University of New Mexico **UNM Digital Repository**

Reports & Documents

Publications & Reports

6-2012

SNAP-Ed New Mexico Social Marketing Campaign Phase 1 Report

Sally M. Davis

Glenda Canaca

Jose Canaca

Patty Keane

Pamela Monaghan-Geernaert

See next page for additional authors

Follow this and additional works at: https://digitalrepository.unm.edu/prc-reports-documents



Part of the Pediatrics Commons

Recommended Citation

Davis, Sally M.; Glenda Canaca; Jose Canaca; Patty Keane; Pamela Monaghan-Geernaert; and Mary Hanrahan. "SNAP-Ed New Mexico Social Marketing Campaign Phase 1 Report." (2012). https://digitalrepository.unm.edu/prc-reports-documents/14

This Report is brought to you for free and open access by the Publications & Reports at UNM Digital Repository. It has been accepted for inclusion in Reports & Documents by an authorized administrator of UNM Digital Repository. For more information, please contact disc@unm.edu.

Authors Sally M. Davis, Glenda Canaca, Jose Canaca, Patty Keane, Pamela Monaghan-Geernaert, and Mary Hanrahan

SNAP-Ed New Mexico



Social Marketing Campaign Phase 1 Focus Groups Report June 2012

Suggested Citation:

Davis, S. M., Canaca, G., Canaca, J., Keane, P., Monaghan-Geernaert, P. and Hanrahan, M. SNAP-Ed New Mexico Social Marketing Campaign Phase 1 Focus Groups Report, Division of Prevention and Population Sciences, University of New Mexico, Albuquerque, NM. June 2012.

This report was developed by the University of New Mexico Prevention Research Center to share the findings and recommendations from focus groups conducted in rural and urban areas in New Mexico as part of the Supplemental Nutrition Assistance Program Education (SNAP-Ed) Social Marketing Campaign, commissioned by the State of New Mexico Human Services Department contract # GSA 11-630-9000-0005.

This publication can be downloaded at: http://hsc.unm.edu/som/prc/_pages/publications/guides.html.

University of New Mexico Prevention Research Center

Sally Davis, PhD Glenda Canaca, MD José Canaca, MD Patty Keane, MS, RD Pamela Monaghan-Geernaert, PhD Mary Hanrahan, BFA



TABLE OF CONTENTS:

Introduction	2
Background and Methods	3
Focus Group Participation	4
Data Analysis	5
Results:	
A. Parents of Preschool Children	6
B. Parents of Elementary School-Age Children	12
C. Children Ages 8-10	18
Discussion	21
Relation to the FNS Core Concepts for Nutrition Messages	24
Next Steps	25
References	26



Introduction

The Supplemental Nutrition Assistance Program (SNAP) of the United States Department of Agriculture (USDA) plays an essential role in the nutrition status of low-income families in the United States. Although it is not mandatory to provide nutrition education to SNAP recipients, USDA's Food and Nutrition Service (FNS) highly encourages each state's SNAP agency to educate SNAP participants (SNAP-Ed). The purpose of SNAP-Ed is to help SNAP eligible individuals to make healthy food choices consistent with the 2010 Dietary Guidelines for Americans, that fit within their limited budget. In New Mexico, SNAP and SNAP-Ed are administered by the State of New Mexico Human Services Department (HSD).

FNS guides states to choose the most effective nutrition education tools and strategies to meet the focus of SNAP-Ed. FNS encourages state plans to include "behaviorally focused, science-based nutrition education interventions, projects or social marketing campaigns" [1]. Social



Marketing is defined as a consumerfocused, research-based process to plan, implement and evaluate interventions that are designed to influence the voluntary behavior of a large number of people in the target audience [1].

The purpose of the SNAP-Ed New Mexico Social Marketing Campaign is to develop and evaluate culturally appropriate nutrition education intervention messages

in Spanish for parents and care-givers of preschool age children, parents of elementary school-age children, and children ages 8-10 years. In collaboration with HSD, the University of New Mexico Prevention Research Center (PRC) set out to develop and test messages to effectively motivate SNAP participants who do not currently meet U.S. Dietary Guidelines recommendations for consumption of fruits, vegetables, whole-grains and low-fat dairy to increase their intake of these foods. This is a three phase project. Phase one of the project was the planning phase and consisted of conducting focus groups with Spanish speaking SNAP eligible individuals to identify the concepts in which the messages for this specific population would be based. This formative research phase was carried out from January 2010 until June 2011.

Focus groups were conducted with a) parents of preschool children, b) parents of elementary school-age children, and c) children ages 8-10. The goal was to have SNAP-eligible, Spanish-speaking parents and children develop "slogans" and "messages" which would resonate with them and their neighbors and encourage families to make healthy food choices.

This report outlines the methods used for the focus groups; results from the focus groups with emergent themes and direct quotes from participants; discussion of findings and implications for SNAP-Ed; connections with the consumer-tested FNS Core Nutrition Messages; and next steps for phases two and three of the campaign.



Background and Methods

FNS has created a set of core nutrition messages for use with three groups participating in federal nutrition assistance programs: mothers of preschool-age children; mothers of elementary school-age children; and 8-10 year old children. These messages were developed as a result of a three-phase process by conducting focus groups with the target audiences. After holding focus groups in nine different cities in the U.S., with over 200 participants, 16 core messages were created, directed to each of the three groups. These messages reflect five core concepts tested in the focus groups: role modeling; cooking and eating together; division of feeding responsibility; availability and accessibility; and food preference, beliefs and asking behavior.

