MACRO INTERNATIONAL, INC.

FOCUS GROUP ON
METHYL MERCURY
(FOOD AND DRUG ADMINISTRATION)

THURSDAY
OCTOBER 12, 2000
8:00 P.M.

Moderator: Lynn Halverson

Calverton, Maryland
MS. HALVERSON: (in progress) -- to my left. You can give us your first name and how many people there are in your household.

A PARTICIPANT: My name's Gary.

There's a total of four, with two daughters at school, which gets us down to school.

MS. HALVERSON: Ah, okay. How old are your daughters?

A PARTICIPANT: 22 and 19.

A PARTICIPANT: Linda, family of five. I have three boys. They are four, six and nine.

MS. HALVERSON: Okay. Thanks.

A PARTICIPANT: Sorry.

A PARTICIPANT: I'm not.

MS. HALVERSON: (Laughter)

A PARTICIPANT: My name is Tania. It's just my husband and I. All the children are out of the nest.

MS. HALVERSON: Okay. How did you do that? Oh, that's for another focus group.

A PARTICIPANT: My name is Henrietta.
A family of four. Two adult children. One just
got married this past Saturday, so she's gone
now. So, one adult male.

MS. HALVERSON: Great.

A PARTICIPANT: My son is still there.

MS. HALVERSON: How old is he?

A PARTICIPANT: Afraid to tell you.

38.

MS. HALVERSON: That's what I keep worrying about.

A PARTICIPANT: Yeah, my name is Evral (ph). I'm a family of three, and my wife and our
daughter -- five year old daughter.

MS. HALVERSON: Ah, great. Okay.

Thank you.

A PARTICIPANT: My name is Luis.

Contradictory to how it looks over here, my name
is Luis. It's a total of three people. That's
including myself in the household.

MS. HALVERSON: Okay. Thank you.

A PARTICIPANT: My name is Jay. But
this says John here.
MS. HALVERSON: Okay. There's a total of four people in the apartment, all college.

MS. HALVERSON: Okay, great.

A PARTICIPANT: My name is Wanda. And there's my husband and myself. And we consider our two cats and our rabbit our kids.

MS. HALVERSON: Okay. Great. Well, I'd like to start out by finding out, when you think about stuff out there in the environment, like contaminants that can get into the air we breathe, or the water we drink or the foods we eat, what kinds of things do you think about?

(No response heard.)

MS. HALVERSON: Or don't you? Evral?

A PARTICIPANT: I think about water.

Water you drink.

MS. HALVERSON: Okay.

A PARTICIPANT: Especially if you want to (inaudible) supermarket, something like that.

MS. HALVERSON: What would you find in the water you drink?

A PARTICIPANT: Not finding. I am
they tell you all kind of crap about safe filtered water.

MS. HALVERSON: Okay.

A PARTICIPANT: And that's what I'm really concerned with that. The way it's been processed. Something like that.

MS. HALVERSON: Okay. So what kinds of contaminants might there be in the air or the water or the food you drink (sic)?

A PARTICIPANT: Pesticides.


(Simultaneous discussion)

A PARTICIPANT: These are all commercial products that one would buy in a store?

MS. HALVERSON: Not necessarily. But let's say you're buying meat or fish or fruits and vegetables. Something like that.

A PARTICIPANT: Well, I think somebody already said, pesticides. What you say about mad cow disease and contaminated meat. And certain
parts of the United States, the water reserve contaminated from local ecological problems.

MS. HALVERSON: Okay. Anyone else?

A PARTICIPANT: In some places, the water I think, might have sewage in it.

A PARTICIPANT: Yeah, that's true.

A PARTICIPANT: Right, right.

A PARTICIPANT: That's true.

MS. HALVERSON: Okay. Tania, did you --

A PARTICIPANT: Yeah. I was going to think about the fish. Fish that we eat, and where it's caught, and the contaminated -- the diphtheria (ph) and the --

(Simultaneous discussion)

MS. HALVERSON: Okay.

A PARTICIPANT: I was concerned about that. And where are we getting our fish in this area? Where is it coming from?

MS. HALVERSON: Okay. So, I've heard pfisteria (ph), pesticides, the sewage, that kind of bacteria or something like that, that you
might get. How about something like lead or mercury? Where would you find that?

(Simultaneous discussion)

MS. HALVERSON: Sorry. I'm not hearing you, Everall.

A PARTICIPANT: The lead sometimes they say, doesn't it come in paints? Like the old paints?

MS. HALVERSON: Pencils?

A PARTICIPANT: The (inaudible) painted like 50 years ago or before the --

MS. HALVERSON: (Interposing) Lead pencils? Okay.

A PARTICIPANT: Lead in the water.

MS. HALVERSON: Lead in the water?

A PARTICIPANT: Because of the pipes.

Because of the pipes that lead from the city into your house. Now, you may have new carpet pipes (sic) put in, but you have pipes that belong to the city and connect. So it's still coming through that.

MS. HALVERSON: Okay.
A PARTICIPANT: It can also come from paint cans.

A PARTICIPANT: Yeah.

MS. HALVERSON: All right.

A PARTICIPANT: That kind of thing.

A PARTICIPANT: And also, it comes -- also, if it's painted, you know, they say you shouldn't ingest it. But no, it's in the dust that comes off the -- you know, in the (inaudible) that is airborne. So, you're inhaling it.

MS. HALVERSON: Okay. How about pesticides? Where would you be likely to get that? From air, water, food?

A PARTICIPANT: Fruits and vegetables.

MS. HALVERSON: Fruits and vegetables?

Okay.

A PARTICIPANT: All three.

MS. HALVERSON: All three, you said, Luis?

A PARTICIPANT: I would think so.

A PARTICIPANT: That's right.
A PARTICIPANT: Yeah.

MS. HALVERSON: Okay.

A PARTICIPANT: Probably more in our area. Maybe the fruit. Versus cause I don't see any fruit, you know, farms around our area that have drifting pesticides (sic). But definitely through the fruit, if not in the air.

MS. HALVERSON: Okay.

A PARTICIPANT: According to where we live.

MS. HALVERSON: How about mercury?

Where would that come from?

A PARTICIPANT: I would assume maybe water. Do we have some type of a -- I know in different parts of the Americas, like from where I come from, we have that problem in the water, because of mining.

MS. HALVERSON: Ah, okay.

A PARTICIPANT: I'm not sure in North America where that would be.

MS. HALVERSON: Okay.

A PARTICIPANT: But I would assume
water.

MS. HALVERSON: All right. Any other?

A PARTICIPANT: We get that in fish.

MS. HALVERSON: How is that, Gary?

A PARTICIPANT: I don't know. But they -- somehow, the fish ingest it, and it -- from what I remember reading about it, it kind of accumulates in the fish.

A PARTICIPANT: I would think industry dumping.

A PARTICIPANT: Yeah.

A PARTICIPANT: Right.

A PARTICIPANT: Right.

A PARTICIPANT: They throw a lot of things in the food now that are really dangerous for you. I once got Hollywood bread, and when my sister -- she's really into this -- was looking at it. We found out that the reason it was diet bread was because it was made with sawdust.

A PARTICIPANT: Oh yeah?

A PARTICIPANT: Yeah. Our (inaudible) was sawdust.
A PARTICIPANT: Wow.
A PARTICIPANT: That's interesting.
MS. HALVERSON: What are the risks that are associated with these kinds of contaminants?
A PARTICIPANT: Cancer.
MS. HALVERSON: Cancer? With all of them, or --
A PARTICIPANT: I think with pesticides.
MS. HALVERSON: Okay.
A PARTICIPANT: I know they found aluminum in people with Alzheimer's.
MS. HALVERSON: Okay.
A PARTICIPANT: And also with (inaudible).
MS. HALVERSON: Also with what?
A PARTICIPANT: Also with mercury. I think that can distribute to Alzheimer's (sic).
MS. HALVERSON: To mercury?
A PARTICIPANT: I think I got --
MS. HALVERSON: Contributes to Alzheimer's?
A PARTICIPANT: I think I read that somewhere.

MS. HALVERSON: Okay. Everall?

A PARTICIPANT: You know what bothers me most?

MS. HALVERSON: What?

A PARTICIPANT: Sometimes I wonder what it is, see. Because every day, you end up with something new. Every day, one worries such (inaudible) so many different things that causes cancer, that sometimes it scares me to death. You know? So, it’s really difficult (inaudible) -- especially with the things we eat and drink. I’m scared to death.

A PARTICIPANT: The food can also affect heart disease.

MS. HALVERSON: What can?

