 15-day outpatient Jumpstart
5 program teaches our patients to eat an oil-free
6 vegan diet without caloric counting, calorie
7 counting, or portion control.

8 It has been given 10 times to 250
9 patients in the Rochester, New York area as well
10 as to 40 patients in Austin, Texas. The results
11 have been remarkable. For patients whose total
12 cholesterol was over 200, there was an average
13 drop of 50 points by day 15, with one patient
14 dropping a total cholesterol from 299 to 149, a
15 drop of 150 points in just two weeks.

16 Last fall, an untreated patient with
17 diabetes and hemoglobin A1C of 13.6, took our
18 jumpstart and within three months, his hemoglobin
19 A1C was 6.0, meaning that he no longer has
20 diabetes.

21 While these are anecdotes, many other
22 physicians using plant-based interventions have

1 document similar results, and peer-reviewed
2 literature backs up these observations.

3 With results achieved so quickly and
4 easily, a whole food plant-based eating pattern
5 should be considered the default diet. According
6 to the executive summary of this committee five
7 years ago, at least 117 million Americans are
8 afflicted with one or more preventable chronic
9 diseases.

10 Given that the leading cause of this
11 epidemic is the food we eat and given that the
12 most effective to prevent and reverse these
13 chronic conditions is a whole food plant-based
14 diet, I urge the committee to make this clear in
15 the next report.

16 Even if the final guidelines do not
17 reflect this conclusion, I urge everyone in this
18 room to remember that a whole food plant-based
19 diet should be their first choice when they or a
20 loved one are afflicted with one of the chronic
21 conditions now plaguing so many Americans.

22 It's effective, it's quick, it's

1 simple, and it's environmentally sustainable.

2 Thank you.

3 DR. CASAVALE: Commenter 68.

4 MS. CHOU: Hello. My name is Sherene
5 Chou. I'm a registered dietician specializing in
6 plant-based diets. I'm here today representing
7 the Plant-Based Foods Association. The
8 Plant-Based Foods Association was founded in 2016
9 to promote the plant-based foods industry. We
10 currently have over 140 members, from small
11 startups to large, established companies.

12 Our members offer consumers a variety
13 of plant-based options. Plant-based foods have a
14 unique role in healthy diets and dietary
15 patterns, which optimize and increase health at
16 all life stages.

17 The Guidelines should support and
18 facilitate Americans' ability to make healthier
19 food choices through public policies that reflect
20 scientific evidence and the evolving food
21 environment.

22 Decades of research have shown that

1 shifting to a plant-based diet provides an array
2 of health benefits and chronic disease prevention
3 and promotes healthy growth at all life stages,
4 including pregnancy and lactation, infancy,
5 childhood, adolescence, older adulthood, and for
6 athletes.

7 People consuming a plant-based diet
8 are at a reduced risk of health conditions,
9 including heart disease, type 2 diabetes,
10 hypertension, certain types of cancer, and
11 obesity, all conditions the committee is
12 examining.

13 The 2015 Dietary Guidelines concludes
14 that the three main patterns to support healthy
15 eating, the healthy vegetarian, Mediterranean,
16 and U.S. patterns were all nutrient dense and
17 plant centric.

18 These patterns emphasize higher
19 consumption of fruits, vegetables, whole grains,
20 legumes, nuts, and seeds, lower in animal foods,
21 lower in sugar sweetened beverages and foods.

22 These plant-centric patterns emerged

1 to help Americans increase intake of nutrients
2 that are under consumed, including vitamins A, E,
3 C, folate, magnesium, potassium, and fiber.

4 A diet rich in plant foods tend to be
5 higher in all these nutrients and has health
6 protective vital chemicals and fiber, which are
7 exclusively found in plants.

8 Also, calcium and vitamin D were noted
9 as nutrients of public concern, with
10 recommendations to increase dairy. However, as
11 you've heard today, 30 to 50 million Americans
12 are lactose intolerant.

13 Fortified plant milks are accessible
14 and nutritious that can provide the same amounts,
15 or sometimes more, calcium and vitamin D as
16 dairy. Plant-based milks support those avoiding
17 dairy due to health, culture, and lifestyle
18 choices.

19 In addition to plant-based milks, many
20 other plant-based foods are excellent sources of
21 calcium.

22 Finally, plant-based sources of

1 protein are nutritionally superior to animal
2 sources for several reasons. Plant-based protein
3 sources such as nuts and seeds, legumes,
4 including all beans, lentils, peas, and soy
5 foods, provide essential amino acids and are
6 excellent sources of both soluble and insoluble
7 fibers.

8 Regular intake of these foods is
9 associated with a lower risk of cardiovascular
10 disease, colon cancer, and type 2 diabetes.

11 Data shows that more Americans are
12 interested in incorporating more plant-based
13 options into their diets. This is a very
14 positive shift the committee should encourage
15 further and recommend more availability of these
16 options in institutions nationwide.

17 As the committee evaluates ways to
18 develop patterns that promote long-term health,
19 it is critical to provide guidance establishing
20 plant-based foods as the foundation for optimal
21 health. Thank you.

22 DR. CASAVALE: Commenter 69.

1 DR. MILLS: Hello. My name is Dr.
2 Milton Mills. I'm here on behalf of Gilead
3 Medical Group. I have no relationship whatsoever
4 to the pharmaceutical company.

5 I work as an internal medicine and
6 critical care physician in the D.C. Metro area,
7 and so I practice both outpatient and
8 hospital-based medicine.

9 I actually came here this morning to
10 call out the racism that is inherent in the U.S.
11 Dietary Guidelines, but then as I got a look at
12 this committee, I suddenly understood why it's
13 such an intractable problem.

14 This committee bears no relationship
15 to the general makeup of the American populace
16 and whoever put it together is clearly still
17 practicing the optics of tokenism.

18 Now, that is not an attack on any of
19 you as individuals, because I'm sure you're all
20 very accomplished and very sincere, but it is
21 outrageous to have a committee that does not
22 reflect the American population.

1 And as non-minority members of this
2 committee, I should think you would be
3 embarrassed looking around this table. But
4 anyway, I want to talk about the health profiles
5 of communities of color, which, as we know, are
6 generally much worse than the general population.

7 And why is that? It has to do with
8 the guidelines coming out of this committee. As
9 co-author on a paper published in 1999 called
10 Racial Bias in the U.S. Dietary Guidelines, Two
11 Parts, I would encourage you to look it up and
12 read it.

13 But I have actually seen illness
14 caused by your guidelines. As people have
15 already mentioned, the vast majority of people of
16 color in this country are intolerant of the
17 lactose that's in milk.

18 Yet, because they think they have to
19 eat this stuff, they go out, eat it, get sick,
20 and think that they have some sort of intestinal
21 problem, but in fact, when I encourage them to
22 stop eating dairy, their problems cleared up.

1 And so it's really outrageous to
2 encourage people to eat foods we know will make
3 them sick, particularly when the number one
4 reason advanced for dairy foods is its calcium
5 content, but African-American women are
6 genetically protected against getting
7 osteoporosis, so we're making them sick for no
8 good reason.

9 People will trash carbs left, right,
10 and center here and never mention glycemic index.
11 Whole food carbs that have their fiber are
12 excellent. The ones that have their fiber
13 removed, those are the problems.

14 It's not carbs; it's the processed
15 carbs. And lastly, there is no scientific or
16 nutritional reason for people to be consuming
17 dairy products. We have no more reason to suck
18 on the teats of a cow than we have to suck on the
19 breast of a postpartum weasel.

20 And we've already talked about the
21 hormone content that creates excess disease, such
22 as prostate cancer, breast cancer, I tell people,

1 as far as the nutrients contained in dairy foods,
2 drinking -- taking -- eating dairy products for
3 their nutrients is equivalent to inhaling
4 cigarette smoke for its oxygen content. It's not
5 a good idea.

6 So I want to encourage you, get the
7 racism out, get the dairy out, please do your
8 job. Thank you.

9 DR. CASAVALE: Commenter 70.

10 MR. O'GREY: My name is Eric O'Grey.
11 I'm a private citizen and I'm here because I
12 believe that this committee can and must resolve
13 the current -- America's current pandemic of
14 obesity and chronic disease.

15 Ten years ago, at age 50, I was 340
16 pounds on 15 different medications, including 200
17 units of insulin a day for type 2 diabetes, and
18 every other thing that you can imagine. I had
19 been morbidly obese for 25 years and I didn't
20 know why, and nobody could tell me why.

21 I kept going from doctor to doctor and
22 I couldn't get a solution. I was eating what

1 everybody else was eating. What was the problem
2 with me?

3 And so one day at a physical, my
4 doctor told me he'd run out of options, and my
5 option, really, unless I wanted 2/3 of my stomach
6 removed, was to purchase a cemetery plot because
7 he didn't know anything else that he could advise
8 me to do.

9 So then I decided to get a second
10 opinion. In my second opinion, I found a doctor
11 and she sat down with me, and she said, I'm going
12 to prescribe for you, two things, I'm going to
13 tell you to get a rescue dog from your local
14 shelter, because you need a little bit of
15 exercise, and I'm also going to prescribe a whole
16 food plant-based diet. And I'd never heard of
17 that before, so it was really interesting.

18 At that point, I had tried every diet
19 ever commercially marketed in the United -- in
20 America, and I was able -- including, I'd cycled
21 on and off Atkins for about 20 years, I was
22 always able to lose a little bit of weight, but

1 then I would put it back on, and I never knew
2 why.

3 And when I failed on each of these
4 diets, I would feel ashamed, and I would just go
5 back and crawl back in my hole, not knowing what
6 to do.

7 Now, on this new diet, I lost 150
8 pounds in 10 months. It felt effortless. I felt
9 better than I'd ever felt in my entire life. And
10 after three weeks, I'd lost 20 pounds, and I went
11 back and I said, it feels like a miracle has
12 happened.

13 My energy is through the roof, my
14 mental clarity is like nothing I've ever
15 experienced, I feel like I've experienced a
16 miracle or emerged from the matrix. What has
17 happened to me?

18 And she said, you're starting to feel
19 normal. Apparently I'd never felt normal before.
20 Now, it is true that humans can feel good and
21 lose weight with either whole food plant-based
22 nutrition or a low-carb, high-fat eating pattern,

1 but I beg you to consider the long-term
2 ramifications of each of these.

3 As has been shown in long-term,
4 large-population studies, going back over 50
5 years to Framingham, high cholesterol is
6 associated with heart disease.

7 Most Americans who consume animal
8 products need statins to control their
9 cholesterol. Several large-scale, long-term
10 studies show that vegan populations have the best
11 longevity and lowest chronic disease, and there
12 is no study suggesting that keto or any other
13 low-carb, high-fat diet improve longevity or
14 reduce heart disease or cancer, as there is with
15 vegan diets.

16 And even if all other things were
17 equal, vegan diets are indisputably better for
18 our environments and do not involve the horrors
19 of factory farming and concentrated animal
20 feeding operations.

21 I beg you to choose life. Thank you
22 for your time.

1 DR. CASAVALE: Commenter 71.

2 DR. FOLEY: Hi. Good afternoon. My
3 name is Dr. Kerry Foley. I'm a retired emergency
4 medicine physician from the Washington, D.C.
5 area, having practiced emergency medicine here
6 for roughly 30 years.

7 The emergency that I concern myself
8 with now is our epidemic of obesity, heart
9 disease, diabetes, and other purely food-borne
10 illnesses that are sickening us and overwhelming
11 our healthcare system.

12 It is no secret that nutrition is not
13 taught to our healthcare providers, which is a
14 glaring error, given that most of our chronic
15 diseases not only are preventable, but often
16 reversible with proper nutrition.

17 Every time we eat we are either
18 feeding disease or we are fueling our health. I
19 became interested in this personally because I
20 watched my mother die from Alzheimer's disease,
21 as her mother had died before her, and I was
22 determined not to have that befall me.

1 So the more I read, the more I studied
2 up, it's the food. There's just no question in
3 my mind about it. It's the food.

4 Our healthcare system is bankrupting
5 us, taking care of what are really preventable
6 diseases. Your task, therefore, I see as a
7 tremendous opportunity and a sacred
8 responsibility to lead us towards wellness.

9 The topic that I want to -- I chose to
10 hone in on today is something others have spoken
11 about, but I believe it bears repeating, and it's
12 dairy.

13 We are the only species that continues
14 to consume dairy after the age of weaning and the
15 dairy that we consume is that of another mammal,
16 which makes zero sense. Sort of gross, if you
17 think about it.

18 We're also culturally acclimated into
19 this reality that we don't -- that we all accept
20 this very weird fact, but when we include dairy
21 into our dietary recommendations, we do so at the
22 expense of the health of our children and

1 ourselves.

2 Milk does not do a body good unless
3 you're a baby cow. That slogan is not science.
4 It's marketing and nothing more.

5 The idea that dairy is necessary for
6 bone health has been debunked and we know that
7 the United States has one of the highest rates of
8 dairy consumption as well as one of the highest
9 rates of osteoporosis and hip fracture in the
10 world.

11 Cows don't make calcium. They get it
12 from eating grass. They get it from the plants,
13 as do we. Because we were never physiologically
14 meant to drink cow's milk, the majority of
15 Americans have some degree of lactose
16 intolerance, as others have covered, and when we
17 dictate that kids eat dairy in school every day,
18 we are making them sick every day. It's really
19 unconscionable.

20 Dairy is laden with saturated fat and
21 cholesterol, which add to the cardiovascular
22 disease burden, which we absolutely know from

1 autopsy studies, starts in childhood.

2 Past Dietary Guidelines have
3 instructed people to decrease their rates --
4 their intake, rather, of saturated fat and
5 cholesterol, but that messaging is purposely
6 confusing to people. We need to clearly tell
7 them what foods to eliminate, such as dairy,
8 eggs, and meat for their optimum health.

9 I implore you to follow the lead of
10 Canada, which earlier this year, chose to --

11 DR. CASAVALE: Thank you for your
12 comments.

13 DR. FOLEY: -- de-emphasize dairy from
14 their dietary guidelines.

15 DR. CASAVALE: Commenter 72, please.

16 MS. LUTZ: Hi. My name is Jennifer
17 Lutz. I'm the director of the True Health
18 Initiative. We are a non-profit organization
19 that is a coalition of health professionals
20 dedicated to using the evidence-based practices
21 of lifestyle as medicine to eradicate the
22 preventable chronic disease that is currently

1 severely harming our society.

2 As such, I'm here today to advise the
3 committee to recommend the foods and dietary
4 patterns that are best for human health, both
5 directly and indirectly, via the environmental
6 effects of producing these foods.

7 Specifically, we believe this should
8 extend to protein foods. We call upon the
9 Dietary Guidelines for Americans Advisory
10 Committee to do away with the category of protein
11 foods all together and in its place, we advise
12 this committee to recommend the specific foods
13 that are best for human health, both directly and
14 indirectly.

15 This approach would emphasize nuts,
16 seeds, legumes, whole grains, and vegetables,
17 falling in line with the 2015 DGA recommendations
18 that Americans eat more vegetables and less
19 animal products.

20 The last Dietary Guidelines moved
21 strongly in the right direct by focusing more on
22 dietary patters, but public misconceptions about

1 protein often steer people towards unhealthy food
2 choices, making this issue timely and important
3 for the 2020 Dietary Guidelines.

4 Americans are not subject to protein
5 deficiency, with the rare exception. In fact,
6 more Americans eat too much protein than too
7 little, mostly coming from animal products and
8 often highly processed animal products that
9 contributed to disease.

10 A variety of plant foods can supply
11 all essential amino acids. They do not need to
12 be eaten in any specific time frame and they
13 provide the nutrients that most Americans are
14 deficient in, potassium, fiber, calcium, at the
15 same time, they have minimal amounts of the
16 nutrients that the Guidelines recommend be
17 limited, sodium, saturated fats, and added
18 sugars.

19 We do not have a protein deficiency
20 problem in the United States. We have a
21 vegetable deficiency problem. We have a fiber
22 and vitamin deficiency problem and we have a food

1 system sustainability deficiency problem.

2 This is threatening the health of the
3 public that relies on these food systems and
4 clarifying the confusion around protein by
5 recommending the specific foods that are both
6 sources of protein and health promoting would
7 help solve all of these issues. Thank you.

8 DR. CASAVALE: Commenter 73.

9 MS. JOHNSON: Good afternoon. My name
10 is Jillian Johnson and I am here on behalf of
11 countless parents asking that the DGA committee
12 take our concerns into consideration as they
13 prepare for the infant nutrition guidelines.

14 While it may be rare, it's not
15 impossible for a newborn to die from dehydration.
16 I would know, as I lost my first child from
17 dehydration while attempting to exclusively
18 breast feed.

19 As soon as I found out I was pregnant,
20 I took all of the hospital parenting classes. I
21 thought I knew everything I needed to know as I
22 prepared for the arrival of my first child. I

1 was so wrong.

2 Landon would not have been home from
3 the hospital for even 12 hours before I found him
4 not breathing. He was so dehydrated that he had
5 to be given fluids through his shins because they
6 couldn't get a vein anywhere else in his tiny
7 body.

8 I sat at the hospital for the first 24
9 hours of him being on life support running
10 everything through my head. I was exhausted
11 because I had spent the last three days trying to
12 soothe a baby that was crying out from the pain
13 of starvation.

14 He had to room in with me because I
15 had him at a baby-friendly hospital and there was
16 no nursery, hence, why I was exhausted. As I met
17 with the head of the NICU, he told me that he
18 believed Landon went into cardiac arrest due to
19 dehydration.

20 He, himself, did not understand why
21 hospitals pushed exclusive breast feeding so
22 hard. He said, yes, breast is best if the baby

1 is actually fed, but please, follow with a bottle
2 if you're in doubt.

3 I couldn't understand what he was
4 telling me. How does a baby that is being breast
5 fed become dehydrated? How is a new mom to know
6 her child is in danger if she is taught by
7 everyone that the constant crying and nursing is
8 normal?

9 They told me Landon's cardiac arrest
10 led to his brain stem being damaged and
11 ultimately his death after two weeks on life
12 support.

13 Just like that, my beautiful baby who
14 was perfectly healthy when he was born, was gone.
15 It's been more than seven years and I still find
16 it to be ludicrous. How foolish do you think it
17 sounds when people ask me how he died? He
18 starved to death because I didn't give him a
19 bottle.

20 My body failed me and my milk didn't
21 come in until he was on life support. Not a day
22 goes by that I don't have to live with the

1 thought that my son's death was a 1,000 percent
2 preventable and it still happens every day.

3 I was not given the tools I needed
4 upfront, the education that was provided at the
5 hospital and in all of the literature pushed
6 breast is best and formula is poison, and I was
7 brainwashed not to give him formula.

8 The classes didn't teach you the what
9 ifs, what if my milk doesn't come in? What if I
10 don't get enough? What are the signs that
11 something's wrong? I was setup to fail from day
12 one. Most people are fortunate enough to not
13 have their situations end as horribly as mine,
14 but no child should ever come that close.

15 No prescription should have to be
16 written for a baby to be supplemented. Hospital
17 feeding classes should be required to educate on
18 supplementation whether it's donor milk or
19 formula, and the risks of not supplementing
20 should be very obvious and put in front of new
21 parents.

22 My son died and that's why I'm here,

1 because this is still happening to other babies,
2 so on behalf of all the parents out there, I'm
3 asking that you guys please put into place,
4 standard practices and patient education
5 guidelines so that we can protect newborns from
6 these 100 percent preventable negative outcomes.
7 Thank you.

8 DR. CASAVALE: Commenter 74.

9 DR. HAZBUN: Thank you for sharing
10 that. My name is Tamara Hazbun. I'm a family
11 physician and obesity medicine physician,
12 practicing in Lafayette, Indiana.

13 Thank you so much for allowing me to
14 speak to you today. I'm here to request that a
15 low-carbohydrate diet be included as an
16 acceptable diet in the 2020 U.S. Dietary
17 Guidelines.

18 I've been practicing medicine for 21
19 years. My family medicine practice consisted of
20 wonderful patients, many, many of whom had
21 metabolic syndrome and obesity.

22 I managed them the way I was trained,

1 with medicines and instructing them to follow a
2 low-fat diet. Unfortunately, over time, many of
3 these patients became sicker and I found myself
4 chasing their blood sugars, and lipids, and blood
5 pressures with more and more medicines.

6 In 2013, I began learning about
7 low-carbohydrate diets as a way of improving
8 metabolic health. I was skeptical at first, but
9 after reviewing the literature, I gradually
10 integrated low carbohydrate into my practice.

11 My patients started to get healthier.
12 I had such phenomenal success, that in 2016, I
13 completely switched the focus of my practice to
14 obesity medicine and metabolic health.

15 In my obesity clinic, I teach my
16 patients how to eat a low-carbohydrate, moderate
17 protein, high-fat diet. For adults, we start
18 with 50 to 75 grams of carbohydrates per day, and
19 then often reduce to 30 grams a day.

20 For kids, we shoot for 60 grams of
21 carbs per day. Initially, when I explain a
22 low-carb diet to my patients, they are

1 flabbergasted. They cannot believe that a doctor
2 is telling them to increase their dietary fat,
3 because they have been told for their whole lives
4 that in order to be healthy, they must eat low
5 fat.

6 As my patients progress through my
7 program, learning to eat low-carb, high-fat, I'm
8 often able to remove medications, including those
9 for blood sugar and blood pressure. I also see
10 their lipids improve.

11 I have so many stories of patients who
12 have been successful in my program. Those who've
13 gotten off insulin, patients who've lost 100
14 pounds, but I'm going to close with a story about
15 a teenager named Chad, because really, we need to
16 change the guidelines so the kids have a healthy
17 future.

18 Sixteen-year-old Chad came to my
19 clinic with a percent body fat of 32, which is
20 considered obese. He was a high school swimmer
21 and worked out two hours per day year round. He
22 was frustrated because he had obesity and

1 pre-diabetes, even though he was an athlete.

2 Over the next six months, my team
3 taught him how to reduce his carbs, eat moderate
4 protein, and increase his dietary fat. His blood
5 sugars improved and so did his weight. We've got
6 to include low carb in the Dietary Guidelines.
7 It's imperative for the --

8 DR. CASAVALE: Thank you for your
9 comments.

10 DR. HAZBUN: -- health of our country
11 and especially --

12 DR. CASAVALE: Thank you for your
13 comments.

14 DR. HAZBUN: -- for the health of our
15 children.

16 DR. CASAVALE: Speaker 75. Thank you.

17 MS. NGUYEN: Good afternoon. I'm
18 Haiuyen Nguyen here on behalf of the Council for
19 Responsible Nutrition. First, we commend the
20 committee and the USDA, and HHS staff, for
21 implementing what has become the most transparent
22 Dietary Guidelines process yet. With limited

1 time and resources, you have done a tremendous
2 job.

3 The Dietary Guidelines for Americans
4 is a critical effort to improve and promote
5 public health through nutrition. While the focus
6 is on healthy dietary patterns that include a
7 wide array of foods, it is also prudent to
8 consider the potential contribution dietary
9 supplements can make to these healthy dietary
10 patterns in targeted populations and more
11 broadly.

12 Regarding birth to 24 months, and
13 pregnancy and lactation life stages, we recommend
14 the advisory committee consider the variety of
15 infant feeding options, taking into account
16 practicality and flexibility, with a goal of
17 supporting healthy mothers and healthy babies.

18 Prenatal multivitamins are widely
19 recommended to women before and during pregnancy,
20 and often postpartum for breast-feeding women, to
21 ensure adequate intake of nutrients.

22 A recent study suggests that pregnant

1 women in the U.S. do not meet recommendations for
2 key essential nutrients and that dietary
3 supplements reduce the risk of inadequacy, thus,
4 dietary patterns recommended for this life stage
5 should highlight opportunities for
6 supplementation.

7 More broadly, in their scientific
8 reports, previous advisory committees have
9 consistently observed data demonstrating that the
10 majority of the U.S. population do not consume
11 enough vegetables, fruits, whole grains, and
12 dairy to meet nutrient needs, and thus, have
13 nutrient shortfalls.

14 In fact, some shortfalls have
15 significant impact and present public health
16 concern. These include vitamin D, calcium,
17 dietary fiber, and potassium.

18 We recommend the advisory committee
19 consider novel recommendations, including
20 supplementation, to help Americans meet nutrient
21 requirements without exceeding energy needs.

22 Healthy dietary patterns can consist

1 of a variety of nutrient-dense foods, as well as
2 nutrient-dense supplements. Consumers understand
3 that dietary supplements are just one part of a
4 healthy lifestyle, reporting that they use
5 dietary supplements to support overall health and
6 wellness, and to fill nutrient gaps.

7 In addition, data demonstrates that
8 supplement users are more likely than
9 non-supplement users to engage in health
10 promoting habits, such as eating healthy diet and
11 incorporating regular physical activity.

12 Therefore, if current data still
13 points to underconsumption of important nutrients
14 by the U.S. population, appropriate
15 supplementation may be warranted to correct these
16 nutrient shortfalls when nutrient adequacy is not
17 met through diet.

18 DR. CASAVALE: Thank you for your
19 comments.

20 MS. NGUYEN: Thank you.

21 DR. CASAVALE: Commenter 76, please.

22 DR. DODDS: Good morning. My name is

1 Dr. Michael Dodds and I'm oral health lead
2 scientist at Mars Wrigley, and an adjunct
3 professor of dentistry.

4 Mars Wrigley had provided written
5 comments to the Dietary Guidelines Advisory
6 Committee and I thank the USDA and HHS for the
7 opportunity to provide the highlights in this
8 oral testimony.

9 Our comments address the importance of
10 strong teeth and good oral health to consuming a
11 high-quality diet throughout all life stages and
12 the importance of incorporating sugar-free gum, a
13 food, as part of a daily dietary pattern.

14 The development of dental caries, a
15 non-communicable, nutrition-related, chronic
16 health condition is almost entirely preventable
17 through good dietary habits and oral preventive
18 practices.

19 The 2005 and 2010 Dietary Guidelines
20 for Americans recognized the importance of oral
21 health prevention by recommending brushing,
22 flossing, and drinking fluoridated water.

1 Mars requests that the 2020 to 2025
2 Dietary Guidelines recommend individuals of all
3 ages should follow a daily oral hygiene routine
4 which includes brushing their teeth with
5 fluorinated toothpaste, cleaning between their
6 teeth where possible, chewing sugar-free gum for
7 20 minutes after meals, or snacks if possible,
8 drinking fluoridated water where available, and
9 limiting intake frequency of dietary fermentable
10 carbohydrates.

11 Oral health preventive practices have
12 significant dietary benefits for all Americans.
13 Caries is the most prevalent chronic disease,
14 affecting both children and adults in the U.S.,
15 and is associated with a multitude of other
16 health and social comorbidities.

17 While the presence of bacteria in the
18 mouth is universal, inadequate oral hygiene can
19 allow dental plaque to grow, often in
20 hard-to-reach sites, where decay occurs.

21 If not removed, the bacteria and
22 dental plaque can metabolize dietary

1 carbohydrates, producing acids that lead to
2 decay.

3 The frequency of intake of fermentable
4 carbohydrates during the day can be more
5 important than the total amount of sugars
6 consumed for caries development.

7 Eating habits are changing, with the
8 individuals snacking throughout the day, often
9 while on the go, at a high frequency of
10 consumption, fermentable carbohydrates, even in
11 healthy snacks, such as fruits, fruit juices, and
12 energy bars can cause a pH of the plaque to drop,
13 putting teeth at risk for decay.

14 Routine oral health preventive
15 practices can reduce the plaque and decay.

16 Saliva is a mouth's natural healing force, which
17 neutralizes acids and provides minerals to repair
18 and reverse early decay.

19 Extensive research has shown
20 sugar-free gum after meals can stimulate saliva
21 to neutralize plaque acids, thus, reducing decay.

22 The European Union and Canada have

1 approved health claims for chewing sugar-free gum
2 and dental associations worldwide, including the
3 American Dental Association, have endorsed the
4 role of gum in reducing dental decay.

5 I thank you for the opportunity to
6 provide these comments.

7 DR. CASAVALE: Commenter 77.

8 DR. SODICOFF: Good afternoon. My
9 name is Eric Sodicoff. I would like to thank the
10 members of the committee for allowing me to speak
11 before you today and in doing this important
12 work.

13 I'm a medical doctor and internist
14 obesity specialist, and sometimes a hospitalist
15 in Philadelphia. I have become an advocate of
16 low-carb diets. I traveled here because I would
17 like the DGA committee to give serious
18 consideration to the evidence base supporting the
19 utility of low-carb diets and preventing and
20 reversing metabolic disease.

21 During my 20 years of practice, there
22 has been a dramatic rise in type 2 diabetes and

1 obesity, yet, the DGA has done nothing to arrest
2 it, and I suspect it might actually be
3 contributing to the epidemic.

4 I practiced conventional style
5 medicine for 15 years of my early career, I
6 rapidly churned through patients while writing a
7 lot of drug prescriptions, which, truth be told,
8 didn't do anything but mask the symptoms of
9 chronic disease.

10 Then five years ago, feeling rather
11 burnt out, I read a startling book by two
12 journalists that introduced me to the scientific
13 literature supporting low-carbohydrate diet to
14 promote human nutrition.

15 A body of literature that's still not
16 found in the DGA. Now, in defiance of the DGA
17 patterns, I teach low-carb diets to my patients,
18 in whom I see marked, quantifiable improvements
19 in multiple health factors, both objective and
20 subjective, while using less medicine, and I
21 simply love my job now.

22 Roughly 3/4 of the patients who I find

1 on my hospital list every morning are there with
2 preventable diseases, such as diabetic kidney
3 infections, dental disease, cholecystitis,
4 diverticulitis, kidney failure from diabetes and
5 hypertension, coronary disease, arrhythmia, and
6 most troublesome, suffocation from excess body
7 fat, among many others.

8 All three of the USDA HHS Dietary
9 Guidelines call for 55 percent of their -- of
10 fattening non-essential carbohydrates. It is
11 crucial that we get the DGA right this time and
12 because its influence trickles down throughout
13 society.

14 Several years ago, I attended an
15 obesity conference here in Washington, D.C. A
16 room full of obesity specialists were in a hotel
17 ballroom and the speaker asks, who here uses the
18 USDA MyPlate to help your patients lose weight?
19 The room broke out into spontaneous laughter.

20 This is not a laughing matter. We do
21 need to get this right. We do need to command
22 respect from the Dietary Guidelines. Thank you

1 very much.

2 DR. CASAVALE: Commenter 78.

3 DR. KANE: Hi. Thank you. I think
4 I'm batting cleanup here, so thanks for your
5 patience and your ear service. I'm the chief of
6 section for obesity medicine at the Zucker School
7 of Medicine at Hofstra/Northwell in New York, as
8 well as an obesity educator.

9 I direct our obesity medicine
10 fellowship and play an active role on multiple
11 committees of the American Board of Obesity
12 Medicine.

13 Obesity continues to represent a
14 critical medical and social problem in the United
15 States. Over 70 percent of our population suffer
16 from overweight obesity or normal weight obesity.
17 It is associated with increased diabetes,
18 vascular disease, and at least 13 types of
19 cancer.

20 No organ system is spared when it
21 comes to the ravages of this disease. While the
22 origins and perpetuation of our obesity epidemic

1 stem from a combination of genetic, behavioral,
2 and environmental factors, the single greatest
3 modifiable risk factor for obesity and
4 comorbidities is diet.

5 I have personally treated thousands of
6 patients struggling with obesity and there is
7 great confusion about what to eat. In fact, the
8 confusion persists among healthcare providers as
9 well.

10 The lay press and for-profit
11 industries have helped perpetuate this confusion.
12 Today, I would like to address one major concept
13 that I see often, an overemphasis on
14 macronutrients in determining healthy eating
15 strategies.

16 This would suggest that all
17 carbohydrates are the same, though high fructose
18 corn syrup is obesogenic, whereas the
19 undigestible resistant starch and fiber in beans
20 hardly adds at all to caloric balance and
21 improves insulin sensitivity.

