

>> Jon Leibowitz: If everyone could take a seat. If everyone could take a seat, we are going to begin shortly.

>> Keith Fenton Miller: Good morning. Am I loud enough? Can you hear me? I will project my voice until they adjust the volume accordingly. Good morning and welcome to the FTC's forum on sizing up food marketing and childhood obesity. My name is Keith Fenton Miller, I'm a senior attorney here at the Federal Trade Commission. Just a few quick procedures before we begin. First, I'm required to make some security announcements. Keep your name tag on the sticky pad that's on at all times. If you leave the building for fresh air or a cup of coffee or a bottle of 100% juice or skim milk, you will need to go through the Magnetometer and X-ray machine again. In the unlikely event of a fire or evacuation, please leave in an orderly fashion. We will proceed across New Jersey Avenue on the sidewalk area to the left of Georgetown Law Center. And if an emergency makes it unsafe to go outside, you'll be told to -- where to go inside the building. In the case of suspicious activity if you spot it, please notify security, and that does not include smuggling in a flask of sugary soda. Restrooms are through the FTC lobby. Follow the signs or ask our security personnel for directions. Cell phones, please be aware that the microphones are on all day, although apparently not very loud. So just make sure to preserve your privacy as best as possible. Make calls in the lobby area or outside. Actually, now would be a good time to either turn off your cell phones or put them on vibrate. For two of the panels today, the agenda calls for question and answers or comments from the audience. Staff will be walking up and down the aisles with portable microphones for that purpose. For people who are participating by the webcast, you can send your questions or comments by e-mail to childhoodobesity@FTC.gov. And in case you didn't get that, that e-mail address will be posted on one of the PowerPoint slides at the appropriate time. There should be some literature on the back tables, in the outside lobby there for people who wanted to bring literature there. And that's it, as far as the housekeeping matters. And it is my great honor to introduce the chairman of the Federal Trade Commission, Jon Leibowitz. [Applause]

>> Mr. Leibowitz: Thank you so much, Keith, and good morning. What a thrill it is to see this kind of turnout. As some of you may know, because I see you as repeat offenders in the audience this is our ninth, I think day of workshops in the last three weeks and they have ranged from things like

the future of news journalism to debt collection to merger guidelines and we are especially delighted to be able to welcome HHS secretary Kathleen Sebelius as our keynote speaker. She's sitting over here and I'd like you all to give you a round of applause. We are not introducing you yet. [Applause] And today, of course, we're going to discuss one of the most serious threats to the well-being of our children and that's childhood obesity. As all of you know, childhood obesity is more than a social stigma. It has become an epidemic of alarming proportions. Obesity rates among children 6 to 11 have doubled since 1980. And since that time, they've more than tripled for teens 12 to 19. About 1 in 5 young people is now obese, a condition that puts those children or those teens at risk for heart disease, diabetes, osteoarthritis and cancer. Indeed, physicians no longer use the term adult onset diabetes anymore because so many children are getting it. Now they call it type II diabetes. This epidemic is affecting not only the quality of our children's lives but also their lifespan. Sadly this maybe the first generation of American children with a shorter life expectancy than their parents. Now, as many of you know, it has been more than four years since we held our first conference on food marketing and childhood obesity. The immediate response of the food and beverage industry to that workshop in 2005 was heartening. Several companies pledged to make changes to what and how they advertise to children. Others have followed since. And we've seen, I think, some successes. Soda consumption in our schools is down. President Clinton's alliance for a healthier generation reports that calories from beverages shipped to schools has dropped about 41%. And as an "L.A. Times" story this morning noted, Kraft has actually stopped advertising Chips Ahoy and Oreos, although I still saw my daughter sneaking a few Oreos last night at around 10:30, but that's another story. All right. That was a joke. It was a bad joke. But I guess its early in the morning. These changes, as we all know, have however, come in small increments. Obesity rates and obesity related problems continue to grow and we really have to do better. Today, we are calling on the food industry to tackle this will threat and boldly reinvent the food marketplace. Whether or not you are part of the problem, you need to be apart of the solution. Put simply it is time for industry to super size its efforts. Now, we had all hoped that the progress thus far would be more substantial and more apparent. Instead, the Rudd Center at Yale University reported this fall that cereals marketed to children contained 85% more sugar, 65% less fiber and 60% more sodium than adult cereals. These numbers, of course, put bluntly, are very disturbing. And hopefully General Mills won't be the only company to respond, as they did last week, by cutting the sugar content of many of their kids' brands. Children's diets

are still far from balanced. Potato chips and French fries account for nearly half of all vegetables consumed by children and despite the progress made in schools, the majority of teens are drinking the equivalent of 39 pounds of sugar each year from soda and other sugar-sweetened beverages. Just think of that. We all realize that marketing is just one of the many influences on children's diets and as a parent, I can appreciate that getting children to eat better is no easy task. And that's why we really need the industry's help. As you know, the FTC looked at the children's food marketplace in 2006, just as industry under the auspices of the better business bureau was beginning to take its first self-regulatory steps. And I see Lee Peeler in the audience who was instrumental in making that happen. So thank you. Our comprehensive reported food marketing techniques and expenditures set the benchmark for measuring industry's efforts. Our report also includes a number of specific recommendations to address shortcomings in these efforts. Four in particular helped frame our discussions today. First, the FTC called on all food and beverage companies to adhere to meaningful nutrition-based standards for foods marketed to children. To their credit, 16 have already signed CVB pledges. Others have taken action on their own but many companies that market heavily to children and teens have yet to join or make their own commitment. Why, for instance has in Yum brands with its KFC, Taco Bell and Pizza Hut chains steps up, or Chuck E. Cheese or I-Hop, or the marketers of Air Heads, or Baby Bottle Pops. Second, companies must close the nutrition loopholes and we all know they are strategic ones that allow foods with questionable nutritional value to be marketed to children simply because they have somewhat less sugar, fat or salt than prior versions. Our slightly lower fat potato chips or slightly less sugary cookies really the foods we should be encouraging our children to eat? And every food marketer should play by the same set of rules, otherwise those who lead may suffer harm from those who game the system to their competitive advantage. We need self-regulatory standardization. Third, these pledges should cover all forms of marketing to children, not just traditional advertising but also product packaging, in-store promotions, virtual marketing and other techniques that are heavily used to reach children. If you are willing to limit your advertising, why not limit packaging, promotions and other marketing in the same way? And fourth, it's time for the entertainment industry to play a constructive role. It needs to felt earth foods that are advertised on children's programming, particularly on children's cable networks. At a senate appropriations hearing last fall, and I was testifying at that hearing, Nickelodeon made this commitment to the senator Tom Harkin, and I quote, "Sir, if uniformed standards are adopted and they apply to all the

industries we deal with absolutely, we will use them as a filter for all of our marketing and advertising relationships." As you're going to hear this afternoon, we will have such a uniform framework in place, we expect, by this summer. And we expect VICOM to honor its commitment and others to follow their lead. We're also conducting a follow-up to our first study, we're going to examine whether the food and media industries have acted on our recommendations. We will soon be sending out 44 subpoenas to the largest food marketing companies to collect marketing data for 2009 when the pledges begin to be implemented. We'll also assess whether the nutritional quality of children's food has improved since 2006. We continue to believe that the food industry and children's media are trying to affect positive change. Based on their response to date, we are hopeful that self-regulation can work and that their efforts, your efforts, won't be falling short, but we can't simply congratulate ourselves. Companies that can't simply congratulate themselves for meeting their pledges and be done with it. We need to be sure that the pledges are adequate to drive real change in the marketplace and especially in children's diets. Now, the FTC is very sensitive to the first amendment principles that governed here. It has been one of the reasons we continue to encourage an industry-driven approach, but the stakes really, they can't be higher. If action doesn't come from the private sector, there are many who will call for Congress to act and there are many in Congress who will want to do so. As almost everyone here today knows, the cost of inaction on our children's health, not to mention the economic cost of our obesity, are significant. A report this year estimated that almost 10% of all medical spending is due to obesity and if these trends continue, and I think we all hope that they will not, by the year 2018, that figure will rise to 21%. Public opinion on childhood obesity and about the role of government, the role government should play has also shifted. For the first time, but my guess is not the last, an annual poll of parents' top ten health concerns ranked childhood obesity as number one, ahead of smoking, ahead of drug abuse. Perhaps the strongest indicator of the shift in public sentiment comes from Congress, which is now calling on the FTC and other agencies to take a more active role. Both in tracking industry progress and in developing nutrition standards for children's food marketing. And from the president who has called childhood obesity and, I quote, "a growing epidemic." Let's all keep this in mind, this new landscape, as we go forward on this issue and I hope we go forward collectively. So we're going to start the morning with a look at new research on food marketing to children. We know that marketing to children is more integrative and immersive than ever before. Children who used to spend 30 seconds watching a TV ad for their favorite cereal are now