FNS programs are encouraged to integrate these messages into their nutrition education activities, however FNS also recognizes that the core nutrition messages developed and tested in focus groups with only English-speaking, urban-dwelling participants might not have the same impact if translated into another language, or delivered among another cultural backgrounds [2]. HSD further recognizes that these messages may not resonate with New Mexico's low-income, Spanish speaking population in rural or urban areas.

USDA's guidance in Maximizing the Message: *Helping Moms and Kids Make Healthier Food Choices* suggests that if messages are going to be used in another language or with other racial/ethnic groups, additional formative research should be conducted to ensure that



messages are relevant, understood, and motivating to the target audience [2]. In response to this guidance and the concerns of HSD, the PRC has begun to develop a culturally appropriate social marketing strategy and health education intervention in Spanish for parents, caregivers and children who are eligible for SNAP. The PRC adopted a focus group approach that was culturally attuned and could

gather reliable information for a Spanish speaking population. This research, including all instruments used, was approved by the Institutional Review Board (IRB) at the University of New Mexico.

Using the focus group toolkit developed by USDA as a foundation, the team modified the content to be culturally sensitive to the New Mexico population. Upon review of the USDA scripts, the focus group team from HSD and PRC had concerns that some of the introductory material may lead participants to feel judged, so these types of questions were minimized. Scripts were translated into Spanish and reviewed by native Spanish-speaking researchers for content and clarity. Focus group participants were asked to come up with new messages and were asked several questions to determine behavior and preferences.

The five overarching concepts of the sixteen FNS core nutrition messages were explored in the focus groups. For parents of preschool children, questions explored overall healthy eating; role modeling; picky eating; and patience in trying new foods. For parents of elementary school-

age children, questions explored overall healthy eating; meals and snacks provided at home; fruit, vegetable and dairy preferences and availability; and participant-generated messages around these concepts. For children aged 8-10, questions explored perceptions of healthy eating; dinner time environment at home; fruit, vegetable and dairy consumption; how to influence family members to eat healthfully; and typical foods they ask parents or caregivers to buy for them at the store.

Six formative focus groups were conducted to elicit responses from three unique population groups from urban and rural areas: a) parents of preschool children, b) parents of elementary school-age children, and c) children from 8 to 10 years old. Each focus group was then conducted twice, once in an urban setting and once in a rural setting, in the counties of



Bernalillo, Rio Arriba, and Doña Ana. The goal was to have parents and children generate potential slogans and messages which would resonate with them and their neighbors to encourage families to make healthy food choices.

Focus groups were designed to attract families to participate, and were conducted during the day, after school or in the evening to accommodate work and school schedules of

participants. Post cards were distributed to potential respondents. Lists of interested participants were created. All interested participants received several phone calls, to explain the purpose of the focus group and to ask for participation. They also received a phone call in the day(s) prior to the focus group to remind the participant of the event. Child care was provided at all focus group events by either PRC staff or by staff at the location (i.e. Head Start staff). Healthy snacks and water were available at each focus group.

Focus Group Participation

In this phase of the project there were a total of 59 participants (table 1); 18 children and 41 adults, 45 females and 14 males, all Hispanic with Spanish being their first language. Focus groups lasted an average of 90 minutes, with a range of 45 to 105 minutes. The shortest focus groups were with the school-age children. All focus groups were conducted in Spanish and were tape recorded.

Parents of Preschool Children

The PRC has a long-standing relationship with Head Start, therefore parents were recruited through the Head Start Program in Bernalillo and Rio Arriba counties. Twelve parents participated at the urban focus group and eight parents participated in the rural focus group. Focus groups lasted approximately 1.5 hours.

Parents of Elementary School-Age Children

Thirteen parents attended the urban focus group and eight attended the rural focus group, both of which were in Doña Ana County. Participants were recruited by PRC research staff



with collaboration of the administrative staff at both schools. The schools were recruited first by submitting a request for research to the specific county school district; once the PRC obtained IRB approval, the principals of the qualifying schools (those serving a majority of low income families), were presented with the project. All school boards work within stringent guidelines to protect their students. Proposals to conduct research with students are reviewed carefully and must be considered in the best interest of the children and at times that do not interrupt classes and teacher instruction. Many school principals were interested in the project, but found it challenging to fit us into their schools' busy schedules. Building relationships with the schools that participated required an enormous investment of time and perseverance. These relationships provide the foundation for this report and for future work.

Children Ages 8-10 Years

Focus groups with elementary school-age children were conducted in the same communities as the parents of elementary school-age children focus groups. Nine children attended the urban group and nine attended the rural group.

Table 1. Focus Group Participants

Target Audience	# of participants	# of females	# of males
Parents of preschool-age children: Urban	12	11	1
Parents of preschool-age children: Rural	8	7	1
Parents of elementary school-age children:	13	13	0
Urban			
Parents of elementary school age children:	8	8	0
Rural			
Children ages 8 – 10 years old: Urban	9	3	6
Children ages 8 – 10 years old: Rural	9	3	6

Data Analysis

Data was examined using qualitative research methods. Qualitative researchers stress the socially constructed nature of reality, the intimate relationship between the researcher and what is studied, and the situational constraints that shape inquiry [3]. Qualitative approaches have the advantage of allowing for more diversity in responses. The word qualitative implies an emphasis on process and meanings. Throughout analysis, the goal is to gain a deeper understanding of the responses to the focus group questions and to continually refine and interpret the results. The object of analyzing qualitative data is to determine the categories, relationships and assumptions that inform the respondents' view of the world in general, and of the topic in particular.