22 It suggests that all proteins are

1 considered the same, when we know the diotine
2 animal sources of protein are linked with
3 increased obesity, diabetes, hyperlipidemia, and
4 cellular aging, whereas, diets based on whole
5 foods and plant-based sources of proteins
6 potentially prevent or reverse these very issues.

7 It suggests that all fats are the same
8 and we know that diets high in saturated fat
9 increase blood lipid levels and consumption of
10 nuts, mainly made up of fat, lower lipid levels.

11 Rather than relying on fixed
12 macronutrient distributions, I recommend the
13 committee focus on consumption of whole unrefined
14 foods. A recent NIH study suggested that a diet
15 consisting of highly-processed foods increases
16 overeating and weight gain.

17 In consuming whole foods, on the other
18 hand, we can avoid empty calories, added sugars,
19 and fats. On the positive side, a whole foods
20 based diet would be higher in fiber and prebiotic
21 foods, associated with reduction of cancer,
22 diabetes, and vascular disease.

1 It would augment the consumption of
2 low-energy density foods, low-energy density
3 diets have been associated with a reduction in
4 obesity, and it could maximize disease-fighting
5 micronutrient and phytochemical consumption.

6 Finally, in consuming a whole foods
7 based diet, we could obsess less about specific
8 macronutrients and I could allay patient's
9 ever-growing fear of not getting enough dietary
10 protein, as their fitness magazine suggests.

11 For instance, 2,000 calories of brown
12 rice and broccoli, neither one would be
13 considered protein in common vernacular, and not
14 that I make this exclusive recommendation,
15 actually have more than ample amounts of protein
16 in both of them for health maintenance. Thank
17 you for your time.

18 DR. CASAVALE: Thank you.

19 MS. DE JESUS: Thank you all for the
20 comments. This will conclude our oral comment
21 session and we'll have a few closing remarks.

22 CHAIR SCHNEEMAN: As the Chair of the

1 DGA Committee, I do want to extend my
2 appreciation to all of you for being with us for
3 the -- most of you were here yesterday, but being
4 with us this morning and providing your comments.

5 The committee takes very seriously,
6 the role of the public in providing input, either
7 through these oral comments or through the
8 written comments, and I remind you all that the
9 comment -- the written comment period is open for
10 the period that the DGAC is meeting.

11 So we, once again, encourage you to
12 use that route as well, but on behalf of the
13 committee, we really appreciate your being here,
14 sticking to the time, we appreciate the staff
15 managing this in a way that we were able to hear
16 so many of you, even more than we had originally
17 thought we would be able to hear in this public
18 hearing, so thank you.

19 DR. STOODY: Yes. Thank you. And we
20 did end up -- we pushed it a little bit so we
21 could get everybody who actually came today, who
22 had registered to provide oral comments, both

1 those who were confirmed, as well as those who
2 were on standby, so thank you for your comments.

3 So just to quickly wrap-up, this
4 concludes Meeting 2 of the 2020 committee. Here
5 are the dates for the remaining meetings. As
6 we've noted before, two of the next three
7 meetings will be in Washington, D.C., the fourth
8 meeting will be held in Houston, Texas.

9 In addition to this meeting, Meeting
10 4 will include an opportunity for oral comments
11 to the committee from the public, and
12 registration for each meeting will be announced
13 about one month prior to the meeting at
14 Dietaryguidelines.gov and through our listserv.

15 In the meantime, we encourage you to
16 follow along at Dietaryguidelines.gov. We have
17 gotten some questions if the slides from the
18 yesterday are available. The slides are not yet
19 available, however, the committee walked through
20 their protocols, so the analytic frameworks, the
21 inclusion and exclusion criteria, the
22 definitions, the analytic plans, all of that is

1 available through the protocols at
2 Dietaryguidelines.gov.

3 So if you go to Dietaryguidelines.gov,
4 go to work underway in the review of the science,
5 there's a list of topics and questions, and
6 through each of the questions, you can see the
7 details on the proposed approach for examining
8 the evidence by the committee.

9 We encourage you, as I said, to stay
10 engaged. We do make announcements through our
11 website, and also through our listserv, and
12 really, our listserv is the way to stay up to
13 date.

14 If you haven't signed up for our
15 listserv, if you go to Dietaryguidelines.gov,
16 scroll down all the way to the bottom of the
17 page, there's a link to stay updated, and that's
18 how you can sign up for our listserv.

19 And then we do want to take a minute,
20 of course, to say thank you to the committee, but
21 also, to say thank you to the staff supporting
22 this process.

1 There is a team of over 60 staff who
2 support this process in different ways, from the
3 Department of Agriculture and the Department of
4 Health and Human Services.

5 At USDA, most of the staff are from
6 the Center for Nutrition Policy and Promotion,
7 which is led by Jackie Haven, but we also have
8 support from the Food and Nutrition Service, and
9 Agricultural Research Service, from HHS, staff
10 are primarily from the Office of Disease
11 Prevention and Health Promotion, which is led by
12 Dr. Don Wright, but we also have support from the
13 Centers for Disease Control and Prevention, the
14 Food and Drug Administration, and the National
15 Institutes of Health.

16 The staff leading the process include
17 Dr. Rick Olson and Janet de Jesus from ODPHP, and
18 Colette Rihane and me from CNPP.

19 Thank you to all of the federal
20 liaisons, to the NESR Staff, which is led by Dr.
21 Julie Obbagy. To the staff who will be
22 conducting peer review of the NESR systematic

1 reviews, which will be coordinated by Dr. David
2 Klurfeld.

3 The Data Analysis and Food Pattern
4 Modeling staff, led by Dr. TusaRebecca Pannucci,
5 the dietaryguidelines.gov team, which is led by
6 Elizabeth Rahavi and Stephenie Fu. The public
7 comment team, which is led by Kristin Koegel, our
8 staff supporting stakeholder relations and
9 outreach, which is led by Jessica Larson and
10 Stephenie Fu, and our staff who made this meeting
11 happen, which was read -- led by Jean Altman,
12 Susan Cole, and Colette Rihane.

13 So thank you for helping to make this
14 a transparent, inclusive, and science-driven
15 process.

16 So with that, we will adjourn. We
17 hope to see you at our next meeting on October
18 24th and 25th here in Washington, D.C. Thank
19 you.

20 (Whereupon, the meeting in the
21 above-entitled matter was concluded at 12:37
22 p.m.)

A		
a.m 1:10 6:2 159:1,2	accounts 208:11	87:11 96:14 166:18
A1C 93:22 201:13,18	acculturation 96:16	177:12 186:16
202:13,21 223:17,19	accurately 160:4	adds 260:20
AAP 60:3 112:21	achievable 58:21	adequacy 185:21
abdominal 129:19	111:16	252:16
220:4	achieve 27:19 59:20	adequate 57:15 104:3
abilities 143:15	78:14 79:1,16	113:6 163:9 250:21
ability 46:5 52:7 61:8	achieved 108:1 224:3	ADHA 149:5 151:12
92:7 105:17 107:19	achievements 180:6	ADHD 189:1
119:5 140:17 207:9	achieving 133:4 175:12	adherence 78:19 79:17
225:18	acid 124:18 180:1,4	81:1 160:22
abject 119:14	181:18 183:12 191:14	adjourn 5:5 267:16
able 11:20 12:2,4 17:11	acids 56:8 112:22 174:2	adjunct 75:1 253:2
22:17 38:19 91:21	174:5 183:13 228:5	Administration 266:14
143:17 193:19 201:16	241:11 255:1,17,21	Administrator 7:7
233:20,22 248:8	acknowledge 189:10	admissions 118:14
263:15,17	221:12	208:12
above-entitled 158:22	acknowledgment	admonished 102:3
267:21	121:18	adolescence 57:1
absent 217:13	acne 129:10	195:3 226:5
Abshire 3:11 131:17,18	act 18:15 77:15	adolescents 80:9
absolute 208:20	acting 5:2 6:13 7:8	adopt 41:21 86:2
absolutely 190:9,12	191:18	100:21
238:22	active 58:15 259:10	adopted 85:21 167:14
absorbable 57:13	activity 23:19 24:3	184:13 221:15,18
absorbed 57:7	252:11	adopting 149:9
absorption 115:8	acute 219:13	adoption 165:9
abundant 167:19	Adams 2:15 92:19,20	adult 70:11 162:8,18
academia 164:18	adaptable 109:11	164:6
academic 117:1 198:1	add 48:10 85:10 198:4	adulterated 176:3
Academies 100:14,20	238:21	adulthood 50:19 57:2
102:4	added 18:22 43:9 44:20	226:5
Academies' 25:16	68:22 90:3 145:21	adults 17:11,16,20 44:2
Academy 4:2 26:7 73:6	197:9 198:8 241:17	44:22 47:15 59:19
81:17 112:15 119:10	261:18	67:10 76:1 97:18
142:11 143:1 144:21	addict 170:21	113:8 115:5 134:13
148:7 199:9	addicted 94:13	136:5 137:13 138:4,6
Academy's 145:7	addiction 170:20	146:16 148:13 162:14
accept 237:19	addition 26:10 36:1	162:20 163:13,14
acceptable 246:16	45:4 73:12 127:13	176:7 197:5 216:8
acceptance 82:20	129:11 148:10 195:13	221:21 247:17 254:14
accepted 28:18 82:1	196:5 217:18 222:8	advanced 231:4
221:1	227:19 252:7 264:9	advances 166:9
accepting 51:7	additional 87:12 115:15	advantage 211:22
access 19:5 64:5 75:11	147:14 152:5	adverse 138:7
88:21 89:10,14 111:2	Additionally 31:3,15	advice 16:9 38:2,3,10
139:4,12 142:7	34:6 106:16 132:11	39:11 43:8 44:21
accessibility 174:17	181:14	45:16 100:6 126:9,11
accessible 17:5 31:4	additions 80:14	158:5 213:1
165:1,21 195:22	address 15:2 43:17	advise 54:7 96:17
227:13	48:17 81:9,20 89:14	100:21 233:7 240:2
acclimated 237:18	126:5 160:20 164:8	240:11
accommodated 120:13	166:10 181:10 183:10	advised 76:15 118:7
accompanied 116:18	253:9 260:12	146:20
accomplished 229:20	addressed 24:17 25:2	advising 87:6
account 183:1 250:15	124:9 130:7 163:1	advisory 1:1,8 6:5 7:5
accountable 52:10	addresses 97:5	7:13 8:10,12 9:14
	addressing 19:11 68:13	56:3 87:17 88:14 89:2
		89:17 143:9 144:5
		164:8 165:18 172:20
		175:9 177:11,15
		215:15 240:9 250:14
		251:8,18 253:5
		advocacy 43:6 62:11
		175:15 182:10
		advocate 15:6 90:11
		115:22 131:9 256:15
		advocated 176:1
		advocating 170:8
		affairs 20:8 55:14
		171:20 193:13
		affect 176:7
		affiliate 33:7
		affiliates 30:7
		affiliation 12:16
		afflicted 220:18 224:8
		224:20
		afflicting 100:11
		affordable 58:22
		111:16 139:4 165:22
		167:4,18 195:22
		196:10,21
		African 129:21
		African-American
		231:5
		African-Americans
		142:1
		Africans 142:2
		afternoon 236:2 242:9
		249:17 256:8
		afterthought 177:3
		age 48:2 66:7 82:4
		107:16 110:10 172:14
		179:22 182:22 194:18
		215:19 217:2 232:15
		237:14
		aged 38:2 56:16 115:4
		163:18
		agencies 18:12 162:8
		182:12
		ages 107:10 146:15
		150:3 151:14 168:22
		172:3 254:3
		aging 162:16 261:4
		ago 22:13 35:17 93:3
		103:9 126:1 152:11
		153:2 156:18 157:16
		200:11 201:9 213:4
		221:16 222:8 224:7
		232:15 257:10 258:14
		agree 134:16
		agreeing 10:16
		agreement 207:4
		agricultural 81:16
		131:2 266:9
		agriculture 1:9 5:3 49:7

- 130:9,17 168:3 266:3
AI 113:9
AICR 23:18,22 24:7
 26:10
ailing 51:20
aimed 85:15
aiming 76:16
alarm 93:4
Albert 2:2 214:19
alcohol 25:1,3 44:1
 70:21 147:22
alcoholic 148:17
Alex 155:8
ALEXANDRA 2:3
align 66:3,14
alignment 67:14 156:9
alike 219:4
Alison 2:4 105:9
all-cause 28:21 29:3
 180:19 181:8
allay 262:8
allergen 54:13,14,15,17
allergic 158:3
allergies 48:9 129:11
 183:8 184:1
allergy 183:19
allergy- 185:14
allocation 110:20
allotted 12:19 145:3
 146:2
allow 19:6 35:5 64:10
 121:1 189:12 215:16
 254:19
allowance 194:19
allowed 1:10 91:1
 192:20
allowing 37:6 84:2
 107:18 246:13 256:10
allows 167:3
Almond 173:17 206:17
almonds 122:10
alongside 144:7
alteration 154:8
alternative 41:8,18
 73:15 205:5 206:8,15
alternatives 47:1
 172:22 173:2,7
Altman 267:11
Alzheimer's 159:22
 187:5 189:3 236:20
ambassadors 140:10
 140:16
AMDR 59:19
America 3:7 11:1 52:9
 71:21 74:13 77:12
 142:11 162:19 204:20
 233:20
America's 112:8 134:5
 232:13
American 2:7,9 3:7,9
 3:13 4:9 23:16 26:6,7
 26:8 28:16 30:5 33:6
 38:20 45:12,13 50:20
 51:11 55:14 73:4,5
 85:1 91:16 92:4 95:7
 105:15 107:18 108:1
 112:7,15 113:5
 120:18,21 121:9,21
 125:16 129:1 148:4,6
 149:4 152:4 160:2
 180:2 199:9 206:22
 222:9 229:15,22
 256:3 259:11
American's 156:6,22
 174:10
Americans' 29:19 61:18
 98:18 135:13 225:18
Amie 2:4 46:10
amino 56:8 174:2,5
 228:5 241:11
amount 35:22 40:20
 123:4 152:20 163:15
 184:5 255:5
amounts 27:12,16 32:2
 35:9,10 36:3 69:15
 83:6 113:3 135:19
 136:22 138:18 174:7
 181:3 193:18 200:22
 227:14 241:15 262:15
ample 262:15
Amy 2:5 67:20
anabolic 174:4,6
analyses 19:9 24:18
 25:3,10,14 88:6 96:3
analysis 14:22 24:9
 27:15 28:17 67:3
 107:8 120:17 123:19
 124:3 173:1,6 267:3
analyst 16:20
analytic 264:20,22
analyzes 24:1
ancestors 141:19
and/or 87:19 88:4,7
 99:3
anecdotes 223:21
anemia 57:11
anew 144:17
angioplasty 222:6
animal 34:15,17,21
 35:9,11 36:8 40:14,20
 40:21,22 41:18 49:7
 88:17 130:12 146:19
 153:21 169:10 173:22
 174:2 188:6 191:19
 191:19 210:14 226:20
 228:1 235:7,19
 240:19 241:7,8 261:2
animal-based 88:11
 89:5 147:1
animals 40:16,17 153:7
 153:9 208:20
Ann 2:13 102:12,14
Annals 28:18
announced 264:12
announcement 9:6
announcements 9:11
 265:10
announcer 12:13
annual 156:6
anodyne 144:2
answer 25:14 193:7
answering 103:15
 143:16
anthropology 188:3
anti-nutrients 188:13
antioxidants 85:11
anxiety 189:2
anybody 170:9
anymore 153:5
anyway 126:13 230:4
apnea 39:20
ApoB 123:21
apparently 127:20
 234:19
appeal 111:3
appealing 110:2 111:17
 195:21
appear 120:12
appearance 101:14
appears 123:22 147:4
 177:2
appetite 22:7
applaud 41:6
applauds 215:10
applause 10:12,13
 11:13
apples 77:4
application 165:13
 167:2
applications 70:11
apply 78:13 164:18
appreciably 197:9
appreciate 6:10 26:21
 30:7 33:7 66:22 77:18
 111:11 135:2 165:2
 263:13,14
appreciates 20:15 56:1
 95:12 96:6 97:20
appreciation 263:2
appreciative 12:21
approach 37:12 78:9
 81:4 95:13,19 106:22
 132:16 134:21 143:15
 144:14 162:9 163:2
 184:4 200:12 202:8
 240:15 265:7
approaches 81:1
 166:14 184:3
appropriate 69:15
 73:12 135:19 138:18
 176:15 184:5 204:15
 252:14
appropriateness 185:5
approval 220:11
approved 256:1
approximately 108:19
 118:14,15 124:12
April 38:20
arbitrarily 146:3
Arbor 2:13 102:12,14
ARD 1:14
area 7:10 134:2 223:9
 229:6 236:5
areas 72:16 139:8
 204:22
arguably 63:4
argument 210:15
arm 182:9
Arnett 4:18 213:3
array 226:1 250:7
arrest 222:14 243:18
 244:9 257:1
arrhythmia 258:5
arrival 242:22
arsenic 185:8
artery 168:20
artesian 215:1
arthritis 39:20 129:15
 169:3
article 99:4
articles 123:15
artificial 43:11 48:19
artificially 146:3
Asha 2:5 128:12
ashamed 234:4
Asheville 2:5 67:22
 189:20
Asian 50:20 129:20
Asians 219:21
aside 173:7
asked 67:2 78:17
asking 92:10,12 112:1
 190:11 221:2 242:11
 246:3
asks 183:4 192:4
 258:17
ASN 95:8,12,18 96:1,6
 96:11,13,22 97:2,20
 98:2
Aspiration 167:13
aspire 203:10
assay 160:8

assembling 110:5
assert 45:17
assigned 12:6
assist 79:9
Assistance 141:15
associated 25:5 28:3
 88:7 89:6 113:15,17
 123:14 127:11 137:16
 138:2,8,13 147:19
 149:20 155:1,2
 180:19 191:12 195:6
 221:13 228:9 235:6
 254:15 259:17 261:21
 262:3
association 2:2,6,7,11
 2:12,14 3:7,9,11,18
 4:13 20:10,17 26:8,9
 30:6 33:6 38:20 45:12
 59:8 65:7 77:21 91:16
 92:4 108:13 131:20
 131:20 134:12 135:8
 135:9 137:20 148:4
 149:5 152:4 181:7
 182:8 204:20 214:21
 225:7,8 256:3
Association's 51:11
associations 28:11
 138:5 175:16 256:2
Associations' 133:11
assume 144:18
assumptions 189:10
assure 67:14
assuring 88:20 89:10
asthma 129:11 150:8
 219:10
astuteness 143:15
ate 38:8 218:14
athlete 90:5 218:20
 249:1
athlete's 219:13
athletes 42:13 219:4
 226:6
Atkins 233:21
attack 229:18
attacks 44:5
attempt 50:8
attempting 242:17
attend 6:8,9
attended 258:14
attention 49:9 117:11
 117:22 147:16 157:6
 159:15 166:6 183:6
attest 90:5
attitudes 135:1 158:9
attributes 173:13
 206:13
audience 53:10,12
auditorium 1:8 12:6,11

13:1
Audrey 2:6 62:10
augment 262:1
Austin 223:10
author 81:17 98:8
authored 14:18
authoritative 24:4
 148:1
authorities 45:12 73:3
authority 23:18
autistic 201:13
autoimmune 129:15
autopsy 239:1
availability 141:3
 228:15
available 18:19 19:4,5
 22:12 35:16 51:22
 73:14,18 105:2
 152:13 161:3 165:12
 254:8 264:18,19
 265:1
Avenel 127:9
Avenue 1:9
average 19:1 21:1
 39:16 60:7 89:7 91:17
 172:19 173:16 213:17
 213:18 223:12
avoid 54:13,16 69:18
 72:19 118:7 120:20
 151:10 201:17 261:18
avoidance 70:8
avoiding 227:16
aware 52:9 131:4
awareness 114:8
 148:20

B

B 60:2 85:11 145:21
 157:22
B-24 71:20
B12 56:19 113:1 172:11
B6 56:19 106:20 113:1
babies 117:17 180:2
 246:1 250:17
baby 117:17 130:19
 147:20 238:3 243:12
 243:22 244:4,13
 245:16
baby's 71:15
baby-friendly 243:15
baby-led 185:5
Bachelor's 159:9
back 12:10 38:1 100:5
 120:16 121:15 191:3
 197:17 202:19 212:12
 234:1,5,5,11 235:4
backs 224:2
bacon 119:16

bacteria 254:17,21
bad 77:6 171:5,13
 190:16
baggy 94:11
Bailes 3:2 199:2,3
BAILEY 1:14
balance 58:13 61:13
 82:20 110:3 127:21
 133:21 134:17 175:11
 175:18 176:15 177:5
 177:12,14 178:6
 260:20
balanced 2:6 56:7
 62:12 79:2 202:7
 207:8
balances 127:22
ball 120:12
ballroom 258:17
banana 192:13
bananas 103:14
bank 192:13
bankrupting 237:4
bar 83:22 210:12
Barbara 1:10,13
barely 38:16
Barnard 49:17
Barnett 4:21 221:7,7
bars 255:12
base 188:10 256:18
based 4:13 18:3 19:3
 27:17 29:14 32:3
 33:16,18 46:18 64:12
 68:8 72:6 78:11 80:19
 81:12 82:15 86:18
 98:18,20 99:1 101:22
 103:17,17 127:1,17
 128:18 132:10 135:21
 140:7 165:7 169:14
 171:16 180:8 195:7,8
 195:15 203:16 261:4
 261:20 262:7
basic 14:8 15:10 99:19
 100:6
basically 121:13 152:14
 152:17
basing 204:2
basis 32:5 64:6 98:11
 136:17
batting 259:4
battle 208:22
Bausch 2:15 218:3,5
BAZZANO 1:15
beans 30:18 31:11,13
 31:17,19 32:19,20
 47:2 48:11 57:20
 68:20 142:3 192:3
 228:4 260:19
bears 229:14 237:11

beautiful 244:13
Becky 2:6,7 30:4 108:9
becoming 42:12
beef 2:11 55:16 57:4
 59:7,8,9,12,14 60:1,6
 60:8,8,14,20 61:1,11
 61:12,17,20 62:1,6
 83:20
beef's 59:10
beer 190:1
befall 236:22
beg 235:1,21
began 218:19 222:21
 247:6
begging 190:5
beginning 148:1
begins 171:21
behalf 6:22 13:19 23:15
 30:5 37:5 43:4 62:10
 68:1 77:19 90:2
 102:14 105:10 108:13
 125:16 152:3,10
 178:13 208:6 229:2
 242:10 246:2 249:18
 263:12
behavior 63:22
behavioral 260:1
behaviors 79:7 96:20
beliefs 36:9 61:17
believe 7:20 24:11 27:7
 53:8 71:19 77:6
 111:13 134:14 164:20
 180:12 198:21 211:6
 218:10 232:12 237:11
 240:7 248:1
believed 243:18
believing 93:12
Bella 2:19 84:11
Bellevue 94:19
beneficial 22:5 36:6
 39:3 135:15 136:3
 195:19
benefit 80:22 115:12
benefits 14:7 28:10
 32:22 33:19 36:14
 73:20 80:13 84:17
 88:15 125:9 151:8
 152:2 157:17 170:15
 170:17 174:12,16
 181:14 195:1 205:8
 205:11,22 209:22
 211:2 226:2 254:12
berries 15:21
best 2:8 18:19 19:4,5
 44:10 53:5,6 61:5
 72:6,21 73:8,15
 100:19 108:16 115:20
 146:18 187:9 189:13

189:15 205:5 206:8
 206:15 212:5,21
 235:10 240:4,13
 243:22 245:6
better 4:19 13:19 17:8
 22:10 23:3 39:10,11
 42:22 67:14 76:18
 84:16 96:15 137:13
 147:15,17 169:14,15
 193:19 195:2 201:3
 207:17 210:4 213:1
 218:20 234:9 235:17
beverage 17:17 21:15
 27:2,4,10 28:1,7
 29:16,19,21 136:1
 185:12
beverages 27:6,16,19
 28:4 45:5 70:15,18
 134:18 135:16 173:18
 173:19 176:11,20
 194:10 206:7 215:13
 226:21
beyond 14:8 66:9 83:10
 96:12 115:12 166:12
bias 48:6 230:10
big 98:9 131:8
Bill 121:7
billion 17:14,19 18:1
 78:4 108:19,20
 118:15 121:2 131:6
bioactive 16:2 28:2
bioactives 16:4 27:20
 136:4
bioavailability 174:5
bioavailable 57:5
 114:19 188:7
biochemist 154:11
Biochemistry 159:10
biological 144:15
biology 48:5 222:1
biomarkers 15:22 97:4
 97:10 170:19 210:1
bipolar 189:2
Birch 2:12 182:5,6
birth 112:14 118:2
 148:10 182:22 216:22
 250:12
birthday 71:13
bit 176:5 233:14,22
 263:20
black 29:1,8 50:20 74:6
Blacks 219:22
blanket 161:10
bleached 154:13,19
blend 83:1 84:20 86:8
 86:12
blended 83:20 85:18
 86:2

blending 83:10 85:5
blind 93:5
bloating 129:19 220:4
blood 39:19 74:1
 138:10 169:16 187:1
 247:4,4 248:9,9 249:4
 261:9
Bloomberg 86:19
blue 94:11 191:9
BMJ 99:5
board 112:7 222:9,17
 259:11
board-certified 190:2
 222:3,10
bodies 70:4 100:4
 148:1
bodily 216:4
body 19:22 54:3 57:7
 68:4 71:4 123:14
 125:5 131:4 143:9
 154:21 159:13 179:12
 186:11 213:17 214:7
 216:12,18 238:2
 243:7 244:20 248:19
 257:15 258:6
bold 64:12 92:10
bologna 120:4
bone 48:12 195:2 238:6
bones 47:22 194:21
book 98:9 152:10,15
 190:19 202:18 257:11
born 180:2,10 244:14
Borough 2:15
Borra 4:14 77:15,17
bottle 214:21,22 244:1
 244:19
bottled 2:2 215:2,9
bottlers 215:5
bottom 265:16
BOUSHEY 1:15
bovine 70:20
bowel 75:13
boys 82:8
brain 53:15 56:14 71:15
 112:19,20 113:14
 114:22 116:4,19
 117:9 118:11,17
 147:12 148:13 184:9
 187:3,7,10,11,17
 188:18 244:10
brain-building 148:8
brainwashed 245:7
Brandon 5:2 6:12 7:6
brands 35:7 132:11
 133:16
brazils 122:11
bread 69:6 77:5 192:14
bread 149:15

break 158:20
breakfast 80:3 82:18
 106:9 110:7
breakfasts 108:20
breast 73:22 116:12
 117:21 118:1 129:6
 217:3 220:20 231:19
 231:22 242:18 243:21
 243:22 244:4 245:6
breast-feeding 250:20
breastfed 73:10 116:13
 116:20 117:4,7
breastfeed 117:17
 119:5
breastfeeding 73:8,11
 73:14,17,21 74:1,3
 115:22 116:10 117:19
 118:9
breathe 220:9
breathing 219:9 243:4
bridge 140:19
brief 11:16
briefly 15:2 43:17
bring 153:10 159:14
 183:6
brings 164:17 178:14
broad 67:1 159:19
broadening 96:11
broader 31:17 36:5
broadly 250:11 251:7
broccoli 262:12
broke 258:19
Brooklyn 2:15
brought 90:3 212:12
brown 262:11
brushing 151:15
 253:21 254:4
bubble 9:2
budget 109:14
build 47:21 64:8,16,18
 71:15 198:5
building 71:21 80:2
 133:17 194:21
built 69:5,10
bulletproof 93:1
bumping 121:10
bun 77:7
bunch 6:22
Buona 2:19 84:11
burden 39:18 83:14
 111:1 121:5 238:22
burger 77:7 83:20 86:2
burgers 45:19 85:2
burn 70:5
burned 39:22
burnt 257:11
business 168:14 190:6
businesses 132:12

215:7
busy 8:2 10:17

C

C 106:20 136:7 227:3
Cabell 3:2
cafes 108:16
cafeteria 46:13 197:2
cage 41:1
cake 178:3
calcium 35:19 36:4
 48:10,11 106:19
 136:12 172:9,15
 173:3 193:20 194:3
 196:2 227:8,15,21
 231:4 238:11 241:14
 251:16
calcium-equivalent
 194:10
calculating 91:8,13
California 52:16
call 9:13,14 12:13 84:19
 175:17 229:10 240:8
 258:9
called 12:14 13:3 62:12
 102:13 139:3 152:15
 161:14 230:9
calling 148:8
calls 146:22
caloric 27:2 91:4
 216:13 223:6 260:20
calorie 32:9,10,11,13
 32:14 43:10 45:7 58:7
 60:12 61:21,22 85:9
 91:6,8 110:3 134:15
 134:18 203:21,21
 223:6
calories 19:2 22:1
 44:20 48:18 54:8,15
 58:3 60:13,15 63:13
 80:7,16 91:9,12
 124:11,17 134:8
 154:12,14 161:5
 178:20 180:21 194:1
 194:7 196:22 203:14
 203:14,17,18 211:18
 212:4,8 216:12,14
 261:18 262:11
Canada 42:5,7 239:10
 255:22
Canada's 52:5
Canadian 52:6 206:12
cancer 3:14 18:1 23:16
 23:20,21 24:3,5 25:2
 25:4,6 26:15 47:18
 50:17 69:6 73:22,22
 76:20 88:9 119:21,22
 120:2,7,7,9,15,18,20