spending much, much longer on branded online game sites. The Rudd Center, which is a treasure trove of information in this area, reports that every month on average, 767,000 young people each spend a total of 66 minutes engaged in General Mills' millsbury.com alone. And while online, avatars in these virtual worlds popular with teens are quenching their virtual thirst with virtual cans of soda. One virtual brand sold 110,000 virtual cans of pop last year on a single site. And we look forward really to learning what the impact of all this marketing is other than having an increase, of course in virtual weight. Okay, I'm only as good as my material. But I wrote that myself, so you can only blame me, not my staff. Next, we'll have what promises to be both a scholarly and lively discussion of the first amendment ramifications of restricting advertisement to children, hosted by David Vladeck, the Bureau of Consumer Protection director and resident expert on commercial speech. In the afternoon, hope to have a constructive dialogue about the progress that the food and entertainment industry has made in reshaping the marketplace, and improving the nutritional profile of foods directed to children. Finally, we'll be previewing the much-anticipated nutritional standards being developed at Congress' behest by the interagency working group on food marketing to children, unofficially known as the acronym snack pack, although when I try to figure out the acronym it comes out like "IWGFMC." We're going to open up the last panel for a town hall discussion and we hope to hear very candid feedback, I'm sure we will, as the group works towards its July, 2010, deadline on a report for Congress. We have a package end. So let's get started. It is now my absolute light delight and great honor to welcome the secretary of health and human services, Kathleen Sebelius, as our keynote speaker. Secretary Sebelius is in charge of one of the largest federal government departments, overseeing 80,000 employees, and an myriad of agencies including the Food and Drug Administration, the Centers for Disease Control and Prevention and the National Institutes of Health. She has the lead -- she is the lead cabinet official on comprehensive health care reform and know she is going to be having a busy day and busy week and shoulders the response to the H1N1 epidemic and doing so as well as anyone could ask for. Despite these and many other responsibilities, she managed to put the weight of her office against the battle against childhood obesity and we've been fortunate to work extensively with Secretary Sebelius and her staff on many, many issues, for example fighting against collusive pay for delay pharmaceutical settlements where the brand name pharmaceutical company pays its generic competitors to stay out of the market. And once health care legislation passes, and I am confident it will, we are going to work with HHS to provide critical disclosures to consumers so they can better

compare competing health care plans. And we are pleased to continue a partnership that our two agencies formed in 2005 at our first joint workshop on childhood obesity. We know you care deeply about this subject, Madam Secretary, and under your leadership, HHS has worked with local school districts to find out how they're getting kids to eat healthier and be more active and you are spreading the word, I think, better than almost anyone can about the successful programs and the best practices. We're proud to be working alongside you to combat the scourge of childhood obesity. And with that I will turn it over to the secretary of HHS, Kathleen Sebelius. [Applause]

>> Secretary Sebelius: Well good morning. And thank you so much, Chairman Leibowitz, for that nice introduction. Jon has been a great advocate for consumers for lots of years, whether it's helping get affordable prescription medicines or protecting personal information or fighting predatory loans. So, I'm really delighted to have him as a partner on some of these incredibly important health issues and look forward to working with him. I want to also at the outset of my comments acknowledge a couple of key members of the HHS leadership team, two of whom you are going to hear from later today, Dr. Barbara Schneeman from the Food and Drug Administration and Dr. Bill Dietz from the Centers for Disease Control and Prevention. And also, Dr. Dora Hughes is with me this morning. She's the counselor in our office who works on a myriad of issues, but particularly the public health agenda and the FDA agenda is in her bailiwick. Dr. Shneeman and Dr. Dietz are representing our department on the interagency working group that the chairman has already referred to and they will have some exciting updates for you later today. So, stick around for their session. And finally, I just want to thank all of you for being here today. There is a wide range of folks in this room representing, I think, the wide range of interests who have been working collaboratively on this issue, from scientists and industry leaders, to consumer advocates and that's encouraging because childhood obesity is an area that while we have understood the health risk for quite some time, we really haven't acted on what we know in a very effective fashion. And I think the alarm bells need to sound and we need to really step up our action plans. We know where good ideas are and we're looking forward to working with you so we can really create a healthier future for all the children of America. As the chairman said, we know that one in five American children is obese. More alarmingly, more than one in three American children are overweight or obese. So we're talking about a third of the kids in this country who are really more and more out of step in terms of their health prospects. And being overweight as a kid

is now, we well know, associated with a wide range of problems from high blood pressure to asthma to diabetes to depression. Its also directly the biggest link that will give a clue to whether or not that child will be overweight or obese as an adult, what happens during their childhood years. And adult obesity, again, is the underlying health risk for a host of diseases; heart disease, stroke, various kinds of cancers. It's the single biggest predictor of diabetes. And there is a huge cost with all of those illnesses to our economy. Chronic diseases account for 75% of our health care dollars. 75 cents of every dollar we spend on health care is spent on underlying chronic diseases. And it explains why the CDC estimates that while obesity costs our health care system \$150 billion a year, nearly twice what it was in 1998, so in the last ten years, we've actually doubled the health costs associated with just that one disease. And to put that in perspective, the American Cancer Society has totaled the health care expenditures in America on all cancers combined, all populations, all cancers and it is about \$100 billion a year. So, diabetes is now 50% more than all the cancers put together and that creates an enormous financial challenge, but there's another piece of it. This trend is getting worse and not better. The share of our kids who are overweight is four times as high as it was 40 years ago, and just to give you an anecdotal example, I'm going to highlight, again, what the chairman has already said that no longer is the term adult onset diabetes even used in the medical community, there are just way too many kids, kids as young as 8 and 9 presenting with type II diabetes. So it no longer is a terminology that is even recognized. Now, think about a different scenario. Think about one in three children in America being exposed to radiation, which we knew would cause serious cancers in the long term and we knew that more and more kids in every community in America were being exposed to that radiation, day in and day out. I think alarm bells would be going off across America. There would be a huge outcry and a demand that something be done immediately. Unfortunately, we're dealing with a situation where sometimes, the health impact doesn't present itself for 10 or 15 or 20 years. So, it's a slow walk to a very dismal future. But we need to insert some urgency in this discussion. The fact that many of the effects of childhood obesity doesn't show up for a while doesn't make it any less damaging. Americans are getting sick and paying higher medical bills and in some cases dying because we didn't do enough to help them stay healthy when they're young, and that's simply unacceptable. Now, the president is very interested and engaged in this issue and we've had a number of discussions about it. The First Lady has clearly made childhood obesity and nutrition issues one of her signature projects that she is taking on and in addition to prevention and wellness education, she's now the most famous

vegetable gardener in the world. And I think just those steps to lead up to what she hopes will be a major action initiative, give some example of the power of her bully pulpit and she intends to use it so, the administration is very much engaged and feels the urgency of this issue. One of the most significant steps taken so far is the \$650 million in the recovery act that will be targeted toward community efforts on obesity and smoking cessation. Its the single biggest investment in wellness and prevention ever in the history of the United States and will give us an opportunity to really, particularly in the area of obesity, do some projects with some measurements to see what works. And in urban areas and rural areas and tribal nations and in communities, we want to have on-the-ground projects to really see what actually moves the dial, what has an impact on Americans. From a narrow perspective, it's easy to see why weight comes up and down. The number of calories in and the number of calories burned creates that balance about what you weigh. But what we've learned is that there are lots of other variables in addition to what goes into your body and what you use in your body. Whether or not you get healthy meals at school has a big impact. Whether there are supermarkets that sell fresh fruit and produce that are easily accessible. Whether it's actually safe or secure in a neighborhood for kids to go out and play. There's a lot of conversation about you know, parents turning off the television and sending your children outside. That's a great idea, except outside is much more dangerous than inside, which, in some cases, it is. What happens in gym class in schools? Do kids get to run around or do three-fourths of the kids stand against the side watching some of the kids run around or do they wait for one or two pieces of equipment and basically spend the entire class sedentary or does the class even exist any more? In many schools in this country, that has been one of the products of moving to a more intensive testing regime, that physical education has really disappeared in classrooms across America. And the answers to those questions really matter. It turns out that what we eat is only a part of how we decide what we eat. Cost and convenience are equally important. You may not want a chocolate bar to eat, but if you've only got \$1 and if you've got a vending machine that's full of various kinds of fatty snacks and chocolate bars cost \$1, it may be what you choose to eat. So, we have to look at all the strategies that involve healthy food and nutrition and recognizing that all those factors matter, most of the \$650 million is going to go to local communities and various kinds of projects to strengthen a variety of opportunities for health and wellness and nutrition, but also give us some opportunity to measure results and learn about what really works. Now, a lot of factors involving obesity have to do with kinds of foods available to Americans. But we know that there's another category of

influence about what we eat, and that is advertising. And so today, I want to talk about two kinds of advertising in particular, what's on television that are targeted at kids, and that would include the video game market and other kinds of media marketing and what's at the front of packages, so when you go into the grocery store, what kind of advertising hits you in the face? Those are the labels targeted at parents. So we have got something coming at kids and we have got additional messages coming at parents. And there is something disturbing that I read recently. Market research, which surveyed kids to find out their top ten most beloved brands, what are children paying attention to? Not surprising, one favorite was Disney. Another two were two of the most popular video game systems, but the remaining seven were some of the most unhealthy foods in the market, from Cheetos to Doritos. Those came up as the things kids love the best, in terms of brands. And of course, you think, you know, kids love junk food. I know my kids love junk food. But in the context of the huge health consequences of childhood obesity, it is pretty disturbing how rapidly children can identify the products and the brands out there. And it's not a surprise. The companies making these products spend a lot of money branding them for children. The reason that they spend \$1.6 billion a year, according to the FTC survey, more than the gross domestic product of Belize, marketing food to children is because it works and clearly the survey indicates that it works pretty well. The research is pretty clear. Our children spend more than 5 1/2 hours a day using various media. And for almost all of those hours, they are subject to advertising. So there's a lot of messaging in and out, almost as much time as they spend in school, they spend in front of various kinds of computers or television screens. If you're watching a children's television network, according to a recent survey, you will see a food ad every eight minutes. So that is a lot of time over a 5 1/2 period of time it and these aren't ads for All Bran or Fiber One. In fact, one group of researchers studied this and found that compared to cereals marketed to adults, cereals advertised to kids have 85% more sugar, 65% less fiber and 60% more sodium. All ingredients that lead to weight gain and obesity. And they've also looked at the top ten most unhealthy cereals that were advertised. And the top ten cereals that were advertised to kids. Eight of the ten are the same. So, again, marketing really pays off with children. With new ways to reach kids emerging like websites and games that can be given even more effectively and harder for parents to monitor, now is absolutely the time to act. Our interagency working group has been working hard to develop recommendations for national standards and nutritional standards. We used to decide which ad should be shown to kids. Later today, you'll hear about the first draft of those recommendations.