All focus groups were conducted in Spanish and were tape recorded. Transcripts of the focus groups were then developed and translated into English for analysis. English language focus group transcriptions were printed and reviewed. Each transcript was read three times: first to get a gestalt or overall feeling of the group; second, to determine the flow of the questions and responses; and third, to identify overarching themes.



Transcripts were uploaded into NVivo Qualitative Software program in order to organize the unstructured information. The software provides a workspace that enables the researcher to classify, sort and arrange information, as well as a template to analyze material, identify themes, glean insight and develop meaningful conclusions. This program does not

supplant the interpretive nature of coding but rather aims at enhancing the analyst's efficiency at data storage/retrieval and at applying the code to the data.

CODING

Once the transcripts were loaded into NVivo, text coding ensued. Line by line data was read. Rather than using preconceived categories, the data was read through to discover what themes emerged from the text. Qualitative analysis is built from the text up, not by forcing the data into an established system. The main idea of each sentence or paragraph was given a short phrase summarizing the concept. Each line of text was read and coded either by creating a code to summarize the main idea, or the text was coded into an existing identified code. No limits were put on the number of codes that could be created. Initially all codes were given the same "weight" or "value." No hierarchies of ideas or codes were established.

Once all text for each focus group was coded, the coding categories were reviewed. Data (sentences, paragraphs and thoughts of participants) under each code were evaluated on a) how closely they identified with the named code and b) how closely they identified with other data in the code. Data that seemed misaligned with the code or other data were flagged. These flagged data were then reviewed to see if they matched another coding category better or if a new code should be established. This iterative process occurred throughout the analysis phase and is parallel to "cleaning" the data in quantitative databases.

Results

A. PARENTS OF PRESCHOOL CHILDREN

Domains

Thirty two codes emerged from the data from parents of preschool children, which were then grouped into five main domains. The domains are:

- 1) Food
- 2) Parental Enthusiasm
- 3) Parental Anxiety
- 4) Strategies
- 5) Slogans



"Sea el espejo de sus hijos."

- 1) Food: This domain included eight subcategories:
 - a) Junk food
 - b) Eating out
 - c) Balanced meals
 - d) Cooking like school
 - e) Making fast food
 - f) Accessibility of healthy foods
 - g) Affordability of healthy foods.
 - h) Watch how children eat around others

The food domain focused on the food itself. Parents shared their feelings about preparing foods in ways that encourage children to eat healthy. They discussed how their preschool children were learning about food from the Head Start program and how the children were asking for food prepared similar to school meals. One parent commented "You don't have to be shy to ask the teachers or going yourself to the cafeteria." The children's interactions with others encouraged parents to watch how their children ate with other children at school and with family and friends (i.e. were they more adventurous about trying new food at school or with family?) Parents noted several times when their children or the children they were watching changed their eating behavior because of the group dynamic. One mother noted "When you take them to grandma's house, their auntie's, pay attention to what they eat, for example your mom gives them melon and you see that they eat, you give them as well."

Parents commented on the accessibility of healthy foods and their cost. Cost saving strategies were discussed, such as cooking big meals using fresh ingredients and then storing leftovers for later. Accessibility of "junk food" in the house and around others was a concern for parents, as was making healthy choices when eating out. Restricting junk food from children was a goal of the parents; however they often felt that their own desire for junk food interfered. For example one parent shared that "I don't want to buy that because even for me I don't like to have soda at home because even for me if it's there it's very tempting."

Parents also commented that they could make small changes when eating out to provide a healthy meal for their children or to recreate fast food options at home. When eating out, one parent explained "For example I change their option for apples or a salad, going to McDonald's does not necessarily mean... now they offer healthy foods, instead of the soda they offer orange juice or a cup of milk." Creating healthy "fast food" at home was also discussed. One parent noted, "Chinese food, it's a lot of vegetables, but they prepare it like not too healthy, because it has too much fat, because the vegetables are overcooked, so it is better if you say OK I will take some time to try to make this Chinese food myself here in my house. To cook it in a healthier way, not overcooked, not too fatty." Another parent made healthier pizza, "The other day my daughter said mom what if we put cucumber and green chile instead of putting too much pepperoni and meat? Another creative parent suggested making healthier hamburgers, "To cook the burger and put more lettuce, more tomato and say to them here you go. The meat at McDonald's for example is made with soy, give them natural meat [instead] and add carrots to the meat."

2) Parental Enthusiasm: This domain included ten subcategories:

- a) Children helpers
- b) Educating children

- c) Children shoppers
- d) Positive TV influences
- e) Meal time equals family time
- f) Making healthy food appealing
- g) Eating when hungry
- h) Planning healthy meals
- i) Modeling good behavior
- j) Games for eating healthy

This domain encompasses the resourcefulness of the parents in providing opportunities for healthier eating. In general, parents were very eager to provide healthy meals in creative ways. Most parents include the children in the cooking process as a way to engage them in healthy eating. Parents accomplish this by having children help cook or help grocery shop. Examples include one parent who said, "I also involve her, look we'll prepare the food you and I together, and she likes to shred the cheese, peel the cucumber or whatever, but something to involve her to make her eat it." Another parent uses the meal prep time for taste testing, "Because when you are preparing you can tell them, look the green pepper tastes different than the yellow one and the red as well, now we are going to cook them and you'll see they taste different."