120:21 121:16,19,22
171:6 220:19,20
226:10 228:10 231:22
231:22 235:14 259:19
261:21
cancers 44:6 75:16
90:14 129:6 159:21
181:9 220:19
cane 53:21
canned 15:13
canola 154:17
capital 84:13
carb 38:4,15 39:3 53:22
53:22,22 70:10
102:15 103:4 104:19
104:19,21 161:12
192:12 249:6
carbohydrate 37:11
38:21 39:10 40:5 45:9
54:2,11,19 55:1 68:11
69:19 160:15 161:1,8
161:15 178:19 180:13
180:18,21 181:2
188:14 191:10 201:1
202:4 212:1,6 247:10
carbohydrates 53:20
68:19,22 69:3,14 77:2
100:2 106:19 124:21
151:21 161:5 187:15
200:9 211:18 212:4,7
247:18 254:10 255:1
255:4,10 258:10
260:17
carbs 54:3 77:6 103:22
191:8,18 192:1,1,15
231:9,11,14,15
247:21 249:3
carcinogens 47:11,15
119:18
cardiac 243:18 244:9
cardio 123:10
Cardiology 45:13
cardiovascular 15:15
17:13 28:12,13 29:6
29:10 44:16 90:14
138:9,12 159:20
174:15 195:6 213:19
214:3 228:9 238:21
care 17:8,19 18:2 37:3
49:17 74:22 103:12
114:10 159:9 160:6
162:1 163:3 212:10
229:6 237:5
cared 153:8,9
career 257:5
carefully 11:8 19:22
181:1 190:18
cares 220:15

caries 149:10 150:2,4,6
151:3 253:14 254:13
255:6
CAROL 1:15
Carolina 2:5,11 39:5
67:21,22 90:4 189:20
Caroline 2:7 74:20
carotenoids 114:20
115:8
carried 100:7
carrier 115:10
carry 74:14
carrying 18:12
carte 110:12,17
Casavale 12:13 13:15
16:17 20:4 23:13
26:18 30:2 33:11
36:22 40:10 43:1 46:8
49:13 52:12 55:11
59:4 62:8 65:4 67:18
71:5 74:18 77:14 81:7
84:8 86:15 89:22
92:18 95:5 98:6 102:7
105:5 108:7 111:21
112:3 115:17 119:7
122:2 125:13 128:6,9
131:16 135:5 138:20
142:9 146:4,7 149:2
152:7 155:3,6 158:19
159:3 162:3 164:12
168:9 171:17 175:3
178:10 182:1,4 186:4
189:17 193:10 196:16
198:21 202:9 204:17
208:1 211:6 214:14
214:18 217:20 218:1
221:6 225:3 228:22
232:9 236:1 239:11
239:15 242:8 246:8
249:8,12,16 252:18
252:21 256:7 259:2
262:18
case 29:15 197:14
221:11
casein 219:6
cases 163:7 188:18
Casey 2:9 55:13
cash 102:20
cashews 122:11
cast 144:17
Castillo-Hegy 2:8
115:18,19
Cate 152:8
categories 20:14 69:3
category 31:8,10,13,15
32:6,8,14,17 173:13
174:20 220:6 240:10
CATHERINE 2:10

cats 40:15
Cattlemen's 2:11 59:7
Caudill 3:12 146:8,9
causality 99:13
causation 204:10
cause 28:13 44:15
47:17 74:5 120:2
121:8 163:7 170:18
186:20 188:21 191:8
191:18 216:17,18
224:10 255:12
caused 53:18,19 169:7
230:14
causes 51:5 89:15
104:16 116:4,6
119:21 164:4 186:16
187:17 191:21 203:6
causing 69:7 191:20,20
cautioned 101:16
CDC 66:9 75:22 160:11
180:4 217:6
celebrations 61:19
celiac 129:14
cell 127:9 219:16
cell- 33:17
cellular 261:4
cemetery 233:6
center 2:13,21 3:5,16
4:6 43:4 49:18 67:21
86:18 87:1 102:13
112:6 114:7 231:10
266:6
centered 69:22 132:12
Centers 216:6 266:13
central 158:14
centric 51:7 226:17
centuries 61:18
century 176:1 180:7
ceramide 191:20
cereal 181:15
cereals 56:10
cerebral 187:2
certain 15:18 57:9
70:11 137:18 147:21
159:21 181:9 226:10
certainly 64:9 67:10
170:3
certification 222:17
certified 126:1 209:1
cetera 127:9
Chad 248:15,18
chain 3:10 43:10 86:2
110:21 112:21 166:8
178:13,18
chains 85:22
Chair 1:10,13,13 125:14
262:22,22
challenge 61:14 189:10

challenged 109:18
201:14
challenges 62:20,21
109:8 157:21 164:20
209:7
challenging 21:19
22:13
chance 42:16
change 19:15 51:10
54:21 66:20 82:10
96:19 100:8 119:12
130:16 134:2 139:22
140:8 141:5 143:4
154:10 161:16 210:20
214:11 216:18 248:16
changed 121:15,17
153:13 154:2,5
192:19
changes 32:1 46:4,19
67:13 95:15 111:13
132:14,16 140:18
141:6 152:18 154:3
156:18 165:8
changing 19:14 22:20
156:8 167:17 191:14
255:7
characterized 21:16
charge 143:17
charity 40:14
charter 143:18 145:17
chasing 247:4
Checkoff 59:8
cheese 193:16 194:13
chemicals 227:6
chewing 149:16 151:17
254:6 256:1
chickpeas 30:17
chief 259:5
child 35:4 41:8 74:12
118:16 119:4 185:9
242:16,22 244:6
245:14
child's 67:8 71:12
childbearing 107:16
childcare 81:14
childhood 50:19 57:1
129:16 139:19 226:5
239:1
children 44:22 47:6,13
47:14 48:8 49:12
56:15 60:5 63:2,8,10
63:16,17 64:13,17
66:15,19 70:12 71:9
72:2 80:9 93:2 106:8
107:4 113:18,20
115:3 128:15 130:3
136:5 137:2,4,5,7,12
137:20 138:4,6

- 147:17 150:7,18
152:12 153:11 158:1
182:11,15 184:6,11
185:13 194:13 195:3
199:7,10 200:21
216:21 217:4 221:18
237:22 249:15 254:14
children's 66:11 108:17
133:13 172:11
China 42:1 69:20
choice 40:5 47:6 62:2
189:14 224:19
choices 34:6 79:5,10
87:6 92:8 133:2,13
138:15 141:2 155:18
179:18 197:18 198:16
207:17 225:19 227:18
241:2
choking 158:3
cholecystitis 258:3
cholesterol 44:15 63:12
82:21 123:20,21,22
129:4 170:22 203:13
207:5,10,14 209:18
223:12,14 235:5,9
238:21 239:5
choline 60:2 113:2,5,7
113:10,13,17,21
114:2,8,12 146:9,14
146:18 147:3,4,9,10
147:11,14,18 148:2,5
148:8,11,12,21
183:11
choline-containing
148:21
choose 72:18 84:2
104:8 235:21
chopped 84:22 85:5
Chorus 6:17,20 11:15
chose 8:1 101:2 237:9
239:10
chosen 132:15
Chou 4:13 225:4,5
Christie 2:8 115:19
Christine 2:10 159:5
chronic 15:22 37:15
38:14 48:7 50:16 68:9
69:21 83:14 87:20
88:12 90:7,18 92:8
93:18,19 97:1,4 123:6
125:18 126:22 127:16
137:17 138:3 141:19
142:14 150:4,7
163:22 164:3 168:18
174:13 181:5 189:2
196:13 208:10,15,21
217:1 219:10,15,17
221:14 222:15 224:8
224:13,20 226:2
232:14 235:11 236:14
239:22 253:15 254:13
257:9
churned 257:6
cigarette 232:4
Cincinnati 83:17,21
cited 156:14
citizen 2:16 3:6,10 4:4
232:11
citizens 42:8
citrus 15:20
city 46:16 92:22 93:3
94:17 189:21
claim 122:22
claims 256:1
Clara 2:11 59:5,6
clarify 184:8
clarifying 242:4
clarity 234:14
class 159:15
classes 174:18 242:20
245:8,17
classified 47:10 106:3
181:3
clean 156:13
cleaning 151:16 254:5
cleanup 259:4
clear 15:4 27:8 31:6
57:14 68:18 74:7
185:12 188:5 209:13
211:19 224:14
cleared 230:22
clearer 119:20
clearly 32:21 42:19
51:17 69:4 92:14
129:2 131:4 134:11
229:16 239:6
climate 19:14,15 49:8
130:16
clinic 39:15 49:17
247:15 248:19
clinical 14:12 27:18,21
29:14 61:10 99:8,11
104:14 113:19 123:12
188:3,20 213:10
214:7
Clinically 161:2
clinicians 75:9 125:18
126:14 127:18 160:7
160:12 161:18 189:12
clock 93:4
close 21:11 61:20
113:12 245:14 248:14
closely 20:18 35:8
129:9 163:12
closer 67:8
closing 196:9 207:15
262:21
CNPP 198:15 266:18
co-author 230:9
co-create 134:1
coalition 2:4 3:15,22
46:11 98:15 133:21
162:6 178:14 239:19
cocaine 170:20,21
coconut 206:17
Code 202:18
coffee 70:21
cofounder 101:3
cognition 22:7 114:4
cognitive 113:19 114:4
115:3,4 117:12
138:13 147:15
cohort 127:7
cohorts 114:2 127:9
Cole 267:12
Colette 266:18 267:12
collaborating 82:12
Collaboration 104:17
Collaborative 134:6
collaborator 98:3
colleague 7:1
colleagues 16:2 42:4
62:14
collective 134:9
Colleen 90:1
college 3:7 45:13 73:4
125:16 126:1,22
127:22
college's 126:19
colleges 85:21
COLLEN 2:11
colon 228:10
color 36:10 47:22 50:18
230:5,16
colorectal 18:1 75:16
76:20 88:9 119:21
120:9
colored 15:21
Columbus 168:12
combination 58:15
115:12 147:6 260:1
combine 153:17
combined 120:1
combining 84:21
come 19:21 38:19
39:14 102:19 154:14
170:9,16 192:20
244:21 245:9,14
comes 30:14 53:9,20
83:16 103:19,21
104:7 124:11 136:21
157:20 177:21 203:9
259:21
coming 230:8 241:7
command 258:21
commend 41:9 185:22
249:19
comment 11:17 13:10
13:18 20:15 30:9 33:8
56:2 74:17 87:15
101:7 105:7 108:13
122:13 124:8 125:12
126:7 175:8 178:16
262:20 263:9,9 267:7
commenter 13:15
16:17 20:4 23:13
26:18 30:2 33:11
36:22 40:10 43:1 46:8
49:13 52:12 55:11
59:4 62:8 65:4 67:18
71:5 74:18 77:14 81:7
84:8 86:15 89:22
92:18 95:5 98:6 102:7
105:5 108:7 112:3
115:17 119:7 122:2
125:13 128:10 131:16
135:5 138:20 142:9
146:7 149:2 152:7
155:6 159:4 162:3
164:12 168:9 171:17
175:3 178:10 182:4
186:4 189:17 193:10
196:16 198:22 199:1
202:9 204:17 208:1
211:7,8 214:18 218:2
221:6 225:3 228:22
232:9 236:1 239:15
242:8 246:8 252:21
256:7 259:2
commenters 2:1 12:4
comments 5:4 7:12,14
8:6,11,19 9:7,13,16
9:21 11:7,19,21,22
12:2,5 22:3 23:17
26:11,17,22 43:4,16
59:1 68:4 77:18 81:20
87:9,16 108:4 111:22
112:11 115:15 122:8
126:10 128:7 135:3,4
144:22 146:5,12
152:3 155:4 158:18
158:20 175:9 178:17
182:2 214:15 217:21
239:12 249:9,13
252:19 253:5,9 256:6
262:20 263:4,7,8,22
264:2,10
commercially 233:19
commercially-oriented
50:6
commissioned 14:11
114:7

commissioning 155:22
commitment 37:7
 74:12 133:9 142:19
commitments 132:15
committed 55:20 79:1
 98:17 132:18 134:20
 143:3 145:12
committee's 8:14 18:17
 50:1 59:2 122:13
 128:16 143:15 167:21
 181:17 193:15
committees 251:8
 259:11
commodity 81:16
common 47:7 48:7
 51:14 75:12 150:7
 169:20 262:13
commonly 28:7 36:10
 51:1 116:17 118:5
Commonwealth 4:17
 37:4
communicate 8:3
 155:14
communications 135:7
communities 18:9
 139:5 140:4,14 141:1
 143:5 163:3 185:20
 230:5
community 2:5 119:15
 128:12 132:20 139:10
 139:11,21 140:21
comorbidities 254:16
 260:4
companies 20:11 78:3
 94:12 204:21 215:4,6
 225:11
company 49:2 229:4
comparable 35:20
 120:8 206:2
Compare 122:20
 213:22
compared 30:22 115:8
 156:17 157:15 172:21
comparison 21:18
 87:21
compartment 203:19
compelled 98:14
compensate 197:6
competitive 137:9
complementary 73:13
 74:9 89:13 137:8
 184:21 185:1,3
 194:14
complete 173:17 192:3
completely 204:12
 209:10,13 247:13
complex 109:16 110:12
complexities 102:22

145:2
compliance 98:2
complicated 193:7
complications 52:19
 116:2,17 117:11
 118:10
component 39:12
 110:4 148:5
components 28:2 39:7
 83:7
composition 84:17
compounds 136:8
comprehend 153:4
comprehensive 14:11
 27:15 120:17
comprehensively 24:1
comprise 79:20
compromised 188:18
concentrated 113:5
 235:19
concept 84:19 85:18
 161:14 260:12
concern 75:5,6 76:5
 106:13 114:18 147:11
 148:18 163:11 196:14
 227:9 236:7 251:16
concerned 4:10 16:21
 17:10 18:4 53:2
 204:14 218:8
concerning 24:20
concerns 36:8 158:2
 185:8 242:12
conclude 12:20 262:20
concluded 138:7
 206:14 267:21
concludes 226:13
 264:4
conclusion 25:7 45:10
 80:21 138:14 200:6
 224:17
conclusions 26:12
condition 51:3,15 94:15
 94:21 150:7 216:17
 253:16
conditions 37:16 88:12
 127:16 129:16 137:19
 138:4 141:20 149:21
 164:4 168:19 186:19
 222:15 224:13,21
 226:8,11
conducted 24:9 96:3
 141:11
conducting 100:19
 155:22 266:22
conference 48:22
 258:15
confers 211:2
confidence 143:8,14

144:10
confirm 99:18,20
confirmed 264:1
conflicting 131:1
confused 190:14,14,15
 190:16
confusing 154:6 199:22
 210:8 239:6
confusion 77:9 170:6
 242:4 260:7,8,11
Congress 89:18
conjunction 133:21
Connecticut 159:8
connection 25:1 140:16
consecutive 156:5
consensus 64:8
consequence 147:2
consequences 19:15
 27:18 118:9 143:21
consider 9:21 21:14
 27:1 37:9 49:7 57:20
 67:17 80:18 81:4
 97:13 148:22 163:12
 164:2 170:17 183:4
 183:15 204:3,22
 215:16 216:22 235:1
 250:8,14 251:19
considerable 36:3
consideration 86:12
 97:3 108:6 165:10
 193:15 242:12 256:18
considered 67:1 93:9
 95:22 96:9,12 99:12
 153:20 173:9 215:14
 224:5 248:20 261:1
 262:13
considering 26:16
 68:14 174:21
consist 251:22
consisted 246:19
consistent 18:18 66:12
 73:1 163:2 217:5
consistently 32:2 44:8
 127:10 129:5 251:9
consisting 261:15
consists 142:2
constant 244:7
constantly 22:16
constipation 48:8 75:7
 75:21 76:5 216:19
 220:5
constituents 220:15,16
 220:22
constitutes 210:7
consultant 81:13
consume 16:11 18:21
 36:10 50:7 58:2 76:15
 80:6 109:22 137:6

156:10 161:2 163:6
 174:20 180:11 184:5
 193:18 216:8 218:10
 235:7 237:14,15
 251:10
consumed 21:15 27:13
 28:7 67:11 79:21 81:3
 83:8 124:13 135:16
 137:2 138:17 171:10
 183:22 227:2 255:6
consumer 5:3 6:14 7:9
 21:2 22:20 43:6 55:18
 134:22 156:1,8
 158:10,13 167:9
 175:15,21 205:1,15
 217:7
consumers 4:5 20:20
 22:18 23:2 56:6 58:8
 69:4 78:6,13 79:1,15
 82:5 123:2,5 125:2,8
 146:20 155:19 156:12
 156:16 157:11,14,18
 158:9 165:22 166:16
 167:6 172:3 175:7
 176:3,14 178:15
 205:18 207:1,16
 225:12 252:2
consumers' 157:8
consuming 15:12 20:21
 54:8 80:18 111:14
 115:9 161:11 179:9
 180:20 219:12 226:7
 231:16 253:10 261:17
 262:6
consumption 25:2,4,5
 27:4,10 28:9 29:2,8
 29:19 32:1,6 34:7
 42:2 45:4 47:16 48:4
 51:6 66:11,19 67:14
 82:3,7,10,13 85:16
 88:3,6 105:19 107:2
 107:20 115:13 119:13
 119:20 123:13 124:4
 124:6 125:6,9 129:3
 129:16 130:6,20
 138:3,9 141:13
 149:19 156:20 157:13
 174:12 179:13,20
 181:7,12 185:7,11
 187:21 194:22 195:10
 195:18 197:1 205:7
 205:14 217:11 221:22
 226:19 238:8 255:10
 261:9,13 262:1,5
contacted 168:16
contain 35:9 68:19,21
 69:15 174:2
contained 18:16 232:1

- containing** 34:22 195:5
contains 35:21 91:18
 130:10
contaminants 130:11
content 14:5 31:1,2
 57:8 83:5 91:11 174:1
 195:16,19 231:5,21
 232:4
contents 5:1 16:2
continually 37:18 79:4
continue 15:6 19:18
 36:20 44:21 97:1
 101:17 121:2 144:11
 173:12 174:12 179:2
 184:10 194:20 220:10
continued 32:12 73:11
 78:9 95:18 97:20
 186:1 195:11 200:17
 219:2
continues 21:10 65:11
 107:5 176:5 177:15
 179:13 183:3 200:17
 207:11 237:13 259:13
continuously 55:22
continuum 163:3
contractor 59:8
contradictory 210:8
contraindicated 70:12
contrary 102:2
contribute 31:4 50:16
 58:6 138:16 179:18
 193:17
contributed 130:16
 177:8 241:9
contributes 60:14 61:1
 135:15 162:22 206:5
 216:1
contributing 110:1
 169:6 196:5 257:3
contribution 22:8
 215:18 250:8
contributions 57:17
 179:14 194:15
contributor 22:7 90:16
 90:17,18 136:9
contributors 90:22
control 38:8 104:14
 121:11 124:3 176:17
 223:7 235:8 266:13
controlled 44:13 45:1
 123:19 213:10
controlling 186:17
Controls 216:7
convenience 45:22
 167:11
convenient 56:6 167:4
 167:19
conventional 36:10
 257:4
conversations 21:20
converted 170:1 209:21
conviction 186:11
cook 80:5
cookies 45:20
cooking 49:3 153:16
Cooper 3:19 208:2,3
coordinated 267:1
cord 113:14
corn 154:17 260:18
Cornell 3:12 146:10
Cornell-trained 154:11
corners 94:11
cornerstone 177:14
 179:16
cornerstones 182:17
coronary 168:20 181:8
 258:5
correct 30:13 31:19
 32:17 252:15
corrected 51:20
correlated 187:4
correlation 90:12 204:9
correlations 204:12
cost 82:22 109:21
 131:3 196:1,3 221:13
costing 118:15
costly 162:21
costs 17:14,19 54:17
 110:19
Council 2:3,4 3:1,6,12
 105:11 108:5 122:5
 155:10 193:13 249:18
count 47:13 60:12
counterpart 136:18
counting 189:16 223:6
 223:7
countless 242:11
countries 164:17
 217:10
country 9:1 17:9 18:9
 46:13 54:10,19,20
 55:9 132:6 143:6
 153:1 230:16 249:10
counts 171:3
County 108:11
couple 168:20
coupled 174:8
course 9:17 65:10
 95:16 104:5 169:3
 171:2 265:20
cover 72:16
covered 69:7 238:16
cow 130:19 231:18
 238:3
cow's 35:20,21 48:15
 70:16,22 205:5 206:9
 206:16,22 218:17
 219:6,7,11 220:3
 238:14
cows 130:9 238:11
Cox 3:7 204:19,19
craft 160:8
crawl 234:5
crazy 190:12 192:2
 204:11
cream 178:2 218:13
create 40:18 98:14
created 79:3 117:22
creates 84:22 231:21
creating 42:21 141:4
 198:14
creation 84:18
credentialed 143:2
credit 41:7
credited 35:4
crisis 49:8 142:12
 160:3 162:19
criteria 133:18 264:21
critical 7:21 14:20 16:3
 56:5,12,22 71:20
 72:15 74:2 112:18
 148:19 166:11 211:15
 228:19 229:6 250:4
 259:14
critically 76:9
criticized 50:10
cross 67:3
crucial 165:11 258:11
cruciferous 15:19
crying 118:4 243:12
 244:7
CSPI 43:6,15
culinary 84:19 134:5
 153:19
culmination 98:9
cultural 61:17 109:13
 140:2,16 166:1 167:7
culturally 51:13 139:17
 140:11 237:18
culture 140:7 227:17
cultures 142:5
Cumulatively 179:17
cup 29:7 124:21
cups 32:8,10,11,12
 33:4 185:9
curb 149:10
curious 189:9
current 14:12,17 17:11
 18:20 24:5 27:8,11
 28:8 31:13,15 53:2,3
 54:7 55:2 89:7 101:21
 104:1 108:17 122:14
 135:12 138:2 160:2,9
 163:21 172:2 176:22
 188:21 198:3 204:3,5
 210:10 221:13 232:13
 232:13 252:12
currently 18:10 31:20
 79:9 102:5 133:6,17
 159:16 161:3 165:17
 217:10 225:10 239:22
customers 86:4 133:1
cut 17:18
cutout 202:3
cuts 60:9
cutting 67:3 190:7
cycle 37:14
cycled 233:20
cycles 19:7
-
- D**
- D** 35:20 85:10 113:1
 114:17 136:11 166:20
 172:11,15 183:11
 185:18 193:21 194:4
 196:2 227:8,15
 251:16
D.C 1:10 9:2 16:22
 33:16 229:6 236:4
 258:15 264:7 267:18
daily 19:2 29:1,8 60:16
 60:18 82:6,17 92:14
 110:4 124:11 130:2
 136:22 151:14 161:4
 174:21 175:1 178:21
 179:4 253:13 254:3
dairy 3:6 33:18 36:11
 37:20 41:12,22 43:22
 44:11 47:19 48:8,10
 50:7,8,12,15,22 51:17
 56:10 69:8 70:14
 109:4 128:20,22
 129:2,4,9,16 130:1,6
 130:8,13,15 131:13
 132:9 169:10 172:4,6
 172:8,16,17,21 173:7
 173:10,12,13,14
 174:12,17,19 184:8
 193:13,19 194:2,9,12
 194:19,22 195:2,5,9
 195:14,18,21 196:1,6
 196:9 218:10 219:2,5
 219:12 220:20 221:3
 221:22 227:10,16,17
 230:22 231:4,17
 232:1,2,7 237:12,14
 237:15,20 238:5,8,17
 238:20 239:7,13
 251:12
dairy's 172:1 174:13
 195:15
damage 93:9 94:1

- 154:22 155:1,2
219:16
damaged 244:10
danger 128:3 244:6
dangerous 130:16
189:3
dangers 68:10
Dare 160:1
dark 15:20,21
Darlana 2:12 182:6
Darren 2:13 102:12
DASH 45:9 60:21
data 15:17 21:1 29:14
44:13 61:12 65:20
66:5,9,15 67:2 99:11
107:9 118:2 123:2
124:14 137:11 148:22
158:17 180:14 197:17
205:4 228:11 251:9
252:7,12 267:3
database 191:11
date 145:6 265:13
dates 264:5
daughter 131:11
daughters 220:17
daunting 159:12
David 267:1
Davis 2:21 189:18,19
day 1:6 6:4 7:4,16 15:8
15:12 17:17 20:20
21:3,7 46:20 53:1
60:8 76:16 86:5 91:1
91:9,15 102:21 111:5
120:10 124:22 134:10
157:4 172:5 178:4
197:5 201:21 207:13
208:11 211:5 212:7
216:9,10 223:13
232:17 233:3 238:17
238:18 244:21 245:2
245:11 247:18,19,21
248:21 255:4,8
Dayle 2:14 81:10
days 3:11 56:22 71:8,10
71:11,17,19 74:13
112:17 118:2 169:19
209:13,18 243:11
de 11:8,14,16 262:19
266:17
de-emphasize 239:13
deal 208:10
dealers 94:10
dealing 103:1 192:10
dear 78:21
death 28:14 74:4,5
121:8 244:11,18
245:1
deaths 17:13,18,22
116:5 208:16
debilitating 142:12
debunked 238:6
decade 14:6 82:10
180:6 213:4
decades 66:1 84:15
117:10 160:9 176:10
197:17 221:10 225:22
decay 45:3 149:11
254:20 255:2,13,15
255:18,21 256:4
December 9:5
decided 93:14 221:17
233:9
decision 41:7 52:5
91:22 119:5
decisions 19:3 128:16
142:21 143:22 167:10
decline 114:4
declining 65:22 121:13
decrease 17:14 70:22
166:22 191:12 197:4
208:20 239:3
decreased 32:3 124:4
180:3
decreases 191:15
decreasing 32:5 83:6
85:16
dedicated 7:18 98:15
239:20
dedicating 186:9
dedication 65:9
deem 180:4
deep 152:15 218:19
deeper 144:4
deeply 218:8
default 41:17 224:5
defeat 3:14 162:5 164:7
defect 147:20
defects 113:16 180:3
180:10
defend 40:4
defiance 257:16
deficiencies 166:19
186:21
deficiency 241:5,19,21
241:22 242:1
deficient 48:20 241:14
deficits 112:20 117:11
define 58:4 157:7
161:12
defined 211:17
defines 32:21
definition 21:18 30:15
60:10
definitions 21:21 31:7
157:8 264:22
degenerative 90:9
168:19
degree 153:4 154:7
212:1 238:15
dehydrated 243:4
244:5
dehydration 116:3,6,10
116:19 118:22 216:17
242:15,17 243:19
del 2:8 115:18,19
delayed 97:8
deli 47:8
deliberation 168:5
deliberations 59:2
delicious 85:1 86:10
delighted 68:12
deliver 28:2 187:9
delivering 167:16
delivers 60:1,16 61:22
136:2
demands 23:6 40:7
167:17
demographics 107:7
167:5
demonstrate 99:13
127:14 207:6
demonstrated 27:21
39:1
demonstrates 141:4
252:7
demonstrating 118:2
150:3 210:22 251:9
demonstrations 79:12
demystify 92:15
denote 31:18
dense 14:4 55:21 58:5
69:15 114:14 136:1
226:16
density 14:5 76:10
125:1 179:19 262:2,2
dental 3:9 149:4,6,10
150:2,6,10 151:3
152:4 185:10 253:14
254:19,22 256:2,3,4
258:3
dentistry 253:3
dentures 149:18
deodorized 154:13,19
Department 1:9 5:3 7:2
86:20 89:17 92:22
266:3,3
Departments 145:6
168:3 198:19
departure 25:11
depression 76:20
Deputy 5:2 6:13 7:8
derived 130:8,12
describe 69:3 203:7
desert 139:11
deserts 139:7,15
designated 13:6
designed 61:12
desperate 38:6
despite 31:6 177:7
212:21
despondent 212:15
destructiveness 219:5
detail 158:7
detailed 26:11 43:15
59:1
detailing 27:12
details 87:14 265:7
deteriorate 154:21
determinant 123:22
determination 24:12
determine 184:4
determined 172:13
236:22
determining 260:14
detrimental 116:21
devastating 117:14
develop 10:6 26:1 63:3
64:15 72:13 92:8
116:14,20 117:7
168:6 171:6 228:18
developed 36:20 59:17
118:6 165:13
developing 30:8 56:12
76:18 81:4 97:5
114:22 132:3 194:16
development 56:5,14
56:22 60:5 87:13
90:17 97:7 112:19
113:14 147:12 148:3
184:9 194:20 217:1
253:14 255:6
developmental 117:12
developments 204:22
DGA 31:8,21 32:5,7
66:12,15 96:17 109:9
113:9 114:13 165:6
172:8 181:4 193:22
195:1 240:17 242:11
256:17 257:1,16,16
258:11 263:1
DGAC 20:16 24:7,15
25:12 32:16,21 33:2
43:16,20 96:1 106:2
125:4 144:10 183:3
194:11 195:11 263:10
DGAC's 24:16,22 26:13
DGAs 96:22 108:17
109:1,7,18 182:20
184:17 185:17,19
186:3
DHA/omega-3 183:12
diabetes 17:18 26:8

- 38:8,20,22 44:6 45:2
52:19 53:12 54:1
73:22 74:22 75:17
76:19 77:3 88:8 90:9
90:13 92:4,6 93:8
94:7 123:16 126:7,16
127:6,12,15 129:14
138:9 149:21 159:20
160:9 168:19 169:2
170:2 174:15 180:15
181:9 187:6 191:8,13
191:15 195:8 201:11
213:8,12,15,21 214:3
220:18 223:17,20
226:9 228:10 232:17
236:9 256:22 258:4
259:17 261:3,22
diabetic 94:6 202:12
258:2
diagnose 160:8,13
diagnosed 38:8 92:6
201:11
diagnosis 93:8 213:15
213:21
diagnostic 160:10
222:3
dialogue 7:20
Diane 2:14 135:6
diarrhea 129:19 220:5
dictate 64:20 238:17
die 236:20 242:15
died 236:21 244:17
245:22
diet's 169:6
diet-related 142:14
dietaryguidelines.gov
9:8,19 13:11 264:14
264:16 265:2,3,15
267:5
Dietetics 4:2 26:7 81:18
119:11 142:11 143:1
144:21
dietician 16:20 30:4
49:15 51:19 77:17
81:11 92:20 105:10
108:9 139:1 178:12
182:6 225:5
dieticians 79:9 133:5
199:17
diets 19:13 42:11 45:8
60:16,21 61:11,13,19
63:6,7 68:11 69:5,12
69:19,22 70:10 88:16
88:20 89:10 124:17
126:16 127:14 136:1
136:4 142:15 149:13
156:7,19 157:5,7,12
158:2 170:8,13,13
- 171:13 172:12 180:15
180:18 188:11 190:21
191:10 199:11,16
205:12 225:6,14
228:13 234:4 235:15
235:17 247:7 256:16
256:19 257:17 261:4
261:8 262:3
difference 49:11 121:21
143:4
differences 183:15
different 54:18 69:2
110:6,10,12 127:21
176:4 200:6,12
232:16 266:2
differs 25:6
difficult 45:5 62:19
188:8 194:8 195:14
dig 144:3 218:19
digest 50:21 220:2
digested 50:13,13
digestive 157:19
diligence 50:1
dinner 80:3 95:1 108:21
diotine 261:1
direct 27:4 34:15 56:7
135:3 240:21 259:9
directly 7:13 8:3 10:11
10:19 128:15 240:5
240:13
director 20:7 46:11
55:13 59:6 67:20 71:7
83:17 108:10 112:5
122:4 131:18 162:5
175:7 189:19 214:20
218:5 239:17
disabilities 117:2
disability 116:5 117:13
162:22
disabled 90:5
disaster 70:9
discern 61:8
disciplines 165:14
disclosure 132:21
disclosures 43:9
discontinue 38:19
discourage 47:16
185:11
discouraging 106:11
discover 189:13
discovered 98:13
212:19
discovery 97:9
discuss 87:9 105:2
discussed 211:15
discussion 143:12
discussions 158:14,16
161:18 190:16
- disease-fighting** 262:4
diseases 37:17 50:16
53:18 75:17 83:15
99:22 100:4,10
129:10 142:14 196:14
208:15 217:1 219:17
224:9 236:15 237:6
258:2
dish 84:3
dishes 47:4 49:1 83:6
85:2
disorder 189:2
disorders 213:8
disparage 106:10
disparaging 106:4
disparities 89:15
disparity 130:5
displayed 48:21
disproportionately
50:18
disservice 57:19
distilling 144:8
distinct 31:6 172:2
distinction 68:18
distinctions 101:11
distinguished 101:4
distinguishing 69:4
distributions 261:12
distributors 135:10
215:5
district 46:16
districts 84:5
disturbing 168:21
diverse 74:8 96:15
134:2 140:1,11
diversify 35:6
diverticulitis 258:4
Division 112:7 146:10
DNA 94:22 154:22
docket 26:4
doctor 74:21 92:20
190:3 202:13 222:19
232:21,21 233:4,10
248:1 256:13
doctors 93:7
document 224:1
Dodds 3:15 252:22
253:1
dog 233:13
dogs 40:16 47:9 119:17
doing 19:20 39:22
101:13 118:9 154:7
198:12 199:22 200:5
203:17 256:11
dollar 121:2
dollars 17:8 118:16
domestic 215:4
dominance 129:8
- Domokos-Bays** 2:6
108:8,9 112:1
Don 266:12
donor 73:15 245:18
DONOVAN 1:16
dose 24:20 28:19 29:4
124:1
Dotsie 2:15 218:5
doubt 244:2
dozen 181:16
draft 8:18 9:22
dramatic 123:9 256:22
dramatically 132:2
drank 218:13
dried 15:13 30:17,17
drink 78:10 218:17,21
238:14
drinkers 137:12,14
drinking 17:16 137:15
137:21 138:11 151:19
176:2 215:20 216:3,7
216:9,11,16 217:2
219:11 232:2 253:22
254:8
drinks 43:13 44:3,21
216:14 217:6
drive 110:18
drive-in 86:3
Drive-ins 86:1
driven 167:10 187:1
drivers 160:2 167:12,14
drives 197:21
driving 22:10 55:19
202:19
drop 120:12 223:13,15
255:12
dropped 32:9 209:18
dropping 223:14
drops 169:16
DrPH 1:20
drug 94:10 257:7
266:14
drugs 94:13 186:18
dry 30:16 31:3
Dubost 3:8 26:19,20
due 14:4 16:1 22:9
45:18 51:4 106:14
129:12 174:4 176:9
185:7 227:17 243:18
duplicating 25:20
dysfunction 187:17
-
- E**
-
- E** 227:2
ear 129:10 259:5
earlier 65:12 66:1 160:9
239:10
early 8:13 50:19 59:22