But no matter what standards we create, we're not going to stop kids from loving Cheetos. In fact, I love cheetos and my 88-year-old father loves Cheetos, so, it is a multigenerational addiction in my family. The good news about cheetos is you can see orange hands. I children couldn't figure out how I knew they had Cheetos. The hands give it away. But if a child gets diabetes when he's 18, partly because he, when he was younger, he only ate the foods he saw everyday on TV, and internet, its not his fault. Its our fault. So, we need to start doing a better job regulating the types of ads that our kids see and working with parents and teachers and others to spread the word. That's what these new standards will do. And we welcome input from all of you as we try to get them right. Now, the other piece of advertising that I want to talk about for a few minutes today is food labeling. Another HHS initiative that we're launching around obesity and marketing has to do with food labeling. The nutritional messages targeted at parents specifically front of the package labeling. Now, you have all seen recently what's appearing on boxes, green checkmarks and number ratings, stars, smiley faces, hearts, handful of other icons that you see as you walk up and down the aisles of the supermarket. The labels are popular. People are really looking for some kind of information to do what's good for their kids, to make some healthy choices. Now when I was a mom of younger children we didn't even have the nutrition facts on the back of the boxes, you were really kind of on your own to figure out what was good or bad. But even if those labels on the back had been there, I frankly didn't have time when I was shopping usually with a kid in the supermarket cart to pull out every box of cereal and go to the back and try to read what is a pretty difficult to read barcode on the back of the box. So we need an easier way to get nutrition facts out to people. Icons are helpful, you know, everybody knows the Siècle and Ebert two-thumbs up for movies, I mean they did it because it works, it labels things in an easy way. Its why consumer reports has editor picks. Now we don't think front of box labels should replace nutrition facts, but we do think they're potentially a useful for busy shoppers to try and make sure their families are getting healthy foods. I say its potentially a good way because the labels are only as helpful as the information they convey. And in that area, the record has been pretty mixed. Right now, there are way too many labels, so consumers have a hard time know hag each one means and what makes it even harder is that different manufacturers have used different criteria to decide which products are the most nutritious and we saw recent examples of that when front of package labels on nutritional food included endorsed products like Fruit Loops and mayonnaise as healthy choices. Now, that label may have been technically accurate according to some criteria, but the bar was set pretty low

when those kinds of products are actually labeled as nutritious. So, our new commissioner from the Food and Drug Administration, after seeing the gap between the potential of the labels and what is being done right now, the FDA decided to launch a plan to create basically scientifically valid rules that could help the labels actually work for consumers and meet a higher standard. The first step was to write to the food industry, explaining what we were doing and calling on them to work with us, to take more responsibility for nutritional information that they were providing to consumers. And we got some immediate, good results. Not only was the Smart Choices program suspended, but just a few days ago General Mills announce it was going to reduce the amount of sugar, voluntarily, it adds to cereals marketed to kids. These are the kinds of positive changes we saw when we introduced the nutrition facts label in 1994, and by the way that label is being updated, too. Its way out of date, it doesn't even include a sodium content, so, efforts are underway not only to address the front of package but also to look at the back nutrition facts labeling. It's why we believe that credible standardized and easy to understand labeling can not only help consumers make healthier choices, but put pressures on producers to make healthier products. And do it simultaneously. I think all the conversations I've had with executives in the food industry understandably indicate that we don't want to be economically punished if all of our competitors are still clinging to an old system and we're trying to do the right thing, only to lose a huge amount of market shares. So, whatever we do has to be done across the board and have some uniformity again, which is why having some standards that are measurable across producers makes good sense. We want to take three additional steps to make front-of-package labels work better for consumers. First, the FDA is in the process of identifying and analyzing front-of-package labels not only here but around the world that are helpful and we're going to take a look at what works and try to come up with a strategy and seek your input along the way. We're analyzing the labels that appear to be misleading and considering appropriate enforcement action, which the FDA currently holds. We want to produce a rule that will create a consistent criteria for food labels. Right now, its up to manufacturers to individually decide what criteria to use to rate the nutritional value of its own foods. And having one set of science-based criteria we think will help consumers get good information, at the same time, allowing manufacturers to highlight their healthy food qualities. And third, we are going to be conducting a wide array of consumer research to see what kinds of front-of-package voluntary government-approved system would be the most effective for retailers and manufacturers to use. The advantage of this approach is that it could serve as a universal

system that consumers could count on regardless of what manufacturer or what retailer used it. No companies would be required to use these symbols but they give healthy producers an advantage. What might prompt less healthy producers to reduce their sodium and calories, to get that kind of label on their packages, which is exactly the kind of health competition we'd like to spur in the marketplace. So we're moving in all of these areas and again look forward to a collaborative dialogue as we move forward. You will be hearing more about the progress we're making from FDA commissioner Peggy Hamberg sometime in the very near future. When we talk about childhood obesity, the challenge can seem pretty overwhelming. The trend is not good. The platform that we start from is not good and we need to do something pretty dramatic. Unfortunately, the epidemic is widespread. There are many, many reinforcing factors. The health risks are enormous and the costs to our health system are so high. But the flipside of the challenges that we face tackling this problem is the opportunity that we have in reducing childhood obesity. If we can bring these numbers down, even a little bit, there are huge cost benefit for our health care system. There are huge cost benefits for the health of our nation, and I would argue for the prosperity of our nation. We are looking at a workforce, as the chairman said, who not only might have shorter lifespan than their parents but who clearly will spend a lot of their lives with an unproductive work history, absenteeism, missing jobs, not able to secure the jobs, which will make our country as a whole, significantly less competitive in a global marketplace. Now, it won't be easy. But we can start by not overwhelming kids with ads for unhealthy foods and making easier for parents to figure out which foods really are healthy. So, I'm looking forward to working with all of you, to certainly continue our collaborative effort with the Federal Trade Commission. This is a very interagency effort. The department of agriculture is very much at the table. The department of education is very much at the table. So, as we look at everything from school lunches to food deserts in communities, we are looking at these strategies in a collaborative fashion, and led by the President and the First Lady, I think that we can have a very successful initiative for the health of our children. Thank you all very much. [Applause]

>> Mr. Leibowitz: Keith, we will turn it back over to you. Thank you so much.

>> Keith Fentor Miller: Thank you, secretary Sebelius. Okay. We are going to set up now for our first panel of the day. New research on food marketing to children. And as we set up, I will turn it over to David Britt, the moderator.

>> David Britt: Thank you very much. I'm having senior onset technophobia. Oh, here it is. Yeah. Thank you. Good morning, everyone. I'm going to try to set a context for the discussion of the current research that we are going to be -- oh, yeah, dealing with this morning. And to do so, I will start not by introducing our panel, which we will introduce as we go along and whose biographies are in your materials here, which I hope at some point, you have a chance to read. We've got a lot of stuff to cover in this particular session, so it is going to be a natural experiment in self-regulation and we will see where it ends. [Laughter] As I said, my goal is to provide a brief context for our presentations and our discussions. Food and beverage marketing to children and youth has been actually transformed, I think, in the last five years. Research and the policy development it informs is rising now to meet a very wide range of new challenges. Oh, look, it works. Some data points, some of which you have heard already, so I won't go through them again. Let me add a slightly different take on the one that senator -- Secretary Sebelius mentioned, which is that a recent estimate of obesity-related costs. The numbers she talked about in terms of diabetes expanded to the rest of obesity-related diseases comes to about 9% of the total U.S. health care costs today. As she indicated that's twice what it was ten years ago. And this this estimate suggests that ten years from now, it will double again to 20%, so we're looking at upwards of \$340, \$350 billion, in today's terms. And this dollar estimate doesn't reflect not only the workforce costs but also the quality of life costs for literally millions and millions of young people, and soon-to-be older people. The IOM committee brought together relevant data and analyzed some 30 years of peer-reviewed research around the issue of food marketing and children and youth. Its findings of causation were rigorously and very, very conservatively determined based on a systemic evidence review. The report called for an integrated sustained program of action by all the relevant players and because obesity is a public health issue and priority of the highest order, the committee recommended review of progress and necessary course corrections in two years, which would have been 2008. Today, we are seeing a real renaissance, in fact, in the area of research, some of which you are going to hear about this morning and some of which is going on all over the country, in places such as the healthy eating research center at the University of Minnesota, directed by Mary

