

## Parent-Focused Nutrition Education: Empowering Families To Eat Smart

**Moderator: Barbara Hallman, Chief, State Administration Branch, Food Stamp Program, Food and Nutrition Service, U.S. Department of Agriculture, Alexandria, VA**

### Fit Kids = Happy Kids

**Susan Mayer, Nutritionist, Supplemental Food Programs, Southwest Regional Office, Food and Nutrition Service, U.S. Department of Agriculture, Dallas, TX**

I am the Regional Nutritionist for the Southwest Region. We have these five States in that region: Texas, Arkansas, Oklahoma, New Mexico, and Louisiana, and 22 Indian Tribal Organizations. The first thing I'm going to do is set the stage for how we came about developing this project and then talk about the outcomes of that project.

The first thing to note is that this was a group project. In the Southwest Region, the WIC programs came together and formed a group called "Educating Communities on Healthy Options (ECHO)." This group came about as a challenge from the national WIC office at FNS. Patricia Daniels, Director, Supplemental Food Programs Division, came up with the initiative of revitalizing nutrition education in the WIC Program. As part of that, we challenged our States in the Southwest Region, asking, "What do you all think you can do? How can we get in on revitalizing nutrition education for the Southwest Region WIC States?"

They met that challenge. They came together and, under the direction of my Regional Director, Sondra Ralph, we realized that we needed to do training for staff. Staff was in desperate need of some training so they were all on the same page from State to State. We had a regional concept of training the staff on a broad scale. We did that via teleconferencing, video-teleconferencing, and had a couple of video-teleconferences.

Our Southwest Region ECHO members are Susan Handford and Susan Winkler, in Arkansas; in Louisiana, we have Elizabeth Sloan, most people know her as Beth, and Janet Guidry, who was with the MCH Program in Louisiana. In New Mexico, we have Deanna Torres, the WIC nutritionist who is now the Assistant Director, and Kerry Sparks, who is their Nutrition Coordinator. In Oklahoma, we have Traci Lundy, who is the Nutrition Coordinator. In Texas, we have Lynn Wild, who is a nutritionist, and Mary Van Eck, who is their Nutrition Coordinator. We have the Indian Tribal Organizations (ITOs) represented as well. In Oklahoma, for the Chickasaw Nation of Oklahoma, we have Debi Tipton, their Nutrition Coordinator, and Melinda Newport, who is their Director. For the New Mexico Tribal Organizations, we have Ruby Wolf, who is their WIC Director. Many of you may know some of these people. I want to give special thanks to Lynn Wild and Debi Tipton on this project. Without those two spearheading the production end of it, this would have never come about.

The group came together and developed a mission statement. The team needed to know where they were going. The mission statement helped ensure program integrity by defining what effective nutrition education practices are, through available models. It wasn't a matter of reinventing the wheel, but a matter of taking a look at what wheels were out there and seeing which ones would fit our practice. They also came up with some underlying principles to keep in mind as projects were developed.

### ECHO Nutrition Education Principles

- ◆ Interaction
- ◆ Flexibility
- ◆ Relevance
- ◆ Supportive Environment
- ◆ Trained Staff
- ◆ Culturally Supportive
- ◆ Acknowledge Challenges
- ◆ Empowerment
- ◆ Client Involvement

When we start talking about what was actually developed through this project, you'll see how these principles are reflected in the materials made available. Client involvement also was very important to the group. I would like to provide you with a bit of background information on projects that ECHO did that led up to the project that I will be talking about with you today. ECHO has done three different projects. In 2001, we had our first video-teleconference which was strictly aimed at training staff in the stages of change models. It was a 2-day teleconference, we learned some valuable lessons from it, and a lot of good information was provided, but we learned that 2 days is way too long.

When you're doing a video-teleconference, you cannot set up your presentations like you would for a conference here. Here, you may have somebody speaking for an hour or so. That just doesn't work on a video-teleconference—you need short presentations. If you think about it, when you watch TV or any other video medium, you're used to looking at information in short bites. After about 20 minutes, you tune out and don't pay attention anymore. So, we took those lessons and did another training teleconference. We also sent out a needs assessment throughout the Southwest Region to those who had attended the first conference. Because it was a satellite video-teleconference, anyone in the Nation could tune in to it and we had over 3,000 people tuning in to that first teleconference.

The needs assessment was conducted in 2002. One of the main things that staff said they needed help on was dealing with the issue of childhood obesity. How do you begin to even talk to parents about that? They felt so uncomfortable in terms of even beginning that conversation and giving tips and tools. The other thing they were very concerned about was that many didn't feel they were practicing what they preached. That was a difficult thing to come to terms with, how can we talk about it if we're not practicing what we preach, how can

we be convincing? We took that information and developed a second video-teleconference--"On the Road to Excellence--WIC Fit Kids Obesity Prevention Project." This teleconference was broadcast to over 6,000 nutrition educators throughout the Nation who tuned in that day. We took all of that information from the video-teleconference and put it into what we call the "Fit Kids=Happy Kids Tool Kit for Obesity Prevention."

At this point it is important to note that the video-teleconference and the Fit Kids=Happy Kids project could not have come about without the help of Dayle Hayes, the nutrition consultant on the project. She had the monumental task of "herding the cats." She was able to take several different presenters' information and put them into a seamless production piece where all of the presentations had the same look, the same feel, the same tone, and came across as one seamless production unit. That was very helpful as the evaluations proved. We received 2,300 evaluations, most of which were overwhelmingly positive. There were only about 15 evaluation forms that had any suggestions for improvement; that's how well-received it was.