67:7 76:20 83:12
151:3 189:2 214:9
217:2 255:18 257:5
earth 220:5
easier 34:5 104:22
134:15
easily 57:6 58:9 147:5
224:4
eat 17:21 36:8 38:10
40:20 42:8,18 46:5
54:14 60:6,7 63:2,2
64:5,21 76:1 78:10
80:5,5,15 96:18
103:13,13 111:18
123:3 141:18 142:6
154:11 157:15 178:1
187:9 191:9 193:8
197:16 201:17 208:19
223:5 224:11 230:19
230:19 231:2 236:17
238:17 240:18 241:6
247:16 248:4,7 249:3
260:7
eaten 142:2 169:9
241:12
eating 14:1 21:13 22:5
34:10 41:14 53:14,19
59:15 62:3 65:12
66:16 71:18 72:19
76:22 77:3 79:7 80:12
83:10,13 86:7,14
92:16 96:10,19
108:18 109:10 113:12
122:16 124:10 125:2
127:1 140:8 147:1
156:7,13,17 177:22
187:8 190:12,20
192:17,21,22 193:1
195:4 196:11 201:4
205:18 212:19 214:8
214:11 224:4 226:15
230:22 232:2,22
233:1 234:22 238:12
252:10 255:7 260:14
EatWell 3:3 139:3
economic 139:5 140:14
141:1 166:17
economically 31:4
Ede 2:22 186:5,6
edible 30:16
edition 10:7 31:10
106:15,22 109:9
112:12
editions 46:2 106:1
edits 28:18
educate 118:18 245:17
educated 210:5
education 3:13 46:14

112:6 118:8,13 122:6
139:2 140:19,22
141:9,14 151:8
177:13 182:9,17
217:7 245:4 246:4
educational 217:14
educator 259:8
effect 111:7 207:8
effective 18:6 40:14
51:13 82:22 127:15
127:21 161:16 176:20
224:12,22
effectively 155:13
220:2
effectiveness 24:14
151:6
effects 14:13 15:21
90:6,9 114:3 118:22
130:17 138:7 151:10
207:6 240:6
efficacy 118:3 183:14
efficiency 24:14
efficient 166:8
efficiently 13:1 25:22
effort 134:7,17 164:9
250:4
effortless 234:8
effortlessly 38:5
efforts 43:8 83:9 96:7
111:11 134:11 166:5
egg 3:16 112:5,7,8
114:7 206:3
eggs 33:18 41:2 56:10
112:10 113:3 114:13
114:15,19 115:7,10
146:19 221:22 239:8
eight 114:15 141:10
173:17 221:16
Eighty 94:5 129:20
either 23:3 212:1
234:21 236:17 263:6
elaborate 110:6
elevate 148:20 219:16
elicits 147:14
eliminate 131:13 239:7
eliminated 221:14
elimination 43:11
Elizabeth 267:6
email 9:9
embarrassed 230:3
embody 109:9
embrace 167:6 205:18
embraced 85:22 94:4
embraces 128:1
emerged 226:22 234:16
emergencies 118:7
emergency 236:3,5,7
emerging 20:14 36:2

80:8,20 115:2 138:10
195:13
emotional 80:12
emphasis 33:22 36:15
47:3 68:9
emphasize 46:22 65:10
68:7 145:4 172:1
226:18 240:15
emphasizes 165:6
222:12
emphasizing 95:19
employ 79:9 166:14
employee 49:1
employing 133:5
empty 63:13 124:17
261:18
enable 58:8 165:8
198:11
enables 167:5
enabling 66:4 198:13
ENC 112:9
encourage 16:12 23:1
27:14 29:16 34:7 48:9
48:11 67:16 78:18
137:10 158:6,13
171:13 181:19 205:6
217:6 228:14 230:11
230:21 231:2 232:6
263:11 264:15 265:9
encouraged 102:4
120:22 141:9 215:21
encourages 80:17 96:1
encouraging 42:8 48:4
81:2 115:13 174:20
199:11,12 205:14
endocrinologist 199:4
endorsed 256:3
endorses 178:18
endpoints 15:22 97:4
144:19 159:19
energetic 210:3
energy 14:5 157:19
201:3 234:13 251:21
255:12
enforcement 18:11
engage 168:4 252:9
engaged 10:6 134:5
265:10
engagement 6:10 29:21
engaging 161:18
Engineering 86:21
100:15
enhance 85:12 86:6
95:9
enhanced 82:20
enhancement 39:20
enhances 85:6
enhancing 57:3 85:4

enjoy 13:21 16:9,14
59:15 62:6 109:12
enjoyed 61:17 107:17
enjoying 221:21
enlist 177:18
enormous 214:7
enraged 219:1
enriched 179:6,8,10
181:20
ensure 10:1 18:6 71:9
72:5 89:19 97:2 144:4
149:8 150:15,16
250:21
ensuring 10:22 57:15
74:12 98:17 133:1
145:12 164:21
entire 58:13 77:22
132:12 145:18 201:14
234:9
entirely 253:16
entrees 47:5 82:22
110:11
environment 13:21
45:18 87:4 152:13
207:18 225:21
environmental 86:20
89:7 205:11 240:5
260:2
environmentally 223:2
225:1
environments 235:18
envy 189:4
enzymes 50:21
EPIC 127:9 191:11
epidemic 45:15 100:10
176:13 208:10 221:14
224:11 236:8 257:3
259:22
epidemiological 123:12
epidemiologically-ba...
188:1
epidemiology 104:15
161:17
equal 91:12 235:17
equally 110:12
equals 103:10,11 104:7
equation 103:8,20
equipment 109:20
equivalent 57:21
120:10 232:3
eradicate 239:21
Eric 2:15,16,16 92:20
232:10 256:9
error 236:14
ERS 123:2
especially 36:7 47:1
49:12 107:16 174:7
174:21 195:3 249:11

essential 56:4,8,15,21
60:17 62:1 73:19
97:12 105:16 114:16
146:15 151:22 153:20
164:21 173:9 174:2
187:10 196:6 228:5
241:11 251:2
essentially 54:2 119:11
152:20
establish 83:12
established 39:4 44:15
96:5 99:6 100:18
181:15 225:11
establishing 228:19
esteemed 68:4 71:4
estimated 75:22 172:19
estimates 160:11
estrogen 129:7 130:10
130:12
et 127:8
ethical 36:9
ethnic 130:5 167:7
European 51:7 255:22
evaluate 160:13
evaluated 159:16
evaluates 228:17
evaluating 101:18
181:6 204:7
evaluation 66:15
181:21
evaluations 164:1
Eve 6:15 7:6
eventually 190:22
191:3
ever- 159:12
ever-growing 262:9
everybody 6:16,19 7:4
10:3 196:18 233:1
263:21
everyday 64:1
evidence 14:6,13,22
15:11 16:8 19:9,13,19
25:12 28:8 29:12,14
33:21 36:13 37:10
39:1 40:7 42:6 43:19
44:7,10,12 59:18 61:5
62:5 64:12 65:11,18
87:14 88:5 95:13,22
96:4 98:19,20 99:1,2
99:8,15 100:4,7,12
101:12,18 102:1,2
125:5,11 127:4,17
128:19 129:2,13
130:15 134:22 135:21
138:2,10 141:4
145:22 179:12 184:18
195:7,8,9,11 205:10
207:11 210:22 214:7

225:20 256:18 265:8
evidence-based 49:21
95:19 101:6 125:19
131:9 142:18 143:3
239:20
evident 22:21 133:10
evolved 184:15
evolves 144:5,5
evolving 22:16 134:21
225:20
exacerbated 219:11
exacerbates 164:4
exactly 91:22 203:5
204:5
examination 107:9
222:9
examine 181:2 184:11
examined 206:13
examines 14:22
examining 164:3
226:12 265:7
example 18:20 24:22
28:5 35:1,18 85:7
104:16 106:6 140:18
141:21 148:4 167:1
171:7
exceed 150:2
exceeding 45:7 251:21
excellence 95:11
excellent 30:19 114:15
227:20 228:6 231:12
exception 31:12 241:5
exceptionally 62:18
excess 26:15 54:9,21
63:13 231:21 258:6
excessive 45:4 116:3
116:14,15
Exchange 3:3 139:3
excited 40:2 133:22
163:4,21
exclude 24:12 187:10
excluded 99:3 102:1
Excluding 25:9
exclusion 61:10 264:21
exclusive 116:10,20
243:21 262:14
exclusively 73:10
116:13 187:22 227:7
242:17
excuse 204:13
executive 46:11 67:20
71:7 112:5 122:4
133:8 175:7 177:6
218:5 224:6
exercise 37:19 48:12
198:1 199:13 212:13
233:15
exhausted 243:10,16

exist 26:2 101:14
existing 24:8,17 25:13
25:18,21,22 80:4,19
96:2
exists 127:4
expanding 159:13
Expectant 72:20
expected 36:3
expecting 114:9
expense 237:22
experience 109:5 128:5
211:5 220:3
experienced 209:22
234:15,15
experiences 194:16
experiencing 63:14
experiment 152:21
221:18,19
experimental 141:10
experiments 99:10
expert 14:18 24:4 71:3
expertise 17:3 186:8
experts 41:19 100:6
101:5 102:1 133:4
211:20 215:21
explain 247:21
explains 203:20
explicitly 24:12 187:14
187:18,21
exploration 86:11
explore 79:19 87:18
88:15 158:6
explored 85:3 156:22
expos 48:21
expose 109:2
expressed 86:21
extend 240:8 263:1
extends 194:12
extensive 117:8 255:19
extensively 191:5
205:21
external 19:8 24:13
92:11
extraordinary 73:20
Extreme 111:18
extremely 109:16
159:19 191:9
extrinsic 207:6,7
eye 93:5
eyes 218:4
eyesight 93:21

F

face 7:13,13 157:21
162:20
faces 142:12
facetious 171:2
facilitate 79:5 225:18

facilitates 81:5
facilities 109:20
fact 60:7 65:14 79:8
99:4,18 100:14 107:2
113:18 120:19 127:20
128:1 130:11 133:6
137:18 154:4 162:18
169:14 172:13 176:1
177:6,7 191:13
197:21 212:21 216:7
230:21 237:20 241:5
251:14 260:7
factor 99:20 116:9
169:7 197:15 260:3
factors 109:19 121:6
126:15 183:1 257:19
260:2
factory 235:19
facts 43:9 50:1 54:6
faculty 75:1
fail 82:5 191:1 245:11
failed 234:3 244:20
failing 117:16 191:4,5
failure 88:8 112:17
118:13 119:14 258:4
failures 98:12
fairly 201:14
fall 136:21 172:18
223:16
fallen 53:7
falling 240:17
false 130:20
familiar 140:21
familiarizing 161:13
families 46:5 63:8,10
63:14 64:13,17,22
66:6,7 93:2 142:22
152:11 188:22
family 2:5,10 65:1
74:10 80:10,19 81:2
128:12 139:10 152:9
201:14,17 246:10,19
family-owned 215:7
far 126:12 156:14
187:20 232:1
Farida 2:17 164:13
farm 40:17
farm-to-table 178:13
farmers 59:9 112:8
farming 153:16 235:19
Farms 2:20 84:11
Farris 42:15
fascinating 175:5
fast 85:22 146:3 176:19
faster 199:21
fasting 103:5 124:5
156:15 171:1 202:21
fat 31:2 34:22 35:3

- 37:20 43:12 44:11,11
48:18 50:15 60:13
63:12 70:5 82:21 85:9
85:17 98:9 99:21,21
104:4,5,19 110:3,15
120:14 132:9 143:22
147:15 148:14 154:12
154:14 169:9 170:21
171:9 191:19,20
192:12 195:16,19
196:22 197:7,8 198:8
198:9 200:6,11 202:3
207:13 214:12 238:20
239:4 248:2,5,19
249:4 258:7 261:8,10
- fat-free** 194:2 195:5
fathers 220:17
fatigue 219:16
fats 44:9,9 80:7 110:14
129:1 132:9 166:22
184:8,8 241:17 261:7
261:19
fattening 258:10
fatter 169:4
fatty 39:19 69:8 112:22
124:18 148:17 183:12
183:13 191:14 213:7
favorable 113:17
124:18
favorably 61:2
favorite 86:9 177:20
FDA 122:22 125:3
fear 77:2 262:9
feature 187:5
February 175:14
feces 130:10
fed 2:8 115:20 244:1,5
federal 18:12 24:11
66:18 106:5 108:22
266:19
Federation 3:17 171:21
feed 152:19 242:18
feeding 73:17 106:5
116:2 118:20 119:3
157:20 158:1 184:22
185:1,3 235:20
236:18 243:21 245:17
250:15
feel 13:5 143:14 201:3
234:4,15,18,20
feeling 210:2 257:10
feelings 189:6
feels 234:11
feet 93:10 94:1
fellow 92:13
fellowship 259:10
felt 19:16 234:8,8,9,19
female 129:10 163:19
- fermentable** 151:21
254:9 255:3,10
Ferranto 2:19 84:9,10
fetal 113:13 147:21
fewer 60:13 80:6 111:5
134:7
fiber 30:20 31:1 35:10
41:4 42:12 48:20
69:14 75:5 76:6,7,11
76:15,16,18 77:1,10
106:12 166:21 171:10
179:21 181:15 227:3
227:6 231:11,12
241:14,21 251:17
260:19 261:20
fiber-rich 142:3
fibers 228:7
field 211:13,20 222:5
Fifty 134:16
fight 177:4
fighting 42:16 162:8
figure 198:16
fill 252:6
filled 76:4
filtered 215:8
final 8:18 13:8 20:2
145:11,13 224:16
finally 45:15 49:6 70:14
89:12,16 115:6 134:4
177:18 205:6 207:3
227:22 262:6
financial 208:7
financially 131:7
find 9:17,18 79:4 91:14
126:14 127:10 128:2
158:5 160:13 244:15
257:22
finding 17:10 139:16
findings 15:3 18:3 20:1
156:2
finely 84:22 85:5
finished 12:19 13:5
firm 114:6
first 8:9,12 13:12 27:7
37:14 41:5 43:19
46:22 50:12 56:21
63:18 64:14 65:10
71:10,11,17,22 72:3
72:16 73:10 74:13
86:1 98:21 100:15
103:19 104:7 112:17
120:17 126:7 140:5
140:10 143:13 145:5
161:16 164:7 171:22
177:18,19 180:6
182:21 185:15 186:12
190:20 193:16 199:8
200:14 205:9 208:4
- 216:21 224:19 242:16
242:22 243:8 247:8
249:19
fish 56:9 57:5 183:15
221:22
fished 153:5
fit 8:7 103:16 109:14
127:18
fitness 262:10
five 15:6,12 16:10 26:18
35:17 39:7 43:17
53:12 60:14 93:7
117:6 123:8 131:10
150:7 191:13 197:6
199:8 214:5 221:19
224:6 257:10
fixed 261:11
flabbergasted 248:1
flat 53:8
flavonoid 28:16,20 29:5
flavonoids 16:4 27:21
28:10 136:9
flavor 22:17 85:3,6,12
197:7,13,13,15,21
198:4,18
flavorful 82:22
flavors 153:17
flexibility 111:12
250:16
Florida 152:9
flossing 253:22
flour 68:22
fluids 70:21 243:5
fluoridated 151:16,19
253:22 254:8
fluorinated 254:5
FMI 78:3,7,21 80:4,16
focus 16:12 25:22 68:5
70:6 78:8,9 88:18
97:20 132:2 143:21
144:12 155:17 163:4
175:9 184:7,21
186:16 187:8 193:4
216:21 247:13 250:5
261:13
focused 7:11 13:20
81:22 158:1 175:21
focuses 157:9
focusing 240:21
folate 30:19 112:22
136:10 166:19 179:21
227:3
Foley 3:10 236:2,3
239:13
folic 180:1,4 181:18
follow 49:20 61:15
77:16 110:6 151:14
212:11 239:9 244:1
- 247:1 254:3 264:16
follow-up 144:22
followed 65:19 73:11
73:16 94:3,17 199:9
following 17:20 72:16
84:7 101:8 156:12
183:4 197:1 200:3
216:8
follows 83:3
food-borne 236:9
foolish 244:16
foot 201:12
for-profit 260:10
force 22:10 139:19
255:16
forces 55:19
foremost 171:22
186:12 211:20
forest 144:11
forget 177:22
forgotten 53:9
form 48:6 57:13 116:19
188:8
formal 46:15
formally 132:13
former 41:5 177:19
forms 13:22 14:14 15:7
16:6,15 66:11 105:17
formula 73:16 217:3
245:6,7,19
formulate 165:20
166:14
formulating 167:3
formulation 166:6
forth 12:10
forthcoming 19:12 22:3
33:9 135:4
fortification 180:1,5
fortified 35:19 136:11
173:3 179:8,10
181:20 188:12 227:13
fortunate 245:12
Forum 4:1 168:11
forward 12:15 13:4 23:8
23:12 29:21 36:18
58:22 78:16 115:14
125:10 167:20 186:1
fostering 13:21
found 22:4,9 44:8 58:4
85:4 89:2 93:4 107:2
108:4 119:11 121:8
124:15 138:5,8
149:17 156:11 157:1
157:8 160:4 173:1
174:7 176:17 195:17
195:22 199:18,19
214:2 227:7 233:10
242:19 243:3 247:3

257:16
foundation 2:9 3:13
 4:20 13:20 14:10
 58:18 71:15 83:13
 115:21 121:7 122:6
 155:11,12,22 158:9
 158:17 228:20
foundational 59:12
 61:20
founded 20:8 213:2
 215:3 225:8
founder 139:2
founders 176:1
founding 125:22
four 29:9 65:20 83:18
 102:16 141:10 176:10
 200:16 201:18
fourth 45:8 116:22
 264:7
fracture 238:9
frame 109:11 241:12
framework 162:9
frameworks 264:20
Framingham 235:5
frankly 48:6
free 13:5 41:1,1 172:4
free-living 197:5
freedom 189:13
French 178:2
frequency 21:12 96:10
 124:9 151:20 254:9
 255:3,9
frequent 22:5
fresh 3:18 15:13 31:16
 65:6 66:18 75:11
 139:13 189:9
friend 154:17
friendly 117:18 223:2
fries 45:19 178:3
front 12:17 52:21 131:8
 245:20
frontier 80:21
frontline 208:9,21
 211:5
frontlines 182:13
frozen 15:13
fructose 191:12,15
 260:17
fruit 53:22 66:18 135:17
 136:16,17,18,22
 137:2,7,8,9,10,12
 138:3,11,17 141:13
 255:11
fruitless 166:6
fruits 13:22 14:2,7,14
 15:7,9,18,20 16:6,14
 17:12 23:7 37:19 42:9
 43:22 65:13 66:5,11

66:16 67:6 68:19
 69:10 74:8 75:11 76:1
 76:7 80:6 84:1 87:22
 89:4 109:3 127:3
 132:8 136:15 137:1
 149:14 156:20 199:11
 211:1 226:19 251:11
 255:11
frustrated 248:22
Fu 267:6,10
fuel 41:5 219:13
fueling 236:18
fulfill 143:17
full 24:8 39:6 77:10
 111:2 116:11 120:21
 149:18 172:16 258:16
full-service 139:12
full-time 98:10
fully 27:11 150:10
 197:6
function 57:3 138:13
 147:13 148:13
functional 34:18
functioning 148:15
functions 216:5
Fund 23:22
fundamental 101:9
funded 59:9 99:8 121:7
funding 109:19 142:19
funds 23:22
Fung 203:15,19
Fung's 202:17
funnel 130:19
further 41:19 50:14
 66:5 101:16 107:8
 108:2 147:2 158:16
 179:2 228:15
furthering 167:21
Furthermore 80:8
 114:1 130:14 137:11
 180:8
future 2:14 4:7 36:19
 42:22 71:16,21 80:17
 81:9,12 86:18 87:1
 88:18,21 89:10
 148:20 178:8 248:17

G

gain 37:17 38:12 44:22
 137:22 138:6 261:16
gained 38:1 199:20,21
Gale 2:19 84:10
Gallimore 2:9 55:12,13
gap 27:7 140:19
gaps 113:12 252:6
garden 153:6
gardening 153:16
garnered 157:5

Garrison 2:7 30:3,4
Garth 2:21 189:18
gas 45:22 129:19 220:5
Gates 121:7
gateway 107:19
gatherers 23:22
geared 202:1
general 37:2 70:4,12
 105:19 120:6 139:8
 229:15 230:6
General's 121:17
generally 22:1 230:6
generation 21:5 63:17
 84:12
generations 19:21 21:4
Genes 152:16
genetic 260:1
genetically 231:6
George 13:17
Georgetown 133:22
Georgia 2:22 186:6
getting 40:1 60:13
 126:9,10 146:2 169:4
 187:9 231:6 262:9
GFI 33:15
Gilead 3:18 229:2
Gillings 2:12
girl 200:15
girls 57:9 82:8
give 10:12 11:16 41:3
 42:15 71:3 94:16
 101:13 117:20 198:17
 244:18 245:7 256:17
given 21:14 23:2 41:16
 76:9 97:17 106:11
 150:20 154:7 179:2
 210:18 223:8 224:10
 224:11 236:14 243:5
 245:3
gives 91:9
giving 7:11 68:3 161:9
glaring 236:14
glass 173:16
global 2:12 24:1 117:13
 121:5 164:15,21
 176:16 205:13 219:18
glucose 169:17 171:1
 187:2,3 188:18
glycemia 39:2
glycemic 231:10
goal 202:6 250:16
goals 40:17 79:16
 140:18 168:1
God 122:1
gold 60:22 99:12,15
Goldman 4:6 86:16,17
Gordon 101:4
gotten 248:13 264:17

government 20:7 21:18
 24:11 30:11 99:9
 153:12 164:18 205:12
 217:15
governments 217:9
grade 101:2,4,9,13
 110:10 116:22
graders 169:1
gradually 247:9
grain 3:10 53:21 70:1
 178:13,13,18 179:4
 179:10,13,18 181:6
 181:11,11,11
grains 37:19 42:9 43:22
 44:4 68:20 69:11 70:8
 75:12 76:8 89:4 109:3
 127:3 132:9 166:21
 178:22 179:1,3,6,7
 181:13 187:14 188:11
 199:12 211:1 226:19
 240:16 251:11
gram 136:17,17 206:18
grams 35:2,3 76:16
 91:1,11,12,15,16,18
 92:14 104:4 173:17
 173:18 206:20 207:12
 212:7 247:18,19,20
graphic 217:17
graphics 217:12
grass 238:12
grass-fed 130:9
gravity 203:4,6
greasy 77:7
greater 34:13 35:14
 175:12 205:6
greatest 128:2 164:20
 260:2
greatly 20:14 33:7
 177:8
green 15:20 29:1,8 84:3
Greenberg 4:5 175:4,6
greens 48:11 142:3
Greger 3:16 119:8,9
groceries 78:4
grocery 76:3 78:1
 139:12 206:22
gross 237:16
ground 84:21 85:5,7
grounded 187:22
group 3:18,20 13:17
 20:19 27:20 45:6
 47:10,20 48:10,10
 58:7 67:4 70:15 81:22
 98:15 127:17 133:8
 134:2 135:18 136:16
 162:6 172:2 173:10
 190:10 208:4 209:5
 221:4 229:3

groups 13:13 23:1 33:7
36:7 70:11 81:16 82:4
110:11 114:14 149:7
163:18 166:20 175:15
179:22 215:19
grow 195:11 254:19
growers 105:12 135:10
growing 42:16 125:5
162:14,19 188:14
200:21 201:6
grown 63:9
growth 56:14,22 60:4
194:20 226:3
guacamole 110:16
Guardian 42:1
guess 178:5
guidance 27:9 30:13
58:21 61:15 74:7
78:11 80:1 81:2,3,4
84:7 96:13,18 97:5,15
148:20 150:15 158:8
167:13 185:2 217:12
217:16 228:19
guide 42:7 52:6 85:15
86:13
guided 36:12
Guideline 63:22 84:2
89:12 100:6 140:7,10
178:19 210:12
Guideline's 36:15 65:16
177:6
guidelines' 91:2 100:2
gum 151:18 253:12
254:6 255:20 256:1,4
gut 219:8
Guyatt 101:4,12
Gynecologists 73:5

H

habits 61:16 66:7 71:18
80:2 108:18 141:5
156:7,8 157:1 217:2
252:10 253:17 255:7
Haiuyen 3:1 249:18
half 21:2 54:10,20 55:2
122:19,19,21 139:7,8
150:18 157:11 178:22
181:16 220:8
halfway 138:21
Hall 2:15
Hallberg 4:8 211:9,10
214:16
ham 119:17
Hamlin 2:4 46:9,11
hand 61:12 120:8
261:18
hands 93:10 94:1
Hanselman 3:17 171:18

171:19
happen 267:11
happened 8:14 121:14
152:18 234:12,17
happening 246:1
happens 144:2 190:21
245:2
happier 16:15
happy 98:2 221:21
hard 30:7 63:1 77:15
139:16 175:1 186:1
243:22
hard-to-reach 254:20
harder 63:4
hardest 212:20
harm 50:18
harmful 100:3 118:22
harming 52:2 240:1
harmless 218:15
harmonize 96:7
Hartford 159:7
Hartman 20:19
Harvard 41:20
Harvard's 41:21
harvested 31:3
Haven 266:7
Hawaii 69:20
Hayes 2:14 81:8,11
hazards 158:3
Hazbun 4:18 246:9,10
249:10,14
hazelnuts 122:11
head 26:20 243:10,17
headquarter 1:9
heal 95:1
healing 2:13 102:13
255:16
healthcare 150:20
160:3 188:22 210:4
236:11,13 237:4
260:8
healthful 41:4 70:15
79:10 133:13 155:20
178:14
healthier 16:15 22:14
71:21 80:11 86:6,13
108:2 111:9 132:4
133:2,4 141:3 142:21
156:17 198:16 225:18
247:11
healthiest 71:10 171:10
hear 8:13,22 10:11,19
68:12 192:1 263:15
263:17
heard 10:2 154:18
160:7 191:7 219:22
227:11 233:16
hearing 7:18 126:8

263:18
hears 192:8
heart 26:8 44:5,10,14
45:2,12 50:17 60:21
61:2,11 75:16 76:19
88:8 91:16 123:1,16
129:3 149:21 181:8
205:7 207:3,14 226:9
235:6,14 236:8
heartbreaking 130:18
Heather 1:16 103:3
heavily 189:5
held 264:8
Hello 13:16 74:19
128:11 155:7 159:5
211:9 225:4 229:1
help 12:12 15:10,14
16:9 29:18 38:6 40:3
40:16 46:12 59:19
62:6 67:12 69:4 77:8
79:6,15 83:14 88:11
96:18 103:2,7 113:12
123:5,16 125:8 126:6
132:4 133:4 136:15
139:3 151:9 153:12
158:10 161:12 165:22
184:4 196:12 207:16
207:20 216:12 222:14
227:1 242:7 251:20
258:18
helped 203:3 260:11
helpful 70:3 78:20
107:1 132:7 136:1
helpfulness 167:11
helping 14:8 79:1 82:3
86:8 137:4 155:17
176:14 189:1 198:15
205:18 209:6 212:16
267:13
helps 83:11 105:1
148:14 150:21
heme 57:12
hemoglobin 201:12,18
223:17,18
hemp 35:18
Hennessy 4:11 40:11
40:12
herbs 197:14 198:4
hesitate 210:11,12
hey 192:9
HHS 7:16 10:21 11:9
17:4 18:5 19:6 27:22
29:18 65:9 76:14 96:5
98:3,22 144:6 175:17
249:20 253:6 258:8
266:9
Hi 20:6 84:9 102:11
162:4 178:11 189:18

196:18 202:10 218:3
236:2 239:16 259:3
high 19:7 24:8,17 25:9
25:19 26:1 35:9 41:4
44:11,12 48:1,11
53:18 57:7 59:14 62:5
63:11 68:11 69:14
74:1 76:7,8 87:19
88:6,10 89:3 96:2
100:2 101:11 106:12
118:1 124:20 129:3
130:10 142:2 169:2,9
170:22,22 171:9
174:1,6,7 180:18
188:13,13 191:9
197:2 210:13 235:5
248:20 255:9 260:17
261:8
high-calorie 176:19
high-carb 171:12
high-carbohydrate
214:12
high-fat 170:8,13 171:7
234:22 235:13 247:17
248:7
high-fiber 169:13
high-protein 171:7
high-quality 205:3
206:1 253:11
high-tech 222:5,19
higher 31:1 32:14 42:8
43:21 45:2 57:10
59:18 60:18 65:13
88:16 123:14 134:8
137:6 147:18 163:15
173:22 174:3 195:17
219:20 226:18 227:5
261:20
highest 42:13 238:7,8
highlight 27:5 156:1
162:10 175:18 251:5
highlighting 34:9 36:14
97:21
highlights 253:7
highly 23:3 68:21 69:7
75:18 179:11 220:12
241:8
highly-processed
261:15
hindered 97:8
hip 238:9
Hispanics 219:22
historically 105:22
history 63:5 121:6
175:20
Hixson 3:4 20:6,7
Hofstra/Northwell 3:3
259:7

hold 192:13
holding 178:8
holds 222:12
hole 234:5
home 80:5,10,15,19
 81:3 111:9 243:2
hone 237:10
hope 105:1 148:21
 177:17 189:8 204:15
 207:19 267:17
hopefully 70:19
hopes 12:4
Hopkins 4:6 86:18
hormonal 203:16,18
hormonal-based
 220:18
hormonally 54:5
hormone 186:22
 200:10 231:21
hormones 54:4
HORN 1:22
horribly 245:13
horrors 235:18
hospital 3:2 94:19
 117:18 208:12 242:20
 243:3,8,15 245:5,16
 258:1
hospital-based 229:8
hospitalist 256:14
hospitalization 116:7
hospitals 64:4 143:6
 243:21
hot 47:9 119:17
hotel 258:16
hours 116:21 118:5
 243:3,9 248:21
House 139:18
Houston 8:21 264:8
huge 49:10
human 7:3 51:2 59:6
 70:16 73:15,17 89:18
 106:18 112:10 119:18
 130:12,19 159:10
 168:3 188:3 206:16
 240:4,13 257:14
 266:4
humane 4:11 40:13,15
 40:18,19 41:1 42:4
humans 14:9 48:1
 130:21 234:20
hummus 110:16
hundred 129:20 135:17
hundreds 85:21 152:22
 153:1 200:20,21
 209:7
hunger 21:9 118:5
hungry 201:4
hunted 153:5

Huntington 3:2 199:4
Hutchins 7:2
hydration 215:22
hygiene 150:20 151:15
 254:3,18
hygienists 149:5,6
 152:4
Hygienists' 3:9
hyperbole 120:5
hyperinsulinemia
 159:17,18 160:4,13
 160:22 161:20,22
hyperlipidemia 261:3
hyponatremia 116:18
 117:5
hyponatremic 117:5
hypertension 88:9
 213:7 226:10 258:5
hypoglycemia 116:4,18
 116:21 117:8 119:1
hypometabolism 187:2
hypotheses 188:1
hypothesis 203:14