Parents found that their children were helpful when grocery shopping. One parent commented, "When you go to the grocery store, children like to put the fruits or the vegetables in the cart. I have had that experience. 'I can help you put it in.'" Another parent encourages her children to pick out what they would like, "Going shopping and tell them, well what do you want? What do you want to try? Because at the end the food is for them."

In our focus groups, parents were overwhelmingly interested in educating their children about healthy food choices. A number of parents commented on the ways they taught their children. One parent noted that education needed to start early, "We have to give it to them starting when they are babies to develop that taste." Another parent commented on the role of siblings, "Educate from the oldest one to the little one, because the little ones want... their big brother is like another superhero, it is their hero."

Parents want to learn about healthy eating and seek out many resources. One parent stressed that, "As a parent you have to teach them, and as I said before I had to educate myself... if I have to talk with the person at the cafeteria I talk to her. Recently I got a letter for my child to make him eat healthy... I have a lot of papers... because I always try to be informed to know what they have to eat and to show them I am always reading. They ask me, what are you reading? I am reading how to give you healthy food." Another parent commented on the array of information available, "So you have to get the information as a parent, you have the responsibility to get informed and get the information from where? From anywhere, there is the internet, WIC, there are these programs you are offering, there are better programs so the information is everywhere and the children are very smart, they are little but they know what is best."

Mealtime is important for parents and half of the subcategories in the domain reflected family involvement with meals such as making meal time a time for the family; preparing healthy meals and appealing food; making games out of healthy eating; and most important to these families, modeling healthy behavior. One parent commented, "We sit to eat, that is our family time and dinner is perfect. So in that moment we know we will share, and we are going to talk, we are going to eat whatever we have." Parents also put great emphasis on presenting the food to



"We have to give it to them starting when they are babies to develop that taste."

make it appealing saying, "Present to them the dishes in a very innovative, colorful way, that they like it that it looks delicious," and "put them (healthy food) in a nice plate, and maybe with a little bit of salsa, lemon as she says, it would capture their attention." Other parents suggested, "Sometimes to put some cucumbers, a piece of cheese and one

carrot, like a happy face... look I finished my happy face and they eat it no problem." Or, "it is also the colors, like now we put broccoli and carrots to everything, because the color orange goes with the green pretty well and they look delicious."



Parents realized how their behavior influences their children and use it as an opportunity to model healthy eating. One parent stated. "Porque debemos ser primero un ejemplo para ellos" ("Because first, we have to be an example for them.") Another parent commented, "Lots of children get the same bad habit from what they see from their parents. If he eats it, I eat it as well." Parents realized their children

watch their behavior, "I hide to eat that because I don't want them to see me. How can I tell them to eat healthy if they see me eating that?" But parents also saw their children influencing their food choices, "Because as a matter of fact I used to drink a lot of soda and my oldest child used to tell me "You know what mom that hurts your stomach, you shouldn't be drinking that, would you like some water?" Working together as a family to eliminate poor habits and encourage healthier eating was important to all the families.

3) Parenting Anxiety: This domain included 11 subcategories:

- a) Struggles with healthy eating
- b) Lack of knowledge
- c) Pleasing multiple tastes
- d) Picky eating
- e) Overeating
- f) Bribe children
- g) Eat in moderation
- h) Die
- i) Language and cultural barriers
- i) Choices or not
- k) Force to eat or finish a meal

Parents also expressed their anxiety and frustration in getting their children to eat healthy. This domain gathers that frustration and explores what the parents said. Many struggled with getting their children to make healthy eating choices and to eat in moderation. Parents said, "I cook everything for them but I really struggle with both of them to eat." Other parents try to balance meals by "We will take a little plate, we put some fruits on it, we put a sandwich, we add a little bit of chips, eat it... maybe he will eat the chips but he also will try to eat the rest, to

offer him more healthy things and putting a little bit of the rest to let him say I can eat anything." Parents expressed concern when their children ate in excess. "They eat everything, they like fruits and vegetables, they like everything and they eat everything, I don't struggle for them to eat, but I am concerned about my girl who eats a lot." Some parents noticed their children just ate too much, "She eats everything, but in excess, and the oldest likes to eat and eat at anytime. She is watching TV or something and she goes and grabs whatever she can find."

Parents also struggle with picky eaters and trying to accommodate multiple taste preferences. A mother responded, "I prepare food and I give them everything I cook and he eats only what he wants and leaves everything else. Or "I don't like that," that is how he answers. But you haven't tried it... when he says that he has not tried that I say you have to try it. Sometimes just after seeing the food you say I don't like the color, the shape, whatever, but in order to know you have to try it and then you can say if you like it or not." Although parents reported being frustrated, they agreed it is important to continue offering healthy food, "Siempre es bueno seguir intentando porque tarde o temprano van a comérselo. Se lo va a comer ahora, o en una semana, o cuando sea mayor. Siempre es bueno ofrecerles," (It is always good to keep trying because sooner or later he will eat it. He will eat it now or in a week or when he is older. It is always good to offer them.) An approach used by one parent to accommodate multiple tastes is to make options in one meal, "I think that when you prepare something you have to give them two or three options, I'm not saying that you have to prepare three main dishes, for example if I cook fish I prepare salad that I know my son would like, if I make pasta that is what the little ones will eat because they don't like fish and everybody else eats fish, so there are three things that they can choose from."