The teleconference focused on childhood obesity. Dayle Hayes presented on myths and realities of obesity. Susan Johnson, in Colorado, provided a research update on obesity prevention models for childhood obesity. Pat Lyons did a session that empowered staff and dealt with the staff issues such as, "How do I begin to talk about weight issues when I myself am not in the best physical shape?" Staff found that an extremely helpful session. Pam McCarthy presented on the Art of Persuasion; she gave the staff tools for how to be more persuasive in the information that they're providing and how to become a person of influence. Her other session was on how to be likable and things that you don't necessarily think of in terms of educating your clients or even your staff. Anybody looking at this session would see things that they could incorporate into your own lives in everyday dealings with staff and co-workers.

Jane Peacock, the WIC Director in New Mexico at the time and promoted up a level since, presented on the feeding relationship. New Mexico had a Special Projects Grant in which they worked with Ellyn Satter to do feeding assessment of children in New Mexico. Carolyn Dunn presented on TV time--this was an enlightening and very popular session: how to deal with the issue of too much TV time and other screen time for computers and things like that.

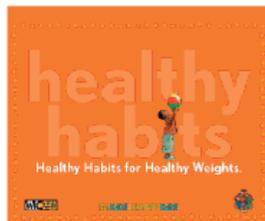
The key messages in the video-teleconference, which were translated then into the Happy Kids=Fit Kids tool kit, were as follows:

- ◆ Families are the foundation to the overweight problem and the foundation of the solutions to the overweight problem.
- ◆ Establishing and maintaining a positive feeding relationship is one way to help prevent obesity from birth.
- ◆ Nutrition and physical activity are easier than we believe. Realizing the myths and realities of everyday fitness can help us all "walk the talk."

- ◆ Screen entertainment (television, computers, and video games) have a profound effect on children’s health and development.
- ◆ Happy, healthy kids come in all shapes and sizes. Families need new attitudes, new skills, and new ways to enjoy physical activity.

Now, I want to talk to you about what’s in the tool kit. We took the messages that were in the video-conference and put them in a toolkit. This toolkit is being rolled out in our Southwest Region States this month. One of the key features of the toolkit is flip charts. In addition, there are also six PowerPoint presentations for training staff. We have participant focus materials and staff focus materials. The presentations come in the staff binder which has the PowerPoint with the presenter’s notes on it. It also has the CDs with all of the PowerPoint presentations and all of the print materials. If more materials are needed, the information can be taken to a printer for printing. Also, video clips from the actual video-conference are incorporated into the PowerPoint presentations.

## Tools for Helping Participants

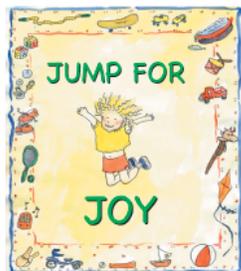


### Six Staff Training Modules

1. **Healthy Weight: From Research to Practice**
2. **Myths and Realities**
3. **Healthy Feeding for Healthy Weight**
4. **Becoming a Person of Influence**
5. **Physical Activity is for Everybody**
6. **TV Time: Helping WIC Families Make Better Choices**

Texas WIC developed a children’s book to go along with it which is targeted to preschool children. It talks about physical activity and nutrition throughout the book. It’s called “Jump for Joy,” and they produced it for 12 cents a copy. It’s a very cost-effective way to get your nutrition messages to the children.

### Children’s Nutrition Book



There’s also a companion poster for clinic sites that was designed to reinforce the messages that are in the participant materials.



We’re also doing another poster for Outreach that’s not out yet. It’s for other sites such as Food Stamp sites, Head Start, schools, and others that interface with children and families. One tool for helping participants is the flip chart.

There are the six training modules in the staff training “Healthy Weight from Research to Practice.” That first module is probably the most important one of all the modules; that’s why it is the first one. This would be your first step in training your staff to get them onboard with the messages. It shows them how research backs up what is in the materials for the participants and the staff.

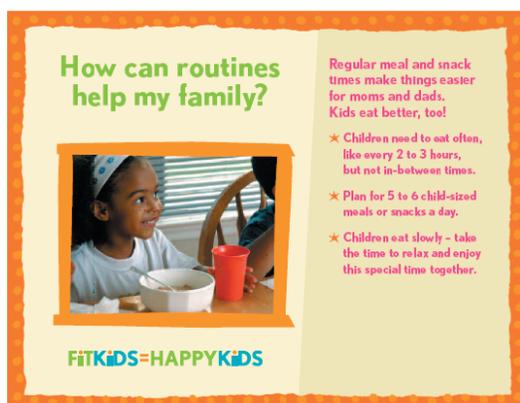
Then, we go into the “Myths and Realities of Obesity Prevention,” and “Healthy Feeding for Healthy Weight.” “Healthy Feeding for Healthy Weight” will be in your participant modules as well. The fourth one is “Becoming a Person of Influence.” Everyone would benefit from looking at that information in there; it includes some valuable information on how to do training. “Physical Activity is for Everybody,” “TV Time, Helping with Families to Make Better Choices,” and the poster I showed you are included.

Now, I want to talk about what’s actually in the participants’ modules; these focus on families, feeding relationships, and how you’re going to help the family. One of the key features of the participant materials, is the front side of the flipchart, what the participant would see. The flipcharts come in two sizes. The larger one would be, for example, for doing a classroom education. Many of our WIC clinics do one-on-one counseling in which they provide nutrition education to one client at a time. So, we developed it into a smaller table-size flipchart. Each page includes a separate lesson. One of the things the research shows is that it’s hard for participants to handle too many messages at one time. So, it is important to focus on one or two messages at a time at one visit, because they will only respond to so much information.