A PARTICIPANT: The food we eat.

MS. HALVERSON: The food?

A PARTICIPANT: Like the contaminants can affect heart disease.

MS. HALVERSON: Okay. Are you doing...
anything in particular now, to protect yourself
from these kinds of environmental contaminants?

A PARTICIPANT: No. I use -- for
water, I use a filter at home. And I also don't
buy -- it's a brand of bottled water called
Crystal Clear. I heard they were using some type
of cyanide as part of clearing it -- cleaning it
or something. So, you know, with kids I don't
want that. So, that's about it. I buy the
bottled water. I mean, the --

MS. HALVERSON: Use a filter.

A PARTICIPANT: Yeah, thank you.

MS. HALVERSON: Okay. Jay, how about
you?

A PARTICIPANT: I use a Brita filter,
mainly for taste though. I'm used to drinking
well water.

A PARTICIPANT: We don't use anything.

MS. HALVERSON: All right.

A PARTICIPANT: I don't -- I remember
in (inaudible), my dentist, who told us that a
lot of the kids today are getting more cavities
than we used to.

A PARTICIPANT: Yeah.

A PARTICIPANT: Because of the bottled water.

MS. HALVERSON: Really?

A PARTICIPANT: It's not fluoridated.

A PARTICIPANT: It isn't?

MS. HALVERSON: Hmm.

A PARTICIPANT: Well, normally I boil my water for at least about five minutes before drinking it.

MS. HALVERSON: Boil it?

A PARTICIPANT: Yeah.

MS. HALVERSON: Hmmm.

A PARTICIPANT: I usually does that (sic).

A PARTICIPANT: I can --

MS. HALVERSON: What -- yeah?

A PARTICIPANT: I've been using the Fit, which is made for you know, washing your fruits and vegetables to get off -- it's supposed to get rid of more pesticides.
MS. HALVERSON: Okay.

A PARTICIPANT: That leaves a taste on it, too. I bought it, and I sprayed it on grapes. Because my sister says grapes have more -- there's a book, and it says what you shouldn't eat.

A PARTICIPANT: What's the name of it?

A PARTICIPANT: Fit.

A PARTICIPANT: F-i-t.

A PARTICIPANT: Fit. F-i-t. It's a book, and it says the things that you definitely shouldn't eat is red. And grapes is one, because it says it has more pesticides on it than anything else.

MS. HALVERSON: What kinds of precautions do you think that the industry and government should be taking to reduce the risk of consumer exposure to these kinds of contaminants?

Anything they should be doing?

A PARTICIPANT: I guess I would assume to make this information simple and easy to find.

One: Not to have to go to the library or watch
"20/20" to find out where to (inaudible) --

Somehow, without taking away from the sale of the food itself, make it easy for somebody to find out this information that's right out there, before you buy products.

I'm not sure if they would want to do that, because they might not sell anything,

but --

MS. HALVERSON: Okay.

A PARTICIPANT: I think the products should be labeled more. You know? Sometimes you don't even know what's in it. What's in anything, unless -- it should be on the can or labeled so that you can understand exactly what it is.

MS. HALVERSON: Uh huh. Okay. Let's talk specifically about fish and seafood, and that kind of thing. How many of you do eat fish or seafood as a regular part of your diet?

A PARTICIPANT: Yeah.

A PARTICIPANT: I do.

MS. HALVERSON: I see everybody except
Wanda. Okay. All right. What kinds of seafood do you eat, generally?

A PARTICIPANT: Everything.

MS. HALVERSON: Everything?

A PARTICIPANT: That's right. Crabs, shellfish.

A PARTICIPANT: Shellfish, crabs, fish.

MS. HALVERSON: Everall?

A PARTICIPANT: I eat more fish and shrimps (sic). That's about it.

MS. HALVERSON: Fish and Shrimp? Okay.

Henrietta?

A PARTICIPANT: We eat mainly trout.

That's the only kind of fish we really like, and crabs. And that's it.

MS. HALVERSON: Okay. Tania?

A PARTICIPANT: Okay. We usually eat salmon, tuna, crabs and scallops. And I don't eat oysters unless they're fried. I mean, I don't eat them raw. I don't eat any raw fish.

MS. HALVERSON: Okay.

A PARTICIPANT: It has to be cooked.
So, just about anything, except catfish. I don't like that.

MS. HALVERSON: Okay. Linda?

A PARTICIPANT: Salmon, cod, tuna.

Those are the ones we eat regularly.

MS. HALVERSON: And Gary, how about you?

A PARTICIPANT: We eat everything.

Shellfish, oysters (inaudible) that I -- mussels.

Trout and crabs.

MS. HALVERSON: Okay. All right. What are the advantages of eating fish?

A PARTICIPANT: I've heard that it's brain food.

A PARTICIPANT: I was just gonna say.

A PARTICIPANT: It's no -- from what I know --

A PARTICIPANT: Low cholesterol.

A PARTICIPANT: -- yeah, low cholesterol, low fat. I understand that the fat of fish is not as bad as like animal fat. So I hear. I haven't investigated it.
MS. HALVERSON: Okay.

A PARTICIPANT: Fish is higher in omega three fatty acids, which is something that gets destroyed in a lot of our foods.

MS. HALVERSON: Okay.

A PARTICIPANT: Well, I don't look at the fat count or the caloric count. I just eat it because I like the way it tastes.

MS. HALVERSON: About how often do you eat fish?

A PARTICIPANT: Every week, for me.

A PARTICIPANT: Once a week.

A PARTICIPANT: At least once a week.

A PARTICIPANT: Yeah, me too.

(Simultaneous discussion)

MS. HALVERSON: At least once a week?

A PARTICIPANT: Yeah.

A PARTICIPANT: Two or three times a week. Wow. And Wanda, never.

A PARTICIPANT: I eat tuna fish.

MS. HALVERSON: Oh, okay.

A PARTICIPANT: I eat tuna fish.
MS. HALVERSON: Out of a can? That kind?

A PARTICIPANT: Yeah.

MS. HALVERSON: Okay. And about how often do you eat that?

A PARTICIPANT: Two or three times a week.

MS. HALVERSON: Okay. All right. What are the disadvantages of eating fish?

A PARTICIPANT: You could die from food poisoning. No, I mean, I enjoy cooked fish as well as raw fish. Like Japanese cuisine?

MS. HALVERSON: Uh huh.

A PARTICIPANT: Everything they cook -- you know, they whip up raw, I eat it.

A PARTICIPANT: Sushi?

A PARTICIPANT: Yeah, sushi. So, I worry about getting like cholera or pfisteria, like we talked about.

MS. HALVERSON: Okay. Anyone else?

A PARTICIPANT: It's difficult to keep, isn't it? You can only keep it for a certain
A PARTICIPANT: What, fish?

A PARTICIPANT: Or can you freeze it?

A PARTICIPANT: Freeze it.

A PARTICIPANT: Yeah, put it in the freezer.

A PARTICIPANT: You can freeze it. Uh huh.

MS. HALVERSON: When you think about fish, Gary had mentioned mercury earlier. What is the concern with mercury?

A PARTICIPANT: I remember reading a few years ago that (inaudible) had found some fish that had some mercury. A mercury scare in fish. I haven't read about it recently.

MS. HALVERSON: Okay. And how would you be exposed to mercury, then?

A PARTICIPANT: Well, it's in the fish.

MS. HALVERSON: So by eating it?

A PARTICIPANT: Yeah.

MS. HALVERSON: You would be exposed to it?
A PARTICIPANT: Yeah. How else?

MS. HALVERSON: Smelling it? I don't know. How does it compare to pesticides, for example? Do you think mercury is more of a concern to someone, or pesticides on your fruits and vegetables or --

A PARTICIPANT: Definitely. I think mercury is a very volatile substance. Very toxic substance, whether it's smelled and absorbed into your skin. Deadly thing.

MS. HALVERSON: Okay. And have you heard this, what Gary had said about mercury being in fish and all?

A PARTICIPANT: Right. I never knew about it here in North America, because I know in Central America where they have mining, they use mercury to mine gold. And the mercury grows in the water to fish. Being in there -- rather than send out to the consumer, or they absorb it in their bodies. We eat it. We get the mercury. Like a third party, we get it through the fish.
MS. HALVERSON: Okay.

A PARTICIPANT: That's all I have heard.

MS. HALVERSON: And what have you heard are the side effects of the mercury then? I mean, what would be the bad thing that would --

A PARTICIPANT: (Interposing) Always I heard is brain damage and/or death (sic). But I would question at what point -- what age you are. I think young children are more --

A PARTICIPANT: They're liable to get it?

