UNITED STATES OF AMERICA

DEPARTMENT OF AGRICULTURE
AND
DEPARTMENT OF HEALTH AND HUMAN SERVICES

DIETARY GUIDELINES ADVISORY COMMITTEE

THIRD MEETING

THURSDAY, APRIL 30, 2009

The meeting came to order at 8:30 a.m.,
Dr. Linda Van Horn, Chairperson, presiding.

PRESENT:

LINDA V. VAN HORN, PHD,RD,LD   CHAIR
NAOMI K. FUKAGAWA, MD,PHD   VICE CHAIR
CHERYL ACHTERBERG, PHD   MEMBER
LAWRENCE J. APPEL, MD, MPH   MEMBER
ROGER A. CLEMENS, DRPH   MEMBER
MIRIAM E. NELSON, PHD   MEMBER
SHARON M. NICKOLS-RICHARDSON, PHD   MEMBER
THOMAS A. PEARSON, MD,PHD,RD   MEMBER
RAFAEL PEREZ-ESCAMILLA, PHD   MEMBER
XAVIER PI-SUNYER, MD, MPH   MEMBER
ERIC B. RIMM, SCD   MEMBER
JOANNE L. SLAVIN, PHD,RD   MEMBER
CHRISTINE L. WILLIAMS, MD, MPH   MEMBER

ALSO PRESENT:

CAROLE DAVIS, CO-EXECUTIVE SECRETARY AND DFO,
      USDA
KATHRYN McMURRY, CO-EXECUTIVE SECRETARY, DHHS
ROBERT POST, ACTING EXECUTIVE DIRECTOR, CNPP,
      USDA
CAPT. SARAH LINDE-FEUCHT, DHHS

TABLE OF CONTENTS

PAGE

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

 2   (8:28 a.m.)

 3   CHAIR VAN HORN: Well, good

 4 morning, everyone. And yesterday we heard

 5 from four expert presenters and from the Food

 6 Safety and Technology subcommittee.

 7   This morning we have two more

 8 presentations in areas where the Committee

 9 felt outside expertise would be valuable.

10   We will also hear updates from the

11 work from the remaining six subcommittees.

12 Oh, okay.

13   (Off the record comments.)

14   CHAIR VAN HORN: All right. Start

15 over. All right. Good morning. Yesterday we

16 heard from our four expert presenters and from

17 the Food Safety and Technology subcommittee.

18   This morning we have two more

19 presentations in areas where the Committee

20 felt outside expertise would be most valuable.

21   We'll also hear updates on the

22 work from the remaining six subcommittees.

 1   Again, I'd like to remind the Committee that

 2   this meeting is open to the public to observe,

 3   and we should do our best to please announce

 4   your name before you speak.

 5   We also will do our best to stay

 6   on time following the agenda that was just

 7   mentioned.

 8   Today,   we   have   our   first

 9   presentation from Andrea Carlson, and Mark

10   Lino.   Dr. Andrea Carlson has been an

11   economist at the USDA Center for Nutrition

12   Policy and Promotion, since 2000.

13   She is the team leader for the

14   USDA Food Plans and Food Prices Database

15   Project and works on the cost of raising a

16   child project.

17   Her   research   focuses   on

18   improvements and verifications on the USDA

19   Food Plans, and Cost of a Healthy Diet and the

20   CNPP Food Prices Database.

21   Dr. Mark Lino has been employed as

22   an economist with the US Department of

1 Agriculture for the past 20 years. He works

2 on research related to food and nutrition,

3 including the USDA Food Plans which are used

4 to set SNAP, formerly Food Stamps, allotments,

5 and   the   Department   of   Defense's   Basic

6 Allowance for sustenace Rate for Service

7 Members.

8   He   also   works   on   the   USDA's

9 Expenditures and Children's Project which is

10 used to set state child support and foster

11 care payments.

12   And with that, I'd like to welcome

13 both of you. Thank you.

14   DR. CARLSON: Thank you very much

15 for inviting me to present to you today. The

16 title of my presentation is "The USDA Food

17 Plans, Eating Healthy for Less Money."

18   The   question   that   I'd   like   to

19 address is: "Can   a   nutritious   diet   be

20 inexpensive?" Well, unfortunately, I'm going

21 to give you the typical economist answer. "It

22 depends." It's an economist.

1   On the one hand, a nutritious diet

2   can be very expensive, depending on what foods

3   you choose. On the other hand, a nutritious

4   diet can be very inexpensive if you choose the

5   right foods.

6   To demonstrate that, we have put

7   together this scatter plot for you. Up in

8   this corner -- okay. There we go. Up in this

9   corner we have the very healthy, inexpensive

10   foods. In this corner over here we have the

11   expensive healthy diets. This a plot of total

12   HEI score with the daily expenditures.

13   Down in this corner, we have --

14   okay. Well, we'll go over here, then. Okay.

15   Down in that corner we have the inexpensive

16   diets that are not very good for you. They

17   are very low HEI scores, and then finally in

18   the lower right-hand corner, we have the

19   expensive diets that are not very good for

20   you, have a very low HEI score.

21   So, the point is, there really

22   isn't a -- with Americans' diets, people can

1 spend a lot or people spend a little, and we

2 get healthy diets and we get unhealthy diets.

3   Now, how do we get people into

4 that upper right-hand corner, because we

5 certainly would like -- or the upper left-hand

6 corner. We certainly would like people to

7 spend a little bit and get a very healthy

8 diet.

9   The USDA Food Plans are mechanisms

10 to help guide consumers to eat healthy for

11 less. We have four food plans. The thrifty

12 food plan, the low-cost, the moderate cost and

13 the liberal food plan.

14   The thrifty food plan, I'm going

15 to talk more about in a minute, but let me

16 tell you a little bit about the low-cost,

17 moderate cost and liberal food plans.

18   All three of these food plans are

19 used in divorce court to estimate the cost of

20 food for setting alimony payments. They are

21 also used in the cost of raising a child

22 report that CNPP does to allocate the

1   expenditures that are used for food on -- the

2   household expenditures on food, to allocate

3   those out to children.

4   And the CRC, the cost of raising a

5   child report is used to set foster care

6   payments and it's also used to set child

7   support payments.

8   The low-cost plan is used to --

9   it's used in bankruptcy courts to allocate

10 money for food for bankruptees, and finally,

11 the liberal plan is used to set the food

12 allotment for service members by the

13 Department of Defense.

14   Okay. So, next, we'll talk about

15 what is the thrifty food plan. Well, the

16 thrifty food plan is a minimal cost,

17 nutritious diet. The plan has a set number of

18 market -- as a set of market baskets

19 specifying the type and quantity of foods that

20 should -- that individuals could purchase,

21 could consume at home to obtain a nutritious

22 diet.

 1   The thrifty food plan also then

 2   forms the basis for the supplemental nutrition

 3   assistance program, the SNAP, formerly the

 4   Food Stamp Program. It sets the basis for

 5   those -- that program's maximum allotments.

 6   So, people ask, well, what is a

 7   minimal cost?   This can mean a lot of

 8   different things to economists, so I'm going

 9   to define it here. A minimal cost we have

10   defined, we simply take the cost of the

11   previous months thrifty food plan and inflate

12   it.

13   So what that means for a family of

14   four, which we define as two adults, ages 20

15   to 50, a child, age six to eight, and a child,

16   age nine to eleven, and for in February of

17   2009, this was $137 per week for that family

18   of four. That's what we would consider a

19   minimal cost.

20   This is about 25 percent below

21   what the average family of four spends on

22   food, so it's -- that is considered a minimal

 1 cost.

 2   Now, since you're the Dietary

 3 Guidelines Advisory Committee, I assume you're

 4 actually interested in, well, what do we

 5 define as a healthy diet.

 6   For the most recent update of the

 7 food plans, we used the 1997 to 2004 Dietary

 8 Reference Intake. These were used to set the

 9 recommendations for Vitamin A, Vitamin C,

10 iron, fiber, all of those things that we have

11 DRI's for.

12   There were some nutrients that

13 didn't have DRI's. There were also some

14 things that we needed to incorporate, and for

15 those we used the 2005 Dietary Guidelines for

16 Americans, particularly, we used the

17 recommendations for intakes of saturated fat,

18 sodium and cholesterol, and we also included

19 the physical activity recommendation.

20   Then, in addition, then, we used

21 the 2005 Food Pyramid, MyPyramid. The

22 MyPyramid recommendations for food group and

 1   subgroup intakes. So, we -- this is how we

 2   defined a healthy diet.

 3   Well, how did we go about setting

 4   this up? How did we go about deriving these

 5   baskets? Well, I'm going to start out by

 6   saying it's a very data-driven operation, so

 7   for the most recent updates which were done in

 8   2006 and 2007 -- 2006 was the thrifty and 2007

 9   was the other three.

10   We used the 2001 and 2002 National

11   Health and Nutrition Examination Survey or

12   NHANES.   From that we drew the food

13   consumption, and the nutrient content of food.

14   And unfortunately NHANES doesn't have prices.

15   We need to have prices in order to do the

16   food baskets.

17   So, what we had to do, what CNPP

18   had to do was, we had to compile this food

19   prices database.   We, through a long,

20   complicated process that goes on for a year,

21   we matched the food, the ingredients used to

22   make the foods in Nielsen, NHANES. Remember

 1   NHANES is foods that people report eating, not

 2   foods that people report purchasing in the

 3   store.

 4   So, we then -- we broke those

 5   down, got the foods that people actually

 6   purchased and then matched those to the

 7   Nielsen Homescan Data, and then we were to

 8   able to get prices for the foods that people

 9   consume.

10   For the thrifty food plan, we

11   created a subset of Nielsen based on just the

12   low-income sample of the Nielsen data. These

13   food baskets are updated every month and for

14   that we use the Consumer Price Index to update

15   that.

16   Our basic methodology is a

17   standard economic optimization model and this

18   selects -- and we used this model to select a

19   nutritious diet.   It has to meet certain

20   standards.   It has to meet the dietary

21   standards which we have already discussed.

22   It has to fall within the cost

 1 constraint. In other words, it has to be at

 2 or below whatever the cost constraint is for

 3 the years that we're working with.

 4   We need to -- we take into account

 5 current consumption by food categories. There

 6 are 58 food categories that we work with.

 7 I'll be talking more about those in a minute.

 8   And the energy levels are set to

 9 maintain medium weight at a low-active

10 physical activity level. In other words, 30

11 minutes a day of moderate activity.

12   For those of you that would like

13 to see more of a schematic, we can do it this

14 way. We have the inputs, and I will be

15 describing the inputs in more detail in a

16 minute.

17   We have the average consumption by

18 food category, and again, there are 58 food

19 categories. We have the cost per hundred

20 grams by food category, the nutrient profile

21 per hundred grams, and the MyPyramid Food

22 Group Profile for 100 grams for each of those

1 food categories.

2   The constraints you've already

3 seen. This would be the nutrient standards,

4 the DRI's, the MyPyramid recommendations, and

5 the cost constraints. These inputs and

6 constraints are put together into a

7 mathematical optimization process.

8   This spits out a solution, not

9 quite as simple as that sounds, but it does

10 give us a solution. This solution is in 58

11 categories of foods as consumed. People can't

12 buy, can't go to the grocery store and buy a

13 plate of spaghetti.

14   They have to go to the grocery

15 store and buy pasta, and tomato sauce or

16 marinara sauce, depending on how they want to

17 make their spaghetti and meat and cheese and

18 all of that.

19   And so, we then go through a

20 conversion process, and we come out with

21 market baskets. There are 15 age-gender

22 groups, and for each of those we have 29

 1 market basket -- 29 food categories for the

 2 market baskets. All right.

 3   I said I was going to tell you a

 4 little bit more about the inputs, because they

 5 are sort of interesting, at least for me. The

 6 first -- it's a two-step process to create

 7 these inputs.

 8   The first step is to divide all of

 9 those 6,000 foods in NHANES into 58

10 categories. Each food goes into one and only

11 one category, and this would be the

12 predominant food.

13   Some examples of these might

14 include -- we have breakfast cereals we divide

15 up by whether it's a whole-grain or a

16 nonwhole-grain. We notice within the whole-

17 grains we also had to divide it up by low-

18 calorie and high-calorie. It's essentially

19 low SoFAAS and high SoFAAS foods.

20   The vegetables are divided up

21 pyramid subgroup and then also by whether

22 there's added fat or no added fat or a very

1   limited amount of added fat.

2   The fruits are divided up into

3   four groups, citrus fruits, melons and

4   berries, and then all the other fruits, those

5   are whole fruits, and then we have two 100

6   percent juice categories which mimic the whole

7   fruit categories.

8   Milk and milk-based foods, we

9   divide those up into lower fat and higher fat

10   milk and milk-based foods. We also have milk

11   desserts and we have a separate group for

12   cheese.

13   And then finally, the meats, not

14   only did we have to divide those up by

15   discretion -- by the amount of discretional

16   solid fat in those, we also had to divide

17   those up by cost.

18   And then the fish, we divided up

19   by the amount of fat that's in it. And I'm an

20   economist, so I'll just leave it at that. The

21   good fat.

22   Once we've divided these foods up

 1   into the 58 food groups, and it was

 2   nutritionists who did that, we didn't leave

 3   that job to the economists, then, we used

 4   consumption weights to calculate the cost per

 5   100 grams for the cost per each of these 58

 6   food categories, the nutrient profile and the

 7   MyPyramid -- the number of pyramid equivalents

 8   in each of these categories.

 9   Okay. So, we've seen the inputs

10   -- you've seen the inputs. You've seen the

11   constraints.   We're going to leave the

12   optimization process as a black box for now.

13   I'd be happy to describe it, but you probably

14   don't want to hear it.

15   And so now, I'm going to talk

16   about the results. And on Tab Number 8 you

17   should have a copy of the Thrifty Food Plan

18   market basket towards the back of that tab,

19   and what you're seeing there are the pounds

20   per week that an individual would purchase to

21   create a healthy diet.

22   And these are divided up in the 29

 1   food categories, so we have things like whole-

 2   grain breads, rice, pasta and pastries. And

 3   this includes the whole-grain flour for people

 4   that want to bake.

 5   This, again, represents the foods

 6   that would be purchased to prepare a diet that

 7   would -- that meets the model constraints.

 8   So, you can see these foods. They

 9   are very heavy in whole grains. They are very

10   heavy in fruits and vegetables. They have

11   some meat. They have milk. They have meats

12   and beans, and they are a little bit low on

13   some of these table fats and other -- and

14   added sugars, as you might expect.

15   So the question is: Is this

16   basket healthy? Well, it met the dietary

17   recommendations   in   almost   all   of   the

18   nutrients. It met the dietary recommendations

19   for MyPyramid and almost all of the nutrients.

20   The nutrients that were not met,

21   not surprising, were vitamin E, potassium and

22   sodium, but we did actually do much better

 1 than consumption.

 2   I'm going to talk a little bit

 3 about vitamin E. For children, we actually

 4 managed to meet 100 percent of the RDA for the

 5 children's baskets. The other market baskets

 6 for the adults were 63 to 95 percent of the

 7 RDA.

 8   For potassium we are at the 15

 9 market baskets -- we're somewhere between 70

10 to 98 percent of the Adequate Intake. And

11 again, that is higher than consumption for

12 each market basket.

13   And this was actually true --

14 those -- vitamin E and sodium was -- vitamin E

15 and potassium, I'm sorry, were also true for

16 the low-cost and moderate cost and liberal

17 food plans. We just couldn't meet those --

18 the cost was not the issue, it's just the

19 foods that are out there.

20   The sodium, the TFP actually does

21 better in sodium than the other market

22 baskets, and the TFP market basket met the

1 sodium   recommendation   for   five   groups,

2 children ages one and ages two to three, and

3 females ages 12 to 13, 51 to 70 and 71-plus.

4   The   sodium   levels   in   the   other

5 baskets ranged from 2,322 milligrams a day for

6 females ages 14 to 18, up to 3,629 milligrams

7 a day for males age 14 to 18. So, we were

8 always below the median consumption for each

9 of these age-gender groups, and significantly

10 below the average.

11   Well, okay, so how did we do this?

12   What changes -- if you were to go out

13 tomorrow and start recommending changes, what

14 would you do? Well, in a nutshell, what we

15 might do is, we need to increase -- this is

16 probably   very   similar   to   what   your

17 recommendations might look like.

18   We need to increase the grains,

19 particularly whole grains consumption, and

20 this would be in -- this is in pounds per

21 week. We are -- we need to increase the

22 vegetables and the fruits and the milk

1 products. Meat and beans appear there's no

2 change, but there are some shifts within it.

3   With each of these groups there

4 are shifts within it.   The grains, as I

5 mentioned, moved towards whole grains, the

6 vegetables   moved   towards   dark   green

7 vegetables, the orange vegetables and the

8 legumes, and the milk -- the fruits move

9 almost all to whole fruits.

10   In fact, the model preferred to do

11 all whole fruits. We had to force a little

12 bit of orange juice in there because people

13 really like orange juice.

14   Milk products is almost all skim

15 milk, as opposed to cheese, which accounts for

16 most of the increase. Within the meat and

17 bean groups there's a shift towards more nuts,

18 again, looking for that vitamin E.

19   And then the other foods, not

20 surprising, have a significant drop and that's

21 where your savings comes in. So, we're not

22 having fats, oils, and we have a limited

 1   amount of fats, oils and sweets in our market

 2   basket, but that's probably what you're going

 3   to tell us anyway. So, that shouldn't be too

 4   surprising.

 5   So, I want to return to my scatter

 6   plot and talk about the economics of

 7   nutrition, and I'll wait for the pointer. So,

 8   I'll talk wherever he wants to go. All right.

 9   So, we'll start up in the upper

10   left-hand corner. This is where we wanted to

11   end up. We want people to eat healthy for

12   less money, if they don't want to spend a lot

13   of money on food. That's where we wanted to

14   end up, and there are certainly people that

15   are doing that. If you use the thrifty food

16   plan, that's where you'll end up.

17   You also have the option of

18   spending a lot of money and getting healthy

19   diet. If you want to move towards the liberal

20   food plan, you can follow that as well.

21   However, I'm sure as a Committee

22   you probably don't want people down here no

1   matter how much money they're spending. We

2   really don't people making poor food choices

3   that would -- no matter how much money they're

4   spending, to be on that bottom part of the

5   graph.

6   So, let's return to the economics

7   of nutrition.   An unhealthy diet can be

8   inexpensive, but it can also be very

9   expensive.

10   A healthy diet can be expensive,

11   but it can also be inexpensive, and we have

12   forthcoming research from CNPP demonstrating

13   that with that scatter plot, even when you

14   start controlling for the normal things that

15   would protect HEI score, price is really not

16   -- what you spend on food really doesn't

17   account for -- doesn't do much for the --

18   doesn't explain much of the HEI score. For

19   men, the relationship is insignificant. For

20   women the association is very small.

21   USDA has resources available to

22   translate from the food plans to something

 1   that consumers might use. It does require

 2   some nutrition educators intervention, and the

 3   SNAP-Ed connection has over 4 million hits in

 4   -- had over 4 million hits in fiscal year

 5   2008, and this has a recipe database which

 6   nutrition educators can use to find recipes,

 7   and also this is open to every consumer within

 8   the United -- this is open to anybody who has

 9   access to the Web.

10   There are also the State EFNEP

11   programs, and the SNAP Nutrition Education

12   Programs, which also help.

13   With that, I'd like to thank you

14   for the invitation, and I'm happy to introduce

15   -- to address any questions as well as Dr.

16   Mark Lino as well.

17   MEMBER WILLIAMS: I was thinking

18   of most pediatricians' offices where they

19   don't have access to a nutritionist, and is it

20   possible to translate some of this into

21   educational materials that, for example, show

22   different plates with breakfasts and lunches

1 and dinners that would fit into the thrifty

2 food plan?

3   DR. CARLSON: It is possible. I'm

4 pretty sure you don't want an economist

5 actually doing that translation. And FNS is

6 working to translate some of that material and

7 their materials are mostly web-based, so

8 pediatricians could certainly print that out

9 and make it available to their patients.

10   And MyPyramid.gov, also -- if you

11 follow the pyramid you can save money. I

12 mean, that's kind of the bottom line. As long

13 as you choose the lower-cost foods.

14   CHAIR VAN HORN: Tom.

15   MEMBER PEARSON: I wanted to

16 follow up on that last comment you just made.

17   We were evaluating a video tape in 16 clinics

18 in Upstate New York, randomized to either the

19 video tape or not, followed with 036 and nine-

20 month, four-day random diet recalls to the

21 Penn State Nutrition Assessment Lab.

22   And then, a Cornell student put on

1   as her honors thesis, a linking of those foods

2   to an Oregon and Washington cost database at

3   that time. So, they weren't actually local

4   costs, but it didn't matter because it was all

5   relative to the database.

6   And there was really no -- the

7   video tape was looking at lowering --

8   implementing the guidelines of ATP-2, which

9   was a fat and cholesterol target.

10   DR. CARLSON: Okay.

11   MEMBER PEARSON: So, our end point

12 was Hegsted score.

13   And so, if you looked across the

14 quartiles of Hegsted score between the lowest

15 change in -- actually, it was an increase in

16 projected cholesterol, serum cholesterol. The

17 best one, the fourth one, was about $1.75 per

18 person per day savings without any emphasis on

19 cost. I mean, we didn't even put in --

20   DR. CARLSON: Right.

21   MEMBER PEARSON: So, I guess the

22 message for me there, and maybe the question

1 for you would be -- and Dr. Drewnowski,

2 yesterday, I think, also showed a lot of

3 scatter.

4   So, you can construct any -- any

5 diet you want for any cost you want.

6   DR. CARLSON: Correct.

7   MEMBER PEARSON: You know, the

8 foie gras is not only expensive, but it's

9 probably kind of not so good for you, you

10 know.

11   And so, the point really has to do

12 with the behavior that, within a cost that

13 people can afford going up the ATI.

14   DR. CARLSON: Exactly.

15   MEMBER PEARSON: And so that's the

16 question, is what is our database, our

17 evidence database for interventions that will

18 do that. That seems to be the behavioral

19 economics question that we need, not that

20 we can't construct these diets, but that we

21 can't implement them.

22   DR. CARLSON: Right. And I have

 1 seen other studies in addition to the one you

 2 described, although they are a bit smaller,

 3 where people may actually do a cost

 4 intervention as well as a nutrition

 5 intervention, and they find that the families,

 6 in trying to have the kids -- the one in

 7 particular I'm thinking about had overweight

 8 children, and so they were doing an

 9 intervention with the whole family, and over

10 the course of a year the grocery bills went

11 down because they changed the behavior of that

12 family.

13   MEMBER PEARSON: But, I mean, that

14 should be the main motivator, for people eat

15 healthy. Right now everybody thinks it's more

16 expensive.

17   DR. CARLSON: Right. Right. And

18 there's a lot of myth out there that it's more

19 expensive. I'm not quite sure where that came

20 from, because certainly people have been

21 eating healthy. I get emails all the time

22 from people saying, "I eat this and this and

1 this. Is this healthy?"

2   And I look at it and I say, "Well,

3 I'm not a nutritionist. Type it into

4 MyPyramid," and they come back and say, "Oh,

5 well, it is very healthy. I guess I'm good.

6 Why is it -- why do people say it's so

7 expensive?" I don't know.

8   CHAIR VAN HORN: I think the --

9 and I'm going to get to you two in just one

10 minute, but I think this is the key issue, and

11 that's why we're so glad that you're here

12 today.

13   We didn't need you to be a

14 nutritionist. We needed you to be an

15 economist, and what we're trying to do here, I

16 think, is blend the two skills --

17   DR. CARLSON: Right.

18   CHAIR VAN HORN: -- and

19 backgrounds so that we can, in fact, provide a

20 reassurance to the American people that the

21 kinds of recommendations we're making are

22 affordable, and there are ways to pick and

1 choose.

2   We know what the nutrition is, but

3 we don't know how to get the cost savings

4 across. And I think that's what we're really

5 after here.

6   DR. CARLSON: Right. Right.

7   CHAIR VAN HORN: Save, and then --

8   MEMBER PI-SUNYER: Yes.   Pi-

9 Sunyer.   I wanted to ask you, you know,

10 yesterday Dr. Drewnowski made a big point, and

11 he keeps making this point, that people are

12 eating nutrient-dense, calorically-dense food

13 because it's cheaper for them per thousand

14 calories.

15   You're saying that they can do

16 perfectly well and eat inexpensively, and

17 don't need to do that. But, I think 4 million

18 hits isn't a whole lot for a country that has

19 300 million people.

20   So, how can you get this across as

21 part of your message and goal?

22   DR. CARLSON: Well, first off,

1 there are some advertising limitations. I

2 mean, we just don't -- USDA has a very limited

3 budget. We have several million hits on the

4 MyPyramid website.

5   So, one of the issues with

6 Drewnowski's thing -- and, yes, I'm saying you

7 can eat more. And, in fact, the food baskets,

8 if you measure by weight, by pounds of food,

9 you get more in the thrifty food plan than

10 people eat.

11   I understand from volumetrics that

12 pounds are -- pounds or grams or whatever,

13 what make you feel full.   Calories don't

14 necessarily make you feel full. So, the cost

15 per calorie, I wonder how important that

16 really is.

17   I really think that the cost per

18 gram is much more important, and perhaps even

19 since we're talking -- if we're going to go

20 with -- with MyPyramid, perhaps even the cost

21 per cup equivalent or ounce equivalent is

22 really the correct metric within economics, to

1 measure dollars per what are people eating,

2 not dollars per calorie, because dollars per

3 calorie are a convenient measure, but they

4 don't make you feel full.

5   MEMBER   PEREZ-ESCAMILLA: Yes.

6 This Rafael Perez-Escamilla, and thank you for

7 a   wonderful   presentation,   and   I   think

8 consistent with what you are saying and other

9 Committee members are commenting on.

10   I published a paper several years

11 ago with CSFII data showing that the

12 relationship between income and the healthy

13 eating index was modified by food label use.

14   So, no matter how much money you

15 had, if you didn't use the food label to make

16 your food purchases, you were not eating

17 healthy, and you could actually have much less

18 money, but if you used the food label you

19 would eat healthier.

20   DR. CARLSON: Exactly.

21   MEMBER PEREZ-ESCAMILLA: So, I

22 think what we're getting at is that nutrition

 1   education and teaching people in culturally-

 2   appropriate ways how to use the Federal

 3   nutrition tools, the food labels, MyPyramid

 4   and so on is very crucial, and that income

 5   matters, but by itself will not make the

 6   difference.

 7   DR. CARLSON: That is true.

 8   MEMBER NELSON: This is Mim

 9   Nelson. Thank you also for the presentation.

10   I think it's a nice balance to the

11   presentation we had yesterday, and sort of

12   looking at the whole picture.

13   I wish you'd been here yesterday.

14   It would have been great. But, one thing --

15   I mean, when we think about the way Americans

16   eat these days, versus how they ate in the,

17   you know, 20 years ago, the foods eaten away

18   from home are such a bigger contributor to

19   intake and potentially to expenditures.

20   And I'm not a -- I'm so far away

21   from being an economist, but I just have to

22   think that I wonder how much we've been -- you

 1   know, how the Federal Government, as well as,

 2   you know, committees like ourselves have

 3   really started to think about the realities of

 4   the full income spectrum of foods eaten away

 5   from home and how they really enter in,

 6   because it's really different now.

 7   DR. CARLSON: Right. Well, as it

 8   turns out, I just -- I'm co-author on a paper

 9   that just got preliminarily accepted in the

10   Journal of Nutrition, that does -- that

11   basically takes the food plan model and brings

12   in food away from home.

13   Now, we were working at just the

14   thrifty level, but you could certainly rerun

15   it with the other plans in -- that may match

16   more what some higher-income Americans are

17   spending.

18   And what we've found is, you can

19   incorporate some food away from home into your

20   diet and make it healthy. It's very difficult

21   to find those foods when you're away from

22   home.

1   And so -- but the paper outlines

2   what -- what needs to be done, what choices

3   you can make of what's available right now and

4   what people actually reported eating at

5   NHANES.

6   CHAIR VAN HORN: Cheryl, your

7   comment?

8   MEMBER   ACHTERBERG: Cheryl

9   Achterberg.   Again, your presentation is

10 illuminating   in   terms   of   what's

11 hypothetically, theoretically possible, but it

12 -- I believe in your thrifty food plan you're

13 having folks soak their beans overnight and

14 cook them all day?

15   DR. CARLSON: No. No. That's

16 definitely not true.   That is actually

17 something that people think. When we did the

18 prices database we were very, very, very

19 careful on this. Part of the reason it takes

20 so long is we go through all of the recipes in

21 NHANES and look for convenience foods.

22   Beans and legumes are assumed to

1 be purchased canned. If you want to bring

2 them, there's certain recipes that taste a

3 whole lot better if you soak them and cook

4 them yourself.

5   You can certainly do that, because

6 that's certainly cheaper. You have a little

7 money for something else. But, we assume that

8 people are purchasing their beans canned.

9   We   assumed   that   people   are

10 purchasing their soup in cans. We assumed

11 that purchasing spaghetti sauce. We assumed

12 the macaroni and cheese comes from a box, if

13 they said it came from a box.

14   We assumed that any foods eaten

15 with high frequency such as pizza and egg

16 rolls were purchased frozen, that they were

17 not made from scratch.

18   MEMBER ACHTERBERG: Thank you.

19 That's important with that time trade-off.

20   DR. CARLSON: Right.

21   MEMBER ACHTERBERG: All right.

22 Thank you.

1   CHAIR   VAN   HORN: Is   Dr.   Lino

 2   ready?

 3   MS. O'CONNELL: Brian is next.

 4   CHAIR VAN HORN: Oh, is Brian --

 5   MS. O'CONNELL: Mark was just for

 6   questions.

 7   CHAIR VAN HORN: Okay.   We had

 8   some --

 9   COURT REPORTER: Your microphone

10   is not on.

11   CHAIR VAN HORN: Sorry.   Can you

12   hear me now?   All right.   This is Linda Van

13   Horn.

14   Our   next   speaker   is   Dr.   Brian

15   Wansink, and we're delighted to have him back

16   with us.   He is the John Dyson Professor of

17   Marketing   --   of   Nutritional   Sciences   at

18   Cornell.

19   He also is the Director of the

20   Cornell Food and Brand Lab, which uniquely

21   focuses on the psychology behind what people

22   eat and how often they eat it.

 1   His research focuses on how ads,

 2 packaging, personality traits influence the

 3 usage and frequency of volumetrics and healthy

 4 foods. His research is on consumption volume,

 5 and has won national and international awards

 6 for its relevance to consumers.

 7   And with that, I'd just like to

 8 thank you, Brian, for joining us today.

 9   DR. WANSINK: It is great to be

10 back here. It's great to be back for a bunch

11 of reasons. You could probably guess, but

12 it's great to be back here for a reason that

13 none of you could ever guess.

14   It was two years ago next month

15 that I gave a talk in this exact same room, at

16 this exact same podium and right after that,

17 during the break, I was approached by Dr. Eric

18 Hentges, the former executive director of

19 CNPP, and he told me I was one of the

20 finalists being considered for the position.

21   So, that meant a lot to me and it

22 means a lot to be back.

 1   MS. DAVIS: Who knows what will

 2   happen.

 3   DR. WANSINK: I also -- I remember

 4   very few things from that conversation, first

 5   of all, because it hit me so dramatically, and

 6   the second reason was, it was during the

 7   break, I just finished buying two diet Dr.

 8   Peppers from the pop machine out there. I

 9   spent the entire conversation trying to hide

10   them, fearing I would be disqualified.

11   So, here's where we're talking

12   about food, nutrition and consumer behavior.

13   Now, there's a bunch of different schools of

14   thought when it comes to how people change.

15   There's   a   health   belief   model,   social

16   cognitive model and so on.

17   With only 20 minutes what I want

18   to touch on is the consumer behavior, the

19   psychology view of things and the marketing

20   overview. And this is for two reasons.

21   First of all, I think a consumer

22   behavior   perspective   and   a   marketing

 1 perspective provides the most compelling

 2 answers to the questions that you posed to me.

 3   But second of all, I think it

 4 points towards the most promising solutions.

 5 And, indeed, this is the approach we've used

 6 when I was Executive Director at CNPP to

 7 actually try to get this stuff out there.

 8   And at the end of every slide

 9 there will be some bottom of the page

10 citations, and typically these will be ones

11 that you can look for more information. They

12 are oftentimes mine. And I have them there,

13 because if you're to go to those articles, you

14 could find all the stuff you need.

15   And most part of the stuff, it's

16 not only cited, it comes from my book,

17 Marketing Nutrition.

18   Here's the overview of the

19 questions that you asked me to consider. What

20 are the determinants of intake? What is

21 effective nutrition information? What is

22 segmenting messages and markets? How do you

 1   do that?

 2   What are optimal models that kind

 3   of relate from transitions to different

 4   lifestyles? When does nutrition information

 5   fail?   And, how do you get people to

 6   prioritize nutrition?

 7   There's a tremendous amount of

 8   overlap in the last five questions here. And

 9   so what I've done is, I've broken them in a

10   way that I think I can tackle a lot of these

11   questions in a different sort of format.

12   I'll talk about something called

13   the Web of Science and Drivers of Intake. But

14   for the most part, these last five issues I

15   will be discussing under the heading of

16   segments   and   markets,   messaging   and

17   leveraging, and then intervention and change.

18   The first thing is: Where do you

19   find most of the published information on food

20   and nutrition behavior? This is the most

21   important thing I will talk about today. If

22   there's only one take-away you have, it will

1 be this.

2   You find most published research

3 on food nutrition and behavior, not on PubMed.

4   Okay.   That's the tip of the iceberg.

5 There's a lot of correlation-based studies,

6 there's a lot of epi studies, but they don't

7 tell you the psychology about why something's

8 happening.

9   They don't really delve into that

10 because a lot of the data that's used can't do

11 that, but I would say that 93 percent of the

12 things that inform me most about my research

13 end up being from journals in psychology,

14 economics, consumer behavior, sensory studies,

15 marketing,   sociology,   food   technology,

16 education, communication, and most of these

17 aren't indexed in PubMed.

18   Why? Well, it could be because

19 very few articles in these particular journals

20 specifically relate to food. A lot of the

21 ideas in those journals specifically relate to

22 behavior, not -- not a lot of the articles

 1   specifically relate to food.

 2   And if there's only one take-away

 3   for the NEL people, make sure that you inhabit

 4   the NEL index if you're going to look at

 5   behavior, the stuff that comes from the

 6   journals that really do study behavior.

 7   The place to find this, the best

 8   place is the Web of Science. It also

 9   encompasses all the PubMed sort of stuff, and

10   you do find it in any database. Web of

11   Science, also known as the Social Science

12   Citation Index.

13   Okay. What are the drivers of

14   food intake? Well, let's look at three

15   drivers of accessible food intake. Now, we're

16   going to focus on accessible stuff versus

17   inaccessible foods because I think it's more

18   relevant to looking at consumer behavior in

19   this context.

20   Now, there's three things that

21   influence food intake. It's when or how often

22   you eat it, it's what you decide to eat and

 1   it's how much. These don't happen in a linear

 2   way like this.

 3   I mean, because you can buy a big

 4   thing of chips and have them sit in front of

 5   you, and the question is, when are you going

 6   to eat the next chip. Typically this is the

 7   way that it happens.

 8   Let's look at them in sequence

 9   here. The when question, the drivers of the

10   when are physiological factors. They can be

11   hunger, they can be deficiencies. There can

12   be a lot of emotional factors, and recent

13   studies showed that emotions end up driving

14   what people eat.

15   Two things can be going on. They

16   can either be going -- they can either be

17   eating to maintain a mood, that is, they're

18   happy, and they want to continue being happy,

19   or they can be -- things can be eaten to

20   regain a mood. Tend to happen when you're in

21   a negative sort of state.

22   Now, a lot of the research that's

 1   looking into it shows that if you're trying to

 2   maintain a mood there's a slight tendency that

 3   you end up having to eat healthier foods than

 4   if you're trying to regain a mood, you end up

 5   looking for things that give you that initial

 6   hit, and that long-term disappointment.

 7   In terms of salience, internal --

 8   there's internally and externally-generated

 9   salience. Internally generated salience is

10   the type thing where you say, "Geese, I cannot

11   get ice cream off my mind." You're driving

12   home and you're saying "Ice cream. Ice cream.

13   Ice cream."

14   Externally-generated   salience

15   sends up, you know, the sort of thing that you

16   don't even think about this until you pass the

17   donut plate at work, and you kind of go, "Yes,

18   I'm hungry for a donut." When you weren't

19   before.

20   Those   influence   people   in

21   different ways, and because you eat different

22   amounts of stuff.

1   Now, the internally-generated is

2   often based on scripts and emotions. Scripts

3   would be if you end up coming home regularly

4   and walk into the kitchen, and your script is

5   to open the refrigerator and see what's there.

6   That becomes the natural sort of way to do

7   things.

8   The salience, we did kind of an

9   interesting piece of research a short time ago

10   that showed that people who walk home through

11   the kitchen end up weighing -- and it's self-

12   reported data, on average 17.2 pounds more

13   than people who don't walk home through the

14   kitchen.

15   Externally-generated   sensory

16   salience, you see, smell, hear somebody talk

17   about a food. But it ends up being why a

18   fruit bowl is a good idea and a candy jar is a

19   bad idea.

20   In terms of what we eat, some of

21   the same drivers that grade those out are

22   going on for what we eat, and physiological

 1 factors will influence what you want to eat,

 2 in terms of your hunger and deficiencies, as

 3 will emotion and salience.

 4   But what also kicks in when we

 5 look at what you eat is specific self-stated

 6 drivers of choice. But typically these will

 7 vary a little bit. Typically the top four,

 8 based on the survey you'll look at, it says

 9 "Taste is most important, and convenience and

10 then price, and the last health."

11   What typically isn't broken out is

12 what "health" means.   And oftentimes for

13 people, it means different things for

14 different segments. Health doesn't mean, you

15 know, I'm going to be getting all the vitamin

16 B I need for today. Health will be, "I'll

17 lose weight, or I won't gain weight, or fall

18 asleep in the middle of the afternoon."

19   What's very often looked at is the

20 unstated driver, and it's the idea that the

21 person's immediate environment, whether it be

22 their cupboards, table, candy dishes and so

 1 on, end up having an incredible influence on

 2 what we choose, but we will not acknowledge it

 3 because we don't really think it's happening.

 4   You know, you've read about that

 5 in my book, "Mindless Eating," and it gives

 6 you some more ideas about that. In terms of

 7 how much, in terms of how much again,

 8 physiological factors and emotional factors,

 9 but also it ends up being how closely we

10 monitor what we eat and what we consider the

11 consumption norm to be for that situation.

12   That consumption norm could be,

13 "What we normally do," or it could be what the

14 guy next to us is doing, and -- but it's

15 biased by a lot of things around you and I'll

16 give you a real basic idea of this framework.

17   When we look at all the things

18 that can influence us, when they lead us to

19 overeat, it typically is mediated by two

20 different things, either poor consumption

21 monitoring which ends up being sort of our

22 unawareness of how many food-related decisions

1 we actually make, or is it being mediated

2 through this idea of consumption norms, that

3 the size of a plate suggests that three and a

4 half ounces looks better than three ounces.

5   The second thing to look at is

6 consumer segments and markets.   Who pays

7 attention to nutrition information? Well, I

8 -- an often-cited figure is 70 percent of

9 consumers report paying attention to nutrition

10 information.

11   I don't know where this comes

12 from, but about two and a half years ago, I

13 was doing an interview at 60 Minutes, and the

14 correspondent at one point said, this is when

15 this stuff was going on about the New York

16 labeling of foods, and she asked, she cited

17 this and says, "So won't labeling transform

18 the way people eat in New York City?"

19   And at the break time I said,

20 "Where did you get that 70 percent figure?"

21 You know, I think of this stuff all the time,

22 and I've never heard it. And she goes, "Oh,

 1   everybody knows it."

 2   Fair enough. Okay. Well, you

 3   hear a figure like this. What's that -- do

 4   they report paying attention? Is just like we

 5   report doing sit-ups every day when we talk to

 6   our physician? Or we report flossing three

 7   times a day when we talk to our dentist?

 8   And what's, "pay attention?" Does

 9   that "pay attention" ignore -- I'm not sure

10   what it means. How often? Is it every time,

11   or that one time I paid attention to nutrition

12   information?

13   The fact is, most controlled

14   studies of behavior, a lot of these are done

15   in supermarkets, which is most relevant for

16   what we're talking about -- most controlled

17   studies that show that only 12 to 22 percent

18   end up reading the labels for this level of

19   detail.

20   And some of these studies also

21   showed that the 12 or 22 percent who do this

22   are the people who need it least. They're the

 1   ones that go, "140 calories. I thought it had

 2   138."   They're not the ones who need to

 3   change.

 4   So let's consider three segments

 5   of consumers. The nutrition vigilant segment,

 6   these are the people who have changed or they

 7   are pretty much on target to begin with.

 8   The next segment is this nutrition

 9   predisposed segment.   This is the segment

10   that, they'd like to change, and they'd like

11   to eat better if it was easy to do so.

12   And the last one is the nutrition

13   disinterested segment. The thing about these

14   segments is that they cut across demographics,

15   and in the research that we've done, the

16   segment you're in is a much better

17   determinative of your behavior than your

18   demographic group that you belong to.

19   So where can you get the biggest

20   change for the smallest cost? I think these

21   nutrition predisposed people.   Now, the

22   nutrition vigilance, if we talk to the choir

 1 and get them to eat two less calories a day,

 2 that's probably good, but I think they're

 3 going to find the information nevertheless.

 4   So I've got a couple of things

 5 here. They are the kind of people who read

 6 magazines like this, Men's Health. You know,

 7 how to do 200 push-ups by next week. I mean,

 8 they don't really need as much of our help as

 9 do the second group.

10   Now I've got a magazine that might

11 be appealing to them, too. We have People

12 Magazine here.   It's Hollywood's Hottest

13 bodies, 100 Tips From The Stars To Lose

14 Weight.

15   They're looking for an easy

16 answer. They're looking for something that

17 can just nudge their life in the right

18 direction, and eat a little bit better.

19   The last group, the nutrition

20 disinterested, that's going to be a tough row

21 to hoe, and maybe the best bang for the buck

22 would be to make sure the second segment moves

 1 as far as they can, and maybe drags along the

 2 disinterested spouses they might have.

 3   Messaging and leveraging. Well,

 4 I've broken this into four really brief

 5 questions that I'm going to answer with some

 6 empirical data.

 7   First, when is labeling most

 8 effective; second, what are best practices

 9 from health claims; third, what nutrition

10 knowledge is most correlated with food intake;

11 four, what types of messages are most

12 effective with what types of segments.

13   First, when is labeling most

14 effective? One of the concerns with labeling,

15 these are the two horns of the dilemma when it

16 comes to labeling, is that nutrition

17 information, whether it be a pyramid, or

18 whether it be fat information, or whether it

19 be something else, a little number or a star,

20 is either totally ignored, or when it is

21 attended to, can lead to these unmerited

22 health halos.

1   These unmerited health halos ended

2   up being the thing that, on one of our studies

3   -- we showed that there are ten grams of

4   protein in something.   People ended up

5   inferring that, because it had ten grams of

6   protein -- ten grams of soy protein, that

7   would reduce birth defects and cure cancer.

8   No. One way around this is use

9   front and back label claims. Using both sides

10 of a package. A short blurb in front is a

11 take-away for about 80 percent of the

12 population that's disinterested. The full

13 claim on the back, and you kind of target the

14 15 or 25 percent who really do want more

15 information.

16   What are best practices from

17 effective claims?   This is kind of an

18 interesting thing done that looked at the

19 effectiveness of the different health claims

20 that the FDA has put on labels, and if we look

21 at some of them, the ones that are most

22 effective, they targeted a specific segment,

 1   they received significant media attention, and

 2   are often introduced with aggressive partnered

 3   marketing campaigns.

 4   And you think of the oats and the

 5   oat recommendation in Cheerios, for instance

 6   about 15 years ago, 20 years ago, that

 7   highlighted   quantitative   benefits   that

 8   provided proof and helped provide vivid,

 9   personally relevant health problem.

10   Third, what nutrition knowledge is

11   most correlated with food intake? The key

12   thing to look here is the very last bar. If

13   people knew that a certain food had an

14   attribute, that didn't really influence them

15   that much, and again, this is a -- this is

16   survey data.

17   If they only knew the consequence,

18   you know, that soy is good for heart disease,

19   that had a little bit more of an impact. But

20   when they could pair the reason why the

21   product gave you the consequence, it was that

22   group that was most likely to change their

 1 behavior.

 2   What types of messages are most

 3 effective with what segments? Let's take a

 4 look at two positive messages. I think Dr.

 5 Drewnowski mentioned this a little bit

 6 yesterday. These are the positive sort of

 7 "eat this" messages versus the negative,

 8 "don't eat that," messages.

 9   Now the research says -- it's all

10 over the map. Okay. But my take on this

11 literature is that, basically, whether a

12 positive message is effective or a negative

13 message is effective depends on the situation

14 and the individuals.

15   So with the positive message, in

16 doing the review, I think what's going on is

17 they will work best with optimistic people,

18 people who eat because it tastes good, and

19 people who don't think too hard about eating,

20 people who eat healthy to feel good, people

21 who see eating as a choice, and people who

22 value food as a way to stay healthy.

1   The negative message, you know,

2   "don't eat that," seems to be more effective,

3   you know, based on a review of the literature,

4   with pessimistic people, or people who like to

5   think logically about each decision, people

6   who eat healthy because they're afraid of

7   getting sick, people who see eating as an

8   obligation, people who value food as a way to

9   not get sick.

10   Which group do we fall in? I

11   mean, the vast majority of people I hang

12   around with who are in the profession are in

13   the second group. And I think, for a lot of

14   us, negative messages might be better than the

15   --

16   MEMBER NELSON: Scientists.

17   DR. WANSINK: For the scientist,

18   exactly.

19   But for the bulk of people out

20   there, the positive messages work best with

21   most people with most mind sets in most

22   situations.

 1   So in terms of intervention and

 2   choice,   what   are   effective   intervention

 3   strategies   for   the   nonvigilant   consumer?

 4   Those are the bottom two parts of the pyramid.

 5   Well,   in   one   study   we   did,   we

 6   found that people make over 200 more decisions

 7   than   they   --   about   food   a   day   than   they

 8   believe they make. Now, they're not making

 9   these   decisions   when   they're   in   front   of

10   MyPyramid.gov. They're not making them when

11   they're reading a nutrition brochure, they're

12   making   them   wherever   they   work   and   play,

13   wherever they purchase and prepare food.

14   And   the   fact   is,   nutrition

15   information   is   really   not   there when most

16   people need it. But I think if we could get

17   -- when people are making these 200 decisions,

18   we could get them to just think twice, to just

19   pause four or five times and make the decision

20   to turn left and the decision to turn right,

21   that's all it would take for the bulk of

22   people to start eating a little bit better

1 instead of a little bit worse.

2   Now, one way we could do that is

3 if we all had a personal dietitian who, every

4 time you're going to make a decision, to kind

5 of tap us on the shoulder and say, "think

6 again." That might -- that would be one

7 solution.   A bad one, but that would be

8 possibly a solution.

9   But I think another solution is to

10 have   this   24-7,   360   degrees   nutrition

11 information surrounding people so that there

12 is a reminder there, and it doesn't have to be

13 their personal dietitian.

14   One solution, probably -- it can't

15 be a governmental solution, because that would

16 be a huge task.