I

I.Q. 201:15
IARC 119:19
IBWA 214:22,22 215:3
 215:5,10
ice 178:2 218:13
iconic 85:1
idea 70:1 84:21 109:10
 161:11 232:5 238:5
ideal 200:18
ideas 86:7
identified 78:19 112:21
identify 22:3 89:13
identifying 79:10 80:22
ideology 104:22
IFIC 155:12,22 158:9,17
 197:17
ifs 245:9
IFT 164:15 165:6
 167:20 168:2
IGF-1 129:7
ignore 19:18 100:7
ignored 99:3,7,16 142:5
 214:17
ignores 167:14
ignoring 100:12 120:15
illness 137:17 186:17
 230:13
illnesses 236:10
illogical 210:17
illusory 101:15
illustrate 84:5
image-guided 222:6
imagine 232:18

imaging 222:4
imbalanced 54:5 63:8
imbalances 186:22
impact 27:4,17 38:13
 64:2 86:8 89:7 95:14
 96:9 123:10 124:22
 127:5 134:12 140:4
 142:7 179:15 183:2
 205:15 207:17 251:15
impacted 9:4 173:5
impacts 150:22 173:15
impaired 219:9
impairment 115:4
impairments 117:12
imperative 183:1 249:7
implement 67:13 97:22
 134:1 140:13 142:20
 145:7 176:14
implementation 18:6
 82:2 109:7,18 165:8
implemented 132:22
 167:15 197:22
implementing 84:5
 249:21
implications 26:13
implore 37:9 239:9
implores 30:10
imply 100:4
importance 47:1 72:14
 80:18 118:19 148:19
 149:8 150:13 175:18
 185:19 198:18 210:5
 215:11 217:8 253:9
 253:12,20
important 8:22 9:2 11:5
 16:13 23:11 24:19
 28:5,12 49:10 56:18
 57:8 62:16 65:17 76:9
 78:17 79:18 87:4
 101:10 105:14 106:17
 107:4,13 126:15,17
 136:9 141:7,16
 146:12 148:11 149:1
 149:12 154:3,5,10
 162:11,17 164:11
 166:3 181:12 186:8
 194:14 197:15 205:17
 207:20 208:5 214:6
 215:17 216:22 241:2
 252:13 255:5 256:11
importantly 10:19
 78:12 101:10 150:9
importers 59:10
impossible 188:9
 242:15
improbable 179:11
improve 40:3 42:3
 58:19 68:6 76:12 79:6

 79:22 96:20 102:4
 123:7 124:6 139:21
 151:4 156:19 162:11
 166:5 168:7 177:4
 202:15 235:13 248:10
 250:4
improved 49:21 113:19
 138:13 147:15 249:5
improvement 39:12,19
 141:13
improvements 43:12
 201:8 257:18
improves 107:3 260:21
improving 37:7 39:1
 112:16 143:5 213:18
 247:7
in-person 1:11
inadequacy 251:3
inadequate 109:20
 254:18
inappropriate 57:19
inaugural 222:9
incidence 118:1 127:11
include 19:7 20:1 27:15
 27:18 30:17 31:16
 33:3 34:15 41:13
 51:13 80:1 83:22
 95:14 96:1,15 112:21
 138:15 154:16 157:18
 158:3 165:7 173:12
 177:11 181:20 215:4
 237:20 249:6 250:6
 251:16 264:10 266:16
included 29:16 61:13
 87:10 107:14 135:19
 246:15
includes 44:12 72:18
 83:19 133:14 151:15
 159:19 254:4
including 15:5 20:12
 26:6 28:1 36:4 40:17
 41:11 42:12 45:8
 50:16 56:21 57:9
 58:11 66:3 80:4 95:21
 96:16 105:19 106:18
 109:19 112:13 122:10
 125:20 127:7 132:7
 138:17 149:21 150:13
 156:8 162:15 163:3
 174:14 188:5,8
 193:20 194:21 215:1
 215:7,8,13 226:4,9
 227:2 228:4 232:16
 233:20 248:8 251:19
 256:2
inclusion 48:14 125:6
 173:10 207:12 215:13
 264:21

- inclusive** 267:14
INCNREF 122:6,9
 125:10
income 174:18
incomplete 173:20
inconsistent 180:15
incorporate 23:7 88:19
 89:9 145:7
incorporated 162:1
 207:8
incorporating 228:12
 252:11 253:12
increase 22:1,22 66:10
 66:19 67:13 81:1 82:3
 82:13 83:5 84:6 85:15
 107:20 115:7 117:1
 120:9 123:9 129:5
 137:17 166:20 176:10
 179:4,20 197:1 202:3
 219:8 225:15 227:1
 227:10 248:2 249:4
 261:9
increased 25:6 132:2
 141:5 147:9 180:9,19
 205:14 259:17 261:3
increases 120:6 214:13
 261:15
increasing 109:21
 123:4 141:3 156:20
 205:1,9 207:1
increasingly 16:11
 22:21 63:7,9 115:10
 131:3 155:20 206:9
Independence 1:9
independent 72:7
index 231:10
Indiana 4:8 211:10
 213:3 246:12
indicate 51:17
indicated 117:21
 134:14
indicates 28:19 66:9
 80:5,9 138:11 195:14
indirectly 240:5,14
indisputably 235:17
individual 61:8 92:5
 141:17 143:10 144:13
 164:16
individuals 11:18 12:1
 12:5 38:22 46:5 96:19
 97:15 109:12 127:20
 141:1 149:7,17 150:3
 151:14 172:14 229:19
 254:2 255:8
induced 185:15
indulgent 22:15
industrial 130:9,17
industrially 187:18
- industries** 260:11
industry 20:10,12,18
 22:15 23:5 30:6,10
 42:6 50:2 52:2 55:20
 64:10 72:8 77:1,22
 78:22 84:14 98:16
 105:13 121:2 130:15
 130:18 131:21 132:1
 132:17 133:3 134:19
 135:11 164:18 175:16
 208:8 215:1 219:2
 225:9
industry's 85:18
inefficient 25:11
inexpensive 196:7
infancy 148:3 226:4
infant 73:16 74:3,4
 116:2 118:20 119:3
 183:20 194:17 217:3
 242:13 250:15
infants 60:5 73:9,9 74:5
 74:6 81:14 106:7
 114:21 118:21 147:16
 157:21 180:10 184:1
 184:19 185:13 194:18
infarction 209:20
infections 129:11 258:3
inflammation 90:7
 154:22 186:21 187:16
 187:20 219:14
inflammatory 210:1
influence 46:19 64:11
 72:8 189:5 258:12
influences 216:3
influencing 83:9
inform 14:14 42:6 105:8
 158:10
information 2:3 9:18
 11:11 23:9 24:20
 51:22 52:2 79:4
 115:15 132:18 133:2
 155:10,14 194:11
 210:19 215:17
informed 90:3 155:18
informing 87:7 99:14
 121:21
informs 155:19
ingredient 196:21
 197:13
ingredients 48:20
 166:7
inhaling 232:3
inherent 229:10
initially 103:12 247:21
initiative 3:4 33:9
 117:18 214:1 239:18
initiatives 30:12
injury 116:4 117:9
- 118:11,17
innovations 166:8
innovative 34:4 79:5
 178:14
input 165:3 263:6
insecurity 75:22
insoluble 228:6
inspiration 85:19
inspirational 165:4
instance 262:11
institute 2:9,17 3:1,13
 3:21 4:14,22 23:16
 33:15 55:15 56:1
 58:10,20,22 77:20
 120:18 134:5 164:14
 176:17 196:19 209:6
 219:20 221:8 222:22
Institutes 266:15
instituting 209:16
institutionally 66:21
institutions 228:16
instructed 212:11
 239:3
instructing 247:1
instruction 150:19
instructions 11:17
insufficient 18:10 116:2
 116:12 118:1
insulin 38:11,19 53:19
 94:2,6,7 124:5,5,7
 187:1,4,16 188:15,18
 191:17,18,21 200:9
 200:10 202:16 232:17
 248:13 260:21
insults 147:21
insurance 102:17
intake 15:18 22:1 27:2
 27:3 28:21 29:5 38:22
 55:1 57:16 59:18 67:4
 67:9 84:7 85:10,17
 90:13 91:4 97:14
 107:3,11 113:7,13,17
 114:3 121:1 123:20
 134:15 137:9,10
 146:17 147:3 150:11
 151:20 156:19 162:12
 163:12 178:20 185:12
 185:18 197:4 201:1
 202:4 212:6 216:13
 227:1 228:8 239:4
 250:21 254:9 255:3
intakes 107:13 137:4,6
 147:10,18 149:14
 151:2 163:17
integral 57:15 167:16
integrate 18:11
integrated 247:10
integrity 72:12 74:15
- 87:13 89:19
intellectually 189:9
intended 58:19
intentions 212:21
interaction 151:5
interconnections 87:2
interest 3:5 32:20 43:5
 98:16 105:12
interested 197:12
 206:10 228:12 236:19
interesting 233:17
interests 104:12 205:2
 205:9
interference 72:9
intermittent 103:5
 156:15 202:21
internal 28:19 159:8
 212:9 229:5
international 2:2,3 3:4
 3:12 20:8,9,9 23:22
 42:5 100:22 122:5
 155:10 214:21 215:4
internist 37:2 256:13
intervention 123:19
 213:14
interventional 222:4,18
interventions 125:20
 126:17 176:17 213:11
 223:3,22
intestinal 230:20
intestines 190:8
intolerance 36:11 48:1
 51:1,5,14 129:17,22
 238:16
intolerant 54:2,11,19
 219:19 227:12 230:16
intractable 229:13
intramyocellular
 191:20
intrinsic 207:5,9
introduce 46:13 158:4
introduced 257:12
introducing 74:7
introduction 185:14
 217:4
invalidate 127:19
invaluable 174:10
investigated 104:18
investigates 87:2
investigation 98:10,14
investigations 93:16
investing 84:15
investment 18:11
invite 108:15
involve 235:18
involves 141:5
involving 152:21
iodine 113:1 183:11

Ipsos 114:6
IRI 21:1
iron 30:21 36:4 56:18
 57:4,7,11,12 60:2
 106:19 112:22 179:21
 181:21
irrefutable 40:6
irreplaceable 172:7
irresponsible 19:17
 70:5
issuance 145:11
issue 48:17 75:10
 120:12 171:15 175:10
 175:11 177:18 211:15
 241:2
issued 98:22 145:17
 148:7
issues 105:13 176:4
 242:7 261:6
item 110:5
items 110:15,22 111:2
iterations 49:22
iterative 144:9
IU 4:18

J

Jackie 266:7
JAMES 3:2
Jamie 3:2 199:2
JAMY 1:14
Janet 11:8 266:17
January 8:21
Japan 69:20
Jasmine 3:3 138:22
Jason 202:17 203:15
 203:19
jaundice 116:3,5,9,14
 118:22
JD 5:2
Jean 267:11
jeans 94:11
Jefferson 1:8
Jennifer 3:4 239:16
Jessi 3:5 43:2
Jessica 3:4 20:6 83:17
 267:9
Jesus 11:9,14,16
 262:19 266:17
Jill 3:6 193:11
Jillian 3:6 242:10
JOAN 1:20
job 103:3 151:6 153:10
 192:9 198:15 200:1
 232:8 250:2 257:21
John 3:7,7 125:21
 204:19
Johns 4:6 86:17
Johnson 3:1,6 196:17

196:18 242:9,10
join 205:13
joined 175:17
joining 10:4,5
joke 53:7,7,10 55:4
 170:10
Journal 85:3 119:10
 206:11
journalist 98:8
journalists 257:12
journey 202:13
joy 3:8 26:20 177:21
JPA 135:9,9 137:1
 138:14
JR 3:2
juice 2:14 15:14 53:22
 135:8,11,14,14,17,18
 135:22 136:2,6,13,14
 136:18 137:3,6,8,12
 137:14,16,21 138:3,6
 138:8,11,17
juice/milk 185:10
juices 136:11 255:11
Julie 266:21
JULY 1:5
jumpstart 223:4,18
justifiably 50:10
justify 44:11

K

KANE 3:2 259:3
Karen 3:9 149:4
Kathy 3:10 178:11
keep 12:22 70:4 158:13
 174:18
keeping 68:15 148:14
 212:2 218:4
Kellie 12:13
Kelly 3:7 125:14,21
 128:8
Kendrick 42:15
Kennett 84:12
kept 39:17 232:21
Kerry 3:10 236:3
keto 235:12
ketogenic 38:4 70:5
 160:15 188:19 202:20
ketosis 102:16 190:20
 190:21 191:4
key 15:2 18:4 21:21
 91:2 92:15 95:22
 112:18,20 148:8
 149:19 173:13 177:12
 187:5 251:2
keys 58:15
kidney 216:19 258:2,4
kids 42:15 120:3 133:11
 133:13,19 169:2

197:2 201:3,6 221:20
 238:17 247:20 248:16
kill 50:18 53:14
killer 15:15 119:22
 121:11
killing 142:15
kindergarten 131:12
kinds 192:3
kitchen 62:22
kits 79:13
KLEINMAN 1:13
Klurfeld 267:2
knew 93:16 170:2 234:1
 242:21
knowing 40:3 93:15
 153:17 234:5
knowledge 91:6 95:10
 141:6 153:19 154:1
knowledgeable 75:8
 140:5
known 83:14 106:8
 116:4,22 119:18
 120:16 135:8 214:21
 222:19
Koegel 267:7
Kristin 267:7

L

la 110:11,17
labeled 179:9
labeling 43:10 132:20
labels 91:10
labor 109:21
lacked 100:20
lacks 139:12
lactase 50:21
lactating 147:8
lactation 72:17 181:22
 183:19,22 226:4
 250:13
lacteal 70:19
lactose 36:11 48:1
 50:22 51:1,4,14
 129:17,22 219:19
 220:3 227:12 230:17
 238:15
laden 69:8 238:20
Lady 177:19,19
Lafayette 246:12
lamb 55:16 57:4
Landon 243:2,18
Landon's 244:9
language 31:20
Lanou 2:5 67:19,20
large 22:4 76:2 78:1
 127:7 176:9 209:5
 215:6 225:11
large-population 235:4

large-scale 235:9
largely 45:17 99:8
 142:13
larger 177:7
largest 46:16 86:3
 121:6 213:9
Larson 267:9
lasting 99:10 114:3
lastly 19:10 33:2 231:15
latest 42:7 112:12
 183:21
Latino 129:21
Lau 2:11 59:5,5,6
laughing 258:20
laughter 53:5 77:13
 258:19
launch 99:2 133:18
launched 117:18
Laura 3:11 131:17
Lawson-Sanchez 2:6
 62:10
laxatives 76:4
lay 11:6 260:10
LD 1:19,22
LDL 44:14 123:20
lead 16:20 44:21 45:10
 81:17 108:2 117:11
 150:22 155:19 164:9
 237:8 239:9 253:1
 255:1
leadership 92:11
leading 20:9,17 23:18
 28:13 50:14 60:2 71:8
 74:5 116:6,9 119:22
 131:20 148:17 163:7
 175:16 176:21 180:4
 205:13 219:15 224:10
 266:16
leads 107:12
leafy 15:20 142:3
League 4:5 175:8,21
lean 37:20 58:6 60:10
 109:3 132:8 206:6
leaner 60:8
Lear 2:2 214:19,20
 217:22
learn 70:17 144:3
 157:11
learned 82:19 93:7,17
 94:12 103:8 218:21
learning 247:6 248:7
leave 13:7 19:10 48:19
led 43:8 77:5 124:16
 244:10 266:7,11,20
 267:4,5,7,9,11
left 12:7,9 231:9
legume 30:16
legumes 30:22 31:7,8

31:11,17 32:18 42:10
 44:1 56:10 69:10 70:9
 89:4 127:3 142:3
 188:11 226:20 228:3
 240:16
LEIDY 1:16
lending 17:2
lentil 36:1
lentils 30:17 47:2 228:4
let's 6:18 10:12 11:4
 16:12 77:12 95:2
 131:13
letter 26:3
letting 42:6
Leucine 174:6
level 25:5 58:3 100:2
 203:10 210:13
levels 28:21 29:5 31:5
 35:20 42:13 53:19
 111:19 114:8 116:21
 116:22 130:10 146:17
 166:20 169:17 171:1
 173:3 181:2,4 187:2
 261:9,10
Levin 4:15 49:14,14
Lewin-Zwerdling 2:3
 155:7,8
liable 104:12
liaisons 266:20
library 14:22
Lieu 3:18 65:5,6
life 22:6 39:21 54:12
 56:21 57:3 59:13 60:1
 61:21 63:19 67:5,8,12
 78:8 85:20 93:13
 95:10,12,15,16
 105:15 106:22 107:1
 114:3 116:22 126:11
 146:16 148:12 151:4
 183:5 184:6,19
 185:15 192:18 218:11
 225:16 226:3 234:9
 235:21 243:9 244:11
 244:21 250:13 251:4
 253:11
life-changing 200:22
 201:7
lifelong 63:3 71:14
 108:18 112:19
lifespan 149:8 150:5
 162:13 196:12
lifestyle 3:7 4:21 58:15
 104:10 125:17,19
 126:2,3,13,22 128:3
 140:17 143:4 155:20
 161:1 208:11 209:1
 221:8 222:10,11,18
 222:22 227:17 239:21

252:4
lifestyles 59:11 78:14
 81:5
lifetime 38:12 118:17
lifter 42:15
light 111:8 204:16
limbs 93:11
limit 18:22 54:21 92:8
 92:14 146:20 149:14
limitations 63:21
 111:18 189:11
limited 27:11 61:8
 75:11,21 88:3 91:3
 109:19 111:2 241:17
 249:22
limiting 44:18 151:20
 156:19 254:9
limits 48:18 58:8 110:4
 110:15 120:14,15
LINDA 1:21,22
line 13:2,13 111:2 131:9
 240:17
linear 28:19,22 29:4,6
lines 52:21
link 9:18 19:13 23:19
 120:10 121:19 183:21
 185:9 265:17
linked 45:1 75:18 129:9
 195:1,2 261:2
linking 121:16 195:9
links 115:2
lipid 203:13 213:8
 261:9,10
lipids 247:4 248:10
Lipps 5:2 6:12,15,18,21
 7:6 10:14
list 12:1 90:21 178:17
 204:11 258:1 265:5
listed 31:13 113:10
 114:13 152:5
listen 11:7 63:20
listened 202:18
listing 91:1,5 92:14
listserv 264:14 265:11
 265:12,15,18
literature 18:21 20:1
 21:17 25:8 32:4 90:11
 146:1 159:13 160:5
 189:5 211:21 212:17
 224:2 245:5 247:9
 257:13,15
little 17:21 18:22 76:6
 76:22 82:9 181:7
 219:1 233:14,22
 241:7 263:20
Livable 4:6 86:18 87:1
live 10:5 64:19 93:18
 95:1 132:4 133:12,13

133:19 139:6,7 142:6
 244:22
lively 6:22
liver 39:19 148:14,17
 159:21 213:7
lives 9:3 16:16 17:8
 65:2 121:3 132:5
 221:21 248:3
living 38:13 120:6
 139:15
local 133:15 162:7
 233:13
located 133:14
locations 131:22
 133:16
logical 81:3
long 65:1 78:22 112:21
 120:13 171:5,6
long-range 134:20
long-term 28:9 228:18
 235:1,3,9
longer 38:3 94:17
 192:19 223:19
longest 213:10
longevity 235:11,13
longstanding 73:2
look 16:3 23:8,12 29:21
 36:18 52:4 103:22
 104:13 115:14 152:17
 167:20 170:13 186:1
 190:17 191:8,11
 192:9 203:3 204:8
 213:10 218:19 229:11
 230:11
looked 124:14 191:6
 199:15
looking 133:3 230:3
lookout 9:5
looks 58:22 125:10
lose 50:21 93:6,11
 170:15,19 200:17,17
 200:21 201:6 233:22
 234:21 258:18
losing 116:14 213:6
loss 39:10,15,16 45:10
 56:15 111:7 117:6
 151:1,11 157:19
 166:11 180:16 190:2
 190:3 197:7 201:20
 202:1,5 214:5
lost 37:22 38:5,16
 153:15,19,22,22
 154:1,1 199:19
 200:15 201:19 213:17
 234:7,10 242:16
 248:13
lot 170:6,18 171:4
 199:6 203:16 257:7

lots 203:11
Loudoun 108:11
love 187:12 257:21
loved 224:20
low 14:5 37:10,20 38:4
 38:14 39:3,9 40:5
 43:22 44:3,11 45:9
 69:18 70:10 101:11
 102:15 103:4 104:18
 104:19,19,21 114:7
 132:9 139:4 140:14
 141:1 147:10 160:14
 161:12 171:9 180:13
 180:18 181:3 188:12
 192:11,12 201:14
 207:13 212:6 247:10
 248:4 249:6
low- 160:22 161:7
low-carb 170:13 180:14
 181:2 212:19 234:22
 235:13 247:22 248:7
 256:16,19 257:17
low-carbohydrate
 180:11 211:16,21
 212:3 213:4,11 214:8
 214:11 246:15 247:7
 247:16 257:13
low-energy 262:2,2
low-fat 169:13 184:12
 194:2 195:5 199:11
 199:16 247:2
low-income 139:7
low-tech 222:12,19
 223:2
lower 31:2 44:2 80:16
 88:11,17 89:5 107:12
 123:5 124:17 134:18
 149:18 168:21,21
 197:7 198:8 207:9
 226:20,21 228:9
 261:10
lowered 123:20
lowering 82:21 103:22
 123:22 147:3
lowers 207:5
lowest 82:7 196:1,3
 235:11
luck 189:16
Lucy 3:11 71:7
ludicrous 244:16
lumping 70:19
lunch 80:3 82:16 106:9
 110:7 111:6 119:17
 130:2
lunches 43:12 83:19,22
 108:20 111:9
lunchroom 62:22
lung 120:7 121:16

lutein 114:20,21 115:2
Lutz 3:4 239:16,17
Lydia 1:15 103:5

M

macadamias 122:12
macro 103:20
macronutrient 58:9
 127:21,22 192:21
 261:12
macronutrients 105:1
 260:14 262:8
macros 103:16 104:13
Madam 125:14
magazine 262:10
magic 196:20
magnesium 30:21
 106:20 136:10 172:10
 196:4 227:3
main 47:4 49:1 98:21
 130:11 226:14
mainstream 22:11
maintain 57:2 59:20
 79:2 163:16 168:17
 172:1
maintained 201:20
maintaining 31:2 56:13
 66:6 178:18 179:5
maintenance 157:19
 180:16 262:16
Maitin-Shepard 3:13
 23:14,15
major 27:5 28:16 40:17
 123:21 150:4 196:14
 260:12
majored 222:1
majority 21:6 50:20
 55:15 137:2,19
 188:14 210:19 230:15
 238:14 251:10
makeup 229:15
making 101:10 116:7
 138:14 142:13,16
 143:4 153:21 206:3
 209:3 212:22 231:7
 238:18 241:2
maladies 150:9
male 163:18
malls 45:22
malnourishment
 162:20
malnutrition 3:14 162:6
 162:8,18,21 163:6
 164:2,6
mammal 237:15
mammals 70:20
man 70:2
managed 246:22

Management 2:21
 189:20
manager 135:8 171:19
managing 216:12
 263:15
manner 92:2 165:9
mantel 121:20
Manu 3:21 33:12,14
manufacturers 20:13
 82:12
March 9:15
Marie 3:12 146:9
marked 156:5 257:18
market 33:17 34:5
 131:6
marketed 233:19
marketers 20:12
marketing 4:14 77:19
 219:3 238:4
marketplace 79:3 82:1
Mars 3:15 253:2,4
 254:1
Marsh 2:11 90:1,1
mask 257:8
Mason 13:18
mass 59:21 163:16
Massachusetts 186:7
massive 152:20
master's 90:10 139:1
 159:10
match 104:2,10 150:2
 173:3
maternal 113:13,16
 147:14,18
math 91:7,14
matrix 234:16
matter 53:20 64:3
 144:19 158:22 209:10
 258:20 267:21
matters 7:19 49:10
MATTES 1:17
Maureen 3:12 122:4
maximize 165:9 262:4
McCormick 3:1 196:19
McKinsey 176:16
MD 1:13,14,15,18,20
meal 21:6,15 46:17
 79:12 82:19 110:7,9
 124:15 167:4
meals 20:22 21:10
 46:20 47:14 66:13
 79:12,20 80:10,19
 81:2 82:15 108:21,22
 109:2,22 110:8 111:8
 111:14 134:10 150:16
 151:18 176:11 206:6
 254:7 255:20
mean 37:21 49:2

169:17 203:3,11,15
 204:5,7 218:15
meaning 54:3 57:6
 223:19
meaningful 18:8
meaningless 204:13
means 9:10 178:6
 185:18 219:13
meant 238:14
measurably 58:19
measure 44:14 176:21
 185:20
measurement 173:21
measurements 170:14
meat 2:9 17:22 18:22
 33:18 34:15,17,18,21
 35:7,9 41:7,11 42:2
 42:20 44:2 47:1,8
 55:14,19 56:1,5,8,17
 57:8,12,14,17,21 58:4
 58:10,11,20,22 75:18
 83:1,11 84:21 85:6,7
 85:9 88:7,7 94:18
 103:17 119:12,16,21
 120:13,21 121:1,2,22
 146:19 187:22 206:3
 221:22 239:8
meats 34:11,14,20
 35:11 37:20 47:10,17
 58:6 69:7 74:8 87:20
 88:4 119:17
mechanisms 129:7,12
 186:20
medal 218:7 221:1
media 157:6
medical 2:16 3:18,19
 17:14 33:21 36:13
 40:7 49:18 51:11 54:6
 75:10 118:6 148:4
 149:21 150:9 189:19
 190:3 208:3 209:5
 222:2 229:3 256:13
 259:14
medically 117:21
 169:16
medication 39:18
 186:14 201:19 210:2
medications 37:16
 128:4 169:17 232:16
 248:8
medicine 3:2,8 4:16,21
 28:19 37:3,13 40:2
 49:16 52:17 53:5 55:6
 55:6,8 93:13 94:2
 100:15 101:6 117:15
 125:17 126:2,2,4,14
 128:3 159:6,9 209:1
 212:10 221:8,10

222:10,11,18,22
 229:5,8 236:4,5
 239:21 246:11,18,19
 247:14 257:5,20
 259:6,7,9,12
medicines 94:8,9 247:1
 247:5
Mediterranean 45:9
 60:22 122:15 226:15
medium 215:6
meet 15:10 17:11 23:5
 45:6 58:9 59:17 65:15
 67:8 82:5 96:4 109:13
 110:12,22 111:3
 136:16 137:4 139:17
 146:16 165:22 166:15
 172:7 193:19 196:12
 251:1,12,20
meeting 1:3,10 6:4,7
 7:4 8:17,18,20 9:7
 10:10 58:7 60:9 67:8
 110:4 113:9 134:21
 136:21 143:13 167:22
 175:1 178:9 263:10
 264:4,8,9,9,12,13
 267:10,17,20
meetings 264:5,7
meets 145:8
Melinda 121:7
Melissa 3:13 23:15
member 1:14,14,15,15
 1:16,16,17,18,19,20
 1:21,22 41:6 75:1
 78:3 92:21 125:17
 204:21
members 1:12 10:9
 17:1 22:17 33:13
 55:15 74:11 78:21
 95:9 108:14 125:15
 134:4 143:10 158:12
 164:16 167:20 178:17
 215:3 225:10,12
 230:1 256:10
memo 171:12
memory 147:17
men 91:17 119:22
 143:2
mental 186:17 234:14
mentally 201:13
mention 231:10
mentioned 177:5
 230:15
mentions 177:1
menu 86:2 132:20
 133:13 134:6
menus 35:6 43:11
 46:14 47:8 110:2,17
 132:16 133:4

Meredith 3:14 162:4
message 72:19 119:2
messaging 14:16 239:5
met 1:8 147:5 243:16
 252:17
meta 19:8 24:9,18 25:3
 25:10,13 28:17,22
 29:6 88:5 96:2 123:18
 124:2
meta-analyses 181:6
 181:10,16
meta-analysis 180:17
metabolic 39:8,12
 52:20 90:22 95:14
 123:11,17 212:5
 214:9 246:21 247:8
 247:14 256:20
metabolism 188:19
metabolize 254:22
methodology 26:12
methods 101:17
Metro 229:6
Michael 3:15,16 119:8
 193:8 253:1
Michelle 177:19
Michigan 2:7 75:2,3
 102:13
Mickey 3:16 112:5
microalgae 183:16
micronutrient 14:4
 174:9 262:5
micronutrients 56:18
 97:14 172:16 174:22
 188:7
microphone 12:15 13:4
middle 38:2 115:4
midst 92:11
mild 115:4
military 151:5
milk 3:17 35:18,18,19
 35:20,21,22 36:2,2
 41:12 47:21,21 48:2,3
 48:15 50:22 51:5,21
 52:5 68:10 70:16
 73:15,17 116:11,12
 117:21 118:1 129:4
 130:18 131:4 171:20
 173:4,16 174:8,9
 176:2 184:9,12
 189:22 193:16 194:19
 196:1 205:4,5 206:2,8
 206:9,15,16,17,17,18
 206:19,22 217:3
 218:13,17,22 219:6,7
 219:11 220:3 230:17
 238:2,14 244:20
 245:9,18
milk's 70:22

milks 35:12,16 48:14
 131:5 206:10,14
 207:2 227:13,16,19
Millenials 22:10
Millennials 21:5
milligrams 197:5
million 46:20 82:16,17
 83:18 86:4 94:16
 111:5 121:3 129:18
 131:22 134:10 139:6
 160:11 161:9 176:7
 182:11 224:7 227:11
millions 118:16 128:14
 152:22
Mills 3:18 229:1,2
Milton 3:18 229:2
mimic 35:8
mimicry 129:12
mind 79:22 186:11
 237:3
mine 245:13
mineral 57:16 215:2
minerals 106:19 136:4
 255:17
minimal 35:3 117:22
 118:21 241:15
minimally 23:6 64:9
 70:6 88:16 127:2
 157:10
minimize 120:22
minimum 59:17 82:5
 178:21
minute 265:19
minutes 11:20 151:18
 201:16 254:7
Miquela 3:17 171:19
miracle 234:11,16
misconceptions 51:20
 240:22
missing 149:13
mission 2:21 7:10
 115:21 155:13
mistakes 102:10
mitochondrial 155:1
mixed 83:6 123:12,15
model 28:22 142:2
 177:20 203:14,16,18
 203:19,21
modeling 67:3 81:22
 267:4
models 29:7
moderate 44:1 88:6
 195:8 247:16 249:3
moderation 58:14
 178:6
modifiable 260:3
Mohamedshah 2:17
 164:13,14

molecular 129:12
Mollie 3:18 65:6
mom 244:5
moment 10:8
moms 114:10
money 189:6
monitor 20:18 134:15
monitored 169:16
Monitoring 18:14
Montana 81:12
month 17:9 119:9
 264:13
months 23:10 38:15
 39:17,18 73:10 93:22
 94:5 112:14 131:12
 156:13 182:22 197:6
 200:16,16 201:18,19
 202:22 203:1 209:11
 216:22 217:5 223:18
 234:8 249:2 250:12
mood 22:7 216:18
morbidity 208:21
morbidity 232:19
morning 6:3,16,17,19
 6:20 7:18 11:14,15
 16:18 23:14 26:19
 30:3 33:12 37:1 40:11
 46:9 52:13 55:12 59:5
 62:9 65:5 67:19 71:6
 77:16,19 84:9 92:19
 95:6 105:6 108:8
 112:4 122:3 146:8
 149:3 171:18 175:4,5
 182:5 186:5 193:11
 193:14 204:19 208:2
 214:19 229:9 252:22
 258:1 263:4
morning's 13:9
mortality 28:21 29:3,6
 29:10 74:3 76:21
 180:20 181:8
mother 62:17 94:3,6
 236:20,21
mother's 119:5 130:18
 218:22
mothers 72:20 73:21
 113:20 114:9 118:7
 182:11,15 220:16
 250:17
motivates 155:18
motivations 158:8
mounting 37:10 130:14
 205:10
mouth 254:18
mouth's 255:16
move 12:3,9 38:10 98:1
 128:9 146:5 148:14
 166:11 198:22 211:7