Story and funded by Robert Wood Johnson. Government and education at all levels is now focusing on this issue. What Secretary Sebelius talked about today of different agencies with different agendas and long-standing jurisdictional, shall we say values, are really working together for the first time in a long time, and at state and local levels as well to begin to tackle this will problem. And one of the most important was the -- last year's release of the FTC study, which is going to be repeated again. But the fact remains that overall, there isn't yet the integrated effort necessary to make the progress we need to change the trajectory of the childhood obesity. Instead, what we've seen is acceleration and integration of the variety and intensity of food marketing of children, targeting children and youth, to an unprecedented level. Current research is documenting the current reality and that is that food marketing to young people, both traditional and digital, still works. The great preponderance of marketing still promotes foods that are high in calories, fat, sugar and/or sodium. Self-regulation schemes, well intentioned, don't cover many important industry players and marketers, don't cover many critical venues and are, as the secretary pointed out, quite idiosyncratic, in terms of individual company by company definitions of what is nutritionally permitted. Finally, digital marketing is accelerating an additive to traditional marketing. Research is telling us, in fact that marketing is working harder than ever. It has become food and beverage marketing 2.1. It includes all the marketing we've known for the last 35 years around TV ads. And they remain important and critical because they sell product and because they allow companies to keep their brand recognition high and competitively fight for mind share for brand so that kids know enough to make Cheetos the brand they remember the most in the world. And it takes this traditional ad frame, television ad frame and blends it with a variety of digital techniques; marketing brands, brands and product avatars, to targeted audiences, to extend and deepen the individual engagement that they have with young consumers. All of these subjects are going to be dealt with, in terms of studies that have been conducted by our panelists this morning, so you will hear more about what's really going on from people who actually have figured out what's really going on. What we have here, in terms of -- I'm sorry, I skipped one. Let me go back. Yes. Food marketing 2.1 integrates TV and digital marketing products and brands, as we all know very well. In fact, it brings together -- blending with those issues -- and now let me go back, having hit that. For researchers and policymakers, marketing 2.1 brings new and different challenges, such as the need to monitor exposure, times of engagement, awareness of marketing efforts, not simply the dollars spent on the marketing issues. We need to have more attention and

analysis of marketing, in terms of its impact on specific subgroups, ethnic minorities, adolescents, the already overweight who may be particularly vulnerable to marketing messages around foods that are high in sugar and sodium and fat and stuff. And we need to focus on performance, in terms of reducing marketing exposure to food high in calories and sugar and fat and increasing marketing exposure. The other side of that coin, increasing exposure of marketing of foods that are healthy and lead to a healthier diet. Neural marketing. This is the -- kind of the new buzz word in the world of marketing. What's new about neural marketing, 'cause after all, all marketing traditionally has, in fact, tried to play on emotions to sell products, is the use of the measurements of activity in different brain centers and other related measures to shape, evaluate and quickly adapt the impact of marketing messages so that they can be more effective and that they can be dropped when they are no longer effective. As one marketing consultant touts it, your messages or materials will be absorbed directly into the consumers subconscious, where we can measure their effectiveness, devoid of outside contaminating factors, like education, language, ethnicity, cultural or other factors. You can't make this stuff up. [Laughter] It's now reported that some 90 firms are selling neural and related emotions-based research techniques to marketers. Now, we don't want to overstate some of this stuff. Remember these folks have presumably attempting to excite the emotional centers of marketers and food companies. [Laughter] And sometimes when you read it, it looks a little bit like the little machine with the red lights that flash on and off and nobody's quite sure exactly what it means. Nevertheless, it is being used it is being bought, and it is being used to the point where it is no longer experimental or being something that people are trying out. It is now mainstream marketing. So, whether they are right or not, they believe it's right. And it is being retrofitted. The results are being retrofitted to traditional television advertising and other kinds of product placement and all of the usual stuff. So -- whoops, did I skip one? Yes. In terms of the emerging research challenges of neuromarketing, I think it's quite clear that there is broad consensus on the very first two points on this particular screen. There are fewer neuroscientific studies that have focused on food marketing, per se, but there already is good evidence supporting the second two points as well. Neuroscience is developing rapidly and has much -- learned much already about the development and functioning of a variety of brain centers that relate to cognition and emotions and how they work together to help frame behavioral choices. More work is under way and more is needed. And interactions among transdisciplinary teams of researchers are needed to understand how adolescent development in particular, responds to marketing as well as other

important issues that confront youth. I think that it's clear that any earlier assumptions we may have had that there is some bright point in cognitive development before adolescence, after which young people are sufficiently armed to defend themselves against marketing is simply wrong. Future has become reality and we now know that. I think the research is also clear that even cognitive understanding of marketing and its intent is more difficult and complex in a digital marketing environment that includes ad games, product placement, peer participation, a whole variety of techniques which Kathryn is going to talk about later that blur and change the landscape for young children as well as older children. Each of these issues and I'm not going to read them, is a whole new set of research challenges. Added to the research challenges that we have already talked about such as the impact of marketing on adolescents, each will require forming new partnerships, among disciplines. Each will require accessing adequate research funds and making research accessible to policymakers and to the public, all at a pace that is six to ten times faster than the pace of change in marketing as we've known it for the last 35 years. Let me finish my part by saying that food and beverage marketing 2.1 represents a quantitative as well as a qualitative leap in marketing reach, speed, weight and intensity. Research to inform and evaluate policy and an effective performance-based regulatory environment, including self-regulation, has to be similarly comprehensive, integrated, quick and adaptive. Nothing less will be adequate to change the current trajectory of obesity. So I hope that with that frame, we can now get down and look at some of the real scientific work going on and for that I want to turn to our first -- [Applause] You have any idea what it cost me to get him to do that? I want to introduce our first panelist, Jennifer Harris from the Rudd Center at Yale University in Newhaven, down the street from where I live in the summer. And Jennifer, as you can see from her biography is not only a skilled researcher but she has actually had work on the dark side, as some of you like to call it, for years and years. So she knows whereof which she speaks. Jennifer?

>> Dr. Harris: Thank you. Okay. Great it works well. Good morning, everyone. As David mentioned, the institute of medicine report on children and food marketing highlighted the need for more research on how food marketing affects the diet and diet-related health of young people and that was the reason I conducted the research that I'm presenting today. Research on the effects of food marketing to young people has traditionally focused on how it affects product preferences and purchasing behaviors and when children know that advertising is trying to persuade them. And

these questions are extremely important, but I believe that there are many other questions that we could be asking on how much -- how the marketing affects much broader health-related beliefs and behaviors and that we need to do this before we understand the full impact of food marketing to young people. So, in this research, I asked a different question. Which does food advertising cause us to eat more? And I based this question on a large body of social psychology research on priming effects. Any of you who read the book "Blink" by Malcolm Gladwell will have read about the research that shows that very subtle cues in our environment affect our beliefs and behaviors in ways we are not aware of and that are very difficult to control. In the field of eating behavior research there have been many studies to show that external cues can have powerful effects on how much people eat. So, focusing on the taste or smell of a food, subtle things as the size of the container, how many colors are in the food, the portion size, what people around us are doing, all of those factors have been shown to affect how much we eat. Now, food advertising is not exactly a subtle cue, but priming effects also occur when we're not aware of how the stimulus is affecting us. And what we found is that most people do not think that food advertising affects how much they eat, which ironically makes it possible that it could do that -- exactly that. So, to test this hypothesis, we conducted three experiments, our first two experiments were with children in second to fourth grade. And we chose this population because we know that we understand that advertising is trying to persuade them but they're not yet able to activate their defenses against it. But if these effects are actually unconscious and occur outside of our awareness, then they should affect adults as much as they affect children, so our third experiment was with college students. I'm going to report the results of experiments one and two together, because we used the same method for both of these experiments, the difference was in our first sample, we had a group of higher SES children who had unfortunately lower-than-average television viewing, so we thought it would be important to replicate the study with a larger sample of a very diverse group of children of diverse incomes, ethnicities, race and more normal television viewing. In total, we met with 108 children and the way the experiment worked is that we invited the parents to allow their children to stay after school and watch a television show, so we met with all of the children individually. They were in a comfortable room and they watched 12-minute session of Disney's "Recess," which used to be popular with the target group. They were randomly assigned to one of two conditions. In the food advertising conditions, the program that they watched had four food ads inserted where they would normally appear in the program and these were ads that we picked from children's television