17   One solution would be to partner

18 with MyPyramid, and that was the intent we had

19 when Rob, and Jackie Haven, and John Webster

20 and myself started the partnering with

21 MyPyramid, getting a hundred companies to

22 promote the Dietary Guidelines in whatever way

 1   they wanted, and wherever -- to whatever

 2   public they wanted.

 3   What's the role of social

 4   marketing and nutrition education motivation?

 5   This is one of the questions asked. I think

 6   social marketing -- I guess by that question

 7   what was meant was like Facebook and Twitter,

 8   and things like that, I guess. That's the way

 9   I interpreted it.

10   Well, I think there's tremendous

11   potential for good and bad. The danger is

12   that there's a lot of food and nutrition

13   misinformation. Now Dr. Van Horn's journal,

14   the Journal of the American Dietetic

15   Association, has a great article in there

16   about nutrition information. That's one of

17   their ADA, sort of position papers. It goes

18   into that in a lot of detail.

19   But there's also these things -- I

20   have people ask me every other day about

21   something like magic berries, or something

22   like that, and there's a website that's, "What

1 Your Mother Told You," and people are looking

2   at these as sources of nutrition information

3 in the absence of other things. Well, what

4 circumstances had the most promise? I think

5 the circumstance where these sort of things

6 work best end up being either when it's a

7 movement, or when it's a lifestyle choice,

8 like veganism.

9   I always -- I'm amazed at how

10 radical somebody can change their life once

11 they decide it belongs to a cause bigger than

12 themselves, whether it be to be a vegetarian,

13 or vegan, or whatever the case is.

14   But I think these circumstances

15 also have a lot of promise when it's a cool

16 cause. We've seen some real cool causes over

17 the last few months. These cool causes have

18 to be identity bandwagons. It's one thing

19 they all have in common is that if you're --

20 if this isn't feeding your identity or

21 demonstrating who you are, it doesn't work.

22 And the problem with Dietary Guidelines is can

 1   they ever be cool or movement inspired?

 2   And for the 15 blessed months I

 3   was with CNPP, this is what we thought about

 4   and tried to make happen in different ways.

 5   And I don't think it hurts to use this bottom-

 6   up approach with the young'uns, you know, with

 7   the little kids that are out there, but it's

 8   also probably not worth holding our breath at,

 9   because what we can also do is use a top-down

10   family strategy, and it ends up being

11   targeting the nutritional gatekeeper.

12   The   nutritional   gatekeeper   is

13   considered to be the person who purchases and

14   prepares most of the food. And in 1943,

15   nutrition education showed that this person

16   has a disproportionate impact on what every

17   person in their family eats.

18   Back then it tended to be a

19   mother. Now it's tending to be relatives,

20   fathers, things like this. But in a study in

21   2004, one finding of 1004 gatekeepers is that

22   they believe they influence 72 percent of the

1 eating decisions of their family.

2   It's either for the better or for

3 the worse, and it's either directly, or it's

4 indirectly. It's directly to what they bring

5 in the house, or it's indirectly by what they

6 end up eating when they are out at a

7 restaurant with their kid, or what they end up

8 doing when they give their kid five bucks to

9 go to eat lunch at school.

10   And so the idea would be to target

11 the person who makes the decisions, and also

12 at the same time build awareness for their

13 kids with this 360-degree, 24-7 approach, that

14 I think is becoming a lot more common given

15 some of the cool things that companies are

16 doing.

17   So let's bring it on home here to

18 the nutrition predisposed consumer segment.

19 Now if we look at this pyramid, and we look at

20 the entire United States there, we can have

21 two strategies. We can say, there's no person

22 left behind, but that's an impossible starting

 1   point, because it's really hard to change

 2   people who want to change, let alone people

 3   who don't want to change, or don't think they

 4   need to change.

 5   Another strategy would be to say,

 6   "Why don't we start where we can make the

 7   biggest difference right away." Folks in the

 8   nutrition predisposed segment, and then

 9   focusing on the nutritional gatekeepers as a

10   way to get us there.

11   So in transitioning from this

12   recommendation to lifestyle change, if we look

13   at the nutrition vigilance, hey, we can

14   provide them information and reminders, which

15   we already do. We do an incredible job with

16   that.

17   With the nutritionally

18   predisposed, we can provide tools, whether it

19   be web-based or whether it be iconic on

20   packages, that provide them product solutions,

21   which is typically a company thing to do.

22   But the nutrition disinterested,

 1 this has to be a stealth health approach, in

 2 that passive environmental or product-related

 3 changes, whether it be reformulations, portion

 4 control packaging, or other stealth health

 5 will probably be the best way to get them to

 6 move if it's not their spouse or family

 7 member.

 8   So before we move on to questions,

 9 I want to just give a special USDA CNPP stand-

10 up recognition to all the people who have been

11 working on the policy and the DGAC, and Dr.

12 Robert Post, the inimitable Carole Davis,

13 Colette Rihane, and then Kellie O'Connell, who

14 so gently gets us to do stuff without us

15 feeling anything more than just slightly

16 nudged.

17   For   promoting   of   Dietary

18 Guidelines, Jackie Haven, John Webster, Dr.

19 Patricia Britten is back there, and Janie

20 Fleming have done amazing things over the last

21 two years.

22   So   I   think   we're   open   for

1 questions.

2   CHAIR VAN HORN: Yes. Thank you.

3   Here we go again. Linda Van Horn. Thank

4 you, Brian, very much. That was excellent and

5 certainly raises lots of questions, I think,

6 for this group, as you well know.

7   And I think when we invited you to

8 come, that -- the kinds of topics that you

9 were addressing are, of course, uppermost on

10 our mind, and I think probably the most

11 specific one being this issue of education

12 versus motivation.

13   And I think you're addressing it

14 in terms of issues related to things like

15 labeling and, you know, is labeling education,

16 or does it motivate, and who does it motivate,

17 and how do we address that.

18   And you know, if you could

19 elaborate a little bit on that, and then I'm

20 sure others have questions, as well.

21   DR. WANSINK: I can, yes. That's

22 a good question. In looking at the idea

1 between motivation versus education, the

2 problem with us as Americans, and I'm not

3 speaking from studies as much as I'm speaking

4 just from what I observe, is that I think we

5 seem to be an all or nothing -- we have an all

6 or nothing mentality.

7   And we tend to be very impatient.

8   And the problem with motivation is that

9 people don't seem to be motivated to make

10 small changes, because they want big results,

11 so they're motivated to make a huge change,

12 and then it doesn't work, and then they become

13 discouraged and they fall into that third

14 segment.

15   And that's why, when it comes to

16 encouraging people to eat nine fruits or

17 vegetables a day, holy cow. When has that

18 ever happened? But getting people in a small

19 distance, that doesn't take much motivation.

20 All it involves them doing is making a

21 slightly smaller decision.

22   And so instead of motivating a

 1 great change like, you know, like giving up

 2 pizza, or you know, never eating fried food

 3 again in their life, which they're not

 4 probably going to do, I think if we can move

 5 them in these small directions gradually, it's

 6 not going to entail them having to change

 7 their life.

 8   CHAIR VAN HORN: Rafael.

 9   MEMBER PEREZ-ESCAMILLA: Yes.

10 Rafael Perez-Escamilla. Thank you for this

11 very useful presentation. I do think it's

12 very relevant for the work that we are doing.

13   Studies have consistently shown

14 that acculturation of immigrants into the US

15 mainstream culture, however we define that,

16 influences quite a bit food choices and other

17 lifestyle behaviors.

18   And I think it would be incredibly

19 useful if you and your colleagues could

20 include the dimension of acculturation in your

21 research, because it would be very interesting

22 to see how people respond to the cues around

 1   them in terms of their food choices, how they

 2   are when they arrive, how they change as they

 3   become more acculturated.

 4   DR. WANSINK: What's interesting

 5   is that 60 years ago, this is just only a meat

 6   and potatoes country, but what happened after

 7   World War II is, when GI's came back after

 8   having experienced these different foods, they

 9   kind of brought some of these tastes with

10   them.

11   And now here 60 years later, if

12   you go to any town in America that's over

13   3,000, you're going to find the most popular

14   restaurant on one side of the street, it's

15   going to be a Chinese restaurant that's open

16   'til eleven every night. And on the other

17   side of the street, it's going to be the

18   Mexican restaurant.   And unlike a lot of

19   cultures, we end up being, I think, one of the

20   most flexible in terms of being able to adapt

21   different meal patterns.

22   MEMBER PEREZ-ESCAMILLA: Thank

 1   you.

 2   MEMBER NELSON: Brian, thanks a

 3   lot. This is Mim Nelson. I really enjoyed

 4   it, and I think that -- you know, I think one

 5   of the neat things with these Dietary

 6   Guidelines will be -- it's going to -- we're

 7   going to move things forward around behavior

 8   and the environment, but one question I have

 9   is -- is I don't know that it's a concern, but

10   the sort of -- the partnering with food

11   companies around the social marketing, which I

12   think is good, but I kind of feel like they're

13   orphans out there, the green beans and the

14   sort of lettuces that don't have the

15   stakeholder -- you know, they don't have --

16   the things that we actually want to market

17   mostly - with the exception of maybe whole

18   grains that come in a package with a label -

19   the things that we want to be getting people

20   to eat more of don't have -- you know, there

21   isn't the stakeholder there. There's not the

22   company behind that green bean.

1   So how do we deal with the whole

2 range of foods that don't have those, you

3 know, large stakeholders, if you will.

4   DR. WANSINK: I like that. I like

5 that. I've got an answer for that. For the

6 first part of your comment, when you said

7 you're going to look at behavior, that does my

8 heart good to look at that, because if you

9 look at what all of you have in common, even

10 though you have different research interests

11 and different specialties, almost every single

12 one of you comes from a behavior-related

13 background.

14   You deal with behavior as it

15 relates to food safety, or with food

16 technology. You deal with behavior as it

17 relates to seeing patients, or behavior as it

18 relates to dietitians.

19   So there's this inherent behavior

20 component that every one of you have that

21 makes me say that you are a legendary

22 Committee.

1   Second thing about the green

2   beans, about pinto beans, about canned

3   spinach, the biggest determinant of whether

4   that gets eaten is whether it gets purchased

5   and brought in the house, and that's one way

6   of talking to the nutritional gatekeeper --

7   you know, we can say, yes, but you know, they

8   only account for maybe 72 percent of what's

9   eaten in their household.

10   72 percent is a whole lot better

11   than saying, there's nothing we can do about

12   it.

13   And that's why I think trying to

14   convince, you know, little Billy and little

15   Audrey to eat better is going to be a whole

16   lot less effective than trying to convince the

17   person that purchases and prepares food to

18   bring the stuff in and use it.

19   MEMBER NELSON: Yes. I mean - I

20   agree with you. I think that the gatekeeper

21   is big, but -- but if we rely on the food

22   industry and sort of try to get them to market

1   -- the problem is you have sort of David and

2   Goliath. Even though they may be trying to do

3   their best for the most part, those are the

4   food -- you know, for the most part, those are

5   the foods that we're trying to get people away

6   from.

7   I mean, it is -- it's tricky, I

8   think.

9   DR. WANSINK: I see what you mean.

10   Well, I think one thing going on is they can

11   be our partner. They don't have to be our

12   spokes -- they don't have to be -- they don't

13   have to be our voice. They can just be a

14   partner.

15   But the second thing that's going

16   on is, there are economic interests in beans,

17   whether it be the canned green beans. We

18   don't all have to eat fresh fruits and

19   vegetables as the Guidelines say. We can eat

20   canned and frozen things.

21   MEMBER NELSON: Yes.

22   DR. WANSINK: But second of all,

1 I'm pleased that we have a lot of retailers

2 that are interested in doing this, too,

3 because it's incredibly in the retailer's

4 interest to get people to buy a lot of

5 produce, because it's got --

6   MEMBER NELSON: Exactly.

7   DR. WANSINK: -- massive margins.

8   MEMBER NELSON: Exactly. Exactly.

9 So maybe it is empowering the retailers more

10 -- yes. Great.

11   MEMBER PEARSON: Tom Pearson.

12 Brian, your segmentation of consumers

13 obviously is kind of a bit of transtheoretical

14 model and a little bit of fusion of innovation

15 kind of rolled into one.

16   The problem with maybe the

17 nutrition disinterested, and it is a pyramid,

18 and they're on the bottom of the pyramid, and

19 by definition, that's a big group.

20   And so, I wonder what we could do

21 to think about really getting them involved.

22 Now from a clinical standpoint, we deal with

1 the stages of change all the time, and the

2 typical patient that we see is, in fact,

3 precontemplater.

4   He just, you know -- he or she

5 doesn't -- you know, have any idea. And so,

6 what we try to do is not to move them up to

7 somebody who's actively changed, but just up

8 one more step into the next phase.

9   So what would you say about --

10 about strategies to get the nutrition

11 disinterested, like you said, dragged into the

12 nutrition predisposed so that at least we

13 could start to get across the idea of a

14 healthy diet being a social norm in the same

15 way that some of our tobacco efforts have

16 gotten into -- into obviously saying that a

17 smoke-free environment is the normative

18 environment?

19   DR. WANSINK: Well, let me talk

20 about one segment, and it's not how we move

21 them into the next -- move them up the

22 pyramid, so to speak, it's how we grow them up

1 the pyramid, and these end up being a lot of

2 the younger people that we have out there.

3   I think there's a lot of neat

4 things that are going on now that haven't gone

5 on before. It's cooler now to cook in the

6 kitchen. There's a lot of programs looking at

7 some things like this.

8   We,   ourself,   are   starting

9 something called smarterlunchrooms.org, and we

10 have all the research that goes on about how

11 you can get kids to eat better school lunches

12 without taking away their cookies. And it's -

13 - it's a very effective thing.

14   So I think one thing is, we can

15 keep an eye on these younger -- this younger

16 generation, and try to grow them into people

17 who   are   kind   of   at   least   nutrition

18 predisposed.

19   But a lot of the older -- with a

20 lot of the older people, I think things can

21 happen from family members more than it can

22 help from us, whether it be a child coming

1 home and saying, "hey, I learned how to cut up

2 an onion today in class," or whether it be a

3 spouse who comes home and is feeling a little

4 bit empowered to maybe add that can of green

5 beans to a casserole that he or she wouldn't

6 have otherwise done.

7 And so I think that might be able

8 to help -- that might be able to happen almost

9 through contagion through other family

10 members, but I still think the best thing we

11 can do in the meantime is try to build in

12 these stealth health approaches that companies

13 might be doing, whether it be through

14 packaging to move them in that direction.

15 CHAIR VAN HORN: Naomi and then --

16 MEMBER NELSON: Can I follow up on

17 -- I'm sorry. This is Mim. Just, Tom --

18 sorry, I just -- I feel compelled to follow up

19 because -- Brian, I don't know, I mean, if you

20 would agree with this, but I would say that

21 the way you get the disinterested to eat

22 better is by choice architecture, basically,

1 that if we can recreate -- I mean, we've done

2 some research of this where we don't --

3 there's no -- it's not about changing their

4 choices, it's just that you create an

5 environment where cities -- I mean, I've

6 talked about this before, but they just

7 naturally, what they're going to get off the

8 shelves is going to be healthier, so it's not

9 even about them making a decision.

10   So that's the way you get the

11 bottom part of the pyramid is you get

12 collective change within that community.

13   CHAIR VAN HORN: Okay. Naomi and

14 then Larry.

15   VICE   CHAIR   FUKAGAWA: Naomi

16 Fukagawa. Thank you, Brian. I do resonate

17 with your suggestion that the youth of today

18 really are our future and our hope, because I

19 do think that the vast majority of them are in

20 the nutrition predisposed group, much to my

21 surprise.

22   And   so   therefore,   they   can

1 influence, you know, their parents, and the,

2 quotes, "older generations." But one of the

3 big issues, and as alluded to by Dr. Carlson,

4 is the fact that we are still or have had

5 people focus on calories, and that perhaps

6 focusing on the weight of food that they're

7 purchasing or eating could be something that

8 might modify behavior.

9   But then, how do we -- or do you

10 have any suggestions for efforts that we might

11 make with respect to education about portion

12 control, because oftentimes we think of this

13 as a cup, but we know this isn't a cup. I

14 know, I mean, you know, the classic cup and

15 the measures.

16   DR. WANSINK: Yes. Well I think

17 there's two dimensions to nutritional balance,

18 and one of them I had zero appreciation for

19 before about five years ago. One of them ends

20 up being, do we eat the right number of

21 calories, like I said.

22   But the other one ends up being,

 1 do we eat in the right balance. And I think,

 2 with some of these kids who are growing up,

 3 rather than saying, you can't eat that, you

 4 can't eat that, don't eat too much of that,

 5 that's really not a very, you know, empowering

 6 and encouraging thing to do, but instead,

 7 giving them the substitute and saying, "You

 8 can't eat this, why don't you try this? Why

 9 don't you do something with this?"

10   I think that's where there's a

11 tremendous amount of promise, but it's not

12 what we've ever really done in the past.

13 We've tended to view nutrition as being "don't

14 do that," whether it be don't eat enough

15 calories, or don't eat that food.

16   You know, and I like what you said

17 about children. I gave a series of talks in

18 California maybe last week or the week before,

19 and one of them was at Cal Poly, and there's

20 an interesting woman there named Ann McDermott

21 who's starting these really crazy outreach

22 programs that bizarrely seem to work.

 1   One was called "Food Dudes," where

 2 she goes into this junior high kid, Hispanic

 3 junior high kids, teaches them how to cook,

 4 and sees what happens, sees what happens after

 5 that.

 6   And they go home, they teach their

 7 parents, they think it's cool to cook. And a

 8 month ago, you could have never convinced me

 9 that you're going to convince any junior high

10 kid, junior high boy to cook.

11   And I think it's because we don't

12 try. We don't try enough ways to find the

13 right way.

14   MEMBER APPEL: This is Larry

15 Appel. A very interesting talk. I wanted to

16 think globally. What do you -- and I think

17 this stealth health approach is really quite

18 important, and yet this Committee really

19 focuses on pretty narrow issues often.

20   You know, like does sodium affect

21 health, something like that. So can you give

22 us some guidance here, because I'm a bit

 1 concerned because the stealth health questions

 2 often, you know, don't have as robust a

 3 database to support them, and you know, you

 4 use a grade of evidence approach, and we're

 5 going to be left with, you know, Cs, you know,

 6 because we don't have evidence that cutting

 7 portions and a quarter actually leads, you

 8 know, prevents obesity downstream.

 9   We might have data from single

10 meal studies in front of us, so we need some

11 guidance from you on the stealth health and

12 what our role in this Committee could be.

13   DR. WANSINK: Well, yes. I think

14 the charge of the Committee is being not

15 necessarily to talk about communication, I

16 mean, as much as that happens after the --

17 after you've actually delivered the report.

18   But in terms of thinking who and

19 what is going to be the best changes to make,

20 whether it be thinking in terms of what's

21 realistic for a nutritional gatekeeper to

22 think about.

 1   You know, what's the easiest thing

 2   to do for the growing nation of people who

 3   maybe aren't that adept at knowing how to cook

 4   beans. You know, is it realistic to have

 5   maybe the major recommendation be to, you

 6   know, soak beans and eat them every day?

 7   I mean, that's why -- I mean,

 8   there's a lot of things to think about, but in

 9   keeping in mind who kind of the target markets

10   are, it won't change the science at all, but

11   it might just change the way you think about

12   the science, maybe the way it gets -- where

13   the emphasis lies.

14   MEMBER APPEL: Well, let me just

15   follow up. I mean, we -- I think everybody

16   realizes we have this incredibly -- this

17   incredible trend towards eating food outside

18   of the home with, you know, the gatekeeper may

19   be bringing them to the restaurant.

20   You know, you either choose, you

21   know, --

22   DR. WANSINK: Cheesecake.

1   MEMBER APPEL: Cheesecake Factory

2   or another place. But you get there and, you

3   know, massive portions. I mean, are, you

4   know, strong statements about the environment

5   and selection.

6   I mean, I'm sort of struggling

7   because I think that we're -- some of these

8   issues are so beyond the narrow research

9   question that we often pose, ourselves. Or

10 this Committee poses.

11   DR. WANSINK: Yes. They are. And

12 you know, being able to stay within those

13 guidelines, and I think Dr. Post and Carole

14 will be able to keep you within the guidelines

15 of what's going on, maybe looking more in

16 terms of maybe how this gets implemented in

17 some ways.

18   CHAIR VAN HORN: Linda Van Horn.

19 Thank you very much, Brian, for all of your

20 words of wisdom and experience. We really

21 appreciate everything that you provided.

22   DR. WANSINK: Thank you.

1   CHAIR VAN HORN: Thank you.

2   With that, we're ready to move

3   along now for our subcommittee reports, and

4   Dr. Appel, you're on.

5   MEMBER APPEL: Okay. So my duty,

6   I guess, is to go over our subcommittee

7   progress to date, so let me first start off by

8   acknowledging our Committee members, besides

9   myself, the chair, Tom Pearson, Christine

10   Williams, and the person that keeps us on

11   track, Holly McPeak.

12   So in terms of topic areas, we

13   have -- we cover water, sodium and potassium,

14   and we've made this our sort of basic

15   structure in terms of priorities. Finishing

16   up the water chapter, which really doesn't --

17   and I'll point out, doesn't have a huge amount

18   of new data to change the guideline.

19   Sodium in children, which is a

20   fresh start, and Christine's going to bring us

21   up to date on the progress on that. Sodium in

22   adults, and the third is potassium.

 1   So the first research question is

 2   water, what amount of fluid is recommended.

 3   And we've actually had a lot of progress on

 4   this. We saw this as our low-lying fruit. We

 5   got an expert, Mike Sawka in January, already

 6   reported back that he's -- based on his view

 7   of the literature, and he's perhaps the

 8   world's -- one of the world's experts on

 9   amount of fluid that's required for health,

10   there's been no major studies to change our

11   recommendation.

12   So what we -- what I did was to

13   actually update the 2005 chapter already.

14   This might be sort of like the canary in the

15   cage, the first pass at trying to take what we

16   did in 2005 and update it.

17   So added some additional text on

18   water and the elderly, which came up in the

19   comments to the Committee.   A section on

20   hyponatremia, which is low serum sodium. It

21   doesn't occur often in a healthy population,

22   but there's potential for miscommunication if

 1 you don't address it.

 2   We do have a need to coordinate

 3 with other committees, potentially Xavier's

 4 Committee or Joanne's on caloric versus

 5 noncaloric beverage and preference for that,

 6 and not -- that's sort of an issue on hold.

 7   But I'll bring this up too -- I've

 8 been on our Science Committee which is, you

 9 know, concerned about the grading of evidence

10 approach and how we're going to deal with

11 this.

12   There was, in January, very

13 interesting, we had the subcommittee

14 discussion with Mike Sawka, and he goes, "This

15 is the right conclusion." You know, and it

16 basically is no different from before, but

17 then -- so it's a multipart -- it's a

18 multipart conclusion with three distinct

19 elements.

20   Very informative. I think it's

21 helpful to the public, to the nutrition

22 science community to have it -- have a three-

 1 part statement, but then how do you apply a

 2 grade of evidence to that, you know, and I'm

 3 not quite sure.

 4   So, the other groups may find

 5 themselves in the same situation where your

 6 best -- your best conclusion is not one that

 7 is so narrow as to then put a grade.

 8   So the second question is what are

 9 the health effects of salt or sodium chloride

10 on health, and so here's the status update.

11   Literature searches have been

12 completed for adults and children. The

13 articles are being abstracted, and there's

14 been great progress spearheaded by Christine

15 on effects of sodium on blood pressure in

16 children.

17   So Christine, do you want to take

18 the lead here?

19   MEMBER WILLIAMS: Well basically,

20 this is the results of the search results for

21 sodium in children, and there was 771 total

22 citations retrieved, 71 reviews and 700

1   trials. 62 were selected, 14 reviews and 48

2   trials.

3   And of the 14 reviews, eight were

4   included, six excluded, and of the 47 trial

5   citations, 28 included and 19 excluded. And

6   then, reviewing these articles, we excluded an

7   additional ten articles, and then we added 14

8   additional articles and one additional review

9   article, and there may actually be a few more

10 added after this.

11   So the current status is that

12 there are 61 clinical trial citations, 32 were

13 included and 29 excluded, and 15 reviews, nine

14 included and six excluded.

15   In addition to these articles,

16 there are a number of background articles that

17 we'll use too, as far as prevalence of

18 hypertension in children, morbidity, mortality

19 related to left ventricular hypertrophy and

20 other things that are present in hypertensive

21 children, tracking of blood pressure in

22 children and a few other areas, but basically

1 the review, the search results are almost

2 completed.

3   MEMBER APPEL: Good. I think the

4 one lesson perhaps for other subcommittees

5 from what Christine identified is that the NEL

6 searches can come short. They really depend

7 on whether you have the right inputs, and I

8 think there was an age restriction that led to

9 a few studies not being abstract or

10 identified.

11   So we -- I think -- I think

12 everybody really needs to consider some of

13 these more comprehensive reviews that,

14 together with the NEL search, might give you a

15 more comprehensive view. Otherwise you're

16 going to miss some articles.

17   Okay.

18   MEMBER PI-SUNYER: Can I ask you a

19 question?

20   MEMBER APPEL: Sure.

21   MEMBER PI-SUNYER: You're talking

22 about trials which are interventional, right?

1 And you only picked 48 out of 700. The rest

2 were excluded just because they were no good?

3   MEMBER WILLIAMS: No. The 700

4 included intervention trials and observational

5 epidemiologic studies.

6   MEMBER PI-SUNYER: Okay.

7   MEMBER APPEL: You know, it's a

8 lot of, you know how the indexing of the

9 literature is.   Sometimes it's crisp and

10 sometimes it's not, and this one -- this

11 literature search doesn't go back just three

12 or four -- I mean, to 2003 or 2004, it goes

13 all the way back because it's a fresh start.

14   So the indexing, you know, could

15 be -- you could get trials that are part of

16 review articles, you know, and stuff like

17 that, so --

18   MEMBER APPEL: But they went back

19 to '64 --

20   MEMBER PI-SUNYER: But were most

21 of these --

22   MEMBER WILLIAMS: We went back to

1   1970.

2   MEMBER PI-SUNYER: But were most

3   of these actual intervention trials or

4   observations --

5   MEMBER WILLIAMS: There were 12

6   intervention trials finally included.

7   CHAIR VAN HORN: But you did look

8   at some observational trials?

9   MEMBER WILLIAMS: Actually, in the

10   bottom there the 32 clinical citations

11   includes the 12 intervention trials, and then

12   the rest were observational.

13   CHAIR VAN HORN: Okay.

14   MEMBER PEREZ-ESCAMILLA: Are these

15   from the US and abroad?

16   MEMBER WILLIAMS: Yes. English

17   language.

18   MEMBER APPEL: Okay.   So the

19   subcommittee yesterday discussed three issues

20   that I think are going to be important ones

21   that this -- this -- the Committee as a whole

22   is going to have to decide on.

1   The first is the target sodium

2   level, and just to refresh your memory, for

3   the general population, the recommendation in

4   the 2005 Dietary Guidelines was 2300

5   milligrams per day.

6   And in those who are most

7   responsive to the effects of sodium, 1500

8   milligrams per day, and that's middle and

9   older age adults, African-Americans and

10   hypertensives.

11   And as Frank pointed out, you get

12   more bang for your buck going, you know, from

13   -- from around a hundred millimoles or 2300

14   milligrams down to the 1500 milligrams, a very

15   steep part of the dose response curve.

16   This 1500 milligrams applies to,

17   you know, almost 70 percent of the population,

18   so the issue that's going to -- that we're,

19   you know, going to have to make a decision on,

20   probably the biggest one of our subcommittee,

21   is whether we should shift to 1500. The

22   reason for doing it, not doing it, you know,

 1 as Frank mentioned yesterday, even if you're

 2 not in one of those high-risk groups, you

 3 know, if you -- if you live long enough, you

 4 will be.

 5   So -- which is good. And it's

 6 also, from public health, your point's

 7 confusing when you have more than one number

 8 out there and what category you should jump

 9 into.

10   But that's a big issue. So stay

11 tuned. The second one is whether or not to

12 adjust sodium and potassium goals by estimated

13 caloric intake, which actually came up

14 indirectly in the presentation we heard, and

15 you know, it's difficult, and I'll give you a

16 very concrete example why.

17   Approach the joint effects of

18 sodium potassium. The intake of one affects

19 the biologic responsiveness of the other, and

20 typically, if you're consuming a high sodium

21 diet, a high potassium diet mitigates the

22 effects.

 1   It doesn't eliminate them, but

 2 mitigates. And the converse, in setting a low

 3 potassium diet, low sodium intake is -- has

 4 greater benefit.

 5   And the fourth issue is data

 6 source on sodium. There have been -- there's

 7 pretty limited -- we're going to rely on NCI,

 8 I think, to provide the summary tables once we

 9 have an idea of what types of -- the format of

10 those tables for all the nutrients.

11   So this -- let me just go over

12 this sodium-potassium adjustment issue. Some

13 people might think this is quite mundane, and

14 on the other hand, it is very important in

15 terms of -- because some of our Guidelines are

16 calorie adjusted and others not.

17   Effectively,   you   know,   the

18 cholesterol recommendation of 300 milligrams

19 per day is an absolute recommendation, not a

20 calorie adjusted recommendation, whereas the

21 saturated fat, a recommendation of ten percent

22 effectively   is   a   calorie   adjusted

 1   recommendation.

 2   So I've outlined, here is the

 3   reasons to calorie adjust. And the first is a

 4   very basic -- it's -- it's fact. It's not

 5   theorem, it's fact. It's -- the absolute

 6   intake of sodium potassium is inextricably

 7   linked to caloric intake. The higher your

 8   caloric intake, the higher your sodium

 9   potassium intake.

10   The second thing is, in real life,

11   we adjust by calories. We all ate, you know,

12   lunch together, some of us ate more, some of

13   us ate less, but it was the similar foods, and

14   if you're preparing foods in a household,

15   you're typically eating the same foods, just

16   more or less of them.

17   So we are doing this in real life,

18   you know, and then in clinical trials, like

19   the trials that I -- the feeding studies I do,

20   when you try to keep weight constant, you have

21   to provide people with a certain amount of

22   calories.

1   And the sodium levels in those

2 calories are -- are adjusted, and I'll show

3 you that in a second.

4   The reason not to adjust is that

5 there's no clear biologic rationale,

6 especially for sodium, where you need next to

7 nothing, so if you need next to nothing, why

8 do you adjust next to nothing, you know. But

9 there's a practical element to this.

10   So this just gives you a handle,

11 and it's from a clinical trial, but this is a

12 clinical trial that, you know, helped us make

13 these recommendations. So just go to that --

14 let's say the column on the right, what we

15 call the intermediate level.

16   Well at 2100 calories per day, the

17 second row, well, that's where our

18 recommendation came from, 100 millimoles,

19 which is, you know, 2300 milligrams per day.

20 But if you were eating a diet with 1600

21 calories, well, that intermediate level --

22 that diet provided 80, but if you were active,

1 physically active on the bottom row, somebody

2 who consumed 3100 calories per day, that

3 intermediate level was 140.

4   Okay. So that's in part why, you

5 know, we learned, you know, in the -- from the

6 first speaker that -- that it was difficult,

7 in young men, to reach the sodium goal

8 because, you know, young men typically have

9 higher levels of caloric intake, and it's

10 going to be difficult for them to achieve the

11 numbers.

12   So you know, how we approach this

13 is -- is not totally clear to me at this

14 point. But I think, you know, the -- I think

15 this is an important issue.

16   The   research   question   on

17 potassium, what are the health effects of --

18 or what are the effects of potassium on

19 health. This is our third -- third priority

20 -- I guess the third tier. We are on hold. I

21 think the -- we started the literature

22 searches, but I'm not sure the abstraction's

 1   being done.

 2   So, I think that's about it. That

 3   might be the last slide.

 4   CHAIR VAN HORN: Okay. Xavier.

 5   MEMBER PI-SUNYER: Pi-Sunyer. Do

 6   you think that part of the reason obese people

 7   have more hypertension is because they are

 8   eating more calories and therefore, getting

 9   more sodium?

10   MEMBER APPEL: Yes. I think part

11   of it, and I -- I don't have -- I have a slide

12   from one of our feeding studies where we

13   actually have the 24-hour urine excretion, in

14   non-overweight,   overweight   and   obese

15   individuals, and the number of people that

16   were, you know, who were under 2300 milligrams

17   per day in terms of urinary excretion was

18   almost nothing in the people who were obese

19   because, you know, they're consuming, you

20   know, 3,000 calories per day whereas the

21   nonoverweight person, you know, is -- it's not

22   -- we're talking about averages here, of

 1 course, but you know, their caloric intake is

 2 less.

 3   So, you see a very graded

 4 response. So, that's part of the reason, and

 5 then the other reasons that obese people might

 6 have more in -- the literature on whether the

 7 responsiveness to sodium is more -- whether

 8 they are more salt-sensitive, obese are more

 9 salt-sensitive than non-obese is a bit mixed.

10   We didn't find it in our feeding

11 studies, but others have, so that's -- I think

12 there are other factors besides salt.

13   CHAIR VAN HORN: Rafael.

14   MEMBER PEREZ-ESCAMILLA: Yes.

15 Larry, we have conducted focus groups in our

16 Latino community in Connecticut and several

17 times the comment about the Food Pyramid has

18 been where is the water, why there isn't a

19 glass of water, why there is no message about

20 water being communicated to us in that

21 pyramid.

22   So, the question is: Do you think

1   there is scientific justification to display

2   water to the people, water in the Food

3   Pyramid.

4   MEMBER APPEL: Yes. Larry Appel

5   again. We -- in the 2003 IOM report, you

6   know, we explored the need to, you know, the

7   eight glasses per day and whether there's need

8   for what we call purposeful drinking, just to

9   -- and the bottom line was that people,

10 through just their usual activities, without

11 even thinking, you know, are going to meet

12 their normal fluid -- their fluid

13 requirements.

14   What I think we didn't deal well

15 with, and which I think is going to be

16 important, is the caloric issue, where when we

17 talk about beverages, that -- or fluids that

18 people consume, we need to integrate this with

19 the broader theme of controlling calorie

20 intake.

21   And that probably is sort of a

22 back door approach to recommending water as

1   well as other beverages without calories.

2   MEMBER WILLIAMS: Right. I would

3   like Joanne to comment on this, because this

4   definitely gets at the cross-cutting issue

5   that we discussed yesterday in that group.

6   MEMBER SLAVIN: Actually, I wanted

7   to ask another question, too. Is that okay?

8   Yes, we   discussed   yesterday

9   because of the interest in water and also

10   weight and obesity. So, I think both of our

11   Committees will be thinking more about water,

12   and how to assess that on different fronts.

13   But my question had to do with the

14   evidence-based review for sodium. I see, like

15   for kids going back to 70's, but for the

16   adults, what kind of data is there, and what's

17   the effort? Is that going to work in that

18   framework at all, or are there --

19   MEMBER APPEL: Well, this is one

20   where, you   know, we   --   the   2005

21   recommendations were largely based on the IOM

22   report which was completed just about the same

1   time as the Guidelines.

2   So, you know, my -- the outcome

3   variables that we are going to look at are new

4   studies with blood pressure, cardiovascular

5   disease, kidney disease. We have a broad net

6   stroke.

7   But, you know, I stayed recently

8   on top of this literature. I do get surprised

9   every once in a while, you know, with

10   something I haven't, you know, -- that I

11   haven't -- wasn't aware of.

12   But, I'm not sure there's going to

13   be anything major. I think, though, one area

14   where we -- where I'd like to just spend a bit

15   of that for -- to document, is the cohort

16   studies.

17   The problem, though -- these are

18   cohort studies. They are not clinical trials,

19   necessarily, with clinical cardiovascular

20   outcomes, and it's a very confusing literature

21   with a lot of methodologic pitfalls, but I

22   think it needs to be summarized because people

1 are misusing that literature in ways that --

2 that, you know, -- but anyway, I think we need

3 to review that literature, and so I will be

4 doing that as well as I think the more

5 relevant outcome variable, which is just blood

6 pressure.

7   CHAIR VAN HORN: Right. And I

8 think if you could just elaborate a bit on

9 that. I think, you know, the issue of sodium

10 and intake being, you know, already higher

11 than what the biologic requirement is by quite

12 a bit.

13   You know, there's no fear about

14 limiting to 1500 milligrams from what I'm

15 hearing you say, what Frank said yesterday.

16   The point is that if, again, if

17 you're not hypertensive, you're possibly

18 prehypertensive, and the data show from the

19 OMNI Heart, as well as the DESCG trials,

20 sodium   trials,   that   even   normotensive

21 individuals   benefit   with blood pressure

22 lowering with a reduced sodium intake.

1   MEMBER APPEL: Yes. And now we

2 also have the trials hypertension prevention.

3   It shows long-term follow-up with reduced

4 clinical events. But, that's only -- you

5 know, there are only a few of those trials.

6   In contrast, there are many more

7 epidemiologic studies but, you know, it's a

8 mine field in terms of methodologic issues,

9 but I think it needs to get summarized and we

10 need to just present it just for completeness

11 sake.

12   CHAIR VAN HORN: Larry, the other

13 thing, and then Tom. The other thing about

14 this issue in terms of the sodium potassium

15 relationships, it would appear to me that the

16 very recommendation to increase dietary

17 sources of potassium, which would be fruits,

18 vegetables, et cetera, would actually

19 accomplish both an increase in potassium and a

20 lowering of sodium if, in fact, those foods

21 are increased in the diet. Correct?

22   MEMBER APPEL: Correct. But a lot

 1   depends on processing. So, you know, it's how

 2   you prepare your fruits and vegetables.

 3   MEMBER PEARSON: Since we have a

 4   couple of minutes, I wonder if I could raise

 5   this issue relative to the evidence, and with

 6   the water and electrolyte group, I think this

 7   came up and it was kind of one of our

 8   decisions, and that is to -- with the NEL

 9   search is to really prioritize the randomized

10   trials and then the prospective observational

11   trials, and maybe not spend a lot of time on

12   cross-sectional and case control studies

13   because of the -- particularly with a

14   lifestyle variable like diet, their proneness

15   to really just irretrievable confounding.

16   And so this -- with Larry's --

17   with our group with Larry, we raised this

18   initially, but I think this is what crept into

19   the fatty acid group and many of the other

20   groups, but I think one of the reasons to

21   raise this is that we wouldn't want to have,

22   kind of heterogeneity of evidence, depending

1   on what nutrient you were talking about.

2   So, I raise that issue now,

3   because it came up, and I think the sodium

4   literature is a good example that there are

5   enough trials to really -- even in pediatrics

6   to get down to a real core of science that are

7   really going to be difficult to trump with,

8   say, cross-sectional data.

9   I don't know if maybe Larry could

10 comment on that.

11   MEMBER APPEL: Yes. I think that,

12 you know, it's -- when you have a mature

13 field, you can basically deal with trials and

14 cohort studies but if, depending -- I think

15 it's not -- I hesitate to be a hundred percent

16 universal on this one, because I think there's

17 going to be some really important research

18 questions where the database isn't as mature,

19 and we're going to just have to deal with

20 cross-sectional data.

21   But be right up front and center

22 that, you know, causality is going to be --

 1   inferences are going to be tenuous, especially

 2   if there is, you know, if there already are

 3   public health messages so that you get these

 4   weird directions, directionality, like it's a

 5   -- you know.

 6   MEMBER PEARSON: But there is a

 7   NEL resource issue as well, in terms of the --

 8   where to start, et cetera, so that we use that

 9   valuable resource wisely.

10   MEMBER APPEL: Yes. I guess I've

11   already done that to some extent, you know,

12   with the searches that have crossed my desk.

13   You know, if it just says "We evaluated," I

14   mean, maybe we should make this more explicit

15   -- and I know this is not a Science Committee

16   discussion, but if you come across a cross-

17   sectional study, you know, you have to have a

18   good reason to select it as opposed -- because

19   that's going to require NEL

20   time to retrieve and abstract and then

21   catalogue.

22   You know, most of the time I just

 1   -- I did not consider those relevant to the

 2   question.

 3   CHAIR VAN HORN: Right. And I

 4   agree with you. I think we've seen already

 5   that where the literature is mature and we

 6   have the luxury of selecting among randomized

 7   control trials, and that's where we'll go.

 8   But   obviously   the   variability

 9   across these topics does require a little bit

10   of, you know, selection related to that.

11   Mim.

12   MEMBER NELSON: Yes. A question

13   about understanding that -- this is Mim Nelson

14   -- that probably our pallet has changed around

15   salt, because there's just been so much salt

16   in the diet.

17   But, irrespective of that, is it

18   -- thinking about -- I want to make sure we

19   don't forget about the pleasure of eating and,

20   you know, sort of how wonderful it is.

21   And is it possible to have a

22   palatable good-tasting diet at 1500 milligrams

1   of sodium?

2   MEMBER APPEL: Yes.

3   MEMBER NELSON: Okay. A good job.

4   Then you answered my question. I just think

5   it -- I want to make sure we don't propose

6   something that's just, you know, tastes

7   terrible.

8   MEMBER APPEL: No. I mean, I

9   think that we've done, you know, studies.

10 Others have, too, of -- you know, there's a

11 lot of -- you know, there are populations in

12 the world that eat next to nothing. You give

13 them sodium and they say this tastes awful.

14   MEMBER NELSON: Yes. Right.

15   MEMBER APPEL: You know, so -- I

16 mean, our pallets are very accustomed to this.

17   So, you know, I guess, you know, we're I

18 guess, you know, setting what the standard is.

19   The reality we are going to never,

20 you know, and in my lifetime, if we get to

21 2300 milligrams I'd be a very happy person,

22 but 1500 probably is not -- you know, meat,

1 there's going to be a huge period of time for

2 industry to catch up and make our food

3 flavorful.

4   And I think they've done a --

5 they're doing it. Yes. And I think they've

6 been successful.

7   CHAIR VAN HORN: Xavier.

8   MEMBER PI-SUNYER: Pi-Sunyer. If

9 you go to 1500 calories, what percentage of

10 that is added salt versus inherent in foods?

11   MEMBER APPEL: That is a great

12 question. I think most of it still will be

13 inherent in foods.

14   MEMBER RIMM: Should we have it at

15 the table or do we add it --

16   MEMBER APPEL: Add it at the

17 table. Okay.

18   MEMBER PI-SUNYER: I mean, I

19 think that makes an impact on whether you're

20 going to eventually express this per calorie

21 or not.

22   MEMBER APPEL: Well, you know, the

1 problem with this, we have so little data on

2 actually sources, you know, that's good. You

3 know, there's this pie chart that everybody

4 shows that's -- you know, the study that's

5 based on around 60 people, that 70 percent of

6 sodium comes from processed food.

7   That's -- that really hasn't been

8 updated, there hasn't been good data to

9 reflect the change in our habits, again, the

10 sodium from restaurants.

11   My instincts are that it's still a

12 huge amount from processed and very little

13 added by individuals. But I think this is one

14 of -- I was talking to Robert Post a few

15 months ago, and I said, "Well, that would be a

16 good use of stimulus money."

17   Over two years figure out, you

18 know, currently what our -- you know, what the

19 distribution of sources of sodium is and do it

20 in a rigorous way, because we really -- that

21 data is missing.

22   MS. McMURRY: Am I on? This is

 1 Kathryn McMurry. I just wanted to point out

 2 to you and the rest of the Committee that

 3 there are some tables of top food sources of

 4 nutrients, of certain selective nutrients in

 5 the last tab of your notebooks, including

 6 energy, sodium, choline, fatty acids.

 7   I don't believe it covers

 8 specifically processed versus other foods, but

 9 -- Table 2 is sodium.

10   CHAIR VAN HORN: Thank you.

11 That's helpful.

12   MEMBER SLAVIN: Am I on?

13   CHAIR VAN HORN: Yes. Joanne.

14   MEMBER SLAVIN: Joanne Slavin. I

15 have two questions. The first is, I think

16 grain products are a big contributor to sodium

17 intake, so as we recommend, some of the

18 recommendations saying more grains, more whole

19 grains, it's hard to make those products

20 really low-sodium, and the other question I

21 have or concern is typically sodium, sugar

22 bounces around.

 1   So you take sodium down in a

 2 product and then sugar, a lot of times has to

 3 go up just for taste.

 4   So, in being really restrictive on

 5 sodium, I think we can drive other issues that

 6 we might not like the results of.

 7   MEMBER APPEL: Yes, again, so far.

 8   But I think that even on -- if you go to the

 9 supermarket you still see some, you know,

10 whole wheat bread that does have, you know,

11 that also is marketed as, you know, 20 to 25

12 percent less than other products.

13   I think -- I don't remember what

14 line, but you know, part of the problem with

15 this field is that there are -- you know, that

16 our recommendations drive, you know, drive the

17 industry, you know, and so -- you know, so to

18 some extent we need to -- we do need to take

19 into account what's currently available but,

20 you know, there are -- there seems to be

21 incredible creativity among the food

22 manufactures on accomplishing our goals, not

1   just sodium, but others, too.

2   CHAIR VAN HORN: I have personal

3   experience from research that we did with

4   middle school aged children that, you know,

5   even in as short a time as three to four

6   weeks, reduction of sodium in their natural

7   daily intake results in not only reduced

8   intake, but then the inability to go back to

9   eating as much sodium as was previously being

10   consumed, because it now tastes so salty

11   compared to what it did when it was reduced.

12   So, I wonder, Christine, if you

13   wouldn't mind, you know, you did a fabulous

14   job of reviewing the literature, but in terms

15   of, you know, trying to move forward in terms

16   of the children, especially and trying to

17   change those taste perceptions that work

18   within, you know, what's a normal level of

19   sodium, you know, are there things that you

20   can think of that we should be addressing?

21   MEMBER WILLIAMS: There was a

22   recent article about the sodium in school

 1   lunches, and it's still relatively high, and

 2   that's certainly one area that we could work

 3   on to gradually reduce in a step-wise manner

 4   the amount of sodium, and I think that would

 5   help with children to get them used to foods

 6   that are less salty.

 7   And there are other ways that --

 8   venues that we could do the same.

 9   CHAIR VAN HORN: Cheryl.

10   MEMBER ACHTERBERG: Given the lack

11   of literature and data sets that I keep

12   hearing, everyone referred to it. It seems

13   like this is another moment where we might

14   want to do some modeling, at least in terms of

15   when we get the set of recommendations we

16   think we want to have, eat more of this, eat

17   less of that, however it turns out, that we

18   should model that to see what impact it has on

19   sodium levels, and then perhaps consider

20   adjustments accordingly.

21   Since we don't have the evidence

22   base, and we do intend to do some modeling in

1 some other areas, I think we could justify

2 doing this piece as well.

3   CHAIR VAN HORN: Good. Rob.

4   DR. POST: This is Rob Post. I

5 have a question, and it's for Larry.

6   At the IOM Committee meeting on

7 strategies to reduce sodium, has there been

8 information presented?   I thought ILSI

9 presented information that updated the rather

10 old data on sources of sodium.

11   MEMBER APPEL: Yes. That's based

12 on an unpublished analysis of NHANES 3. Okay.

13   And I don't really have much more than the

14 presentation.

15   I thought that, you know, for the

16 Committee, you know, if we -- there are a few

17 issues. One is, I think we want to present

18 our data in a certain way. You know, we

19 wanted to look at food intakes by weight by

20 not just gender and age, but by weight status,

21 you know, and to do this in a uniform

22 presentation.