214:15 218:1
moved 240:20
movement 75:13
moves 78:16
movie 45:21
moving 12:22 103:1
MPH 1:14,15,17,18
MRI 117:9
mucous 219:8
multi-chain 78:2
multi-cultural 52:8
multicultural 96:14
multilayered 219:5
multiple 20:20 31:22
 76:3 91:13 99:20
 110:18 157:3 167:17
 181:6 195:1 209:9
 257:19 259:10
multisector 134:3
multitude 254:15
multivitamins 250:18
muscle 56:15 59:20
 163:16 174:4 219:15
muscles 56:13
mushroom 2:19 83:20
 84:11,12,13,14 85:8
 85:18
mushrooms 83:2 84:17
 84:22 85:4,5 86:13
mushrooms' 85:12
myocardial 209:20
MyPlate 41:10,21
 217:16 258:18

N

nachos 45:20
NAIMI 1:18
naive 90:15
Najjar 2:10 159:5,6
name 7:6 12:15 13:16
 16:18 20:6 23:15 30:3
 31:17 33:14 37:1
 40:11 43:2 49:14 62:9
 65:5 67:19 71:6 74:19
 77:16 81:10 84:10
 86:16 90:1 92:19 98:7
 102:11 105:9 115:18
 119:8 131:17 135:6
 138:22 146:8 152:8
 155:7 168:10 171:18
 175:6 178:11 186:5
 189:18 202:10 211:9
 225:4 229:1 232:10
 236:3 239:16 242:9
 246:10 252:22 256:9
named 248:15
naming 41:9
narrow 110:21

- NASCENT** 184:13
nation 37:8 39:6 53:4
 55:3 108:2 133:1
nation's 40:13 46:16,21
 49:12 52:7 74:2 86:3
 99:14 131:14 149:6
 182:14
national 2:4,11,12 3:6
 3:11,17 4:5 18:14
 22:9 25:16 26:5 59:7
 66:13 86:1 100:14
 102:3 105:10,13
 106:9 107:8 108:4
 130:1 131:19 133:15
 145:7 162:7 171:20
 175:7,15,21 182:7
 193:13 219:19 266:14
nations 140:1
nationwide 22:12
 131:22 228:16
Native 50:20 69:20
 129:21
natural 23:6 85:13
 114:17 166:8 196:21
 255:16
naturally 36:4 77:9
nature 144:9 165:5
nausea 220:5
near 78:21
nearly 17:22 23:2 39:14
 83:18 98:10 102:2
 107:6 111:19 157:1
 165:12 201:11
necessary 37:11 60:1
 70:16 79:19 89:19
 163:12 238:5
necessity 51:21
need 11:7 16:8 42:15
 42:17 48:2 51:9 58:2
 60:12 61:4 66:22 69:2
 69:4 91:11 104:3
 128:9 133:2 140:13
 141:18 142:17,18
 144:14 146:5 152:16
 154:19 163:14 172:1
 176:2 186:14 198:10
 210:9 214:15 218:1
 233:14 235:8 239:6
 241:11 248:15 258:21
 258:21
needed 50:3 67:13 98:2
 100:5 148:2 242:21
 245:3
needles 38:12
needs 45:7 58:9 67:17
 97:21 134:22 147:4
 166:1,16 196:13
 251:12,21
- negative** 97:17 151:10
 246:6
negatively 173:5
neighborhoods 140:11
neighbors 52:4
Neil 3:19 208:2
neither 73:16 262:12
nerve 93:9 94:1
NESR 25:21 96:3
 266:20,22
net 123:13
Network 23:22
neural 113:15 147:20
 147:21 180:3,10
 186:22
neurocognition 112:14
neurocognitive 60:4
 95:17 113:18
neurodevelopment
 115:1
neurodevelopmental
 117:2
neuropsychiatric
 186:19
neutral 195:19
neutralize 255:21
neutralizes 255:17
never 37:21,21 91:21
 94:22 130:7 160:7
 170:20,22 218:11
 231:10 233:16 234:1
 234:19 238:13
Nevertheless 65:16
new 22:16 23:5 26:1
 28:17 34:3 37:12
 46:15 79:4 92:22 93:3
 94:16 114:8 132:11
 145:20,22 160:21
 175:19 180:17 184:18
 195:22 198:10,14
 212:13 221:9 222:11
 223:9 234:7 244:5
 245:20 259:7
newborn 116:6 117:17
 242:15
newborns 116:13,20
 117:4,7 118:4 157:20
 246:5
newly 38:7
news 8:7 65:18
Nguyen 3:1 249:17,18
 252:20
NHANES 21:14 124:15
niacin 56:20 136:11
niche 110:21
Nicholls 3:6 193:11,12
Nicole 3:21 33:14
NICU 243:17
- Nielsen** 21:9
NIH 129:17 261:14
Nina 3:22 98:7
nine 39:16 94:8,9
 122:10 172:4
no-brainer 174:18
nobody's 154:17
nomenclature 31:11
non- 148:16
non-athletes 219:4
non-communicable
 253:15
non-dairy 172:22 173:2
 206:10
non-essential 258:10
non-existent 139:14
non-fruit 137:13
non-minority 230:1
non-profit 139:2 155:12
 182:9 218:6 222:21
 239:18
non-supplement 252:9
non-White 219:21
nonanimal-based 34:8
nondairy 48:14
nonfat 43:22
nonprofit 13:20 33:16
 43:6 49:15,17 71:8
 98:15 115:21 122:9
 125:16
normal 48:5 51:2,15
 80:11 234:19,19
 244:8 259:16
normal-weight 169:5
normalization 210:1
north 2:5,9,11 3:7 39:5
 52:5 55:14 67:21,22
 90:4 189:20 204:20
northern 51:7
nose 219:10
note 13:8 22:2 107:4
noted 107:14 227:8
 264:6
noticeably 217:13
noting 35:5 217:8
notion 58:5
nourished 65:1
nourishes 59:13 61:21
nourishment 47:14
novel 251:19
NOVOTNY 1:19
noxious 218:21
number 12:8,9,14,14
 13:3,15 15:15 16:17
 19:3 20:5 22:4 23:13
 26:18 53:9 75:6,6
 106:17 121:8,10,11
 123:9 128:22 133:11
- 136:13 137:15 183:9
 183:18 184:2 185:1
 185:16 197:18 205:1
 205:4 207:1 213:16
 214:16 216:4 219:20
 231:3
numbers 12:7,8 161:8
 170:16
numerous 45:11 127:7
 127:13 136:7 207:4
nurse 74:20
nursery 243:16
nurses 75:8
Nurses' 127:7
nursing 2:8 74:21 75:2
 118:4 244:7
nut 3:12 122:5 123:12
 123:20 124:1,1,6
 125:6,9
nutrient 14:8 15:10
 22:8 27:19 45:6 55:21
 56:4 57:16 58:5 59:14
 60:14 69:14 75:5
 76:10 84:16 107:6,15
 113:12 114:14,17
 124:16,22 136:1
 146:15 148:2,9 149:1
 166:1,5,19 172:8
 173:5,8 179:18
 186:20 193:19 194:8
 196:13 226:16 251:12
 251:13,20 252:6,16
 252:16
nutrient-dense 196:10
 252:1,2
nutrient-rich 172:6
nutrients 56:20 58:3
 60:17 62:1 68:6,14
 72:22 76:9 85:10
 96:13 103:21 106:13
 106:17 107:13 112:18
 112:20 113:4,11
 114:16 135:15 136:3
 144:13 149:19 163:11
 166:20 173:4,9
 179:20 187:10 188:12
 194:6,19 195:16
 196:6,8 227:1,5,9
 232:1,3 241:13,16
 250:21 251:2 252:13
nutrition-related
 163:22 253:15
nutritional 2:13 21:11
 52:22 53:2,6 58:18
 97:2,3,10 102:13
 118:21 136:19 146:10
 152:21 159:6,13
 161:17 162:12 166:15

172:21 174:16 179:14
186:15 193:17 194:15
206:13 215:10 217:16
231:16
nutritionally 30:18
136:14 182:14 228:1
NutritionFacts.org 3:16
119:9
nutritionist 92:21
108:10 182:7
nutritious 22:18 73:13
79:12 85:1 86:9 88:22
110:2 111:14 132:12
158:2 165:1,21
167:18 173:14 205:19
206:6 227:14
nuts 23:7 44:1 56:11
89:4 122:10,12,20
123:1,3,4,10,15 124:4
124:12,13,16,21
125:4 127:3 211:1
226:20 228:3 240:15
261:10
NWA 182:9 183:3

O

O'Grey 2:16 232:10,10
oat 35:18
OB-GYNs 114:11
Obama 177:19
Obbago 266:21
obese 42:18 60:12
202:12 212:14 232:19
248:20
obesity 37:3 41:16
45:13,15 52:17,18,19
65:22 75:16 76:19
104:1 137:19 139:19
142:13 150:3 159:20
176:5,13,21 177:4,9
177:13 190:4,8 199:7
202:7,18 211:13
212:5 213:2 214:8
226:11 232:14 236:8
246:11,21 247:14,15
248:22 256:14 257:1
258:15,16 259:6,8,9
259:11,13,16,16,22
260:3,6 261:3 262:4
obesogenic 260:18
objective 257:19
objectives 155:21
obscured 92:2
observation 114:21
observational 14:12
44:12 114:2 204:8
observations 224:2
observed 143:12 251:9

obsess 262:7
Obstetricians 73:5
obtain 188:6,9
obvious 118:11 152:17
153:2 245:20
occasion 14:1
occasions 10:20 22:22
96:10
occur 95:15
occurred 117:6 118:12
occurring 36:4
occurs 254:20
October 145:17,20
267:17
odd 12:7
ODPHP 266:17
offense 170:9
offensive 170:12
offer 14:15 47:20 85:17
112:11 174:17 194:15
225:12
offered 48:15 134:9
offering 47:7 55:21
132:7 134:9
offers 173:16 174:9
office 11:9 169:5,12
170:21 266:10
official 51:12 119:19
126:19
Ohio 168:12
Ohio-based 83:21
Ohlhorst 4:9 95:6,7
oil 183:16,16
oil-free 223:5
oils 154:13,16,19
187:19
Okinawa 192:17
Okinawans 171:11
old 94:5 105:20 131:11
217:5
older 57:2 67:9 115:5
148:13 162:8,14,18
162:19 163:13,14,18
164:6 172:4 184:12
194:16 226:5
olds 65:20
Olson 266:17
Olympian 218:7
Olympic 42:14 218:16
221:1
omega-3 183:13
once 12:14 13:4 75:14
85:14 99:6,17 178:3
263:11
one's 156:9 170:20
219:16
One- 135:16
One-hundred 135:18

136:13
one-third 124:21
one-to-one 211:4
ones 26:2 198:14
231:12
ongoing 9:13 97:9
onions 83:2
online 6:9 78:2
onset 168:22
open 7:20 9:15 11:2
161:18 190:7 218:4
263:9
opened 9:14
Opening 5:2
operate 78:3
operating 190:22
operations 235:20
operators 35:6 78:2
opinion 154:10 170:11
233:10,10
opinions 86:21 210:7
opportunities 8:11
134:1 151:7 251:5
opportunity 7:12 8:8,13
8:16,19 20:15 23:1,17
26:21 30:9 33:8,13
34:12 35:13 36:17
37:6 43:3 46:10 52:14
56:2 62:6 71:3,13
74:17 77:18 81:9 84:4
96:22 105:7 112:11
122:7 125:15 128:18
135:2 138:19 146:11
152:3 165:2 168:13
178:7,16 196:18
197:20 198:20 205:6
207:15 209:2 220:14
237:7 253:7 256:5
264:10
opposed 104:15
oppressive 220:13
optics 229:17
optimal 28:3 107:11
119:3 148:3 228:20
optimize 225:15
optimizes 59:13
optimizing 28:5 187:7
optimum 239:8
option 29:21 36:2 41:12
41:17 57:12 83:5
173:15 233:5
optional 51:18
options 22:11,14,15,18
41:1 109:4 132:7,13
134:18 184:12 225:13
228:13,16 233:4
250:15
oral 2:1 7:12 8:11,19

9:7 11:11,17,19 26:21
68:3 71:3 149:9,19
150:11,13,19,20
151:8,15,22 253:1,8
253:10,17,20 254:3
254:11,18 255:14
262:20 263:7,22
264:10
order 78:14 96:20 98:1
108:1 192:2 248:4
organ 148:15 259:20
organization 13:20
33:16 43:7 47:11
62:12 71:8 73:4 122:9
155:13 164:15 175:14
239:18
organization's 115:21
organizations 24:10
26:5 60:3 93:17 152:5
162:7 205:13
organs 53:15 216:5
originally 144:20
263:16
origins 259:22
osteoporosis 231:7
238:9
ounce 91:17,22
ounces 60:8 122:19,21
123:3
outcomes 16:1 27:17
44:14 58:16 61:3
87:20 113:18 117:13
147:15 164:1,3
179:15 180:16 181:13
195:10,15,20 211:4
246:6
outdated 50:4
outlined 106:14 143:17
162:9 181:19
outpatient 223:4 229:7
outrageous 229:21
231:1
outreach 267:9
outside 9:2 21:15 24:10
96:3 100:16
ovarian 73:22 129:6
159:22 220:19
overall 29:11 38:21
83:11 85:12 107:20
123:7 138:16 142:7
176:6 216:3,10 252:5
overarching 27:9
overconsuming 62:3
63:11
overconsumption
75:18
overeating 261:16
overemphasis 260:13

overheat 216:19
overjoyed 38:17
overlooked 175:10
overly 109:17 144:18
oversee 193:12
oversees 59:9
overstatement 62:18
overweight 60:11 177:9
 199:7 259:16
overwhelming 19:12
 33:20 236:10
overwhelmingly 137:20
oxidation 186:21
 187:16
oxidative 219:14
oxygen 232:4

P

P-R-O-C-E-E-D-I-N-G-S
 6:1
P.I 213:9
p.m 267:22
package 60:17 62:1
 66:2,8 174:9 182:16
 184:13,17 194:9
packaged 76:6 176:19
packaging 166:7
page 76:13 91:2 265:17
pain 90:7 129:19 220:4
 243:12
painful 149:13 151:11
 220:4
pairing 115:7
palatable 165:21
 167:18
paleolithic 70:2
Pam 168:11
PAMELA 4:1
pandemic 232:13
panel 43:9,10
Pannucci 267:4
paper 119:10 230:9
papers 81:18 208:17
paramount 72:14
parent 62:19
parentheses 31:12
 32:19
parenting 242:20
parents 63:19 94:13
 133:12 157:21 158:1
 201:2 221:17 242:11
 245:21 246:2
part 23:21 27:2,13
 29:17 58:12 59:15
 61:18 64:10 105:14
 107:14 133:7 135:17
 176:9 178:4 189:21
 196:11 207:13 252:3

253:13
partial 149:18
partially 197:6
participants 152:22
 185:2
participate 8:1 11:3
 12:5
participating 36:18
 65:21 133:20
participation 13:12
 133:10 186:2
particular 34:3 67:2,7
 72:10 143:8 183:13
particularly 15:14,19
 24:19 66:21 74:6
 87:21 128:14 147:7
 179:21 219:6 231:3
partner 11:9
partners 7:2 151:12
partnership 46:15
Partnerships 155:9
parts 30:11 103:1
 230:11
paternalistic 210:17
path 49:20
patience 259:5
patient 118:13 200:14
 201:10 209:9,12,15
 209:17 223:13,16
 246:4
patient's 188:22 262:8
patients 37:15 38:6,7
 38:18 39:4,8 40:3
 52:18 55:7 75:9,13
 77:5 102:16,18
 128:13 131:10 189:13
 190:13,22 191:5,22
 192:10 199:6,15
 200:3 208:19 209:3
 210:18 212:11,12,22
 213:14,16,20 223:1,5
 223:9,10,11 246:20
 247:3,11,16,22 248:6
 248:11,13 257:6,17
 257:22 258:18 260:6
patients' 51:20
pattern 27:3,13 29:13
 29:17 33:3 34:10
 41:14 43:20 44:4
 58:14 60:22 67:3
 77:11,12 81:21,22
 89:2 109:10 135:20
 161:8 189:14 194:1
 210:6 212:19 214:8
 214:11 224:4 234:22
 253:13 267:3
patterns 27:16 61:7
 62:7 65:11 67:5 68:8

68:13 69:13,19 78:19
 79:17,18,20 80:12
 83:10,13 86:7,14
 87:11,19,21 88:10
 92:16 96:12,15
 107:22 110:7,9
 113:12 122:16,18
 123:5 125:8 140:8
 144:12 147:1 161:3
 163:6 180:13 195:4
 196:11 198:10 210:16
 215:19 225:15 226:14
 226:16,18,22 228:18
 240:4 250:6,10 251:4
 251:22 257:17
patters 240:22
patties 83:20
pause 10:8
pawns 219:3
paying 102:19
PB&J 47:7
PBH 14:10
PCRM 93:17
pea 35:19,21
peace 212:20
peak 121:12
peanuts 31:16
peas 30:17 31:11 32:19
 228:4
pecans 122:11
pediatric 199:3,14
pediatrician 199:3
 200:2
pediatricians 114:11
Pediatrics 73:6 112:16
 148:7 199:9
peer 99:5 100:16
 266:22
peer-reviewed 197:10
 224:1
peers 219:2
Pennsylvania 84:13
people 6:7 8:5 9:3 13:2
 13:21 15:10 16:9,11
 36:9 37:22 39:14
 47:22 48:5 49:11
 50:13,18,21 51:9 52:3
 52:10 54:18 61:15
 74:22 75:15,21 91:20
 94:16,19 99:9 100:3
 103:13 104:2,8
 119:15 120:22 139:6
 139:7 149:8 153:3,5,5
 153:6,7,14 156:18
 157:7 168:15,18
 169:8,8,13,21 170:5,7
 170:15,18 171:11
 172:18 174:20 187:9

190:7,10 191:7,17
 192:14,20 197:16,18
 198:16 212:2 213:6
 226:7 230:14,15
 231:2,9,16,22 239:3,6
 241:1 244:17 245:12
Pepin 4:2 142:10
pepperoni 47:9
peppers 83:2
perceptions 156:6
Perdue 7:1
perfected 49:22
perfectly 38:9 244:14
perform 185:8 221:17
performance 113:20
 115:3 151:5
performed 114:6
performing 42:13
perinatal 147:11
period 71:17 112:18
 125:12 145:9,18
 147:11 263:9,10
periodontal 150:21
periods 57:1
permanent 93:9
Permanente 3:19 208:3
permits 12:2
perpetuate 220:20
 260:11
perpetuation 259:22
persists 260:8
person 6:8 10:4 169:5
person's 71:14
personal 61:16 109:13
 141:17 161:14 167:6
 189:6 207:18
personally 128:5 170:8
 209:22 236:19 260:5
perspective 57:22 88:5
perspectives 165:16
pervasive 162:21
petrified 192:13
pH 255:12
pharmaceutical 90:8
 94:12 229:4
pharmacy 76:2
PhD 1:13,14,15,15,16
 1:16,17,19,21,22
phenomenal 247:12
Philadelphia 256:15
PHILIPP 4:4
Phillip 202:10,11
phosphorous 172:10
physical 23:19 24:3
 57:3 60:4 233:3
 252:11
physician 2:5,10 4:3
 52:16 128:12 131:9

152:9 159:6 208:6,13
 209:2 212:10 221:8
 229:6 236:4 246:11
 246:11
physicians 4:15 49:16
 127:17 208:9 223:22
physiological 95:15
 161:14
physiologically 200:8
 238:13
physiology 188:3
phytochemical 262:5
pick 40:22 141:2
picked 202:17,17
piece 192:14
pine 122:12
pistachios 122:11
pizzas 45:20
place 14:3 40:7 47:3,12
 187:11 206:21 240:11
 246:3
placed 199:10,16
placement 222:7
places 62:21 64:3
 108:16
plaguing 224:21
plain 216:11
plainly 47:17
plan 19:11 127:1
planet 171:11 205:16
planners 82:19
planning 11:7 110:2
plans 52:22 264:22
plant 4:13 16:16 34:17
 42:11 48:12 76:10
 103:17 126:16 127:5
 127:10,14 132:9
 136:8 153:22 174:1
 188:9 206:4,14
 207:22 226:17 227:4
 227:13 241:10
plant- 68:7 169:13
 171:15
plant-based 33:17,20
 34:1,4,11,13,14,20
 35:7,12,14,16 36:2,5
 36:14 40:21 41:12,17
 46:13 47:3,5 57:18
 69:13 77:11 87:22
 88:10,17 89:3 93:21
 94:4 131:5 157:5,7,12
 157:13,15 171:9
 173:19 179:16 193:2
 205:2,3,10,14,18,20
 206:10 207:2 209:4,6
 209:11,14,17,19,21
 210:13 221:15 222:14
 223:1,22 224:4,13,18

225:6,7,8,9,13,13
 226:1,7 227:16,19,20
 227:22 228:2,12,20
 233:16 234:21 261:5
plant-centric 205:12
 226:22
plants 42:19 75:20
 131:8 192:22 193:9
 208:19 227:7 238:12
plaque 254:19,22
 255:12,15,21
plaques 209:10
plasma-saturated
 214:12
platform 207:20
play 16:7 57:14 71:20
 97:13 137:3 181:13
 205:17 259:10
players 134:3
plays 74:2 87:5 215:9
please 9:9 10:1 12:14
 12:20 42:19 54:21
 55:1 102:8 128:10
 146:7 159:4 190:5
 211:3 218:2 221:3
 232:7 239:15 244:1
 246:3 252:21
pleased 7:22 70:17
 106:21 108:13 211:11
pledged 132:14
plentiful 36:13
plethora 210:6
plot 233:6
plus 103:10,10
PMA 2:16
pocket 102:20
Poconos 202:19
pod 30:16
podium 221:1,3
point 79:10 101:3,8
 154:5 157:2 171:3
 187:12 188:17 203:7
 206:7 208:17 233:18
points 27:6 43:18 98:21
 103:4 145:4 193:14
 216:9 223:13,15
 252:13
poison 245:6
Police 92:22
policies 30:12 46:4
 58:18 87:7 89:13
 225:19
policy 24:6 51:12 71:1
 80:1 98:11 99:15
 117:22 131:19 148:7
 162:5 266:6
policymaking 98:13
political 143:22

politics 145:14 189:6
Pollan 193:8
polycystic 159:21
polyphenols 136:8
polyunsaturated
 112:22
poor 45:17 90:16 91:22
 126:14 149:19 151:1
 164:3 169:6 192:7
Popper 4:1 168:10,11
populace 229:15
popular 42:12
population 52:9 70:13
 105:19 139:9 162:17
 180:14 183:2 211:2
 219:18 229:22 230:6
 251:10 252:14 259:15
population's 169:3
populations 64:5 75:11
 130:4 147:7 148:11
 185:21 219:21 235:10
 250:10
pork 55:16 57:4 103:15
portion 58:5 133:21
 134:17 175:11,18
 176:11,15,18 177:2,5
 177:7,11,13 178:6
 223:7
position 52:6 81:18
 126:19 172:2
positions 79:14
positive 22:6 46:19
 58:16 61:2 86:8 90:6
 97:16 123:10 124:22
 127:5 132:14 139:22
 179:15 207:7 228:14
 261:19
positively 205:15
 207:17 216:3
possible 52:1 66:20
 73:8 151:17,19 153:6
 254:6,7
posted 13:10
postpartum 231:19
 250:20
potassium 30:21 35:21
 56:20 85:11 106:13
 107:3,5 136:7 172:10
 193:21 194:5 196:4
 227:3 241:14 251:17
potato 2:4 105:11,12,13
 108:4 192:17
potato's 108:3
potatoes 77:4 105:14
 105:21 106:2,11,12
 106:16 107:1,3,13,17
potential 14:13 17:7
 71:16 147:2 179:19

180:9 188:2 250:8
potentially 123:6
 148:16 211:17 261:6
pouches 185:11
poultry 55:16,20 56:5,9
 56:17 57:5,8,14,17,21
 58:4,6,11
pounds 2:10 38:16
 159:7 200:15,16,19
 201:7,12,20 213:18
 214:5 232:16 234:8
 234:10 248:14
powered 42:11
powerful 187:15 198:17
powers 121:18
practical 16:9 58:21
 75:9 78:12,13 84:19
 111:15 165:6 168:7
 184:3 210:16
practicality 250:16
practice 4:3 50:10 53:1
 53:6 55:7 74:21 81:18
 95:11 102:12 109:15
 143:3,7 188:20
 192:18 199:5,8 209:6
 229:7 246:19 247:10
 247:13 256:21
practiced 236:5 257:4
practices 61:6 100:19
 115:22 126:3 149:10
 150:12,14 151:9
 152:1 185:6 239:20
 246:4 253:18 254:11
 255:15
practicing 2:22 37:3,13
 40:2 52:16 186:6
 221:10 229:17 246:12
 246:18
practitioner 74:20
praised 42:5
pre-agricultural 188:17
pre-diabetes 53:13,17
 54:1 249:1
pre-diabetic 38:16
pre-standards 66:17
prebiotic 261:20
predict 195:14
predicted 63:18
predominantly 222:13
predominately 127:1
preferences 22:20
 61:16 71:18 109:14
 167:7
preferentially 114:22
preferred 207:21
 215:22
pregnancy 59:22 71:12
 72:17 113:22 181:22

182:22 183:5,7,18,22
226:4 250:13,19
pregnant 57:10 72:1
81:14 113:9 147:8
148:10 184:4 242:19
250:22
premature 180:12
prenatal 148:6 250:18
preparation 79:11
167:5
prepare 133:18 242:13
prepared 85:8 105:18
109:1 242:22
preponderance 19:19
28:8 29:11 210:21
prescribe 233:12,15
prescribing 55:8 210:5
prescription 109:11
245:15
prescriptions 208:13
257:7
prescriptive 109:17
presence 164:2 217:18
254:17
present 1:12 11:7 34:11
35:11,12 122:7
198:22 211:7 251:15
presented 109:8
presenting 189:12
presents 8:18 92:3
president 81:11 84:10
108:12 125:22 155:9
presiding 1:10
press 260:10
pressing 176:5
pressure 39:19 72:4
74:1 138:10 169:17
248:9
pressures 50:2 92:12
247:5
pretense 130:20
pretty 200:1
prevalence 51:4 127:12
160:3 163:22 180:2
prevalent 21:3 150:8
254:13
prevent 17:13,17,22
56:15 88:11 116:1
126:6 141:19 150:21
163:16 202:6 214:3
216:16 222:14 224:12
261:6
preventable 92:9
117:13 150:10 164:7
224:8 236:15 237:5
239:22 245:2 246:6
253:16 258:2
preventative 126:2

prevented 163:8 170:2
preventing 148:16
151:3 161:19 256:19
prevention 11:10 23:20
24:6 68:8 97:1 114:4
120:20 126:21 127:6
160:17,18 161:6
216:6 226:2 253:21
266:11,13
preventive 149:9
150:12,14 151:9
152:1 253:17 254:11
255:14
previous 8:14 19:7 46:2
80:14 251:8
previously 212:22
price 167:11,12
prices 50:8
primarily 116:11 266:10
primary 9:10 29:20 37:3
49:17 127:6 135:16
155:21 159:9 160:2,6
162:1 167:12 212:10
principle 60:20
principles 222:13
prior 264:13
priorities 14:15 24:6
prioritize 77:9 92:12
119:4
private 2:16 3:6,10 4:3
4:4 72:11 143:7
232:11
privilege 125:22
Priyanka 4:3 52:15
proactive 134:20
probably 189:22
problem 48:7 50:9 91:7
91:14 141:17,18
150:1 177:8 200:7
212:18 229:13 230:21
233:1 241:20,21,22
242:1 259:14
problems 203:20
230:22 231:13
procedure 169:12
procedures 222:6
proceed 12:16
process 6:11 7:20 8:10
10:2,6,10,16 11:1,2,5
11:11 12:12,22 17:3,5
19:9 24:15 25:12,17
29:22 65:9 72:13
78:16 87:14 94:20
95:20 97:9 98:4
100:17 145:9 158:11
168:5 169:21 186:2
249:22 265:22 266:2
266:16 267:15

processed 17:21 18:22
23:6 44:2 47:8,10,17
48:17,21 63:11 68:21
69:6,7 70:7 75:19
87:19 88:4,7,16 94:18
119:12,16,20 120:13
120:21 121:1,22
127:2 157:10 169:10
210:13 231:14 241:8
processes 8:15 145:1
processing 147:16
166:7 187:3
processor 83:21
processors 135:10
produce 3:18 4:19
13:19 55:15,22 65:7
134:7 139:13 140:17
165:20 166:15
produced 187:19
196:11
producer 84:12
producers 3:17 22:14
171:20
producing 143:4 240:6
255:1
product 220:11
production 55:19 87:3
110:22 116:11 219:8
products 2:14 34:16,18
40:20,21 41:18 50:12
50:16,22 51:18 55:20
55:21 56:6,17 57:8,17
57:21 58:4,12 70:14
122:20 128:22 129:5
130:13 131:2 135:8
165:12,20 166:15
167:3 172:6,16
173:12,14 219:12
231:17 232:2 235:8
240:19 241:7,8
professional 62:13
68:2 95:8 127:8
professionals 108:19
114:9 118:19 133:7
164:17 239:19
professor 68:3 101:4
253:3
proficiency 117:1
profile 173:8
profiles 22:17 124:19
136:19 230:4
profit 72:11 131:7 219:3
profit-driven 218:9
profound 64:2
program 35:6 65:21
66:13,17,18 94:18
106:7 130:2 133:12
141:15 182:10 213:2

213:4 223:5 248:7,12
programs 18:13 30:12
35:5 41:8 46:17 81:14
81:15 82:11 87:7
89:13 106:5,10 109:8
110:19 133:11 141:9
141:11 212:13
progress 248:6
prohibited 110:16
project 199:15
projected 176:7
projection 176:9
projects 36:8
prolonged 219:15
prominent 52:6 128:20
217:14
promise 64:21
promising 176:12
promote 23:1 41:4
48:14 88:12 97:1
107:22 140:11 149:11
154:21,22 217:11,15
225:9 228:18 250:4
257:14
promoted 77:1
promoters 187:15
promotes 40:19 226:3
promoting 69:5,9 87:6
89:6 136:8 242:6
252:10
promotion 11:10 28:11
266:6,11
promptly 158:21
pronounced 62:21
proper 101:17 147:12
150:11 210:6,18
236:16
properly 148:16
properties 85:4 174:7,8
proportion 42:9 162:15
proportions 100:11
proposed 144:22
181:17 265:7
prostate 50:17 129:6
220:19 231:22
protect 18:19 99:22
137:18 147:20 246:5
protected 72:8 93:2
231:6
protecting 131:1 176:3
protective 227:6
protects 52:2
protein 30:21 31:1
34:21 35:2,9,22 41:10
41:10 55:21 56:4,9,12
57:18 59:15,16,18
60:1,15,16,20 61:22
62:2 68:11 69:16