that were typically shown, but children in the controlled conditions saw four ads for other products that weren't food-related. And while they were watching, we gave them a big snack -- a big bowl of Goldfish crackers as a snack. And you will notice that the snack that we gave them was not the same as the foods that were advertised. And we -- after they left, we measured how much they ate and we predicted that children who saw the program with the food ads would consume more, which, in fact, they did they consumed 45% more Goldfish crackers when they saw the program with food advertising and as you can see, we found the same effects with both of the samples we looked at. So children who saw the food ads ate 28.5 grams of Goldfish and children who saw the controlled ads ate 19.7 grams. Just to put this in context if they had been watching for a half an hour they can would have consumed 94 additional calories from watching the food ads. When we designed this study, we thought there would be a lot of individual characteristics that would also affect how much children ate. So we also asked their parents to give us a lot of information about their children to try to control for all of those factors. Probably the most surprising thing to us about this study was that we didn't have to control for anything. None of the individuals -- all but one of the individual factors that we measured was not related to how much they ate. So, how old they were, whether they were overweight or normal weight, their ethnicity, whether they were in a lower or higher SCS community, their appetite is assessed by their parents, how long it had been since they last ate, how often they snacked while watching television and how often they watched television, none of these factors was related to how much they ate or affected the results of the study. There was one, and that was how much they liked Goldfish crackers, and this was according to their parents. So not surprisingly, the children who liked Goldfish consumed more Goldfish, but whether they liked the product or not, the food advertising still caused them to eat more. Then in our third experiment, we, as I mentioned, we wanted to see if these effects occurred with adults as well. We were also interested in whether the effects persisted after they had been exposed to the advertising. So, it -- does it only occur while you are watching TV or does it occur at a subsequent eating occasion after you finish watching? And lastly, we were interested in how the advertising message affected these results, specifically, whether a message about nutrition and health or healthy foods would have the same effect. In this experiment, since we were working with adults, we had to be a little more careful in what we told them about what we were doing, so we had to have a cover story, which was they were participating in a study on television and mood. And they were all very a fortunate because they were in the comedy conditions, but in fact, everyone saw the

same clip from "Who's Line is it Anyway?" And then there were three different conditions, people were randomly assigned to the control condition, which included 11 ads for nonfood products inserted where they would normally appear, it was a 16-minute clip, and this is the number of ads they would typically see during that timeframe. In the snack food condition, we replaced four of those 11 ads with ads for products with a snacking and enjoyment. message. And then in the nutrition advertising condition, we replaced four of the ads with advertising that promoted nutrition and health. Now the nutritionist in the room will probably tell me these products aren't necessarily very healthy but what we were interested in was the message that was conveyed as opposed to the healthiness of the food themselves. So people watched in a room, a comfortable room with a television set and then asked them if they would be interested in participating in a second study on a consumer testing study and when they agreed, we took them to a different room with a different researcher and this was the first time they knew that the study had anything to do with food. So in the room, there were five foods laid out on the table and we asked them to taste each of the foods and rate them. And the foods -- there were two very unhealthy foods, two foods that people considered to be moderately healthy and then carrots and celery, which were the actually healthy options. All of the foods were presented in plain containers, no packaging or branding were there. We asked every to taste each one at least once and rate them, but they were free to consume as much as they want. We left the room and they told us when they were finish. Our prediction was that -- was that people who had been exposed to the snacking commercials would consume more. Which is what we found. So, people who saw the snack food advertising ate significantly more than people who saw either the nutrition or the control ads. The difference between the nutrition and control wasn't statistically significant but it looked like that message may have reduced consumption somewhat. Now, this is an overall message that combines all -- overall measure that combines all of the foods that we were looking at, but if you look at each of the foods individually, you will see the same pattern. In all cases, they consumed more of the food when watching the snack ads and less when watching the nutrition ads. Even -- it didn't matter how healthy the food was. So even the carrot and celery sticks, they consumed more in the snack ad conditions and less in the healthy ad conditions. We were able to rule out some alternative explanations for these results. Consumption was not related to mood. It wasn't related to whether they recalled the food ads or not. And it wasn't related to their reported hunger. So, the one exception was in the nutrition condition, how much they ate was related to their hunger. So, it seems like that message might

have deactivated the snacking message somewhat. So, in summary, unhealthy food advertising, increased snack food consumption, it occurred with children and adults. These effects, we concluded, were automatic. The respondents did not know they were affected in this way. It happened when they were watching TV as well as during an eating occasion afterwards. It generalized other foods that tasted good. So none of the foods that we advertised were the foods that they ate, but we still found those effects. And the situational factors were most salient. The effects of the advertising were much stronger than any individual differences that we measured. So, in the future, we plan to ask more questions about how food marketing affects us and these are just a few examples of questions that psychology research suggests we could be asking, and that we could be showing having an effect. And I believe that as we move onto new questions such as these, we will discover profound effects of food advertising on many different diets and health-related outcomes and these findings will make it clear that we need to protect children from unhealthy food marketing influence. I would like to thank my co-authors, John Barge and Kelly Brunell, everyone who helped with the study and I'd also like to point out that our website YaleRuddcenter.org has a lot of information about food marketing to children. So, please visit it. And thank you all for listening. [Applause]

>> David Britt: Thank you, Jennifer. Our next panelist is Inas Rashad Kelly, who is an economist at Queens Cooney in New York and is also a research fellow at the National Bureau of Economic Research and she's going to discuss one of her recent studies. Inas?

>> Dr. Kelly: Okay, thank you. All right, I would like to acknowledge my co-author, Tatiana Andreyeva, who is at the Rudd Center for food policy and obesity and we're looking at exposure to food advertising, food choices, and childhood obesity. This is still ongoing research that's actually funded by the Robert Wood Johnson foundation. This study is important for several reasons. One of the reasons is that it actually shows categorical effect of food advertising. So, not only is the food industry -- not only is it predatory in nature, not just competing with one another to capture market share. So for example, when you see an ad for Burger King, they are not only taking customers away from McDonald's, they are increasing food consumption in general. So we're looking at all of food advertising, fast food advertising, soda advertising, and cereal advertising, which actually in the FTC report were the top three advertising categories. And we're looking at

the affect on overall consumption and we do find increases in consumption, which shows the cooperative nature of these advertisements. As our moderator, David Britt, referred to the IOM report in 2006, the institute of medicine actually concluded and that's the last bullet point, that there's still weak evidence of a causal effect on fast food of advertising, in general food and soda advertising on childhood obesity. So there's still a huge gap in the literature here and we're seeking to fill that gap. Some other studies, Lisa Powell and colleagues at at the University of Illinois, Chicago actually found that 98% of children and 89% of adolescents are exposed to food advertising for food products that are high in fat, sodium and sugar. And Margo Wootan from the center of science and the public interest will be speaking later on today founded a brief report recently that 59% of companies that identified their ads as appropriate to market to children actually don't meet third party standards so its important that more research be done in this area. So our research goal in this particular study to look -- so we gather advertising data from the Nielson Company on soft drinks, fast food and cereal and we look at those effects on food consumption in children, actually so far, we've just got children. We've got up to fifth graders in this study, but we're planning on including eighth graders and also very young preschoolers as well. And we're looking at the effects on food consumption behaviors and, in turn, the bodymass index or height adjusted weight. Now, some from previous studies, of course there's the 1985 study by Bill Dietz and Gortmaker that actually shows that those who have more screen time for every additional hour of screen time that actually increases obesity by 2%. Other studies that have followed have shown that middle school children who watch more television are more likely to purchase soft drinks, might be partly due to the ads they're exposed to. Similarly, children who view videotapes with embedded commercials are more likely to choose those advertised items. Now this is in contrast with a few studies that haven't shown an effect in looking at childhood obesity in places that have been -- basically banned advertisements for children 12 years of age and younger, such as Quebec and Sweden, but those were cross-sectional studies. And as we heard, things like BMI take a while to change overtime and that's one of the things we're planning on doing. A more recent study by Epstein and colleagues actually showed -- actually was a randomized trial and took students or children, rather, and reduced screen time for a randomized set of children and actually found that it lowered BMI, I believe five years later in life. And the reduction -- and some might argue, well if they're reducing screen time they might be participating in physical activity, doesn't necessarily have to do say with being exposed to advertisements while watching television. They found that it

was solely due to decreased caloric intake, and not to decreased sedentary behavior. In my previous work with Shin-Yi Chou and Michael Grossman, we've used the national longitudinal survey of youth to actually find an effect. We find that it lowers -- we hand-picked 41 fast food companies, took into account the causal nature, so those fast food companies might choose to advertise in areas where demand is higher. We took that in account and we actually found, in fact, on overweight status and obesity in children and adolescents, 12% to 15% for children and 4% to 17% for adolescents. We looked in that study at the implications of banning the -- or eliminating the tax deductibility of advertising, which might be part of the reason they spend \$1.6 billion on advertising. So it is important to look at those implications as well. In this study, we don't use the national longitudinal survey of youth, we use a restricted use data set, early childhood longitudinal survey. This is longitudinal in nature, so it follows the same students over time. They started in kindergarten, and we've got so far up to fifth grade. We have got data on eighth graders as well but the results I'm presenting here are only fifth graders so this is still ongoing research. So we've got information on where they live and so we actually merge these data with advertising data by designated market area, which is similar to a metropolitan statistical area. These are the measures advertising, the Nielson Company gives us and we collect data and merge it for cereal, fast food and soft drinks from the Nielson Company. For the top 56 designated market areas, this might not seem like many market areas but it actually covers over 70% of exposure, advertising exposure, so it covers -- it gets to a wide audience. And just to be clear, the actual soft drink measure that we used, it doesn't just refer to soda or carbonated beverages, it actually refers to sports drinks as well, so, Gatorade, and also fruit juice that isn't 100%. So things like Hi-C, Kool-Aid, that's also included. That's included in the advertising measure and luckily it's also included in our food consumption measure that they ask the children, they either asked the children or one of their parents. So its during the past seven days, how many times did you drink soda pop or fruit drinks, sports drinks or fruit drinks and that is the question on soft drinks and the question on fast food is during the past seven days, how many types did you eat a meal from a fast food restaurant, which we designate as one of the quick service restaurants, okay? Now our food consumption and distribution looks like this somewhat normally distributed, highly skewed to the right and we do take that into account in our analysis. And so our dependent variable what we're looking at, the outcome is actually both soft drink consumption and fast food consumption, so we are looking at the effect of three types of advertising on soft drinks and fast food consumption. Our main results,