1   So, I felt that we probably would

2 wait for the format and then use the NCI data

3 to address issues of top ten contributors and

4 other things that would be -- would -- but it

5 would be sort of like in the same sort of

6 cookie-cutter mold as everything else that

7 we're looking at.

8   MS. McMURRY: Just to point out,

9 the data in your notebooks is based on the

10 NHANES   2005-2006   data,   using   the   NCI

11 methodology.

12   MEMBER APPEL: I think it would be

13 -- you know, I don't know who's in charge of

14 this, but it would be useful to actually get

15 those tables, you know, the way we want them,

16 and get into -- because I think that would

17 inform us for, you know, in the process here.

18   CHAIR VAN HORN: Yes, right.

19 Well, with that, actually, that will be a good

20 segue to the next group, which will be the

21 nutrient adequacy group, but we will first

22 take a break, and then Shelly will bring us up

 1 to date on that and talk more about the

 2 modeling issues, because I think that's really

 3 relevant.

 4   So, 15-minute break. Thank you.

 5   (Whereupon, the above-entitled

 6 matter went off the record at 10:11 a.m. and

 7 resumed at 10:29 a.m.)

 8   CHAIR VAN HORN: All right.

 9 Welcome back. And we're ready to launch into

10 the nutrient adequacy subcommittee.

11   Shelly.

12   MEMBER NICKOLS-RICHARDSON: Okay.

13   This is Shelly Nickols-Richardson, and this

14 is an update for nutrient adequacy.

15   The Committee members are --

16 appear on the screen, and I do want to

17 acknowledge Trish Britten with USDA and Eve

18 Essery at HHS who have been very instrumental

19 in keeping us moving forward with our work on

20 the subcommittee.

21   Are you going to click for me?

22 Okay. So, just a few slides that update what

 1   our questions are and how we've prioritized

 2   those questions, so as a refresher, our

 3   priority one questions are looking at within a

 4   fixed energy intake, what dietary patterns is

 5   or are associated with achieving recommended

 6   nutrient intakes.

 7   As things stood from the last

 8   meeting, we also had the question of what

 9   dietary patterns is or are associated with

10   positive health outcomes, and I'll provide an

11   update related to that question.

12   What environmental factors related

13   to diet are associated with achieving

14   recommended nutrient and food group intakes,

15   what individual behaviors related to diet are

16   associated with achieving recommended nutrient

17   and food group intakes. So, those are our

18   priority one questions.

19   Okay.   And our priority two

20   questions, then, are what nutrients are most

21   likely to be consumed by the general public in

22   amounts low enough to be of concern, what food

1 groups are most likely to be consumed by the

2 general public in amounts -- I think -- yes,

3 low.

4   Sorry about that. Low enough -- I

5 think we know how we're eating, but low enough

6 to be of concern, and then what nutrients and

7 food groups are most likely to be consumed by

8 the general public in amounts high enough to

9 be of concern.

10   And I'll mention why that was sort

11 of inserted into this Committee's work. Also,

12 for our priority two questions, looking

13 specifically at folic acid, the overall or

14 overarching question is folic acid intake in

15 the US post-fortification era related to any

16 healthy or unhealthy outcomes.

17   And then our subquestions under

18 this include: Is the serum folic acid status

19 of women of childbearing age related to neural

20 tube defects? Is the serum folic acid status

21 of men and women related to cardiovascular

22 disease,   strokes,   colon   cancer   and

1   precancerous polyps?

2   And then how do folic acid intake

3   levels   from   foods   after   mandatory

4   fortification and supplementation affect serum

5   folate levels and help outcomes?

6   Another priority two question is

7   related to vitamin D, and is an increase in

8   vitamin D intakes above current consumption

9   levels   associated   with   positive   health

10   outcomes?

11   Then   we   do   have   some   priority

12   three questions. These include our special

13   nutrient recommendations needed for certain

14   subgroups. These are really being updated

15   from   the   2005   reports,   so,   specifically

16   looking at iron in women, B12 in elderly,

17   vegetarians, pregnant women and smokers.

18   And then another question that has

19   come up or an area that it appeared that we

20   needed   to   address   from   the Science Review

21   Committees and from presentations from the

22   last   overall   DGAC   meeting   was   related   to

1   nutrient supplements.

2   This also came up when we had our

3   webinars and our conference calls related to

4   folate   as   well,   and   some   of   the

5   supplementation issues specific to folate.

6   Another   priority   three   question

7   is: Has the nutrient composition of food

8   significantly changed since 2005, in a manner

9   that impacts nutrient adequacy, and then, is

10   there   any   evidence   that   nutrient   bio-

11   availability has significantly changed due to

12   alterations in the nutrient matrix of foods,

13   including things like food fortification or

14   functional foods.

15   Okay. So, where we exist now with

16   our questions, and just the status update in

17   looking at dietary patterns, nutrient intakes

18   and health outcomes, we had some discussion in

19   our subcommittee on our calls, looking at the

20   process of the NEL searches versus data and

21   modeling of really just the modeling analyses

22   that   could   be   done   looking   at   nutrient

1   composition within fixed energy intakes.

2   After sort of several rounds of

3   where do pieces fit within this subcommittee

4   related   to,   say,   carbohydrate   protein

5   subcommittee, energy balance subcommittee, I

6   think we've finally come to a consensus that

7   what the nutrient adequacy subcommittee will

8   really focus on, is the question of modeling

9   and using that as a procedure for looking at

10   the fixed calories, and can we meet nutrient

11   needs related to the fixed energy intake.

12   So, looking at range of patterns

13   of intake, diet quality, within those patterns

14   and within fixed calories, rather than going

15   through NEL searches specific to some of the

16   intervention   trials   related   to   health

17   outcomes, which will now be shifted to the

18   other subcommittees.

19   Our   priority   for   looking   at

20   nutrients is within the context of foods, so

21   again, keeping in mind that nutrients come

22   within our food system and really looking at

 1   the patterns of foods that would be able to

 2   meet the nutrient recommendations.

 3   The question about water, because

 4   that came up in the -- I think it was the

 5   carbohydrate protein subcommittee, and then

 6   under energy balance, I sat in on those

 7   sessions yesterday, and it does look like we

 8   can model water into the diet as we do the

 9   modeling process.

10   This question actually came up in

11   relation to discretionary calories, rather

12   than sort of the water, per se, sort of

13   purposeful drinking kinds of questions.

14   So, I think in terms of linking it

15   to discretionary calories and what do you do

16   when you substitute water for sugar-sweetened

17   beverages and other beverage choices, we can

18   do that in that context, but if it links to

19   sort of the water purposeful drinking context,

20   we can add that or contribute that to the --

21   that particular subcommittee, looking at

22   sodium and fluids.

1   And again, our role would really

2   be looking at diet quality, so again,

3   depending   on   what   beverage   is   being

4   substituted, and where water fits into the

5   overall diet, what does that do in terms of

6   nutrient recommendations and meeting those

7   recommendations.

8   The   priority   of   the   dietary

9   patterns for nutrient intakes really looking

10   at that link to health, we will focus on maybe

11   just one or two, probably things like

12   breakfast intake because we do know that

13   breakfast intake as a pattern of eating or a

14   way of eating does connect to certain

15   nutrients such as calcium, vitamin D, for

16   example, and certain types of foods such as

17   milk, fluid milk and whole grains, for

18   example.

19   But we're not going to focus on

20   really those health outcomes. Those will be

21   moved over to carbohydrate, protein, and I

22   think energy balance subcommittee will really

1 address the health-related outcomes looking at

2 dietary patterns.

3   Okay.   So,   then,   with   the

4 environment and environmental factors and

5 nutrient food group intakes, again, much of

6 this will be integrated with the carbohydrate

7 protein subcommittee and the energy balance

8 subcommittee.

9   So,   really,   those   systematic

10 reviews will be housed under those two

11 subcommittees, and what we will do within sort

12 of nutrient adequacy, then, is having some

13 supporting or include supportive statements

14 within our section of the report that really

15 link the reader to or the information to those

16 other subcommittees.

17   So, the environmental factors,

18 individual behaviors, so we can go onto the

19 next Committee. Yes.

20   MEMBER SLAVIN: You need to move

21 the slides.

22   MEMBER NICKOLS-RICHARDSON: I'm

 1 sorry. I'm sort of doing it, and he's sort of

 2 doing it, so -- okay.   Okay.   We're on

 3 environmental factors, and actually this slide

 4 will look very similar to the next slide. So,

 5 when we think about environmental factors, and

 6 then in individual behaviors -- and let's go

 7 back one.

 8   There   we   go.   So,   the

 9 environmental   factors,   the   individual

10 behaviors, this sort of looks very similar, so

11 what our subcommittee will really be doing is

12 just providing supportive statements that then

13 connect readers or connect the science,

14 really, to the energy balancing carbohydrate,

15 protein subcommittee.

16   So, we won't be leading those NEL

17 searches. The other subcommittees will be

18 doing that. Okay. Nutrients of concern.

19 When we move to sort of our second priority,

20 questions or our level two priority questions.

21   Nutrients of concern. There were

22 some questions about what is the definition of

 1 a shortfall nutrient? How do we really

 2 identify or establish some criteria for what

 3 constitutes a nutrient of concern, and so now

 4 we have some information that was collected

 5 and provided by Trish and Eve, and so we have

 6 more information that will help us define what

 7 shortfall means, and then how we would

 8 establish these nutrients of concern.

 9   So, the criteria that we have

10 right now that we're working with will include

11 usual intake data to look at sort of those

12 shortfall nutrients. We have information from

13 the last overall Committee meeting that were

14 provided about usual intakes of Americans or

15 people residing in the United States.

16   Also connecting that to functional

17 indicators, then, in using the IOM reports as

18 guides for what are some of the functional

19 indicators or serum concentrations or health

20 outcomes that would identify that there's

21 something linked to a shortfall nutrient, and

22 then what are the health outcomes?

 1   So, what are the nutrients that

 2   are really of public health significance? So,

 3   if there are nutrients that we might not be

 4   meeting the recommendations in the diets, but

 5   the functional outcome or the health indicator

 6   really is not a public health concern or

 7   doesn't have a lot of significance, then we

 8   won't focus on those nutrients as much as we

 9   will on those where there are clearly

10   established public health implications.

11   We've identified this area as a

12   priority for having the first draft of the

13   text ready by the May 29th deadline, so we'll

14   be working on that pretty diligently here in

15   the next month.

16   For food groups of concern, again,

17   trying to define what is the definition of

18   that, what does that actually mean? So, sort

19   of a same process here, looking at usual

20   intakes of shortfall food groups from

21   information that was provided and from the

22   national database is looking at food intake,

 1 trying to link that, then, to the nutrients

 2 that are related to those foods or nutrients

 3 that might not be met because of the foods

 4 that are being consumed or not being consumed

 5 and, again, linking this to health outcomes.

 6   So, there needs to be some, you

 7 know, pretty significant evidence, or some

 8 significant implication for what the health

 9 outcome is for foods that are not being met.

10   We did add sort of this piece

11 about the SoFAAS, in terms of what the

12 nutrient adequacy subcommittee will do is that

13 we'll really just look at this within the

14 context of nutrient shortfalls and dietary

15 patterns.

16   But then, in terms of how this

17 links to health outcomes, this will be

18 related, then, to the other subcommittees, so

19 the solid fats would be part of the health

20 outcomes would lie or reside within the fat

21 subcommittee, the alcohol within that group,

22 and then the added sugars really within

1   carbohydrate protein.

2   So, all that we would be doing is

3   just identifying from usual intakes and

4   dietary patterns that there are these issues

5   related to the SoFAAS, and then the health

6   outcomes would come within those other

7   subcommittees.

8   For folic acid in health outcomes,

9   the subcommittee did have a webinar

10   presentation with Joel Mason. His

11   presentation really focused on the question

12   about colon cancer, precancerous polyps and

13   folate intake, post-fortification.

14   We had a conference call then with

15   Lynn Bailey who we asked to focus on the

16   neural tube defect question. In relation to

17   folate, Dr. Bailey also presented some

18   compelling evidence related to folate

19   supplementation, intake and serum folate

20   concentrations and changes that have occurred

21   post-fortification.

22   So, I think the Committee is now

1   feeling quite comfortable with recommendations

2   that could be made here. We have a search and

3   sort plan that has been completed.   The

4   articles have been looked at and so some of

5   those are under review, and we've -- we're

6   anticipating a June deadline for the first

7   draft related to the folate questions.

8   For vitamin D, again, knowing that

9   the AHRQ report will be coming out June, end

10 of June-ish or June sometime, and that there

11 will be a public meeting of the IOM Committee,

12 either late July or early August and hoping to

13 have either subcommittee members attending

14 that public meeting or other staff from HHS

15 and USDA attending that so that we'll have as

16 much information as we can that's in a public

17 format that we could use.

18   Heavily using the AHRQ report when

19 it's available to really come up with our

20 interpretation of what that information is

21 showing us in terms of vitamin D and where we

22 need to be with recommending foods related to

1   vitamin D intake.

2   The pattern of protein intake was

3   a question that we had been looking at, but

4   we've now decided that this really fits better

5   with the carbohydrate protein subcommittee,

6   and so those questions have really been moved

7   there, and working with Joanne in that

8   subcommittee if there are things that are

9   needed from nutrient adequacy.

10   But, largely the protein sort of

11   patterning and overall macronutrient

12   patterning will fit within that subcommittee.

13   Then, the special populations and

14   the nutrient questions specifically related to

15   iron, B12, nutrient supplements, I think we're

16   maybe a little bit further along with the B12

17   question.

18   We believe that there really is

19   only a minimal review of literature that will

20   be required to update the 2005 report, and in

21   anticipation of having the first draft of that

22   particular piece of our text done by the end

1   of May.

2   So then, the question about

3   nutrient supplements that has arisen, I think

4   we can fit this into nutrient adequacy, sort

5   of looking at where do we meet recommendations

6   for the overall diet, but then looking at some

7   of the special populations that it might be

8   advisable to recommend supplements for certain

9   populations.

10   So, looking at some of the

11   literature on that, and making recommendations

12   where that seems to be appropriate.

13   In terms of nutrient composition

14   and bioavailability, this is on hold.   I

15   believe that where we are with this now is

16   that because we believe that probably our food

17   intake information, usual intake which

18   encompasses much of those foods that have now

19   become functional foods and so on, that with

20   that information we'll be able to address this

21   sort of indirectly, and not really take time

22   to address this directly at this point, and

1 sort of keeping this piece till the end, and

2 if it's needed, to do some of the nutrient

3 composition questions.

4   If we need to include those, we'll

5 do that at the end, but hopefully through the

6 other work that we have with the subcommittee,

7 some of this will be evident in the modeling

8 and the information there.

9   Okay. So, I think that is

10 everything we wanted to cover. The question

11 of discretionary calories and this term has

12 come up.

13   We do plan to address sort of the

14 definition of that, and introduce that in the

15 introduction to the nutrient adequacy text for

16 our subcommittee, but I think maybe that might

17 be a piece of discussion, how would you like

18 nutrient adequacy to handle discretionary

19 calories if you want us to address that at

20 all, or if that will be something that really

21 comes up in energy balance or some of the

22 other macronutrient-related subcommittees.

1   CHAIR VAN HORN: Okay. Open for

2   discussion. Thank you Shelly. Xav.

3   MEMBER PI-SUNYER: I think -- this

4   is Pi-Sunyer. I think you should include

5   discretionary calories as an item in your

6   deliberations because I think it is important,

7   and it does -- it does impact on energy

8   balance, but we are not specifically dealing

9   with it because it really deals so much with

10 nutrient adequacy.

11   So, I think it would be very

12 helpful, and it would be complementary if you

13 did that.

14   CHAIR VAN HORN: Yes. I just

15 think -- well, those of us on the Committee

16 are familiar with this, maybe not so subtle

17 issue that Shelly has been raising here, is

18 that this group will be depending much more on

19 the whole modeling concept of how to actually

20 achieve nutrient adequacy working with foods

21 and recommendations for food patterns that

22 will achieve that end.

 1   And so, I think that the idea of

 2   discretionary calories and exactly how that

 3   should happen makes total sense to fit within

 4   that subcommittee as well.

 5   And, in fact, I don't know about

 6   the rest of you, but I found fascinating --

 7   Thank you very much, Kathryn for pointing it

 8   out -- the data at the end of our booklets

 9   here related to 2005-6 NHANES data, and I did

10   not recognize -- I don't know if you all did,

11   that grain-based desserts are now our number

12   one contribution to calories in this country.

13   Grain-based desserts.   What is

14   that? I looked to see what it includes.

15   Cakes, cookies, doughnuts, pies, crisps,

16   cobblers and granola bars. All right. That's

17   the number one contributor to our energy

18   intake.

19   Second is yeast breads, and then

20   third is chicken. And fourth is soda and, you

21   know, the liquid calories that we were talking

22   about.

 1   So, I definitely hear what you're

 2   saying as far as the discretionary calories

 3   because I think most of us would consider

 4   those food groups part of that, and where and

 5   how can a person achieve all their nutrient

 6   needs, include some of these foods, but not as

 7   their number one contributor to caloric

 8   intake.

 9   Larry.

10   MEMBER APPEL: Okay. I'll just

11   comment -- make one comment about that Table

12   1, because it's important.   Dariush

13   Mozaffarian also analyzed NHANES, and it's

14   really important to stratify this by age,

15   because he found that soda is number one

16   source of energy in children, and so we really

17   need to make sure that we display this across

18   the spectrum of age, because it's probably

19   going to be different.

20   My -- I don't see a question that

21   I think really drove some of the

22   decisionmaking in 2005 and I'll just -- it may

1 not even be a question, but there was this

2 modeling approach that was done and it

3 occurred, and many of us learned about it at

4 the very end, but -- so, in the end they said

5 well, these are the patterns that the US data

6 developed and that meet the Dietary

7 Guidelines.

8   And then they said, okay. Well,

9 what real -- what dietary pattern out there

10 actually meets these goals as well. And then

11 it was actually very -- you know, there

12 actually weren't a lot of patterns, at least

13 at this point we hadn't -- that actually

14 started to display the nutrient intake in

15 sufficient detail that you could say, "Oh,

16 well, here's a diet pattern that actually

17 meets nutrient intake."

18   But, at that point, you know, we

19 -- I made people aware, well, the DASH diet

20 does, you know, so it was a backhanded

21 addition, you know, that occurred at the very

22 end.

1   And so, what I'm thinking that's

2 actually quite important, that in terms of

3 where we might go, is just -- well, what about

4 the Mediterranean dietary pattern, you know.

5   And I think that one of the things

6 the Committee can do, and I'm not sure it's an

7 exhaustive literature search, is to say, okay,

8 well, once we've defined it, now, what do we

9 know about the nutrient composition and are

10 there shortfall nutrients.

11   Because otherwise -- I mean, one

12 of the big changes we could make, you know,

13 from this Committee is that we say, "Well, the

14 Mediterranean Diet is a good dietary pattern

15 and meets all the nutrient goals, but we need

16 to have data, and I don't know -- better to

17 start soon rather than later on this one, and

18 we can probably identify other patterns, you

19 know, can -- you know, Southeast Asian dietary

20 pattern meet all the goals, too.

21   MEMBER ACHTERBERG: I think that's

22 exactly what the Committee is determined to do

1 and front-end it instead back-end it, and

2 define which dietary patterns do we want to

3 evaluate at specific calorie levels.

4   So, can we meet it at 1500

5 calories? Can we meet it at 2000? What's it

6 look like at 2500? So, we really are modeling

7 and evaluating these things in a way that will

8 connect back to some of the decisions and

9 information being evaluated in the other

10 subcommittees.

11   MEMBER APPEL: This is Larry

12 again. But is it a modeling exercise, or is

13 it trying to find out in the literature, are

14 there -- are there people that are actually

15 consuming these diets.

16   You know, it sort of -- it seems

17 to be both. You're right, Linda, yes.

18   MEMBER ACHTERBERG: It's a little

19 bit of both, but as we have done some

20 preliminary work, looking at what the

21 literature has, it doesn't answer all the

22 questions that we want to answer.

1   So we're convinced we have to do

2   modeling, especially if we want to look at a

3   range of different dietary patterns. The

4   literature is spotty, and especially if we're

5   trying to connect back to specific calorie

6   levels, that's where it really has a gap.

7   MEMBER PI-SUNYER: Yes. This is

8   Pi-Sunyer. I think this is one area where

9   maybe, looking at other literature besides

10 English literature might be helpful, certainly

11 in the Mediterranean diet, there's a lot of

12 work in Italy and Greece and France and Spain

13 that have looked at some of this and some of

14 that is not in the English literature, but is

15 pretty good data, particularly, the French.

16   MEMBER NELSON: This is Mim

17 Nelson. Just to add on, I think, you know,

18 hearing Dr. Sacks yesterday looking at the

19 literature more, it's clear -- it's like this

20 wide range that when you're looking at the

21 macronutrients there's a wide range that

22 works.

 1   It's -- the tricky part is all the

 2 sort of getting the whole market basket of

 3 micronutrients into it. So, I think that it

 4 needs to come from both -- we didn't want to

 5 limit to any just sort of specific diets, we

 6 wanted to -- they might be a starting place,

 7 but that there's probably a whole other range

 8 that's not named "diet," you know, that

 9 Americans may follow.

10   But, one question I have is have

11 we in this Committee -- sorry, I'm on the

12 Committee, so I should know this answer, but

13 we haven't explicitly talked about which fixed

14 calorie levels we wanted to address, and I

15 think that, as a Committee, I think we need to

16 come up with -- are we going to do it for

17 1600, 2000, 25 -- or what's the level we're

18 going to do it at, because I think that will

19 be -- then that's how the modeling then goes

20 from there.

21   MEMBER NICKOLS-RICHARDSON: And

22 this is Shelly Nichols-Richardson. That is a

1 very good question, and yesterday I spent some

2 time with Trish, and she actually opened up

3 her modeling spread sheets, if you will, and

4 it can run from twelve -- or a thousand, a

5 thousand calories all the way up in 200-

6 calorie increments.

7   So, the modeling can be done for a

8 wide range of calorie levels, and I did ask

9 the question: Where are the odd numbers? And

10 she said that, you know, you can interpolate

11 that, that there's really not a need to do

12 that, but we can look all across the board of

13 energy level.

14   MEMBER   ACHTERBERG: Cheryl

15 Achterberg, adding a comment. Being sensitive

16 to the fact that lots of people are on weight

17 loss diets, so we may not want to stay within

18 the specific calorie level recommended by

19 different age groups right now, but also look

20 at some other options, if somebody is on a

21 calorie restricted diet, then what can they

22 accomplish.

1   MEMBER PI-SUNYER: The fact is

2   that very few people are on calorie-restricted

3   diets. They think they are, but they're not.

4   CHAIR VAN HORN: That is the

5   problem. I think we'll ask Eric first, and

6   then --

7   MEMBER RIMM: Eric Rim. I just

8   had two questions. One is you referred to the

9   SoFAAS in saying that we -- looking at

10 contributors of SoFAAS to health outcomes you

11 would give to the other groups, the fat group

12 and to the alcohol group.

13   But will you be modeling alcohol

14 within your dietary pattern such that they do

15 contribute to 70 percent of people who drink

16 alcohol? I mean, it is part of -- potential

17 part of the pattern. There's a lot of people

18 that drink.

19   So, I sort of had turfed that in

20 my report, I'll say, oh, we gave that to

21 nutrient adequacy, so -- so I want you to say

22 yes so I can actually say that when the time

1 comes.

2   MEMBER NICKOLS-RICHARDSON: And

3 this is Shelly Nichols-Richardson.   I'm

4 looking at Trish. Was alcohol included in the

5 2005 modeling?

6   MEMBER RIMM: I mean, it's the

7 sixth contributor to calories right here on

8 this list that you just pointed out to us.

9   MEMBER   NICKOLS-RICHARDSON:

10 Exactly, and what I will say is that we won't

11 let it fall into the gap between our two

12 subcommittees.

13   MEMBER RIMM: Okay.

14   MEMBER NICKOLS-RICHARDSON: So, we

15 won't look at health outcomes related to that.

16   That's you, but in terms of modeling --

17 Trish.

18   DR. BRITTEN: Yes. It's part of

19 what we look at as discretionary calorie

20 allowance. That can be split out a number of

21 ways so we could look at, you know, how many

22 -- how many alcoholic drinks or how much, how

1 many calories from alcohol could fit within

2 various patterns.

3   MEMBER RIMM: Okay. Yes.

4   DR. BRITTEN: So, yes, it's a

5 choice, really, in the way we model things.

6 It could be from solid fat, it could be from

7 added sugar, it could be from alcohol.

8   MEMBER RIMM: Okay. Good. So

9 then the second thing is -- sort of relates

10 back to Larry's comments before, on sodium. I

11 do -- is sodium being part of the modeling?

12   The only concern I have about

13 modeling the sodium guideline is that assumes

14 that the food supply will stay the way it is,

15 and I think we shouldn't make that assumption.

16   We should model forward and not backwards.

17   Just the way we sort of -- we got

18 rid of trans in a lot of foods by, you know,

19 modeling in such a way that we could say there

20 are foods that you could create that are

21 without trans, and another point is that you

22 can make breads that are going to potentially

1 be low in sodium and higher in sugar, then,

2 but there's other ways to make food that can

3 have lower sodium.

4   So, I would hate to model

5 backwards.

6   MEMBER NICKOLS-RICHARDSON: Shelly

7 Nichols-Richardson.   Again, a really good

8 question, and I think, yes, sodium is included

9 in the modeling process, and so I think what

10 we could do is potentially look at if we can

11 make some assumptions about what we think the

12 food supply might do over the next five to ten

13 years, and then model based on some of those

14 changes.

15   MEMBER RIMM: Yes, I guess it just

16 shouldn't be restricted solely on the fact

17 that some of the foods may be higher in sodium

18 now, because the industry is slowly moving

19 towards a lower sodium.

20   MEMBER NELSON: Back to this sort

21 of usual intake of looking at these grains as

22 being the number one contributor of calories,

 1 grain desserts or -- I'm thinking about the

 2 modeling and, you know, I think we think about

 3 the SoFAAS are just one piece of this

 4 discretionary calories, and I think that we

 5 need to make sure that in our modeling and how

 6 we come out with our report, that we identify

 7 that, you know, Shelly, you have a slide here

 8 on shortfall food groups.

 9   In a sense, we were looking at the

10 micronutrients and we're looking at shortfall,

11 but also ones that we get too much of. In a

12 sense, I think we have to think about

13 shortfall food groups, and then, you know,

14 exploded food groups where we're getting too

15 much. It's sort of the yin and the yang of

16 both of them.

17   MEMBER SLAVIN: This is Joanne

18 Slavin. One thing we talked about yesterday

19 was organic and suggested that food safety

20 should handle it, and I just want to make sure

21 it doesn't get lost, because it doesn't really

22 fit, you know, particularly well.

 1   I like Eric's hand-off's. I like

 2 to do those myself, and I noticed my Committee

 3 has had a lot of those, so it seems like

 4 organic, sustainable, we need a discussion of

 5 that and it may be one of the cross-cutting,

 6 rather than nutrient adequacy, because it

 7 could potentially fit here, too, but I just

 8 don't want to lose sight of those issues.

 9   MEMBER CLEMENS: Roger. I agree

10 with you Joanne, and we actually -- thanks for

11 everyone's comments. Yesterday we actually we

12 exchanged some information last night, and so

13 we've included it on our heavy docket already.

14   Thank you very much.

15   We have the right -- we reserve

16 the right, though, to turf it back.

17   MEMBER SLAVIN: Pass the hot

18 potato. Yes. Go ahead.

19   MEMBER PEARSON: This is just a

20 minor comment, but relative to the folic acid

21 questions, I want to make sure that -- again,

22 it is a minor point, but that it doesn't fall

1   in between the cracks.

2   The -- your first question has to

3   do with related to neural tube effects, and

4   the second one has to do with cardiovascular

5   disease, strokes, et cetera.

6   And, at least from my reading of

7   the literature, you're going to come up with

8   some very different conclusions between those

9   two.

10   One thing fitting in the middle is

11   congenital heart disease, which has to do with

12   the same pathways of pyrimidine and purine

13   metabolism that the neural tubes are, and I

14   think there is a developing literature that

15   they're seeing some declines in that as well.

16   And   as   one   then   looks   at   the

17   supplementation issue in women of childbearing

18   age, that's on the plus side that will balance

19   some of the voices on the negative side.

20   MEMBER   NELSON: Can   I   comment,

21   because actually, I'm feeling better about the

22   folate question than when we started out. I

1   think,   our   Committee,   we've   had   two

2   presentations, and what was nice is sort of we

3   had two ends of the spectrum, scientists, you

4   know, presenting.

5   Yet I found that there was

6   incredible harmony in what they were talking

7   about in terms of what they're thinking about

8   folate and recommendations and while this is

9   preliminary,   and   it's   really   from   the

10 presentations, and then reviewing a number of

11 the papers, that overall, the fortification

12 seems to be a really good thing for overall

13 health, neural tube defects are coming down

14 that, over time it probably will help with

15 some of the other cardiovascular issues that

16 we're not concerned about that.

17   There may have been a slight blip

18 in something going on there, but that it's

19 probably going to come down to something like

20 this, that with women of childbearing years,

21 that they really should be taking extra folate

22 supplementation, that the foods probably may

1   not be quite enough, but that actually older

2   adults were -- however we decide to define

3   that, that in fact they should not be taking

4   extra folate in supplement form, that it's the

5   people -- it's the skewing to the right with

6   way too much, not with what our food supply is

7   now.

8   That's   probably   actually

9   beneficial, and so I feel pretty good harmony

10 around it, but it's less confusing than it

11 was, and so I think that that's where we're

12 going to fall out.

13   MEMBER PEARSON: I think that was

14 consistent with what I'm seeing. Ours is

15 purely a congenital --

16   MEMBER NELSON: Yes.

17   MEMBER PEARSON: So that we don't

18 -- when they say there is no effects on

19 cardiovascular disease, that's not --

20   MEMBER NELSON: We're not -- I

21 don't --

22   MEMBER PEARSON: -- exactly --

1   MEMBER NELSON: Yes.   I don't

2 think we're going to say that. I think that

3 -- I think that there is overall benefit for a

4 whole host of things, so --

5   CHAIR VAN HORN: I think the point

6 that came out loud and clear to me as a

7 participant, at least, on some of those

8 discussions is exactly what Mim was just

9 referring to that, you know, at the younger

10 age in childbearing years, you know, extra

11 folate would be beneficial, that the food

12 supply, when people derive their folate from

13 the food supply, even the fortified food

14 supply, that's beneficial.

15   Where we potentially get into

16 trouble is in the elderly taking additional

17 supplements of any kind, but especially folate

18 in excess of nutrient needs could potentially

19 be detrimental.

20   And, you know, that's where I

21 think we've seen, as Mim was pointing out, the

22 extremes, and the caution that we provide over

1 and over again about preferentially deriving

2 the majority of the nutrient intake from food.

3   MEMBER NELSON: But I think that

4 will be an important message about that

5 actually there may be some harm with older

6 adults taking extra folate by supplement. I

7 think that's an important message, because

8 it's one -- they've been hearing the opposite

9 in the media for a couple decades.

10   MEMBER ACHTERBERG: One last

11 comment on the supplement part.   I think

12 that's why this subcommittee is saying we have

13 to speak to supplementation in a variety of

14 different spots.

15   But I have another issue. I just

16 want to clarify a little bit with the whole

17 group relative to food groups, and that's, as

18 we're looking at food groups, we're looking at

19 the food groups as has been, I'll say at this

20 point, traditionally defined by USDA.

21   And I think one of the things we

22 have to keep straight, as we do this work, is

1 that these food groups make sense in terms of

2 the science we're used to, and the way we're

3 used to manipulating it, but it may not make

4 sense to the general public.

5   And so, as people are talking

6 about what do we need to present to the

7 general public, what's going to motivate

8 people to change their diets, et cetera, that

9 may be a different kind of messaging, and a

10 different way of conceiving some of these

11 groupings than the way we're analyzing it and

12 doing the modeling and drawing some

13 conclusions.

14   So, I know it's beyond the scope

15 of this report, and this particular Committee

16 to recommend exactly how and what needs to be

17 communicated to the public.

18   But we've heard some presentations

19 today, and I did want to make that distinction

20 and get that out on the table, that it's not

21 necessarily one and the same in terms of our

22 thinking, our presentation and what the public

 1   can or should receive later on.

 2   CHAIR VAN HORN: Okay. Anything

 3   else in regard to nutrient adequacy? Larry?

 4   MEMBER APPEL: Just a comment,

 5   because I was listening to this discussion on

 6   folate and supplements. This is going to be a

 7   tough   one,   because   it's   really   quite

 8   integrated in terms of the literature.

 9   I mean, there are these cohorts

10   studies that suggest that higher intake is

11   beneficial for cardiovascular disease, and yet

12   you have the trials, you know, which I think

13   sort of provide the trump that high intakes at

14   least of the supplements are bad.

15   And I'm just sort of -- you know,

16   concerned about as the -- there could be a ton

17   of effort to just replicating what I think

18   many of the people in this group already know,

19   which   is   that   these   --   that   there's

20   observational evidence that tended towards

21   benefit and trials that documented harm.

22   And I just -- it's like all of the

 1 subcommittees are going to be swamped with

 2 work, and I'm just -- I don't know how to deal

 3 with this, but I sense that, you know, you're

 4 going to spend a lot of effort compiling a

 5 body of literature that you already know says

 6 there's a tendency towards benefit and then

 7 the trials came out and showed no benefit, and

 8 even harm.

 9   I don't know how you're going to

10 resolve this. It's going to be a lot of work

11 for a conclusion you already know, I think.

12   CHAIR VAN HORN: Well, on that

13 bright note, let's move forward.

14   MEMBER APPEL: Yes, I was the

15 pessimist category on Brian's slide --

16   CHAIR VAN HORN: Yes. We're going

17 to give you all the negative messages, Larry.

18   All right. Dr. Pi-Sunyer. Let's

19 see if we can turn this around and talk about

20 energy balance and subcommittee report.

21   MEMBER PI-SUNYER: So the members

22 of our subcommittee are Mim Nelson, Rafael

 1   Perez-Escamilla, Joanne Slavin, Christine

 2   Williams and Linda Van Horn, and our staff

 3   helper is Eve Essery, who's been terrific in

 4   giving us support throughout this. So, I want

 5   to thank her.

 6   I want to move to the topic areas,

 7   that what we've done here is split the topic

 8   areas amongst the different subcommittee

 9   members and have each one take a lead on one

10   of them. All of them are high-priority, so we

11   haven't divided it into priority one and two.

12   Rafael is going to take the energy

13   density question.   Christine will do the

14   childhood overweight and obesity. Mim and

15   Christine are working on the dietary behaviors

16   aspects, and Mim on the environment.

17   I'm   taking   the   macronutrient

18   proportions. With regard to weight management

19   for special population subgroups, Rafael will

20   do gestational weight gain, breast-feeding and

21   lactation.

22   And I'm going to do weight

1 management for older adults. And then Mim

2 Nelson who was on the other Committee on

3 physical activity will deal with that.

4   If we go to energy density. Could

5 you move that forward, please. The question

6 here is: How is energy density related to

7 body weight and health? To what extent is

8 dietary energy density associated with BMI?

9 To what extent is dietary energy density

10 associated with highly-prevalent chronic

11 diseases?

12   Questions addressed in the

13 discussion: What dietary intake patterns are

14 associated with diets and different energy

15 density? Which nutrient intake patterns are

16 associated with diets with different energy

17 density?

18   This is -- this whole topic is the

19 one that has gone the furthest with regard to

20 NEL research. The NEL librarian has completed

21 the searches, and it will be the first topic

22 that we address.

1   With   regard   to   childhood

2 overweight and obesity, the question is: What

3 is the role of dietary intake in the

4 maintenance of healthy weight and prevention

5 of childhood overweight and obesity?

6   As I mentioned, Dr. Williams will

7 be handling this. The status is that NEL is

8 updating several searches conducted by the

9 American   Dietetic   Association's   Evidence

10 Analysis Library on childhood obesity, and

11 they have a very good number of searches.

12   And this will be the second

13 question that is going to be reviewed by the

14 NEL. I might mention that this is one that

15 hasn't been done before, so they're going to

16 go back and do the literature search further

17 back than is the case in most of the other

18 searches.

19   With   dietary   behaviors,   the

20 question is: What is the relationship between

21 behaviors related to food intake and body

22 weight, what dietary behaviors are associated

1 with the maintenance of healthy weight and

2 prevention of obesity in childhood, what

3 behaviors related to food intake most

4 contribute to achieving and maintaining a

5 healthy weight in adults, what behaviors

6 related to food intake most contribute to an

7 unhealthy body weight in adults?

8   The status is that published

9 systematic reviews are being considered and an

10 additional NEL review will be conducted on

11 individual behaviors that are selected by the

12 subcommittee.

13   With regard to the environment,

14 the question is: What environmental factors,

15 e.g. access, availability, type and quantity

16 of food contribute to an unhealthy body

17 weight?

18   Status, published systematic

19 reviews are currently being considered by the

20 SC.

21   With regard to macronutrient

22 proportion, the question is: What is the

1   optimal   proportion   of   dietary   fat,

2   carbohydrate and protein to maintain a healthy

3   body mass index, to lose weight if overweight

4   or obese, to avoid regain in weight reduced

5   persons?

6   The status is the search and sort

7   plan is currently with the NEL librarian, and

8   initial searches are being conducted right

9   now.

10   With regard to weight management

11   for population subgroups, the question is: How

12   does gestational weight gain impact short,

13   e.g. premature, small for gestational age and

14   large for gestational age, and longer-term,

15   e.g. childhood obesity, pregnancy outcomes?

16   The status is that Rafael is going

17   to review the IOM report on the reexamination

18   of Pregnancy Weight Guidelines. This report

19   is expected out in June of 2009.

20   With regard to breast-feeding and

21   weight   change,   that   question   is   in

22   development.   With   regard   to   energy

1 requirement during lactation, this is also

2 under development.

3   And for older adults, what is the

4 effect of weight loss versus weight

5 maintenance on health outcomes? This status

6 is the PICO chart and search and sort plans

7 are in development.

8   With regard to physical activity,

9 the question is how is physical activity

10 related to body weight and other nutrition-

11 related aspects of health? How much physical

12 activity is needed to maintain a healthy BMI,

13 to lose weight, if overweight or obese, to

14 avoid regain in weight-reduced persons?

15   Mim, who was on the Advisory

16 Committee for this report is going to review

17 that report, Physical Activity Guidelines and

18 Physical Activity Guidelines Advisory

19 Committee Report.

20   So, we will not need a search for

21 this particular topic, and she will be in

22 charge of writing that up.

 1   So, in summary, these are the --

 2   the topics that we're working on, and all of

 3   them are moving forward, I think, in a

 4   satisfactory fashion.

 5   CHAIR VAN HORN: Great. Thank

 6   you. Comments from the Committee? Questions?

 7   Larry?

 8   MEMBER APPEL: Yes. Xavier, I was

 9   just curious. What were the -- you said the

10   behaviors, the Committee's going to decide on.

11   Any idea, I mean, which ones you're thinking

12   about?   I mean, there's a pretty huge

13   literature.

14   MEMBER PI-SUNYER: Yes. I think

15   I'll let Mim answer that, or --

16   MEMBER NELSON: Yes, you're right.

17   There's a wide range, and at the moment we're

18   trying to be fairly systematic about this, and

19   so what we're doing is, we're looking at a

20   number of reviews at the moment.

21   And from those -- I'll say, I

22   think we're further along in the environment

1 question than we are in the behavior one, but

2 the plan is to really look at these reviews on

3 behavior and then to try to make a judgment

4 call based on those systematic reviews on the

5 specific -- whether it's going to be three or

6 five, I don't know what the number's going to

7 be, and then do specific searches around --

8 because it's infinite, you know, it's just

9 infinite.

10   Try to pick the ones that seem to

11 have the most evidence, and then do some

12 specific NEL searches on those behaviors.

13   If I can comment just on the

14 environment, the plan is right now is that

15 there are a number of very recent systematic

16 reviews on the influence of the environment,

17 and so we're not going to do an NEL search on

18 specific -- the whole thing about the

19 environment, you can't take -- it's the

20 environment.

21   You can't take one little -- you

22 can't disaggregate it, and so what we're going

1   to be doing -- NEL is helping us with really

2   making sure we're getting all of the good,

3   systematic reviews, and then we're going to

4   use those to base our -- for the writing and

5   the commenting.

6   CHAIR VAN HORN: You know, Brian

7   has left, but in regard to the presentation we

8   heard this morning and his suggestions to look

9   further than what PubMed has to offer, are you

10 --

11   MEMBER NELSON: Absolutely.   I

12 agree with him completely. I do think there's

13 actually a fair amount of literature in the

14 PubMed. I think there's a lot. There is also

15 a whole other area, and I think I want to talk

16 to Eve a little bit further on some of these

17 other sources, but yes, I agree.

18   And I think that we -- the tricky

19 part here is going to be making sure -- this

20 is the first time we've done this question. I

21 think we want to make sure that we focus on

22 those behaviors that have the most evidence,

1   and so, yes, I think we need to look beyond

2   just the PubMed.

3   CHAIR VAN HORN: Other comments

4   from the Committee? Anything else? Tom?

5   MEMBER PEARSON: I think you kind

6   of put this in terms of behaviors and

7   environment and other factors related to

8   weight and weight gain, and weight loss

9   retention. But are you going to look at

10 specific programs and packages that have been

11 tried in terms of interventions? That

12 obviously gets kind of bleak.

13   MEMBER PI-SUNYER: You mean you're

14 talking like specific diet plans, like Atkins

15 plan and Weight Watchers and things like that?

16   MEMBER PEARSON: Well, I was

17 thinking more about more behaviorally-

18 integrated programs, rather -- that have

19 actually put a lot of those individual factors

20 you're going to find together into an omnibus

21 program.

22   Now, if those include some of

1 these commercialized diets, maybe, but you

2 know, programs that try to put all this stuff

3 together, rather than the individual

4 behaviors.

5   Weight Watchers or, you know, some

6 of these other programs that try to synthesize

7 some of this stuff.

8   MEMBER PI-SUNYER: Some of that

9 will come in with regard to dietary patterns.

10 Some of that will come. Also the

11 macronutrient proportions will discuss some of

12 that.

13   But if you're talking about a

14 holistic kind of lifestyle change, including

15 exercise, diet and other plans within a

16 specific kind of program, we have that

17 reasonably compartmentalized. We don't have

18 it as saying this is the way you have to do

19 it.

20   MEMBER NELSON: Tom. This is Mim

21 Nelson. If I could just add to what Xavier

22 said.

 1   Hearing Dr. Sacks yesterday speak,

 2 if you look at the data, when you're talking

 3 about losing weight and keeping it off,

 4 especially that population. Support -- you

 5 know, it doesn't matter where it comes from,

 6 you know, decent support seems to make --

 7 keeps coming out over and over again and self-

 8 monitoring, and there's a bunch of sort of key

 9 things.

10   I actually think that we may be

11 able to address this without sort of saying,

12 you know, Weight Watchers or one of the -- you

13 know, there are a number of great programs out

14 there. There's probably a number of not-so-

15 great programs.

16   But I don't know that we need to

17 go into these specific programs, but that the

18 sort of what makes -- what prepares someone

19 for successful weight maintenance over time?

20 We have some pretty good ideas around that in

21 terms of behavior.

22   But I'm glad you brought that up

 1   because I think that when I think about this

 2   section, in a sense I also need to think about

 3   weight maintenance of ideal body -- you have

 4   to almost think about the three categories,

 5   because they're quite different.

 6   And so, I appreciate that, because

 7   I don't know, Xavier, if you disagree, but I

 8   think there are ways to sort of look at that,

 9   the importance of support and self-monitoring,

10   in a different way than the ideal body weight

11   person.

12   MEMBER PEARSON: Just one comment

13   is that we're -- the Obesity Guidelines are

14   being, obviously, redone by the National Heart

15   Lung and Blood Institute, and I chair a

16   guideline implementation working group with

17   that, and we are probably going to look at

18   this body of information from this perspective

19   about really what does work, what is the

20   evidence of implementability of a specific

21   guideline.

22   I don't think we're going to have

1 that done within the time frame that's going

2 to help these Guidelines. But, it is that

3 other part of that, that coin about if you're

4 a health maintenance organization and you have

5 a million dollars to spend on an obesity

6 program, how do you spend it? That is an

7 important question.

8   CHAIR VAN HORN: Chris.

9   MEMBER WILLIAMS: To take the

10 childhood obesity question one step further,

11 there have been some excellent reviews

12 recently on the obesity prevention trials,

13 intervention trials in children.

14   But I think we could try to tease

15 apart these multidimensional interventions and

16 try to identify the strategies that have been

17 most successful as far as food intake and

18 behavioral interventions as well.

19   CHAIR VAN HORN: Right. That was

20 going to be my comment, is you know, that

21 we're not only about weight loss, but we're

22 about prevention of weight gain, and the

 1   strategies and behaviors related to those two

 2   different populations, I think really do need

 3   to be teased apart, because they're not

 4   necessarily the same.

 5   I do, however, want to go back, to

 6   what you said, Mim, about the need for ongoing

 7   support. I think that -- if we see nothing

 8   else in the literature that is consistent with

 9   every intervention study, it's "out of sight,

10   out of mind."

11   If there is not continuing

12   support, ongoing availability of updating and,

13   you know, somebody to whom the person can be

14   accountable, then the, you know, success drops

15   off precipitously.

16   Joanne.

17   MEMBER SLAVIN: Yes. Joanne

18   Slavin here. I'm a little concerned about the

19   intervention trials, because a lot of this

20   stuff on weight maintenance, it's just, you

21   know, people reporting back. So the people

22   that were successful at losing weight, the

 1   things that they do, exercise, monitor, eat

 2   breakfast.

 3   You know, a lot of that is just

 4   self-report data, and I think we're going to

 5   have to go with that because we're not going

 6   to -- we're going to have to use that because

 7   that's the best data there is.

 8   MEMBER APPEL: Yes, this might be

 9   a case where you want to have somebody from a

10   trial that I participated in, because we did

11   do a weight maintenance trial and actually

12   Rena Wing did one, too, different strategies,

13   and the problem that I sense is that the

14   primary results paper that just look at the

15   randomized groups that have been published and

16   not sort of like the sort of what were the

17   correlates of sustained weight loss.

18   So, that might be, you know,

19   something to consider for our next meeting.

20   MEMBER PI-SUNYER: You   mean   to

21   have a speaker?

22   MEMBER APPEL: Yes. I don't know

 1 who the best one is, but I mean, we now have

 2 two big trials of weight loss maintenance and

 3 randomization of different strategies but

 4 they, you know, that was typically the

 5 different channels, internet versus in person

 6 kind of thing.

 7   But they did -- my understanding

 8 is -- well, I know about our trial, weight

 9 loss maintenance, but I think Rena Wing also

10 has predictor variables and follow-up

11 variables that might help inform this.

12   But, as I said, the problem is

13 that it's relatively early -- you know, these

14 haven't been published as far as I know. I

15 know we've been, you know, they're in analysis

16 right now.

17   MEMBER PI-SUNYER: Well, we have

18 you here, but we could certainly ask Dr. Wing

19 to come, I would think.

20   CHAIR VAN HORN: Cheryl.

21   MEMBER ACHTERBERG: I just want to

22 do a cross check on the scope of what our work

1 is. So, as we're talking about this, is the

2 intent here to describe elements that seem

3 important in success of a weight loss program

4 or weight maintenance program, or are we

5 trying in the report to really do a critique

6 and analysis of all these various things?