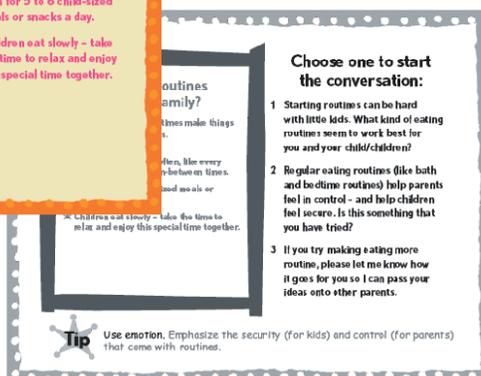
The staff training has a good video clip of a nutritionist doing something that you probably don’t want them to do—handing them pamphlet after pamphlet after pamphlet and addressing every nutrition need you think they have because you’re afraid you’re not going to ever see them again and you’ve got to tell them everything you know about nutrition in 5 minutes.

The back side also has what’s on the front and it also has what we call “conversation starters.” These are open-ended statements or questions that you can pose to your participants to start a conversation about that topic. This works on a one-on-one basis and in a facilitated group nutrition education setting. We talked about becoming a person of influence—persuasion tips are included. So this is what your educator sees right here, this is what they’re working from. Your participants are working from this side. You’re doing two different things. It’s like a cheat sheet for them.

FLIP CHART – FRONT



FLIP CHART – BACK



Snacks are a popular topic. Participants often ask, “What are the best snacks?” “Which is the best milk?” starts out with breastfeeding. “What are the best drinks” focuses on water and milk with every meal and snack, and to avoid sweetened drinks.

Serving size--somebody looked at this today and said “That’s not very welcoming,” they didn’t like that image. They thought it was too cold and sterile. I said then use that to your advantage and ask your participant how to make that more welcoming. How did they react to that? That’s a good open-ended question to get a conversation about serving sizes started.

Which is the best cup for my child? How many have seen the white grape juice commercial where they have the two-quart glasses that are being filled up with white grape juice. I just go crazy when I see that commercial. “How to help your kids”--this focuses on picky eaters. How do I get my child to try new foods? Then, there are the fruits and veggies. What about food fries? That’s a hot topic with participants as well. Then, there is family fun and fitness. It’s all about play. It’s not about work, it’s not about exercise. It’s about having fun with your family, having fun with your kid, and it’s about play, about healthy TV time choices.

To recap this, it’s focused on the family and positive messaging. It’s focused on sharing regular meals and snacks, making family time mealtime special, enjoying delicious rainbow fruits and veggies, drinking milk and water as opposed to sweetened drinks at meal time, and playing together inside or outside every day. One of the things that we did on the exercise session of the video-teleconference was focus not only on outdoor activities but also on indoor activities, and turning off the TV and reading.

It’s being rolled out in our region this week. The print materials are hopefully getting to the States this week. Some of our States have already done some training. They received

advanced copies of the manuals. They're just waiting for the materials to get there so they can go begin to work with participants.

We have an evaluation being done of this project, and that will start probably at the end of September. They will go to some of the clinic sites to see how participants react to the information. The staff that have been trained have loved it and can't wait to get more of the materials.

We're going to put this information on WIC Works, probably by the end of October. You will be able to download the materials, take them to a printer, and have the materials printed. Look for the materials on the WIC Works website at: <http://www.nal.usda.gov/wicworks/index.html>.

### **Eat Better, Eat Together**

**Sue Nicholson Butkus, PhD, RD, Extension Nutrition Specialist, Washington State University, Cooperative Extension, Puyallup, WA**

I will be talking about one of our fun projects, "Eat Better, Eat Together.", a project to promote family meals. It is a product of the Nutrition Education Network of Washington, a network organized to promote consistent messages. While we do have materials, and I'll be telling you about those, it was up to everyone to contribute and be a part of it. I want to particularly note a special thanks to Cathy Franklin, of Washington WIC Program, and Martha Marina, who is now with Washington State Dairy Council, for their enthusiastic and continued support of the project. And, thanks particularly to WIC, which picked up the message and further developed the project.

I will talk about the formative research that led to "Eat Better, Eat Together" because it shaped how we developed the project. I want to talk about the benefits of eating together, both nutritional and psychosocial. But, I'm going to talk about them in reverse, the psychosocial first, then the nutritional benefits and, lastly, our resources.

When we started this project, we surveyed professionals and they were very concerned about the decline in family meals. We did focus groups with families receiving food stamps and asked about family meals and we reviewed the literature for the research. There was no research—nothing. All of the research on the positive aspects of family eating has really come out in the last few years.

We conducted four focus groups: two were with parents of elementary school children; two were with parents of teenagers. All the participants were responsible for food in a family.

The first thing that the participants told us, and it was shocking how consistent it was among all the groups, was that "We have 2 weeks of good meals; and 2 weeks that are difficult."

All of the groups said the same thing, almost verbatim, like they were reading a script. Then they said that they ate better when they ate together. Our project was born! “Eat Better; Eat Together.” The title of it came right out of our focus groups.

They families told us about their survival tools. Number one was the freezer, and again, it was just like they were reading a script. Everybody said “We have a freezer and that really helps us” and the people who didn’t have freezers talked about how difficult it was. Having a small kitchen garden was also a very important survival tool that they told us about. Our focus groups were done in the fall and people were still harvesting food from the gardens. I’m not sure if we would hear about kitchen gardens if we did this in the late winter or spring. We have conducted another study that confirmed the freezer issue, but not the kitchen gardens.