we do -- these are just advertising, this just shows advertising on the right-hand side. We do control for a comprehensive measure of socioeconomic status which takes into account both parents' education and their income levels and we control for gender and race. On the right-hand side. We also control for television watching on the right-hand side. And that doesn't change our results, whether or not we controlled television watching on the right-hand side, which is interesting and we find significant effects. And looking at the last column where we include fast food, cereal and all soda advertising, we find significant effects, the magnitudes may look small but it is partly due to what we are measuring. The advertising measures are in gross rating points and those are very low. So, for example, an increase in just one gross rating point, that means, for example, one advertisement has reached 1% of the intended audience. That's tiny increase. So a more relevant increase might be, say, 1,000. And so looking at that you would find very significant increases in fast food consumption. So we find soda and fast food advertising positively and significantly associated with fast food and soft drink consumption in fifth graders. We find -- we do stratify also by income level. We find that the effects are much greater for low-income families than for high-income families, which is interesting. In preliminary analyses, we still don't find much with the body mass index, but that's because we are getting a snapshot and not looking over time and so we are going to do more analyses and use a cleaner approach for the body mass index models, especially once we merge the eighth graders in. So our further analyses, we'll use a different methodology, we'll use specification checks and we'll use not only the ECLSK, including eighth graders but also plan on using the ECLSB, the birth cohort and look at preschoolers as well. And the birth cohort actually has information on mothers, pre-pregnancy and post-pregnancy BMI, which might be helpful and somewhat in controlling for genetic affects which we can't do as well with the ECLSK. And this is our contact information. [Applause]

>> David Britt: Thank you. That was great. Dick Mizerski, who many of you know, is chair of marketing at the University of Western Australia and has worked for a long time in terms of -- well, not a long time, he is not that old, but has worked with relationship between children's recognition of trade characters and their attitudes and future use of products. I was with a company that knew something about that. The effects of a fast food toy premium and a lot of other really good and interesting work. Dick -- Dick? Thank you.

>> Dr. Mizerski: Thank you. Thank you, David. Yes, I'd like to talk today about a program of research we have been doing at the University of Western Australia, basically myself and my Ph.D. students and I want to report on basically the stuff on mass marketing, mass marketing to very young children. And what kind of responses that it prompts. I'll also add at the end some other information so on some of the other studies we have done. Mass marketing, by the way is a term that was developed last year in a journal of public policy in marketing. And really looking at those messages out there that somehow mask either the source of the message or the message itself. Now the reason is that individuals are much more skeptical of marketing or if they know it is from a marketing, that information, than if it is from an independent source. So clearly, if we mask that by either using something like an advert game or a product placement, too, that I'm going to be using here, buzz marketing and a whole bunch of other techniques, we believe that prompts really a potentially dangerous situation because now children may not understand that it's from a marketer and be much more vulnerable in terms of what we call persuasive knowledge. The reason we're looking at very young children, we are not looking to -- I have done stuff with adolescents but primarily, we are looking at the years from 3 on. And that's because that's when they start to be targeted by food marketers. And at that age, of course, they're not really buying, but they are having a huge impact on the food choices of the family. And we believe that they become very important. They're not actually buying, but they are having an influence on those people. Now, we were talking about the impact of marketing messages and mass marketing, we're looking at two types. First is the area of brand knowledge, which Keller some other people are talking about memory and believes and images and talk a little bit later version power envelope terms of the preferences and loyalty of young children, and we believe that this brand knowledge then leads to what was called brand equity and we have been looking at preferences and choice and particularly brand loyalty and how maybe such things as premiums and toys might have an impact on children's decisions. I'm going to be talking about two mass marketing techniques today that we've tested, the first one was a Fruit Loops advert game from the internet that compared Fruit Loops to fruit and it appeared a year or two ago in the journal of advertising. And there was a sample of 5 to 8-year-olds, and here we're looking at what we would call short-term effects of these mass marketing. So we're talking they play the game, and shortly after, probably within five or ten minutes, then they would respond. And we're always using a controlled group. The second study I'm going to be talking about has yet to come out, although its going to be presented in March at a conference, and

we are looking at a product placement and the children's magazine, which is interesting to me is that there is almost -- we haven't found anything looking at product placements in children's magazines. And those of you who have children know that when they first start to read, they're really are a voracious reader and it is a very interactive and I think print media can have a huge impact in terms of what people are -- what kids think about. I don't know how well you can see this first one, but the Fruit Loops advert game that we chose and this was done by Victoria -- my co-author, Victoria Mallinckrodt that chose this one. We chose this, because we think it was deceptive. Right here, you can see a scene in which the child throws either a Fruit Loop or a piece of fruit at this monster. Now, if you throw a piece of fruit, which you can see the score right there you get five points and the monster goes "MMM." If you threw a Fruit Loop, you get ten points. And the monster goes "MMMMMM." So, we thought, that's kind of fruit denigration, if I've ever heard it. So our hypotheses were several. First of all, we believe that children who played the advert game would tend to believe that Fruit Loops was better for them. Second of all we thought that children who played the advert game would prefer Fruit Loops to other cereals and they also would prefer Fruit Loops to other potentially more nutritious foods. It gives you an idea of the actual questionnaire we had here and we asked the children, again, these were 5 to 8 years old, the circle, first of all, the cereal that they would prefer and second of all, what meal they would prefer, and you could see they had a cereal, hamburgers, sandwiches and sort of a fruit cup there. We found that older children in the treatment group tended to prefer Fruit Loops to other cereal options and particularly for the 8-year-olds. So, the advert game compared to the control group had a strong effect there. We found both 7 and 8-year-olds preferred the cereal option compared to the control group against other foods as well. So here we can see preferences were very much affected. We then asked them are you going to ask anyone in your family to buy Fruit Loops? And we found absolutely no difference mainly because all the kids wanted Fruit Loops and they were going to ask for them. So whether they were a control group or not it really didn't seem to have an impact. Then we looked at this area called persuasion knowledge. Now persuasion knowledge is the idea that kids who understand what the source of the message is, whether it is commercial or noncommercial and if they understand the intent would somehow be inoculated or be able to guard against these persuasive messages. Well we found out with an advert game and you think about your own experience on the web, the first question we ask is who put this game on the web? And we had Toucan Sam, which of course is the trade character. We had my co-author Victoria

Mallinckrodt who was actually collecting the data. Kellogg's which would have been the correct answer, and then finally the teacher. We expected and found that as kids went up in age, more of them would specify Kellogg's, but Kellogg's only really got something like 26%. Most of them, and I guess if we can think back, they're probably right, thought it was a researcher. And I suppose in a sense it's probably true. But again, if you were asked, what was the source of the message you're looking at, often you'd probably have a hard time as well. In terms of the two intents we talked about, the first we asked them -- was the advert game trying to get to you cook with mom? We found only about 5% of the kids would respond to that; learning in school, about 45% said that; and eating cereal, 51% over our whole sample. In terms of the second intent, playing tennis, only about 6% of the kids would respond to that; buying cereal with mom, 60%; and playing computer games, about 34%. So I suppose it is kind of a computer game they were playing there. One of the things that we found interesting, and I'm not going to show the table, because that would be a little hard for you to see, we really didn't see much of a change in terms of children's persuasive knowledge from the age of about 6 to 8 years old. The second thing is, and that really kind of surprised us, is having persuasive knowledge had absolutely no effect on any of the responses. So, if they had persuasive knowledge, they didn't seem to use it in the way we would have expected that to happen. The other thing we did we collected information from the parents and we asked about the media use, how much television they watched over the week and we also asked about the cereal use. And we found out all of the schools, ten school we went into, five of the schools were at lower socioeconomic, five of the schools were upper socioeconomic, we found a very strong social class effect, in terms of the respondent schools, and it was negatively associated with highly sugared cereals. So as social class went down, the use of highly sugared cereal went up. Second of all, things that we have known for a long time, is that social class and television viewing is very much associated with media use, particularly TV. And so, as social class went down, we found that TV use went up. So one of the things we have to be very careful about here is understanding that there is a very strong potential affect and I know that some of our other researchers here have talked about adjusting for it, but we found very strong effects that may explain in some sense why they're using that cereal. We did a second study just recently and it is coming out shortly. And here we looked at the a product placement in a children's magazine. This particular children's magazine, this is a product placement right now for a Garfield: Two movie product, and I wish I had known I was going to be here several years after this happened, but we -- when we did this