7   I'm just checking. What is our

8 scope in writing this report relative to this

9 topic?

10   MEMBER SLAVIN: Joanne Slavin. I

11 always get concerned about -- actually, when

12 Eric -- or when Brian said if we had a

13 dietitian chasing us around all day, you know,

14 that would work and, you know, the cost of a

15 lot of these interventions is not practical.

16   So, even if it works, you know, if

17 I had a personal chef and a dietitian, maybe

18 I'd do better, too. So, trying to -- you

19 know, this -- I think that cost-effectiveness

20 of a lot of stuff we are going to recommend is

21 really important. If it's not available to

22 people, what good is it?

  1   You know, and I'm sure some of the

  2 newer strategies with internet and other types

  3 of support make it more possible, but a lot of

  4 the things that are out there are really

  5 costly.

  6   CHAIR VAN HORN: The unfortunate

  7 thing is that those innovative strategies

  8 using things like internet, and I'm familiar

  9 with some of them, and from pilot work that

 10 we've been doing are very successful, but

 11 you're not going to see them in the literature

 12 yet because they are still at some of the

 13 preliminary, you know, stages.

 14   But they're also, again, drawing

 15 from other literature, related to behavior

 16 change. You know, some of these kinds of

 17 methods have been reported for substance

 18 abuse, other things that, you know, we can

 19 borrow from, which was, of course, you know,

 20 how the motivational intervention literature

 21 has been adapted to changing diet.

 22   So, you know, I think the same

1   thing is true in terms of some of these other

2   issues as well.

3   Tom.

4   MEMBER PEARSON: Yes. Just to

5   say, I mean, there is this huge literature of

6   over 6,000 papers on a Canadian database about

7   implementation of guidelines, and so the

8   question is: Do you want to get into that

9   about really what works in terms of -- you've

10 got the biology worked out. You've got the

11 science worked out about what works, and then

12 really then you've got the science about how

13 to make it work.

14   So, that's another version of your

15 question, Cheryl.

16   MEMBER ACHTERBERG: Don't get me

17 wrong, anybody. I love this stuff and, you

18 know, I can dwell in it, but I'm beginning to

19 get the feel that, as a group, we need to draw

20 some parameters about what we're really going

21 for here.

22   We're breaking new ground, but

1   what are we really going for.

2   CHAIR VAN HORN: I think that, you

3   know, the work Xavier and this group have done

4   already, you know, begins to address some of

5   those things.

6   And while I think the Nutrient

7   Adequacy Committee has, you know, again taken

8   the modeling approach, I think the energy

9   balance group is going to go back to evidence

10 and try to come up with what's available both

11 directly in terms of weight and energy

12 balance, but also approaches that, perhaps,

13 are cutting-edge and leading.

14   So I have to -- I think we have to

15 rely on the expertise assembled in that group

16 to help us determine what is reasonable in

17 terms of some of these boundaries for that

18 particular question.

19   MEMBER ACHTERBERG: Okay. And I'm

20 not questioning the group. Please don't take

21 it that way. But, I'm wondering if this might

22 not, in the end, fall out to a cross-cutting

1   issue, and maybe there's a section of this

2   report that speaks more directly to what you

3   just mentioned, Tom, what works.

4   What   works   in   terms   of

5   interventions   or   behavior   changes   that   we

6   might speak to, but I'm not sure that's a

7   direct part of the Dietary Guidelines. I

8   guess that's what I'm trying to find my way

9   through.

10   MEMBER SLAVIN: I think one way --

11   this is Joanne Slavin -- to limit scope is to

12   look at preventing weight gain, and not, you

13   know, because the weight loss, there's -- each

14   of these -- and they're huge categories, you

15   know, losing weight, and in -- you know, the

16   nice   thing   about   the   people   that   have

17   successfully lost it and kept it off, they

18   have some strategies.

19   People that have never put it on,

20   what are their strategies? And I do think for

21   Dietary Guidelines -- and, you know, I know

22   we've talked about that there aren't very many

1   of those people around.

2   We have a lot more people that are

3   overweight now, so we need to do something

4   fairly drastic, rather than just business as

5   usual. So --

6   MEMBER NELSON: Well -- this is

7   Mim Nelson -- I think that there's enough

8   literature, and it's very different between

9   the sort of not gaining weight, ideal body

10 weight, or overweight, let's just say, and

11 sort of not drifting up and looking at that

12 pattern of behaviors that's related to a

13 healthier body weight.

14   And I think that it's a different

15 literature, but there's enough of it, I

16 believe at this point in time, to look at the

17 weight loss and weight maintenance folks.

18   I'm not worried about scope with

19 this.   I will say that, you know, this

20 originally,   these   two   questions   were

21 originally in both Committees, as Shelly just

22 said, and we made a decision because there's

 1   so much overlap that you still want someone,

 2   if they're losing weight or whomever, to have

 3   a good quality diet that we've merged them so

 4   that there's just two questions.

 5   But I agree. I think that --

 6   well, I mean, I think this behavior and the

 7   environment ones are not just around energy

 8   balance, too. It's about wholesome quality of

 9   -- we'll see where it ends up. You know, once

10   it's written, we'll see where it goes.

11   CHAIR VAN HORN: All right. Well,

12   thank you for that lively discussion, and I

13   think we now ready to move on for carbohydrate

14   and protein, and this will be the last

15   subcommittee before our lunch break.

16   MEMBER SLAVIN: Thank you, Kellie,

17   and I want to thank all of the USDA and other

18   staff. We've had a wonderful, really great

19   support.

20   So, Jan Adams has taken over as

21   our chair, and Colette kind of kicked us off,

22   and Eve has done a ton of work, so it's been

1 really nice working with everybody.

2   And I appreciate all you people

3 out there in the hinterland, so hopefully

4 there's some people from my neck of the woods

5 that are linked in here so this new technology

6 has been really fun, too.

7   I want to acknowledge my

8 Committee, Cheryl, Xavier, Linda, and I think

9 we've expanded our approach, and when you see

10 how many questions we have, we're going to

11 have to do some dumping to Eric. Maybe Eric's

12 got some time. So, anybody else want some

13 chores? I might send them over.

14   So, a lot of our work was done

15 before in 2005. There's a whole section on

16 carbohydrates and protein. Kind of by

17 default, there was some discussion within

18 that.

19   There was also some discussion of

20 protein in other sections, and we've renamed

21 this Committee Carbohydrates and Proteins, so

22 that's given us some new direction that we'll

1 discuss.

2   Okay. These are some of our

3 overall research questions, and then we're

4 going to break them down into some categories,

5 and I want to mention that some of our

6 questions overlap a lot with other Committees,

7 and we discussed that yesterday, and some of

8 them are cross-cutting that we'll talk about

9 later, too.

10   How is carbohydrate consumption

11 related to health, how is protein consumption

12 related to health, how is fiber consumption

13 related to health, and these are very general

14 questions and we'll talk more about some of

15 the health outcomes we want to get after.

16   What is the utility of glycemic

17 index, glycemic load for providing dietary

18 guidance for Americans? And I'll discuss this

19 later, but this is the question that we've

20 made the most progress on. It was done well

21 in 2005, so it's really just an update.

22   And some of our protein questions

 1   that we're working on are going to be more

 2   difficult, because there was nothing that we

 3   could start with.

 4   How are non-caloric sweeteners

 5   related to body weight? There's a lot of

 6   overlap with our Committee and the Energy

 7   Balance, and I'm on both so we're trying to --

 8   you know, some of these topics may go one way

 9   or the other.

10   So,   what   is   the   impact   of

11   consumption of liquids versus solid foods on

12   weight gain, this is a topic we'll talk more

13   about today, but also just the water issue has

14   some overlap here.

15   And then a new question we had a

16   lot of interest in is the role of probiotics

17   and prebiotics in the diet.

18   Okay.   Number one, carbohydrate

19   consumption related to health. What is the

20   evidence that the types and percentages of

21   carbohydrate in the diet influence health

22   outcomes?

 1   And I want to mention a lot of the

 2   health outcomes for body weight are going to

 3   move over to the other group. So, some of the

 4   reviews, we know there will be some overlap in

 5   our reviews, but I think the actual discussion

 6   will be in energy balance.

 7   Some of the other diseases we want

 8   to get at, Type 2 diabetes, cardiovascular

 9   disease and cancer.

10   What is the relationship between

11   consumption of carbohydrate containing foods

12   and oral health, and this is an example, when

13   Larry talked about the low-hanging fruit, that

14   there really isn't a lot of new information.

15   It was done well in 2005, and it's essentially

16   just updating what was there.

17   We don't think there's anything

18   earth-shattering that needs to be included

19   into that.

20   You see some of the stars, these

21   are ones that have been added or tweaked since

22   our last meeting, are low-carbohydrate diets,

 1 low-calorie diets, safe and effective for

 2 long-term weight loss and maintenance, and

 3 this is an example of a topic that would move

 4 over into Energy Balance.

 5   Does the type of carbohydrate,

 6 sugar versus starch, high-fiber alter body

 7 weight and/or maintenance. And you can see

 8 kind of the overlap here with the carbohydrate

 9 -- if the carbohydrate is the question that

10 our Committee -- or the protein, our Committee

11 will take the lead on that.

12   What is the association between

13 added sugar intake, sugar-sweetened beverages

14 and body weight, and I appreciate Adam giving

15 us some insights, both on that and the liquid

16 versus solid.

17   This is a topic we're working on.

18   There's been, you know, 2005, there was a

19 discussion of that, too.

20   What is the role of carbohydrates

21 on satiety? And when we get into kind of the

22 cross-cutting issues, all of the satiety ones

 1   were   dumped.   I   shouldn't   say   "dumped."

 2   Given, honored -- our Committee is honored to

 3   take those all on.

 4   And part of the reason is that

 5   every Committee, seems -- you know, fat --

 6   fatty acids had satiety and we thought it

 7   would be better for those all to come to our

 8   Committee. So, we're going to do a very broad

 9   review on the role of -- you'll see this on

10   all of our lists here.

11   What's   the   relationship   between

12   fruits and vegetable intake and health and the

13   relationship between whole-grain intake and

14   health, and these were questions that were

15   asked in 2005, so it's essentially an update

16   of those.

17   Okay.   It's   haunted.   How   is

18   protein consumption related to health? Pretty

19   much the same questions, cut and paste, take

20   protein,   you   know,   switch   it   around   with

21   carbohydrate. Type and percentage of protein

22   in the diet influencing health outcomes.

1   And this was not reviewed at all.

2   So, we've had some discussions, how far we

3   want to go back in our NEL process in this,

4   and this, as I go through here, this is the

5   lit review that we're kind of jumping in and

6   trying to get moving on just to see what the

7   scope of it will be.

8   High-protein diets, safe and

9   effective? A lot of that will go over to

10   Energy Balance, and it was great having Frank

11   here yesterday to discuss that.

12   Role of protein on satiety. I

13   told you that's going to be generalized into a

14   question on satiety. Dried beans, peas and

15   health. Some of the other -- we wanted to

16   expand our carbohydrate, and Cheryl's going to

17   have to help me out here, because there's a

18   lot of food group Nutrient Adequacy, and it's

19   nice being on these three Committees, so I can

20   kind of make sure we're not duplicating

21   effort.

22   But a lot of -- we wanted to

 1 expand out of fruits and vegetables, whole-

 2 grains to other high-carbohydrates, and make

 3 sure that we give that a look.

 4   I suspect there's not a huge

 5 database. It's a developing database.

 6 Relationships between milk product intake and

 7 health, and this is -- if you go back to the

 8 old 2005 Dietary Guidelines, it was in Section

 9 6. It doesn't really fit with any place.

10 Obviously, milk has carbohydrates, it has

11 proteins. It doesn't fit into a protein-

12 carbohydrate, but we'll make sure we check it

13 out here.

14   Other animal products, meat, fish,

15 eggs and health, and this is where we have

16 overlap with the Fatty Acid group and some of

17 the other groups.

18   How do the health outcomes of a

19 vegan diet compare to that of an animal-based

20 diet? A lot of interest in different eating

21 patterns, and even how do we ask these

22 questions.

1   So, I really appreciate the

2 support of Trish and some of the modeling

3 people, and I think some of these questions,

4 there will be some literature base, but not a

5 huge amount.

6   So, in trying to model these

7 diets, trying to put together different diets

8 to see can we -- and this overlaps, obviously

9 with Shelly's Committee, Nutrient Adequacy.

10 Do we have questions on that?

11   The last one is one of the

12 questions that has been discussed, how do the

13 health outcomes of a plant-based diet compare

14 to that of an animal-based diet? Where we

15 have some real needs from the Committee to

16 define what that is.

17   So, a lot of people wanting to ask

18 that question. It came to our Committee, but

19 how do we define that? There's no easy ways

20 of getting that, either from the NEL or

21 getting it from the modeling.

22   So, we will have to just make some

1   decisions   in   both   those   as   moving   that

2   forward.

3   Fiber and health. How is fiber

4   consumption -- yes, Mim.

5   MEMBER   NELSON: What's   the

6   difference between a vegan diet and animal-

7   based versus a plant-based and animal-based --

8   MEMBER SLAVIN: Well, that's the

9   good--

10   MEMBER   NELSON: I   mean,   aren't

11   they the same? Isn't that the same question?

12   MEMBER SLAVIN: I think the vegan

13   diet compared to an animal-based diet is an

14   easy one to get at because those are really

15   clear.

16   Lots of discussion on plant-based

17   protein, a plant-based diet, health benefits

18   of a plant-based diet, and from what we can

19   see,   there's   no   definition.   There's   no

20   accepted -- so it's moving more towards a

21   plant-based diet as the total amount of foods.

22   MEMBER NELSON: That seems -- the

1 plant-based one seems to be more holistic than

2 just the vegan --

3   MEMBER SLAVIN: Absolutely. And

4 it may be a question that will not be -- might

5 be impossible. That's not one that we've

6 actually gotten to yet, for the NEL or even

7 the modeling, trying to come up with how you

8 would model that.

9   MEMBER ACHTERBERG: Peer review --

10   MEMBER SLAVIN: Thank you. How is

11 fiber consumption related to health, the

12 relationship between consumption of fiber-

13 containing foods.

14   This is -- we tried to separate

15 out foods, dietary fiber and functional

16 fibers, what's available on that. And then,

17 you see satiety again with fiber. So, those

18 will all go into a satiety sort.

19   This is the one where we actually

20 made the most progress, and I appreciate it.

21 We talked about this at our meeting yesterday,

22 what's the utility of the glycemic index,

1 glycemic load for providing dietary guidance

2 for Americans.

3   You see, it's body weight, which

4 is discussed here, just because it seemed to

5 fit here within our group, and also other

6 health measures.   Some of the ones we've

7 already   listed,   Type   2   diabetes,

8 cardiovascular, cancer.

9   2005 it was well-reviewed. There

10 have been about, I don't know, four systematic

11 reviews published recently, a few recent

12 papers, so Eve has given us the results of the

13 NEL, so I think this is the one where we've

14 made the most progress. And it's going to be

15 not as much work, because there was so much

16 done since 2005.

17   And some of these additional

18 questions. This is like our market basket or

19 our basket of "Where do these fit? Why don't

20 you take them?"

21   So,   this   is   --   Eric's   not

22 listening right now. I'm going to -- oh, you

1   are listening. Okay. Never mind.

2   How   are   noncaloric   sweeteners

3   related to body weight?   And this is an

4   example of one that -- this question could go

5   lots of different places, but it's in our

6   Committee, just to ask this -- go back and do

7   the NEL search on this and start from scratch,

8   really, because it wasn't addressed in the

9   2005 Guidelines.

10   You   can   see   this   one   of

11   consumption of liquids versus solid foods on

12   weight gain. This gets into -- if I look at

13   the Venn diagrams of how these things relate

14   to   each   other,   sugar,   sugar-sweetened

15   beverages gets into this, but also the water

16   question.

17   You know, like does -- and does

18   our -- even though we got into this discussion

19   yesterday in the subcommittee that most

20   consumers think that you can drink water and

21   lose weight. There's really no data on that,

22   but people typically do eat for calories that

 1 -- you can try to trick them, but if they're

 2 not eating calories, they're not full. So,

 3 trying to do a broad review on that.

 4   And then this last additional

 5 question, which there was nothing in 2005,

 6 probiotics and prebiotics in the diet.

 7   Okay. Where are we at?   The PICO

 8 Charts and literature search and sort plans

 9 have been approved for all the research

10 questions, so that is done.

11   The prebiotics/probiotics is the

12 one we really haven't made any progress on,

13 and I notice everybody else did a much better

14 job than we did on priorities. So -- which --

15 whenever we meet everything's a high-priority,

16 so it's hard to get anything down into

17 category three.

18   I mentioned that the search has

19 already been completed on the glycemic index

20 load, and the dental caries questions. Those

21 are fairly easy, and ones that are not going

22 to take a huge amount of new effort.

1   We did decide yesterday, and this

2   is why this is probably a little disorganized.

3   The way we're presenting this is that the

4   protein and health question is going to be the

5   first one that we're going to do -- that has

6   moved to the top of our search that we're

7   going to try to get done by end of May.

8   And then the question, obviously,

9   was how far are we going to go back, and we're

10 going to start, I notice, with Christine going

11 back to 1970 for her search. Sometimes it's a

12 little overwhelming.

13   So we're going to start with 2000,

14 go back to that, and if we get 3,000 hits,

15 then we'll -- that may -- you know, that

16 decision really hasn't been made. We're going

17 to start with that.

18   Cross-cutting topics.   I think

19 we're the cross-cutting kings. We're always

20 cross-cutting, so we like move to every group,

21 you know, we're like utility infielders. We

22 go anywhere we're needed.

 1   So satiety is one where a lot of

 2   other people can come to us. We're going to

 3   do a search on that, and we're going to write

 4   that section up.

 5   Food group questions. We have a

 6   lot of overlap with food groups, and I

 7   appreciate -- I haven't really acknowledged

 8   the people on my Committee that are taking the

 9   lead. Dr. Pi-Sunyer is taking the lead on the

10   glycemic index and some of the dietary

11   patterns. Cheryl is taking the lead on that,

12   and I know that there will be a lot of overlap

13   with the -- Shelly's Committee also, with both

14   food groups and dietary patterns.

15   And   then   the   macronutrient

16   proportions in weight and health, we had a lot

17   of discussion about that yesterday. It's

18   mostly in the energy balance, but some of the

19   questions about protein and carbohydrates,

20   some of those topics may get into our section

21   or in our -- you know, a lot of the reviews

22   will be the same type of reviews, the same

 1   literature, not sure exactly which section it

 2   will end up with, or if it will be in a bigger

 3   cross-cutting section.

 4   Any other discussion? Questions?

 5   MEMBER NELSON: Thanks, Joanne.

 6   This is Mim Nelson. A question about satiety,

 7   because you could look at satiety by first

 8   looking at the effect of proteins or -- and

 9   then looking at carbohydrates and look -- or

10   you could look at what type of dietary pattern

11   influences satiety in the most positive way.

12   And it seems like that may be a

13   better way than sort of reducing down the

14   elements, or maybe you have to do both.

15   That's sort of -- because I think satiety --

16   it's also so linked to situation that, you

17   know, as Brian has so eloquently showed. So I

18   think there's -- satiety is a tricky one.

19   MEMBER SLAVIN: Yes. I appreciate

20   that. Looking at that area, I think you have

21   to do the controlled -- you know, as we've

22   heard today, and I'm a total believer in the

1   diet food.

2   I love food. You know, I've

3   always loved food, so I think that food has

4   more than the components. No question about

5   it. But to do these studies, when you compare

6   macronutrients, usually you put things in a

7   drink or something and completely control

8   them.

9   And if you don't control

10 macronutrients, your results are meaningless.

11   I mean, like the satiety studies that -- that

12 -- where people don't give the same calories,

13 they don't get their carbohydrates or, you

14 know, things -- when they're comparing groups,

15 it's not very helpful.

16   So when you look at the way those

17 studies are done, typically, too, I think the

18 people's assessments are wrong. Because

19 lipids are actually pretty -- you know, they

20 don't make people full, and as dietitians we

21 always say, oh, the reason people like fat is

22 because they feel fuller.

1   Look at that literature, it's not

2   true at all. So I think there's that -- just

3   starting   with,   okay,   what   about

4   macronutrients, and then typically in fiber

5   studies, you know, you change the types of

6   fibers, the kinds of fibers, that's a huge

7   literature base.

8   And then you can do like energy

9   density studies, or you can do whole-food

10   studies. So it's -- you know, I agree with

11   you that it's not just the macronutrients,

12   other things do affect it.

13   MEMBER NELSON: Can I just add a

14   follow-up question?

15   MEMBER SLAVIN: Sure.

16   MEMBER NELSON: I appreciate that.

17   Back to the -- I know in the energy

18   subcommittee, and I may have misunderstood,

19   but it seems like Xavier is taking over the

20   sort of -- the influence of the range of

21   macronutrients on body weight, and then here,

22   looking at protein, carbohydrate -- like the

 1   individual things, it seems like, isn't that

 2   one question?

 3   I mean, like that should only be

 4   done once. I mean, if you're looking at the

 5   range of macronutrients on body weight, then

 6   you are looking at the subcategories. You

 7   don't have to do it individually and

 8   separately. Is that correct?

 9   MEMBER SLAVIN: Yes. No, we're

10   definitely --

11   MEMBER NELSON: It's just going to

12   be done once?

13   MEMBER SLAVIN: It's only going to

14   be done once.

15   MEMBER NELSON: Yes. Okay.

16   MEMBER SLAVIN: What we have it --

17   our outline yesterday, cross-cutting issues

18   and questions, low-carbohydrate, high proteins

19   and body weight. You know, it was originally

20   put together with that.

21   MEMBER NELSON: Okay.

22   MEMBER SLAVIN: That was our

1 question with our group. It does overlap.

2   MEMBER NELSON: Yes.

3   MEMBER SLAVIN: So it can be done-

4 -

5   MEMBER NELSON: It's going to be

6 done once.

7   MEMBER SLAVIN: -- in energy

8 balance.

9   MEMBER NELSON: Yes.

10   MEMBER SLAVIN: Macronutrient for

11 sure in energy balance. The liquid versus

12 solid in body weight.

13   MEMBER NELSON: Is different.

14   MEMBER SLAVIN: Yes. We're going

15 to do it just because we agreed to do it, and

16 also the non-caloric sweeteners and body

17 weight. But they -- I think they are all

18 examples of cross-cutting. They do fit more

19 than one subcommittee.

20   MEMBER RIMM: This is Eric. I was

21 afraid to turn my microphone on, thinking you

22 may give me a few of these responsibilities.

 1   I want to ask an issue that's come

 2   up in both the subcommittees that I'm on and

 3   that applies here quite clearly. And what

 4   you've done is pulled a lot of the questions

 5   that were asked in 2005, as well as establish

 6   ten new ones, which will give you a lot of

 7   work.

 8   And I don't know if there can be

 9   some discussion across everybody here, is what

10   do we do about those questions where, for

11   instance, for fiber and coronary heart

12   disease, the last technical report had very

13   nice listing of the 15 studies and showed that

14   it was clearly protective. Is it really worth

15   our effort for you to go back and to have --

16   do the NEL searches, find the three more

17   studies that have been done, and try to

18   rewrite all that?

19   At some point we should say, okay,

20   this -- this is an issue that we know, it's

21   done. There may be more data on it but, you

22   know, how much time do you have and how much

1 work, I would rather you spend more time on

2 things that are on satiety that haven't been

3 done. So --

4   MEMBER SLAVIN: And I think that's

5 like the glycemic index is a good example of

6 that, that there's some systematic reviews.

7 We feel like we can update it pretty quickly.

8   You know, because the 2005 was well-written.

9   It was well-researched.

10   MEMBER RIMM: So are we going to

11 pull the 2005 technical report paragraphs and

12 say, okay, here's -- we're copying them

13 directly and adding a paragraph on the end

14 saying, "Here's the latest?"

15   CHAIR VAN HORN: Right. Well, I

16 think we need to work with NEL on this, and to

17 -- you know, as we've said in other examples

18 for, you know, the AICR report just published

19 from --

20   MEMBER RIMM: Yes.

21   CHAIR VAN HORN: -- the, you know,

22 cancer people, and the 7,000 reviews they did,

 1 you know, that would be foolish to go back

 2 over that territory.

 3   MEMBER RIMM: Yes.

 4   CHAIR VAN HORN: So I totally

 5 agree that we should borrow from the existing

 6 reviews that have, you know, been --

 7   MEMBER RIMM: This is us, I mean--

 8   CHAIR VAN HORN: Right.

 9   MEMBER RIMM: I mean, this is

10 Larry. Larry wrote this five years ago. Is

11 he going to --

12   CHAIR VAN HORN: You want to go do

13 it again?

14   MEMBER RIMM: -- exactly cut and

15 paste things that he wrote before? And I

16 think that -- I think we should do that.

17   MEMBER SLAVIN: We need him to

18 sign a disclaimer first so they don't sue us.

19   MEMBER RIMM: Yes, right.

20   MEMBER SLAVIN: But otherwise we

21 can steal, right?

22   CHAIR VAN HORN: Right. Let me

1 add one more thing though, because especially

2 on fiber, in fact, as soon as you were done,

3 Eric, I was going to jump in with this issue

4 because this is one that I'm particularly

5 conscious of. Why? Because of the inadequate

6 intake in our American diet right now.

7   I mean, when we look at what are

8 the nutrients that are shortfall nutrients,

9 Americans eat half -- half as much dietary

10 fiber as they should. And we all know that if

11 we could flip it around and that people would

12 just consume adequate sources of dietary

13 fiber, a lot of the other things we're trying

14 to do would fall into place.

15   So in my mind, you know, I agree

16 with you completely that, rather than spending

17 additional time looking for yet another reason

18 to talk about how wonderful dietary fiber is,

19 we need to borrow from what the Nutrient

20 Adequacy Committee has been advocating, which

21 is let's show people how to add more dietary

22 fiber to their diet in order to achieve those

1 goals and make that happen.

2   I mean, that's been something on

3 the reports for the last ten years that I'm

4 aware of that we don't get enough dietary

5 fiber. We all know that but nothing's been

6 really done about that in terms of increasing

7 it. So to me that would clearly be a message

8 that needs to be made somehow better and more

9 effective in terms of improving that very

10 important component of the diet.

11   And as I said, the things that

12 keep company with that change could actually

13 help us in terms of achieving other goals.

14   MEMBER SLAVIN: And, you know, I

15 think that's a good example, too, with the ADA

16 evidence-based -- you know, because the

17 dietary fiber position paper we just wrote and

18 published in October of 2008. So there's a

19 ton of work that's already done. You just use

20 that. And that's why whenever we get into, we

21 can only use certain data or, you know,

22 there's got to be a randomized trial or

1 anything like that.

2   I think each of these questions is

3 going to have to line up fairly differently.

4 Because if there is a systematic review,

5 great, that helps us out a lot. If there's

6 nothing, then, you know, like we'll have to

7 start more from scratch. So each of these

8 searches is going to look real different.

9   MEMBER RIMM: But on a -- this is

10 Eric again. On a related note, you're not

11 going back to all the questions that were

12 there in the 2005 report, so should we assume

13 that the three that you didn't go back to fall

14 off the map and aren't important?

15   I think that's what I'm struggling

16 with. Some of the things that we're doing, I

17 know we would find the same answer if we

18 looked again. Is it worth having them there,

19 or just getting rid of them and saying, okay,

20 we don't have to go through that again, even

21 though --

22   MEMBER SLAVIN: You mean like

1   dental caries?

2   MEMBER RIMM: You don't want to --

3   yes. Right. Do you need to drive that point

4   home again. I guess so. Can we just have

5   conclusions -- at the end have conclusions

6   we're carrying forward from the last report,

7   as opposed to having to go through and

8   document every one of them?

9   MEMBER PI-SUNYER: Eric, I don't

10 think we've resolved this issue about how to

11 write this up. I mean, I agree with you. I

12 mean, I wrote the glycemic index stuff last

13 time. I could just grab it and put it back in

14 verbatim.

15   But we really haven't resolved

16 that, how we're going to do that, are we going

17 to put it in quotations, or are we going to

18 say "This is what we said," and then add a

19 paragraph or --

20   MEMBER RIMM: I think we all need

21 to do the same thing, whatever it is, across

22 each chapter, and that's why I brought it up

1 now before I have to give my talk and say

2 that.

3   MEMBER APPEL: Well, I am a little

4 bit out of the -- I did update the water

5 chapter, and my fundamental premise was that

6 like this is a textbook, you know, and this is

7 version two. We did version one, and we

8 really fine-tuned that text, you know,

9 massaged it to, you know, on both the

10 conclusions as you know, we tortured ourselves

11 in the text.

12   Why rewrite everything, you know,

13 and it's just a matter of figuring out how we

14 describe the new text, the new conclusions,

15 the grade of evidence and the additional

16 literature and, you know, maybe -- I have one

17 prototype we could use but, you know, you

18 might want to not look at it and think about

19 how you would do it, and then we'll take the

20 best of both sides and make it --

21   VICE   CHAIR   FUKAGAWA: Naomi

22 Fukagawa.   So I think the question about

 1 satiety and the components of the diet that

 2 influence behavior and satiety is extremely

 3 important. But the field of the connection

 4 between the gut and the brain is also a field

 5 that's really, you know, exploding. How do

 6 you propose to approach, you know, melding the

 7 two areas since it could truly be overwhelming

 8 because we don't want to just do protein-

 9 carbohydrate, because we want whole foods, et

10 cetera? Just a thought.

11   MEMBER SLAVIN: Joanne here again.

12   Thanks, Naomi. I live in this world, so yes.

13   You know, I think the prebiotics-probiotics

14 will -- that is another kind of new topic to

15 think about where you get into the gut and

16 brain reactions, but also, yes, for sure,

17 satiety and the gut hormones and huge

18 literature base.

19   I think it, you know, when I -- I

20 always don't want to get too far off of

21 dietary guidance because each of these topics

22   can, you know, quickly expand to a huge

1 literature base and not -- at the end of the

2 day I don't know how much information it will

3 give us to help people eat better.

4   So I guess it could -- you know,

5 for the satiety for sure, that if you look at

6 the literature, lots of things are affecting

7 it besides just the macronutrients, fiber, gut

8 fill, feedback from gut hormones.

9   So I guess that could be explained

10 in the beginning section.   You know,

11 summarized just so people understand it's

12 fairly complicated.

13   CHAIR VAN HORN: Right. I think

14 that issue and then, Mim, you'll be next. But

15 I think that the issue that you're just

16 raising is the one that we keep coming back to

17 which is, we have to establish up front in our

18 report what we did and why we did it.

19   And the decision-making process is

20 something that collectively I think that's

21 what we're charged to do. So, you know, I

22 don't think there's any one right way or wrong

 1 way to do this. We are now engaging in a new

 2 -- this will be the first time, really, that

 3 we're basing everything on an evidence base

 4 that was not previously available. So we're

 5 breaking new ground even in that.

 6   But in addition, as we've said

 7 over and over every time we meet, you know,

 8 we're presenting this report through the

 9 filter of an obesity epidemic and an obese

10 environment that we are taking very seriously

11 as we go forward with these recommendations.

12 And so I think as we begin to make decisions,

13 I think that will be one of the considerations

14 we make over and over again, is how is this

15 going to help us with our obesity problem?

16 How is this going to help us in making changes

17 in that regard.

18   And I think if we kind of keep all

19 those factors together -- and I feel it

20 already. I don't know if you do, but now that

21 we've met this number of times, I feel that we

22 are moving closer to some decisions about some

1   of these programmatic decisions. And as the

2   expertise comes forth in terms of the

3   components within each question, I think,

4   again, as I said to Cheryl, we have to rely on

5   the body of experts that are dealing with it

6   to help make some of those decisions.

7   And I think -- you know, I agree

8   we have to come up with some standardized

9   approaches. We can't do one thing in one

10 group and another thing in another. But I

11 think that will become abundantly clear. None

12 of us want to review data that has already

13 been really well-reviewed, and we do want to

14 take advantage of new data that might help us

15 go forward in the time ahead.

16   Mim.

17   MEMBER NELSON: Just a follow up

18 on that. This is Mim Nelson. Larry, I think

19 I'm -- and maybe Linda, this is what you're

20 just saying, I think the way to deal with

21 those questions that are basically the same

22 questions, and the evidence is pretty much the

1 same, but there may be some tweaking, as you

2 said, you just -- you update it, you edit it,

3 but you don't need a whole NEL search.

4   And I'm thinking of fiber in

5 particular. Joanne, I think that, you know,

6 one of the important things that's different

7 in fiber, and you certainly know this area

8 better than I do, but it's fiber in foods not,

9 you know, just sprinkling fiber that makes the

10 difference, you know.

11   And that's actually a difference,

12 and that will be important to sort of

13 highlight. And so I think it's -- I mean, I

14 don't think you just necessarily -- that we --

15 I can't imagine we are just going to lift, you

16 know, three columns and it's exactly the same,

17 put it in italics, and this was from -- it's -

18 - you know, that there is some editing, but

19 understanding that there's not much

20 difference, and that's fine to say.

21   CHAIR VAN HORN: Rafael.

22   MEMBER PEREZ-ESCAMILLA: Yes. One

1   of the public comments from the American

2   Dietetic Association has been do we need to

3   revise the Guidelines every five years, or

4   should it be done every ten years. So I think

5   that the outcome of this issue, and it's going

6   to help a lot to answer that question because

7   if it ends up being a very similar report to

8   the 2005, it would suggest to me that, you

9   know, maybe five years is not the right amount

10 of time.

11   But given all of the discussions

12 that we've had, I don't think that's going to

13 be the outcome. I think there's going to be

14 quite a bit of new information.

15   CHAIR VAN HORN: Right.

16   MEMBER PEREZ-ESCAMILLA: And

17 approaches.

18   CHAIR VAN HORN: Right. And to

19 that very point, I agree with you completely,

20 Rafael, and in the discussion we had in one of

21 our subcommittees, I don't remember which one,

22 that issue came up as being if related to the

 1   access to the existing data, in terms of what

 2   the NHANES data show currently related to

 3   actual intake.

 4   And our strong suggestion, as we

 5   go forward, is that if it's going to continue

 6   to be every five years, then the subsequent

 7   group needs to be able to look at the progress

 8   that was made since the other report and be

 9   available -- have available to them the

10   current intake of the American public so that

11   a new guideline can be made on the basis of

12   what people have done since the last report.

13   If that can't be done, then ten

14   years probably is the right time frame. But

15   if it can be done -- and I don't see why it

16   can't be, given the current electronic age,

17   then that would be the strong recommendation.

18   And as I said about dietary fiber,

19   we see it. It's right in front of our eyes.

20   People don't eat enough dietary fiber. That's

21   a huge teachable moment here that, you know,

22   can help us flip this around. And so I think

1   that is the beauty of gathering together,

2   taking the evidence, but also looking at what

3   the problems are, and how to go about fixing

4   them.

5   Other thoughts, comments about

6   anything that we've said this morning, because

7   we are rapidly approaching the lunch hour?

8   Any other topics, cross-cutting or otherwise?

9   All right. Well, thank you all

10 for a very, very lively discussion. We will

11 adjourn now until 1:30, 1:15. Maybe we can

12 start at 1:15, since we're breaking a little

13 early, and we'll pick it up with Eric and

14 alcohol.

15   So thank you.

16   (Whereupon, the above-entitled

17 matter went off the record at 12:00 p.m. and

18 resumed at 1:27 p.m.)

19   CHAIR VAN HORN: Welcome back. We

20 are delighted to be resuming our discussion

21 today in regard to the updates from the

22 various subcommittees of the Dietary

 1 Guidelines Advisory Committee, and now we will

 2 be hearing Dr. Eric Rimm fill us in on

 3 ethanol.

 4   MEMBER RIMM: Thank you. Before I

 5 start, I'd like to thank my colleagues at the

 6 USDA and HHS, which have been instrumental in

 7 putting this together.   Rachel Hayes and

 8 Patricia Guenther who -- as well as a few

 9 others, but thank you, Rachel, for pushing us

10 along and putting together a lot of the

11 background for the talk today.

12   So, actually, maybe I'll -- I'm

13 going to change a little bit about what I was

14 going to say based on the conversations we've

15 had in the last two or three hours about what

16 to do about guidelines that were made in the

17 past which may or may not change. So I wanted

18 to quickly preface some of what we're doing

19 now and how we're going forward based on what

20 was said in 2005, and one of the first

21 questions they asked was among persons who

22 consumed four or less drinks per day, what is

1   the dose response between alcohol and health.

2   And this was the answers or the

3   conclusions that were made, that one to two

4   drinks per day lowers total mortality. One to

5   two drinks lowers CHD, and one drink slightly

6   increases breast cancer. And these actually

7   are unlikely to change, and so at our meeting

8   yesterday which was actually incredibly

9   helpful, I mean, I think the decision was that

10 we don't really need to pursue this further.

11   But in light of what Joanne's

12 doing, I think maybe I will pursue this

13 further myself, and just summarize any new

14 evidence that has been published in the last

15 four or five years which I assume will support

16 this. Most of what I've read will continue to

17 support this. So I'll update what was said

18 before, but I don't think we're going to push

19 the NEL database to try to, you know, come up

20 with a new review of these three topic areas.

21   However one thing that is

22 different between the Dietary Guidelines and

1 between NIAAA's recommendation is that the --

2 I think we should pursue looking at drinking

3 patterns.   There has been a fair bit of

4 research I know for a fact in the last five

5 years, but also even previous to that in the

6 last five to ten -- ten to 15 years on

7 drinking patterns influencing alcohol intake

8 and health.

9   So if you go back and look at the

10 2005 Dietary Guidelines I have a quote here

11 from the actual Dietary Guideline which says,

12 "This definition of moderation is not intended

13 as an average over several days, but rather as

14 the amount consumed in any single day."

15   So -- which means that if you --

16 let's use males as an example. If you drink

17 and do so in moderation, that would be two

18 drinks a day or less. But that's meant to be

19 that day.

20   And if you look at NIAAA's

21 recommendation, which I'll -- I don't have it

22 on the slide, but I'll just read from my

 1   computer. It means that a man should drink no

 2   more than four drinks in any one day, but no

 3   more than 14 in any one week, which means that

 4   you are allowed to sort of space out your two

 5   drinks per day over the course of the week, as

 6   opposed to only having two on any given day.

 7   And I know that we all can sort of

 8   joke about that and think about our own

 9   personal experiences, or we can actually look

10   at what the literature shows us. And I think

11   there are -- everybody knows that we didn't

12   intend for you to have all 14 drinks on Friday

13   night.

14   But as I actually remember back to

15   the first time I talked about this nine months

16   ago, there is now a body of literature to

17   suggest that having it on three or four days

18   per week may give similar benefits.

19   So what I will probably be doing

20   is updating those key areas which I talked

21   about, heart disease, mortality and breast

22   cancer, with respect to drinking patterns and

1   potentially come up with different -- slightly

2   modified dietary guidance which hopefully will

3   be more in line with NIAAA as well as other --

4   other bodies that have talked about alcohol in

5   moderation.

6   So we sort of reviewed the areas

7   where we thought there would be the lowest-

8   hanging fruit and the most literature on

9   drinking patterns and that would be in

10   cardiovascular disease mortality, blood

11   pressure, diabetes. And because patterns are

12   a little tricky when it comes to accidents and

13   falls and trauma, I thought it was important

14   to include this because even though someone

15   may, a male, may be drinking up to four drinks

16   in any one day, a woman up to three drinks in

17   any one day, that actually could be associated

18   with increased risk of falls and trauma and

19   accidents.

20   So we did our search and sort

21   plan, we went through and I picked 1995 as our

22   arbitrary date to go back to. Joanne picked

1   2000. Christine picked 1970. I picked 1995

2   mostly out of my sort of knowledge of the

3   data, that it wasn't until the mid-1990's,

4   maybe a little bit before, before people

5   really   started   doing   rigorous   long-term

6   studies   on   drinking   patterns   in   chronic

7   disease.

8   So there were some studies in the

9   Eighties on binge drinking and hemorrhagic

10   stroke, but we'll see what we get here, and if

11   we like, we'll go back further if we feel like

12   we've missed something.

13   What is the relationship between

14   alcohol intake and weight gain? This was the

15   one that we thought we actually could start

16   on. It was something that was relatively

17   well-defined. You could come up with a PICO

18   terms for this and sort of get going, and

19   hopefully have this as our chapter -- or as

20   our summary and conclusion by the end of May

21   or early June.

22   This   is   something   that   the

 1   previous guidelines did take on as a question,

 2   as one that they got to the end and said

 3   there's not enough data. There's no evidence

 4   to suggest that drinking in moderation is

 5   associated with weight gain.

 6   There have been a lot of studies

 7   in this area. It's also an area where there

 8   haven't been long-term trials, obviously, but

 9   we also felt that the 7200 cross-sectional

10   studies that were out there that were probably

11   going to be picked up by the NEL group would

12   not be worth reviewing because there are so

13   many reasons that people start and stop

14   drinking, and if one of them is related to

15   body weight, cross-sectional studies on

16   alcohol and body weight wouldn't be that

17   useful.

18   And since there are a number --

19   actually a lot more prospective studies now on

20   alcohol and weight gain, I thought we would

21   review those. And as Larry pointed out, even

22   those are complicated because of just the many

 1   different ways you can analyze prospective

 2   data where you have repeated measures of

 3   alcohol and body weight.

 4   Nonetheless, we'll take that up as

 5   sort of our first charge. And also, we're

 6   also going to have some summaries from NHANES,

 7   which we'll be looking at, specifically the

 8   contribution of alcoholic beverages relative

 9   to other major sources of discretionary

10   calories among those who consume alcohol. So

11   that may be part of our chapter, but it will

12   be descriptive in nature.

13   We also wanted to look at how

14   effective -- how effective are predictors of

15   alcohol-related disorders. There are always

16   the sort of the list of disclaimers of who

17   should not drink, and we wanted to see if we

18   could examine that in a little bit more detail

19   to see if there are better predictors of who

20   may go on to drink at an unhealthy -- in an

21   unhealthy range, either in their midlife or in

22   older ages.

 1   And, again, this is probably a

 2   pretty long literature. We talked to -- we

 3   had a conference call with people from NIAAA

 4   who pointed us to some really nice resources

 5   that they have now on a new NIAAA website that

 6   was launched in February of 2009. So we may

 7   lean on that a bit for this, and plus we'll do

 8   a search back to 1995.

 9   This is the one where I've turfed

10   a bit off to Joanne and others, and since

11   she's not listening, it's perfect.   She

12   accused me of not listening, so I wanted to

13   catch her up for that.

14   What is the relationship between

15   consuming alcoholic beverages and macro and

16   micronutrient profiles in overall metabolic

17   consequences? And this one started out as

18   many different questions that we ended up sort

19   of shrinking into one to make it a little less

20   work.

21   There's issues related to alcohol

22   and folate status, issues related to alcohol

 1 and glycemic index of the diet, and there's

 2 issues related to alcohol in altering

 3 macronutrient profiles.

 4   So we put this on hold, and I

 5 guess we could take parts of it back or we

 6 could help you out, Joanne, or help out the --

 7 help out Shelly, if necessary, if it becomes

 8 part of it. But we are going to do at least

 9 an NHANES analysis to look at how much energy,

10 sugar or other carbohydrate, protein, and fat

11 is provided by alcoholic beverages, among

12 those who consume beer, wine and spirits.

13   We will have sort of, I think, the

14 standard equivalency as part of our Guidelines

15 showing that the ethanol in beer, wine and

16 spirits is about the same. However, there is

17 the point that not everybody drinks beer

18 straight or wine straight or distilled spirits

19 straight, and that there may be other calories

20 that come along with -- well, I guess wine,

21 you almost always have as wine.

22   But I guess if you have wine

1 coolers, maybe not, if there's added sugar

2 there and distilled spirits. If you have a

3 White Russian, it comes with milk and

4 calories, and I guess beer you usually drink

5 alone.

6   But we -- we actually have the

7 ability to -- we have the ability -- not

8 "alone." I meant it's not mixed. It's not

9 mixed with other calories.

10   So with the NHANES data, we

11 actually have some ability to look at on

12 specific days where it was measured, where the

13 other calories came from. So that will be, I

14 think, more of an informative descriptive

15 analysis than anything that answers any

16 specific question.

17   So this is our action item in

18 order of the questions, what is the

19 relationship between alcohol intake and weight

20 gain, which we'll be starting on. Question

21 one, again, is the drinking patterns.

22   Question three is the how

1   effective are predictors of alcohol-related

2   disorders, which will be both using NIAAA's

3   website as well as the new search, and finally

4   question four, which will be tabled and passed

5   to energy balance.

6   I think that's it. Yes. So I

7   thought that would be quick, and I'm more than

8   happy to take questions.

9   CHAIR VAN HORN: Thank you, Eric.

10   Just to set the record straight, in

11   Pittsburgh they drink a shot in a beer. I

12   just wanted you to know that.

13   All right. Cheryl.

14   MEMBER ACHTERBERG: This might be

15   for the future, but if some modeling is done,

16   it might be interesting to look at the

17   potential of legalizing alcohol at age 18, and

18   then what impact would that have on the diet

19   for those 18 to 21 year olds, if -- if you

20   made certain assumptions and put that in

21   there.

22   MEMBER RIMM: I'm guessing that is

1   way beyond the purview of the Dietary

2   Guidelines, but --

3   MEMBER ACHTERBERG: I said for

4   future.

5   MEMBER RIMM: Yes. No, I mean,

6   that's -- and I know that's been kicked

7   around. There's lots of governors and things

8   like that who are trying to change the -- or

9   potentially change the drinking age.

10   Yes. Okay. Well, I mean, I guess

11   it could be something that we have in our sort

12   of recommendations for future study. I know

13   people are studying the impact of alcohol

14   consumption if you change the guideline. I

15   don't think anybody's looked at the impact of

16   what happens if 18-year-olds start to drink

17   and do they eat more pizza and things like

18   that.

19   Oh, sorry.   If 18-year-old's

20   legally drink, does that impact their --

21   right, diet and pizza, doughnut and pizza

22   consumption, correct.

 1   CHAIR VAN HORN: The other

 2   question that I would just raise, in terms of

 3   our ongoing discussions about discretionary

 4   calories and, you know, the concept of where

 5   those calories might come from, would you

 6   think that that topic related to the caloric

 7   intake related to alcohol might be something

 8   to consider in terms of weighing and

 9   balancing, you know, weight control in terms

10   of alcohol intake?

11   MEMBER RIMM: Yes. I mean, I

12   think the -- our biggest challenge will be to

13   see if we can come up with something which we

14   feel comfortable with for a conclusion like

15   the alcohol and weight gain because that

16   obviously will tie in with energy balance.

17   And if -- if we are comfortable enough, it's

18   not like there's suddenly magically going to

19   be 15 cohort studies that all descend upon us

20   that say there's no association.

21   But I know there is a reasonable

22   amount of evidence on moderate consumption and

 1 weight gain, so you know, I hate -- I don't

 2 think I want to go beyond the Guidelines where

 3 we are right now, in terms of drinking more,

 4 although I guess you could make the argument

 5 that if we changed the Guidelines or altered

 6 the Guidelines to be more in line with

 7 patterns of consumption described by NIAAA on

 8 those days where people have -- men have four

 9 drinks and women have three drinks, that

10 actually could contribute a fair bit to their

11 calories on that day, up to 15 or 20 percent.

12   So I think that's a good point. I

13 think it's probably worth at least having some

14 comment on that or some discussion on that.