We also looked at our formative data to see what the obstacles were to eating together. The very first thing—and this is not surprising, it goes across all groups—was that “we’re too busy.” What was interesting about these focus groups, was that many of them were “too busy” because they were working two or three jobs. Frequently, they had service sector jobs that interfered with family meal times. For instance, they were pizza delivery people or fast food workers, service jobs that meant that they were frequently at work during traditional meal times. Some of these families told us that they were eating together late at night. They were really committed to having meal times together and that meant at oddball times.

They also were very concerned about keeping children involved in school activities. So, between balancing jobs, sometimes balancing school for themselves, they were also balancing the children’s schedules, and that left them with very little time to shop and cook. Then, there were all the other standard problems: “We don’t all like the same foods.” “Sometimes, we get in big arguments.” “The kids don’t get along.” “It’s noisy because of electronic distractions—not only the TV, but cell phones, computer games, all of the kinds of electronic things that you get into.” There were issues in which it was a power struggle where some family members simply would not join in a family activity.

Our focus groups were conducted by a research firm. When you do formal market research, you may be able to observe the focus group from behind a one-way mirror. Although it was not really an obstacle, the observers noted that many of the parents sounded like they felt powerless. They would say things like, “I don’t want to interfere with my kid, he or she is playing, and I can’t tell him to come in and have dinner—that would interfere with them having fun.” So, when we developed our materials, we did do a great deal of explaining that it’s a parent’s responsibility to provide meals and it’s a child’s responsibility to eat. We did a lot of teaching about structuring meals, parental responsibility, and that they were the child’s first teacher.

Before I tell you about anything else, I need to say that when you talk about family meals, one size doesn’t always fit all. Family meals are really sensitive issues. You’re dealing with family interaction. It’s a very personal thing and how people eat frequently is culturally

determined. When we started, people would say, “Why are you doing family meals? Not everybody’s a family.” We actually defined a family meal as one or more adults and children eating together, whether it was an adult that went to a school and ate with a kid with a school lunch or at home. Families come in all different kinds, sizes, shapes, and styles. Family meal styles are culturally determined. While we encourage families to talk to each other around a meal, one of the things that was pointed out to us is that if we were in Alaska, some of the native people believe that eating is a sacred time and you don’t talk. So, you have to think about it. Who eats with whom is very culturally determined. While our materials were developed for the largest group in Washington, I always felt that we needed to be very careful as we went out and used the materials.

The issue of what do we mean by “together” came up when we had a call one day—and this was typical—asking “Am I eating together with my child when my child’s in the kitchen and I’m in the other room ironing, but we’re doing it at the same time?” People didn’t understand the idea of “together.”

Now for a little bit of background on family meals. Everybody likes to talk about how family meals are disappearing. They’re not really disappearing. Even when we did our early research, we found that, on average, three to five meals per week were eaten together. There’s a very definite decline as children get older. If you survey families with preschool children, you find that 7 days a week they’re eating together at least one meal a day. As you get to high school, it may be just a few meals a week. There is a group, 10 to 20 percent, who never eat meals together.

The most important benefit to family meals is communication. When you put children into a family setting, where they have not had family meals before, the children talk about how important it is to them to be able to talk with the adults/parents. When children are eating together, they exhibit fewer risky behaviors, fewer problems in school, less drugs, and better school performance.

One of the early studies was conducted by CASA (Center for Addiction and Substance Abuse). It showed a direct relationship between kids who are better adjusted and the number of meals they ate with their families. CASA teens, who had dinner with their families two nights a week or less, were at double the risk of substance abuse as those who ate dinner with their family more often. Between two and five to seven meals a week, there was a dramatic decrease in the use of cigarettes, alcohol, and marijuana, and increase in good grades. CASA Family Day is September 26<sup>th</sup>. We supported the family day with CASA for a while. They are heavily underwritten by Coca Cola and now General Foods. Two years ago, CASA promoted family meals and they had a lovely family sitting around a dinner table with a large bottle of Coca Cola in the center of the table. We were telling people to moderate their sweetened beverage intake. It was a big conflict for us.

If you eat together as a family, are meals more nutritious? Yes. The earliest study, in 2002, reported more fruits and vegetables, less soda, higher intakes of calcium, fiber, and all the nutrients. What was most interesting about this study was that it carried over to eating out. The kids were more apt to eat nutritiously, not only when they ate at home, but also when they went out to fast food places or other places. Teens who ate meals with a parent ate more fruits, vegetables, dairy foods, and were less likely to skip breakfast. The same thing was found in the United Kingdom.

One of the advantages of eating with children is that it allows parents to be role models. We really push the fact that parents are role models. In terms of family meals at home and obesity prevention, the relationship is not clear; we're seeing conflicting results. But, overall, it appears that family meals do reduce the rate of obesity. And, of course, there are benefits of cost. Families can save money when they eat together.

Our basic advice is to slow down and make the meal last 15 minutes or more. Make healthy family meals a priority. Turn the TV off. The TV is not a family member. Two-thirds of people, families, have the TV on and it's mostly for background. We recommend that the families have a positive conversation during mealtimes and we even give out conversation cards.

Let me take just one second to tell you about TV. We were planning a TV campaign for October 2001. You know what happened--9-11-2001? It wiped out our news coverage. Then, we were set to go out with a TV campaign in the fall of 2002. We had a wonderful success story. A woman was going to be interviewed for a TV blurb. The TV cameras went out and the first thing she said was, "Well, what's really important about eating together and getting your life turned around through family meals is to turn the TV off." You know what happened to our TV spots? They were shut down. So, you've got to think about where you're going to send the message.