A PARTICIPANT: Right. You would -- able to get like brain damage. I think it's even at an early age. I'm not sure about adults. I'm not sure what kind of symptoms or problems they would get.

A PARTICIPANT: Mercury is actually cumulative. It stays in your body. I mean, unlike a pesticide where you can get sick, and you know, if you don't have it enough, you're
fine the next day. But I think mercury stays in your body and it accumulates.

MS. HALVERSON: Okay.

A PARTICIPANT: And I feel it affects another organ besides the brain. I forget what it is. I think it's the liver, or it could be the kidney.

(Simultaneous discussion)

MS. HALVERSON: Now, Jay had just said earlier that he thought fish was brain food.

And then here Luis is saying, "Hey, but mercury can cause brain damage."

A PARTICIPANT: Right.

MS. HALVERSON: So, how do you balance those things out in your fish?

A PARTICIPANT: You pray over it.

That's all you can do.

A PARTICIPANT: You don't worry about it.

MS. HALVERSON: You don't worry about it?

A PARTICIPANT: Don't worry about it.
MS. HALVERSON: Why not?

A PARTICIPANT: I kind of assume that fish is not -- whatever you buy is not contaminated.

A PARTICIPANT: I don't have that -- that it's not contaminated. Because I don't think that everything is contaminant free. It's like pesticides. You're going to have to wash your vegetables and everything.

And I mean, I believe you have to take a certain responsibility to keep things clean and fresh for your family. And also, you kind of look at the meat -- I mean, the fish, to see that it's fresh. You know. You know what to look for in a fish. And as I said again, you pray over it. That's all you can do.

MS. HALVERSON: Okay. I would like to pass out some information. And these are just some examples of a sentence or two, kind of explaining mercury. Whoops. You need the whole pile. Sorry. You have examples -- sorry. You're being too helpful. (inaudible) that.
No, you just gave me -- hold on. Three, four, five. Okay. I think you each have a pile there.

Thanks. No, you need this whole thing. One, two, three, four, five. Okay? Okay.

If you look at example number one, it says: Warning: Mercury in fish may harm the babies of pregnant and nursing mothers and young children. When you read that, what does that say to you?

A PARTICIPANT: Avoid mercury.

MS. HALVERSON: For who?

A PARTICIPANT: For young children.

A PARTICIPANT: Pregnant mothers.

A PARTICIPANT: And pregnant mothers.

MS. HALVERSON: For young children and pregnant mothers?

A PARTICIPANT: Yes.

MS. HALVERSON: Okay.

A PARTICIPANT: To me, I wouldn't buy it.

MS. HALVERSON: Why is that?

A PARTICIPANT: Well --
MS. HALVERSON: Tania's pregnant. No.

A PARTICIPANT: No, that -- because you know, if you had this in your house, you know, we all have children. Or you never know who's going to come over. They're going to go in your refrigerator. And they have this.

Well, I have young children and grandchildren. So, they're going to come over and eat it. I would never bring that in my house, because I would never know who would ingest it.

MS. HALVERSON: Okay. So you're saying you would never bring fish, period, into your house?

A PARTICIPANT: No, no, no.

MS. HALVERSON: Oh.

A PARTICIPANT: Whatever says -- is this a certain type of fish, or --

A PARTICIPANT: (Interposing) Yeah, that's it.

A PARTICIPANT: If this statement is true. Do you understand what I'm saying? If this statement is true, then I would never bring
it into my house, whatever this --

MS. HALVERSON: Actually, I'm going to pass out some more information a little bit later that tells you exactly which fish and that kind of thing. So --

(Simultaneous discussion)

MS. HALVERSON: It's not necessarily all fish.

A PARTICIPANT: Right.

A PARTICIPANT: Okay. That's good to see. Okay.

A PARTICIPANT: But is it -- how many people -- it says don't smoke, it causes cancer. And how many people smoke? Because they don't pay attention to it.

MS. HALVERSON: No, it's not on here. She's saying the whole statement about smoking causes cancer. But how many people keep on smoking? If you had a -- someone in your family who was pregnant, how do you think they would react to this kind of a warning?

A PARTICIPANT: I think they would be
reluctant to eat fish.

A PARTICIPANT: Yeah. I don't think they would eat it.

MS. HALVERSON: Any kind, or just the ones that were --

A PARTICIPANT: (Interposing) That would be -- just might be cautious for the time that they're pregnant or after the children grow up.

MS. HALVERSON: Okay. Does this do a good job for you of describing the hazard for mercury?

A PARTICIPANT: It's not very specific.

A PARTICIPANT: No. It's not specific enough for me.

MS. HALVERSON: Okay. Let's look at example number two. It says small amounts of mercury can harm a brain starting to form or grow. That's why unborn and nursing babies, and young children are at risk. Too much mercury can affect behavior and learning. Mercury can
harm older children and adults, but it takes larger amounts. It may cause numbness in hands or feet or changes in vision. Yeah, Jay?

A PARTICIPANT: It's still -- I mean, from the first one, you can gather that mercury's bad. This is just being more specific about how bad it is and what it can do.

MS. HALVERSON: Okay.

A PARTICIPANT: But you still don't know where you're getting it from.

MS. HALVERSON: Okay. Anyone else?

A PARTICIPANT: I agree.

A PARTICIPANT: I agree, too.

(Simultaneous discussion)

MS. HALVERSON: Sorry?

A PARTICIPANT: That's why they switched alcohol and (inaudible).

MS. HALVERSON: Ahh, okay. All right. Do you find anything about this to be confusing? The way they've written this?

A PARTICIPANT: I don't know about the (inaudible) --
A PARTICIPANT: (Interposing) I don't care for the last line. It may cause numbness in hands and feet and changes in vision. I mean, a lot of other things can cause that too, and I'm not really sure why that's thrown in there.

MS. HALVERSON: So reading this, who does it say to you is affected by mercury?

A PARTICIPANT: Everybody.

A PARTICIPANT: Everyone.

A PARTICIPANT: Everybody.

A PARTICIPANT: Oh yeah.

MS. HALVERSON: Okay. And do you think that's the message they're trying to get across?

A PARTICIPANT: I think so.

MS. HALVERSON: Okay. All right.

Let's look at example number three. Let's look at example three. It says: A recent report from the National Academy of Sciences looked at the evidence that mercury can cause learning problems in children exposed to high levels of
mercury in the mother's diet during pregnancy.

Since fish are the main source of dietary exposure to mercury, the EPA and FDA are providing guidelines about the kinds and amounts of fish that pregnant and nursing mothers, and women of childbearing age can safely eat without exposing their children to any significant risk of harm. What's the main message of this statement?

A PARTICIPANT: Now the government says don't eat it.

MS. HALVERSON: Okay.

A PARTICIPANT: But it still hasn't gotten to the point where --

A PARTICIPANT: (Interposing) Well, I have a question. How are they going to test this?

MS. HALVERSON: How are they going to test what?

A PARTICIPANT: How are they going to test? It says the FDA are providing guidelines about the kinds of -- so how -- don't they have
to take samples of people who have eaten this who are going to be the subjects?

MS. HALVERSON: Okay.

A PARTICIPANT: How are they going to find it out?

MS. HALVERSON: All right. Good question. Any other questions it raises for you?

A PARTICIPANT: No.

MS. HALVERSON: Linda, anything?

A PARTICIPANT: Uh uh.

MS. HALVERSON: Is there any important information that's missing from this introduction?

A PARTICIPANT: Which fish?

A PARTICIPANT: Right.

MS. HALVERSON: Which fish?

A PARTICIPANT: Yeah.

MS. HALVERSON: Okay.

A PARTICIPANT: Yeah, which fish?

MS. HALVERSON: Okay. Let's look at example four. Seafood is an important and
growing part of the American diet. Seafood provides significant nutritional benefits to consumers. Some seafood, particularly large ocean fish and fresh water fish caught in contaminated waters, may contain levels of mercury that pose a risk to babies of pregnant and nursing mothers.

The FDA and the EPA advise women who are pregnant or who may become pregnant within six months, or are nursing mothers, to follow the safe eating guidelines outlined below. This advice should not be taken as a need to abstain from consuming seafood, except as indicated.

What does that example say to you?

A PARTICIPANT: It says basically all fish. Salt water and fresh water. And that's pretty much all fish.

MS. HALVERSON: Okay.

A PARTICIPANT: But it's more limited in who it's addressing. Only pregnant women or women becoming pregnant.