15   CHAIR VAN HORN: The data that

16 I've seen observationally suggests that, you

17 know, alcohol keeps company with more

18 saturated fat calories, more sodium calories,

19 et cetera.

20   So it's not only the alcohol, it's

21 the company it keeps, and the fact that, you

22 know, disinhibition, the more alcohol you

 1 drink, often accompanies, you know, selection

 2 of foods that you might not otherwise choose,

 3 so if indeed weight control is your goal, this

 4 whole concept of discretionary use of calories

 5 knowing that other calories you eat along with

 6 that, you know, could undermine your attempts.

 7   MEMBER RIMM: Yes. I mean, that's

 8 -- I have seen some of that literature, too,

 9 and it's a challenge because, you know,

10 there's a hundred prospective studies saying

11 that alcohol in moderation lowers risk of

12 heart disease.

13   So if it's coming with a lot of

14 saturated fat and sodium, I don't know if

15 that's contributing enough to the overall

16 average intake of the diet to impact heart

17 disease because in those studies you control

18 for diet or you don't control for diet, it

19 doesn't make any difference.

20   So, you know, I think the

21 hypertension research may be a little bit

22 trickier because clearly at the high end there

1 is an association between alcohol and

2 hypertension, and maybe some of that is

3 disinhibition at four drinks a day and you're

4 eating lots of sodium.

5   But in light consumption, if

6 anything, it lowers blood pressure because of

7 vasodilation and other factors. So, I mean,

8 there is literature. I guess it's probably

9 worth looking into it, though.

10   MEMBER APPEL: This is Larry

11 Appel. I'd like to follow up on what you

12 said, Linda, about sort of the association of

13 other nutrients. I was one of the people that

14 asked Gary to table question four, and I

15 wanted -- I think it's relevant to discussions

16 about other nutrients.

17   I said, you know, we could look

18 at, you know, the nutrient intakes of

19 nondrinkers, people who are one drink a day,

20 two drinks a day, four drinks a day. But, you

21 know, I said, well, that's -- you know, that's

22 interesting but, you know, it's almost like

 1 saying, well, what are the nutrient intake of

 2 people with low saturated fat versus middle

 3 versus high or, you know, the same thing is

 4 like low versus middle versus high, any other

 5 nutrient.

 6   And is it really that relevant

 7 when we're saying, you know, I think most

 8 people believe that you can consume one or two

 9 drinks and eat a healthy dietary pattern,

10 which is the issue.

11   So I felt that question four

12 really might not just be tabled, but just

13 eliminated or part of it, but I don't want to

14 -- I'd be interested in hearing what other

15 people have to say about this.

16   MEMBER RIMM: I think that, to

17 Linda's point, I think it is a good point,

18 just because if you eat low-saturated fat it

19 doesn't have a biological impact on you that's

20 going to impact diet and your dietary intake

21 of other factors.

22   Alcohol clearly does lead to

1 disinhibition, so there is -- the issue is

2 while you're drinking the alcohol, does it

3 impact your diet, and there is literature on

4 that. So, I mean, again, I don't know if it's

5 going to necessarily rise to the level of a

6 NEL search unless we really think there's

7 enough out there or unless the -- you know,

8 Shelly or Joanne thinks that we should address

9 it because they can't address it in their

10 sections.

11   MEMBER SLAVIN: This is Joanne

12 Slavin. I just think of all of alcohol as

13 discretionary calories. It's the only one

14 that really meets that.   Nobody needs to

15 consume it, so everything else, fat,

16 carbohydrates, protein, are not discretionary.

17   You know, a certain amount of them have to be

18 included.

19   So alcohol's a bit of an out --

20 you know, it hangs out -- you know, it

21 outlies, because you know, it's not necessary,

22 so it's all discretionary. It's the perfect

 1 example of what's discretionary. So and I

 2 think tabling it is a good idea. I would

 3 agree with that.

 4   MEMBER PEARSON: Well, just to --

 5 also just -- this is Tom Pearson. The other

 6 thing, obviously, just to reemphasize here is,

 7 is that all of this is really dealing with the

 8 individuals who are drinking four or less

 9 drinks per day, and there's just the

10 recognition that all of the health data are

11 bad of that, so we really -- I'm not sure if

12 you said that specifically, Eric, but I just

13 wanted to make sure that that assumption was

14 here, and so the issues of what is likely to

15 change are in that range of consumption rather

16 than heavy alcohol.

17   MEMBER RIMM: Well, there still is

18 data on disinhibition below five drinks a day.

19   I mean, people still -- potentially -- again,

20 I'm not speaking from personal experience.

21 I've heard that there -- I mean, there is --

22 it can impact your diet even when you're not

 1   drinking --

 2   MEMBER SLAVIN: Hey, Eric, we all

 3   know you're from Wisconsin, so, come on.

 4   MEMBER RIMM: So the -- actually,

 5   the other point that I didn't bring up, which

 6   is what I should have, based on some things

 7   that were said earlier is that we -- we

 8   probably will lean a bit on the WCRF report

 9   for alcohol and cancer.

10   It's not that I've left that out,

11   it's just that they've done the world's best

12   review on alcohol and every possible cancer

13   that was published only six months ago. So

14   rather than, you know, putting more weight on

15   the NEL database to do that over again, that

16   we'll -- we'll lean on that a fair bit.

17   CHAIR VAN HORN: I just -- just to

18   mention one more time, the caloric issue

19   because, at minimum four drinks would be, at

20   minimum   400   calories,   and   could   be

21   considerably more than that depending on what

22   you're drinking and what you're concocting

1   within that.

2   And, again, as we were talking

3   about beverages, this is another one of those

4   occasions where calorie consumption could

5   really be significant and by most people's

6   standards, not even recognized as being such a

7   major contributor, not only because of the

8   calories from the alcohol itself but, again,

9   the disinhibition that accompanies it. So I

10 think that's the only point I'm trying to

11 make.

12   Rafael.

13   MEMBER PEREZ-ESCAMILLA: Rafael

14 Perez-Escamilla.   Eric, if I understand

15 correctly, the way you are defining alcohol

16 intake patterns is based on the frequency, the

17 number of drinks?

18   MEMBER RIMM: Yes. It's based on

19 average. I mean, before everything was based

20 solely on average and not on frequency, and

21 now we'd like to take frequency into account

22 by looking at alcohol patterns which is

1   frequency and average.

2   MEMBER PEREZ-ESCAMILLA: Okay.

3   Because when I hear that word "patterns," it

4   also brings to mind the issue of the type of

5   drink, and I know from your previous

6   presentation that the benefit has been found,

7   irrespective of the type of drink as long as--

8   MEMBER RIMM: Correct.

9   MEMBER PEREZ-ESCAMILLA: -- it has

10   ethanol. But I still think that understanding

11   the dietary intake patterns associated with

12   different types of drinks, and even within

13   wine, for example, red versus white. So it's

14   a whole issue of what are people eating with

15   different types of drinks, you know, hard

16   liquor versus beer, versus wine, red versus

17   white wine.   I think that descriptive

18   information may be -- may be useful to know.

19   MEMBER RIMM: Yes. And I think we

20   will have some of that from NHANES. I think

21   it's only descriptive in nature, though. It

22   doesn't -- it doesn't lend itself to a

1 guideline.

2   It's not like I'm saying, "Well,

3 if you drink red wine, then therefore, you

4 should have this type of food." I think it --

5 you know, if this was a research article it

6 would be interesting in that we could describe

7 the different patterns in this country. And

8 people have done that here and in Mexico and

9 in France and other places, and there are

10 distinct differences in how people eat based

11 on what their choice is, their beverage choice

12 is, and it's dependent on culture.

13   So, yes, I mean, it could be part

14 of a description. I just don't think it will

15 change. Well, maybe it will change, you know,

16 our discussion of calories, but I don't think

17 it will necessarily change the Guidelines on

18 alcohol.

19   MEMBER PEARSON: I haven't looked

20 at this for a few years, but I think some of

21 the patterns are more represented with certain

22 beverages than others, so that I think you

 1 probably, as we look at the patterns that Eric

 2 -- as he's defining, you're probably going to

 3 have to look at the type because there will be

 4 more binge drinkers in, you know, the one or

 5 two glass of wine day drinker is going to be

 6 fundamentally different than a person who

 7 binge drinks with wine, who's going to be from

 8 fundamentally different than the distilled

 9 spirit group. So I think you're going to

10 probably have to get into that anyway with the

11 patterns.

12   MEMBER RIMM: Yes. I mean, that's

13 -- I hate to say it, but that's a bunch of

14 Americans sitting around a table. That's a

15 bit of a stereotype here. But the world's

16 literature, if I'm going to summarize the

17 world's literature on heart disease, diabetes,

18 breast cancer, you know, it turns out there

19 are people that are binge drinkers of red wine

20 that live in France, and there are people that

21 are binge drinkers of spirits in Finland and

22 binge drinkers of beer in Germany.

1   So the literature on chronic

2   disease is going to be across the board. So,

3   you know, we will have to see what it tells us

4   in terms of patterns.

5   CHAIR VAN HORN: Okay. That is

6   excellent. A really thorough job. Thank you

7   so much. I think we can move along and talk

8   now about fatty acids.

9   Tom.

10   MEMBER PEARSON: This is Tom

11 Pearson on behalf of our subcommittee that

12 we've renamed Fatty acids and Cholesterol. I

13 don't know if she stuck that in there.

14   And I just want to recognize my

15 subcommittee colleagues, Roger Clemens, Eric

16 Rimm and Naomi Fukagawa, and particularly

17 recognize Shirley Blakely who keeps us all

18 sane, or at least heading in the right

19 direction, and certainly the help from her as

20 well as the -- our NEL colleagues, et cetera,

21 we've -- with our working group, I've had a

22 webinar, I think a very useful webinar on

 1   omega-3 and omega-6 fatty acid ratios.

 2   At our face-to-face meeting Roger

 3   Clemens gave us a very useful update at the

 4   Experimental Biology Symposium on some issues

 5   relative to types of fats and outcomes. And

 6   so I think we've had the opportunity to have

 7   considerable input to this issue of fatty

 8   acids and cholesterol.

 9   So, if I can figure out how to do

10   this, the -- so we have five questions. I

11   think one of them is not a NEL question.

12   We're actually going to show some of those

13   data today.

14   We have -- the next two questions,

15   two and three we would have as our priority

16   one questions, and questions four and five

17   would be our priority two questions. So, kind

18   of did it that way.

19   And so, you see here the first

20   three questions was the evidence for the

21   implementation of the Dietary Guidelines for

22   fats, going back well before 2005, in fact.

1   The second is what is the

2   influence of dietary fat and cardiovascular

3   disease and other health outcomes, and the

4   third is what dietary components affect plasma

5   LDL, HDL and non-HDL cholesterol.

6   And question two and three have

7   considerable overlap with the 2005 Guidelines.

8   Just a comment at this point, that non-HDL

9   cholesterol was used instead of triglycerides

10   since it does have some target values in the

11   Adult Treatment Panel of three guidelines in

12   terms of therapeutic targets and therefore

13   possible goals for guideline implementation.

14   And so I'm going to be talking

15   about each of these questions. Just in terms

16   of the other two questions, the relationships

17   between consumption of n-6 and n-3 fatty acids

18   and the health outcomes, and then an area of

19   discussion that we'd like to bring before the

20   whole group for certainly some resolution,

21   associations between -- of consumptions of

22   fats from specific foods.

1   This is a very careful wording, so

2 we're really interested in not just foods with

3 fats, but fats from foods -- there's a

4 distinction.   And so there are three

5 particular foods, nuts, fish and chocolate

6 that have enough data to talk about them in

7 terms of specific, in which the fats from

8 those foods may, in fact, have a meaningful

9 health outcome.

10   So, I did want to spend a little

11 bit of time with this first question which is

12 really a question from a number of the

13 databases that we have available, and I want

14 to thank Pat Guenther and others for pulling

15 these together for us.

16   And so what's the evidence for

17 implementing the Dietary Guidelines for fats,

18 and the question is: How did intakes of fat

19 and cholesterol by Americans change between,

20 say, the late 1970's and the latest data we

21 have available, 2005 and six, according to our

22 dietary surveys, how did they change in terms

1   of the absolute amounts consumed, and how did

2   they change relative to the distributions of

3   macronutrients that is a percent of calories

4   as fats.

5   And I think there's probably a

6   back drop here to talk about.   The 2005

7   Guidelines certainly had particularly focused

8   on atherosclerotic cardiovascular disease,

9   coronary   heart   disease   and   stroke,

10 particularly as issues related to dietary fats

11 and   cholesterol,   and   that's   certainly

12 appropriate.

13   It's probably also appropriate to

14 say that despite mortality reductions in those

15 diseases, the incidence data, in new cases of

16 those data, I think -- and they've been just

17 reviewed as recently as the cardiovascular

18 pulmonology meetings suggest really no change

19 in the incidence of these major killers in the

20 United States since certainly 1990 and

21 possibly even 1980.

22   Certainly   we   had   tremendous

 1   reductions in both incidence and mortality

 2   from, say, 1968 to, well, say, 1990, but the

 3   mortality reductions since 1990 had to do more

 4   with the reductions of case fatality rates

 5   than really the decrease in incidents.

 6   So, we're doing a better job in

 7   keeping people alive and converting these

 8   diseases from fatal, acute diseases to chronic

 9   debilitating diseases, and the attendant

10   health care costs.

11   I think also is the suggestion of

12   cereal, and some of this is NHANES data as

13   well, is the suggestion that blood cholesterol

14   levels in the United States have not changed

15   since, say, 1990, and some of the changes that

16   have occurred, particularly in men are

17   probably attributable to pharmacologic agents,

18   certainly HMG-CoA reductase inhibitors are the

19   number one class of prescribed drug in the

20   United States, and so there is some non-

21   dietary factors dealing with that as well.

22   So, in that backdrop, then let's

1   look at the data talking about the intake of

2   fats and cholesterols in the surveys that we

3   would say would be most representative of

4   Americans.

5   And, as you can see the surveys

6   across. So, there's really quite a bit of

7   data. Look at the numbers, as you can see

8   them, and obviously these have been thought to

9   be   representative,   statistically

10   representative samples in the United States.

11   Having   said   that,   we   will

12   recognize the methodological vagaries of

13   dietary assessment going forward, and I think

14   what our conclusion was, is this is the -- the

15   closer you got to the right margin, the more -

16   - the more certainty you had of -- of

17   methodological consistency.

18   In other words, those on the left

19   side, particularly the NFCS had a number of

20   methodologic differences, and I think Eric had

21   pointed out particularly the undercounting of

22   calories in -- in the 1977 surveys, and

 1 perhaps even the 1989 surveys.

 2   Having said that, and to be

 3 honest, et cetera, I think as you go along,

 4 there's relatively little evidence to suggest

 5 in terms of absolute amounts that the amount

 6 of fat consumption has done much in the United

 7 States, possibly even gone up.

 8   That's the second line there. The

 9 saturated fat, again, in terms of grams --

10 thank you very much. -- also has been I think

11 really quite flat, again, if anything has gone

12 up, the polyunsaturated fats may actually have

13 increased quite a bit, and the monounsaturated

14 fats have perhaps increased somewhat as well.

15   For the dietary cholesterol in

16 terms of milligrams per day, I think what you

17 can see is -- is certainly, since, say 2000,

18 very little changed and perhaps a little bit

19 of an increase since, say, the 1990's, et

20 cetera.

21   And then what you can also do is

22 then look at these in terms of percent of

 1   calories and their -- you can recognize that,

 2   and particularly the bottom line there, maybe

 3   asking you to go down to the bottom, the

 4   energy kilocalories you can see, as we know

 5   with our obesity epidemic, there's been this

 6   increase in -- in calories over this time

 7   which, of course, is part of the denominator

 8   for the percent of calories from fat.

 9   Having said that, I think these,

10   with the exception of probable decrease from

11   the late 1970's, these have been remarkably

12   stable in terms of percent of calories from

13   total fat since, say, 1990, and also with

14   saturated fat around eleven percent or so over

15   this period of time.

16   Larry.

17   MEMBER APPEL: Yes.   Eric has

18   pointed out it's -- this is a pretty broad age

19   range, too.

20   MEMBER PEARSON: Yes. Absolutely.

21   MEMBER APPEL: So we've had

22   changes in the distribution of age over time.

1   So, these are not age-standardized or

2   adjusted in any way, these are just crude

3   levels of intake?

4   AUDIENCE MEMBER: Not age-

5   adjusted.

6   MEMBER APPEL: Not age-adjusted.

7   So, it might, for -- I mean, it's going to all

8   be difficult because we don't have the data

9   sets and we might have to more finely tune

10 this to a --

11   MEMBER PEARSON: As a statistical

12 sample of the United States over this period

13 of time, I don't think the age pyramid changed

14 that much. It is worth talking about gender

15 differences, which I'll show you in a minute,

16 but I think the point is well-taken.

17   And the evidence suggests again

18 that about eleven -- eleven and a half percent

19 of calories have been from saturated fat over

20 this period of time, suggesting that, oh, say,

21 probably 60 or so percent of Americans are not

22 at our saturated fat guidelines given the

1 distribution of saturated fat across the

2 population.

3   So, with the exception of the

4 increase in calories, you really don't see

5 very much change in the quality of the fat

6 constituents in the diet.

7   This is the data for men, just to

8 show that there are some differences here.

9 The message is that, essentially the same,

10 possible increases in saturated fat in men,

11 but I think the thing to talk about here

12 really is the dietary cholesterol with most

13 Guidelines, including the 2005, suggestion 300

14 milligrams a day, and a showing that at about

15 350 and up, this would suggest that quite a

16 minority of men in the United States are at

17 the cholesterol targets.

18   Women -- And this is the percent

19 of calories, again, not a whole lot of change

20 over this period of time.   A substantial

21 increase in the number of kilocalories per day

22 in terms of energy in men.

1   In terms of women, perhaps a

2   little bit more positive information.

3   Certainly lower grams of saturated fat.

4   Perhaps also relatively high levels of

5   monounsaturated fat, and here you can see the

6   big male-female difference and that is, is

7   that with an average of say, 230 milligrams

8   per day of cholesterol, a substantial majority

9   of women will be at the Guidelines for dietary

10 cholesterol.

11   So, this is a -- probably the

12 largest gender difference that you would see.

13   And, again, for -- it's percent of

14 energy. I think pretty similar for total

15 unsaturated fat for -- for women as in men.

16   And again, the saturated fat, if

17 anything, possibly rising over this period of

18 time. And the caloric intake actually rising

19 substantially again with the proviso that

20 there's an undercounting of this in the 1970's

21 and Eighties.

22   So, what you're left with is -- is

1   the Dietary Guidelines, as you see here, from

2   relatively general, nonspecific guidelines of

3   the 1980's in '85 to quite specific targets

4   for   total   fat   and   saturated   fat   and

5   cholesterol.

6   Obviously, not a lot of progress

7   has been made. There's really -- I think it's

8   striking of the lack of change, and again,

9   with   some   vagaries   by   --   by   gender   but

10   essentially when you pair this to the lack of

11   blood   cholesterol   change   and   the   lack   of

12   coronary incidence, I think you basically have

13   essentially this level of fat and cholesterol

14   consumption committing us to the continuation

15   of our cardiovascular disease epidemic.

16   MEMBER SLAVIN: Can I just bring

17   in one thing? It's Joanne Slavin here. If

18   you go back out to the Eighties, you had like

19   40 percent of the calories from fat. There

20   really   was   some   change   there.   That   was

21   obviously --

22   MEMBER PEARSON: Yes. And I think

1 all of us have seen from the 1960's and

2 Seventies and the very spotty data we had with

3 some substantial changes, this was also the

4 peak of the coronary epidemic was 1968 with

5 some very steep changes in coronary incidence,

6 according to the very few data that we have on

7 this during that time.

8   CHAIR VAN HORN: Mim.

9   MEMBER NELSON: It seems -- this

10 is Mim Nelson -- that a lot of the speakers

11 that we've heard and I'm sure there's been a

12 discussion about that a high-quality diet is

13 looking like there may be a real range in

14 terms of macronutrients in terms of fat, and

15 so I'm wondering, the utility of sort of

16 looking at this when actually what we may be

17 proposing is that a range from, you know, 25

18 to 45 or -- there's a huge range.

19   I mean, saturated fat being in and

20 of itself, it's own entity, but that in a

21 sense, does it matter now, now that we're

22 looking at it from a lens where the range, if

 1   you have fruits and vegetables in the whole --

 2   you look at the whole diet, that the range of

 3   fat is just fine from a health perspective.

 4   So, do you see where I'm coming

 5   from?

 6   MEMBER PEARSON: No.

 7   MEMBER NELSON: Sorry. That we're

 8   presuming, or when you present this, I guess

 9   I'm hearing from you -- I'm concerned, because

10   we haven't gone down in all of these things,

11   and yet what we're hearing more of, and what

12   the evidence is showing us is, in fact, you

13   don't need to come down.

14   You can be high, you can be low.

15   If saturated fat -- if we worry about

16   saturated fat, and that's there, but -- and

17   that hasn't changed, but I'm concerned and I

18   want to make sure that we don't contradict

19   ourselves.

20   CHAIR VAN HORN: Tom is not done

21   yet.

22   MEMBER NELSON: Okay.

 1   MEMBER PEARSON: Yes. We're just

 2 --

 3   MEMBER NELSON: Okay.

 4   MEMBER PEARSON: Well, just to say

 5 is, is that, you know, if you believe in the

 6 work of Keyes and Hegsted and the -- all of

 7 those trials that really tried to understand

 8 the main determinants of group cholesterol

 9 levels.

10   It was -- it was the saturated

11 fat,   dietary   cholesterol,   and   the

12 polyunsaturated fats, and there have been also

13 some equations with monounsaturated fat and,

14 again, none of those have changed.

15   But I think terms of the things

16 that keep them up, all of these guidelines,

17 obviously say "less than." Okay. There's no

18 suggestion that there's -- except that perhaps

19 extraordinarily low levels that there would be

20 any health issues there, so these are all less

21 than.

22   And so the drivers of maintaining

1   a high population cholesterol level would be

2   the saturated fats and cholesterol.   And

3   those, I think, are the particular data.

4   So, in terms of total fat, I'll

5   agree with you, and that's the liberalization

6   in the 2005 Guidelines, as well as the Adult

7   Treatment Panel 3 Guidelines of being able to

8   go up, and usually having to do with the

9   liberalization of monounsaturated fats, rather

10   than replacing those with carbohydrates.

11   So, I guess that part I am

12   agreeing with you. But it's the saturated fat

13   and the cholesterol, I think is striking in

14   the times that we've had stable high

15   cholesterol levels and stable high coronary

16   disease incidents levels, we have stable high

17   saturated fat and dietary cholesterol levels.

18   I think that's the -- that's point.

19   And so, the real question is the

20   role of the Dietary Guidelines in really

21   getting to a level where we could expect our

22   incidence of coronary disease to fall.

 1   MEMBER RIMM: So, I think -- this

 2   is Eric Rimm. I think we are completely on

 3   board with what you're saying. Is that, you

 4   know -- in some of our discussions is why do

 5   we need a -- why do we need a guideline for

 6   total fat.

 7   We can't base it on necessarily

 8   chronic disease, but maybe is able to be able

 9   to base it on weight gain, because that's part

10   of his work. And what we've heard yesterday

11   from Frank Sacks and from the trials in

12   Israel, it didn't make any difference for

13   weight gain.

14   MEMBER PEARSON: Right.

15   MEMBER RIMM: So, I think we are

16   somewhat in agreement in there, the

17   subcommittees -- clearly, there's still

18   evidence for saturated fat and trans fat.

19   MEMBER PEARSON: And as you'll

20   see, one of our questions deals with this

21   trying to tease apart that issue to confirm

22   what you supposed.

 1   MEMBER NELSON: You almost wonder

 2   -- it's Mim -- if we forget about the total

 3   fat recommendation and we only talk about

 4   saturated fat and cholesterol, you know, it

 5   would be a departure that's on the table.

 6   MEMBER RIMM: It's on the table.

 7   MEMBER PEARSON: Okay.   So,

 8   relative to the influence of a variety of

 9   dietary fat constituents on cardiovascular

10   disease and other health outcomes, I think we

11   would look at these as a review of the data

12   just to identify any new information on these

13   topics over the next -- over the past five or

14   six years, and probably suggest that there

15   won't be any major changes here.

16   There may be some, relative to the

17   breadth of these -- these questions, probably

18   in cardiovascular disease, these are quite

19   well-established relationships. There may be

20   some other health issues that we would like to

21   pick up with our -- with our NEL searches.

22   So, the PICO Charts, as you see

1   here, have to do with these dietary

2   constituents and particularly some

3   subquestions about gender differences, genetic

4   susceptibility issues, et cetera.

5   In terms of the NEL search, as you

6   can see, a lot of, again, attention on

7   cardiovascular disease and diabetes. We are

8   probably having to do with the WCRF just

9   having a thorough review of dietary fats and

10 cancer, we should refer to that rather than to

11 do that in NEL.

12   Okay. Another focus in the 2005

13 Guidelines had been relationship to serum

14 lipids, particularly LDL cholesterol. We've

15 expanded this a little bit to HDL cholesterol

16 and to non-HDL cholesterol. Both of those are

17 tertiary or secondary target values in the

18 Adult Treatment Panel III Guidelines.

19   And so, there are some

20 subquestions that we would be also looking at

21 with this particular set, and so we're talking

22 about some genetic polymorphisms affecting the

 1   associations between these dietary components

 2   and plasma LDL, particularly apoprotein E, but

 3   some other ones as well.

 4   What is the effect of total

 5   dietary fat on LDL cholesterols at different

 6   levels of dietary saturated fat? This gets to

 7   the point, Mim, that you were making, is this

 8   really -- is this really saturated fat, or is

 9   -- and then can you let the total fat kind of

10   run above that, and so that basically is

11   looking at the literature to answer that

12   question you were raising.

13   Similarly   effective   dietary

14   cholesterol levels of dietary saturated fat,

15   kind of the idea is, is if your dietary

16   saturated fat is, say, very low, is there a

17   good evidence to suggest that you could

18   liberalize your dietary cholesterol.

19   And   we   are   very   aware   of,

20   obviously, the Keyes and the Hegsted's

21   equations about their independence.

22   There are a couple of questions.

1 These two questions are ones that we've

2 selected in terms of doing our first NEL

3 searches and to get the evidence tables

4 together as a little pilot of all of this.

5   The first is the association

6 between LDL and dietary stearic acid. This

7 has to do with the effects across the class of

8 -- of saturated fats.

9   The potential for heterogeneity in

10 these and certainly the suggestion in a number

11 of studies that dietary stearic acid has very

12 different effects, or actually very little

13 effect on LDL, compared to the other LDH-

14 raising fatty acids.

15   And then, the next question was

16 the effects of consuming natural versus

17 synthetic trans fatty acids on these lipid

18 endpoints. So, this is -- there was quite a

19 bit of discussion on trans fatty acids in the

20 2005 Guidelines, although there was not a

21 recommendation that came from them.

22   But I think we'd like to firm up

 1   that and then do the specification of those

 2   that are -- that are manufactured versus

 3   naturally-occurring, in terms of trans -- in

 4   terms of the general issue of the trans fatty

 5   acids being deleterious, I think we were going

 6   to assume that as a pretty well-proven

 7   subject.

 8   And so this is somewhat of a

 9   smaller specification of that -- that larger

10   topic.

11   Can we advance.

12   The third question -- so, this is

13   the -- this is the PICO Chart for that. I

14   think we've talked about this relative to

15   lipid outcomes. Next slide.

16   Okay. The next question we had,

17   looking at these issues of n-6 versus n-3

18   fatty acids and health outcomes. There's

19   obviously been a literature on this and one of

20   our webinars dealt with issues related to the

21   ratio of these two as part of -- of

22   unsaturated fatty acids, polyunsaturated fatty

 1   acids in the diet, and so we're going to look

 2   further.

 3   I think we were able to resolve

 4   with that literature, I think quite well, but

 5   there are a couple of other issues related to

 6   the sources of the n-3 fatty acids, the marine

 7   versus plant, and I think this is a worthwhile

 8   effort, as these obviously have very different

 9   sources and obviously oftentimes get lumped

10   together.

11   That may be the right thing to do,

12   but it would be nice to see if, in fact, plant

13   versus marine n-3 fatty acids, in fact, showed

14   any difference in health effects.

15   And   then   looking   at   the   diet

16   higher in n-6 fatty acids, lower the risk of

17   health outcomes relative to other fats in the

18   diet as a next subquestion of this larger

19   question.

20   So, the PICO Chart. Next slide.

21   You can see here now, the outcomes relative to

22   this -- thank you -- is, obviously has some

1 broader and perhaps more specific set of

2 outcomes, neurological development, cognitive

3 development.

4   Obviously, dementia, perhaps,

5 issues as well. Serum lipids, cardiovascular

6 disease and insulin sensitivity. Again, we'll

7 -- for cancer, I think the WCRF report has

8 dealt with this and finally, macular

9 degeneration.

10   Then finally, and something we'd

11 like some input from you about was the

12 associations from these foods that have some

13 specific fat profiles, so this is fats from

14 foods, from specific foods, again, and related

15 to our willingness to look at specifically the

16 issues relative to nuts, relative to fish with

17 a collaboration with the Food Safety Group and

18 the issues that they've already discussed with

19 you, and relative to chocolate.

20   There was a number of other

21 specific foods discussed, including milk and

22 milk products, red meat, but we thought that

1   those were really much more over into the

2   protein and other areas whereas these are

3   particularly related to the health effects of

4   their fat constituents.

5   And so the PICO Charts for this

6   looks as -- as we have it here with outcomes

7   for these also looking at the effects of these

8   on obesity and BMI, diabetes, as well as the

9   serum lipids and cardiovascular disease

10   endpoints, and again referring the cancer to

11   the WCRF report.

12   And then finally, turfing the fat

13   intake in society to our carbohydrate and

14   protein friends, and our dietary patterns to

15   particularly some of the very high or very low

16   fat diets. Some of those things that Frank

17   Sacks was talking about, obviously to the

18   nutrient adequacy subcommittee.

19   So, those are our report.

20   CHAIR   VAN   HORN: Great.

21   Excellent.

22   Joanne Slavin.

 1   MEMBER SLAVIN: I'm wondering

 2 about for the nuts and the chocolate, you

 3 know, the assumption is that it's related to

 4 the fat and isn't it more of a whole foods

 5 question, because the chocolate could very

 6 well be all phytonutrients and have nothing to

 7 do with the fat, or --

 8   MEMBER PEARSON: This is the issue

 9 -- chocolate obviously is a stearic acid

10 issue, but it clearly has many other

11 compounds, flavonols, theobromines, et cetera,

12 et cetera, and so you may be -- may be right.

13

14   But it was a largely fat product

15 that we were looking at as the fats in those

16 foods being -- having any health effects, with

17 the possibility of identifying any other

18 health effects in the trials that we're

19 looking at the fat issues.

20   But, you know, we're -- if you

21 would like to steal them from us, we could

22 probably be argued out of it.

 1   MEMBER APPEL: Larry Appel. I'm

 2 not sure this goes to Tom or to Linda or to

 3 the whole group, but your first question

 4 dealing with trends, and I think it's sort of

 5 stimulated by a lot of discussions we've been

 6 having today about like what are the impact of

 7 these Guidelines.

 8   So, is this something that is just

 9 isolated to your chapter, or should we be

10 thinking about sort of a parallel set of

11 tables for some of the recommendations that

12 have been made, you know, whether it's for

13 sodium or fruits and vegetable intake, and

14 then rather than sort of like having a -- this

15 gets to an issue of standardization.

16   I mean, if it's an important

17 enough issue for your chapter, I think you

18 could make the same argument for a few of the

19 repeated recommendations in other chapters.

20   If you looked at the -- I'm sure

21 you have. There were, I think, similar kinds

22 of trends in some of the chapters of the 2005

 1 Guidelines so your point, Larry, is very well-

 2 made, that -- that this may be something we'd

 3 like to standardize, just, say, in 2005 there

 4 were some trends over, say, the last 20 or 30

 5 years, and for some issues and not for others.

 6   So, I think that really is

 7 probably a group decision that we'd want to

 8 make.

 9   I think they are quite informative

10 relative to the -- the -- what we've been

11 talking about is really developing Guidelines

12 that would really make a difference.

13   MEMBER PI-SUNYER: I would --

14 Xavier here. I would agree with that. I

15 think that -- and it does show the lack of

16 impact in many of these trends over the years.

17   In fact, some of them have gotten worse.

18   So, I think it would be a good

19 thing to have more of them, as indicative of

20 where our problems are.

21   MEMBER RIMM: This is Eric. This

22 wouldn't quite speak to the 2005 Guidelines

 1 yet, because this is NHANES 2005-2006.

 2   MEMBER NELSON: Right.

 3   MEMBER   RIMM: Before   the

 4 Guidelines had a chance to kick in.

 5   MEMBER NELSON: This is Mim. But

 6 I guess I -- I'm thinking of the Physical

 7 Activity Guidelines that we just did, and one

 8 of the things that we did was one of the early

 9 chapters that was, you know, a condensed

10 chapter was really looking at the patterns of

11 physical activity over time, and what I would

12 advocate, I think, as opposed to pieces --

13 disaggregating all the pieces in the different

14 chapters is that we might consider that there

15 is a chapter up front that really talks about

16 the trends or the change in diet over time up

17 to as recent data as we have so that you can

18 sort of look at the whole thing as opposed to

19 sort of separating it out.

20   And then it's -- I think it's the

21 alarming piece that we're trying to get to,

22 because it shows that certain things have

1 really gotten bad. Other things have stayed

2 exactly the same, you know, so -- and the

3 calories have gone up. It paints the whole

4 picture.

5   CHAIR VAN HORN: I would tend to

6 agree that having the, again, current status

7 of the diet of the American people should be

8 an ever-present message in front of them, but

9 I also think that each chapter, in some ways,

10 stands alone for some groups.

11   And so, I would hate to miss out

12 on opportunities to point out, because I see

13 this happening, at least in the circles I

14 keep, that there is sort of a moving away from

15 concern related to saturated fat.

16   You know, basically it's a "let

17 statins take care of it" mentality that

18 suggests that, you know, because we're

19 widening the range of dietary fat intake that

20 it no longer matters.

21   And I don't think that's what

22 we're saying at all. In fact, that's what Tom

 1   was just pointing out.

 2   So, I think, rather than risking

 3   that, you know, mixed message, we really do

 4   need to be fairly deliberate about pointing

 5   out what the potential problems are, what the

 6   current situation is, and why this Guideline

 7   is addressing it.

 8   And I think Tom just did a great

 9   job of that. Rafael.

10   MEMBER   PEREZ-ESCAMILLA: Yes.

11   Rafael Perez-Escamilla. And, Tom, my question

12   is: Did the 2005 report address genetic

13   polymorphisms and their interaction with

14   dietary fats and cholesterol?

15   Because, I think that's a very

16   exciting area. That is going to be a new

17   contribution here. And I know you are not

18   done with the review, but do you predict there

19   will be enough useful information that can be

20   translated into recommendations to the public?

21   MEMBER PEARSON: Well, I think one

22   gets into the issues of so-called personalized

1 medicine and that is largely a promissory note

2 at this point, so I think -- but we've --

3 those of us who deal with cholesterol

4 disorders, obviously have been impressed by

5 some patients having substantial benefits from

6 the same dietary advice that the experts had

7 who didn't change any at all, and there's

8 obviously a very complicated backdrop to that.

9   But there's certainly a number of

10 known polymorphisms, and so one of the

11 questions is, is how far is that from

12 implementation, and the answer is it may not

13 make a difference for this go-around, but it

14 may set the stage for future -- future

15 Guidelines.

16   MEMBER WILLIAMS: Chris Williams.

17   I just wondered on that question four, with

18 the n-3 and n-6 fatty acids, that you may need

19 to take that down to birth, since there have

20 been so many studies of neonates and up to age

21 one or two, and then follow-up studies that

22 might be worthwhile to look at that.

 1   MEMBER   PEARSON: That's

 2 interesting because obviously some of the

 3 formulas have had substantial amounts of n-3

 4 fatty acid variabilities.

 5   MEMBER CLEMENS: 2002.

 6   MEMBER PEARSON: Yes. So, Chris,

 7 that's a very good point. I think you should

 8 probably change that, the PICO down to birth,

 9 because of particularly the use of these in

10 various formulas.

11   MEMBER CLEMENS: That is a very

12 good question. This is Roger. There's a

13 great question there, Chris. The formulas in

14 the United States have been used since 2002,

15 however, it would be interesting to explore,

16 Tom, perhaps there may be data, longitudinal

17 data as early as the late Nineties, so we get

18 at least maybe ten years worth of data and see

19 if there's anything worth it to look at.

20   MEMBER ACHTERBERG: Not to be

21 picky, but the Guidelines are for age two and

22 up.

 1   MEMBER WILLIAMS: Chris Williams,

 2 but some of the studies look at neonates and

 3 then follow them to an older age, and then the

 4 studies continued in intake after age two.

 5   MEMBER PEARSON: Yes. Obviously

 6 with the fatty acids, obviously, we have --

 7 you assume the breast-fed child is kind of on

 8 autopilot relative to the fat, fat intake, but

 9 I think in this instance, it's probably an

10 exception to that.

11   I was quite interested in reading

12 about the variability between one formula and

13 the next and some of these things, so --

14   CHAIR VAN HORN: Other topics

15 related to this subcommittee?

16   (No response.)

17   CHAIR VAN HORN: Okay. If not,

18 then I think we're at the point in our --

19 thank you. I don't think I have any slides.

20   I think we're at the point in our

21 discussion now where we are ready to begin

22 some of the discussion of cross-cutting

1 questions that are identified by Joanne Spahn

2 in Tab 17.

3   These are topics that have been

4 addressed by each of the subcommittees in one

5 way or another, and have come up in ways that

6 we now want to try to address, as far as who

7 really is best suited to maybe address these

8 questions, and also maybe just trying to

9 identify some standard approaches to how we

10 might want to move ahead with those.

11   And I also guess we should

12 probably think about from the NEL's point of

13 view and the writing point of views that this

14 is the time when I think we want to engage our

15 staff, wonderful, capable staff people in

16 terms of providing further input, so it might

17 be not a bad idea to grab a microphone so you

18 can maybe answer some of these questions as we

19 go forward, just to be on the ready.

20   So, starting with the food groups

21 question, that obviously does cut across

22 everything as far as dealing with the

 1 questions like fruits and vegetables, how do

 2 they relate to both adequacy of nutrients as

 3 well as health outcomes.

 4   Same thing with whole grains. We

 5 talked a little bit about the dried beans and

 6 peas issues related both to questions of

 7 vegetable protein, but also fiber and also,

 8 you know, calorie control and inexpensive ways

 9 to meet those nutrient needs, questions that

10 really do kind of cut across all these various

11 topics.

12   We've said very little about milk

13 and milk product intake, other than Joanne's

14 comment   that   it   has   protein,   it   has

15 carbohydrate and it sort of fits into that

16 category.

17   And then looking at other sources

18 of   protein,   the   animal   protein   versus

19 vegetable protein questions, and Tom was just

20 talking about nuts, but we also have fish and

21 egg yolks and a variety of different foods

22 that cut across these different topics.

1   So, I guess the question we might

2 want to raise now, and this is where I'd want

3 input from either Joanne or Joan as to, you

4 know, recommendations for how best we can

5 address this in light of the already pretty

6 heavy workload that each of these

7 subcommittees has.

8   So, if anyone wants to start, and

9 we obviously have other cross-cutting

10 nutrients or issues to talk about, but I think

11 food groups is probably the biggest one, and I

12 would love to open that up for consideration.

13   Tom.

14   MEMBER PEARSON: Well, let me just

15 use fish as an example. I think the American

16 reductionism, obviously thinks that the only

17 thing that's in a fish is fish oil. And the

18 last time I looked there was some protein and,

19 you know, a variety of other things.

20   And so, this is backed up by the

21 literature which, of course, the fish oil

22 supplements, usually with the illness groups,

1 have been very variable, and to my reading,

2 you know, unimpressive.

3   Whereas,   the   observational

4 epidemiology for fish consumption has been

5 really quite consistent and strong. And so,

6 one thing is, you could go up and say that

7 there's really -- it's all observational bias

8 and the people that eat fish are just

9 healthier than people who don't eat fish, and

10 the whole thing is confounded, or you can say

11 that there's really something about eating

12 whole fish versus just the lipid parts that

13 you put into a fish oil capsule.

14   So, I think this is an example,

15 kind of a microcosm of this food group thing

16 because, depending on how you look at this,

17 you would make -- make some different

18 conclusions.

19   But I think the -- I would hope

20 that our Dietary Guidelines would talk about

21 eating whole foods, rather than putting it

22 into a pill.

1   CHAIR VAN HORN: Yes. Linda Van

2   Horn. Once again, looking at the NHANES data,

3   it's kind of fascinating to see, based on the

4   current intake that the number one source of

5   omega-3 fatty acids is salad dressing.

6   You have to be number four to get

7   to other fish and fish-mixed dishes. So, it's

8   interesting that that food product, salad

9   dressing is the number one source of omega-3,

10 alpha linolenic acid and -- and so, you know,

11 it's providing that level of intake.

12   But the benefits of eating fish,

13 as you point out, there are many studies that

14 show there's something that transcends the

15 omega-3 beyond that aspect of it that fish

16 consumption is healthful. So, I do think

17 we're going to want to take that into

18 consideration.

19   Now, I don't know, Joanne.   I

20 guess Joanne is --

21   MS. SPAHN: I'm here.

22   CHAIR VAN HORN: Oh, you're here.

1   Okay. If you would want to address it from

2   the context of the literature searching that

3   the group is already doing.

4   I know one of the questions we're

5   trying to -- or issues we're trying to address

6   is not duplicating effort, and wanting to be

7   sure that whatever group it is that's taking

8   this on, provides the results for the benefit

9   of the overall Committee.

10   So, I don't know if you want to

11 mention anything more about that, or better

12 processes for doing that.

13   MS. SPAHN: I'm Joanne Spahn, and

14 I'm the director of the new USDA Nutrition

15 Evidence Analysis Library, and as I was

16 sitting in on each of the subcommittee

17 meetings that occurred prior to the full group

18 meeting, it does look like each of the

19 subcommittees have selected those food groups

20 in this case that they take ownership of.

21   So I don't -- I think initially

22 the issue was there was more than one

1 Committee doing milk products or there was

2 more than one Committee doing other food

3 groups, so it looks like it's differentiated

4 and those foods that have been identified to

5 be done have been assigned. So, I think it's

6 not an issue at this moment.

7   CHAIR VAN HORN: Larry.

8   MEMBER APPEL: Larry Appel. Are

9 you envisioning, Linda, that we're delegating

10 the food groups to individual subcommittees,

11 but then in the end the report is going to

12 sort of grab all those food groups and put

13 them into a chapter the way we did last year?

14   I mean, that makes sense to me,

15 but it might be -- I'm not sure we made that

16 decision.

17   MEMBER SLAVIN: Yes. I mean that

18 was my understanding based on our last meeting

19 and the discussion when this had already

20 become   an   issue.   Again,   to   prevent

21 duplication of effort, the goal was to make

22 sure that each food was addressed in some

 1   subcommittee, but that ultimately the data and

 2   knowledge would be synthesized into that

 3   direction.

 4   How we go forward with that, I

 5   guess, we'll be looking to Ann for further

 6   help with the writing of that. But, you know,

 7   as the groups continue to deliberate about

 8   this, you know, if there are key issues that

 9   are raised in fatty acids related to fish,

10   that, you know, don't make sense in some other

11   context, you know, then we would want to point

12   that out, I would think.

13   Eric.

14   MEMBER RIMM: So I think that I'm

15   not -- I know that yesterday at our meeting we

16   discussed the fat group not doing milk and not

17   doing meat, even though they are recommended

18   as food groups, because the recommendations

19   currently are for lean or low-fat or lean

20   meat, so we felt like that it was not part of

21   our group, but I'm not sure that was picked up

22   by anybody else, and I don't know if anybody's

 1   specifically doing searches of meat and milk.

 2   Okay. Milk. Okay. So then I

 3   guess it's because it is a -- I'm looking at

 4   the pyramid right here. It is actually one of

 5   the -- it is the fourth group listed as -- I

 6   don't think we've ever done a search on it

 7   before, so I don't know if we will do the same

 8   for red meat.

 9   MEMBER SLAVIN: Well, we have

10   animal protein within our subgroup, you know,

11   so   that   would   pick   it   up,   but   not

12   specifically, and then it overlaps with fish

13   now.

14   So, there will be some issues the

15   way we're doing it that will have to come

16   together at the end and makes sure --

17   MEMBER RIMM: Right.

18   MEMBER SLAVIN: -- it does get

19   covered as food groups because, you know, if

20   you look at some of the stuff that has been

21   presented, the stuff that Andrea presented

22   this morning, you know, there's shortages with

1 the dairy group. There's shortages with

2 fruits and vegetables, you know, as far as

3 what actually people are consuming and NHANES.

4   So -- and there's nutrients that

5 are shortfall, but also this whole

6 phytochemical and health benefits of eating

7 foods rather than nutrients. So, it's a

8 really broad topic. I think, as it comes

9 together at the end, we may have to think of

10 it in different ways to make sure it doesn't

11 get dropped.

12   MEMBER RIMM: Yes. I think --

13 Linda, if you think back to the 2005 -- this

14 is Eric Rimm again, sorry -- to the 2005

15 Dietary Guidelines, the one thing I think that

16 was -- one of the two things that was taken

17 out between the technical report and the final

18 Dietary Guideline was fish, because I guess

19 there wasn't enough evidence in the terms of

20 primary prevention which we've taken that on

21 because I think there is enough evidence now.

22   But I think we should keep that in

 1 mind when we're looking at milk and meat to

 2 make sure that there's -- and I think there

 3 was a pretty broad body of evidence out there.

 4   MEMBER SLAVIN: Yes.   This is

 5 Joanne Slavin again. Just think of iron and

 6 zinc, too, some of the nutrients that when you

 7 put these diets together, if you take the red

 8 meat out, it's harder to meet those. So, we

 9 forget.

10   MEMBER RIMM: Yes. I guess so. I

11 mean, I know that argument's been used a lot

12 for dairy products saying that without the

13 three servings recommended for milk, that we

14 wouldn't have enough calcium, but to me that

15 seems like a backward recommendation.

16   Why don't we, you know, recommend

17 that people eat more broccoli because it had

18 calcium in, and it would be a good source.

19 Broccoli, we should have four servings a day

20 of -- well, I know, but there's other -- I

21 mean, I don't think we should recommend a food

22 just because it has a micronutrient, as

1 opposed to keeping it, you know, focused on

2 foods. Just my opinion.

3   MS. SPAHN: Just to make sure we

4 don't lose a food group in a loophole, because

5 I don't feel like I'm confident in saying

6 which group was working with which food group

7 yet. Should we just go through the exercise

8 of saying which group was working on which

9 food group?

10   CHAIR VAN HORN: I think it is

11 stated below --

12   MS. SPAHN: My apologies.

13   CHAIR VAN HORN: -- if you'll look

14 at Tab 17, right.

15   MS. SPAHN: My apologies.

16   CHAIR VAN HORN: Okay.

17   MEMBER RIMM: That was a great

18 question.

19   CHAIR VAN HORN: Yes.

20   MEMBER RIMM: You had the answer.

21   CHAIR VAN HORN: Okay. It's been

22 requested that, for the sake of the public, we

 1   should just reiterate what it states in our

 2   book which is that fruits and vegetables and

 3   health will be presented by the carbohydrate

 4   and protein group, likewise whole-grain intake

 5   in health.