We did a direct mail campaign to provide some guidance on low-cost family meals. There was one recipe in each one of the flyers we provided and 60 percent of the people used the recipes, so we know the flyers were read. We did not see a big change in family meals, but people were grateful for the information.

We have a downloadable Eat Better; Eat Together Tool Kit at <http://nutrition.wsu.edu/>. All of the materials are there.

I wish you well in promoting family meals and hope that you have a good time with your family and in helping others enjoy family meals.

## **We Can! Prevent Childhood Obesity: Research Strategies and Community Outreach**

**Eva Obarzanek, PhD, MPH, RD, Research Nutritionist and Deputy Leader, Behavioral Medicine and Prevention Scientific Research Group, Division of Epidemiology and Clinical Applications, National Heart, Lung, and Blood Institute, Bethesda, MD**

**Karen A. Donato, SM, RD, Coordinator, National Heart, Lung, and Blood Institute Obesity Education Initiative, National Heart, Lung, and Blood Institute, Bethesda, MD**

**DR. OBARZANEK:** From the National Institutes of Health (NIH), Karen Donato and I will be talking about a family-oriented behavioral nutrition research project to promote a heart healthy diet in children. Then, Karen will talk about a family and community outreach program that was developed by the National Heart, Lung, and Blood Institute (NHLBI) and built on evidence-based research. There is a lot of emphasis now on developing programs based on research that showed that the intervention approaches were effective.

I'm going to talk about the research program called the Dietary Intervention Study in Children (DISC) which was conducted between 1986 and 1996. The purpose of that study was to test the efficacy and safety of a diet that was reduced in saturated fat, total fat, and dietary cholesterol in children who had high levels of LDL cholesterol. The children were 7 to 10 years old at baseline. A total of 663 children were entered into the study, and we followed them for an average of 7 years. This trial is one of the longest intervention studies in children ever conducted in the U.S.

### **Dietary Intervention Study in Children (DISC): 1986-1996**

**Tested efficacy and safety of a diet reduced in saturated fat, total fat, and cholesterol in children with elevated LDL-cholesterol**

- 663 children, age 7-10 years at baseline
- Followed for average of 7 years
- Six field centers, coordinating center
- Sponsored by NHLBI

DISC was a dietary intervention program which had nutrient recommendations. The trial was planned around 1985-1986, before the National Cholesterol Education Program had recommendations for children. It turned out that the DISC recommendations were pretty

close to what later became the Step 2 diet of the National Cholesterol Education Program. The DISC nutrient goals were: not to exceed 28 percent of calories from total fat; saturated fat, less than 8 percent; and dietary cholesterol not to exceed 150 milligrams per day.

Nutrient Recommendations	% Total Calories
Protein	14
Total Fat	28
Saturated fatty acids	< 8
Polyunsaturated fatty acids	9
Monounsaturated fatty acids	11
Carbohydrates	58
Cholesterol	< 75 mg/1000 kcal, not to exceed 150 mg/d
Encourage water-soluble fiber	

But, of course, to teach the kids and the families how to follow a diet with these nutrient levels, we had to put the recommendations in terms of foods. Back at that time, in the '80s, there was very little research going on with food groups. So, the interventionists came up with eight food groups. They had "Go" versions of those food groups and "Whoa" versions. The "Go" versions were lower in total fat, lower in saturated fat, and lower in cholesterol. The "Whoa" versions were higher in total fat, saturated fat, and cholesterol. The idea was to promote the "Go" versions and to reduce or eliminate the "Whoa" versions. The recommended number of servings per day was commensurate with children's caloric intake.

The intervention tool for the children and their families was the "DISC Go! Guide," which was a wheel. It has eight wedges and each wedge had a food group. On the outer side of the wheel were the "Whoa" versions of the food, and on the inside were the "Go" versions. The number of servings that were recommended for each food group for the children were also shown on the Guide.

Food Groups (Serving sizes)	Recommended # Servings/day
GO Meats/Fish/Poultry (svg=1 oz.)	4-7 oz
GO Dairy (svg=1 cup, 8 fl oz; 1 oz cheese)	3-4
GO Bread/Grains (svg=1 sl. bread; 1 oz cereal)	6-12
GO Vegetables (svg=1/2 cup)	2-5
GO Fruits (svg=1 medium piece, 1/2 cup)	2-5
GO Snacks (defined in "DISC Dictionary")	2-3
GO Desserts (svg= 1-2 avg. size cookies, 1/2 cup sherbet/ice milk, pudding)	1-2
GO Fats (svg=1 tsp. margarine, oil, mayonnaise, regular salad dressing; 1 tbsp. reduced calorie)	2-10

Van Horn, L. et al. Pediatrics 2005; 115:1723-1733.

The intervention included both the parents and the child. At the beginning of the session the parents and children were together. Then there were separate activities for the parents and separate activities for the children. Finally, at the end, they came together again.

Three 24-hour recalls were obtained at baseline and then at years one, three, five, and “the last visit.” The intervention was originally slated for 3 years and then it was extended for an average of another 4 years.

The intervention group significantly reduced dietary fat intake after 1 year, and fat intake stayed low throughout the entire 7 years. For usual care group, fat intake remained high and did not change much up through year three. After year three, the usual care group began reducing their dietary fat intake, following the secular trend. Nevertheless, the difference in dietary fat intake between the intervention and usual care group remained significant throughout the whole 7 years. Saturated fat intake followed the same pattern. Dietary cholesterol intake followed a slightly different pattern. The intervention group reduced dietary cholesterol, but, at the last visit, their cholesterol intake increased. So, at the last visit, dietary cholesterol intake was not different between the intervention and usual care group

The blood cholesterol levels over those 7 years showed the typical pattern where LDL-cholesterol decreases naturally during adolescence. However, LDL cholesterol decreased more in the intervention group than in the usual care group. This difference was significant at year one and year three. Thereafter, the difference between the two groups started narrowing. Although the trend was still there, the difference in LDL-cholesterol was no longer statistically significant between the intervention and usual care group at year five and at the last visit.