A PARTICIPANT: Does the --
A PARTICIPANT: (Interposing) Or nursing mothers.

A PARTICIPANT: Sorry. Does the -- may become pregnant within six months. Does that -- is that supposed to say that it leaves your system within six months?

MS. HALVERSON: Okay. That's a good question, too. Any other questions it raises for you?

A PARTICIPANT: So, if you get pregnant within the next week after you've eaten this fish, some (indiscernible) do.

A PARTICIPANT: That's right.

A PARTICIPANT: Yeah.

A PARTICIPANT: It kind of says some seafood. Another one says may contain levels of mercury. I mean, you can get that kind of warning on just about everything. So, this -- I don't know. This wouldn't bother me.

A PARTICIPANT: Well, they can't say all, because there goes the seafood industry.

A PARTICIPANT: Right.
MS. HALVERSON: That's an interesting question. Do you think that they're -- that they're implying that it is all?

A PARTICIPANT: They can't say that, though.

MS. HALVERSON: But do you think that is what they're implying or not?

(No response heard.)

MS. HALVERSON: Okay. So as far as you're concerned, there are some fish that do have and some that don't?

A PARTICIPANT: Uh huh.

MS. HALVERSON: Okay.

A PARTICIPANT: Then it says, caught in contaminated waters. Where are the contaminated waters?

A PARTICIPANT: Right here, but not right here.

MS. HALVERSON: Okay. Let's look at example number five. Fish is an important source of high quality protein, vitamins and minerals. Certain fish species, however, are
known to contain higher levels of mercury than others do. Pregnant women and women of childbearing age are advised to eat a variety of seafood, and to avoid eating those species that may contain higher levels of mercury. These species are listed below.

A PARTICIPANT: Oh yeah?

MS. HALVERSON: They will be listed below, Everall. I promise.

A PARTICIPANT: You just can't be sure. They might -- I mean, how do they know that (inaudible) is that bad?

MS. HALVERSON: Okay. I'm not sure I understood your question.

A PARTICIPANT: If I was a pregnant woman, I think I would stay with small fish.

MS. HALVERSON: And why would that be?

A PARTICIPANT: Because I would be scared that they might not be so sure of themselves about the fish that can (inaudible) mercury.

MS. HALVERSON: Okay.
A PARTICIPANT: Well, doesn't this say that basically all fish? I mean, that's what I'm getting. It says certain fish species are known to contain higher levels than others. So, unless the other levels are zero, it means that all fish contain the mercury.

MS. HALVERSON: Okay.

A PARTICIPANT: That's just what I'm reading into it.

MS. HALVERSON: All right. Any other interpretations of what they're trying to say here?

(No response heard.)

MS. HALVERSON: Do you find anything about this particular one to be confusing?

A PARTICIPANT: It's stronger than the others.

A PARTICIPANT: Uh huh.

MS. HALVERSON: It's stronger than the others?

A PARTICIPANT: Yeah.

MS. HALVERSON: In what way?
A PARTICIPANT: Well, it's a different statement, and it advises to avoid eating certain types of fish. And the others were guidelines and things like that.

MS. HALVERSON: Okay.

A PARTICIPANT: So, I guess --

MS. HALVERSON: Any other reactions to this particular statement?

A PARTICIPANT: No.

A PARTICIPANT: No.

MS. HALVERSON: Okay.

A PARTICIPANT: I just want to ask.

MS. HALVERSON: Yeah.

A PARTICIPANT: I have a friend that's pregnant. Is this true about mercury in fish?

MS. HALVERSON: As I understand it, it is. And that's what they're trying to figure out, how to get that information out to people.

So, what I'm going to do is pass out another set of information. And you know, we had these species are listed below, and as indicated.

This is the as indicated. So, it's four
separate kinds of information. And we'll look
at these one at a time.

(Discussion held off the record.)

MS. HALVERSON: Okay. This first one
is -- again, these are all examples of specific
advice that might be provided to consumers,
particularly pregnant women and women who might
become pregnant about what they can do to reduce
the risk of exposure to mercury.

So, I'd like to look at them one at a
time and discuss each of them after we've read
them. The first one, of course, says: FDA
warns consumers who are pregnant, thinking of
becoming pregnant in the next six months,
nursing a baby - choose the fish you eat
carefully.

Four types of fish contain high levels
of methyl mercury residues that can harm
developing fetuses and nursing babies. The
methyl mercury can accumulate in your body, so
it is important to limit the amount you eat.
And then it says, be aware of these four fish:
Mackerel, shark, swordfish, tuna. Either fresh or frozen or canned.

And by eliminating them, for the mackerel, shark and swordfish, it says do not eat. Tuna, fresh or frozen, three times a month. Canned: Four three ounce servings a week. All other types of fish are safe to eat, such as shellfish, halibut or processed fish, such as fish sticks.

What would you describe as the main message of this particular consumer advice?

A PARTICIPANT: Warning pregnant women to stay away from these fish.

MS. HALVERSON: Okay.

A PARTICIPANT: Not really addressing anybody else except pregnant women.

A PARTICIPANT: It's pretty concise.

It's laid out on the table.

MS. HALVERSON: Okay.

A PARTICIPANT: Easy to read.

MS. HALVERSON: Maria?

A PARTICIPANT: It's a warning to
them, and they're hoping that the consumers will follow the warning.

MS. HALVERSON: Okay. And by consumers, you mean who?

A PARTICIPANT: The people that buy the food.

MS. HALVERSON: Okay.

A PARTICIPANT: Purchase the food.

MS. HALVERSON: All right. What is the most important point that you take from this particular consumer advice? The most important thing on this page to you.

A PARTICIPANT: (indiscernible) fish.

(Simultaneous discussion)

A PARTICIPANT: (inaudible) fish that says do not eat.

MS. HALVERSON: The statements about do not eat?

A PARTICIPANT: Uh huh.

MS. HALVERSON: Okay. All right.

Let's say you saw this, and you have a friend who's pregnant. Wanda. What kind of advice
would you give to this friend, based on the
information that you have?

A PARTICIPANT: Warn them not to eat fish.

MS. HALVERSON: Not to eat any fish?

A PARTICIPANT: Yeah.

MS. HALVERSON: Why is that?

A PARTICIPANT: Because I guess I'm just thinking that if they stated these have less. But I just went on dialysis, and I'm finding out that -- you know, I'm wondering now -- you probably scared me, because maybe I shouldn't even be eating tuna fish. But I've really got -- I've got to watch now what I put in the body.

MS. HALVERSON: Okay.

A PARTICIPANT: And this is sort of like really scaring me, because I believe it.

MS. HALVERSON: Okay. So, you eat tuna fish. And it says for pregnant or nursing mothers, that they can have four servings a week.
A PARTICIPANT: Uh huh.

MS. HALVERSON: And you're not a pregnant or nursing mother, but you're still thinking maybe you shouldn't?

A PARTICIPANT: No, because I'm thinking about the dialysis. That I have to be really careful what I eat.

MS. HALVERSON: Okay.

A PARTICIPANT: What can hurt you know, the kidneys and more. And I guess that's just scaring me. That if it's bad for a nursing mother, you know, maybe it's bad for someone risky.

MS. HALVERSON: Okay.

(Simultaneous discussion)

A PARTICIPANT: Well, to me, when it says mercury can accumulate in your body, to me that stands out. I don't care if you're nursing or you're pregnant or whatever. It's still in your body. And everyone's body cannot tolerate the same thing as (inaudible) -- she may be able to tolerate more mercury than I can, and it
won't affect her. But then you know, another
person, maybe that would be affected a little
bit. And I don't know (inaudible) affect the
person.

A PARTICIPANT: I was reading an
article a couple of weeks ago, especially the
Adventist religion?

MS. HALVERSON: Uh huh.

A PARTICIPANT: They do not eat fish
without scale (sic). All the fish they eat are
scaled. They're not scaled, they're not --

MS. HALVERSON: (Interposing) Scaled?

Yeah? Uh huh.

A PARTICIPANT: So right away, I want
to know -- I was trying to find out why it is
they don't eat fish without scale (sic). Well,
I mean, that help me. Maybe give me a
guideline. Like (inaudible) -- I know my father
loves scaled swordfish. (inaudible) scale on
all these fish.

A PARTICIPANT: Oh, they don't? Ahhh.

A PARTICIPANT: Tuna fish don't have
scale, and they just--so, I tend (inaudible).

A PARTICIPANT: That's interesting.

MS. HALVERSON: How would the rest of you respond if you see this? Again, it says:

FDA warns consumers who are pregnant, thinking of becoming pregnant in the next six months, nursing a baby. Luis, you don't look pregnant to me.