 6   It -- pretty much all of these

 7   relate to, Joanne, that we just -- why have we

 8   been talking about this all day, in that the

 9   carbohydrate and protein group pretty much

10   wins the prize for accumulating the most foods

11   in the food groups, because they really are

12   attending to beans and peas, milk products and

13   also the animal protein and vegetable protein.

14   The only other group identified,

15   at least in this segment, is the fatty acids

16   group that's addressing the foods that we just

17   talked about, nuts and egg yolks and chocolate

18   and that kind of thing.

19   MEMBER PEARSON: This is Tom

20   Pearson. We had ceded egg yolks, milk and the

21   red meat by the time these were printed, so --

22   MEMBER SLAVIN: Those are the

1 original questions at the bottom.

2   MEMBER PEARSON: Right.

3   MEMBER SLAVIN: But I think we

4 have ownership of all the food groups by the

5 carbohydrate and protein subcommittee, except

6 for specific foods that are outlined in the

7 fatty acids, many which are fish, chocolate

8 and nuts.

9   CHAIR VAN HORN: Okay. I think

10 that as far as the other cross-cutting topics,

11 we also have pretty much addressed those most

12 of the day. Those relate to macronutrient

13 proportions and weight, as well as health.

14   That was one of the key questions

15 that kind of we've talked about over the last

16 several meetings. I don't know, Xavier, if

17 you want to add anything more to that.

18   MEMBER PI-SUNYER: No. I just

19 wanted to say that, you know, that we will be

20 working on that in the Energy Balance

21 Committee, and also talking to Joanne in the

22 Carbohydrate and Protein Committee, so we'll

1   take care of it between us.

2   MS. SPAHN: I think that one --

3   Joanne Spahn. We had decided that the NEL

4   would do one sort list to serve both -- the

5   members of both those Committees so that it

6   would be consolidated.

7   CHAIR VAN HORN: Right. Maybe for

8   the benefit of everyone listening and those

9   who have not been regularly attending these

10   meetings, the interesting phenomenon is that

11   since we started we have really blended, as a

12   Committee, and I think because so many of us

13   sit on multiple subcommittees, we kind of

14   don't view ourselves as isolated from each

15   other, but rather more cohesive.

16   And I believe that NEL and Joanne

17   and Joan are very much aware of needing to

18   look at these topics overall and so, to

19   prevent duplication of effort, these kinds of

20   decisions are being made daily as we look at

21   the literature and see which direction it

22   sends us.

1   So, while I think some of the

2   cross-cutting issues initially seemed like,

3   you know, major differences across the groups,

4   I think they now have become part of the

5   ongoing discussion in every group, and there's

6   a lot of sharing of that information.

7   I don't sense -- and please,

8   Committee members, tell me if I'm wrong, but I

9   don't sense that any of us at this point have

10   any concerns that the cross-cutting issues

11   that we've been dealing with all day aren't

12   being addressed by someone.

13   And then if somebody has a pet

14   topic that feels as though nobody's addressing

15   it, you know, this would be a good time to

16   raise that, but I think in terms of covering

17   the literature and identifying which group has

18   the major responsibility for addressing that

19   topic, I believe we now have that covered from

20   our previous discussions.

21   Is that true? Yes. Okay. Good.

22   All right. Then, if there are no other

 1   cross-cutting issues to discuss, then we're

 2   asked to look at Tab 18, which takes us to our

 3   recently-approved approach for use in grading

 4   the body of evidence.

 5   And again, for people who are not

 6   here, we actually have a chart that has -- I'm

 7   familiar with it. It's been used in several

 8   other groups, major groups that are doing

 9   these comprehensive reviews of the literature.

10   And essentially it evaluates the

11   data on the basis of elements of quality,

12   consistency, quantity, public health nutrition

13   impact and generalizability on the left and

14   grades of strong, moderate, limited, expert

15   opinion only or grade not assignable across

16   the top.

17   So, essentially, each group and

18   each review of every study will conclude with

19   a designated evaluation of the grade of that

20   particular study, and it's on the basis of

21   those grades that decisions are made in terms

22   of the evidence, the quality of the evidence

1   and the recommendations that will be made.

2   No? Not true?

3   MEMBER APPEL: Is -- this is Larry

4   Appel. You said "grade each study," or is it

5   "grade each conclusion"?

6   CHAIR VAN HORN: Yes. Sorry. The

7   studies get graded in the process of coming up

8   with the decision on the conclusion, but

9   that's absolutely right.   You're correct.

10   That's it.

11   It's the conclusion against the

12   grade, because those are the key messages that

13   then come forth as far as what the

14   recommendations are.

15   MEMBER PI-SUNYER: You can't grade

16   the individual components.

17   CHAIR VAN HORN: Exactly. Tom.

18   MEMBER PEARSON: Unlike some of

19   the other guideline activities, this one, I

20   think is a little bit of a hybrid between a

21   couple of dimensions of guideline development

22   versus guideline implementation, from the

 1   usual guideline development, the strong,

 2   moderate and limited has to do with the level

 3   of evidence.

 4   These Guidelines, however, put in

 5   also this public health nutrition impact,

 6   which is a little different and across those

 7   grades, just to note, the size of the effect

 8   is clinically meaningful.

 9   The point I'm getting to is that

10   the guideline implementers, the guideline

11   developers basically say A causes B, or -- or

12   this should be -- this, you know, is

13   beneficial to lower.

14   Guideline implementers use the

15   words "must, could, may" -- "must, should, may

16   or not at all." And it has to do with the

17   strength of the evidence, of the impact of it.

18   So, you can have a significant,

19   consistent evidence base of a weak effect.

20   And in that instance, as a public health

21   imperative say, a weak effect -- are you going

22   to say that everyone must do this, even though

1   the impact -- the public health impact?

2   So, I'm just pointing out that

3   there's a little bit of a hybridization here,

4   compared to say AHA, AHDC Guidelines which are

5   just talking about the scientific evidence,

6   this has an implementation component to it.

7   That's okay with me, but let's

8   just make sure we recognize that.

9   MEMBER NELSON: This is Mim

10   Nelson. I appreciate this. I think it's

11   really, really important to use this, and I

12   think that when we went through the Physical

13   Activity Guidelines, we actually spent an

14   unbelievable amount of time developing -- I

15   know you guys used some of this to develop

16   that.

17   One suggestion might be -- and I

18   tell you, it's more of a piece for the writing

19   is because it's -- it's -- you've got two

20   frames, and both frames are important. The

21   grading and the elements.

22   And we ended up with a physical

 1 activity. We had sort of, you know, one, two,

 2 three, four, and then we had A, B, C. So, you

 3 could rate them on the two frames without

 4 always having to use all the words. I mean,

 5 this is more of a very small, little technical

 6 thing, but it was very helpful from -- you

 7 know, it was a 2-B or a 3-A.

 8   I mean, it's just an easy way to

 9 refer to it. It's just an idea. But I think

10 this is really, really helpful.

11   CHAIR VAN HORN: Good. Other --

12 other comments about the grading process and

13 rating?

14   I think probably the most

15 important thing is that, as we've discussed,

16 you know, over these last two days now, the

17 next step is for us to move forward and put

18 this into practice over this next month where

19 hopefully the experience of actually doing

20 this will help all of us recognize maybe where

21 some of the pitfalls are that we may not know

22 about right now, but we will once we actually

 1   walk the road.

 2   But I know that each subcommittee

 3   chair has in mind their number one target that

 4   they planned to put forth over this next

 5   month, and the goal is, by the end of May, to

 6   have one of them completed as far as the whole

 7   review and the recommendation.

 8   Yes. Eric. Yes, sure.

 9   MEMBER RIMM: Sorry, I just wanted

10   to ask a quick question of what Tom said.

11   This is Eric Rimm -- what Tom said did concern

12   me a little bit, so the -- if you use the

13   example of alcohol and breast cancer, where

14   the association is modest, there's a ten

15   percent increase for a drink day.

16   You can argue whether that, in

17   some people's mind is modest or not. It's

18   important. It's been shown in 30 studies.

19   So, there's clear evidence that alcohol

20   increases risk of breast cancer, yet what I --

21   I mean, I would grade that as strong, because

22   there's 30 studies, but it's only a ten

1 percent increase.

2   So, it's actually only a sort of a

3 moderate effect. You sort of get distracted

4 by the fact that you're grading both the

5 quality and the amount.

6   CHAIR VAN HORN: Right.

7   MEMBER RIMM: And then the

8 significance.

9   MEMBER PEARSON: So that would be

10 an incidence of a randomized trials -- this is

11 Tom Pearson -- that would be a class, probably

12 with 1-A evidence.

13   CHAIR VAN HORN: Right.

14   MEMBER PEARSON: With --

15   MEMBER RIMM: Quality strong.

16   CHAIR VAN HORN: Strong.

17   MEMBER PEARSON: With the high-

18 quality from randomized control trials --

19   MEMBER RIMM: It's   not   a

20 randomized control trials of alcohol and

21 breast cancer.

22   MEMBER PEARSON: I guess that's

1 right. So, maybe it would be like a two-way

2 or something.

3   MEMBER RIMM: So, the fact that

4 the --

5   MEMBER PEARSON: But the point is

6 it would be strong.

7   MEMBER NELSON: This is Mim. It

8 doesn't always have to -- I think -- I think

9 Tom's right. I think we have to be a little

10 careful.   If the evidence is strong, the

11 evidence is strong regardless of whether

12 they're -- the magnitude of the risk or the

13 change.

14   And so --

15   MEMBER RIMM: Well, under public

16 health nutrition, in fact, it does say the

17 size of the effect is clinically meaningful.

18 Significant difference is large and, you know,

19 it's ten percent.

20   MEMBER NELSON: And I think -- and

21 it might be that we have to take out the

22 "large." I'm not sure. We might have to all

 1   look at that. This is the first time I've

 2   seen the chart.

 3   MEMBER RIMM: I think there will

 4   probably be other examples in nutrition --

 5   MEMBER NELSON: Yes.

 6   MEMBER RIMM: -- where it's so

 7   overwhelmingly   strong   evidence   that   the

 8   magnitude of the effect is modest.

 9   CHAIR VAN HORN: Yes. And please

10   remember -- and again, for those who aren't

11   here, it says "draft."

12   MEMBER NELSON: Yes.

13   MEMBER RIMM: Oh, no. That's why

14   I was just looking. I wasn't hanging like

15   this, saying this is wrong. I was looking for

16   some help on what to do.

17   CHAIR VAN HORN: No, no, no.

18   Exactly. And that's my point about, we're

19   going to walk through this and uncover those

20   kinds of pitfalls.

21   MEMBER RIMM: Okay.

22   MEMBER NELSON: Yes.

 1   MEMBER RIMM: Well, there you go.

 2   CHAIR VAN HORN: And say, whoops,

 3 we can't do it that way because, of course, we

 4 have to let women in America know that a drink

 5 a day could be a risk factor for breast

 6 cancer, and that's something that we need to

 7 point out.

 8   Yes.

 9   MEMBER PEARSON: But just to give

10 an example, you know, people must reduce the

11 consumption of trans fatty acids as well as

12 possible. I mean, would you be willing to

13 make that relative to the evidence at hand?

14   There are whole cities that have

15 done that. Okay. That's a must.

16   MEMBER NELSON: Yes.

17   MEMBER PEARSON: Okay. Are we

18 going to say that women must avoid alcohol?

19 No. You know, "may" or, you know -- so the

20 point is, on the implementation side, once you

21 take the evidence and then put them into a

22 recommendation, you change this from the

1 scientific evidence to what you really

2 recommend for the public health of the people.

3   MEMBER NELSON: Right.

4   MEMBER PEARSON: And that's when

5 you use these different verbs.

6   CHAIR VAN HORN: I think that's

7 very important, but I'll take it back yet

8 again to the -- also the concept of

9 discretionary calories. There is no biologic

10 requirement for alcohol, you know, at all.

11   And so, therefore, you know, the

12 concept of consuming alcohol is a personal

13 choice that relates to this use of

14 discretionary calories, if that's your choice,

15 that is fine, but you should know what the

16 risk is of including that beyond the caloric

17 issue to the health issues. And I think

18 that's all we're trying to differentiate.

19   MEMBER PEARSON: But my point is,

20 as the guideline developers in perhaps

21 advising the implementers, it's our choice

22 about what we would recommend in terms of what

1   those verbs are.

2   CHAIR VAN HORN: Absolutely.

3   Right. Right. I think that's very true. And

4   I think, again, this next month should prove

5   very interesting as we all kind of get in the

6   driver's seat and try to actually go forward

7   with this.

8   I think from what I'm hearing and

9   seeing, we pretty much have covered most of

10 our agenda at this point. Are there any other

11 issues that either staff or Committee members

12 might have in regard to current situation,

13 next immediate steps?

14   I can also say that our next

15 meeting is planned for sometime in the fall.

16 That has yet to be formally designated, but we

17 have our work cut out for us between now and

18 then.

19   Mim.

20   MEMBER NELSON: This is Mim. Just

21 -- and this is "my brain is a sieve piece,"

22 and this relates to carbohydrates. I just

1 have one follow-up question because there's a

2 lot of new evidence on the effects of glycemic

3 index and load on eye health, macular

4 degeneration and cataracts.

5   And I just don't know if you have

6 considered that, because I think that this is

7 beyond, you know, the phytochemicals, but

8 actual load, and I just think that that's

9 something that should be -- I'm happy to send

10 you a couple of papers. I think it's an

11 important issue. Okay.

12   CHAIR VAN HORN: Oh, Larry.

13   MEMBER APPEL: Yes, two things.

14 Can -- I need to be -- I'm very concrete.

15 What do you want at the end of May? Do you

16 want a full chapter or what is the deliverable

17 at the end of May?

18   CHAIR VAN HORN: My understanding

19 but, again, somebody from --

20   MS. SPAHN: This is Joanne Spahn

21 from the NEL.

22   CHAIR VAN HORN: Go ahead.

 1   MS. SPAHN: I think the goal is to

 2   have one NEL-related question complete, which

 3   would be the evidence summary and a conclusion

 4   statement for at least one of the questions

 5   that you have in your portfolio of questions.

 6   MEMBER APPEL: So, conclusion

 7   statement and grade of evidence?

 8   MS. SPAHN: Correct.

 9   MEMBER APPEL: Okay.

10   MS. SPAHN: And you may consider

11   when you do the grade of evidence, to comment

12   on risk benefit, because that's one piece

13   that, you know, some of the other libraries do

14   in recommendations, but not always in the

15   conclusion statement of just the body of the

16   literature review.

17   CHAIR VAN HORN: Yes, I agree.

18   MEMBER APPEL: I think we need

19   some discussion about when you can use

20   systematic review instead of NEL, you know,

21   under what circumstances, because I heard a

22   lot of people saying, you know, there are

1 these reviews, and I want to rely on it, and

2 we need to have some sort of structure to that

3 decision-making.

4   CHAIR VAN HORN: Yes. I agree,

5 Larry. We've kind of raised this and backed

6 away, raised it and backed away several times.

7   I think the understanding that I have right

8 now is that none of us want to unnecessarily

9 replicate a very thorough review that was done

10 by another respected body that, especially

11 recently, that we can point to.

12   We also don't necessarily want to

13 review again accepted literature that we know

14 already in the 2005 Guidelines or elsewhere

15 has already been accepted as is, and there's

16 nothing new since then.

17   So, having said that, I think the

18 more interesting question is when do we decide

19 that   it's   --   it   requires   additional

20 investigation?

21   And I think that we have to rely

22 on   each   subcommittee   to   make   those

 1   determinations, and that's what we're hoping

 2   for is that, you know, if somebody really

 3   thinks we can't -- we can't make a valid

 4   recommendation unless we also go back or

 5   continue to review this particular topic.

 6   MEMBER APPEL: Yes. Because I

 7   think it came up, or at least when I was

 8   listening to Mim talk about the -- you know,

 9   the behaviors, you know, and I'm not sure this

10   is coming from ADA, it's really -- you know,

11   somebody wrote a good review and, you know, is

12   that good enough for us in terms of --

13   MEMBER   NELSON: Well,   not

14   behaviors environment, but behaviors we're

15   going to do some NEL searches, yes.

16   MS. SPAHN: My understanding --

17   this is Joanne Spahn. My understanding was

18   that once we have this first round of

19   questions that were NEL-oriented done, that

20   both Larry and Xav were going to look at an

21   old question and a new question, one that

22   looked at literature that had been done in the

1 past like the glycemic index question, and one

2 that's relevant -- that's brand new, maybe

3 sodium in children, and decide for the report

4 how exactly are we going to grade evidence

5 from the past report knowing that we probably

6 can't answer every question related -- using

7 the NEL system.

8   CHAIR VAN HORN: Is that -- does

9 that satisfy everybody temporarily, at least?

10   MEMBER PI-SUNYER: Yes. I mean,

11 it's going to be difficult because we didn't

12 grade it at all last time around.

13   MEMBER NELSON: Not formally.

14   MEMBER PI-SUNYER: Not formally.

15   MEMBER PEARSON: This is Tom. I

16 think, though, that the state of the art -- I

17 mean, the last -- the last time I did one of

18 these and didn't grade it, I regretted it in

19 about a year.

20   I think it's become the state of

21 the art.

22   CHAIR VAN HORN: Yes. I think

 1   there are many --

 2   MEMBER   PI-SUNYER: But   the

 3   question is, how to go back and deal with

 4   what, you know, the 16 studies you quoted last

 5   time.

 6   CHAIR VAN HORN: Right. I think

 7   there's no question that this will be a new

 8   report for lots of reasons and, you know, with

 9   lots of issues that have come up in these, you

10   know, several meetings that we've had, this

11   being one of them.

12   But I believe, you know, that as

13   long as we collective come to decisions about

14   how to go forward and establish that clearly

15   in the report so that readers can understand

16   why and how we made our decisions and how we

17   moved forward, that is likely to be the most

18   important aspect of this whole thing, because

19   again, the collective expertise around the

20   table clearly can make those kinds of choices

21   better than anybody else in terms of, you

22   know, looking at what's already there.

1   Any other comments, questions?

2   If not, I just want to thank

3   everyone, certainly all the members, the

4   staff, and everyone that attended with us over

5   these last couple of days. We're glad you

6   joined in and we hope you found it interesting

7   and useful, and we look forward to proceeding

8   from here.

9   Thank you.

10   (Whereupon, the above-entitled was

11 adjourned at 3:02 p.m.)

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271:19 273:2,5,9
294:17 295:7
choice 48:6 57:21
59:2 62:7 78:22
149:5 245:11,11
308:13,14,21
choices 24:2 36:2
69:16 70:1 79:4
126:17 315:20
choir 52:22
cholesterol 3:5
11:18 27:9,16,16
96:18 247:12
248:8 249:5,9
250:19 251:11
252:13 254:15
257:12,17 258:8
258:10 259:5,11
259:13 262:8,11
263:1,2,13,15,17
265:4 266:14,15
266:16 267:14,18
278:14 279:3
cholesterols 253:2
267:5
choline 114:6
choose 7:3,4 26:13
31:1 49:2 84:20
237:2
chores 185:13
Chris 174:8 279:16
280:6,13 281:1
Christine 1:15 86:9
89:14,17 91:5
116:12 161:1,13
161:15 199:10
227:1
Christine's 86:20
chronic 162:10
227:6 247:1 252:8
264:8
circles 277:13
circumstance 62:5
circumstances 62:4
62:14 311:21
Citation 44:12
citations 41:10

89:22 90:5,12
93:10
cited 41:16 50:16
cities 79:5 307:14
citrus 17:3
City 50:18
claim 55:13
claims 54:9 55:9,17
55:19
clarify 157:16
class 78:2 252:19
268:7 304:11
classic 80:14
clear 98:5 99:13
144:19 156:6
194:15 217:11
303:19
clearly 131:9 206:3
206:14 210:7
237:22 239:22
264:17 273:10
315:14,20
Clemens 1:11
152:9 247:15
248:3 280:5,11
click 120:21
clinical 75:22 90:12
93:10 97:18 98:11
98:12 104:18,19
106:4
clinically 300:8
305:17
clinics 26:17
closely 49:9
closer 216:22
253:15
CNPP 1:19 5:20
8:22 12:17 24:12
39:19 41:6 63:3
66:9
cobblers 139:16
cognitive 40:16
271:2
cohesive 296:15
cohort 104:15,18
108:14 235:19
cohorts 159:9

coin 174:3
Colette 66:13
184:21
collaboration
271:17
colleagues 69:19
222:5 247:15,20
collected 130:4
collective 79:12
315:13,19
collectively 215:20
colon 122:22
133:12
column 98:14
columns 218:16
come 15:20 30:4
67:8 71:18 91:6
109:16 123:19
125:6,21 133:6
134:19 137:12
145:4,16 151:6
153:7 154:19
171:9,10 177:19
181:10 190:7
195:7 200:2 206:1
217:8 223:19
226:1 227:17
231:20 235:5,13
242:3 261:13
282:5 290:15
299:13 315:9,13
comes 22:21 37:12
40:14 41:16 44:5
50:11 54:16 68:15
72:12 78:3 113:6
137:21 148:1
172:5 217:2
226:12 232:3
291:8
comfortable 134:1
235:14,17
coming 47:3 77:22
134:9 154:13
172:7 215:16
237:13 261:4
299:7 313:10
comment 26:16

36:7 72:6 101:17
103:3 108:10
140:11,11 146:15
152:20 153:20
157:11 159:4
168:13 173:12
174:20 236:14
249:8 283:14
311:11
commenting 33:9
169:5
comments 4:13
87:19 149:10
152:11 167:6
170:3 219:1 221:5
302:12 316:1
commercialized
171:1
Committee 1:4 4:8
4:19 5:1 11:3
23:21 33:9 72:22
82:18 83:12,14
85:10 86:8 87:19
88:4,8 93:21
109:15 114:2
118:6,16 120:15
128:19 130:13
133:22 134:11
138:15 142:6,13
142:22 145:11,12
145:15 152:2
154:1 158:15
162:2 166:16,19
167:6 170:4 181:7
185:8,21 187:6
189:10,10 190:2,5
190:8 193:9,15,18
197:6 200:8,13
209:20 222:1
287:9 288:1,2
295:21,22 296:12
297:8 309:11
committees 35:2
88:3 103:11
123:21 183:21
186:6 191:19
296:5

Committee's
122:11 167:10
committing 259:14
common 62:19
64:14 72:9
communicated
101:20 158:17
communication
43:16 83:15
community 79:12
88:22 101:16
companies 60:21
64:15 71:11 78:12
company 65:21
71:22 210:12
236:17,21
compare 192:19
193:13 202:5
compared 116:11
194:13 268:13
301:4
comparing 202:14
compartmentaliz...
171:17
compelled 78:18
compelling 41:1
133:18
compile 12:18
compiling 160:4
complementary
138:12
complete 311:2
completed 89:12
91:2 103:22 134:3
162:20 198:19
303:6
completely 169:12
202:7 209:16
219:19 264:2
completeness
106:10
complicated 12:20
215:12 228:22
279:8
component 72:20
210:10 301:6
components 202:4

214:1 217:3 249:4
267:1 299:16
composition 124:7
125:1 136:13
137:3 142:9
compounds 273:11
comprehensive
91:13,15 298:9
computer 225:1
conceiving 158:10
concentrations
130:19 133:20
concept 138:19
235:4 237:4 308:8
308:12
concern 71:9
114:21 121:22
122:6,9 129:18,21
130:3,8 131:6,16
149:12 277:15
303:11
concerned 83:1
88:9 154:16
159:16 175:18
178:11 261:9,17
concerns 54:14
297:10
conclude 298:18
conclusion 88:15
88:18 89:6 160:11
227:20 235:14
253:14 299:5,8,11
311:3,6,15
conclusions 153:8
158:13 212:5,5
213:10,14 223:3
285:18
concocting 242:22
concrete 95:16
310:14
condensed 276:9
conducted 101:15
163:8 164:10
165:8
conference 124:3
133:14 230:3
confident 293:5

confirm 264:21
confounded 285:10
confounding
107:15
confusing 95:7
104:20 155:10
congenital 153:11
155:15
connect 127:14
129:13,13 143:8
144:5
Connecticut
101:16
connecting 130:16
connection 25:3
214:3
conscious 209:5
consensus 125:6
consequence 56:17
56:21
consequences
230:17
consider 10:18
41:19 49:10 52:4
91:12 110:1
117:19 140:3
176:19 235:8
276:14 311:10
considerable 248:7
249:7
considerably
242:21
consideration
284:12 286:18
considerations
216:13
considered 10:22
39:20 63:13 164:9
164:19 310:6
consistency 253:17
298:12
consistent 33:8
155:14 175:8
285:5 300:19
consistently 69:13
consolidated 296:6
constant 97:20

constituents 257:6
265:9 266:2 272:4
constitutes 130:3
constraint 14:1,2
constraints 15:2,5
15:6 18:11 19:7
construct 28:4,20
consume 9:21 13:9
102:18 209:12
229:10 231:12
239:8 240:15
consumed 15:11
99:2 116:10
121:21 122:1,7
132:4,4 222:22
224:14 251:1
consumer 2:7
13:14 25:7 40:12
40:18,21 43:14
44:18 50:6 59:3
64:18
consumers 8:10
25:1 39:6 50:9
52:5 75:12 197:20
consuming 95:20
100:19 143:15
230:15 268:16
291:3 308:12
consumption 12:13
14:5,17 18:4 20:1
20:11 21:8,19
39:4 49:11,12,20
50:2 123:8 186:10
186:11,12 187:11
187:19 188:11
190:18 194:4
195:11,12 197:11
234:14,22 235:22
236:7 238:5
241:15 243:4
249:17 254:6
259:14 285:4
286:16 307:11
consumptions
249:21
contagion 78:9
containing 188:11

195:13
content 12:13
CONTENTS 2:1
2:23
context 44:19
125:20 126:18,19
132:14 287:2
289:11
continuation
259:14
continue 45:18
220:5 223:16
289:7 313:5
continued 2:23
281:4
continuing 175:11
contradict 261:18
contrast 106:6
contribute 126:20
147:15 164:4,6,16
236:10
contributing
237:15
contribution
139:12 229:8
278:17
contributor 34:18
114:16 139:17
140:7 148:7
150:22 243:7
contributors 119:3
147:10
control 66:4 80:12
107:12 110:7
202:7,9 235:9
237:3,17,18 283:8
304:18,20
controlled 51:13,16
201:21
controlling 24:14
102:19
convenience 36:21
48:9
convenient 33:3
conversation 40:4
40:9
conversations

222:14
converse 96:2
conversion 15:20
converting 252:7
convince 73:14,16
82:9
convinced 82:8
144:1
cook 36:14 37:3
77:5 82:3,7,10
84:3
cookies 77:12
139:15
cookie-cutter 119:6
cool 62:15,16,17
63:1 64:15 82:7
cooler 77:5
coolers 232:1
coordinate 88:2
copy 18:17
copying 207:12
core 108:6
Cornell 26:22
38:18,20
corner 7:8,9,10,13
7:15,18 8:4,6
23:10
coronary 206:11
251:9 259:12
260:4,5 263:15,22
correct 28:6 32:22
106:21,22 204:8
234:22 244:8
299:9 311:8
correctly 243:15
correlated 54:10
56:11
correlates 176:17
correlation-based
43:5
correspondent
50:14
cost 5:15,19 8:12
8:17,19,21 9:4,16
10:7,9,10,19 11:1
13:22 14:2,19
15:5 17:17 18:4,5

20:16,18 27:2,19
28:5,12 29:3 31:3
32:14,17,20 52:20
178:14
costly 179:5
costs 27:4 252:10
cost-effectiveness
178:19
country 31:18 70:6
139:12 245:7
couple 53:4 107:4
157:9 267:22
270:5 299:21
310:10 316:5
course 29:10 67:9
101:1 179:19
225:5 255:7
284:21 307:3
court 8:19 38:9
courts 9:9
cover 86:13 137:10
covered 290:19
297:19 309:9
covering 297:16
covers 114:7
cow 68:17
co-author 35:8
CO-EXECUTIVE
1:18,19
cracks 153:1
crazy 81:21
CRC 9:4
cream 46:11,12,12
46:13
create 16:6 18:21
79:4 149:20
created 13:11
creativity 115:21
crept 107:18
crisp 92:9
crisps 139:15
criteria 130:2,9
critique 178:5
cross 109:16
177:22
crossed 109:12
cross-cutting 103:4

152:5 181:22
186:8 189:22
199:18,19,20
201:3 204:17
205:18 221:8
281:22 284:9
295:10 297:2,10
298:1
cross-sectional
107:12 108:8,20
228:9,15
crucial 34:4
crude 256:2
Cs 83:5
CSFII 33:11
cues 69:22
culturally 34:1
culture 69:15
245:12
cultures 70:19
cup 32:21 80:13,13
80:14
cupboards 48:22
cure 55:7
curious 167:9
current 14:5 90:11
123:8 220:10,16
277:6 278:6 286:4
309:12
currently 113:18
115:19 164:19
165:7 220:2
289:19
curve 94:15
cut 52:14 78:1
190:19 208:14
282:21 283:10,22
309:17
cutting 83:6
cutting-edge
181:13

_____D_____

D 4:1 123:7,8
127:15 134:8,21
135:1
daily 7:12 116:7

296:20
dairy 291:1 292:12
danger 61:11
Dariush 140:12
dark 22:6
DASH 141:19
data 13:7,12 33:11
43:10 47:12 54:6
56:16 83:9 86:18
96:5 103:16
105:18 108:8,20
113:1,8,21 117:11
118:10,18 119:2,9
119:10 124:20
130:11 139:8,9
141:5 142:16
144:15 172:2
176:4,7 197:21
206:21 210:21
217:12,14 220:1,2
227:3 228:3 229:2
232:10 236:15
241:10,18 248:13
250:6,20 251:15
251:16 252:12
253:1,7 256:8
257:7 260:2,6
263:3 265:11
276:17 280:16,17
280:18 286:2
289:1 298:11
database 5:14,20
12:19 25:5 27:2,5
28:16,17 36:18
44:10 83:3 108:18
131:22 180:6
192:5,5 223:19
242:15
databases 250:13
data-driven 12:6
date 86:7,21 120:1
226:22
David 74:1
Davis 1:18 40:1
66:12
day 14:11 21:5,7
27:18 36:14 51:5

51:7 53:1 59:7
61:20 68:17 84:6
94:5,8 96:19
98:16,19 99:2
100:17,20 102:7
178:13 215:2
222:22 223:4
224:14,18,19
225:2,5,6 226:16
226:17 236:11
238:3,19,20,20
241:9,18 246:5
254:16 257:14,21
258:8 292:19
294:8 295:12
297:11 303:15
307:5
days 34:16 224:13
225:17 232:12
236:8 302:16
316:5
deadline 131:13
134:6
deal 72:1,14,16
75:22 88:10
102:14 108:13,19
160:2 162:3
217:20 279:3
315:3
dealing 138:8
217:5 241:7
252:21 274:4
282:22 297:11
deals 138:9 264:20
dealt 269:20 271:8
debilitating 252:9
decades 157:9
decent 172:6
decide 44:22 62:11
93:22 155:2
167:10 199:1
312:18 314:3
decided 135:4
296:3
decision 58:5 59:19
59:20 60:4 68:21
79:9 94:19 183:22

199:16 223:9
275:7 288:16
299:8
decisionmaking
140:22
decisions 49:22
59:6,9,17 64:1,11
107:8 143:8 194:1
216:12,22 217:1,6
296:20 298:21
315:13,16
decision-making
215:19 312:3
declines 153:15
decrease 252:5
255:10
default 185:17
defect 133:16
defects 55:7 122:20
154:13
Defense 9:13
Defense's 6:5
deficiencies 45:11
48:2
define 10:9,14 11:5
69:15 130:6
131:17 143:2
155:2 193:16,19
defined 10:10 12:2
142:8 157:20
defining 243:15
246:2
definitely 36:16
103:4 140:1
204:10
definition 75:19
129:22 131:17
137:14 194:19
224:12
degeneration 271:9
310:4
degrees 60:10
delegating 288:9
deleterious 269:5
deliberate 278:4
289:7
deliberations 138:6

delighted 38:15
221:20
deliverable 310:16
delivered 83:17
delve 43:9
dementia 271:4
demographic 52:18
demographics
52:14
demonstrate 7:6
demonstrating
24:12 62:21
denominator 255:7
density 161:13
162:4,6,8,9,15,17
203:9
dental 198:20
212:1
dentist 51:7
Department 1:2,3
5:22 6:5 9:13
departure 265:5
depend 91:6
dependent 245:12
depending 7:2
15:16 107:22
108:14 127:3
138:18 242:21
285:16
depends 6:22 57:13
107:1
derive 156:12
deriving 12:4 157:1
descend 235:19
DESCG 105:19
describe 18:13
178:2 213:14
245:6
described 29:2
236:7
describing 14:15
description 245:14
descriptive 229:12
232:14 244:17,21
designated 298:19
309:16
desk 109:12

despite 251:14
desserts 17:11
139:11,13 151:1
detail 14:15 51:19
61:18 141:15
229:18
determinant 73:3
determinants
41:20 262:8
determinations
313:1
determinative
52:17
determine 181:16
determined 142:22
detrimental 156:19
develop 301:15
developed 141:6
developers 300:11
308:20
developing 153:14
192:5 275:11
301:14
development
165:22 166:2,7
271:2,3 299:21
300:1
DFO 1:18
DGAC 66:11
123:22
DHHS 1:19,20
diabetes 188:8
196:7 226:11
246:17 266:7
272:8
diagrams 197:13
diet 5:19 6:19 7:1,4
8:8 9:17,22 11:5
12:2 13:19 18:21
19:6 23:19 24:7
24:10 26:20 28:5
35:20 40:7 76:14
95:21,21 96:3
98:20,22 106:21
107:14 110:16,22
121:13,15 125:13
126:8 127:2,5

136:6 141:16,19
142:14 144:11
145:8 146:21
170:14 171:15
179:21 184:3
187:17,21 190:22
192:19,20 193:13
193:14 194:6,13
194:13,17,18,21
198:6 202:1 209:6
209:22 210:10
214:1 231:1
233:18 234:21
237:16,18,18
239:20 240:3
241:22 257:6
260:12 261:2
270:1,15,18
276:16 277:7
dietary 1:4 11:2,7
11:15 13:20 19:16
19:18 60:22 62:22
66:17 71:5 94:4
106:16 121:4,9
124:17 127:8
128:2 132:14
133:4 141:6,9
142:4,14,19 143:2
144:3 147:14
161:15 162:8,9,13
163:3,19,22 165:1
171:9 182:7,21
186:17 192:8
195:15 196:1
200:10,14 201:10
209:9,12,18,21
210:4,17 214:21
220:18,20 221:22
223:22 224:10,11
226:2 234:1 239:9
239:20 244:11
248:21 249:2,4
250:17,22 251:10
252:21 253:13
254:15 257:12
258:9 259:1
262:11 263:17,20

265:9 266:1,9
267:1,5,6,13,14
267:15,18 268:6
268:11 272:14
277:19 278:14
279:6 285:20
291:15,18
Dietetic 61:14
163:9 219:2
dietitian 60:3,13
178:13,17
dietitians 72:18
202:20
diets 7:11,16,19,22
8:2,2 28:20 131:4
143:15 145:5
146:17 147:3
158:8 162:14,16
171:1 188:22
189:1 191:8 193:7
193:7 272:16
292:7
difference 34:6
65:7 194:6 218:10
218:11,20 237:19
258:6,12 264:12
270:14 275:12
279:13 305:18
differences 245:10
253:20 256:15
257:8 266:3 297:3
different 10:8
25:22 35:6 40:13
42:3,11 46:21,21
48:13,14 49:20
55:19 63:4 70:8
70:21 72:10,11
88:16 103:12
140:19 144:3
146:19 153:8
157:14 158:9,10
161:8 162:14,16
173:5,10 175:2
176:12 177:3,5
183:8,14 192:20
193:7 197:5
205:13 211:8

218:6 223:22
226:1 229:1
230:18 244:12,15
245:7 246:6,8
267:5 268:12
270:8 276:13
283:21,22 285:17
291:10 300:6
308:5
differentiate
308:18
differentiated
288:3
differently 211:3
difficult 35:20
95:15 99:6,10
108:7 187:2 256:8
314:11
dilemma 54:15
diligently 131:14
dimension 69:20
dimensions 80:17
299:21
dinners 26:1
direct 182:7
direction 53:18
78:14 185:22
247:19 289:3
296:21
directionality
109:4
directions 69:5
109:4
directly 64:3,4
136:22 181:11
182:2 207:13
director 1:19 38:19
39:18 41:6 287:14
disaggregate
168:22
disaggregating
276:13
disagree 173:7
disappointment
46:6
disclaimer 208:18
disclaimers 229:16

discouraged 68:13
discretion 17:15
discretional 17:15
discretionary
126:11,15 137:11
137:18 138:5
139:2 140:2
148:19 151:4
229:9 235:3 237:4
240:13,16,22
241:1 308:9,14
discuss 171:11
186:1,18 191:11
298:1
discussed 13:21
93:19 103:5,8
186:7 193:12
196:4 271:18,21
289:16 302:15
discussing 42:15
discussion 2:5,8,11
2:15,18,21 3:3,6,8
3:9 88:14 109:16
124:18 137:17
138:2 152:4 159:5
162:13 184:12
185:17,19 188:5
189:19 194:16
197:18 200:17
201:4 206:9
219:20 221:10,20
236:14 245:16
249:19 260:12
268:19 281:21,22
288:19 297:5
311:19
discussions 156:8
191:2 219:11
235:3 238:15
264:4 274:5
297:20
disease 56:18 104:5
104:5 122:22
153:5,11 155:19
159:11 188:9
206:12 225:21
226:10 227:7

237:12,17 246:17
247:2 249:3 251:8
251:9 259:15
263:16,22 264:8
265:10,18 266:7
271:6 272:9
diseases 162:11
188:7 251:15
252:8,8,9
dishes 48:22 286:7
disinhibition
236:22 238:3
240:1 241:18
243:9
disinterested 52:13
53:20 54:2 55:12
65:22 75:17 76:11
78:21
disorders 229:15
233:2 279:4
disorganized 199:2
display 102:1
140:17 141:14
disproportionate
63:16
disqualified 40:10
distance 68:19
distilled 231:18
232:2 246:8
distinct 88:18
245:10
distinction 158:19
250:4
distracted 304:3
distribution 113:19
255:22 257:1
distributions 251:2
divide 16:8,14,17
17:9,14,16
divided 16:20 17:2
17:18,22 18:22
161:11
divorce 8:19
docket 152:13
document 104:15
212:8
documented

159:21
doing 23:15 26:5
29:8 49:14 50:13
51:5 57:16 64:8
64:16 68:20 69:12
75:2 78:13 94:22
94:22 97:17 105:4
112:5 118:2 129:1
129:2,11,18 133:2
158:12 167:19
169:1 179:10
211:16 222:18
223:12 225:19
227:5 252:6 268:2
287:3,12 288:1,2
289:16,17 290:1
290:15 298:8
302:19
dollars 33:1,2,2
174:5
donut 46:17,18
door 102:22
dose 94:15 223:1
doughnut 234:21
doughnuts 139:15
downstream 83:8
Dr 1:7 2:3,3,6,10
2:14,17,20 3:2,5
5:10,21 6:14
25:15 26:3 27:10
27:20 28:1,6,14
28:22 29:17 30:17
31:6,10,22 33:20
34:7 35:7 36:15
37:20 38:1,14
39:9,17 40:3,7
57:4 58:17 61:13
66:11,18 67:21
70:4 72:4 74:9,22
75:7 76:19 80:3
80:16 83:13 84:22
85:11,13,22 86:4
118:4 133:17
144:18 148:18
149:4 160:18
163:6 172:1
177:18 200:9

222:2
draft 131:12 134:7
135:21 306:11
dragged 76:11
drags 54:1
dramatically 40:5
drastic 183:4
draw 180:19
drawing 158:12
179:14
dressing 286:5,9
drew 12:12
Drewnowski 28:1
31:10 57:5
Drewnowski's 32:6
dried 191:14 283:5
drifting 183:11
drink 147:15,18
197:20 202:7
223:5 224:16
225:1 229:17,20
232:4 233:11
234:16,20 237:1
238:19 244:5,7
245:3 303:15
307:4
drinker 246:5
drinkers 246:4,19
246:21,22
drinking 102:8
126:13,19 224:2,7
225:22 226:9,15
227:6,9 228:4,14
232:21 234:9
236:3 240:2 241:8
242:1,22
drinks 148:22
222:22 223:4,5
224:18 225:2,5,12
226:15,16 231:17
236:9,9 238:3,20
238:20 239:9
241:9,18 242:19
243:17 244:12,15
246:7
drive 115:5,16,16
212:3

driver 48:20
drivers 42:13 44:13
44:15 45:9 47:21
48:6 262:22
driver's 309:6
driving 45:13
46:11
DRI's 11:11,13
15:4
drop 22:20 251:6
dropped 291:11
drops 175:14
drove 140:21
DRPH 1:11
drug 252:19
Dudes 82:1
due 124:11
dumped 190:1,1
dumping 185:11
duplicating 191:20
287:6
duplication 288:21
296:19
duty 86:5
dwell 180:18
Dyson 38:16

E

E 1:12 4:1,1 19:21
20:3,14,14 22:18
267:2
earlier 242:7
early 134:12
177:13 221:13
227:21 276:8
280:17
earth-shattering
188:18
easiest 84:1
easy 52:11 53:15
193:19 194:14
198:21 302:8
eat 8:10 23:11
29:14,22 31:16
32:7,10 33:19
34:16 38:22,22
44:22,22 45:6,14

46:3,21 47:20,22
48:1,5 49:10
50:18 52:11 53:1
53:18 57:7,8,18
57:20 58:2,6 64:9
68:16 71:20 73:15
74:18,19 77:11
78:21 80:20 81:1
81:3,4,4,8,14,15
84:6 111:12
117:16,16 176:1
197:22 209:9
215:3 220:20
234:17 237:5
239:9,18 245:10
285:8,9 292:17
eaten 34:17 35:4
37:14 45:19 73:4
73:9
eating 2:4 6:17
13:1 29:21 31:12
33:1,13,16 36:4
45:17 49:5 57:19
57:21 58:7 59:22
64:1,6 69:2 80:7
84:17 97:15 98:20
100:8 110:19
116:9 122:5
127:13,14 192:20
198:2 238:4
244:14 285:11,21
286:12 291:6
eats 63:17
economic 13:17
74:16
economics 23:6
24:6 28:19 32:22
43:14
economist 5:11,22
6:21,22 17:20
26:4 30:15 34:21
economists 10:8
18:3
edit 218:2
editing 218:18
education 25:11
34:1 43:16 61:4

63:15 67:11,15
68:1 80:11
educational 25:21
educators 25:2,6
effect 166:4 201:8
267:4 268:13
300:7,19,21 304:3
305:17 306:8
effective 41:21 54:8
54:12,14 55:17,22
57:3,12,13 58:2
59:2 73:16 77:13
189:1 191:9 210:9
229:14,14 233:1
267:13
effectively 96:17,22
effectiveness 55:19
effects 89:9,15 94:7
95:17,22 99:17,18
153:3 155:18
268:7,12,16
270:14 272:3,7
273:16,18 310:2
effort 103:17
159:17 160:4
191:21 198:22
206:15 270:8
287:6 288:21
296:19
efforts 76:15 80:10
EFNEP 25:10
egg 37:15 283:21
294:17,20
eggs 192:15
eight 10:15 90:3
102:7
Eighties 227:9
258:21 259:18
either 26:18 45:16
45:16 49:20 54:20
62:6 64:2,3 84:20
134:12,13 193:20
229:21 284:3
309:11
elaborate 67:19
105:8
elderly 87:18

123:16 156:16
electrolyte 107:6
electronic 220:16
element 98:9
elements 88:19
178:2 201:14
298:11 301:21
eleven 10:16 70:16
255:14 256:18,18
eliminate 96:1
eliminated 239:13
eloquently 201:17
emails 29:21
emotion 48:3
emotional 45:12
49:8
emotions 45:13
47:2
emphasis 27:18
84:13
empirical 54:6
employed 5:21
empowered 78:4
empowering 75:9
81:5
encompasses 44:9
136:18
encouraging 68:16
81:6
ended 55:1,4
230:18 301:22
endpoints 268:18
272:10
ends 47:17 49:9,21
63:10 80:19,22
154:3 184:9 219:7
energy 2:16 14:8
114:6 121:4 125:1
125:5,11 126:6
127:22 128:7
129:14 137:21
138:7 139:17
140:16 146:13
160:20 161:12
162:4,6,8,9,14,16
165:22 181:8,11
184:7 187:6 188:6

189:4 191:10
200:18 203:8,17
205:7,11 231:9
233:5 235:16
255:4 257:22
258:14 295:20
engage 282:14
engaging 216:1
English 93:16
144:10,14
enjoyed 71:3
entail 69:6
enter 35:5
entire 40:9 64:20
entity 260:20
environment 48:21
71:8 76:17,18
79:5 85:4 128:4
161:16 164:13
167:22 168:14,16
168:19,20 170:7
184:7 216:10
313:14
environmental
66:2 121:12 128:4
128:17 129:3,5,9
164:14
envisioning 288:9
epi 43:6
epidemic 216:9
255:5 259:15
260:4
epidemiologic 92:5
106:7
epidemiology
285:4
equations 262:13
267:21
equivalency 231:14
equivalent 32:21
32:21
equivalents 18:7
era 122:15
Eric 1:14 3:2 39:17
147:5,7 178:12
185:11 205:20
209:3 211:10

212:9 221:13
222:2 233:9
241:12 242:2
243:14 246:1
247:15 253:20
255:17 264:2
275:21 289:13
291:14 303:8,11
Eric's 152:1 185:11
196:21
especially 98:6
109:1 116:16
144:2,4 156:17
172:4 209:1
312:10
essentially 16:18
188:15 190:15
257:9 259:10,13
298:10,17
Essery 120:18
161:3
establish 130:2,8
206:5 215:17
315:14
established 131:10
estimate 8:19
estimated 95:12
et 106:18 109:8
153:5 158:8 214:9
236:19 247:20
254:3,19 266:4
273:11,12
ethanol 3:2 222:3
231:15 244:10
evaluate 143:3
evaluated 109:13
143:9
evaluates 298:10
evaluating 26:17
143:7
evaluation 298:19
Eve 120:17 130:5
161:3 169:16
184:22 196:12
events 106:4
eventually 112:20
everybody 29:15

51:1 84:15 91:12
113:3 185:1
198:13 206:9
225:11 231:17
314:9
everyone's 152:11
everything's
198:15
ever-present 277:8
evidence 3:9 28:17
83:4,6 88:9 89:2
107:5,22 117:21
124:10 132:7
133:18 159:20
163:9 168:11
169:22 173:20
181:9 187:20
213:15 216:3
217:22 221:2
223:14 228:3
235:22 248:20
250:16 254:4
256:17 261:12
264:18 267:17
268:3 287:15
291:19,21 292:3
298:4,22,22 300:3
300:17,19 301:5
303:19 304:12
305:10,11 306:7
307:13,21 308:1
310:2 311:3,7,11
314:4
evidence-based
103:14 210:16
evident 137:7
exact 39:15,16
exactly 28:14 33:20
58:18 75:6,8,8
139:2 142:22
148:10 155:22
156:8 158:16
201:1 208:14
218:16 277:2
299:17 306:18
314:4
Examination 12:11

examine 229:18
example 25:21
95:16 108:4
127:16,18 188:12
189:3 197:4 207:5
210:15 224:16
241:1 244:13
284:15 285:14
303:13 307:10
examples 16:13
205:18 207:17
306:4
excellent 67:4
174:11 247:6
272:21
exception 71:17
255:10 257:3
281:10
excess 156:18
exchanged 152:12
exciting 278:16
excluded 90:4,5,6
90:13,14 92:2
excretion 100:13
100:17
executive 1:19
39:18 41:6
exercise 143:12
171:15 176:1
293:7
exhaustive 142:7
exist 124:15
existing 208:5
220:1
expand 191:16
192:1 214:22
expanded 185:9
266:15
expect 19:14
263:21
expected 165:19
expenditures 6:9
7:12 9:1,2 34:19
29:16,19 30:7
experience 85:20