At baseline, the individual food groups and the number of servings per day were the same for the intervention and usual care group. Note that fruit and vegetable intake was very low, about two and a half servings a day, both groups, at baseline. Note also that although pizza was not one of the original eight food groups, it was such a popular food, for these analyses that we created a new food group called pizza. We also combined three food groups that are popular with children and form an important part of their diet – snack foods, desserts, pizza – into one food group. We found that a third of the children’s daily caloric intake consisted of snack foods, desserts, and pizza.

At 3 years, we see that the fruits and vegetables food groups still remain very low, at about two and a half servings a day. The combined snack foods, dessert, and pizza food group still formed about a third of the caloric intake of the children, but the intervention group had a little lower intake of these foods than the usual care group.

### Intake of Food Groups at 3 Years

FOOD GROUPS: TOTAL	3 YEARS					
	Intervention			Usual Care		
	svg/day	% kcal <sup>1</sup>	% fat <sup>2</sup>	svg/day	% kcal <sup>1</sup>	% fat <sup>2</sup>
Dairy	2.1	12.6	5.1	2.1	11.8	6.3
Meat/Fish/Poultry	3.5	17.1	17.5	3.9	17.5	19.8
Bread & Grains	4.6	25.6	18.1	4.6	23.6	19.7
Vegetables	1.1	4.9	1.9	1.3	5.8	2.5
Fats & Oils	1.4	3.3	3.8	1.4	3.3	4.0
Fruit	1.4	6.6	0.2	1.3	5.6	0.2
Snack Foods	3.9	19.9	4.3	4.4	20.8	5.2
Desserts	1.0	7.5	2.3	1.1	8.5	3.0
Pizza	1.2	13.0	4.2	1.2	12.5	4.3
Snacks/Dessert/Pizza	5.2	31.8	8.1	5.9	34.5	10.0

<sup>1</sup> Calories from food group as a percentage of total kcal. Van Horn, L. Pediatrics 2005;  
<sup>2</sup> Fat calories from food group as a percentage of total kcal. 115:1723-1733.

At baseline, the intervention and usual care groups had similar number of servings and calories per day of “Go” foods and “Whoa” foods. But at year three, the intervention group increased their “Go” foods, whereas the usual care group did not change their “Go” food intake very much. The intervention group decreased their intake of “Whoa” foods, whereas the usual care did not. So, the intervention group made dietary changes in the appropriate direction.

At 3 years, the intervention group significantly increased their intakes of “Go” versions of dairy products, desserts, fats and oil compared to the usual care group. There was a trend for increased “Go” versions of meat, fish, and poultry. Conversely, the intervention group decreased the “Whoa” versions of breads and grains; dairy; fats and oils; meat, fish, poultry; snack foods; and vegetables, compared with the usual care group.

### Intake of Go and Whoa Foods

	Intervention			Usual Care		
	Svg/day	% Kcal <sup>1</sup>	% Fat <sup>2</sup>	Svg/day	% Kcal <sup>1</sup>	% Fat <sup>2</sup>
<b>BASELINE</b>						
Go Foods	11.5	57.0	12.4	11.5	57.1	13.1
Whoa Foods	7.8	43.0	21.3	7.5	42.9	21.2
<b>YEAR 3</b>						
Go Foods	13.4	67.4	13.7	11.9	56.8	12.8
Whoa Foods	5.7	32.8	15.4	8.0	43.2	20.7

<sup>1</sup> Calories from food group as a percentage of total Kcal  
<sup>2</sup> Fat calories from food group as a percentage of total Kcal

We also wanted to see whether any of these changes in food group servings were related to cardiovascular risk factors. We found that three food groups were related to BMI, body mass index, and LDL cholesterol, all in the expected direction. Both boys and girls who ate a lot of

dairy products had lower BMI. All the remaining associations were significant for boys only. Boys who ate “Go” versions of breads and grains had lower BMI; however, boys who ate a lot of desserts, snack foods, and pizza had increased BMI and increased LDL cholesterol levels.

In summary, after 3 years, we found that, compared to the usual care group, the intervention group ate more of their total calories from “Go” foods and fewer from “Whoa” foods. Overall, the intervention group ate fewer servings of snacks, desserts, and pizza than the usual care group, 5.2 versus 5.9 servings per day. We found that children in both groups ate approximately one-third of their calories from the snacks, desserts, and pizza food group, and they ate fewer than recommended servings of fruits and vegetables. We found significant relationships between BMI and LDL in the expected directions in three food groups.

We see from DISC that children can adopt healthy diets by making better choices. They didn’t eliminate any particular food group; they just changed the versions that they were eating. The DISC data showed that the dietary changes can have favorable effects on LDL cholesterol and BMI. These analyses can help point out targets for intervention. The first target is to increase intake of fruits and vegetables in children. Another target is to focus on snacks, desserts, and pizza—a third of the calories are consumed from these foods. A feasible approach is to get children to eat the healthy versions of those types of food, to use as snacks fruits and vegetables, non-fat dairy foods, and whole grains.

However, families need tools to make these positive lifestyle changes and that’s where the **We Can!** Program begins. Karen will talk about **We Can!**

**MS. DONATO:** **We Can!**, which stands for Ways to Enhance Children’s Activity and Nutrition, is a national education program from the National Institutes of Health. Its goal is to provide parents and primary caregivers with information about healthy eating, increasing physical activity, and decreasing screen time in children ages 8 to 13 in order to prevent overweight and obesity.