study, we worked with a magazine, AFLJ Squad, it is a magazine aimed at little football players, and they provided us with information about the placement and also sent out the magazines for us. The reason we did magazines is we found out the four top magazines, kids' magazines, had an average of about two-thirds of their content were commercial. About half of that were product placements. Now, if you compare that to other media, it is much higher. And I haven't really looked at stuff over here in America, but I would imagine probably finding very similar kinds of things. Now, we use the Garfield because we only found about 1% of the placements or the commercial material had to do with food, strangely. We would have anticipated much higher than that. I'm just showing you the area here, we had 236 boys and about 20 girls. Interesting enough, both of them played football. We didn't find any gender effects and I think a lot of reviewers found that hard to believe, but again, little girls are playing football with little boys, what would you expect? We interviewed about 10 to 12 days after receiving the magazine. So here, we're talking about not like the first one with the advert game, where it is relatively short-term affects, we're talking about long-term effects of maybe at least a week after they read the magazine. What we found, and I think this would be very generalizable to the food area is those kids who got the treatment and read the magazine remembered the movie more, liked the movie, more prefer it to other, or excuse me, other children's movies showing at the time, more requested or will request their parents to take them to the movie and will attempt to persuade their friends to see the movie. So, what do we make out of that? Some tentative conclusions of our two studies in mass marketing. First we know that advertisements and placements appear to causally induce memory in a product, preference for the product, intentional request the item and suggest that their friends get the item as well. Persuasive knowledge among children was positively associated with their age, reading ability, but not with their web experience, which kind of surprised us with the advert game. Also, the two components of persuasive knowledge, knowing a commercial from noncommercial content and knowing the persuasive intent, interesting enough, were not related. Some other interesting aspects where that knowing the commercial content appears much more important than knowing intent and this knowledge seems to appear later than knowledge of intent. So kids learn about intent much earlier than they learn about the differences between commercial and noncommercial at least in Australia. Persuasive knowledge is thought to be generally in place by 9 years old. But we found at least half of our 5-year-olds would have something that would be relevant in terms of what we would call persuasive knowledge. Having more persuasive

knowledge presents very little effect in children's responses. So techniques, like advert games and placements that kind of blur this distinction between commercial and noncommercial content, you really challenging the effectiveness of a child's persuasive knowledge, however, they don't seem to use it when they have it. Just to give you some additional findings from some of the other work we have been doing with the food area and young children, we have a study where we did in-depth interviews of 3 and 4-year-olds where we obtained their brand knowledge about fast food choices and then we tried to, they made a choice of the fast food they wanted as an incentive and then we tried to tempt them with a toy in the second preference to see if we could switch them over. We found that understanding that their brand knowledge, particularly such things as liking the brands, images about the brands and some affect aspects were very important in terms of their choices and also in terms of their loyalty. And for those researchers, we could predict, based on their brand knowledge, about 85 to 90% of the time what brands they would choose and whether they would be loyal to those brands as well. Really the most important thing here is the powerful elements in the samples' fast food preference and loyalty decisions were two things and we found this interesting, one was their perception of the premiums that were offered and second in fast food, their perceptions of whether they had a play ground. So we have on one side, you know the toy, on the other side, play in the playground. So we still have to do a little bit more research to find it out, but it's nice to see at least there are some other aspects in toys that were important. We also did some interviews, in-facility interviews in a McDonald's, and a weekend lunch, and we observed the behavior before we actually did an interview of the families. We found absolutely no effect of the difference between whether a child was present or not. So really, this aspect of pestering for a food toy didn't seem to have an effect. And significantly, and strangely, we actually had more adults without children with them buying the toy than people that had children. So this is kind of interesting. By the way, just to kind of leave you with a very short thing here, just to remind you that McDonald's is the number one toy retailer in the world. Thank you. [Applause]

>> David Britt: I'm so glad to know I'm not alone at buying toys at fast food restaurants. [Laughter] Our next panelist, Kathryn Montgomery, is at the school of communications at American University. She has a long and distinguished history in the area of children and children's issues, particularly including food marketing. She was part of the -- founding part of the center for media education some years ago. And she uses -- she -- really with her colleague and

partner, Jeff Chester, have really, really become perhaps the most knowledgeable about digital marketing and the new techniques that are not only widely in use now but are being developed and adapted day by day. So, with that, let me ask Kathryn to bring us up to date.

>> Kathryn Montgomery: Thanks very much, David. Let's see. I need the mouse. Okay. All right. Thank you very much. And I'm very pleased to be part of this forum this morning, looking out at a lot of very familiar faces, having participated in a number of these over the many years I've done policy and research work here in Washington, D.C. I do believe that the FTC does have a very, very important role to play in the youth obesity crisis and I'm very happy to see all the initiatives that the agency has undertaken. We know from a large body of research on advertising, particularly television advertising, that the marketing of unhealthy foods is a significant risk factor for obesity among children and youth. And as more and more marketing continues to spread across a variety of digital platforms, these risks are increasing. So what I want to talk about today is a project that I'm working on now with several colleagues at American University, at the Berkeley Media Studies Group and the Center for Digital Democracy. I have been tracking the digital marketplace actually for -- since the beginning, since it began in the early 1990s, and as some of you may know, was very involved in development and promotion of policy efforts around children's privacy and passage of the children's online privacy protection act in 1998. And a couple of years ago began writing and focusing very closely on digital food marketing. This particular project is a broad project that is part of, that is funded by the healthy eating research initiative and that is funded by the Robert Wood Johnson foundation and many of us are here because of generous funding from Robert Wood Johnson. Our goal is to develop a conceptual framework for really understanding the nature of this new digital marketing culture and being able to translate that into a set of research -- into a research agenda and a set of initiatives that can be undertaken by a variety of researchers. What I want to talk about really is this idea. David, you set it up very nicely, you talked about food marketing, did you say food marketing 2.1? That was a good one. The industry often refers to a digital ecosystem and I think that's a good way to think about marketing in the digital era. It's taking place across a broad spectrum of platforms and on the internet from social networks to mobile phones to games to many, many, many, many other platforms. We have to understand also that it's not that it's separate, the digital media is not separate from television and television advertising, it's all part of the same thing and it's really where all marketing is going and

that's why I think its so important for us to understand it and we also know that food marketers, along with other marketers are moving many of their dollars into the digital realm and following the eyeballs as one of the marketers said. And a lot of young people, many, many young people, and I'm the parent of a teenager myself and I know a lot of you are parents, we all know this, that many of young people are living their lives online, living their lives in this digital media culture. It is a powerful force in their lives, particularly because it taps into so many of the fundamental developmental needs of childhood and of adolescents, from identity exploration to self-expression, to their relationships with pierce and their growing autonomy and independence. The industry understands this very well, and has been doing tons of market research to really look closely at the relationship between industry marketing in the digital arena and young people's needs, developmental needs. So, what I want to talk about, and David referred to some of the aspects of digital marketing, I would like to look at it holistically, I think it is important for us to do that I don't have time to go through all of the individual techniques, but what I decided to do is to identify what we see as some of the key features of digital marketing so that we can think about them as a whole and understand why it's so different from conventional marketing. It is incorporating many of the techniques and practices of conventional marketing but has expanded into a lot of other areas and we need to think about them all at once. There is an article that I've left on the tables out in the lobby from the Journal of Adolescent Health that goes into these in more detail. I'm going to quickly move through them, and just show you a slide for each of the issues we have written about. First of all, digital media has created a pervasive environment that is always on, 24/7 and it can reach children and youth wherever they go. This includes, and we all know how many young people are using their mobile phones and it includes mobile marketing, which is one of the big growth areas, that's able to follow a young person wherever that young person goes and we've identified marketing campaigns for food products that create coupons so that you can get a soda or some other thing when you're near that particular fast food restaurant. Another feature is behavioral targeting profiling. The digital media have created an unprecedented ability for marketers to engage in behavioral profiling and data collection. This means tracking behavior across platforms and developing personalized ads designed for individuals. Behavioral profiling is also a very important aspect of multicultural targeted marketing that is aimed at Hispanic young people, at African-American young people, along with all of the other strategies. Social media marketing and, again, we all know how popular the social network platforms like Facebook and