116:3 241:20
302:19
experienced 70:8
experiences 225:9
Experimental
248:4
expert 4:5,16 87:5
298:14
expertise 4:9,20
181:15 217:2
315:19
experts 87:8 217:5
279:6
explain 24:18
explained 215:9
explicit 109:14
explicitly 145:13
exploded 151:14
exploding 214:5
explore 280:15
explored 102:6
express 112:20
extent 109:11
115:18 162:7,9
externally-gener...
46:8,14 47:15
extra 154:21 155:4
156:10 157:6
extraordinarily
262:19
extremely 214:2
extremes 156:22
eye 77:15 310:3
eyes 220:19
e.g 164:15 165:13
165:15

F

fabulous 116:13
Facebook 61:7
face-to-face 248:2
fact 22:10 30:19
32:7 51:13 59:14
76:2 80:4 97:4,5
106:20 139:5
146:16 147:1
150:16 155:3

209:2 224:4
236:21 248:22
250:8 261:12
270:12,13 275:17
277:22 304:4
305:3,16
factor 307:5
factors 45:10,12
48:1 49:8,8
101:12 121:12
128:4,17 129:3,5
129:9 164:14
170:7,19 216:19
238:7 239:21
252:21
Factory 85:1
fail 42:5
fair 51:2 169:13
224:3 236:10
242:16
fairly 167:18 183:4
198:21 211:3
215:12 278:4
fall 13:22 48:17
58:10 68:13
148:11 152:22
155:12 181:22
209:14 211:13
263:22 309:15
falls 226:13,18
familiar 138:16
179:8 298:7
families 29:5
family 10:13,17,21
29:9,12 63:10,17
64:1 66:6 77:21
78:9
far 34:20 54:1
90:17 115:7 140:2
174:17 177:14
191:2 199:9
214:20 279:11
282:6,22 291:2
295:10 299:13
303:6
fascinating 139:6
286:3

fashion 167:4
fat 11:17 16:22,22
17:1,9,9,16,19,21
27:9 54:18 96:21
132:20 147:11
149:6 165:1 190:5
202:21 231:10
236:18 237:14
239:2,18 240:15
249:2 250:18
254:6,9 255:8,13
255:14 256:19,22
257:1,5,10 258:3
258:5,15,16 259:4
259:4,13,19
260:14,19 261:3
261:15,16 262:11
262:13 263:4,12
263:17 264:6,18
264:18 265:3,4,9
267:5,6,8,9,14,16
271:13 272:4,12
272:16 273:4,7,14
273:19 277:15,19
281:8,8 289:16
fatal 252:8
fatality 252:4
fathers 63:20
fats 19:13 22:22
23:1 132:19 248:5
248:22 249:22
250:3,3,7,17
251:4,10 253:2
254:12,14 262:12
263:2,9 266:9
268:8 270:17
271:13 273:15
278:14
fatty 3:4 107:19
114:6 190:6
192:16 247:8,12
248:1,7 249:17
268:14,17,19
269:4,18,22,22
270:6,13,16
279:18 280:4
281:6 286:5 289:9

291:7 293:2
294:10,16 295:6
food-related 49:22
foolish 208:1
force 22:11
forget 110:19 265:2
292:9
form 155:4
formally 309:16
314:13,14
format 42:11 96:9
119:2 134:17
former 39:18
formerly 6:4 10:3
forms 10:2
formula 281:12
formulas 280:3,10
280:13
forth 217:2 299:13
303:4
forthcoming 24:12
fortification 123:4
124:13 154:11
fortified 156:13
forward 71:7
116:15 120:19
149:16 160:13
162:5 167:3 194:2
212:6 216:11
217:15 220:5
222:19 253:13
282:19 289:4
302:17 309:6
315:14,17 316:7
foster 6:10 9:5
found 35:18 59:6
139:6 140:15
154:5 244:6 316:6
four 4:5,16 8:11
10:14,18,21 17:3
48:7 54:4,11
59:19 92:12 116:5
196:10 222:22
223:15 225:2,17
226:15 233:4
236:8 238:3,14,20
239:11 241:8

242:19 248:16
279:17 286:6
292:19 302:2
fourth 27:17 96:5
139:20 290:5
four-day 26:20
frame 174:1 220:14
frames 301:20,20
302:3
framework 49:16
103:18
France 144:12
245:9 246:20
Frank 94:11 95:1
105:15 191:10
264:11 272:16
French 144:15
frequency 37:15
39:3 243:16,20,21
244:1
fresh 74:18 86:20
92:13
Friday 225:12
fried 69:2
friends 272:14
front 45:4 55:9,10
59:9 83:10 108:21
215:17 220:19
276:15 277:8
fronts 103:12
front-end 143:1
frozen 37:16 74:20
fruit 17:7 47:18
87:4 188:13 226:8
fruits 17:2,3,4,5
19:10 21:22 22:8
22:9,11 68:16
74:18 106:17
107:2 190:12
192:1 261:1
274:13 283:1
291:2 294:2
Fukagawa 1:10
79:15,16 213:21
213:22 247:16
full 32:13,14 33:4
35:4 55:12 198:2

202:20 287:17
310:16
fuller 202:22
fun 185:6
functional 124:14
130:16,18 131:5
136:19 195:15
fundamental 213:5
fundamentally
246:6,8
further 135:16
163:16 167:22
169:9,16 174:10
223:10,13 227:11
270:2 282:16
289:5
furthest 162:19
fusion 75:14
future 79:18
233:15 234:4,12
279:14,14

_____
G

G 4:1
gain 48:17 161:20
165:12 170:8
174:22 182:12
187:12 197:12
227:14 228:5,20
232:20 235:15
236:1 264:9,13
gaining 183:9
gap 144:6 148:11
Gary 238:14
gatekeeper 63:11
63:12 73:6,20
83:21 84:18
gatekeepers 63:21
65:9
gathering 221:1
Geese 46:10
gender 118:20
256:14 258:12
259:9 266:3
general 94:3
121:21 122:2,8
158:4,7 186:13

259:2 269:4
generalizability
298:13
generalized 191:13
generated 46:9
generation 77:16
generations 80:2
genetic 266:3,22
278:12
gently 66:14
Germany 246:22
gestational 161:20
165:12,13,14
getting 23:18 33:22
48:15 58:7 60:21
68:18 71:19 75:21
100:8 145:2
151:14 169:2
193:20,21 211:19
263:21 300:9
give 6:21 15:10
46:5 49:16 64:8
66:9 82:21 91:14
95:15 111:12
147:11 160:17
192:3 202:12
205:22 206:6
213:1 215:3
225:18 307:9
given 64:14 117:10
185:22 190:2
196:12 219:11
220:16 225:6
256:22
gives 49:5 98:10
giving 69:1 81:7
161:4 189:14
GI's 70:7
glad 30:11 172:22
316:5
glass 101:19 246:5
glasses 102:7
globally 82:16
glycemic 186:16,17
195:22 196:1
198:19 200:10
207:5 212:12

231:1 310:2 314:1
go 7:8,14 12:3,4
15:12,14,19 21:12
23:8 32:19 36:20
41:13 46:17 52:1
64:9 67:3 70:12
82:6 86:6 92:11
96:11 98:13 110:7
112:9 115:3,8
116:8 128:18
129:6,8 142:3
152:18 162:4
163:16 172:17
175:5 176:5 181:9
187:8 191:3,4,9
192:7 195:18
197:4,6 199:9,14
199:22 206:15
208:1,12 211:13
211:20 212:7
216:11 217:15
220:5 221:3 224:9
226:22 227:11
229:20 236:2
254:3 255:3
259:18 263:8
282:19 285:6
289:4 293:7 307:1
309:6 310:22
313:4 315:3,14
goal 31:21 99:7
237:3 288:21
303:5 311:1
goals 95:12 115:22
141:10 142:15,20
210:1,13 249:13
goes 12:20 16:10
50:22 61:17 77:10
82:2 88:14 92:12
145:19 184:10
274:2
going 6:20 8:14
10:8 12:5 16:3
18:11,15 20:2
23:2 28:13 30:9
32:19 44:4,16
45:5,15,16 47:22

48:15 50:15 53:3
53:20 54:5 57:16
60:4 69:4,6 70:13
70:15,17 71:6,7
72:7 73:15 74:10
74:15 77:4 79:7,8
82:9 83:5,19
85:15 86:20 88:10
91:16 93:20,22
94:12,18,19 96:7
99:10 102:11,15
103:15,17 104:3
104:12 108:7,17
108:19,22 109:1
109:19 111:19
112:1,20 120:21
125:14 127:19
140:19 145:16,18
149:22 153:7
154:18,19 155:12
156:2 158:7 159:6
160:1,4,9,10,16
161:12,22 163:13
163:15 165:16
166:16 167:10
168:5,6,17,22
169:3,19 170:9,20
173:17,22 174:1
174:20 176:4,5,6
178:20 179:11
180:20 181:1,9
185:10 186:4
187:1 188:2 190:8
191:13,16 196:14
196:22 198:21
199:4,5,7,9,10,10
199:13,16 200:2,3
204:11,13 205:5
205:14 207:10
208:11 209:3
211:3,8,11 212:16
212:16,17 216:15
216:16 218:15
219:5,12,13 220:5
222:13,14,19
223:18 227:18
228:11 229:6

231:8 235:18
239:20 240:5
246:2,5,7,9,16
247:2 248:12,22
249:14 253:13
256:7 269:5 270:1
278:16 286:17
288:11 300:21
306:19 307:18
313:15,20 314:4
314:11
Goliath 74:2
good 4:3,15 7:16,19
  17:21 28:9 30:5
  47:18 53:2 56:18
  57:18,20 61:11
  67:22 71:12 72:8
  91:3 92:2 95:5
  108:4 109:18
  111:3 113:2,8,16
  118:3 119:19
  142:14 144:15
  146:1 149:8 150:7
  154:12 155:9
  163:11 169:2
  172:20 178:22
  184:3 194:9 207:5
  210:15 236:12
  239:17 241:2
  267:17 275:18
  280:7,12 292:18
  297:15,21 302:11
  313:11,12
good-tasting
  110:22
gotten 76:16 195:6
  275:17 277:1
Government 35:1
governmental
  60:15
governors 234:7
go-around 279:13
grab 212:13 282:17
  288:12
grade 47:21 83:4
  89:2,7 213:15
  298:15,19 299:4,5

299:12,15 303:21
311:7,11 314:4,12
314:18
graded 101:3 299:7
grades 298:14,21
  300:7
grading 3:9 88:9
  298:3 301:21
  302:12 304:4
gradually 69:5
  117:3
grain 19:2 114:16
  151:1
grains 16:17 19:9
  21:18,19 22:4,5
  71:18 114:18,19
  127:17 150:21
  192:2 283:4
grain-based 139:11
  139:13
gram 32:18
grams 14:20,21,22
  18:5 32:12 55:3,5
  55:6 254:9 258:3
granola 139:16
graph 24:5
gras 28:8
great 34:14 39:9,10
  39:12 61:15 69:1
  75:10 89:14
  112:11 167:5
  172:13,15 184:18
  191:10 211:5
  272:20 278:8
  280:13 293:17
greater 96:4
Greece 144:12
green 22:6 71:13
  71:22 73:1 74:17
  78:4
grocery 15:12,14
  29:10
ground 180:22
  216:5
group 11:22 14:22
  17:11 52:18 53:9
  53:19 56:22 58:10

58:13 67:6 75:19
79:20 103:5 107:6
107:17,19 119:20
119:21 121:14,17
128:5 132:21
138:18 147:11,12
157:17 159:18
173:16 180:19
181:3,9,15,20
188:3 191:18
192:16 196:5
199:20 200:5
205:1 217:10
220:7 228:11
246:9 247:21
249:20 262:8
271:17 274:3
275:7 285:15
287:3,7,17 289:16
289:21 290:5
291:1 293:4,6,6,8
293:9 294:4,9,14
294:16 297:5,17
298:17
groupings 158:11
groups 15:22 17:3
  18:1 21:1,9 22:3
  22:17 89:4 95:2
  101:15 107:20
  122:1,7 131:16,20
  140:4 146:19
  147:11 151:8,13
  151:14 157:17,18
  157:19 158:1
  176:15 192:17
  200:6,14 202:14
  277:10 282:20
  284:11,22 287:19
  288:3,10,12 289:7
  289:18 290:19
  294:11 295:4
  297:3 298:8,8
grow 76:22 77:16
growing 81:2 84:2
Guenther 222:8
  250:14
guess 27:21 30:5

39:11,13 61:6,8
86:6 99:20 109:10
111:17,18 150:15
182:8 212:4 215:4
215:9 231:5,20,22
232:4 234:10
236:4 238:8 261:8
263:11 276:6
282:11 284:1
286:20 289:5
290:3 291:18
292:10 304:22
guessing 233:22
guidance 82:22
  83:11 186:18
  196:1 214:21
  226:2
guide 8:10
guideline 86:18
  149:13 173:16,21
  220:11 224:11
  234:14 245:1
  249:13 264:5
  278:6 291:18
  299:19,21,22
  300:1,10,10,14
  308:20
guidelines 1:4 11:3
  11:15 27:8 60:22
  62:22 66:18 71:6
  74:19 85:13,14
  94:4 96:15 104:1
  141:7 165:18
  166:17,18 173:13
  174:2 180:7 182:7
  182:21 192:8
  197:9 219:3 222:1
  222:16 223:22
  224:10 228:1
  231:14 234:2
  236:2,5,6 245:17
  248:21 249:7,11
  250:17 251:7
  256:22 257:13
  258:9 259:1,2
  262:16 263:6,7,20
  266:13,18 268:20

31:16
inextricably 97:6
inferences 109:1
inferring 55:5
infielders 199:21
infinite 168:8,9
inflate 10:11
influence 39:2
44:21 46:20 48:1
49:1,18 56:14
63:22 80:1 168:16
187:21 203:20
214:2 249:2 265:8
influences 69:16
201:11
influencing 190:22
224:7
inform 43:12
119:17 177:11
information 41:11
41:21 42:4,19
50:7,10 51:12
53:3 54:17,18
55:15 59:15 60:11
61:16 62:2 65:14
118:8,9 128:15
130:4,6,12 131:21
134:16,20 136:17
136:20 137:8
143:9 152:12
173:18 188:14
215:2 219:14
244:18 258:2
265:12 278:19
297:6
informative 88:20
232:14 275:9
ingredients 12:21
inhabit 44:3
inherent 72:19
112:10,13
inhibitors 252:18
inimitable 66:12
initial 46:5 165:8
initially 107:18
287:21 297:2
innovation 75:14

innovative 179:7
input 248:7 271:11
282:16 284:3
inputs 14:14,15
15:5 16:4,7 18:9
18:10 91:7
inserted 122:11
insights 189:15
insignificant 24:19
inspired 63:1
instance 56:5
206:11 281:9
300:20
instincts 113:11
Institute 173:15
instrumental
120:18 222:6
insulin 271:6
intake 11:8 20:10
34:19 41:20 42:13
44:14,15,21 54:10
56:11 95:13,18
96:3 97:6,7,8,9
99:9 101:1 102:20
105:10,22 114:17
116:7,8 121:4
122:14 123:2
125:11,13 127:12
127:13 130:11
131:22 133:13,19
135:1,2 136:17,17
139:18 140:8
141:14,17 150:21
157:2 159:10
162:13,15 163:3
163:21 164:3,6
174:17 189:13
190:12,13 192:6
209:6 220:3,10
224:7 227:14
232:19 235:7,10
237:16 239:1,20
243:16 244:11
253:1 256:3
258:18 272:13
274:13 277:19
281:4,8 283:13

286:4,11 294:4
intakes 11:17 12:1
118:19 121:6,14
121:17 123:8
124:17 125:1
127:9 128:5
130:14 131:20
133:3 159:13
238:18 250:18
integrate 102:18
integrated 128:6
159:8 170:18
intend 117:22
225:12
intended 224:12
intent 60:18 178:2
interaction 278:13
interest 75:4 103:9
187:16 192:20
interested 11:4
75:2 239:14 250:2
281:11
interesting 16:5
47:9 55:18 69:21
70:4 81:20 82:15
88:13 233:16
238:22 245:6
280:2,15 286:8
296:10 309:5
312:18 316:6
interests 72:10
74:16
intermediate 98:15
98:21 99:3
internal 46:7
internally 46:8,9
internally-gener...
47:1
international 39:5
internet 177:5
179:2,8
interpolate 146:10
interpretation
134:20
interpreted 61:9
intervention 25:2
29:4,5,9 42:17

59:1,2 92:4 93:3,6
93:11 125:16
174:13 175:9,19
179:20
interventional
91:22
interventions 28:17
170:11 174:15,18
178:15 182:5
interview 50:13
introduce 25:14
137:14
introduced 56:2
introduction
137:15
investigation
312:20
invitation 25:14
invited 67:7
inviting 6:15
involved 75:21
involves 68:20
IOM 102:5 103:21
118:6 130:17
134:11 165:17
iron 11:10 123:16
135:15 292:5
irrespective 110:17
244:7
irretrievable
107:15
isolated 274:9
296:14
Israel 264:12
issue 20:18 30:10
67:11 88:6 94:18
95:10 96:5,12
99:15 102:16
103:4 105:9
106:14 107:5
108:2 109:7
138:17 153:17
157:15 182:1
187:13 206:1,20
209:3 212:10
215:14,15 219:5
219:22 239:10

240:1 242:18
244:4,14 248:7
264:21 269:4
273:8,10 274:15
274:17 287:22
288:6,20 308:17
310:11
issues 32:5 42:14
67:14 80:3 82:19
85:8 93:19 106:8
115:5 118:17
119:3 120:2 124:5
133:4 152:8
154:15 180:2
189:22 204:17
230:21,22 231:2
241:14 248:4
251:10 262:20
265:20 266:4
269:17,20 270:5
271:5,16,18
273:19 275:5
278:22 283:6
284:10 287:5
289:8 290:14
297:2,10 298:1
308:17 309:11
315:9
italics 218:17
Italy 144:12
item 138:5 232:17

J

J 1:11
Jackie 60:19 66:18
Jan 184:20
Janie 66:19
January 87:5 88:12
jar 47:18
Joan 284:3 296:17
Joanne 1:15 103:3
114:13,14 135:7
151:17 152:10
161:1 175:16,17
178:10 182:11
201:5 214:11
218:5 226:22

230:10 231:6
240:8,11 259:17
272:22 282:1
284:3 286:19,20
287:13 292:5
294:7 295:21
296:3,16 310:20
313:17
Joanne's 88:4
223:11 283:13
job 18:3 65:15
111:3 116:14
198:14 247:6
252:6 278:9
Joel 133:10
John 38:16 60:19
66:18
joined 316:6
joining 39:8
joint 95:17
joke 225:8
journal 35:10
61:13,14
journals 43:13,19
43:21 44:6
judgment 168:3
juice 17:6 22:12,13
July 134:12
jump 95:8 209:3
jumping 191:5
June 134:6,9,10
165:19 227:21
June-ish 134:10
junior 82:2,3,9,10
justification 102:1
justify 118:1

K

K 1:10
Kathryn 1:19
114:1 139:7
keep 77:15 85:14
97:20 117:11
157:22 210:12
215:16 216:18
262:16 277:14
291:22

keeping 84:9
120:19 125:21
137:1 172:3 252:7
293:1
keeps 31:11 86:10
172:7 236:17,21
247:17
Kellie 66:13 184:16
kept 182:17
key 30:10 56:11
172:8 225:20
289:8 295:14
299:12
Keyes 262:6 267:20
kick 276:4
kicked 184:21
234:6
kicks 48:4
kid 64:7,8 82:2,10
kidney 104:5
kids 29:6 63:7
64:13 77:11 81:2
82:3 103:15
killers 251:19
kilocalories 255:4
257:21
kind 26:12 28:9
42:2 46:17 47:8
53:5 55:13,17
60:4 70:9 71:12
75:13,15 77:17
84:9 103:16 107:7
107:22 156:17
158:9 170:5,12
171:14,16 177:6
184:21 185:16
189:8,21 191:5,20
214:14 216:18
248:17 267:9,15
281:7 283:10
285:15 286:3
294:18 295:15
296:13 309:5
312:5
kinds 30:21 67:8
126:13 179:16
203:6 274:21

296:19 306:20
315:20
kings 199:19
kitchen 47:4,11,14
77:6
knew 56:13,17
know 28:7,10 30:7
31:2,3,9 34:17
35:1,2 46:15
48:15 49:4 50:11
50:21 53:6 56:18
58:1,3 63:6 67:6
67:15,18 69:1,2
71:4,9,15,20 72:3
73:7,7,14 74:4
76:4,5 78:19 80:1
80:13,14,14 81:5
81:16 82:20 83:2
83:3,5,5,8 84:1,4
84:6,18,20,21
85:3,4,12 88:9,15
89:2 92:7,8,14,16
94:12,17,19,22
95:3,15 96:17
97:11,18 98:8,12
98:19 99:5,5,8,12
99:14 100:16,19
100:20,21 101:1
102:6,6,11 103:20
104:2,7,9,10
105:2,9,10,13
106:5,7 107:1
108:9,12,22 109:2
109:5,11,13,15,17
109:22 110:10,20
111:6,9,10,11,15
111:17,17,18,20
111:22 112:22
113:2,3,4,18,18
115:9,10,11,14,15
115:16,17,17,20
116:4,13,15,18,19
118:15,16,18,21
119:13,13,15,17
122:5 127:12
132:7 139:5,10,21
141:11,18,20,21

142:4,9,12,16,19
142:19 143:16
144:17 145:8,12
146:10 148:21
149:18 151:2,7,13
151:22 154:4
156:9,10,20
158:14 159:12,15
159:18 160:2,3,5
160:9,11 168:6,8
169:6 171:2,5
172:5,6,12,13,16
173:7 174:20
175:13,14,21
176:3,18,22 177:4
177:8,13,14,15,15
178:13,14,16,19
179:1,13,16,18,19
179:22 180:18
181:3,4,7 182:13
182:15,15,21,21
183:19 184:9
187:8 188:4
189:18 190:5,20
196:10 197:17
199:15,21 200:12
200:21 201:17,21
202:2,14,19 203:5
203:10,17 204:19
206:8,20,22 207:8
207:17,18,21
208:1,6 209:10,15
210:5,14,16,21
211:6,17 213:6,8
213:9,10,12,16,17
214:5,6,13,19,22
215:2,4,10,21
216:7,20 217:7
218:5,7,9,10,16
218:18 219:9
220:21 223:19
224:4 225:7
233:12 234:6,12
235:4,9,21 236:1
236:17,22 237:1,6
237:9,14,20
238:17,18,21,21

238:22 239:3,7
240:4,7,17,20,20
240:21 242:3,14
244:5,15,18 245:5
245:15 246:4,18
247:3,13 255:4
260:17 262:5
264:4 265:4 273:3
273:20 274:12
276:9 277:2,16,18
278:3,17 283:8
284:4,19 285:2
286:10,19 287:4
287:10 289:6,8,10
289:11,15,22
290:7,10,19,22
291:2 292:11,16
292:20 293:1
295:16,19 297:3
297:15 300:12
301:15 302:1,7,16
302:21 303:2
305:18 307:4,10
307:19,19 308:10
308:11,15 310:5,7
311:13,20,22
312:13 313:2,8,9
313:10,11 315:4,8
315:10,12,22
knowing 84:3
134:8 237:5 314:5
knowledge 54:10
56:10 227:2 289:2
known 44:11
279:10
knows 40:1 51:1
225:11

L

L 1:15,15
Lab 26:21 38:20
label 33:13,15,18
55:9 71:18
labeling 50:16,17
54:7,13,14,16
67:15,15
labels 34:3 51:18

55:20
lack 117:10 259:8
259:10,11 275:15
lactation 161:21
166:1
language 93:17
large 72:3 165:14
305:18,22
largely 103:21
135:10 273:14
279:1
larger 269:9
270:18
largest 258:12
Larry 79:14 82:14
101:15 102:4
106:12 107:17
108:9 118:5 140:9
143:11 159:3
160:17 167:7
188:13 208:10,10
217:18 228:21
238:10 255:16
274:1 275:1 288:7
288:8 299:3
310:12 312:5
313:20
Larry's 107:16
149:10
late 134:12 250:20
255:11 280:17
latest 207:14
250:20
Latino 101:16
launch 120:9
launched 230:6
LAWRENCE 1:11
LDH 268:13
LDL 249:5 266:14
267:2,5 268:6,13
lead 49:18 54:21
89:18 161:9
189:11 200:9,9,11
239:22
leader 5:13
leading 129:16
181:13

leads 83:7
lean 230:7 242:8,16
289:19,19
learned 78:1 99:5
141:3
leave 17:20 18:2,11
led 91:8
left 59:20 64:22
83:5 90:19 169:7
242:10 253:18
258:22 298:13
left-hand 8:5 23:10
legalizing 233:17
legally 234:20
legendary 72:21
legumes 22:8 36:22
lend 244:22
lens 260:22
lesson 91:4
lettuces 71:14
let's 24:6 44:14
45:8 52:4 57:3
64:17 98:14 129:6
160:13,18 183:10
209:21 224:16
252:22 301:7
level 14:10 35:14
51:18 94:2 98:15
98:21 99:3 116:18
129:20 145:17
146:13,18 240:5
259:13 263:1,21
286:11 300:2
levels 14:8 21:4
98:1 99:9 117:19
123:3,5,9 143:3
144:6 145:14
146:8 252:14
256:3 258:4 262:9
262:19 263:15,16
263:17 267:6,14
leveraging 42:17
54:3
liberal 8:13,17 9:11
20:16 23:19
liberalization
263:5,9

liberalize 267:18
librarian 162:20
165:7
libraries 311:13
Library 163:10
287:15
lie 132:20
lies 84:13
life 53:17 62:10
69:3,7 97:10,17
lifestyle 62:7 65:12
69:17 107:14
171:14
lifestyles 42:4
lifetime 111:20
lift 218:15
light 223:11 238:5
284:5
likewise 294:4
limit 145:5 182:11
limitations 32:1
limited 17:1 22:22
32:2 96:7 298:14
300:2
limiting 105:14
Linda 1:7,9 38:12
67:3 85:18 143:17
161:2 185:8
217:19 238:12
274:2 286:1 288:9
291:13
Linda's 239:17
LINDE-FEUCHT
1:20
line 26:12 102:9
115:14 211:3
226:3 236:6 254:8
255:2
linear 45:1
link 127:10 128:15
132:1
linked 97:7 130:21
185:5 201:16
linking 27:1 126:14
132:5
links 126:18 132:17
Lino 2:3 5:10,21

25:16 38:1
linolenic 286:10
lipid 268:17 269:15
285:12
lipids 202:19
266:14 271:5
272:9
liquid 139:21
189:15 205:11
liquids 187:11
197:11
liquor 244:16
list 148:8 229:16
296:4
listed 196:7 290:5
listening 159:5
196:22 197:1
230:11,12 296:8
313:8
listing 206:13
lists 190:10
lit 191:5
literature 57:11
58:3 87:7 89:11
92:9,11 99:21
101:6 104:8,20
105:1,3 108:4
110:5 116:14
117:11 135:19
136:11 142:7
143:13,21 144:4,9
144:10,14,19
153:7,14 159:8
160:5 163:16
167:13 169:13
175:8 179:11,15
179:20 180:5
183:8,15 193:4
198:8 201:1 203:1
203:7 213:16
214:18 215:1,6
225:10,16 226:8
230:2 237:8 238:8
240:3 246:16,17
247:1 267:11
269:19 270:4
284:21 287:2

296:21 297:17
298:9 311:16
312:13 313:22
little 8:1,7,16 16:4
19:12 20:2 22:11
37:6 48:7 53:18
54:19 56:19 57:5
59:22 60:1 63:7
67:19 73:14,14
75:14 78:3 110:9
113:1,12 135:16
143:18 157:16
168:21 169:16
175:18 199:2,12
213:3 221:12
222:13 226:12
227:4 229:18
230:19 237:21
250:10 254:4,18
254:18 258:2
266:15 268:4,12
283:5,12 299:20
300:6 301:3 302:5
303:12 305:9
live 95:3 214:12
246:20
lively 184:12
221:10
load 186:17 196:1
198:20 310:3,8
local 27:3
logically 58:5
long 12:19 26:12
36:20 95:3 230:2
244:7 315:13
longer 277:20
longer-term 165:14
longitudinal
280:16
long-term 46:6
106:3 189:2 227:5
228:8
look 21:17 30:2
36:21 41:11 44:4
44:14 45:8 48:5,8
49:17 50:5 55:20
56:12 57:4 64:19

64:19 65:12 72:7
72:8,9 93:7 104:3
118:19 126:7
129:4 130:11
132:13 143:6
144:2 146:12,19
148:15,19,21
150:10 168:2
169:8 170:1,9
172:2 173:8,17
176:14 182:12
183:16 192:3
197:12 201:7,9,10
202:16 203:1
209:7 211:8
213:18 215:5
220:7 224:9,20
225:9 229:13
231:9 232:11
233:16 238:17
246:1,3 253:1,7
254:22 261:2
265:11 270:1
271:15 276:18
279:22 280:19
281:2 285:16
287:18 290:20
293:13 296:18,20
298:2 306:1
313:20 316:7
looked 27:13 48:19
55:18 134:4
139:14 144:13
211:18 234:15
245:19 274:20
284:18 313:22
looking 22:18 27:7
34:12 44:18 46:1
46:5 53:15,16
62:1 67:22 77:6
85:15 119:7 121:3
122:12 123:16
124:17,19,22
125:9,12,19,22
126:21 127:2,9
128:1 131:19,22
135:3 136:5,6,10

143:20 144:9,18
144:20 147:9
148:4 150:21
151:9,10 157:18
157:18 167:19
183:11 201:8,9,20
203:22 204:4,6
209:17 221:2
224:2 229:7 238:9
243:22 260:13,16
260:22 266:20
267:11 269:17
270:15 272:7
273:15,19 276:10
283:17 286:2
289:5 290:3 292:1
306:14,15 315:22
looks 50:4 129:10
153:16 272:6
288:3
loophole 293:4
lose 48:17 53:13
152:8 165:3
166:13 197:21
293:4
losing 172:3 175:22
182:15 184:2
loss 146:17 166:4
170:8 174:21
176:17 177:2,9
178:3 182:13
183:17 189:2
lost 151:21 182:17
lot 8:1 10:7 23:12
23:18 28:2 29:18
31:18 37:3 39:21
39:22 42:10 43:5
43:6,10,20,22
45:12,22 49:15
51:14 58:13 61:12
61:18 62:15 64:14
70:18 71:3 73:10
73:16 75:1,4 77:1
77:3,6,19,20 84:8
87:3 92:8 104:21
106:22 107:11
111:11 115:2

131:7 141:12
144:11 147:17
149:18 152:3
160:4,10 169:14
170:19 175:19
176:3 178:15,20
179:3 183:2
185:14 186:6
187:5,16 188:1,14
191:9,18,22
192:20 193:17
200:1,6,12,16,21
206:4,6 209:13
211:5 219:6
222:10 228:6,19
237:13 257:19
259:6 260:10
266:6 274:5
292:11 297:6
310:2 311:22
lots 67:5 146:16
194:16 197:5
215:6 234:7 238:4
315:8,9
loud 156:6
love 180:17 202:2
284:12
loved 202:3
low 7:17,20 16:17
16:19 19:12 87:20
96:2,3 121:22
122:3,4,5 150:1
239:2,4 261:14
262:19 267:16
272:15
lower 7:18 17:9
150:3,19 258:3
270:16 300:13
lowering 27:7
105:22 106:20
lowers 223:4,5
237:11 238:6
lower-cost 26:13
lowest 27:14 226:7
low-active 14:9
low-calorie 189:1
low-carbohydrate

188:22 204:18
low-cost 8:12,16
9:8 20:16
low-fat 289:19
low-hanging
188:13
low-income 13:12
low-lying 87:4
low-saturated
239:18
low-sodium 114:20
lumped 270:9
lunch 2:22 64:9
97:12 184:15
221:7
lunches 25:22
77:11 117:1
Lung 173:15
luxury 110:6
Lynn 133:15

M

M 1:12
macaroni 37:12
machine 40:8
macro 230:15
macronutrient
135:11 161:17
164:21 171:11
200:15 205:10
231:3 295:12
macronutrients
144:21 202:6,10
203:4,11,21 204:5
215:7 251:3
260:14
macronutrient-r...
137:22
macular 271:8
310:3
magazine 53:10,12
magazines 53:6
magic 61:21
magically 235:18
magnitude 305:12
306:8
main 29:14 262:8

mainstream 69:15
maintain 14:9
45:17 46:2 165:2
166:12
maintaining 164:4
262:22
maintenance 163:4
164:1 166:5
172:19 173:3
174:4 175:20
176:11 177:2,9
178:4 183:17
189:2,7
major 84:5 87:10
104:13 229:9
243:7 251:19
265:15 297:3,18
298:8
majority 58:11
79:19 157:2 258:8
making 24:2 30:21
31:11 59:8,10,12
59:17 68:20 79:9
136:11 169:2,19
216:16 267:7
male 226:15
males 21:7 224:16
male-female 258:6
man 225:1
managed 20:4
management
161:18 162:1
165:10
mandatory 123:3
manipulating
158:3
manner 117:3
124:8
manufactured
269:2
manufactures
115:22
map 57:10 211:14
margin 253:15
margins 75:7
marinara 15:16
marine 270:6,13

Mark 2:3 5:9,21
  25:16 38:5
market 9:18,18
  15:21 16:1,2
  18:18 20:5,9,12
  20:21,22 23:1
  71:16 73:22 145:2
  196:18
marketed 115:11
marketing 38:17
  40:19,22 41:17
  43:15 56:3 61:4,6
  71:11
markets 41:22
  42:16 50:6 84:9
Mason 133:10
mass 165:3
massaged 213:9
massive 75:7 85:3
match 35:15
matched 12:21
  13:6
material 26:6
materials 25:21
  26:7
mathematical 15:7
matrix 124:12
matter 24:1,3 27:4
  33:14 120:6 172:5
  213:13 221:17
  260:21
matters 34:5
  277:20
mature 108:12,18
  110:5
maximum 10:5
McDermott 81:20
McMURRY 1:19
  113:22 114:1
  119:8
McPeak 86:11
MD 1:11,14,15
MD,PHD 1:10
MD,PHD,RD 1:13
meal 70:21 83:10
mean 10:7 26:12
  27:19 29:13 32:2

34:15 45:3 48:14
53:7 58:11 73:19
74:7,9 78:19 79:1
79:5 80:14 83:16
84:7,7,15 85:3,6
92:12 109:14
111:8,16 112:18
131:18 142:11
147:16 148:6
159:9 167:11,12
170:13 176:20
177:1 180:5 184:6
194:10 202:11
204:3,4 208:7,9
209:7 210:2
211:22 212:11,12
218:13 223:9
234:5,10 235:11
237:7 238:7 240:4
241:19,21 243:19
245:13 246:12
256:7 260:19
274:16 288:14,17
292:11,21 302:4,8
303:21 307:12
314:10,17
meaningful 250:8
  300:8 305:17
meaningless
  202:10
means 10:13 39:22
  48:12,13 51:10
  130:7 224:15
  225:1,3
meant 39:21 61:7
  224:18 232:8
measure 32:8 33:1
  33:3
measured 232:12
measures 80:15
  196:6 229:2
meat 15:17 19:11
  22:1,16 70:5
  111:22 192:14
  271:22 289:17,20
  290:1,8 292:1,8
  294:21

meats 17:13 19:11
mechanisms 8:9
media 56:1 157:9
median 21:8
mediated 49:19
  50:1
medicine 279:1
Mediterranean
  142:4,14 144:11
medium 14:9
meet 13:19,20 20:4
  20:17 102:11
  125:10 126:2
  136:5 141:6
  142:20 143:4,5
  198:15 216:7
  283:9 292:8
meeting 1:5,7 5:2
  118:6 121:8
  123:22 127:6
  130:13 131:4
  134:11,14 176:19
  188:22 195:21
  223:7 248:2
  287:18 288:18
  289:15 309:15
meetings 251:18
  287:17 295:16
  296:10 315:10
meets 19:7 141:10
  141:17 142:15
  240:14
melding 214:6
melons 17:3
member 1:10,11,11
  1:12,12,13,13,14
  1:14,15,15 25:17
  26:15 27:11,21
  28:7,15 29:13
  31:8 33:5,21 34:8
  36:8 37:18,21
  58:16 66:7 69:9
  70:22 71:2 73:19
  74:21 75:6,8,11
  78:16 82:14 84:14
  85:1 86:5 89:19
  91:3,18,20,21

92:3,6,7,18,20,22
93:2,5,9,14,16,18
100:5,10 101:14
102:4 103:2,6,19
106:1,22 107:3
108:11 109:6,10
110:12 111:2,3,8
111:14,15 112:8
112:11,14,16,18
112:22 114:12,14
115:7 116:21
117:10 118:11
119:12 120:12
128:20,22 138:3
140:10 142:21
143:11,18 144:7
144:16 145:21
146:14 147:1,7
148:2,6,9,13,14
149:3,8 150:6,15
150:20 151:17
152:9,17,19
153:20 155:13,16
155:17,20,22
156:1 157:3,10
159:4 160:14,21
167:8,14,16
169:11 170:5,13
170:16 171:8,20
173:12 174:9
175:17 176:8,20
176:22 177:17,21
178:10 180:4,16
181:19 182:10
183:6 184:16
194:5,8,10,12,22
195:3,9,10 201:5
201:19 203:13,15
203:16 204:9,11
204:13,15,16,21
204:22 205:2,3,5
205:7,9,10,13,14
205:20 207:4,10
207:20 208:3,7,9
208:14,17,19,20
210:14 211:9,22
212:2,9,20 213:3

214:11 217:17
218:22 219:16
222:4 233:14,22
234:3,5 235:11
237:7 238:10
239:16 240:11
241:4,17 242:2,4
243:13,18 244:2,8
244:9,19 245:19
246:12 247:10
255:17,20,21
256:4,6,11 259:16
259:22 260:9
261:6,7,22 262:1
262:3,4 264:1,14
264:15,19 265:1,6
265:7 273:1,8
274:1 275:13,21
276:2,3,5 278:10
278:21 279:16
280:1,5,6,11,20
281:1,5 284:14
288:8,17 289:14
290:9,17,18
291:12 292:4,10
293:17,20 294:19
294:22 295:2,3,18
299:3,15,18 301:9
303:9 304:7,9,14
304:15,17,19,22
305:3,5,7,15,20
306:3,5,6,12,13
306:21,22 307:1,9
307:16,17 308:3,4
308:19 309:20
310:13 311:6,9,18
313:6,13 314:10
314:13,14,15
315:2
members 6:7 9:12
  33:9 77:21 78:10
  86:8 120:15
  134:13 160:21
  161:9 296:5 297:8
  309:11 316:3
memory 94:2
men 24:19 99:7,8

190:22 192:18
193:13 248:5
249:3,18 265:10
269:15,18 270:17
270:21 271:2
272:6 283:3
outlies 240:21
outline 204:17
outlined 97:2 295:6
outlines 36:1
outreach 81:21
outside 4:9,20
84:17
overall 122:13
123:22 127:5
130:13 135:11
136:6 154:11,12
156:3 186:3
230:16 237:15
287:9 296:18
overarching
122:14
overeat 49:19
overlap 42:8 184:1
186:6 187:6,14
188:4 189:8
192:16 200:6,12
205:1 249:7
overlaps 193:8
290:12
overnight 36:13
overview 40:20
41:18
overweight 29:7
100:14 161:14
163:2,5 165:3
166:13 183:3,10
overwhelming
199:12 214:7
overwhelmingly
306:7
ownership 287:20
295:4
O'Connell 38:3,5
66:13

_____

_____ **P** _____

P 4:1
package 55:10
71:18
packages 65:20
170:10
packaging 39:2
66:4 78:14
page 2:2 3:1 41:9
paid 51:11
paints 277:3
pair 56:20 259:10
palatable 110:22
pallet 110:14
pallets 111:16
Panel 249:11 263:7
266:18
paper 33:10 35:8
36:1 176:14
210:17
papers 61:17
154:11 180:6
196:12 310:10
paragraph 207:13
212:19
paragraphs 207:11
parallel 274:10
parameters 180:20
parents 80:1 82:7
part 24:4 31:21
36:19 41:15 42:14
72:6 74:3,4 79:11
89:1 92:15 94:15
99:4 100:6,10
101:4 115:14
132:19 140:4
145:1 147:16,17
148:18 149:11
157:11 169:19
174:3 182:7 190:4
229:11 231:8,14
239:13 245:13
255:7 263:11
264:9 269:21
289:20 297:4
participant 156:7
participated
176:10

particular 29:7
43:19 126:21
135:22 158:15
166:21 181:18
218:5 250:5 263:3
266:21 298:20
313:5
particularly 11:16
21:19 107:13
144:15 151:22
209:4 247:16
251:7,10 252:16
253:19,21 255:2
266:2,14 267:2
272:3,15 280:9
partner 60:17
74:11,14
partnered 56:2
partnering 60:20
71:10
parts 59:4 231:5
285:12
pass 46:16 87:15
152:17
passed 233:4
passive 66:2
pasta 15:15 19:2
paste 190:19
208:15
pastries 19:2
Pat 250:14
pathways 153:12
patient 76:2
patients 26:9 72:17
279:5
Patricia 66:19
222:8
pattern 127:13
135:2 141:9,16
142:4,14,20
147:14,17 183:12
201:10 239:9
patterning 135:11
135:12
patterns 70:21
121:4,9 124:17
125:12,13 126:1

127:9 128:2
132:15 133:4
138:21 141:5,12
142:18 143:2
144:3 149:2
162:13,15 171:9
192:21 200:11,14
224:3,7 225:22
226:9,11 227:6
232:21 236:7
243:16,22 244:3
244:11 245:7,21
246:1,11 247:4
272:14 276:10
pause 59:19
pay 51:8,9
paying 50:9 51:4
payments 6:11
8:20 9:6,7
pays 50:6
peak 260:4
Pearson 1:13 3:5
26:15 27:11,21
28:7,15 29:13
75:11,11 86:9
107:3 109:6
152:19 155:13,17
155:22 170:5,16
173:12 180:4
241:4,5 245:19
247:10,11 255:20
256:11 259:22
261:6 262:1,4
264:14,19 265:7
273:8 278:21
280:1,6 281:5
284:14 294:19,20
295:2 299:18
304:9,11,14,17,22
305:5 307:9,17
308:4,19 314:15
peas 191:14 283:6
294:12
pediatricians 25:18
26:8
pediatrics 108:5
Peer 195:9

Penn 26:21
people 7:22 8:1,3,6
10:6 13:1,2,5,8
15:11 19:3 22:12
23:11,14,22 24:2
28:13 29:3,14,20
29:22 30:6,20
31:11,19 32:10
33:1 34:1 36:4,17
37:8,9 38:21
40:14 42:5 44:3
45:14 46:20 47:10
47:13 48:13 50:18
51:22 52:6,21
53:5,11 55:4
56:13 57:17,18,19
57:20,20,21 58:4
58:4,5,7,8,11,19
58:21 59:6,16,17
59:22 60:11 61:20
62:1 65:2,2 66:10
68:9,16,18 69:22
71:19 74:5 75:4
77:2,16,20 80:5
84:2 96:13 97:21
100:6,15,18 101:5
102:2,9,18 104:22
113:5 130:15
141:19 143:14
146:16 147:2,15
147:17 155:5
156:12 158:5,8
159:18 175:21,21
178:22 182:16,19
183:1,2 185:2,4
193:3,17 197:22
200:2,8 202:12,20
202:21 207:22
209:11,21 215:3
215:11 220:12,20
227:4 228:13
230:3 234:13
236:8 238:13,19
239:2,8,15 241:19
244:14 245:8,10
246:19,20 252:7
277:7 282:15

285:8,9 291:3
292:17 298:5
307:10 308:2
311:22
people's 202:18
243:5 303:17
Peppers 40:8
percent 10:20 17:6
20:4,6,10 43:11
50:8,20 51:17,21
55:11,14 63:22
73:8,10 94:17
96:21 108:15
113:5 115:12
147:15 236:11
251:3 254:22
255:8,12,14
256:18,21 257:18
258:13 259:19
303:15 304:1
305:19
percentage 112:9
190:21
percentages 187:20
perceptions 116:17
Perez-Escamilla
1:13 33:5,6,21
69:9,10 70:22
93:14 101:14
161:1 218:22
219:16 243:13,14
244:2,9 278:10,11
perfect 230:11
240:22
perfectly 31:16
period 112:1
255:15 256:12,20
257:20 258:17
person 27:18 63:13
63:15,17 64:11,21
73:17 86:10
100:21 111:21
140:5 173:11
175:13 177:5
246:6
personal 60:3,13
116:2 178:17

225:9 241:20
308:12
personality 39:2
personalized
278:22
personally 56:9
persons 165:5
166:14 222:21
person's 48:21
perspective 40:22
41:1 173:18 261:3
pessimist 160:15
pessimistic 58:4
pet 297:13
pharmacologic
252:17
phase 76:8
PHD 1:10,12,12,13
PHD,RD 1:15
PHD,RD,LD 1:9
phenomenon
296:10
physical 11:19
14:10 162:3 166:8
166:9,11,17,18
276:6,11 301:12
301:22
physically 99:1
physician 51:6
physiological 45:10
47:22 49:8
phytochemical
291:6
phytochemicals
310:7
phytonutrients
273:6
Pi 31:8
pick 30:22 168:10
221:13 265:21
290:11
picked 92:1 226:21
226:22 227:1,1
228:11 289:21
picky 280:21
PICO 166:6 198:7
227:17 265:22

269:13 270:20
272:5 280:8
picture 34:12 277:4
pie 113:3
piece 47:9 118:2
132:10 135:22
137:1,17 151:3
276:21 301:18
309:21 311:12
pieces 125:3 276:12
276:13
pies 139:15
pill 285:22
pilot 179:9 268:4
pinto 73:2
pitfalls 104:21
302:21 306:20
Pittsburgh 233:11
pizza 37:15 69:2
234:17,21,21
Pi-Sunyer 1:14
2:17 31:8 91:18
91:21 92:6,20
93:2 100:5,5
112:8,8,18 138:3
138:4 144:7,8
147:1 160:18,21
167:14 170:13
171:8 176:20
177:17 200:9
212:9 275:13
295:18 299:15
314:10,14 315:2
place 44:7,8 85:2
145:6 192:9
209:14
places 197:5 245:9
plan 8:12,13,14 9:8
9:11,15,16,17
10:1,11 13:10
18:17 23:16,20
26:2 32:9 35:11
36:12 134:3
137:13 165:7
168:2,14 170:15
226:21
planned 303:4