Before launching **We Can!** in June 2005, a number of activities took place. They include the following:

- ◆ A Strategy Development Workshop was held in February. It included 70 stakeholders with representatives from Federal agencies such as USDA, CDC, and FDA, as well as representatives from community and health care organizations. These groups advised us on how to best meet the needs of parents and caregivers as well as communities in order to help prevent childhood obesity. The numerous recommendations are provided in the final report entitled *Healthy Weight Initiative Strategy Development Workshop*, which is posted on the NHLBI **We Can!** website at <http://wecan.nhlbi.nih.gov>.

- ◆ A **We Can!** Strategic Plan was developed that took into account the existing science base on strategies, tools, and models to prevent childhood obesity. The September release of the Institute of Medicine’s Report on Preventing Childhood Obesity which compiled all of the existing evidence helped to confirm our strategies.
- ◆ An environmental scan was developed that considered other programs going on at the Federal level related to childhood obesity. Approximately 50 programs were examined and there appeared to be a lack of programs that targeted parents or primary caregivers of children. NHLBI staff also spoke to community leaders involved in the “Hearts N’ Parks” program that was conducted in 50 communities in 10 States where they have been dealing with this issue at the park and recreation level.

What makes **We Can!** unique? First, **We Can!** is unique because it is a collaboration of four Institutes at NIH who have come together to promote the program; they include in addition to the NHLBI, the National Institute of Diabetes & Digestive & Kidney Diseases (NIDDK), National Institute of Child Health and Human Development (NICHD), and the National Cancer Institute (NCI). These four Institutes have come together under the umbrella of **We Can!** to bring communities, parents, and providers important resources they need.

When we started planning this obesity prevention program in 2003, we found that there was a void of information on the issue for parents. So, our primary targets are parents and primary caregivers as well as children ages 8 to 13. The current prevalence of overweight in children is about 16 percent, equal to approximately 9 million children. A lot has to happen to help prevent overweight and obesity which can result in dire health consequences that occur in these kids as they get older and reach adulthood.

The behavioral objectives for **We Can!** for youth are based on the science, and include an emphasis on choosing fruits and vegetables; limiting intake of high-fat, energy-dense foods that are low in nutrients; choosing foods of moderate portion size; substituting water, fat-free milk, or low-fat milk for sweetened beverages; increasing physical activity, up to 60 minutes a day; as well limiting screen time to no more than 2 hours a day. We know from Stanford University studies that limiting screen time to no more than 2 hours a day can help decrease body mass index.

## Behavioral Objectives

### Youth Ages 8-13

- Choose a sufficient amount of a variety of fruits and vegetables per day.
- Limit intake of high-fat foods and energy-dense foods that are low in nutrients.
- Control portion sizes of foods consumed.
- Substitute water, fat-free milk, or low-fat milk for sweetened beverages.
- Engage in at least 60 minutes of moderate physical activity on most, preferably all, days of the week.
- Reduce sedentary activity by limiting screen time to no more than 2 hours per day.

September 13, 2005

### Parents / Primary Caregivers

- Increase the availability and accessibility of healthy foods in the home.
- Limit the availability and accessibility of sweetened beverages and high-fat, high-density/low nutrient value foods in the home.
- Control portion sizes of foods consumed.
- Support and enable family physical activity.
- Support and enable reduced screen time.

The behavioral objectives for the parents mirror those for the youth, but they deal with accessibility, availability, and supporting and enabling the healthier behaviors. The materials for parents provide strategies and tactics to help them encourage these kinds of behaviors in their families.

The four program elements of **We Can!** include: resources and channels, community outreach, partnerships, and national media.



### *We Can!* Program Elements

- Program Resources and Channels
- Community Outreach
- Partnerships
- National Media and Consumer Outreach

September 13, 2005

In terms of resources and channels, materials from NHLBI, NICHD, NIDDK, and NCI are all available under this umbrella of **We Can!** as long as they are consistent with the basic tenets of **We Can!**.



Also, specific materials that were developed for **We Can!** include:

- ◆ The “**We Can!** Energize Our Community: Toolkit for Action,” that includes a curriculum for parents. There are six lessons on how to engage parents to talk about the whole issue of energy balance—this topic is new to parents. The toolkit also provides communities with action steps on how to get community events underway.

- ◆ The “**We Can!** Families Finding the Balance: Parent Handbook” explains the concept of energy balance and includes examples of “Go,” “Slow,” and “Whoa” foods. The “Slow” foods are the foods that you can have sometimes but not as frequently as “Go” foods. The “Whoa” foods are those that should be avoided or infrequently eaten. The handbook was focus group tested and we found that the tips for nutritional habits and the tips for having fun to play with children were very acceptable to parents. The handbook is available both in English and in Spanish.
- ◆ The **We Can!** poster, “Who can make it happen? **We Can!** ALL PARENTS CAN” can be used at community sites, schools, and after-school settings. It deals with the issues of lowering fat, increasing physical activity, and decreasing screen time.
- ◆ The **We Can!** wristbands for youth and adults are also popular items particularly with the children. They can feel empowered and show that they are part of an effort that’s coming together around this issue of childhood obesity without ever mentioning the word obesity.