Some parents limit choices for children, or negotiate punishments or rewards for eating healthier foods. One parent explained, "In our family we don't have that about I don't like it, we have this food and this is not a cafeteria, you have to eat it and if you don't eat there is nothing else." Enticing children to eat healthier foods often occurred, "What kid doesn't have a videogame? You say to him "Finish this and then you can play," if you don't do that you will

not play. So he will eat pretty fast to be able to play with his videogame. Or sometimes I tell him "You have X amount of time to eat it, if you don't eat it you are not going to do this, you will not go out." And I take her toys, you will not watch movies, you are not going to watch a show and "If you want to watch TV you have to eat the chicken and the fruit that I gave you. If you want to play outside you have to try this new vegetable." Parents sometimes used candy as a reward for trying or eating healthier foods, "I negotiate with the treats. If they don't want to try something because they don't like it or just because they don't want to, I tell them if you eat it I will give you a piece of chocolate."

Language and cultural barriers reported by parents included not knowing the names in English for certain fruits and vegetables and lack of exposure to fruits and vegetables not part of their cultural diet, however children help translate to bridge language and cultural gaps. A mom utilized her children's help when eating out, "And we go somewhere to eat and what is



this, because sometimes they pronounce things for me in English, and they tell me is this and that, try it, let's try it and we all try it." Other parents commented on their culture positively. "I have always liked vegetables and fruit, but here in the USA it's like I don't get satisfied, food doesn't taste, I don't know if it is too much pesticide, fertilizer, yeah

"I offer it to her I put it on her plate, try it, try it, try it, one day yes, the other day no and I keep offering them every day."

they look big, but nothing tastes good. The milk has a lot of hormones, the chicken... they make everything grow. And we Hispanics because of our roots or the place we come from, the farms where we used to live, maybe you used to eat beans, rice, you did not eat too much carbs there, and now the problem is that you have more access to that food and the fast food is less expensive and we are not trying to balance the food or we don't know how to balance it." Another parent commented on her nephew and his "American diet" saying that "The only thing he eats is bread, that American sandwich made with peanut butter and jelly and his juice."

- **4) Strategies:** This domain identified some of the main strategies parents employ to create healthy eating environments for their family. Strategies were grouped into four subcategories:
 - a) Repeated exposure
 - b) Disguise or hide the food
 - c) Add something to it
 - d) Prepare it different ways

Parents showed great patience in encouraging children to eat healthy. Many parents suggested repeated offerings of healthy food. "I offer it to her, I put it on her plate, try it, try it, try it, one day yes, the other day no and I keep offering them every day." Another parent said, "and then I try it 3 days later and it works for me, if after 3 days it doesn't work I try one week later, and like that little by little I introduce it to them." Convinced repeated exposure works, one parent responded, "Cada día pruebe, pruebe, pruebe y pruebe" (Every day try, try try and try.) Other parents find it helpful to disguise fruits and vegetables or combine them with other foods. Parent suggestions included, "What I do with the vegetables is I put them in the blender to make juice. I make popsicles with the fruit juice, or hide the vegetables, like give it to them in a way they don't see it, in a way they cannot taste it, or carrot cake, something like that, they should have fruits and vegetables but they have to taste good." One parent shared a story, "For example, in the morning you are going to make a smoothie, oh she doesn't like papaya, but if in the smoothie you add banana, diced papaya they will drink it and "yumm, this is delicious mom" later you offer them papaya and they say "I don't like it," but you drink it every day, the smoothie I give you has papaya. Haven't you noticed? That is why it tastes delicious." Another parent mentioned, "Lettuce for example, you rinse it, chop it and then you add a little bit of sugar and they eat it. Or I add a little bit of ranch (dressing)."

A strategy used by some parents includes preparing the food different ways such as, "If they don't eat them raw, cook them, or the cauliflower for example... giving it to them in different ways, you can steam and bread the cauliflower to make them try it in a different presentation or just cook it with ketchup or cheese."

- **5) Slogans:** Parents were asked to develop some slogans that would be useful for other families to encourage healthier eating. Samples of the slogans are listed below.
 - a) Siéntense juntos a la mesa para comer. (Sit together at the table to eat)
 - b) Tengan paciencia y ellos comerán. (Have patience and they will eat)



- c) Con perseverancia y paciencia todo se alcanza. (With perseverance and patience you can do anything)
- d) La perseverancia es un paso mas para la buena alimentación. (Perseverance is one step forward towards eating well)
- e) Si comes frutas y verduras estarás muy fuerte. (If you eat fruits and vegetables you will be strong)
- f) Si tienes una buena alimentación serás fuerte como un campeón. (If you eat well you will be strong like a champion)
- g) Sea el espejo de sus hijos. (Be the mirror to your children)
- h) Todo es bueno, los excesos son malos. (Everything is good, the excess is the bad thing)
- i) Comer con moderación. (Eat with moderation)
- j) Traiga mas comida saludable a la casa y menos comida chatarra. (Bring more healthy food to your house and less junk food)
- k) Alimente el cuerpo. (Nourish the body)
- Entre más comida saludable coma mejor para usted y tendrá más energía.
 (The more healthy food you have the better for you and you will have more energy)

B: Parents of Elementary School-Age Children

General comments

Parents of elementary school-age children in our focus groups indicated a strong desire to learn about proper nutrition. They were curious about serving sizes, percentage of fat in milk, and healthy eating tips. They reported encouraging their children to eat healthy, giving children access to healthy foods and encouraging healthy snacking.