A PARTICIPANT: I don't think so.

MS. HALVERSON: How do you respond to this information?

A PARTICIPANT: Well, you said--I thought you said methyl mercury could accumulate in everybody. And it seems that they're warning only pregnant women. Everybody who eats fish should be warned, and at what doses. Like eating these four particular fish, besides the tuna one, they show how much you have there.

But for like an adult male, what does that pose to us? We're not pregnant women, so this chart doesn't apply to me, really. What would apply to me? What would get my attention
and make me aware of it and watch what I eat, as far as fish goes.

A PARTICIPANT: Jay?

A PARTICIPANT: I agree. I'd go out and eat swordfish the next day.

MS. HALVERSON: Okay. Anyone else over here?

A PARTICIPANT: It wouldn't affect me.

MS. HALVERSON: It wouldn't affect you at all?

(No response heard.)

MS. HALVERSON: Okay. And why would that be, Gary?

A PARTICIPANT: He don't eat fish.

A PARTICIPANT: Even though the symptoms -- I'm starting to look pregnant. I don't think so. It's not directed towards me.

MS. HALVERSON: Okay. Let's look to the next one. It says: What kind of fish should I eat? This is a little bit longer.

Women who are or may become pregnant within six months, and nursing mothers, should consume
types of fish known to have low levels of mercury. See table one. And should avoid fish known to have high levels of mercury. See table two.

The fish in table one can generally be eaten a total of two to three times per week, without concern for adverse affects from mercury, with each meal size being six ounces of cooked fish, or eight ounces of uncooked fish.

Breaded fish sticks, fish sandwiches and imitation crab meat are generally made from these fish, and so usually have low levels of mercury.

And then here, they list all these in table one, which are low levels of mercury. And what fish should I avoid? The fish in table two are known to have high levels of mercury and should be avoided by women who are or who may become pregnant within the next six months, and nursing mothers.

And then table two are king mackerel, sharks, swordfish and tile fish. What about
tuna? For canned tuna, which is the most frequently consumed purchased fish, a total of two to three, three ounce cans may be consumed per week. What about fish not on the list? For all other fish and seafood not mentioned, consumption should be limited to one meal per week, six ounces cooked, eight ounces uncooked, by women who are or may become pregnant within six months, and nursing mothers.

This applies to fish bought in a store or restaurant and to all fish -- fresh water fish caught by you or your family in local waters. Okay. What would you describe as the main message of this consumer advice?

A PARTICIPANT: He's giving you quantities of the fish that are preferable to eat, that are supposedly low mercury, and that's what I'm thinking mainly about it.

MS. HALVERSON: Okay.

(Simultaneous discussion)

A PARTICIPANT: Sorry, go ahead.

A PARTICIPANT: It's (inaudible) more
specific. Because I know in the first sheet, it said mackerel. So, that means for the whole mackerel column. But here, it says mackerel Atlantic is all right, but the king mackerel you should avoid.

MS. HALVERSON: Okay.

A PARTICIPANT: So, it's --

(inaudible) more specific about which fish.

A PARTICIPANT: It's also a broader warning. The first one said, other types of fish are safe to eat, and this one doesn't say that. This one says -- puts a limit on it, for whatever it is.

MS. HALVERSON: Okay.

A PARTICIPANT: I'm wondering if fresh water fish are at a higher risk, which would mean that they -- you know, Chesapeake Bay being one of the biggest estuaries of the world, and we get a lot of fish partly from the Chesapeake Bay, they have on the list of fish to eat that are low in mercury, and they say white fish, which is on the good list. And they have this
Atlantic mackerel, versus at the bottom, they have king mackerel, which would make me assume it's a fresh water fish versus the Atlantic mackerel.

But in contradiction, where they have tile fish, they have ocean white fish. So, I'm kind of confused about that. I'm just trying to ease my mind to figure out which ones are possibly fresh water fish concerning me, because you know, I'm a Maryland resident, and we really don't (inaudible) --

MS. HALVERSON: (Interposing) Do you have any preference for something in a relatively small chart, versus a more detailed chart? Which approach works better for you?

A PARTICIPANT: This one.

MS. HALVERSON: The first one, Gary?

Why is that?

A PARTICIPANT: Well, king mackerel is not a fresh water fish.

(Simultaneous discussion)

MS. HALVERSON: You don't think most
would read the second one. Okay. What is that, Overall?

A PARTICIPANT: No, I was just saying that king mackerel, I don't think is fresh water fish.

MS. HALVERSON: Okay.

A PARTICIPANT: This one is easier to read, because it's spread out. And this looks sort of like it's --

(Simultaneous discussion)

A PARTICIPANT: This one?

A PARTICIPANT: No, this is easier to read.

A PARTICIPANT: Oh, the other one than the first one?

A PARTICIPANT: Yeah.

MS. HALVERSON: This was easier to read, but I prefer to read the small print, and I would like to get all the -- have all of the information. I would read this.

MS. HALVERSON: Okay.

A PARTICIPANT: I would guess the more
simple it is, the easier it is going to be to read. If they just put a list of the ones to stay away from, that would be versus every type fish in -- they should just make a list on the second page, the one that we're on right now. They should just make that list according to all the fish that you know, people consume in the world.

I think that when it just gets down to -- the specifics is better (sic). Because you know, they could just list everything that's okay to eat versus the ones to really stay away from. I think the first one's better, because they're giving you four examples of which ones to stay away from, versus having to look up which ones to like (sic), you know, and finding out which one of them.

MS. HALVERSON: Okay. Jay?

A PARTICIPANT: I guess it just depends on what the goal is. Whether you want to have it, you know, quick and easy, or you want to say, you know, the difference -- what
types of mackerel or --

MS. HALVERSON: (Interposing) What do you think the goal is? What are they trying to do with this kind of information?

A PARTICIPANT: I think they're trying to warn people.

MS. HALVERSON: Okay. And how can they best do that? With a shorter avoid these, or a longer more detailed explanation.

A PARTICIPANT: I think the more detailed. I think they can take (inaudible) details.

A PARTICIPANT: Yeah.

MS. HALVERSON: You like the more detailed, Everall?

A PARTICIPANT: Yeah.

MS. HALVERSON: Why is that?

A PARTICIPANT: I'd just like to get some more information. And I was just gonna say, I know they should warn him -- give a clear indication which fish is safer.

MS. HALVERSON: Okay.
A PARTICIPANT: I think that if you're gonna have this, say, in the fish section of the store, people are going to be shopping. You know, and yada yada yada. They're gonna want to look at this, say, okay, I should avoid that.

Not avoid (inaudible) -- you know, I have to go here. I have to do this there (sic). And they're not gonna want to stop and read this whole thing. So, if you want to really inform people and just kind of put it up there real short and sweet.

MS. HALVERSON: Okay. Anyone else?

A PARTICIPANT: Well, it should (inaudible) -- it depends on where you put it.

MS. HALVERSON: Okay.

A PARTICIPANT: If it's in a food magazine or some kind of --

A PARTICIPANT: Pregnancy magazine.

A PARTICIPANT: Yeah, that's good.

MS. HALVERSON: Okay.

A PARTICIPANT: Or some kind of female magazine.
MS. HALVERSON: Okay.

A PARTICIPANT: Or something like this -- you know, or it might be better. But just like John said, in a store, everybody’s got their patience for about three seconds. And something like this would be better.

A PARTICIPANT: I think they could, though, just add a little bit like where -- on the first one, where it says mackerel, why don’t they just be more specific and say “king mackerel.” Why don’t they have the tile fish on there? That wouldn’t add you know, that much to put one more.

MS. HALVERSON: Okay.

A PARTICIPANT: You know, it would make this one a little bit more specific.

MS. HALVERSON: Okay.

A PARTICIPANT: Couldn’t they put this in the you know, obstetrician’s office?

A PARTICIPANT: Uh huh.

MS. HALVERSON: You know, and point it out. Because it’s very important for mothers to
read this. You know, expecting mothers. They need to know everything. Not just a little chart, but in the supermarket yes. But if they're going for information, prenatal care is very important, so they need that. They need to have everything.

MS. HALVERSON: Okay. Let's look at the third example. This says fish safe eating guidelines. Fresh water farm raised catfish or trout. There is no mercury concern for these species. Ocean fish. Swordfish, shark, king mackerel and tile fish. No meals for women who are pregnant, women who may become pregnant within six months, and nursing mothers.

American favorites: Canned tuna.