MySpace are. I was just ferrying some kids to an event at my daughter's high school and one of the young kids said, I spend, you know, like six hours a day on Facebook, and I don't think my mom knows as much about it, but I do. But the marketers do know about it and there's a whole new field of social media marketing that's really tapping into the complex web of social relationships that are being conducted online to strategically insert brands and to take advantage of the social graph and identify who the key influencers are who can then influence other people within their social networks, so it is a very, very important area. So, digital media are also immersive environments and there are a lot of aspects to immersive environments, we know see the state of the art animation, high definition video and other multimedia have created very, very compelling environments that young people can be part of and experience in a very subjective way. Children and teens are participating in them through a number of different platforms, including interactive games and three dimensional virtual worlds. So for example, in-game advertisers can now direct personalized advertising messages at the most intense points in a game, when users are in high states of arousal and they can offer immediate gratification through online purchases and that thus triggering mood-enhanced impulsive behavior. So you begin to get the picture of what's possible. Another aspect is user-generated advertising, with the growing popularity of YouTube and other video sharing sites, we've seen more and more marketers develop campaigns to really enlist young people, integrating ads themselves which turns the conventional model on its head, they're no longer passive viewers, but now they're actually ad producers and distributors. And also, David talked a little bit about neural marketing, which is the use of neural science to study the brain's response to advertising messages. That's a key part of this concept of engagement, finding ways to really deeply understand how people engage with ads in the interactive marketplace. This trend suggests that digital marketing will increasingly be designed to foster more emotional and unconscious choices rather than reasoned, thoughtful decision making. And then finally, the integration of content marketing, we see now that the boundaries between advertising and content which have been disappearing since the emergence of E-Commerce and the worldwide web have been practically obliterated. And now we're also seeing measurement and sales tied in before those of use who have been working in children's television over the years know that there's been a long-standing set of principles of separating the advertisement from the program content. It's irrelevant at this point, and that creates, I think, many, many challenges for researchers and for policymakers. This week we released a set of papers we commissioned from a group of scholars that we convened

this past summer and those papers are available on a website that I'll give you at the end of my presentation and what we did was brought scholars together who were experts on child development, adolescent development and particularly looking at some of the new research in those areas to get them to address the particular and unique challenges and issues regarded to digital marketing and we're finding that in the new media marketplace, the old models of vulnerability no longer really hold. For example, this idea that young kids don't understand the persuasive intent, as they get older they can begin to understand it and therefore don't need safeguards, a lot of that is no longer relevant, both because of the nature of advertising in the digital context, where implicit persuasion is as important as explicit persuasion, but also because what we're beginning to learn about adolescents and adolescent development is there's a constellation of biological and social and emotional developmental issues and trends that take place in their lives that may make them particularly vulnerable to marketing messages, particularly in the digital context. And my colleague, Sonya Greer at American University, has also identified a set of vulnerabilities that are particularly unique to African-American and Hispanic young people. So, what we are doing is developing a broad research agenda and a framework for researching and understanding digital media, which will require different kinds of methodologies. I'm just going to quickly go through these and not really mention them, but there they are. But looking, understanding, for example it is not just effects, has to be beyond the effects, its not just looking at an individual message, understanding the holistic set of relationships in this "360-degree marketplace." All of these things will be very, very important and there has been a resurgence in research. What we want to do is to ensure that researchers are looking more closely at the digital context. Finally, having said all that, I think we do need to continue to do research but that in no way suggests in my mind that we take a wait and see approach to regulatory intervention. Childhood obesity crisis is too urgent for us to delay any responsible actions and I think there really is a role for the FTC to step in and to create some fair marketing principles, some rules of the road to help guide the development of the digital marketing system that is so, so quickly emerging and growing. And I believe that the COPA model, the children's online privacy act model of regulation may be a good one for us to look at. In this situation, we have a government regulatory framework with enforcement provisions coupled with industry self-regulation and guidelines. That creates uniform standards that all consumers can understand, consistency across platforms and a level playing field for industry. Anyway, I am happy to be part of this discussion and look forward to talking with all of you. [Applause]

>> David Britt: Kathryn, thank you very much. I want to ask my co-moderator, Pauline Ippolito, to give us a little bit of commentary on her take as we have been talking. She's been listening. That is sometimes dangerous but always useful. She is the deputy director of the bureau of economics here at FTC. She has worked on a variety of issues in her career and in more recent years, has focused on the role of advertising in general, particularly with the respect to health-related claims and also on studies relating to marketing and children. So with that, Pauline.

>> Pauline Ippolito: Well I've got three minutes to sum it all up. What I'm really going to use my three minutes for is to tell you really why we invited this panel. There are a number of techniques as people tried to explore from a research perspective what's going on in marketing to children and the first two papers you saw, well, maybe I have the order wrong, but in the Harris and Mizerski paper, you saw two really good examples of experimental approaches. The experimental approaches are nice because you can put a stimulus, ads of some sort, have a control group, and then measure effects or measure changes in attitude, changes in behavior. So, you have got tight control over the stimulus and therefore, a better shot at explaining effect and knowing the causation. The inherent problem, of course with this approach is it has to be a short-term effect. You have a stimulus, you put goldfish in front of those kids, how many goldfish did they eat? Or you have a stimulus, you have a second phase and you have eating behavior. So it is very good in terms of the causation and the control, its less good in terms of how does it all play out in the marketplace in the world? So the Kelly paper takes the opposite approach, it uses infield data to try to look at whether there's a correlation between kids who are exposed to more marketing and weight or eating behavior. That's nice because it's out in the real world, you've got all of the other influences going on, you can really try to see whether there's a tight correlation between the issue of concern, food advertising and kids' weights or eating behavior. Of course, the problem is advertisers don't just throw ads out there. They target advertising. They target advertising to where they think it is going to do the most good, from their point of view. And so the key concern always in the infield studies is how well have you identified variation in the invariable control, food advertising in this case, and the outcome variable that you are interested in. And so, she talked about various controls that she tried to do and it's a very good study by these standards, but that's always an issue in those kinds of studies. And so it's important that when we assess the issue, we

try to look at all kinds of research, how good is the evidence on causation in the short-term studies? How does it play out in the real world? Are we getting corroborating evidence there and where are the weaknesses in the evidence that's out there? And then third type of work is the what is happening work? Which for we who have to make decisions is a very important part of what we need to know. It is clear to everybody who follows marketing at all that things are changing. That's true. There is no question about it. How we measure, what we measure, what it really means, is it qualitatively different from what we have seen in the past? Is it, you know -- how do we know how different it is and whether it should matter and how it should shape our decisions? This is an important new area for exploration, so, we're certainly trying to keep track of it, but it's changing very rapidly, and there is very little data at this point, very little hard evidence that says that it had fundamentally different effects. You know, appealing to the emotional reaction to a product is not new. They didn't put all those beautiful women on cars for their information value. You know, this is a technique that is well established in marketing. They are in a better position to use it now. But it is different, as mother of two 20-something boys, I can tell you they live in a world that is very different from the world I lived in and we need to pay attention of that. I guess the one thing I didn't hear a lot about and I think is an important feature to add to the research agenda is can you sell good foods to kids? How do you sell good foods to kids? I don't think food producers are out to, you know, sell bad foods deliberately to children. And so I think we need more work on how do you get kids to want to choose good foods? Salty foods taste good, apparently, sugary foods taste good, apparently. And so I think the other side that we need research on is what's the way forward? Do we -- you know, there's a great temptation to just say stop advertising to children. Well that would be hard to do, but even if we did it does that really change the world very much? And so I think another part of the research agenda that we really should be encouraging, I think, is how do you communicate to children that there are better choices and that they could enjoy those better choices? And so, I would like to add that. Thanks. [Applause]

>> David Britt: Just a couple of quick follow-up, I think we have two more minutes. One, Kathryn, to you, with respect to the question that was just raised by Pauline, are you aware of any use, in terms of the new digital media of efforts to promote healthier eating, whether it's healthier foods or healthier eating in general? I haven't seen a lot on the ground yet, but I just -- you follow this more closely.

>> Kathryn Montgomery: I've seen -- I haven't looked as closely at that, but I have seen some efforts in the virtual worlds to do kind of -- the CDC actually has a campaign in some of the virtual worlds that are targeted at kids to try to promote healthy food. I don't know whether that has been tested. I do think it's an important area, as part of the bigger picture, I mean it's such a human area of research that needs to be done that, that certainly could be included but there's a huge amount that has to be looked at.

>> David Britt: It is also a fruitful potential area, you should excuse the word "fruitful," because of the lower cost and the ability to change and adapt what you're making an investment in to see if it has impact. And it may not well not be product by product, but really --

>> Kathryn Montgomery: Right. And I think tough think about in the overall context that such a message is inserted, so there's one little campaign, but if you look at it within the context of all the other kinds of "messages" and influences that are part of the growing marketing, digital marketing culture, you have to assess whether its going to have much of an impact.

>> David Britt: Dick?

>> Dr. Mizerski: Yeah, I'm just going to share at least what's happening over in Australia is there is an enormous amount of government money going in to promoting fruits and vegetables, and it is all over the place, any sporting event, on television, using the internet. It's really not clear yet how effective what it has been. People can go two fruits and buy vegetables, that's their whole theme. Whether this made any impact in terms of obesity and weight and that kind of thing, really hasn't shown it yet.

>> David Britt: And there are very few examples, I think we would all agree, in terms of research, that really try to combine the approach of marketing to really mirror that which industry does so well, which is to brand products and to wrap things together with avatars that can last for a longtime and build the kind of socialization that your research in particular found to be important, brand loyalty at 3 and 5 years old, that is kind of the holy grail of the marketing world. I think that

really wraps us up. No Jeff? No questions on this one, because we are literally out of time, and I have to congratulate, I must say, everybody says self-regulation doesn't work, but in terms of this panel it did pretty well, but even so, we are out of time. We will have a great deal of time available, more time available in some of the other panels, and particularly at the end of the day. Thank you all very much. [Applause]

>> Keith Fenton Miller: So we're going to take a 15-minute break and we will reconvene at 11:15.