Domains

Sixteen codes were developed and grouped into five domains. The domains are:

- 1) School meals and snacks
- 2) Education



"Cada día pruebe, pruebe, pruebe y pruebe."

- 3) Children's behavior
- 4) Parental persuasion
- 5) Slogans

The Role of Culture

Overarching each of these domains was the influence of the participant's culture over how meals are served. For example, families often have a large meal late in the afternoon or early in the evening, making afternoon snack time less salient to this population. Participants also acknowledged that they often serve different meals than their Anglo neighbors. One mother said, "We have not lost our traditions. We prepare tamales right. Thanksgiving day, I don't like turkey. I cook one in case someone wants it, but I prepare tamales, atole, pozole, menudo." Another parent commented on the difference in foods saying, "Well I don't criticize them, everyone has his own traditions, but people that were born here have parties with burgers, hot dogs and we cook a big soup and chicharrones."

The parents took pride in cooking traditional foods and throughout the focus group listed all the foods they cook. These included: tamales, buñuelos, champurrados, gorditas, enchiladas, chicharrones, atole, pozole, menudo, red chile, green chile, taquitos, flautas.

- 1) School Meals and Snacks: this domain included two subcategories:
 - a) After school program
 - b) School meals

The parents spoke about the influence of the school meal program given the length of time children are in school and the number of meals the school provides for their children. "They are here in the school most of the time. They have breakfast and lunch here." Parents also noted that school meals influence tastes and preferences in their children, but parents responded differently regarding whether their children like the meals served in school. One parent said, "Sometimes they don't like the food they serve here [at school] and they come home really hungry." Others said, "... most of the time they don't like what they are offered there," or "If we cook something healthy they won't eat it because they get something different at school or somewhere else." Parents also commented on the variety of items offered to their children in the after school program. Some parents said their children received, "A snack like those tiny boxes of cereal and a fruit, and a glass of milk, a glass of chocolate milk." Others said that sometimes the snack is not nutritious, "They give him juice and a cookie." And another parent commented that there is a great range of what is given to the students, "And then they give them something more heavy that sometimes is pizza and then most of the time they give them broccoli and juice and milk."

- **2) Education:** this domain focused on the parents desire to learn more about nutrition, and their need to educate their children to make healthy food choices. Subcategories include:
 - a) Milk choices color coded lids
 - b) Education about fruits, veggies and milk
 - c) Shopping for groceries

Almost all the parents in these focus groups identified milk by the color of the lid. They did not necessarily know whether the milk was whole, 2%, 1% or skim, but they knew that the "red" lid had more fat than the "blue" lid. Parents commented that the type of milk they

choose is based out of habit and not based on knowledge. One parent commented, "Well I think most of the time people buy certain milk as a habit. I mean because of habit, it is the one that her mother buys, they keep doing it for generations, but maybe they are not well informed about what is better." Another parent commented that education needs to be focused towards the parents when they are shopping, "But more to the parents to make them conscious so they know the benefits that bring... because a lot of people don't know. At the beginning I didn't know that 2% is better than whole. I always said well this one is good because is the one that most people purchase, and we even go for that. Because other people buy that one, because my friend buys that one, well then I started buying that one. Then I think if we share the truth about the benefits of these foods."

Parents were also very uncertain about what age children should switch from drinking full fat to skim milk. One parent commented, "I started giving my son 2% and when I took him to the doctor for a physical his calcium was low and they ask me what kind of milk I was giving to him and I told them 2%." Another mother said, "... My daughter has been overweight since she turned 2 years old. The doctor told me 'you have to start giving her 2%,' and since then it is the only one we drink at home, 2% since she was 2." Parents looked to the school and WIC for information about milk to help them make informed decisions, "Because in WIC - that's the program for the children – they give you the milk and they used to give us the red one but they took it off because what you said about nutrition." Other parents look for information from school, "Because people teaching us about nutrition say that children older than 1 year old, 2 years old and older they can, they don't need what the red one has." Others said, "(milk) is still healthy and the other one [full fat] not so much." Still other parents use visual clues from posters at the WIC office, "And then I started seeing posters everywhere about fat." One parent stated, "Because as parents we are responsible for what our children eat, if we start purchasing fat free milk, well they will drink it... it will depend a lot on what we buy for them to start." Mothers were asked whether their children had problems with lactose intolerance and if they offered soy milk or other types of milk substitutes. Only one mother said her 2 year old son, not her 8-10 year old, used to have problems with his skin if he drank milk, so they gave him soy milk but later on they gave him regular milk and he "was cured."

Parents also reported seeking information to help encourage their children to eat more fruits and vegetables and are pleased with how responsive the school has been in educating the children and the parents. One parent commented, "Actually here at the school they are always doing food tasting with vegetables and they taste everything but they say that it looks ugly, but



they make them try it." Parents also noted that "At the school the teacher explained to them about labels." Parents noted again how WIC was helpful in educating parents, "Well they give us a different type of class, like we have small children and they teach us... they taught us recently that strawberries and tomatoes, everything that is red helps for so many things." Parents also talked about how to motivate other parents to make healthier choices. However,

parents were concerned they would offend their friends if they spoke directly about nutrition.



Their suggestions instead included, "If you see that in their house they don't eat vegetables and all of that, give them advice, look my kids eat fruits and vegetables in this way, give it to them and you'll see they will like them." Parents also suggested giving "A recipe of vegetables or fruit. Like if I see that she doesn't give it to her daughters, tell her cook them in this way and they will eat it."