104:3,3 106:18 109:4
112:21 132:8 157:13
157:15 163:12,15
169:9 172:10 173:15
173:17,22 174:8
190:20 191:19 192:1
192:1,5,7 193:4 194:4
205:4,7,21 206:1,2,2
206:3,6,18 207:12,22
228:1,2 240:8,10
241:1,4,6,19 242:4,6
247:17 249:4 261:2
262:10,13,15
proteins 34:8 83:1 88:1
134:8 173:19,22
174:1,3 205:20 206:4
219:6 260:22 261:5
protocol 202:20
protocols 145:1 181:18
181:22 264:20 265:1
proud 41:6 46:15
proudly 187:12
prove 39:9 220:14
proven 66:19 109:16
174:3
provide 7:12 8:5,11,19
9:7 11:10,19,20,22
12:2 14:8 20:15 22:17
23:17 24:19 26:10,21
28:1,10 34:14 46:3,14
56:2,6,9 74:17 77:18
80:15 87:11 96:18
105:16 106:16 108:19
111:12 112:18 119:3
124:10 135:3 136:11
139:3 140:22 146:12
152:3 165:3 173:7
182:21 183:10 184:3
185:6,12,13,17,19
194:2 204:9,10
227:14 228:5,19
241:13 253:7 256:6
263:22
provided 111:16 173:19
245:4 253:4
provider 182:12 212:15
providers 209:7 210:4
236:13 260:8
provides 43:7 105:11
133:12 205:19 226:1
255:17
providing 12:5 13:18
23:9 27:8 96:12
115:14 125:10 132:18
184:11 263:4,6
prudent 250:7
psoriasis 209:12
psychiatric 186:14

psychiatrist 2:22 186:6
psychiatry 186:15
psychological 38:13
public 1:3,11 2:1,12 3:5
5:4 6:6 7:12 8:13 9:13
10:19 11:2 13:6,9
14:15,15 15:4 16:19
17:6 18:20 19:21
32:20 34:5 41:20 42:4
43:5 45:17 57:20
62:11 70:4 72:11 73:2
75:5 80:22 83:17,21
86:19 87:3 90:10
98:16 101:7 104:17
106:13 107:18 108:1
108:11 114:18 118:19
119:2,15 121:18,21
131:1 132:14,19
143:13 146:22 155:15
163:11 180:5 182:7
182:13 196:14 225:19
227:9 240:22 242:3
250:5 251:15 263:6
263:17 264:11 267:6
public's 92:7
publication 184:16
206:11
publish 88:2,19
published 14:20 85:2
119:10 120:17 230:9
publishes 24:3
pulse 2:7 30:5,6,10,15
33:6 158:13
pulses 23:8 30:14,16
30:18,22 31:3,7,14,18
31:18 32:2,19,22,22
33:4 68:20 69:11
75:19 76:8 82:14 83:2
211:1
purchase 23:3 66:4
79:11 233:6
purchased 105:17
purchasing 167:10
purely 236:9
purified 215:2
purpose 222:22
purposely 239:5
purposes 145:1
pursued 94:3 208:5
pus 130:10
push 50:6
pushed 243:21 245:5
263:20
pushing 131:2
put 10:22 54:3 64:12
160:19 169:13 171:21
190:5 220:10 229:16
234:1 245:20 246:3

putting 255:13
puzzle 110:6

Q

qualified 122:22
qualities 137:13
quality 19:8 24:8,18
25:9,20 26:1 39:21
44:12 57:3 59:14 62:5
95:10 96:2 101:11
103:10,11,21 104:7
134:8 166:5 173:22
183:15 205:21 206:2
quantifiable 257:18
quantify 91:21
quantities 125:7
quantity 103:9,10,19,20
104:7
quasi 141:9
quest 218:20
question 25:1 78:17
139:20 163:5 237:2
questioning 203:13
204:6
questions 21:13 24:17
25:15 26:14 43:16
67:1 68:13 87:10
103:15 143:16 144:17
185:4 186:8 189:10
192:8 193:6 264:17
265:5,6
quick 106:10 224:22
quickly 9:12 169:15
224:3 264:3
quit 102:17
quite 160:14
quo 64:8
quote 38:21 42:6,7
43:21 51:12 70:19

R

R&D 134:6
RACHEL 1:19
racial 48:6 130:5
230:10
racism 229:10 232:7
racist 50:10
radiology 222:2,5,18
Rahavi 267:6
raise 152:12
raised 153:7,9
raises 21:13
ramifications 235:2
ranchers 59:10
randomized 44:13 45:1
61:10 104:14 124:3
127:13
Randy 4:4 202:10

range 34:3 36:5 38:16
41:1 67:1 80:11 132:3
ranged 157:8
rapidly 167:17 257:6
rare 116:5 169:4 241:5
242:14
rarely 143:19
rate 41:16 74:3,4
199:21
rates 48:1 63:15 65:22
100:9 142:13 150:2,2
238:7,9 239:3
ravages 259:21
RCTs 61:10,12 104:16
104:18
RD 1:14,16,17,21
RNA 59:16,19
RDN 1:15,19,22
reach 58:3
reached 25:7 200:18
reaches 150:17
reactions 158:3
read 93:16 230:12
237:1 257:11 267:11
readily 167:14
readiness 151:6
readmission 116:16
readmissions 116:8
reads 126:20
ready 126:10
real 23:7 84:6 85:20
94:10 119:16 142:1
173:12 193:8
realist 63:20
realistic 16:9 83:4
165:5 168:7
reality 237:19
realize 126:12 141:16
149:8
realized 38:3
rearranging 190:8
reason 21:10 77:1
197:18 231:4,8,16,17
reasons 21:11 41:4
50:11 135:22 207:2
228:2
receive 111:6 150:19
172:4
receives 98:16
recipe 70:9 85:8
recipients 66:4
recognize 51:14 60:3
87:4 127:18 148:2
166:3 215:21
recognized 57:18 217:9
253:20
recognizes 32:22 61:16
137:1

- recognizing** 215:11
recommend 25:21
 27:22 29:18 32:21
 33:2,22 34:12 35:13
 41:20 42:19 48:16
 70:3 122:18 151:13
 171:15 180:13 187:14
 187:18 188:10,16
 228:15 240:3,12
 241:16 250:13 251:18
 254:2 261:12
recommendation 19:11
 26:4 32:7,12,14 33:3
 54:10,22 90:21 91:14
 113:7 172:3 178:19
 190:1 193:4 218:9
 262:14
recommendations 15:5
 17:12,21 18:5,8,16,21
 24:6 26:11 27:10,20
 45:6 46:3,6 49:8 50:5
 51:8 58:7 61:9 63:22
 65:16 66:12 67:9,15
 68:16 73:2 78:15 82:7
 87:12 91:2,5 92:1,15
 97:8,22 101:19
 107:22 112:16 120:20
 125:4 135:13 136:17
 140:20 144:1 145:8
 145:22 158:15 165:7
 168:6 182:21 183:11
 185:7,12,14,17
 193:20 198:13 217:6
 227:10 237:21 240:17
 251:1,19
recommended 25:18
 32:2 43:20 44:18 51:6
 55:1 65:12 79:17 82:5
 91:19 107:12 122:22
 123:4 125:7 136:22
 148:5 172:8 178:21
 179:4 181:4 183:17
 193:18 250:19 251:4
recommending 29:20
 37:18 68:10 69:18
 88:3 242:5 253:21
recommends 24:7
 91:16 96:11,14
 117:20 127:1 216:7
reconvene 158:21
record 159:1
recorded 13:9
records 212:13
recovered 160:21
recovery 162:22 219:13
 219:15
recruit 140:10
recur 161:5
- red** 44:2 87:19 88:4,6
 187:21
reduce 15:8,14 24:14
 40:19 44:5 55:1 59:21
 68:9 69:21 77:8 83:11
 83:14 85:9 116:22
 123:16 196:13 207:14
 235:14 247:19 249:3
 251:3 255:15
reduced 29:2,9 113:15
 115:3 127:11 147:19
 169:18 174:14 176:21
 195:6 226:8
reduces 44:9 74:4
 180:21
reducing 38:21 42:2
 73:21 74:2 82:14 90:6
 128:4 174:13 176:18
 216:13 255:21 256:4
reduction 39:18 214:4
 261:21 262:3
reevaluated 163:20
refer 193:8
reference 163:17
referenced 158:17
references 166:2
referred 31:8,20 51:1
 141:22 187:6 199:6,6
 199:17 201:10
refers 30:15
refine 40:22
refined 44:4 124:20
 154:12,19 179:7,9
 181:11 187:14,15
reflect 51:10 53:3 55:2
 145:13 158:8 184:17
 224:17 225:19 229:22
reflecting 144:14
reflection 200:4
reflective 14:16
refractory 209:12
regain 168:16
regaining 213:6
REGAN 1:14
regarding 26:12 104:18
 122:14 195:19 210:7
 250:12
regardless 195:18
regards 119:4
regional 133:15
register 6:8
registered 6:7,9 11:19
 11:22 30:4 49:15
 77:17 79:9 81:11
 105:9 108:9 133:5
 139:1 178:12 182:6
 225:5 263:22
registration 9:6 264:12
- regression** 28:22 29:7
regular 64:6 125:9
 216:15 228:8 252:11
regularly 219:12
regulatory 55:13
 171:20 193:12
reinforce 73:7 181:12
 185:18
Reinhardt 4:10 16:18
 16:19
reiterated 21:20
reject 143:22
related 18:14 26:14
 27:6 52:19 63:15 80:2
 87:12,14 89:15 97:11
 99:22 100:3,10
 112:13 126:22 138:9
 181:5,21
Relatedly 163:10
relating 20:1
relations 267:8
relationship 25:3 28:20
 29:4 87:18 129:14
 163:5 229:3,14
relationships 24:21
relative 57:18 82:7
released 17:10 21:8
 156:3
released 38:12
relevant 24:20 25:19
 61:7 125:7 139:17
 140:12 162:16 215:16
reliable 158:5 188:6
Reliance 61:7
reliant 144:19
relies 242:3
religious 36:9 167:8
relying 261:11
remain 9:15 158:2
remained 213:16
remaining 40:22 145:3
 264:5
remarkable 223:11
remarks 5:2 12:16,20
 262:21
remember 211:3
 224:18
remind 9:12 263:8
reminded 69:16
remission 126:18
removal 43:13
remove 47:19 48:9 52:5
 106:10 221:3 248:8
removed 172:17 231:13
 233:6 254:21
rep 90:8
repair 255:17
repairing 56:13
- repeat** 102:9 213:20
repeatedly 51:19
repeating 237:11
repercussions 97:17
 106:4 130:6
replace 40:20 77:10
 189:22 194:8
replaced 70:15
replacement 34:15
 207:7
replacements 34:19
replacing 21:5 41:22
 44:8 124:15,20 206:8
 206:15
replicate 34:16
report 8:18 17:10 18:17
 20:2 32:18 33:1 50:1
 75:13 76:13 91:10
 97:18 106:2 119:19
 121:17 134:18 144:2
 145:10 171:22 172:20
 176:16 184:14 194:11
 198:19 224:15
reported 42:1 156:12
reporting 21:7 156:17
 252:4
reports 24:4,19 25:14
 251:8
represent 94:16 107:21
 115:19 128:13 131:8
 162:14 208:9 221:2
 259:13
representatives 7:16
represented 165:17
 220:22
representing 40:12
 77:22 112:7 131:21
 133:16 135:9 225:6
represents 20:11 40:15
 105:12 119:14 122:10
 143:2 149:5 214:22
 215:6
reproductive 129:10
reputable 90:12
request 47:2 151:12
 246:14
requests 254:1
require 108:22 149:15
 160:22 161:7
required 18:13 47:20
 119:3 147:12 180:2
 245:17
requirement 147:9
 172:19 210:2
requirements 14:9
 15:11 59:17 110:5,10
 118:21 145:15 172:8
 175:2 251:21

requires 91:6 144:16
requiring 116:15
rescue 233:13
research 3:13,14 14:15
 18:15,19 19:4,5,12
 21:22 23:16,21 24:2
 24:13,16,22 25:15,19
 25:21 26:12 47:21
 59:7,9 80:4,4,8,20
 84:16,18 93:14 95:11
 97:21 104:13 111:8
 112:9 113:16 114:1,6
 115:2 117:10 120:18
 122:5 123:15 124:10
 129:9 137:5 141:8
 147:13 155:9 156:1
 157:22 158:10 167:9
 174:11 179:17 180:14
 181:21 183:21 184:11
 185:8 195:13 199:15
 200:5 214:20 215:17
 216:2 218:20 225:22
 255:19 266:9
researcher 86:17 146:9
researchers 24:10
 124:14 143:7 206:13
researching 163:10
resident 222:2
residents 139:15
 199:14
resistance 124:5 187:4
 187:16 188:15 191:17
 191:18,21
resistant 260:19
resolve 232:12
resolved 209:11,16
resource 110:20
resources 24:5 142:6
 152:12 166:9 250:1
respect 51:10 52:8
 258:22
respectful 140:18
respective 60:18
respects 119:2
respiratory 219:9
response 24:20 28:20
 29:4 171:6 174:4
responsibility 145:21
 237:8
responsible 3:1 4:15
 30:11 49:16 58:5
 119:1 208:15 249:19
responsibly 196:10
rest 93:13
restaurant 3:11 43:11
 86:4 131:19,21 132:1
 132:17 133:15 134:19
restaurants 45:21

132:6,13,22 134:14
 134:16
restoring 212:2
restricted 68:11 99:21
restricting 200:22
restriction 212:1
restrictions 139:18
result 45:16 77:3 84:18
 101:18 110:15 111:13
 112:19 216:18
resulted 61:9 141:12
 214:4
resulting 18:17
results 18:8 39:8 40:1
 116:11 118:14 129:18
 134:13 158:7 212:5
 213:5,12 223:10
 224:1,3
resume 159:4
resumed 159:1
retail 77:22
retailers 79:2,14
rethink 128:20
retired 90:4 92:21
 108:10 236:3
return 13:5 70:2
returned 93:21
reversal 126:21
reverse 93:19 94:14
 95:2 222:15 224:12
 255:18 261:6
reversed 94:7 170:4
 213:14,21
reversible 236:16
reversing 94:20 213:7
 256:20
review 9:20 14:11,18
 19:9,22 21:12 25:8,12
 28:17 32:3 61:5 69:17
 95:13,21 96:4 100:16
 112:11 123:18 124:2
 125:5 146:13 181:18
 183:14 185:4 186:2
 195:12 210:11,21
 214:6 265:4 266:22
reviewed 25:17 70:18
 99:5 138:1
reviewing 100:22
 148:22 208:18 247:9
reviews 14:20 15:1,17
 19:8 24:9,18 25:10,13
 26:1 90:11 96:2
 100:19 198:11 267:1
revising 133:18
rewrite 144:1
rheumatoid 129:15
 169:2 209:16
riboflavin 56:20 136:10

172:11
rice 185:7 192:17
 206:17 262:12
rich 33:19 42:11 59:14
 60:14 76:15 87:22
 124:16 210:22 227:4
RICHARD 1:17
Richmond 37:4
Rick 266:17
rid 193:3
ridiculous 190:9 192:6
 192:16
rigid 109:11
rigor 100:20 101:14
rigorous 95:20 98:19
 99:1 102:2
rigorously 210:11
Rihane 266:18 267:12
rise 66:1 142:14 157:14
 177:12 256:22
risen 100:10
risk 15:8,14 24:3 25:2,6
 26:14 28:21 29:3,5,9
 44:5,9 45:2 57:10
 59:21 69:21 73:21
 75:16 76:18 88:8
 97:11 113:15 115:4
 116:9 117:2 120:6,7,9
 120:15 121:6,22
 123:6,16 126:15
 129:6 137:17 147:19
 174:13,14 180:9,19
 180:22 181:5 182:15
 183:8,19 187:11
 191:15 195:6 207:14
 213:19 214:4 226:8
 228:9 251:3 255:13
 260:3
risks 119:16 188:2
 196:13 219:17 245:19
road 145:9
robust 29:15
Rochester 4:21 221:7,9
 222:21 223:9
role 16:7 28:5 29:12
 49:7 57:15 59:10
 62:17 71:21 74:2 87:4
 88:20 89:9 96:16
 97:13 108:3 112:9
 115:1 124:12 128:20
 131:1 137:3 165:10
 167:22 174:13 177:20
 181:12 184:8 205:2
 205:17 215:9 225:14
 256:4 259:10 263:6
roles 24:2
RONALD 1:13
roof 234:13

room 48:19 190:11
 224:18 243:14 258:16
 258:19
root 89:14 186:16,20
 187:17
rooted 220:12
roughly 157:3,14 236:6
 257:22
round 8:8 10:12,20
 248:21
route 263:12
routine 149:9 150:20
 151:15 254:3 255:14
routinely 160:5 170:1
Rs 40:19
rubber 145:8
Rubin 3:16 112:4,5
rule 53:9
rules 108:22
run 62:12 233:4
running 243:9
runny 219:10
rural 111:1

S

S.W 1:9
SABATE 1:20
sacred 237:7
saddened 219:1
safe 55:22 115:22
 118:20 164:22 165:21
 166:4 167:17 176:2,2
 188:14
safely 117:16
safety 55:18 118:3
 119:4 155:15 166:10
 175:22
salad 83:22 84:3 192:3
 192:5,7
salient 145:4
saliva 255:16,20
Sally 4:5 175:6
salt 198:4
salted 69:8
sample 134:13
SANCHEZ 62:9
sandwich 120:4
Sarah 4:6,8,9,10 16:19
 86:16 95:7 211:10
sarcopenia 59:21 163:6
 163:7,8,17
sat 102:21 233:11 243:8
satiety 123:11
satisfy 140:6
satisfying 21:9
saturated 34:22 35:3
 44:8 50:15 63:12 85:9
 85:16 99:21 110:14

120:14 129:1 166:22
 191:14 197:8 198:9
 207:13 238:20 239:4
 241:17 261:8
sausage 47:9 119:17
 120:10
save 17:8 18:1 77:7
saw 200:14 202:14
 213:5
saying 120:12 157:3,14
 178:5 190:19
says 192:8
scandalous 74:3
scarce 139:14
scared 192:14
schedules 8:3 10:17
schemes 219:3
Schmidt 2:13 102:11,12
Schneeman 1:10,13
 262:22
school 2:4,6,7,12 3:2
 41:20 43:12 46:12,16
 46:17 47:8,13 48:21
 66:13 75:2 81:18
 82:11,15,19 83:10,19
 83:22 84:5 86:19
 106:9,9 108:12,16,18
 109:7,15,22 110:13
 110:19,20 111:6,8,14
 120:4 130:2,3 151:5
 169:2 197:2 238:17
 248:20 259:6
school-based 81:15
schools 43:13 46:12,21
 47:6,20 64:3 83:12,17
 85:21 94:18 108:11
 109:17 110:6 111:1
 143:6
science 3:1,5 14:17,20
 15:4 43:5 52:8 72:7
 78:11 85:3 98:8,12
 100:15 101:1 112:6
 112:12 121:3,14
 137:19 144:5,8,9
 145:3,13 164:19,21
 165:7,11 166:9 167:2
 167:22 184:15 188:5
 189:11 190:17,17
 196:19 197:11 204:4
 204:7 206:12 210:10
 211:3 214:20 238:3
 265:4
science-based 17:20
 18:7 43:7 81:1 134:21
 155:14 168:6
science-driven 267:14
Sciences 102:4 146:10
scientific 14:6 18:17

19:13 24:1,5 26:14
 29:12 32:5 33:21
 36:13 55:14 84:15
 95:8,10,20 98:11
 100:12,20 128:19
 129:2,13 130:15
 143:16 144:1 145:10
 146:12 179:12 193:12
 208:17 211:21 212:17
 216:2 225:20 231:15
 251:7 257:12
scientifically 24:13
scientist 253:2
scientists 4:10 14:19
 16:21 17:10 18:4
 144:6 165:15,19
 166:13 167:15 168:4
sclerosis 209:10
scope 150:1
score 213:19
Scott 7:1
scouring 212:17
scratch 49:1
screen 96:8
screened 117:4 160:6
screening 161:21
scroll 265:16
scrutiny 50:2
seafood 44:1 183:8
 184:2,5
Sealander 3:9 149:3,4
Sean 4:11 40:12
seat 13:5,6
seated 12:17
seats 12:7
second 7:4 8:8,16,19
 21:11 28:4,7 42:1
 44:7 47:19 69:18
 71:13 73:1 101:3
 103:21 119:22 120:8
 140:22 145:16 194:22
 196:3 206:7 233:9,10
seconds 92:5
secret 197:13,14
 236:12
Secretaries 19:6
Secretary 5:2 6:13 7:1
 7:9
secretion 200:10
secretions 70:20
section 41:10,10,11,13
 41:22,22 259:6
secure 43:8
security 31:5 88:19
seed 30:16 187:19
seeds 23:8 89:4 122:20
 127:3 211:2 226:20
 228:3 240:16

seeing 37:14
seek 34:16
seeking 127:19 157:18
seen 55:6 168:20 201:6
 209:12,15 230:13
sees 96:22
segments 214:22
seitan 35:1
seldom 109:21
select 109:2
selected 143:10
selenium 56:19 113:1
self-care 150:19
self-esteem 201:8
self-sufficient 153:3
sell 78:4
selling 49:4,4
send 120:4
senior 182:7
seniors 150:22
sense 200:8 218:18
 237:16
sensitivity 124:7
 260:21
sensory 194:16
sent 186:13
sentence 76:14
sentiment 21:19
separately 181:10
September 201:9
Serena 42:14
serious 50:9 149:20
 256:17
seriously 126:13 263:5
serve 7:7 34:18 83:18
 94:17 107:18 143:10
 179:15
served 46:20 48:22
 69:8 82:16 130:2,22
 182:11
service 7:8 74:16
 141:12 182:12 259:5
 266:8,9
services 5:3 6:14 7:3
 7:10 81:19 89:18
 168:4 182:14 266:4
serving 56:8 60:19
 82:22 86:4 173:15
 206:19
servings 15:7,12 16:10
 82:6 136:22 172:4
 174:21 178:21 179:5
 179:6 194:1
session 11:17 13:10
 262:21
set 32:8 44:19 71:14,22
 72:3 198:5 210:12
sets 110:18

settle 64:7
settled 189:12
setup 245:11
seven 20:21 94:6
 116:14 123:12 182:11
 206:20 244:15
seven-year-old 147:17
severe 163:8
severely 240:1
shakes 45:19
Shanahan 2:10 152:8,9
 155:5
shape 29:19 71:19
 134:1
shaped 182:18
shaping 108:17
share 43:4 74:12 80:10
 103:2,6 104:6 135:21
 154:9 183:20 186:10
 186:19 193:14
sharing 246:9
SHARON 1:16
Sheet 216:7
shelf 105:17
Shelly 83:18
shelter 233:14
shelves 76:4
Sherene 4:13 225:4
shift 146:22 228:14
shifting 226:1
shifts 113:11
shining 83:16
shins 243:5
shoot 247:20
shop 78:6
shoppers 79:7
shopping 45:21 66:7
short 136:21 171:4
short-term 170:14,17
 171:4
shorter 63:19
shortfall 179:20
shortfalls 107:15
 251:13,14 252:16
show 25:4 90:12 92:11
 104:19 114:7 115:6
 141:10 163:14 170:14
 174:12 181:7 235:10
showed 29:1,7 39:6
 65:22 113:19 157:22
showing 65:19 111:8
 123:10 197:17
shown 61:1 69:21
 76:17 82:2 100:1
 113:16 114:2 117:8
 117:10 123:13,15
 129:5 141:8 219:7
 225:22 235:3 255:19

- shows** 15:12 47:21 62:5
 65:20 66:6,15 124:10
 137:5,11,20 147:13
 167:9 179:17 216:2
 228:11
sick 54:5 142:16 169:8
 210:18,18 220:8
 230:19 231:3,7
 238:18
sickening 236:10
sicker 169:4 212:14
 247:3
side 13:1,3 84:3 261:19
sides 12:6 110:11
sifting 159:12
sight 93:6
sign 265:18
signed 9:8 26:5 94:19
 265:14
significance 27:22
significant 14:6 35:10
 82:9 136:3 137:3
 138:5 141:12 145:22
 152:1 251:15 254:12
significantly 111:9
 124:4 172:18
signs 245:10
silliness 144:8
silver 218:7
Silverman 3:5 43:2,3
similar 136:14,19 173:8
 224:1
simple 86:7 160:14
 193:7 225:1
simplify 92:7
simply 48:1 72:9
 115:12 186:17 195:15
 197:20 208:18 257:21
sincere 229:20
sincerely 189:8
single 17:15 90:15
 120:10 176:20 195:16
 260:2
single-owner 78:1
sippy 185:9
sit 204:11
sites 254:20
sitting 126:8
situated 12:11
situation 79:15 104:1
situations 245:13
six 19:1 25:4 39:15
 73:10 116:21 175:16
 178:21 186:13 194:5
 202:22 203:1 209:11
 217:5 249:2
Sixteen-year-old
 248:18
- size** 45:19 58:5 127:18
 176:18,18 177:2
sizes 134:17 176:11
 177:8
skeletal 174:3
skeptical 200:13 247:8
skill 93:15
skills 63:3 153:15,16,20
skin 209:13
sleep 39:20 96:8
slices 47:9 69:8
slides 264:17,18
slogan 238:3
slower 162:22
slowly 53:14
sluggish 187:3
small 111:1 215:6
 225:10
smart 110:13,14 190:10
smoke 120:3,8 232:4
smoker 120:6
smoking 121:12,16,19
SNAC 3:4 20:8,9,10,14
snack 20:10,12,14,18
 20:20,21 21:6,7,10,16
 22:11,13,15 110:7,13
 157:3
snacking 20:18 21:3,13
 21:16,22 22:4,22
 23:10 157:1 255:8
snacks 21:2 23:4,9
 108:21 110:14 124:10
 124:13,16,20 151:19
 157:2 176:11 206:7
 254:7 255:11
SNETSELAAR 1:21
social 139:5 140:14
 141:1 151:4 166:16
 254:16 259:14
society 4:9,11 26:6
 40:13,15,19 42:5
 45:14 95:7,9 96:15
 120:22 240:1 258:13
soda 70:21 91:18,22
 216:15
sodas 45:20
Sodicoff 2:16 256:8,9
sodium 34:22 48:18
 58:8 63:12 82:14,21
 85:10,17 110:3
 111:19 120:14 124:18
 134:7 166:22 196:22
 197:4 241:17
soil 153:10
sold 110:11
solely 96:13
solid 98:18
solidified 14:3
- soluble** 228:6
solution 85:20 232:22
solutions 82:1 86:12
 222:20
solve 164:19 212:18
 242:7
Somebody 11:5
something's 245:11
son 245:22
son's 245:1
Sonic 86:1,3
sons 220:17
soon 9:11 51:22 242:19
soothe 243:12
sort 64:20 230:20
 237:16
sound 24:13
sounds 244:17
source 28:16 30:19,20
 50:15 56:7 73:8 76:10
 88:17 114:15,19
 129:1 130:11 136:7
 146:19 174:22 205:3
 206:1 207:21 215:22
sources 28:15 56:18
 57:6,19 90:12 113:5
 114:17 146:18 172:9
 196:2,3,7 227:20,22
 228:2,3,6 242:6 261:2
 261:5
Southeast 3:19 208:3
Southern 141:21
sowed 170:7
soy 31:12,18 32:20
 122:20 154:16 173:7
 205:3,4,7,9,17,19
 206:1,5,8,15,19 207:3
 207:5,7,9,12,21 228:4
soy-based 35:1
Soyfoods 3:7 204:20
span 63:19
sparkling 215:2
sparred 259:20
speak 9:3 33:14 36:18
 37:6 52:15 73:20 75:4
 102:14 125:15 128:18
 246:14 256:10
speaker 249:16 258:17
speakers 11:21 218:4
speaking 30:5 37:5
 202:11 208:4
special 104:12 106:6
 147:7
specialist 126:3,4
 256:14
specialists 2:16 258:16
specialize 125:18
 186:15
- specializes** 52:17 74:21
specializing 225:5
specialty 222:11
species 48:3 218:22
 237:13
specific 27:9,12,17
 70:10 88:18 96:13
 144:22 157:21 240:12
 241:12 242:5 262:7
specifically 10:15
 31:14 81:20 106:2
 122:13 136:6 240:7
specify 41:14
speculate 99:17
speed 122:1 147:16
spending 18:2
spent 10:9 84:14
 212:16 243:11
spices 197:13 198:3
spinal 113:14
spite 37:18
spoken 237:10
spontaneous 258:19
spread 177:20
spring 215:1
Square 84:12
stabilize 50:8
stable 105:17
staff 10:22 12:11 13:1
 17:4 41:5 65:8 185:2
 209:8 249:20 263:14
 265:21 266:1,5,9,16
 266:20,21 267:4,8,10
stage 12:18 59:14
 61:21 95:12,16
 105:15 106:22 183:5
 184:7,20 251:4
stages 22:6 56:21 67:5
 67:12 78:8 107:1
 146:15 148:12 166:16
 225:16 226:3 250:13
 253:11
staggering 41:16
stake 72:9 121:4
stakeholder 267:8
stakeholders 9:1
stamp 220:11
stance 171:14
stand 62:16 131:14
 220:21
standard 38:10 39:11
 61:1 99:12,15 101:2
 132:21,21 169:12
 185:19 246:4
standardize 32:17 96:7
standards 66:14 96:4
 100:22 101:9 109:16
 110:13,14,18 111:1,3

- 111:7,12 160:10
standby 12:1 264:2
standing 218:12
staple 130:1 174:19
staples 188:11
star 42:14
starch 161:10 260:19
starch-based 171:12
starchy 70:1,8 106:3 188:11
start 12:8,18 16:3 38:11 146:14 161:17 198:2 202:15 203:13 204:6 204:6 211:14 217:1 247:17
started 11:4,18 13:13 50:7 200:12 202:20 247:11
starting 94:20 131:11 188:17 234:18
startling 257:11
starts 80:2 202:7 239:1
startups 225:11
starvation 243:13
starved 244:18
state 12:15 47:17 70:5 91:3 133:14 135:14 162:7
stated 112:15 173:6
statement 126:20 148:7 161:10
states 4:12 40:13 49:11 55:17 74:6 87:8 92:5 109:9 121:9 147:5 148:18 162:15 195:2 195:4 217:15 218:16 238:7 241:20 259:15
stats 235:8
stations 45:22
status 53:3 55:2 64:8 115:2 137:16
statutory 145:14
stay 161:1 189:9 218:17 265:9,12,17
staying 10:5
steady 65:22
stealth 132:15
steer 241:1
stem 244:10 260:1
stent 222:7
step 12:14 13:4 91:13 117:20 161:16,16
Stephenie 267:6,10
steps 89:19 117:19
sticking 263:14
stigmatized 105:22
stimulate 200:9 255:20
stimulates 200:11
- stock** 153:21
stomach 233:5
stones 216:19
stood 221:1
STOODY 6:3 263:19
stop 42:17 120:21 230:22
stopped 103:15
storage 200:11
stores 45:22 78:1,2,5 79:6 139:12 206:22
stories 248:11
story 83:16 248:14
straightforward 187:8
strata 166:17
strategies 14:16 82:2 84:6 132:4 142:19 177:3 260:15
strategy 83:3 84:2 175:11 176:13 177:12 187:7
strength 48:13
strengthen 36:15
stress 219:14
strict 110:3
strive 79:4
stroke 88:8 149:22
strokes 44:5
strong 15:11 16:7 29:14 42:17 43:19 47:22 56:13 88:4 95:19 126:16 127:5,10,14 129:13 171:14 189:6 194:21 195:7 210:9 218:17 253:10
stronger 33:22
strongest 28:11 44:7
stronghold 70:22
strongly 24:7 32:21 33:8 67:16 80:16 171:13 187:4 211:22 215:20 240:21
struggle 32:4 65:15
struggling 260:6
student 82:13,20 83:9 90:10 222:2
students 82:16,17 84:2 108:21 109:2,21 111:4,5,14,17,20
studied 191:5 205:21 237:1
studies 21:14,19 22:4 39:9 61:1 70:17 76:17 88:5 115:6,11 121:15 123:9,13 127:7 149:17 163:14 181:2 195:17 204:8 207:4,6 214:17 235:4,10 239:1
- study** 22:9 39:5 85:2 121:5,6 124:13 127:8 127:8,9 133:8 138:1,5 141:10 180:9 195:22 235:12 250:22 261:14
study's 158:7
studying 163:21
stuff 230:19
stunning 199:18
style 60:22 122:14,15 122:15 193:22 257:4
subcommittee 81:21
subcommittee's 21:20 96:6
subject 241:4
subjective 257:20
submission 145:10
submit 9:15 43:15
submitted 14:21 87:15 101:6
submitting 26:3 59:1
subpopulations 57:9
Subramanian 2:5 128:11,12
subsection 87:10
subsequent 125:6 151:1
subset 156:2
substantial 159:15 179:14
substantially 25:6 163:15
substantiated 70:7
substituted 216:14
subvert 121:3
succeed 111:15 82:2 83:16 133:17 221:19 247:12
successful 117:19 166:18 211:4 248:12
successfully 161:19 167:15
suck 231:17,18
sudden 74:4
suddenly 229:12
Sue 77:16
suffer 52:18 259:15
suffering 160:12 221:13
sufficiency 97:2
sufficient 118:20
sufficiently 128:4
suffocation 258:6
sugar 17:16 19:1 43:9 44:3,18 50:22 53:21 54:9,18,21 63:12 69:8
- 90:3,6,13,15,21 91:9 91:10,15,18,20 92:1 92:14 156:19 161:10 166:22 187:1 196:22 197:9 200:9 201:1 226:21 248:9
sugar-free 151:18 253:12 254:6 255:20 256:1
sugars 44:20 68:22 80:7 91:3 198:9 241:18 247:4 249:5 255:5 261:18
sugary 43:13 44:21 45:5
suggest 14:7 107:10 115:11 160:1 161:13 184:18 204:21 260:16
suggested 83:3 137:4 261:14
suggesting 124:6 235:12
suggestions 80:15
suggests 28:9 59:18 95:13 96:8 115:1 137:8 180:17 211:22 250:22 260:22 261:7 262:10
Sullivan 3:11 71:6,7
sum 101:21
summarize 14:12 76:13
summary 32:16 125:2 158:7 177:6 224:6
summer 108:21 110:8 192:9
super 45:19
superior 15:21 57:16 228:1
supermarket 78:22
supermarkets 79:8
supper 110:8
supplement 97:16,19 252:8
Supplemental 106:6 141:14
supplementation 118:8 183:12,16 245:18 251:6,20 252:15
supplemented 113:21 118:6 245:16
supplementing 147:13 245:19
supplements 57:11 97:13 147:6 148:6 183:7,9 184:22 185:16 250:9 251:3 252:2,3,5
suppliers 20:12 215:5