Three ounce serving. Up to four three ounce servings per week for women who are pregnant, women who may become pregnant in the next six months, and nursing mothers. No limits for all others as part of a balanced diet.

There are no limits for anyone as a part of a balanced diet for the following top
species which make up the majority of the
seafood market: Canned salmon, shrimp, salmon,
pollack, catfish, cod, clams, flounder, scallops
and fish sticks. No one should eat lobster
tamale.

A PARTICIPANT: Wow.

(Simultaneous discussion)

A PARTICIPANT: What is that?

A PARTICIPANT: What is that? Right.

MS. HALVERSON: What is lobster
tamale?

A PARTICIPANT: Uh huh.

MS. HALVERSON: Okay.

A PARTICIPANT: That's kind of out of place in there.

MS. HALVERSON: Okay. How would you
describe the main message of this consumer
advice?

(Inaudible comments)

A PARTICIPANT: I think they're
telling -- I mean, they're basically like we
just heard, they're saying which ones are -- you
could eat without limit. And I don't have to worry about running a risk of being contaminated by mercury. But unless you really like these ones only (sic), I think people who have other fish preferences -- it wouldn't apply to them, unless they really liked these fish only.

It doesn't list -- it's an interesting piece of information to make you find out what doesn't have mercury, but I'm pretty sure people are going to have to change their whole fish diet, because these ones (sic) don't have mercury.

I think they're going to still be interested in buying those other type fish that run a risk, and they're not getting any information about what risk they're running. Well, like the last one did, this one doesn't.

MS. HALVERSON: What's the most important information on this sheet?

A PARTICIPANT: It tells you what fish has no mercury, which is good for me. And although it's not in a column as such, you
really have to read it. And I don’t think anybody is going to go through that process just to read down. But if there were some columns, what to eat, you know, what not to eat -- but the information is good now. But it’s just the way it’s presented.

MS. HALVERSON: Okay. Now Wanda, I’m going to apply your tuna fish standard here. When you read this, how does it make you feel about eating canned tuna fish?

A PARTICIPANT: I think I’m still scared to eat it.

MS. HALVERSON: You’re still scared to eat it?

A PARTICIPANT: Yeah.

MS. HALVERSON: Okay. What about anyone else? How does the advice about tuna affect you personally here?

A PARTICIPANT: It says no limits, so I don’t worry about it.

A PARTICIPANT: Yeah, it doesn’t bother me.
A PARTICIPANT: Eat all you want.

A PARTICIPANT: You figure four servings for pregnant women, I mean, I wouldn't eat anymore than that anyway.

A PARTICIPANT: That's a lot.

A PARTICIPANT: If it's safe for them, then you know, okay.

A PARTICIPANT: That's a lot of tuna fish.

A PARTICIPANT: Yeah.

A PARTICIPANT: Something doesn't like that (inaudible) with how they have in bold print: fresh water farm raised catfish or trout. Then underneath it, they have a bold print, ocean fish. From the very beginning of the title, fish safe eating, it's -- it doesn't say under the ocean fish -- it doesn't say these are the ones that run the risk. I just noticed that it has kind of (inaudible) --

(Simultaneous discussion)

A PARTICIPANT: Oh yeah, that's right.

MS. HALVERSON: Okay.
A PARTICIPANT: They don't say these run the risk. They just mention ocean fish. I would think maybe all these fish, swordfish, shark, king mackerel, are okay to eat, too, as far as the ocean fish go. They don’t list what risks they run. I would think that those are safe fish to eat.

MS. HALVERSON: Okay. So it isn’t real clear, the way it’s laid out.

A PARTICIPANT: Right.

MS. HALVERSON: That there are -- okay.

A PARTICIPANT: This one actually seems like a warning.

MS. HALVERSON: Uh huh. The first one?

A PARTICIPANT: Yeah.

MS. HALVERSON: Okay.

A PARTICIPANT: And this seems (inaudible) story.

MS. HALVERSON: And this seems like what?
A PARTICIPANT: A little story.


Fish safe eating guidelines. All right?

A PARTICIPANT: It wouldn't come across to me as a warning like this does.

MS. HALVERSON: Okay. So, the chart format? Is that --

A PARTICIPANT: Well yeah, it stands out.

A PARTICIPANT: It catches your attention.

MS. HALVERSON: Okay. Any other comments on this one?

A PARTICIPANT: Well, our family is a trout family, so this just --

(Tape change.)

A PARTICIPANT: (in progress) -- it's safe to eat trout.

MS. HALVERSON: Okay. Now, it says fresh water farm raised catfish or trout. How about trout that isn't farm raised? Where would that fall?
(Simultaneous discussion)

A PARTICIPANT: I would have a question there.

MS. HALVERSON: Okay. So, Henrietta, how would you interpret that? Let's say your husband goes out trout fishing.

A PARTICIPANT: Well, I would sort of be skeptical as to whether or not the trout that he catches is safe to eat.

MS. HALVERSON: Why is that?

A PARTICIPANT: Since it does say fresh water farm raised.

MS. HALVERSON: Okay. Any other responses to this particular page?

(No response heard.)

MS. HALVERSON: Okay. Let's move on to the last one. This one has on one side, a fish. And the safe eating guidelines. And we'll just read through a couple of them. Fresh water fish, brook trout and land locked salmon, limit one meal per month for pregnant and nursing women, women who may get pregnant and
children under eight.

A PARTICIPANT: Excuse me?

MS. HALVERSON: One meal per week for all others. All the other fish species, limit no meals for pregnant and nursing women, women who may get pregnant and children under eight. Two meals per month for all others. And so on.

Okay, what would you say is the major message of this consumer advice?

A PARTICIPANT: Gives you some guidelines of how often and how much you can eat and for whom.

MS. HALVERSON: Tania.

A PARTICIPANT: (Laughter)

MS. HALVERSON: You're looking at this, and --

A PARTICIPANT: I'm looking at it, because it says like for swordfish and shark, although I don't eat that, no meals for pregnant women and two meals per month for all others.

And for children under eight. And I'm thinking you know, my bank gets a lot of fish (sic). And
I'm thinking. Especially for the salmon.

Now, I don't know what land locked salmon means, so -- and brook trout. I guess that's where you catch it in a brook or something. But I don't know what land locked salmon is. And it says, and children under eight, one meal per month. That's what my concern is.

MS. HALVERSON: Okay.

A PARTICIPANT: I'm thinking you know, about the little ones.

A PARTICIPANT: I think this format -- and maybe this like saved it for one for the last ones --

A PARTICIPANT: Yeah.

A PARTICIPANT: This format seems to be easy on the eyes, appealing. But I would -- if I see this, I would just guess this is something that a dietician told me or something, and is suggesting. I don't see anything that says: official report by FDA.

A PARTICIPANT: Yeah.
A PARTICIPANT: Suggesting that this is a good guideline to follow because of a methyl mercury contamination. That's what I'd be hoping to see. If I just saw this the way it is, I'd just guess it's like some kind of fish dietician.

A PARTICIPANT: That's true, yeah.

A PARTICIPANT: Suggesting you know, amounts of fish, and so on. And I'm still like -- be wondering why they're saying no one should eat lobster tamale. You don't even (inaudible) show. I don't know what that's all about.

A PARTICIPANT: This one doesn't say anything about the mercury.

A PARTICIPANT: Right.

A PARTICIPANT: It doesn't say why.

A PARTICIPANT: Yeah, it says nothing about mercury.

A PARTICIPANT: Exactly.

A PARTICIPANT: That should be limited.
A PARTICIPANT: I would think is a nutritional thing.

MS. HALVERSON: You would take it as a nutritional thing?

A PARTICIPANT: As nutrition, yeah.

A PARTICIPANT: Right.

MS. HALVERSON: Okay.

A PARTICIPANT: But other than that, it tells you what -- you know, what your limits are. But it doesn't say why. And that's what you need to know. Because I would throw this in the trash.

MS. HALVERSON: Okay.

A PARTICIPANT: I was sort of surprised to see that it says white tuna has more mercury than regular.

(Simultaneous discussion)

A PARTICIPANT: Yeah.

A PARTICIPANT: Yeah, that's the only part that says that.

A PARTICIPANT: My question too is, can you combine these? Like how many meals,
total? You know, if I eat something one meal per week, okay, I have that. Now, can I eat this other fish two meals a month in addition to the other one a week, or you know, what's the -- total amount?

MS. HALVERSON: Okay. When you look at this chart, how do you think people would understand and use this advice?

A PARTICIPANT: This chart by itself with no explanation, you mean?

MS. HALVERSON: Let's say they had a little explanation about the mercury.