"Because as parents we are responsible for what our children eat, if we start purchasing fat free milk, well they will drink it."

Parents also saw the importance of their role in educating their children and shopping for healthy food. "Well telling them that it is good for them, for their development for their health," and "well, buying it to make him see it." However, parents saw the downfall of taking their children shopping, "Sometimes we don't want to take them to the grocery store because they are the ones that put everything in the cart, everything they want, you don't bring enough money and they already put stuff in it."

3) Children's Behavior: this domain focused on the eating styles of children.

Three subcategories were included:

- a) Aging out of drinking milk
- b) Picky eaters
- c) Eating fruits and vegetables

Parents commented on how their children reacted to eating fruits and vegetables and drinking milk. Many parents felt their children 'aged out' of drinking milk and that both parents and children consider milk consumption to be more important when children are babies and toddlers and less important as they got older. "My son started like that as well, when he turned 8, they think they are grown ups and milk is for kids. So what I did is I make them popsicles, plain milk or with chocolate milk or smoothies and I froze them and that's it." Another parent stated, "They don't have the habit like before, it doesn't matter if you want to give it to them, they don't want it anymore. And my child doesn't drink a glass of milk, he'll drink it if he has a cookie or cereal, but grabbing a glass to drink..."

Parents struggle with picky eaters. "I just have one child that, nothing, he doesn't like anything, if you offer him something like this (pointing at the vegetable tray in the middle of the table) he doesn't even look at it." Another parent says her child's response to new food is to say that "it tastes awful, and I don't like it." Parents also commented that children change their preferences, "My daughter used to eat everything when she was little and now she doesn't want anything. Yes she used to eat everything before. And I tell her you like it because you used to eat it, and she says 'I USED to, not anymore." Parents use creativity and perseverance to encourage children to try new foods, "I gave it to him in every single possible way, and he doesn't want it or I tell him to try it, if you don't like it leave it there. You have to try it because you cannot just look at it and say it is not good." Sometimes children preferred canned items, "One of my kids prefers the canned one because it's sweeter. He likes a lot of everything that is sweet."

Parents commented that eating fruits and vegetables was often an economic decision. Most parents that purchased fresh fruits and vegetables and healthy choices in food and acknowledged that these choices were often more expensive. "The thing is that in fact we all would like to eat healthy but when we go to the store we get scared..." and "most times I think that way because sometimes the budget... between this one and this one... the cheapest." One parent gives the following example, "As simple as wheat bread, the other day the regular bread, the one with regular flour was 2 for \$1.00, two loaves; people were leaving with a lot, (but) not the wheat

bread." Yes they buy the cheapest." One parent commented about healthy food saying "It's always more expensive, more fat is cheaper."

Parents in the rural community highlighted a very unique opportunity that they have with a vendor from Mexico. "On Wednesday a person comes from Mexico to sell fruit, he comes Tuesday morning and Friday mornings and he comes ready with a basket. He comes from Mexico. He sells guavas and you can buy beautiful tangerines, orange, and sugar cane. And he brings bell pepper, tomato, and garlic. Well everything we like from Mexico. He comes in a truck. Sometimes he doesn't take anything back, he sells everything. He brings bread, cheese. He comes tomorrow and we already finished the groceries from Wednesday. We will get more tomorrow morning."

4) Parental Persuasion: this domain includes four subcategories:

- a) Accessibility
- b) Modeling good behavior
- c) Strategies for drinking milk
- d) Strategies for eating fruits and vegetables

Parents acknowledged that their children were interested in, and capable of, making and choosing snacks. To enhance opportunities for their children to make healthy choices, parents make fresh fruits and vegetables accessible. This was a very popular theme of the focus group and echoed by most parents. Comments included; "I just don't tell them what they are going to eat. I prepare it and I put it on the table and every time they pass by the end of the table they grab and they eat it. Or you put it where they can see it, call it to their attention. And I put it in the middle of the table, where you can see it."

Two additional strategies parents reported using are packing healthy snacks and having fresh fruit visible inside the refrigerator. One parent commented, "That is why I carry cucumber or carrot, all of that because I know that they like them, so I try to have that because they go and grab them by themselves." Regarding refrigerator foods parents said, "You put it in the fridge to make them see it when they open it," others noted, "Like now that it is very hot; you put in the fridge (instead of on the table) because the fruit and vegetables will ruin."

Parents stated that having availability of unhealthy food was often a problem, "I have a sister in law next door, so she goes and grabs one [soda] from her because she always has it in her fridge. But I don't like when she drinks soda, I don't like it..." Another parent commented "Or hiding the sodas where they are not able to find them, because if you put them where they are, they will drink it and then they go play and they grab another one."

Parents spoke about the need to eliminate unhealthy food options, "If there are no chips, no cookies, neither sodas, so they have to go for what is available, and there are just fruits. And if there is juice and there is no soda they will drink juice, if there is no juice, well just water." One parent commented, "I don't buy too many sweet cookies. If I buy them a bag of cookies and put them on the table with the fruits, there are no more cookies and you still have all the fruits." Another parent agreed saying, "If you buy a box (of doughnuts) and everyone has the right to get three of them, they will eat three to finish it all. You have to buy them one or nothing."