309:15
plans 2:4 5:14,19
6:3,17 8:9,11,17
8:18 11:7 20:17
24:22 35:15 166:6
170:14 171:15
198:8
plant 270:7,12
plant-based 193:13
194:7,16,17,18,21
195:1
plasma 249:4 267:2
plate 15:13 46:17
50:3
plates 25:22
play 59:12
please 5:3 162:5
181:20 297:7
306:9
pleased 75:1
pleasure 110:19
plot 7:7,11 23:6
24:13
plus 153:18 230:7
podium 39:16
point 7:21 27:11
28:11 31:10,11
50:14 65:1 86:17
99:14 105:16
114:1 119:8
136:22 141:13,18
149:21 152:22
156:5 157:20
183:16 206:19
212:3 219:19
231:17 236:12
239:17,17 242:5
243:10 249:8
256:16 263:18
267:7 275:1
277:12 279:2
280:7 281:18,20
282:12,13 286:13
289:11 297:9
300:9 305:5
306:18 307:7,20
308:19 309:10

312:11
pointed 94:11
148:8 228:21
230:4 253:21
255:18
pointer 23:7
pointing 139:7
156:21 278:1,4
301:2
points 41:4
point's 95:6
policy 5:12 66:11
Poly 81:19
polymorphisms
266:22 278:13
279:10
polyps 123:1
133:12
polyunsaturated
254:12 262:12
269:22
poor 24:2 49:20
pop 40:8
popular 70:13
population 55:12
87:21 94:3,17
161:19 165:11
172:4 257:2 263:1
populations 111:11
135:13 136:7,9
175:2
portfolio 311:5
portion 66:3 80:11
portions 83:7 85:3
pose 85:9
posed 41:2
poses 85:10
position 39:20
61:17 210:17
positive 57:4,6,12
57:15 58:20
121:10 123:9
201:11 258:2
possibility 273:17
possible 25:20 26:3
36:11 110:21
179:3 242:12

249:13 257:10
307:12
possibly 60:8
105:17 251:21
254:7 258:17
Post 1:19 66:12
85:13 113:14
118:4,4
post-fortification
122:15 133:13,21
potassium 2:10
19:21 20:8,15
86:13,22 95:12,18
95:21 96:3 97:6,9
99:17,18 106:14
106:17,19
potato 152:18
potatoes 70:6
potential 61:11
87:22 147:16
233:17 268:9
278:5
potentially 34:19
88:3 149:22
150:10 152:7
156:15,18 226:1
234:9 241:19
pounds 18:19
21:20 32:8,12,12
47:12
practical 98:9
178:15
practice 302:18
practices 54:8
55:16
prebiotics 187:17
198:6
prebiotics-probi...
214:13
prebiotics/probio...
198:11
precancerous
123:1 133:12
precipitously
175:15
precontemplater
76:3

predict 278:18
predictor 177:10
predictors 229:14
229:19 233:1
predisposed 52:9
52:21 64:18 65:8
65:18 76:12 77:18
79:20
predominant 16:12
preface 222:18
preference 88:5
preferentially
157:1
preferred 22:10
pregnancy 165:15
165:18
pregnant 123:17
prehypertensive
105:18
preliminarily 35:9
preliminary 143:20
154:9 179:13
premature 165:13
premise 213:5
prepare 19:6 59:13
107:2
prepares 63:14
73:17 172:18
preparing 97:14
prescribed 252:19
present 1:8,17 6:15
90:20 106:10
118:17 158:6
261:8
presentation 5:9
6:16 33:7 34:9,11
36:9 69:11 95:14
118:14,22 133:10
133:11 158:22
169:7 244:6
presentations 4:8
4:19 123:21 154:2
154:10 158:18
presented 118:8,9
133:17 290:21,21
294:3
presenters 4:5,16

presenting 154:4
199:3 216:8
presiding 1:7
pressure 89:15
90:21 104:4 105:6
105:21 226:11
238:6
presuming 261:8
pretty 26:4 52:7
82:19 96:7 131:14
132:7 144:15
155:9 167:12
172:20 190:18
202:19 207:7
217:22 230:2
255:18 258:14
269:6 284:5 292:3
294:6,9 295:11
309:9
prevalence 90:17
prevent 288:20
296:19
preventing 182:12
prevention 106:2
163:4 164:2
174:12,22 291:20
prevents 83:8
previous 10:11
224:5 228:1 244:5
297:20
previously 116:9
216:4
price 13:14 24:15
48:10
prices 5:14,20
12:14,15,19 13:8
36:18
primary 176:14
291:20
print 26:8
printed 294:21
prior 287:17
priorities 86:15
198:14
prioritize 42:6
107:9
prioritized 121:1

priority 99:19
121:3,18,19
122:12 123:6,11
124:6 125:19
127:8 129:19,20
131:12 161:11
248:15,17
prize 294:10
probable 255:10
probably 18:13
21:16 23:2,22
28:9 39:11 53:2
60:14 63:8 66:5
67:10 69:4 94:20
102:21 110:14
111:22 119:1
127:11 136:16
140:18 142:18
145:7 154:14,19
154:22 155:8
172:14 173:17
199:2 220:14
225:19 228:10
230:1 236:13
238:8 242:8 246:1
246:2,10 251:5,13
252:17 256:21
258:11 265:14,17
266:8 273:22
275:7 280:8 281:9
282:12 284:11
302:14 304:11
306:4 314:5
probiotics 187:16
198:6
problem 56:9
62:22 68:2,8 74:1
75:16 104:17
113:1 115:14
147:5 176:13
177:12 216:15
problems 221:3
275:20 278:5
procedure 125:9
proceeding 316:7
process 12:20 15:7
15:20 16:6 18:12

119:17 124:20
126:9 131:19
150:9 191:3
215:19 299:7
302:12
processed 113:6,12
114:8
processes 287:12
processing 107:1
produce 75:5
product 56:21
65:20 115:2 192:6
273:14 283:13
286:8
products 22:1,14
114:16,19 115:12
192:14 271:22
288:1 292:12
294:12
product-related
66:2
profession 58:12
Professor 38:16
profile 14:20,22
18:6
profiles 230:16
231:3 271:13
program 10:3,4
170:21 171:16
174:6 178:3,4
programmatic
217:1
programs 25:11,12
77:6 81:22 170:10
170:18 171:2,6
172:13,15,17
program's 10:5
progress 86:7,21
87:3 89:14 186:20
195:20 196:14
198:12 220:7
259:6
project 5:15,16 6:9
projected 27:16
promise 62:4,15
81:11
promising 41:4

promissory 279:1
promote 60:22
promoting 66:17
Promotion 5:12
proneness 107:14
proof 56:8
proportion 164:22
165:1
proportions 161:18
171:11 200:16
295:13
propose 111:5
214:6
proposing 260:17
prospective 107:10
228:19 229:1
237:10
protect 24:15
protective 206:14
protein 2:19 55:4,6
55:6 125:4 126:5
127:21 128:7
129:15 133:1
135:2,5,10 165:2
184:14 185:16,20
186:11,22 189:10
190:18,20,21
191:12 192:11
194:17 199:4
200:19 203:22
214:8 231:10
240:16 272:2,14
283:7,14,18,18,19
284:18 290:10
294:4,9,13,13
295:5,22
proteins 185:21
192:11 201:8
204:18
prototype 213:17
prove 309:4
provide 30:19 56:8
65:14,18,20 96:8
97:21 121:10
156:22 159:13
provided 56:8
85:21 98:22 130:5

130:14 131:21
231:11
provides 41:1
287:8
providing 129:12
186:17 196:1
282:16 286:11
proviso 258:19
psychology 38:21
40:19 43:7,13
public 5:2 61:2
88:21 95:6 109:3
121:21 122:2,8
131:2,6,10 134:11
134:14,16 158:4,7
158:17,22 219:1
220:10 278:20
293:22 298:12
300:5,20 301:1
305:15 308:2
published 33:10
42:19 43:2 164:8
164:18 176:15
177:14 196:11
207:18 210:18
223:14 242:13
PubMed 43:3,17
44:9 169:9,14
170:2
pull 207:11
pulled 206:4
pulling 250:14
pulmonology
251:18
purchase 9:20
18:20 59:13
purchased 13:6
19:6 37:1,16 73:4
purchases 33:16
63:13 73:17
purchasing 13:2
37:8,10,11 80:7
purely 155:15
purine 153:12
purposeful 102:8
126:13,19
pursue 223:10,12

224:2
purview 234:1
push 223:18
pushing 222:9
push-ups 53:7
put 7:6 15:6 26:22
27:19 55:20 89:7
170:6,19 171:2
182:19 193:7
202:6 204:20
212:13,17 218:17
231:4 233:20
285:13 288:12
292:7 300:4
302:17 303:4
307:21
putting 222:7,10
242:14 285:21
pyramid 11:21
16:21 18:7 26:11
54:17 59:4 64:19
75:17,18 76:22
77:1 79:11 101:17
101:21 102:3
256:13 290:4
pyrimidine 153:12
p.m 221:17,18
316:11

―――― Q ――――
quality 125:13
127:2 184:3,8
257:5 298:11,22
304:5,15,18
quantitative 56:7
quantity 9:19
164:15 298:12
quarter 83:7
quartiles 27:14
question 6:18
19:15 27:22 28:16
28:19 45:5,9 61:6
67:22 71:8 85:9
87:1 89:8 91:19
99:16 101:22
103:7,13 110:2,12
111:4 112:12

114:20 118:5
121:8,11 122:14
123:6,18 124:6
125:8 126:3,10
133:11,16 135:3
135:17 136:2
137:10 140:20
141:1 145:10
146:1,9 150:8
153:2,22 161:13
162:5 163:2,13,20
164:14,22 165:11
165:21 166:9
168:1 169:20
174:7,10 180:8,15
181:18 186:19
187:15 189:9
191:14 193:18
194:11 195:4
197:4,16 198:5
199:4,8 201:6
202:4 203:14
204:2 205:1
213:22 217:3
219:6 228:1
232:16,20,22
233:4 235:2
238:14 239:11
248:11 249:6
250:11,12,18
263:19 267:12
268:15 269:12,16
270:19 273:5
274:3 278:11
279:17 280:12,13
282:21 284:1
293:18 303:10
310:1 311:2
312:18 313:21,21
314:1,6 315:3,7
questioning 181:20
questions 25:15
38:6 41:2,19 42:8
42:11 54:5 61:5
66:8 67:1,5,20
83:1 108:18
114:15 121:1,2,3

121:18,20 122:12
123:12 124:16
126:13 129:20,20
129:22 134:7
135:6,14 137:3
143:22 147:8
152:21 162:12
167:6 183:20
184:4 185:10
186:3,6,14,22
190:14,19 192:22
193:3,10,12
196:18 198:10,20
200:5,19 201:4
204:18 206:4,10
211:2,11 217:21
217:22 222:21
230:18 232:18
233:8 248:10,14
248:16,16,17,20
249:15,16 264:20
265:17 267:22
268:1 279:11
282:1,8,18 283:1
283:6,9,19 287:4
295:1,14 311:4,5
313:19 316:1
quick 233:7 303:10
quickly 207:7
214:22 222:18
quite 15:9 29:19
69:16 82:17 89:3
96:13 105:11
134:1 142:2 155:1
159:7 173:5 206:3
219:14 253:6
254:11,13 257:15
259:3 265:18
268:18 270:4
275:9,22 281:11
285:5
quotations 212:17
quote 224:10
quoted 315:4
quotes 80:2

―――― R ――――

R 4:1
Rachel 222:7,9
radical 62:10
Rafael 1:13 33:6
  69:8,10 101:13
  160:22 161:12,19
  165:16 218:21
  219:20 243:12,13
  278:9,11
raise 107:4,21
  108:2 235:2 284:2
  297:16
raised 107:17
  289:9 312:5,6
raises 67:5
raising 5:15 8:21
  9:4 138:17 215:16
  267:12 268:14
random 26:20
randomization
  177:3
randomized 26:18
  107:9 110:6
  176:15 210:22
  304:10,18,20
range 72:2 125:12
  144:3,20,21 145:7
  146:8 167:17
  203:20 204:5
  229:21 241:15
  255:19 260:13,17
  260:18,22 261:2
  277:19
ranged 21:5
rapidly 221:7
rate 6:6 302:3
rates 252:4
rating 302:13
ratio 269:21
rationale 98:5
ratios 248:1
RDA 20:4,7
reach 99:7
reactions 214:16
read 49:4 53:5
  223:16 224:22
reader 128:15

readers 129:13
  315:15
reading 51:18
  59:11 153:6
  281:11 285:1
ready 38:2 86:2
  120:9 131:13
  184:13 281:21
  282:19
real 49:16 62:16
  97:10,17 108:6
  141:9 193:15
  211:8 260:13
  263:19
realistic 83:21 84:4
realities 35:3
reality 111:19
realizes 84:16
really 7:21 22:13
  24:2,15,16 27:6
  28:11 31:4 32:16
  32:17,22 35:3,5,6
  43:9 44:6 49:3
  53:8 54:4 55:14
  56:14 59:15 65:1
  71:3 75:21 79:18
  81:5,12,21 82:17
  82:18 85:20 86:16
  91:6,12 107:9,15
  108:5,7,17 113:7
  113:20 114:20
  115:4 118:13
  120:2 123:14
  124:21 125:8,22
  127:1,9,20,22
  128:9,14 129:11
  129:14 130:1
  131:2,6 132:13,22
  133:11 134:19
  135:4,6,18 136:21
  137:20 138:9
  140:14,16,21
  143:6 144:6
  146:11 149:5
  150:7 151:21
  154:9,12,21 159:7
  168:2 169:1

173:19 175:2
  178:5,21 179:4
  180:9,12,20 181:1
  184:18 185:1,6
  186:21 188:14
  192:9 193:1
  194:14 197:8,21
  198:12 199:16
  200:7 206:14
  210:6 212:15
  213:8 214:5 216:2
  217:13 223:10
  227:5 230:4 239:6
  239:12 240:6,14
  241:7,11 243:5
  247:6 250:2,12
  251:18 252:5
  253:6 254:11
  257:4,12 259:7,20
  262:7 263:20
  267:8,8 272:1
  275:6,11,12
  276:10,15 277:1
  278:3 282:7
  283:10 285:5,7,11
  291:8 294:11
  296:11 301:11,11
  302:10,10 308:1
  313:2,10
reason 36:19 39:12
  40:6 56:20 94:22
  98:4 100:6 101:4
  109:18 190:4
  202:21 209:17
reasonable 181:16
  235:21
reasonably 171:17
reasons 39:11
  40:20 97:3 101:5
  107:20 228:13
  315:8
reassurance 30:20
recalls 26:20
receive 159:1
received 56:1
recently-approved
  298:3

recipe 25:5
recipes 25:6 36:20
  37:2
recognition 66:10
  241:10
recognize 139:10
  247:14,17 253:12
  255:1 301:8
  302:20
recognized 243:6
recommend 114:17
  136:8 158:16
  178:20 292:16,21
  308:2,22
recommendation
  11:19 21:1 56:5
  65:12 84:5 87:11
  94:3 96:18,19,20
  96:21 97:1 98:18
  106:16 220:17
  224:1,21 265:3
  268:21 292:15
  303:7 307:22
  313:4
recommendations
  11:9,17,22 15:4
  19:17,18 21:17
  30:21 98:13
  103:21 114:18
  115:16 117:15
  123:13 126:2
  127:6,7 131:4
  134:1 136:5,11
  138:21 154:8
  216:11 234:12
  274:11,19 278:20
  284:4 289:18
  299:1,14 311:14
recommended 87:2
  121:5,14,16
  146:18 289:17
  292:13
recommending
  21:13 102:22
  134:22
record 4:13 120:6
  221:17 233:10

recreate 79:1
red 244:13,16
  245:3 246:19
  271:22 290:8
  292:7 294:21
redone 173:14
reduce 55:7 117:3
  118:7 307:10
reduced 105:22
  106:3 116:7,11
  165:4
reducing 201:13
reductase 252:18
reduction 116:6
reductionism
  284:16
reductions 251:14
  252:1,3,4
reemphasize 241:6
reexamination
  165:17
refer 266:10 302:9
Reference 11:8
referred 117:12
  147:8
referring 156:9
  272:10
reflect 113:9
reformulations
  66:3
refresh 94:2
refresher 121:2
refrigerator 47:5
regain 45:20 46:4
  165:4 166:14
regard 159:3
  161:18 162:19
  163:1 164:13,21
  165:10,20,22
  166:8 169:7 171:9
  216:17 221:21
  309:12
regardless 305:11
regretted 314:18
regularly 47:3
  296:9
reiterate 294:1

relate 42:3 43:20
43:21 44:1 197:13
283:2 294:7
295:12
related 6:2 67:14
90:19 110:10
121:11,12,15
122:15,19,21
123:7,22 124:3
125:4,11,16 132:2
132:18 133:5,18
134:7,22 135:14
139:9 148:15
153:3 162:6
163:21 164:3,6
166:10,11 170:7
175:1 179:15
183:12 186:11,12
186:13 187:5,19
190:18 195:11
197:3 211:10
219:22 220:2
228:14 230:21,22
231:2 235:6,7
251:10 269:20
270:5 271:14
272:3 273:3
277:15 281:15
283:6 289:9 314:6
relates 72:15,17,18
149:9 308:13
309:22
relation 126:11
133:16
relationship 24:19
33:12 163:20
188:10 190:11,13
195:12 227:13
230:14 232:19
266:13
relationships
106:15 192:6
249:16 265:19
relative 27:5 107:5
152:20 157:17
178:8 229:8 248:5
251:2 265:8,16

269:14 270:17,21
271:16,16,19
275:10 281:8
307:13
relatively 117:1
177:13 227:16
254:4 258:4 259:2
relatives 63:19
relevance 39:6
relevant 44:18
51:15 56:9 69:12
105:5 110:1 120:3
238:15 239:6
314:2
rely 73:21 96:7
181:15 217:4
312:1,21
remaining 4:11,22
remarkably 255:11
remember 12:22
40:3 115:13
219:21 225:14
306:10
remind 5:1
reminder 60:12
reminders 65:14
Rena 176:12 177:9
renamed 185:20
247:12
repeated 229:2
274:19
replacing 263:10
replicate 312:9
replicating 159:17
report 2:10,14,16
2:19 3:2,4 8:22
9:5 13:1,2 50:9
51:4,5,6 83:17
102:5 103:22
128:14 134:9,18
135:20 147:20
151:6 158:15
160:20 165:17,18
166:16,17,19
178:5,8 182:2
206:12 207:11,18
211:12 212:6

215:18 216:8
219:7 220:8,12
242:8 271:7
272:11,19 278:12
288:11 291:17
314:3,5 315:8,15
reported 36:4
47:12 87:6 179:17
REPORTER 38:9
reporting 175:21
reports 86:3
123:15 130:17
210:3
representative
253:3,9,10
represented 245:21
represents 19:5
requested 293:22
require 25:1
109:19 110:9
required 87:9
135:20
requirement
105:11 166:1
308:10
requirements
102:13
requires 312:19
rerun 35:14
research 5:17 6:2
24:12 39:1,4 43:2
43:12 45:22 47:9
52:15 57:9 69:21
72:10 77:10 79:2
85:8 87:1 99:16
108:17 116:3
162:20 186:3
198:9 224:4
237:21 245:5
reserve 152:15
reside 132:20
residing 130:15
resolution 249:20
resolve 160:10
270:3
resolved 212:10,15
resonate 79:16

resource 109:7,9
resources 24:21
230:4
respect 80:11
225:22
respected 312:10
respond 69:22
response 94:15
101:4 223:1
281:16
responsibilities
205:22
responsibility
297:18
responsive 94:7
responsiveness
95:19 101:7
rest 92:1 93:12
114:2 139:6
restaurant 64:7
70:14,15,18 84:19
restaurants 113:10
restricted 146:21
150:16
restriction 91:8
restrictive 115:4
results 18:16 68:10
89:20,20 91:1
115:6 116:7
176:14 196:12
202:10 287:8
resumed 120:7
221:18
resuming 221:20
retailers 75:1,9
retailer's 75:3
retention 170:9
retrieve 109:20
retrieved 89:22
return 23:5 24:6
review 3:7 57:16
58:3 90:8 91:1
92:16 103:14
105:3 123:20
134:5 135:19
164:10 165:17
166:16 190:9

191:5 195:9 198:3
211:4 217:12
223:20 228:21
242:12 265:11
266:9 278:18
298:18 303:7
311:16,20 312:9
312:13 313:5,11
reviewed 163:13
191:1 226:6
251:17
reviewing 90:6
116:14 154:10
228:12
reviews 89:22 90:1
90:3,13 91:13
128:10 164:9,19
167:20 168:2,4,16
169:3 174:11
188:4,5 196:11
200:21,22 207:6
207:22 208:6
298:9 312:1
revise 219:3
rewrite 206:18
213:12
rice 19:2
Richardson 2:14
rid 149:18 211:19
right 4:14,15 7:5
16:2 23:8 27:20
28:22 29:15,17,17
30:17 31:6,6 35:7
36:3 37:20,21
38:12 39:16 53:17
59:20 65:7 80:20
81:1 82:13 88:15
91:7,22 98:14
103:2 105:7
108:21 110:3
111:14 119:18
120:8 130:10
139:16 143:17
146:19 148:7
152:15,16 155:5
160:18 165:8
167:16 168:14

174:19 177:16
184:11 196:22
207:15 208:8,19
208:21,22 209:6
212:3 215:13,22
219:9,15,18
220:14,19 221:9
233:13 234:21
236:3 247:18
253:15 264:14
270:11 273:12
276:2 290:4,17
293:14 295:2
296:7 297:22
299:9 302:22
304:6,13 305:1,9
308:3 309:3,3
312:7 315:6
right-hand 7:18
8:4
rigorous 113:20
227:5
Rihane 66:13
Rim 147:7
Rimm 1:14 3:2
112:14 147:7
148:6,13 149:3,8
150:15 205:20
207:10,20 208:3,7
208:9,14,19 211:9
212:2,20 222:2,4
233:22 234:5
235:11 237:7
239:16 241:17
242:4 243:18
244:8,19 246:12
247:16 264:1,2,15
265:6 275:21
276:3 289:14
290:17 291:12,14
292:10 293:17,20
303:9,11 304:7,15
304:19 305:3,15
306:3,6,13,21
307:1
rise 240:5
rising 258:17,18

risk 226:18 237:11
270:16 303:20
305:12 307:5
308:16 311:12
risking 278:2
road 303:1
Rob 60:19 118:3,4
Robert 1:19 66:12
113:14
robust 83:2
Roger 1:11 152:9
247:15 248:2
280:12
role 61:3 83:12
127:1 163:3
187:16 189:20
190:9 191:12
263:20
rolled 75:15
rolls 37:16
room 39:15
round 313:18
rounds 125:2
row 53:20 98:17
99:1
run 146:4 267:10
Russian 232:3

_____
S
_____
S 4:1
Sacks 144:18 172:1
264:11 272:17
safe 189:1 191:8
safety 4:6,17 72:15
151:19 271:17
sake 106:11 293:22
salad 286:5,8
salience 46:7,9,9,14
47:8,16 48:3
salt 89:9 101:12
110:15,15 112:10
salty 116:10 117:6
salt-sensitive 101:8
101:9
sample 13:12
256:12
samples 253:10

sane 247:18
SARAH 1:20
sat 126:6
satiety 189:21,22
190:6 191:12,14
195:17,18 200:1
201:6,7,11,15,18
202:11 207:2
214:1,2,17 215:5
satisfactory 167:4
satisfy 314:9
saturated 11:17
96:21 236:18
237:14 239:2
254:9 255:14
256:19,22 257:1
257:10 258:3,16
259:4 260:19
261:15,16 262:10
263:2,12,17
264:18 265:4
267:6,8,14,16
268:8 277:15
sauce 15:15,16
37:11
save 26:11 31:7
savings 22:21
27:18 31:3
saw 87:4
Sawka 87:5 88:14
saying 12:6 29:22
31:15 32:6 33:8
46:12 73:11 76:16
78:1 81:3,7
114:18 140:2
147:9 157:12
171:18 172:11
207:14 211:19
217:20 237:10
239:1,7 245:2
264:3 277:22
292:12 293:5,8
306:15 311:22
says 48:8 50:17
57:9 109:13 160:5
224:11 306:11
SC 164:20

scatter 7:7 23:5
24:13 28:3
SCD 1:14
schematic 14:13
school 64:9 77:11
116:4,22
schools 40:13
science 3:7 42:13
44:8,11,11 84:10
84:12 88:8,22
108:6 109:15
123:20 129:13
158:2 180:11,12
Sciences 38:17
scientific 102:1
301:5 308:1
scientist 58:17
scientists 58:16
154:3
scope 158:14
177:22 178:8
182:11 183:18
191:7
score 7:12,20 24:15
24:18 27:12,14
scores 7:17
scratch 37:17
197:7 211:7
screen 120:16
script 47:4
scripts 47:2,2
se 126:12
search 89:20 91:1
91:14 92:11 107:9
134:2 142:7
163:16 165:6
166:6,20 168:17
197:7 198:8,18
199:6,11 200:3
218:3 226:20
230:8 233:3 240:6
266:5 290:6
searches 89:11
91:6 99:22 109:12
124:20 125:15
129:17 162:21
163:8,11,18 165:8

168:7,12 206:16
211:8 265:21
268:3 290:1
313:15
searching 287:2
seat 309:6
second 40:6 41:3
50:5 53:9,22 54:8
58:13 73:1 74:15
74:22 89:8 95:11
97:10 98:3,17
129:19 139:19
149:9 153:4
163:12 249:1
254:8
secondary 266:17
SECRETARY
1:18,19
section 87:19
128:14 173:2
182:1 185:15
192:8 200:4,20
201:1,3 215:10
sectional 109:17
sections 185:20
240:10
see 14:13 19:8 47:5
47:16 57:21 58:7
69:22 74:9 76:2
101:3 103:14
115:9 117:18
139:14 140:20
160:19 175:7
179:11 184:9,10
185:9 188:20
189:7 190:9 191:6
193:8 194:19
195:17 196:3
197:10 220:15,19
227:10 229:17,19
235:13 247:3
248:19 253:5,7
254:17 255:4
257:4 258:5,12
259:1 261:4
264:20 265:22
266:6 270:12,21

150:17,19 236:18
237:14 238:4
274:13 314:3
sodium-potassium
96:12
SoFAAS 16:19,19
132:11 133:5
147:9,10 151:3
solely 150:16
243:20
solid 17:16 132:19
149:6 187:11
189:16 197:11
205:12
solution 15:8,10,10
60:7,8,9,14,15,17
solutions 41:4
65:20
somebody 47:16
62:10 76:7 99:1
146:20 175:13
176:9 297:13
310:19 313:2,11
something's 43:7
somewhat 254:14
264:16 269:8
soon 142:17 209:2
sorry 20:15 38:11
78:17,18 122:4
129:1 145:11
234:19 261:7
291:14 299:6
303:9
sort 16:5 34:11
42:11 44:9 45:21
46:15 47:6 49:21
57:6 61:17 62:5
71:10,14 73:22
74:1 85:6 86:14
87:14 88:6 102:21
110:20 119:5,5
122:10 125:2
126:12,12,19
128:11 129:1,1,10
129:19 130:11
131:18 132:10
134:3 135:10

136:4,21 137:1,13
143:16 145:2,5
147:19 149:9,17
150:20 151:15
154:2 159:13,15
165:6 166:6 172:8
172:11,18 173:8
176:16,16 183:9
183:11 195:18
198:8 201:13,15
203:20 218:12
225:4,7 226:6,20
227:2,18 229:5,16
230:18 231:13
234:11 238:12
260:15 274:4,10
274:14 276:18,19
277:14 283:15
288:12 296:4
302:1 304:2,3
312:2
sounds 15:9
soup 37:10
source 96:6 140:16
286:4,9 292:18
sources 62:2
106:17 113:2,19
114:3 118:10
169:17 209:12
229:9 270:6,9
283:17
Southeast 142:19
soy 55:6 56:18
so-called 278:22
space 225:4
spaghetti 15:13,17
37:11
Spahn 282:1
286:21 287:13,13
293:3,12,15 296:2
296:3 310:20,20
311:1,8,10 313:16
313:17
Spain 144:12
speak 5:4 76:22
157:13 172:1
182:6 275:22

speaker 38:14 99:6
176:21
speakers 260:10
speaking 68:3,3
241:20
speaks 182:2
spearheaded 89:14
special 66:9 123:12
135:13 136:7
161:19
specialties 72:11
specific 48:5 55:22
67:11 124:5
125:15 143:3
144:5 145:5
146:18 168:5,7,12
168:18 170:10,14
171:16 172:17
173:20 232:12,16
249:22 250:7
259:3 271:1,13,14
271:21 295:6
specifically 43:20
43:21 44:1 114:8
122:13 123:15
135:14 138:8
229:7 241:12
271:15 290:1,12
specification 269:1
269:9
specifying 9:19
spectrum 35:4
140:18 154:3
spend 8:1,1,7 23:12
24:16 104:14
107:11 160:4
174:5,6 207:1
250:10
spending 23:18
24:1,4 35:17
209:16
spends 10:21
spent 40:9 146:1
301:13
spinach 73:3
spirit 246:9
spirits 231:12,16

231:18 232:2
246:21
spits 15:8
split 148:20 161:7
spokes 74:12
spots 157:14
spotty 144:4 260:2
spouse 66:6 78:3
spouses 54:2
spread 146:3
sprinkling 218:9
stable 255:12
263:14,15,16
staff 134:14 161:2
184:18 282:15,15
309:11 316:4
stage 279:14
stages 76:1 179:13
stakeholder 71:15
71:21
stakeholders 72:3
Stamp 10:4
Stamps 6:4
stand 66:9
standard 13:17
111:18 231:14
282:9
standardization
274:15
standardize 275:3
standardized 217:8
standards 13:20,21
15:3 243:6
standpoint 75:22
stands 277:10
star 54:19
starch 189:6
stars 53:13 188:20
start 4:14 12:5
21:13 23:9 24:14
59:22 65:6 76:13
86:7,20 92:13
109:8 142:17
187:3 197:7
199:10,13,17
211:7 221:12
222:5 227:15

228:13 234:16
284:8
started 35:3 60:20
99:21 141:14
153:22 227:5
230:17 296:11
starting 64:22 77:8
81:21 145:6 203:3
232:20 282:20
state 6:10 25:10
26:21 45:21
314:16,20
stated 293:11
statement 89:1
311:4,7,15
statements 85:4
128:13 129:12
states 1:1 64:20
130:15 251:20
252:14,20 253:10
254:7 256:12
257:16 280:14
294:1
statins 277:17
statistical 256:11
statistically 253:9
status 89:10 90:11
118:20 122:18,20
124:16 163:7
164:8,18 165:6,16
166:5 230:22
277:6
stay 5:5 57:22
85:12 95:10
146:17 149:14
stayed 104:7 277:1
steal 208:21 273:21
stealth 66:1,4 78:12
82:17 83:1,11
stearic 268:6,11
273:9
steep 94:15 260:5
step 16:8 76:8
174:10 302:17
steps 309:13
step-wise 117:3
stereotype 246:15

stimulated 274:5
stimulus 113:16
stood 121:7
stop 228:13
store 13:3 15:12,15
straight 157:22
231:18,18,19
233:10
strategies 59:3
64:21 76:10 118:7
174:16 175:1
176:12 177:3
179:2,7 182:18,20
strategy 63:10 65:5
stratify 140:14
street 70:14,17
strength 300:17
striking 259:8
263:13
stroke 104:6
227:10 251:9
strokes 122:22
153:5
strong 85:4 220:4
220:17 285:5
298:14 300:1
303:21 304:15,16
305:6,10,11 306:7
structure 86:15
312:2
struggling 85:6
211:15
stuck 247:13
student 26:22
studies 29:1 43:5,6
43:14 45:13 51:14
51:17,20 55:2
68:3 69:13 83:10
87:10 91:9 92:5
97:19 100:12
101:11 104:4,16
104:18 106:7
107:12 108:14
111:9 159:10
202:5,11,17 203:5
203:9,10 206:13
206:17 227:6,8

228:6,10,15,19
235:19 237:10,17
268:11 279:20,21
281:2,4 286:13
299:7 303:18,22
315:4
study 44:6 59:5
63:20 109:17
113:4 175:9
234:12 298:18,20
299:4
studying 234:13
stuff 41:7,14,15
44:5,9,16 46:22
50:15,21 66:14
73:18 92:16 171:2
171:7 175:20
178:20 180:17
212:12 290:20,21
subcategories
204:6
subcommittee 2:10
2:13,16,19 3:2,4
4:6,17 86:3,6
88:13 93:19 94:20
120:10,20 124:19
125:3,5,5,7 126:5
126:21 127:22
128:7,8 129:11,15
132:12,21 133:9
134:13 135:5,8,12
137:6,16 139:4
157:12 160:20,22
161:8 164:12
184:15 197:19
203:18 205:19
247:11,15 272:18
281:15 287:16
289:1 295:5 303:2
312:22
subcommittees
4:11,22 91:4
125:18 128:11,16
129:17 132:18
133:7 137:22
143:10 148:12
160:1 206:2

219:21 221:22
264:17 282:4
284:7 287:19
288:10 296:13
subgroup 12:1
16:21 290:10
subgroups 123:14
161:19 165:11
subject 269:7
subquestion 270:18
subquestions
122:17 266:3,20
subsequent 220:6
subset 13:11
substance 179:17
substantial 257:20
258:8 260:3 279:5
280:3
substantially
258:19
substitute 81:7
126:16
substituted 127:4
subtle 138:16
success 175:14
178:3
successful 112:6
172:19 174:17
175:22 179:10
successfully 182:17
suddenly 235:18
sue 208:18
sufficient 141:15
sugar 114:21 115:2
149:7 150:1 189:6
189:13 197:14
231:10 232:1
sugars 19:14
132:22
sugar-sweetened
126:16 189:13
197:14
suggest 159:10
219:8 225:17
228:4 251:18
254:4 257:15
265:14 267:17

suggested 151:19
suggesting 256:20
suggestion 79:17
220:4 252:11,13
257:13 262:18
268:10 301:17
suggestions 80:10
169:8
suggests 50:3
236:16 256:17
277:18
suited 282:7
summaries 229:6
summarize 223:13
246:16
summarized
104:22 106:9
215:11
summary 96:8
167:1 227:20
311:3
Sunyer 31:9
supermarket 115:9
supermarkets
51:15
supplement 155:4
157:6,11
supplemental 10:2
supplementation
123:4 124:5
133:19 153:17
154:22 157:13
supplements 124:1
135:15 136:3,8
156:17 159:6,14
284:22
supply 149:14
150:12 155:6
156:12,13,14
support 6:10 9:7
83:3 161:4 172:4
172:6 173:9 175:7
175:12 179:3
184:19 193:2
223:15,17
supporting 128:13
supportive 128:13

129:12
supposed 264:22
sure 23:21 26:4
29:19 44:3 51:9
53:22 67:20 89:3
91:20 99:22
104:12 110:18
111:5 140:17
142:6 151:5,20
152:21 169:2,19
169:21 179:1
182:6 191:20
192:3,12 201:1
203:15 205:11
214:16 215:5
241:11,13 260:11
261:18 274:2,20
287:7 288:15,22
289:21 290:16
291:10 292:2
293:3 301:8 303:8
305:22 313:9
surprise 79:21
surprised 104:8
surprising 19:21
22:20 23:4
surrounding 60:11
survey 12:11 48:8
56:16
surveys 250:22
253:2,5,22 254:1
susceptibility 266:4
suspect 192:4
sustainable 152:4
sustained 176:17
sustenace 6:6
swamped 160:1
sweeteners 187:4
197:2 205:16
sweets 23:1
switch 190:20
Symposium 248:4
synthesize 171:6
synthesized 289:2
synthetic 268:17
system 125:22
314:7

274:2 277:22
278:8,11 280:16
283:19 284:13
294:19 299:17
303:10,11 304:11
314:15
tomato 15:15
tomorrow 21:13
Tom's 305:9
ton 159:16 184:22
210:19
tools 34:3 65:18
top 48:7 104:8
114:3 119:3 199:6
298:16
topic 86:12 161:6,7
162:18,21 166:21
178:9 187:12
189:3,17 214:14
223:20 235:6
269:10 291:8
297:14,19 313:5
topics 67:8 110:9
167:2 187:8
199:18 200:20
214:21 221:8
265:13 281:14
282:3 283:11,22
295:10 296:18
top-down 63:9
tortured 213:10
total 7:11 89:21
139:3 194:21
201:22 223:4
255:13 258:14
259:4 263:4 264:6
265:2 267:4,9
totally 54:20 99:13
208:4
touch 40:18
tough 53:20 159:7
town 70:12
track 86:11
tracking 90:21
trade-off 37:19
traditionally
157:20

traits 39:2
trans 149:18,21
264:18 268:17,19
269:3,4 307:11
transcends 286:14
transform 50:17
transitioning 65:11
transitions 42:3
translate 24:22
25:20 26:6
translated 278:20
translation 26:5
transtheoretical
75:13
trauma 226:13,18
Treatment 249:11
263:7 266:18
tremendous 42:7
61:10 81:11
251:22
trend 84:17
trends 274:4,22
275:4,16 276:16
trial 90:4,12 98:11
98:12 176:10,11
177:8 210:22
trials 90:1,2 91:22
92:4,15 93:3,6,8
93:11 97:18,19
104:18 105:19,20
106:2,5 107:10,11
108:5,13 110:7
125:16 159:12,21
160:7 174:12,13
175:19 177:2
228:8 262:7
264:11 273:18
304:10,18,20
trick 198:1
trickier 237:22
tricky 74:7 145:1
169:18 201:18
226:12
tried 63:4 170:11
195:14 262:7
triglycerides 249:9
Trish 120:17 130:5

146:2 148:4,17
193:2
trouble 156:16
true 20:13,15 34:7
36:16 180:1 203:2
297:21 299:2
309:3
truly 214:7
trump 108:7
159:13
try 41:7 73:22 76:6
77:16 78:11 81:8
82:12,12 97:20
168:3,10 171:2,6
174:14,16 181:10
198:1 199:7
206:17 223:19
282:6 309:6
trying 29:6 30:15
40:9 46:1,4 73:13
73:16 74:2,5
87:15 116:15,16
131:17 132:1
143:13 144:5
167:18 178:5,18
182:8 187:7 191:6
193:6,7 195:7
198:3 209:13
234:8 243:10
264:21 276:21
282:8 287:5,5
308:18
tube 122:20 133:16
153:3 154:13
tubes 153:13
tune 256:9
tuned 95:11
turf 152:16
turfed 147:19
230:9
turfing 272:12
turn 59:20,20
160:19 205:21
turns 35:8 117:17
246:18
tweaked 188:21
tweaking 218:1

twelve 146:4
twice 59:18
Twitter 61:7
two 4:7,18 10:14
17:5 21:2 30:9,16
39:14 40:7,20
45:15 49:19 50:12
53:1 54:15 57:4
59:4 64:21 66:21
80:17 113:17
114:15 121:19
122:12 123:6
127:11 128:10
129:20 147:8
148:11 153:9
154:1,3 161:11
175:1 177:2
183:20 184:4
213:7 214:7
222:15 223:3,5
224:17 225:4,6
238:20 239:8
246:5 248:14,15
248:17 249:6,16
268:1 269:21
279:21 280:21
281:4 291:16
301:19 302:1,3,16
310:13
two-step 16:6
two-way 305:1
type 9:19 30:3
46:10 164:15
188:8 189:5
190:21 196:7
200:22 201:10
244:4,7 245:4
246:3
types 54:11,12 57:2
96:9 127:16 179:2
187:20 203:5
244:12,15 248:5
typical 6:21 76:2
typically 41:10
45:6 48:6,7,11
49:19 65:21 95:20
97:15 99:8 114:21

177:4 197:22
202:17 203:4

U

ultimately 289:1
unawareness 49:22
unbelievable
301:14
uncover 306:19
undercounting
253:21 258:20
undermine 237:6
understand 32:11
215:11 243:14
262:7 315:15
understanding
110:13 177:7
218:19 244:10
288:18 310:18
312:7 313:16,17
unfortunate 179:6
unfortunately 6:20
12:14
unhealthy 8:2 24:7
122:16 164:7,16
229:20,21
uniform 118:21
unimpressive
285:2
uniquely 38:20
United 1:1 25:8
64:20 130:15
251:20 252:14,20
253:10 254:6
256:12 257:16
280:14
universal 108:16
unmerited 54:21
55:1
unnecessarily
312:8
unpublished
118:12
unsaturated
258:15 269:22
unstated 48:20
update 2:14 11:6

Wisconsin 242:3
wisdom 85:20
wisely 109:9
wish 34:13
woman 81:20
   226:16
women 24:20
   122:19,21 123:16
   123:17 153:17
   154:20 236:9
   257:18 258:1,9,15
   307:4,18
won 39:5
wonder 32:15
   34:22 75:20 107:4
   116:12 265:1
wondered 279:17
wonderful 33:7
   110:20 184:18
   209:18 282:15
wondering 181:21
   260:15 273:1
woods 185:4
word 244:3
wording 250:1
words 14:1,10
   85:20 253:18
   300:15 302:4
work 4:11,22 14:6
   46:17 57:17 58:20
   59:12 62:6,21
   68:12 69:12 81:22
   103:17 116:17
   117:2 120:19
   122:11 137:6
   143:20 144:12
   157:22 160:2,10
   173:19 177:22
   178:14 179:9
   180:13 181:3
   184:22 185:14
   196:15 206:7
   207:1,16 210:19
   230:20 262:6
   264:10 309:17
worked 180:10,11
working 14:3 26:6

35:13 66:11
130:10 131:14
135:7 138:20
161:15 167:2
173:16 185:1
187:1 189:17
247:21 293:6,8
295:20
workload 284:6
works 5:15 6:1,8
   144:22 178:16
   180:9,11 182:3,4
world 70:7 111:12
   214:12
world's 87:8,8
   242:11 246:15,17
worried 183:18
worry 261:15
worse 60:1 64:3
   275:17
worth 63:8 206:14
   211:18 228:12
   236:13 238:9
   256:14 280:18,19
worthwhile 270:7
   279:22
wouldn't 78:5
   107:21 116:13
   228:16 275:22
   292:14
write 200:3 212:11
writing 166:22
   169:4 178:8
   282:13 289:6
   301:18
written 184:10
wrong 180:17
   202:18 215:22
   297:8 306:15
wrote 208:10,15
   210:17 212:12
   313:11

X

Xav 138:2 313:20
Xavier 1:14 100:4
   112:7 167:8

171:21 173:7
181:3 185:8
203:19 275:14
295:16
Xavier's 88:3

Y

yang 151:15
year 12:20 25:4
   29:10 233:19
   288:13 314:19
years 6:1 14:3
   33:10 34:17 39:14
   50:12 56:6,6
   66:21 70:5,11
   80:19 113:17
   150:13 154:20
   156:10 208:10
   210:3 219:3,4,9
   220:6,14 223:15
   224:5,6 245:20
   265:14 275:5,16
   280:18
yeast 139:19
yesterday 4:4,15
   28:2 31:10 34:11
   34:13 57:6 93:19
   95:1 103:5,8
   105:15 126:7
   144:18 146:1
   151:18 152:11
   172:1 186:7
   191:11 195:21
   197:19 199:1
   200:17 204:17
   223:8 264:10
   289:15
yin 151:15
yolks 283:21
   294:17,20
York 26:18 50:15
   50:18
young 99:7,8
younger 77:2,15,15
   156:9
young'uns 63:6
youth 79:17

Z

zero 80:18
zinc 292:6

$

$1.75 27:17
$137 10:17

0

036 26:19

1

1 140:12
1-A 304:12
1:15 221:11,12
1:27 221:18
1:30 221:11
10:11 120:6
10:29 120:7
100 2:11 14:22 17:5
   18:5 20:4 53:13
   98:18
1004 63:21
11 2:10
12 2:13 21:3 51:17
   51:21 93:5,11
12:00 221:17
120 2:12,14
13 2:16 21:3
138 2:15 52:2
14 2:19 21:6,7 90:1
   90:3,7 225:3,12
140 52:1 99:3
15 3:2 15:21 20:8
   55:14 56:6 63:2
   90:13 206:13
   224:6 235:19
   236:11
15-minute 120:4
1500 94:7,14,16,21
   105:14 110:22
   111:22 112:9
   143:4
16 3:4 26:17 315:4
160 2:17
1600 98:20 145:17
167 2:18

17 3:7 282:2 293:14
17.2 47:12
18 3:9 21:6,7
   233:17,19 298:2
18-year-olds
   234:16
18-year-old's
   234:19
184 2:20
19 90:5
1943 63:14
1960's 260:1
1968 252:2 260:4
1970 93:1 199:11
   227:1
1970's 250:20
   255:11 258:20
1977 253:22
1980 251:21
1980's 259:3
1989 254:1
1990 251:20 252:2
   252:3,15 255:13
1990's 254:19
1995 226:21 227:1
   230:8
1997 11:7

2

2 114:9 188:8 196:7
2,322 21:5
2-B 302:7
20 6:1 10:14 34:17
   40:17 56:6 115:11
   236:11 275:4
200 53:7 59:6,17
   146:5
2000 5:12 143:5
   145:17 199:13
   227:1 254:17
2001 12:10
2002 12:10 280:5
   280:14
2003 92:12 102:5
2004 11:7 63:21
   92:12
2005 11:15,21

87:13,16 94:4
103:20 123:15
124:8 135:20
140:22 148:5
185:15 186:21
188:15 189:18
190:15 192:8
196:9,16 197:9
198:5 206:5 207:8
207:11 211:12
219:8 222:20
224:10 248:22
249:7 250:21
251:6 257:13
263:6 266:12
268:20 274:22
275:3,22 278:12
291:13,14 312:14
2005-2006 119:10
276:1
2005-6 139:9
2006 12:8,8
2007 12:8,8
2008 25:5 210:18
2009 1:6 10:17
165:19 230:6
201 2:21
21 233:19
2100 98:16
22 51:17,21
221 2:22
222 3:2
230 258:7
2300 94:4,13 98:19
100:16 111:21
233 3:3
24-hour 100:13
24-7 60:10 64:13
247 3:5
25 2:5 10:20 55:14
115:11 145:17
260:17
2500 143:6
272 3:6
28 90:5
281 3:8
29 15:22 16:1 18:22

90:13
29th 131:13
298 3:9

3

3 118:12 263:7
3,000 70:13 100:20
199:14
3,629 21:6
3-A 302:7
3:02 316:11
30 1:6 14:10 275:4
303:18,22
300 31:19 96:18
257:13
3100 99:2
316 3:11
32 90:12 93:10
350 257:15
360 60:10
360-degree 64:13
39 2:7

4

4 25:3,4 31:17
40 259:19
400 242:20
45 260:18
47 90:4
48 90:1 92:1

5

50 10:15
51 21:3
58 14:6,18 15:10
16:9 18:1,5

6

6 2:4 192:9
6,000 16:9 180:6
60 50:13 70:5,11
113:5 256:21
61 90:12
62 90:1
63 20:6
64 92:19
67 2:8

7

7,000 207:22
70 20:9 21:3 50:8
50:20 94:17 113:5
147:15
70's 103:15
700 89:22 92:1,3
71 89:22
71-plus 21:3
72 63:22 73:8,10
7200 228:9
771 89:21

8

8 2:3 18:16
8:28 4:2
8:30 1:7
80 55:11 98:22
85 259:3
86 2:10

9

9 2:6
93 43:11
95 20:6
98 20:10