A PARTICIPANT: It would be easier for them to go shopping with this, maybe. This chart. When they're actually in the grocery store, you know. It would be easier.

MS. HALVERSON: Okay. How about looking -- the first chart that we had. The one about be aware of these four fish. Limit what you eat. And look at that in comparison to this, assuming it had the same information.

A PARTICIPANT: Look at the first one.
A PARTICIPANT: This is a good warning. I mean, you know, because FDA warns, you know, everyone would look at that. I mean, we would really look at that.

A PARTICIPANT: I think the first chart just makes it simpler. Like Linda said, you don’t have to worry about well, you know, one from this group. How many meals am I gonna have from this group? And if you’re really concerned, just don’t eat it. Just do what it says. You don’t have to figure anything out.

A PARTICIPANT: I can’t imagine people walking around with a calendar, and it says, have a trout three weeks ago. It’s okay to have another one tonight.

(Simultaneous discussion)

A PARTICIPANT: Some people would.

A PARTICIPANT: No, I don’t mean -- forget pregnant. I mean --

A PARTICIPANT: Oh well, I would.

A PARTICIPANT: I’m not pregnant.

A PARTICIPANT: It would be in my
mind. You know, if you’re serving a family or something. Women are like that. You know, they don’t (inaudible) that way. Maybe men wouldn’t think that way.

MS. HALVERSON: Okay. We’ve looked at a fair amount of information about mercury and fish and various kinds of warnings, and various ways of providing information. Given the information that you’ve looked at, how do you think that the average person out there would factor this information into deciding what kind of fish to eat, and whether or not to eat fish?

A PARTICIPANT: I think it might be in the back of their mind now, just depending on you know, whether they are pregnant or going to be. Or just, you know, a male just buying dinner. But I think no matter who the person is, it’s going to be in the back of their mind. They’re going to think about it.

MS. HALVERSON: Okay.

A PARTICIPANT: I don’t think it really -- even me being this focus group and now
became aware of it, which I really didn't know that was a risk to it, me in Maryland thinking about messing with mercury. I don't really think in general, people, even if they were given this information, would give it much, you know, attention, unless they started really making it aware, like on the news.

Like when everybody hears about the mad cow disease or contaminated beef, then everybody kind of freaks out and stays off the beef. And you go to the market, and you see there's a lot more beef, because everybody's scared of the beef. They don't want to mess with it.

I don't think anybody would really pay that much mind, unless it was made a real issue. And if it was made an issue, I would really wonder if corporations would try to keep it on a hush, worrying about you know --

A PARTICIPANT: Uh huh.

A PARTICIPANT: -- the fish market.

A PARTICIPANT: Right.
A PARTICIPANT: If people are going to be that concerned, it's going to like take away from sales. I (inaudible) would have the opportunity to -- have a chance to freak out, because I'm not sure if the corporation would really want people to know the risks.

MS. HALVERSON: Do you think people would tend to avoid all fish, or just the ones that are listed as do not eat? Or the ones that are rated as having high mercury levels versus the low ones? How do you think --

A PARTICIPANT: Are you talking about pregnant or just in general?

A PARTICIPANT: In general.

MS. HALVERSON: Let's talk about the general public first, and then we'll talk about pregnant women.

A PARTICIPANT: Well it worries me, because they say the mercury stays in your body.

A PARTICIPANT: Uh huh.

A PARTICIPANT: So, I'd wonder from this day, like me eating fish, by the time I'm
like 50, how much mercury would I have in my body. It’s kind of funny. That makes not want to even mess around with fish, but I know by tomorrow, you know, I’l go to Red Lobster and totally forget about what I learned here. It doesn’t really make an impact on me. I really don’t -- I'm not scared enough.

MS. HALVERSON: Okay.

A PARTICIPANT: I think the first chart simplifies it enough that most people wouldn’t mind cutting out mackerel, shark and swordfish, unless they just really love those things and eat them a lot. You know?

A PARTICIPANT: Swordfish is good.

A PARTICIPANT: Most people would -- you know, like I could say, well fine. I just won’t eat those. I don’t eat ‘em anyway, you know. But to get real specific, I don’t think people would take a lot of time with it.

MS. HALVERSON: How about this whole issue of canned tuna? You know, they’re saying for pregnant women, limit to four servings a
week. And Wanda's saying, "Hey, I am not pregnant, but I am on dialysis. I'm concerned about that." How would others respond, do you think?

A PARTICIPANT: I think people who would have physical problems with their bodies, not knowing what they might be, I would say, I think they'd stay away from 'em. They don't need to add to it. You know? And you don't know. As you said, you don't know what the (indiscernible) on you. Your tolerance for mercury may be more or less than someone else's.

MS. HALVERSON: I'd like to just run around the table and see, based upon the information you've seen, what changes, if any, there would be in your behavior, as far as fish you would eat or not eat. Or stuff you'd tell people. Gary?

A PARTICIPANT: Assuming non pregnant (inaudible) people?

MS. HALVERSON: Yep.

A PARTICIPANT: The way I feel,
there's warnings about just about everything you could eat. Too much red meat, too much chicken, too much fish or something. So, I understand the problem here, but I don't think it would affect my diet one drop.

MS. HALVERSON: Okay. And let's say you had someone who was pregnant in your family. Would that affect the way you would talk to them about this, or --

A PARTICIPANT: I would just tell 'em about it.

MS. HALVERSON: Okay.

A PARTICIPANT: You know. And that there's a mercury warning on certain types of fish. And then we can go on.

MS. HALVERSON: Okay. Linda?

A PARTICIPANT: I would certainly consider the information, given that I have children under eight. But I don't think it would really change anything, because we don't eat the ones that are -- you know, particular problems. So, I would mention it to you know,
pregnant friends or something.

MS. HALVERSON: Okay. Tania?

A PARTICIPANT: I agree with Linda.

My only concern -- I don't -- we don't eat the
things that are on the do not eat list, also.

But I would be concerned about you know, my
grandchildren, and I would want their parents to
know what we -- you know, what was on the list,
and to monitor what they give them. And to be
aware of it -- the mercury poisons out there in
the fish.

MS. HALVERSON: Okay. Henrietta?

A PARTICIPANT: I would be more alert,
and I would pass the word along to -- I've got a
lot of friends and relatives. Letting them know
what I learned here tonight.

MS. HALVERSON: Everall?

A PARTICIPANT: Yeah, I'm very happy
I've been here tonight, because I wasn't aware
of this in my (inaudible) business. And my
family, they love fish a lot. So, I will be
able to (indiscernible) all more and give them a
clear guide -- guidance or (indiscernible).

MS. HALVERSON: Okay. And what kind of guidance would that be?

A PARTICIPANT: The fish that's -- to stay away from.

MS. HALVERSON: Okay. Would you have everyone stay away from mackerel, shark, swordfish? Or just pregnant women?

A PARTICIPANT: I'll try and get everyone to stay away from it.

MS. HALVERSON: And why is that?

A PARTICIPANT: Because I'm not sure, you know, if this is true or not. You know?

MS. HALVERSON: Okay. Luis?

A PARTICIPANT: I'm going to sound like a broken record. I don't really eat, really, I mean, besides for the tuna fish -- occasionally canned tuna fish, I eat everything about everything else, except for swordfish, you know, because they're kind of expensive, and these are a little bit more exotic, like shark.

I don't know what type of shark. I like some
shark, and I don't like other type sharks.

Basically, I don't think this would apply to me, really, because I eat more shellfish than these four fish mentioned here.

But if it is -- like by word of mouth, me being here, I'll pass it to people who I think it might be of interest to. But I really think the main concern is that the US government sponsor you know, through the FDA maybe, to make us aware.

Put it on -- information on sources like "Nightline" or "20/20." Things that Americans watch to be informed. That's their responsibility. Because word of mouth is not going to do anything for pregnant women. It is a risky business.

MS. HALVERSON: Okay. Jay?

A PARTICIPANT: I guess if I knew any pregnant women, I'd tell them the -- kind of the three or four general, you know, what to avoid.

And myself, as (inaudible) said -- you know, for swordfish, no more than two meals a month. I
don’t eat it that often, so --

MS. HALVERSON: So it wouldn’t change yours that much?

A PARTICIPANT: No.

MS. HALVERSON: Wanda?

A PARTICIPANT: I’m going to go ahead and tell my boss. You can’t (inaudible) fish. No. I probably will eat tuna once a week or something like that. But I’m kind of going to cut down on it, just because, like I said the kidney -- affects the (inaudible) them. I’m just (inaudible) about me.