- supply** 110:21 116:12
152:19 154:8 164:22
166:4,7 167:19
193:17 241:10
- support** 15:18 33:8
37:10 46:4 52:7 65:11
78:8,18 79:11 89:14
98:17 108:2 112:20
132:20 135:12,22
138:12 144:12 179:3
179:13 181:17 185:8
194:20 197:11 207:12
208:7 209:7 225:17
226:14 227:16 243:9
244:12,21 252:5
266:2,8,12
- supported** 33:20 40:6
45:11 188:2
- supporters** 115:20
- supporting** 29:12 33:17
60:4 69:17 152:5
205:4,11 215:9
250:17 256:18 257:13
265:21 267:8
- supports** 16:8 18:21
29:15 43:19 58:10,20
95:18 97:2 112:9
113:13 138:14 148:12
- suppressed** 52:1
- surgeon** 120:5 121:17
190:3
- Surprise** 98:9
- surrogate** 15:22 144:19
- surrounding** 19:19
- surrounds** 45:18
- survey** 21:9 107:9
114:5 156:3,6,11,22
157:8
- surveyed** 134:12
- surveying** 177:17
- survival** 23:20
- Susan** 4:14,15,17 37:2
49:14 267:12
- susceptible** 47:15
- suspect** 53:16 257:2
- sustain** 118:16
- sustainability** 19:20
131:19 242:1
- sustainable** 88:20 89:9
164:22 165:9 166:4
223:3 225:1
- sweet** 77:4 192:17
- sweetened** 17:17 44:3
226:21
- swiftly** 12:3
- swimmer** 248:20
- switch** 44:11
- Switch4Good** 2:15
- 218:6
- switched** 247:13
- symptomatic** 117:7
- symptoms** 51:5 186:18
209:16 220:4 257:8
- syndrome** 39:8,13
52:20 74:4 123:17
147:22 159:18,22
246:21
- syrup** 260:18
- system** 40:18 46:4 63:7
220:13 236:11 237:4
242:1 259:20
- systematic** 15:1,17
19:8 24:8 25:8,10,13
26:1 28:17 69:17
95:21 96:2 100:19
123:18 124:2 141:18
163:2 181:18 198:11
266:22
- systematically** 61:4
70:18 138:1
- systemic** 149:20
- systems** 16:20 67:13
144:13 187:19 242:3
-
- T**
- table** 62:22 80:3 191:1
230:3
- tackling** 176:13
- taken** 114:22
- takes** 130:18 171:5
263:5
- talk** 75:7,9 104:22
168:13 191:2 198:3
201:7 230:4
- talked** 203:19 212:13
231:20
- talking** 64:4 154:18
198:12,18
- talks** 177:21 178:1
203:15
- Tamara** 4:18 246:10
- tap** 215:8
- tape** 13:2
- target** 44:19 146:16
- targeted** 250:10
- task** 139:18 144:7
159:12 189:4 237:6
- taste** 22:14,18 34:16
35:8 111:17 167:10
167:11 197:19
- tasty** 153:17 206:6
- taught** 38:14 236:13
244:6 249:3
- Taylor** 4:19 13:17
- tea** 28:6,9,15,20 29:2,4
29:8,13,15,20 70:21
- teach** 63:2 140:13
201:16 245:8 247:15
257:17
- teaches** 223:5
- teaching** 102:15
- team** 83:18 249:2 266:1
267:5,7
- teams** 188:22
- teats** 231:18
- technologists** 2:18
164:15 165:16,19
166:13 167:16 168:5
- technology** 22:16
164:19 165:11 166:10
167:3,22 206:12
- Ted** 4:21 221:7
- tee** 201:2
- teenage** 57:9
- teenager** 192:7 248:15
- teeth** 149:12,13 150:16
151:11,16,17 253:10
254:4,6 255:13
- Teicholz** 3:22 98:7,8
102:9
- tell** 53:11 54:13,16
63:14 103:12 169:22
190:13 191:7 192:18
192:19,20,21 201:2
231:22 232:20 233:13
239:6
- telling** 42:17 170:5
197:3 244:4 248:2
- tempeh** 35:2,4 41:7
47:2
- Ten** 116:19 232:15
- ten-year** 98:10
- tend** 227:4
- tenets** 99:19
- tennis** 42:14
- term** 21:17 30:15 106:4
171:4,5
- terminology** 30:13
31:19,22 32:18
- terms** 31:7 173:8 204:8
217:7
- Ternus** 3:12 122:3,4
- test** 160:8
- testament** 52:7
- tested** 99:9 214:1
- testify** 208:18
- testimony** 71:3 152:6
253:8
- Texas** 8:21 223:10
264:8
- texture** 34:17 35:8
- thanks** 6:15 65:7 84:4
85:12 259:4
- theaters** 45:21
- theories** 144:18 203:12
204:1,6
- theory** 203:4
- therapeutic** 52:22
111:19
- thiamine** 56:19 136:10
- things** 16:13 43:14
62:13 103:6 154:4
169:20 170:18 171:4
192:4 197:1 203:4,8
233:12 235:16
- third** 42:11 44:17 48:16
74:7 84:11 113:21
195:21
- thorough** 61:6
- thought** 9:1 103:2
126:9 144:20 160:20
170:3 199:22 218:11
242:21 245:1 263:17
- thousands** 52:18 260:5
- threat** 162:20
- threaten** 19:20
- threatening** 54:12
116:19 242:2
- three** 11:20 13:2 19:3
21:7 29:9 32:8,10
33:4 38:15 40:19 41:3
53:13 72:16 86:4 93:3
93:20,22 122:18,19
135:21 137:15 145:4
174:21 179:5 183:6
184:2 193:14 194:1
204:22 221:10 223:18
226:14 234:10 243:11
258:8 264:6
- three-minute** 12:18
- thriving** 221:20
- THURSDAY** 1:5
- tied** 129:2
- tilt** 187:19
- timekeeper** 12:17
- timely** 25:19 241:2
- timer** 12:18
- times** 20:20 21:2,7
150:8 157:3 223:8
- timing** 96:10 145:16
- TIMOTHY** 1:18
- tiny** 243:6
- tired** 40:4 190:7
- tobacco** 121:10
- today** 3:14 6:22 7:11
8:1,6,12 10:4,11 11:5
15:2 23:18 30:9 33:14
35:16 36:18 40:12
41:3 43:17 49:19
64:15 75:3 81:20
86:21 87:9 98:21
101:3 105:10 122:8

128:18 135:3 136:20
 139:20 150:18 156:2
 158:15 159:14 162:6
 162:19 168:13 169:5
 176:4 178:16 196:17
 208:9,16 210:4
 211:12 218:12 220:1
 220:14,21 221:2
 225:6 227:11 237:10
 240:2 246:14 256:11
 260:12 263:21
today's 11:11 109:15
toddlers 184:19 194:18
tofu 47:2 57:20
tokenism 229:17
told 16:11 49:4 93:10
 93:12 94:15 118:10
 196:20 197:10 218:16
 233:4 243:17 244:9
 248:3 257:7
tolerance 161:15
tolerate 48:5
toll 176:6
tool 52:22 72:10 217:14
tools 139:21 173:21
 198:17 245:3
tooth 45:3 149:10 151:1
 151:10
toothpaste 151:16
 254:5
top 21:10 62:1 101:5
 120:19 156:18 157:17
 172:9 180:5
topic 15:1 78:21 90:3
 124:8 237:9
topics 95:22 112:13
 144:17 181:19 183:6
 184:20 185:3 215:14
 265:5
topped 69:6
total 11:21 19:2 27:2
 60:15,15 78:3 110:15
 123:20 143:21 179:19
 181:11 200:18 209:17
 223:11,14 255:5
totality 61:5 207:11
toxic 45:18
toxicity 191:21
track 67:5 102:6
tracking 156:6
tract 219:9
trade 20:10,17 77:21
 135:9 175:16
tradition 68:15
traditional 20:13 69:19
 69:22 85:7 109:13
 141:22 142:1 152:16
 178:22 185:6

traditionally 14:3
traditions 61:19 140:3
trained 246:22
training 159:8
trajectory 71:14
trans 43:11
Transformation 2:10
 159:7
transition 67:12 74:9
transitions 95:16 209:3
translate 18:7 97:15
translates 211:3
transmitters 186:22
transparency 72:13
 74:15 95:20 145:5
transparent 11:2 17:5
 61:6 249:21 267:14
Trapp 2:7 74:19,20
trash 231:9
traveled 75:3 256:16
treat 126:6 141:19
treated 52:17 260:5
treating 125:18 127:15
 161:19,22 190:4
 223:1
treatment 126:18,21
 128:3 160:14,18
treatments 222:12
tree 3:12 122:5,10
 123:3,20 124:16
trees 144:11
tremendous 202:4
 237:7 250:1
trends 20:19 22:21
 137:21 156:7 168:21
trial 39:9 99:8 113:19
 213:10 214:7
trials 44:13 45:1,11
 61:10 99:11,18,20
 100:1 104:14,15
 123:19 124:3 127:14
 188:4
trickles 258:12
tried 38:4,5 233:18
triglycerides 123:21
trimester 113:21
troublesome 258:6
true 3:4 191:19 234:20
 239:17
truly 80:22 134:19
 142:2
trust 74:14
trusted 24:4
trustworthy 98:20
 101:20,22
truth 257:7
try 6:18 70:4 94:14
 120:3 203:10

trying 243:11
tube 113:15 147:20
 180:3,10
Tufts 222:3
Tuma 4:2 142:10,10
 146:6
turn 107:12 175:22
 185:2 202:2
turning 207:1
TusaRebecca 267:4
tweaking 37:16
Twelve 116:12
Twenty 221:16
twice 72:19,20 75:14
two 8:10 10:20 12:9
 18:16 21:2 27:5 29:2
 37:22 50:11 65:20
 69:2 72:2 75:6 80:14
 84:15 94:5 98:21
 106:13 111:5 121:10
 122:19 136:14 145:18
 145:18 156:18 172:15
 173:18 175:15 183:18
 184:11,20 185:16
 200:15 205:4 213:15
 222:8 223:15 230:10
 233:12 244:11 248:21
 257:11 264:6
two-step 91:7
type 17:18 25:7 44:6
 45:2 73:22 74:22
 75:17 76:19 77:2 93:8
 124:1 126:6,15 127:6
 127:12,15 129:14
 159:20 160:8 168:19
 169:1 174:14 181:8
 187:6 201:11 202:11
 213:8,12,15,21
 220:18 226:9 228:10
 232:17 256:22
type-2 195:7
types 15:18 25:4 27:12
 27:15 226:10 259:18
typically 35:19 69:22
 206:19

U

U.S 1:9 23:18 28:14
 30:6,10,11 46:18
 70:22 72:2 76:3 84:14
 89:8,18 92:6 97:18
 98:11 105:12,13
 116:7 118:15 121:13
 122:14 146:16 175:13
 179:8 180:14 193:22
 196:3 205:12 208:16
 220:15,22 226:16
 229:10 230:10 246:16

251:1,10 252:14
 254:14
ultimately 49:20 164:6
 244:11
ultra 63:11
umami 85:13
umbrella 14:11
unable 220:8
unbelievable 213:5
unclear 216:17
uncomfortable 220:8
unconscionable
 220:13 238:19
uncontrolled 37:15
undefined 21:17
underconsume 179:3
underconsumed 107:6
 113:10
underconsumption
 75:4,19 106:14
 252:13
underpin 24:5
underserved 75:10
understand 21:12 32:4
 59:10 62:20 63:21
 64:1 66:22 84:16
 96:19 102:22 125:8
 154:6 160:16 176:14
 203:6 207:21 243:20
 244:3 252:2
understanding 67:10
 155:18 167:21 203:11
understood 58:12
 203:5 229:12
underutilized 176:12
underway 21:12 265:4
undiagnosed 48:8
undigestible 260:19
uneducated 90:19
unfamiliar 114:12
unfortunate 111:7
unfortunately 48:18
 65:14 99:13 102:5
 114:5 176:22 247:2
unhealthy 154:20
 220:12 241:1
unified 105:11 142:19
Unilever 3:8 26:20
unintended 143:21
 147:2
Union 4:10 16:21 17:9
 18:3 255:22
unique 30:18 79:15
 194:15 205:2,20
 206:3 225:14
uniquely 99:13
United 3:18 4:11 40:13
 49:11 55:16 65:6 74:6

87:8 121:9 147:5
 148:18 162:15 217:15
 218:16 233:19 238:7
 241:20 259:14
units 232:17
universal 254:18
universe 203:8
university 2:5,7,11 3:12
 4:8,17 13:18 37:4
 39:5 67:22 68:3 75:1
 133:22 146:11 211:10
 213:3
unnecessarily 25:20
unnecessary 25:11
 220:12
unprecedented 63:15
unrefined 261:13
unsaturated 44:9
unsolvable 212:18
unstable 187:1
unsweetened 28:6
 29:13,15,20
untapped 17:7
untreated 223:16
upcoming 32:18 34:14
 35:15 128:21 198:5
update 25:17 33:2 35:5
 186:2
updated 66:2 111:6
 265:17
updates 9:9,9 66:14
updating 25:22
upfront 245:4
upmost 74:15
upsetting 104:12
upside 202:2
upwards 160:11 161:4
urge 19:6,21 36:12
 47:19 49:6 128:19
 177:10 183:14 184:7
 185:4,17 224:14,17
urged 68:5 101:12
urges 168:2
usability 68:7
usage 97:16
USDA 7:10,16 10:21
 14:22 17:4 18:5 19:6
 27:22 29:18 35:3 41:5
 41:6,9,21 46:17 49:20
 51:12 65:8 76:14
 81:13 82:12 89:17
 91:14,19 96:5 98:3,22
 100:21 101:2,7,8,12
 101:16 102:3 123:2
 125:3 130:22 141:11
 144:6 175:17 220:6
 220:10 249:20 253:6
 258:8,18 266:5

USDA's 60:10 111:11
 218:8
use 24:8,12 25:9,18
 30:13 52:21 95:18
 101:12 140:6 166:8
 185:9,11 198:7,8,9
 207:19 219:2 222:13
 252:4 263:12
useful 203:17
users 252:8,9
uses 31:10 217:15
 258:17
usually 128:4
utility 256:19
utilized 25:13 57:7
utilizing 222:5 223:1

V

valid 40:5
validated 99:4
validation 97:10
valuable 136:3
value 172:21 193:17
 194:12
values 60:19 140:2
 156:9
Van 1:22 3:18 65:5,6
variable 144:15
variations 142:4
varies 157:7
varieties 14:1
variety 31:9 34:13
 35:14 45:8 58:13 66:5
 84:1 105:18 109:3
 127:2 132:7 138:15
 179:18 185:3 205:19
 206:14 207:2 225:12
 241:10 250:14 252:1
various 110:22 138:3
 166:14 173:21 177:3
varying 110:10 113:3
vascular 222:4 259:18
 261:22
vast 17:7 55:15 76:11
 189:5 230:15
vegan 41:15 68:8 69:12
 157:9 221:18 223:6
 235:10,15,17
vegetable 66:18 70:1
 82:3,6 83:5 84:3,6
 85:16 105:16,21
 106:3 107:19,20
 115:13 135:18 136:16
 141:13 154:13,16,19
 197:1 241:21
vegetables 13:22 14:2
 14:7,14 15:7,9,19,19
 15:20 16:6,15 17:12

23:7 37:20 42:9 43:21
 56:10 65:13 66:5,16
 67:6 68:20 69:10 70:9
 74:8 75:12 76:2,7
 80:6 82:6,14 83:1,11
 84:1 87:22 89:3
 107:11 109:3 115:7,9
 115:11 127:2 132:8
 136:15 149:14 156:21
 198:7 199:12 211:1
 226:19 240:16,18
 251:11
vegetarian 34:10 41:14
 69:12 77:10 122:15
 157:9 210:15 226:15
vein 243:6
vernacular 262:13
versatility 206:5
version 41:21 177:1
versions 85:1
versus 104:19 185:5
vest 93:2
veteran 90:5
viable 37:11
Vice 1:13 155:8
video 13:9
viewing 1:11
Virginia 4:17 37:4
 108:11 199:4
Virta 211:11
virtually 48:20 150:10
vision 53:15
visit 10:1 108:15
visiting 93:7
visits 208:14
visual 147:17
vital 53:15 56:14 103:22
 148:15 174:22 215:9
 227:6
vitality 103:10 104:8
vitamin 35:20 57:15
 85:10 106:20 114:17
 136:7,11 148:6
 166:19 172:15 183:11
 185:18 193:20 194:3
 196:2,4 227:8,15
 241:22 251:16
vitamins 56:19 60:2
 85:11 113:1 115:8
 136:4 172:11 227:2
voice 7:19 10:2 90:11
 105:11 182:10
volunteering 10:15
voucher 66:4
vulnerable 64:5

W

waiter 192:4

Wali 4:3 52:13,15
walk 76:2 100:5
walked 264:19
Wallace 4:19 13:16,17
walnuts 122:12
wanted 8:5 233:5
wants 64:22 210:17
warn 68:10 119:15
 187:21
warranted 252:15
Washington 1:10 16:22
 33:16 236:4 258:15
 264:7 267:18
wasn't 153:12 200:7
waste 83:12 166:11
wasted 110:1
watched 236:20
watching 37:16
water 2:2 36:1 41:22
 69:9 70:20 117:20
 151:19 176:2 214:21
 215:1,8,12,14,18,20
 215:22 216:3,7,9,10
 216:11,16 217:4,8,11
 217:13,18 253:22
 254:8
waters 215:2
way 41:19 76:12 80:16
 91:6 93:18 104:8
 107:15 127:19 142:6
 152:19 153:18 164:9
 188:6 197:19 205:19
 220:16 246:22 247:7
 263:15 265:12,16
ways 31:9 79:5 101:9
 105:18 119:2 154:21
 157:6 228:17 266:2
weak 101:22
weaken 143:22
weaning 48:2 185:5,6
 237:14
wearing 94:11
weasel 231:19
Web 1:11
webcast 10:5
website 10:1 13:10
 265:11
Webster 2:4 105:6,9
week 14:21 21:6 32:8
 32:10,11,13 33:4
 75:14 122:20,21
 123:3 157:2
weekly 110:4
weeks 93:20 223:15
 234:10 244:11
weighed 201:12
weight 2:21 23:19 24:2
 26:15 37:17 38:1,5,12

39:10,15,16 42:14
 44:22 45:10 59:20
 80:11 116:15 117:6
 123:11,14 137:16,22
 138:6 157:18 170:15
 170:19 180:16 185:10
 189:19 190:2,3
 199:20,20,21 200:17
 200:18,22 201:20
 202:1,4 213:6,18
 214:5 216:13 233:22
 234:21 249:5 258:18
 259:16 261:16
Weimer 3:10 178:11,12
 182:3
weird 237:20
welcome 6:4,5,12 7:3
 11:8 30:9 158:16
 178:7
well-being 216:4
well-formulated 160:15
well-suited 144:7
Weland 2:14 135:6,7
wellness 4:1 67:21
 132:3 133:9 168:11
 209:6 237:8 252:6
went 93:22 94:1 159:1
 191:3 202:13,21
 234:10 243:18
weren't 200:3
West 159:7 199:4
Westbrooks 3:3 138:21
 138:22
what-ifs 197:11
whatsoever 229:3
wheat 77:4
wheat-based 35:1
white 50:14 68:22 69:6
 106:2,11,12 107:3,13
 139:18 209:10
Whitmire 3:14 162:4,5
who've 248:12,13
whole-grain 149:15
wholesome 56:1
WIC 2:12 65:21 66:2,8,9
 106:8 107:6 182:8,10
 182:12,16,17 183:2
 184:17 185:2,2,20
WIC's 182:13
wide 66:4 105:18 109:2
 132:3 218:4 250:7
widely 22:12 35:15
 156:14 215:21 250:18
widespread 157:6
wife 221:17
Williams 42:14
willingness 144:16
win 208:21

window 71:13
winning 218:7
wins 104:20
wise 49:3
wish 8:6 13:7
withdrawn 169:18
witness 209:9
witnessed 90:9
woefully 90:19
woke 93:3
Wolver 4:17 37:1,2
woman 38:7
woman's 71:12
women 57:10 71:9 72:1
 81:14 91:17 106:7
 107:4,10,16 113:9
 119:22 143:2 147:8
 180:10 184:4 231:5
 250:19,20 251:1
Women's 214:1
wonderful 126:8 246:20
wondering 160:19
word 9:10 101:13
 177:20 196:17
words 69:2 98:19
wore 93:1
work 8:14 9:17 10:18
 17:4 21:12 23:12 30:7
 42:21 46:10 51:8
 52:21 74:15 81:13,21
 96:7 104:21 105:7
 109:12 122:13 126:5
 126:6 144:4 149:7
 163:10 164:8,11
 177:16 178:7 183:3
 186:1 188:19 189:15
 200:14 203:8 208:5
 209:2,5 211:10 229:5
 256:12 265:4
worked 37:21 38:3
 145:6 168:15 211:13
 212:9 248:21
working 10:10 23:5,12
 40:6 42:2 55:22 67:4
 71:9 81:22 144:6
 192:9
works 189:13
world 23:21 28:8 47:11
 72:4 73:3 84:6,13
 191:6 217:10 238:10
world's 101:5 164:20
worldwide 20:11 256:2
worry 188:22
worse 212:22 230:6
worsening 37:17
worth 78:4 217:8
wouldn't 54:13
wrap-up 264:3

Wright 266:12
Wrigley 3:15 253:2,4
writes 8:17
writing 53:10 102:1
 257:6
written 22:3 26:11
 43:15 87:16 115:15
 135:4 152:6 178:17
 245:16 253:4 263:8,9
wrong 38:4 45:16 55:8
 143:20 243:1 245:11
wrote 99:5 101:15
 152:10 190:19

X

Y

Yale 222:1
year 17:15,19 65:20
 73:12 78:5 118:15
 121:12,13 131:10
 150:20 157:16 176:7
 185:15 194:19 201:9
 212:17 213:13 214:5
 239:10 248:21
year's 156:11
years 83:19
years 22:13 31:9 32:1
 35:17 37:13,22 39:15
 57:2 59:22 63:18 67:7
 68:4 93:1,3 94:5,5,6
 99:7,10 102:17 103:9
 119:13 123:8 126:1
 130:22 132:3 145:18
 145:19 152:11,18
 153:1,2,14 154:2
 156:17 168:15 184:12
 190:4 192:19 199:5,8
 200:11 211:14 212:9
 213:15 218:11 221:16
 222:8 224:7 232:15
 232:19 233:21 235:5
 236:6 244:15 246:19
 256:21 257:5,10
 258:14
yesterday 21:21 70:17
 102:22 103:4 143:13
 211:16 263:3 264:18
yogurt 193:16 194:13
 218:14
York 46:15 92:22 93:3
 94:16 221:9 223:9
 259:7
young 38:7 105:20
 182:11,15 194:13
 221:20
younger 21:4 63:16,17
youth 67:9 216:8

Z

Z 21:5 39:9
zeaxanthin 114:20
zero 54:22 216:11
 237:16
zinc 30:21 56:19 57:4
 60:2 112:22
zones 191:9
Zucker 3:2 259:6

O

1

1,000 3:11 6:7 56:22
 71:8,10,11,17,19
 74:13 112:17 197:4
 245:1
1,500 39:14
1.3 123:3
1.5 18:1 32:9,12
1.6 131:5
1.7 60:8
1/4 157:3,14
10 43:1 44:19 54:8,14
 54:22 60:17,17 76:1
 91:3,8 117:19 120:19
 122:21 146:16 152:11
 156:17 180:5 201:16
 212:8 223:8 234:8
10-year 213:19
10-year-old 200:15
10:49 159:1
100 15:1,13 35:2 53:21
 135:14,22 136:2,6,14
 136:18 137:2,6,11,15
 137:21 138:2,8,11,17
 152:18 153:2,14
 154:2 160:11 161:9
 164:16 201:7 246:6
 248:13
100,000 168:15
102 201:20
108,000 143:2
11 1:5 46:8
11.9 201:13
11:00 158:21
11:01 159:2
110,000 17:13
115 176:7
117 224:7
12 14:19 39:16 49:13
 99:10 156:13 194:6
 201:19 213:17 217:5
 243:3
12,000 182:12
12:37 267:21
120-year 175:20
13 5:4 52:12 82:8

259:18
13.6 223:17
14 55:11 82:8,17 163:18
 200:15
140 225:10
1400 1:9
149 223:14
14th 156:5
15 31:9 32:1 59:4 60:15
 91:2 94:5 103:9 120:7
 126:1 197:2 223:13
 232:16 257:5
15-day 223:4
150 133:15 223:15
 234:7
16 17:18 62:8 120:8
16-year-old 201:10
16,000 164:16
17 65:4 93:22 150:22
178,000 83:19
18 39:17 67:18 82:8
 120:8 184:6 190:4
180 209:18
19 71:5 107:10
19,000 17:18
190,000 118:14
1937 20:8
1958 215:3
1964 121:12,14
1980 44:18
1991 117:17
1998 102:16
1999 230:9

2

2 1:6,6 6:4,4 7:4 16:17
 17:18 44:6 45:2 73:22
 74:22 75:17 76:19
 77:2 93:8 126:6,15
 127:6,9,12,15 159:20
 160:8 162:19 168:19
 169:1 174:14 181:9
 184:6 201:11,12
 202:12 203:18 213:8
 213:12,15,21 220:18
 226:9 228:10 232:17
 256:22 264:4
2,000 32:9,10,13 91:6,8
 134:13 262:11
2.0 133:19
2.5 108:20
2.6 94:16
2.7 118:15
2/3 233:5
20 22:12 35:2 60:22
 68:4 74:18 91:17,22
 119:13 149:19 151:18
 154:13 194:5 197:2

200:11 233:21 234:10
 254:7 256:21
200 6:8 63:18 91:9,12
 117:3 223:12 232:16
200,000 149:6
2000 194:1
2005 32:7 33:5 102:17
 253:19
2007 120:16
2009 66:2
2009-2012 124:14
2010 32:9 65:21 253:19
2012 66:14
2013 247:6
2014 176:16
2015 25:12 31:10 32:12
 41:13 43:20 44:18
 61:9 83:4 89:1 106:1
 109:8 113:9 114:13
 120:11 172:13,19
 173:6 178:18 184:16
 193:22 194:11 195:1
 195:11 215:10 226:13
 240:17

2015-2020 122:16

135:12
2016 225:8 247:12
2017 22:9 75:22 100:17
 184:14
2018 81:16 112:16
 119:19 138:1 145:17
 157:22 206:11
2019 1:5 62:19 117:16
 156:2 157:17 175:14
 190:9
2020 1:1 6:4 9:17 34:1
 36:19 41:13 56:2
 68:16,17 78:7 85:14
 90:20 96:22 128:21
 131:13 145:20 165:3
 166:12 182:20 184:16
 215:15 216:20 241:3
 246:16 254:1 264:4

2020-2025 7:21 9:22

162:10 175:13

2020-25 151:13

2025 182:20 254:1

2030 42:3 176:8

20th 175:22

21 77:14 92:5 194:4

209:13,18 246:18

21st 180:6

22 81:7 93:1

220 133:6

23 84:8

23.5 139:6

23rd 8:21

24 37:14,22 86:15

112:14 145:21 157:22
 182:22 200:16 216:22
 243:8 250:12

24-7 45:19

24-month 148:11

24th 8:21 267:18

25 26:5 38:16 89:22

91:16 116:15 124:10

168:14 199:5 207:12

211:14 232:19

250 223:8

25th 267:18

26 92:18

262 213:13

265 201:12

267 5:5

27 95:5

28 98:6

29 102:8 194:4

299 223:14

2nd 169:1

3

3 20:5 187:6

3,000 32:11 125:17

3/4 257:22

30 37:13 46:20 76:16

82:16 105:5 191:15

212:3 213:18 227:11

236:6 247:19

300 6:8 209:18

30s 121:16

31 108:7

32 17:14 104:20 112:3

248:19

33 115:17

33,000 78:5

34 119:7 139:22

340 232:15

35 99:7 116:13 122:2

180:3 218:10

36 91:17 117:5 125:13

37 128:10

38 60:9 131:16 134:10

156:11

39 135:5

4

4 8:20 23:13 264:10

4,000 17:22

40 76:16 114:11 124:3

134:17 138:20 223:10

400 20:11 117:3

41 142:9

42 146:7 172:14

42,000 133:16

43 149:2

44 152:7

45 25:14 123:14 155:6
 178:20 211:17

46 159:4

47 162:3

48 164:12 217:10

49 168:9

5

5 108:19 201:12

5.4 201:19

5.7 94:1 202:22 203:1

50 42:2 53:16 85:8,8

91:15,18 97:18

107:10 117:1 129:18

161:4 171:17 180:20

200:18 212:7 223:13

227:11 232:15 235:4

247:18

51 175:3

52 178:10

53 182:4

54 186:4 213:16,20

55 161:4 180:21 189:17

258:9

56 193:10

57 196:16

58 198:22

58,000 108:14

59 199:1

6

6 5:2 30:2 117:20

6,500 95:9

6.0 223:19

60 23:2 100:11 114:10

124:12 197:8 202:9

213:13 247:20 266:1

600 94:19

61 123:19 204:18

62 208:1

63 211:7

64 211:8

65 178:20 194:3 197:8

214:18 219:18

66 218:2

67 66:10 221:6

68 225:3

69 228:22

7

7 33:11

7.8 202:22

70 194:2 208:16 232:9

259:15

700 6:9

700,000 115:20

71 236:1

72 11:21 134:14 239:15

73 242:8
74 246:8
75 136:20 199:15
247:18 249:16
75,000 99:9
76 208:13 252:21
77 256:7
78 116:7 259:2

8

8 36:22 113:8
8.4 202:13
8.5 113:8
8:31 6:2
80 154:12 219:7
800 78:4
800-plus 76:13
81 208:11
88 39:6

9

9 11:22 40:10 82:8
9:00 1:10
90 20:19 38:18 162:6
91 208:12
92 21:4
95 79:8 179:7

C E R T I F I C A T E

This is to certify that the foregoing transcript

In the matter of: 2020 Dietary Guidelines
Advisory Committee Meeting

Before: USDA

Date: 07-11-19

Place: Washington, DC

was duly recorded and accurately transcribed under
my direction; further, that said transcript is a
true and accurate record of the proceedings.



Court Reporter

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701