Three youth curricula are also being promoted to communities:

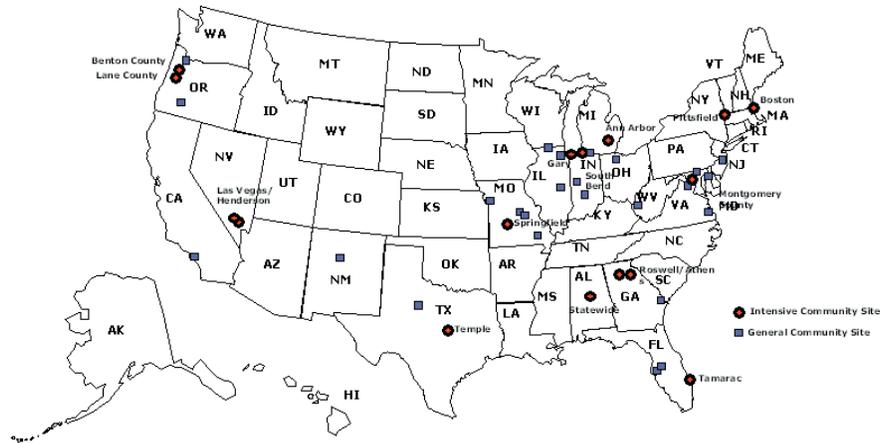
- ◆ CATCH Kids Club,
- ◆ SMART—Student Media Awareness to Reduce Television, and
- ◆ Media Smart Youth (MSY): Eat, Think and Be Active.

These curricula were tested. The first two curricula are based on in-depth clinical trials. The CATCH Kids Club is based on a very large clinical trial that NHLBI conducted in schools. It has now been adapted for the after-school setting and is for children in grades K to 5. SMART has been used in Dr. Tom Robinson’s studies on the influence of reducing screen time on BMI in children. Media Smart Youth was developed by the National Institute of Child Health and Human Development and was tested in community settings. This curriculum can be used in a community to teach children to be more aware of how they’re being approached by the media. It ends with the Big Production which can be a PSA for radio, TV, a print ad, etc. The children are encouraged to engage local media. This curriculum has already been used by Black Entertainment Television Foundation at their summer camp.

Most of materials are available or promoted on the **We Can!** website at <http://wecan.nhlbi.nih.gov>.

Currently, we have 43 communities that are implementing **We Can!** in 22 States and Canada. We’re asking them to implement the youth and parents programs and conduct community events. This map shows the various **We Can!** locations.

## Map of Communities Selected to Date



September 13, 2005

We have two levels of communities—intensive community sites and general community sites. Our intensive sites vary between parks and recreation to a major coalition that’s being held in Lane County, Oregon. Another intensive site includes a statewide program in Alabama. The University of Michigan, and the Anne Arbor’s Healthy School Project, is an intensive site. The **We Can!** sites include a variety of locations within the different communities. The intensive sites have been asked to implement at least three youth programs, three parents’ programs, and three community events in the course of a year.

So far, the sites are exceeding our expectations. Based on the numbers, there are 70 programs related to CATCH, 54 for MSY, and 6 for SMART. The sites are receiving no financial dollars from us; they have volunteered to do this and we are providing them with technical assistance and training. For the most part, the sites were very interested in the topic and planned to do something anyway. They were very pleased to get the information and the materials that we are providing.

In order to encourage as many communities as possible to join **We Can!**, the requirements to be a general site are as simple as possible. Agree to do one program for kids, one for parents, and one community event using the **We Can!** materials, complete a summary form, and let us know what you’ve done. All of the materials and forms are available on the **We Can!** website. We hope that people can take advantage of that and join this effort.

We hope to encourage a lot of partners who are willing to work with us at the local level as well as at the national level. **We Can!** is bringing in partners nationally and at the community level where all of those community sites are located. Only through partners can we really get these messages out to communities.

Currently we have two levels of partners; major partners are those organizations that can make a major commitment to use the **We Can!** messages with their constituents, link to the **We Can!**, and allow us to go to their conferences and exhibit there. Since all organizations are not the same, we also have a level to help “supporting organizations” that just simply want to be a part of **We Can!** do the best they can to get it out to their members.

Currently, we have about 14 partners, including Action for Healthy Kids, American Academy of Family Physicians, American College of Sports Medicine, ADA, etc. We are working with the White House Initiative on Asian-Americans and Pacific Islanders. Black Entertainment Television and Univision are also partners. Our national and local media involves not only getting out some public service announcements, media kits and articles, but also through these media partners: Black Entertainment Television Foundation and Univision, which reaches Hispanic audiences.

**We Can!** is relatively new since it was launched on June 1<sup>st</sup> by Secretary Leavitt of HHS. He was joined at that time by Surgeon General Carmona, who also was a spokesperson for **We Can!** The NIH Director, Dr. Zerhouni, and the NHLBI Director, Dr. Nabel, were also involved in television and radio outreach. HHS issued a press release about **We Can!** at the same time that the DISC study results were published. It was a nice combination of the intervention study with the education effort.

Our national media coverage for the **We Can!** launch was very good since we had visibility in USA Today, Newsday, the CBS Early Show, and CNN. A recent mention was made in Better Homes and Gardens last month, which has a circulation of 7 million. The total audience impressions for **We Can!** are approximately 142 million. We continue to monitor its visibility not only at the national level but at the local level. We are working with our community sites to help them get the messages out to their avenues because they are the best people to do that, and we are also tracking print and online.

All the **We Can!** materials are online at <http://wecan.nhlbi.nih.gov> and they are available free to download; we encourage everyone to download them. If anyone working with children in communities would like to become a general community site, please look at the community form and sign up. We also have a toll-free number that people can call, 1-866-35-WECAN. People can get one copy of the parent handbook free of charge when they call that number. Thank you for your kind attention. With your help, **We Can!** prevent childhood obesity.