MS. HALVERSON: In one of these sheets there, they had something that says that you can eat so many servings in moderation. With respect to fish consumption, what does that mean? In moderation.

A PARTICIPANT: They don’t say.

MS. HALVERSON: How would you define it?

A PARTICIPANT: That’s hard to say. I mean, I don’t really know what eating fish in
1 moderation is. I think it's like you just --
2 A PARTICIPANT: (Interposing) I think
3 it's relative, isn't it? I mean, you know
4 relative to --
5 A PARTICIPANT: Your personal diet?
6 A PARTICIPANT: To your personal diet,
7 or whatever. I couldn't say, eat this in
8 moderation. How would I know when to eat it?
9 A PARTICIPANT: Right, right.
10 MS. HALVERSON: Okay.
11 A PARTICIPANT: You can tell that on
12 TV.
13 MS. HALVERSON: In the final analysis,
14 do you think it's important for consumers to eat
15 fish, or not? I mean, how do you balance this
16 whole thing about --
17 A PARTICIPANT: (Interposing) You
18 don't have to eat fish.
19 MS. HALVERSON: Pardon?
20 A PARTICIPANT: You don't have to eat
21 fish.
22 MS. HALVERSON: You don't have to eat
fish? Okay.

A PARTICIPANT: You're asking, is it important?

MS. HALVERSON: Yes.

A PARTICIPANT: In what way?

MS. HALVERSON: Well, you know, here we have the -- you were telling me in the beginning about all the benefits of fish.

A PARTICIPANT: Oh.

MS. HALVERSON: So, omega three, fatty acids.

A PARTICIPANT: We can get that from vitamins or eggs.

MS. HALVERSON: Okay. So how do you balance the risks and the benefits of something like this, where the risks are you know, certain exposure to mercury, perhaps, in certain fish, and perhaps problems for pregnant women. But also, all these benefits of fish. How do you balance that kind of thing?

A PARTICIPANT: Well, it's just like anything. You know? If you eat anything -- you
eat or drink too much of, it's going to harm you. But you know, you can eat, like I said, in moderation, whatever that is.

A PARTICIPANT: Moderation, yeah.

A PARTICIPANT: But just you know, take it easy.

MS. HALVERSON: Okay.

A PARTICIPANT: You just have to weigh the advantages against the disadvantages.

MS. HALVERSON: All right. What I'd like to ask you to do is, help me by sending these around in two different piles. We have these examples. We can send those around first, and just pile them up like this. And then, these four warning things. We can pile those up. And I'll be back in just a couple of minutes. Okay?

A PARTICIPANT: You don't ask about the simplest guidelines. Just (inaudible) mercury thing on a (inaudible).

MS. HALVERSON: Oh, on the fish label, if there's any mercury in it?
A PARTICIPANT: Yeah. It seems to me that --

MS. HALVERSON: Have some kind of a guideline?

A PARTICIPANT: For fish.

MS. HALVERSON: Okay. How would you define -- how would you delineate between high risk and low risk?

A PARTICIPANT: I wouldn't. You've got four fish in there. Just pile them all (inaudible).

MS. HALVERSON: On those particular fish. Okay. All right. I'll be right back. (Inaudible group discussion follows.)

A PARTICIPANT: I think with the money that they're using to make these focus groups for these specific methyl mercury contamination? I think the amount of money that they're putting into studying it and finding out whether we need to know, they should be using that money to find a way to prevent the methyl containing (inaudible) --
A PARTICIPANT: (Interposing) I think they should clean up the --

A PARTICIPANT: Exactly.

A PARTICIPANT: -- the waste.

A PARTICIPANT: That money should be used to find different methods to not use mercury in whatever they're using that's ending up in the fish. That's what I think.

(Inaudible simultaneous group discussion.)

A PARTICIPANT: How do you know what is the fresh water fish? That's what (inaudible) --

A PARTICIPANT: Like boiler fish (sic).

A PARTICIPANT: Sword.

A PARTICIPANT: One that's not in the ocean, basically.

A PARTICIPANT: Oh, okay.

A PARTICIPANT: This is not salt water.

A PARTICIPANT: River water.
A PARTICIPANT: Lake water.

(Simultaneous discussion)

A PARTICIPANT: The consumer doesn't know.

A PARTICIPANT: Exactly.

A PARTICIPANT: I think the land locked was the farm raised.

A PARTICIPANT: Yeah, farm raised.

A PARTICIPANT: Yeah.

A PARTICIPANT: Oh, that's what that means?

A PARTICIPANT: And just you know, (inaudible) the river. Fresh fish.

A PARTICIPANT: Oh, okay.

A PARTICIPANT: I was surprised that fish, tilapia (ph) or whatever it's called -- I thought that was farm raised only.

A PARTICIPANT: Which one was that?

A PARTICIPANT: The lobster thing?

A PARTICIPANT: No, no, no. It starts with a T.

A PARTICIPANT: Tile?
A PARTICIPANT: Tilapia.
A PARTICIPANT: I don't know that one.
A PARTICIPANT: That's pretty
(inaudible) --
(Simultaneous discussion)
A PARTICIPANT: It's a new fish, right? I thought that was farm raised.
A PARTICIPANT: It's interesting.
It's an interesting program today, huh?
A PARTICIPANT: Yeah.
(Simultaneous discussion)
A PARTICIPANT: Oh, you've had it?
A PARTICIPANT: Yeah, it's good.
A PARTICIPANT: Oh.
A PARTICIPANT: They're serving it in restaurants now. And so --
A PARTICIPANT: Oh really?
A PARTICIPANT: I'm surprised we didn't have tuna fish sandwiches while we're waiting outside.
A PARTICIPANT: Right. And I love tuna fish.

MS. HALVERSON: Oh, you guys did a great job here.

A PARTICIPANT: And it's white tuna fish.

A PARTICIPANT: It's white.

MS. HALVERSON: Let's see. Can I have these? That's two, and I won't need that.

A PARTICIPANT: Oh, you had to go check.

MS. HALVERSON: I have a couple of questions, and I guess the first one is, in some of these guidelines, they had -- remember this table here? They had -- these are fish that are generally low in mercury. And then at the bottom here, they said, "All other types of fish are safe to eat, such as shellfish, halibut or processed fish, such as fish sticks."

So, they had ones that were high mercury here, saying do not eat. And then low in mercury here. How would you react to these
A PARTICIPANT: They're preferable.

MS. HALVERSON: More preferable?

A PARTICIPANT: Right.

MS. HALVERSON: Okay. So would you be more likely to eat those?

A PARTICIPANT: Yeah.

A PARTICIPANT: Yeah.

A PARTICIPANT: Even though they say -- right. Even though they say it has no mercury contaminant, it's still going to add up in your body. But those are more preferable, if you're still going to try to be halfway in and out. Be worried, but not really worried. Now, I guess you'd do your best then to pick from, if you're semi-worried about it.

MS. HALVERSON: Okay. Anyone else?

A PARTICIPANT: You're saying a little bit of mercury as opposed to -- I would take that to mean low in mercury, and other fish have no mercury. And you're saying low mercury, and other fishes have higher mercury. Right?
A PARTICIPANT: I'm sorry. Could you run that by me one time?

A PARTICIPANT: That's what you said. You said that those things have low mercury?

A PARTICIPANT: Right.

A PARTICIPANT: So you're thinking all other fishes have higher levels of mercury. I would take that to mean the opposite. They have low mercury in the other fishes and not.

A PARTICIPANT: Right, right.

A PARTICIPANT: Oh.

A PARTICIPANT: Oh, okay.

A PARTICIPANT: Really?

(Simultaneous discussion)

A PARTICIPANT: Exactly. Those were just having -- still having mercury.

MS. HALVERSON: How would you take that? The rest of you?

A PARTICIPANT: I would take it as low mercury, the others are having high mercury.

MS. HALVERSON: Ah, okay.

A PARTICIPANT: Yeah, that's what I
thought.

A PARTICIPANT: That's how I would take it.

A PARTICIPANT: I have the same interpretation as what Gary --

MS. HALVERSON: Gary? Uh huh. Okay. So, you would interpret it as the others having none?

A PARTICIPANT: Yes.

MS. HALVERSON: Okay. All right.

Well, I want to thank you all very much. You were really helpful. And I hope you enjoyed it.

A PARTICIPANT: It was very good.

MS. HALVERSON: I really enjoyed having you here. So, if you want to step outside, Myisha (ph) has something for you.

A PARTICIPANT: All right.

(Simultaneous discussion)

(Whereupon, the tape recording ended.)

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