Parents also spoke about their influence over their children and the importance of role modeling. One parent said, "Parents are an example for their kids, maybe if they see us eating that, they will start doing it." Some parents struggle with being a role model, "I would tell him,



"Parents are an example for their kids; maybe if they see us eating that, they will start doing it."

don't be like me, I drink too much soda and because I drink a lot of soda I tell my daughter not to drink it and I would tell her don't drink soda because it is bad for you and then I sit and grab a soda from the fridge." Parents also admitted it was more work to prepare fresh foods, "But I almost didn't like it, like I feel lazy to cut the fruits and the vegetables."

Parents reported many strategies for helping their children drink more milk. Some opted for using milk as an ingredient including, smoothies, cereal, and coffee drinks. "My son... he likes coffee, so I make him coffee in pure milk, but I just put a little bit of coffee." Other parents allowed their children "A little bit of chocolate milk and the girls put the milk on the stove... and they boiled their chocolate and they drink it." One parent commented that she uses chocolate milk as an incentive and then "To add a little chocolate and each time less and less until they drink it plain." Parents had the idea to have children unknowingly drink low fat or fat free milk by "Changing the lid or the label." Creativity was important to parents in developing strategies to help their children eat more fruits and vegetables. Many parents felt that adding additional ingredients made the fruits and vegetables more appealing to their children, "The celery, you can put a little bit of what they like, like peanut butter, or the apple with peanut butter or I have to peel them and have them with salt and lemon and at the store there is a chocolate that melts with the heat and maybe freeze the strawberries and bananas then put chocolate on them." Finally one mom suggested, "I like to put cheese on top of the vegetables. Most of the time I don't have to fight them if it has cheese, if I put some cheese strips, doesn't matter if it's spinach, nopales, broccoli, anything but with cheese on it. What I mean is that they eat it more willingly when it has cheese."

Parents also persuade their children to eat fruits and veggies by offering a variety of rewards. One parent suggested, "Maybe give them a reward or a prize, look if you eat this I'll take you to the park or any place they like." One parent has used money as an incentive, "It has come to the point where we say we will pay you if you try that; no not even \$10.00 or \$15.00. We will take



you to the store to buy you whatever you want but you have to eat a little bit of this; and sometimes he wants to try it... in my mom's house she always pays them to make them eat vegetables. But the oldest one eats it for \$15.00, but just because he will get something – just because of the money." Parents reported wanting to help other parents who struggle with helping their children eat fruits and vegetables. Parents suggested that it would be helpful to "Give them recipes," or share their stories, "I would tell my friend that I struggle a lot with my children for them to eat fruits and vegetables, so that we should give each other ideas to help our children, her kids and mine to eat more vegetables and fruit." Another parent said, "I would do a party and instead of offering those dishes (hot dogs, hamburgers, nachos) I would offer more fruits and vegetables for the kids to eat."

- **5) Slogans:** Parents of 8-10 year olds identified slogans that they felt would be effective for marketing, but they also had some additional strategies. The slogans they developed included:
 - a) Pruébalo y verás los resultados. (Try it, and you'll see the results)
 - b) Es más saludable. (It is healthier)
 - c) Sea un ejemplo. (Be a role model)
 - d) Le evitará enfermedades. (It will prevent disease)
 - e) No les compre sodas. (Don't buy them soda)
 - f) Sírvales cuando tengan hambre (Serve them when they are hungry)

Parents also suggested that grocery stores have "tasting sessions" where families can try fruits and vegetables. Other parents suggested a commercial comparison between a healthy eater and a non-healthy eater, "I would put for example, a healthy person that has eaten as healthy as possible all his life, and another person that has not eaten healthy and a doctor telling the person that has eaten healthy that they will live longer or something like that and the person that has not eaten healthy has more wrinkles or something."

C. Children Ages 8-10

General comments

School age children were eager to share their many ideas about healthy eating, had strong preferences for foods they liked, and had creative suggestions to encourage family and friends to eat healthier.

Domains

Fourteen codes were developed and were grouped into four domains.

The domains are:

- 1) Meals
- 2) Preferences
- 3) Augmenting food choices
- 4) Advice
- 1) Meals: this domain includes the following three subcategories:
 - a) Dinner routine family members
 - b) Dinner routine preparing meals
 - c) School meals

The students shared what happens during mealtime at their house. They were asked to imagine what our focus group leaders would see if they came to their house during dinner time. Students commented that, for the most part, they eat dinner with their immediate and extended family members. One student commented that they have dinner with, "Father, siblings, grandma, great grandma." Another student noted that they do not have dinner with their mother, "My mom finishes her work at 10:00 p.m." Still other students said, "Sometimes we have dinner by ourselves, when our parents are busy."

Some students reported being active participants in helping prepare the meals they ate at home. Many students commented that they help their mothers, fathers and grandmas, the usual cooks in the family. One student commented, "I prepare eggs, enchiladas." Another said,



"Pruébalo y verás los resultados."

"Sometimes I make a sandwich with chips." One student commented, "Sometimes I have cereal for dinner" when I cook for myself because "We don't turn the stove on because we can get burned."

2) Preferences: this domain included five subcategories:

- a) Dairy preferences
- b) Shopping for foods
- c) Liking fruits and vegetables
- d) Milk options
- e) Drinking milk

This domain contains the lists of food preferences the children responded to when asked about dairy, fruits and vegetables that they regularly consumed. Most students commented they liked "cheese," "ice cream" and "milk shakes" as alternative forms of milk consumption. Most students commented they drank the "blue" milk (reduced fat or 2%) at home and some students acknowledged that they also drank "Strawberry and chocolate milk." Students demonstrated some knowledge of milk fat consumption. One student remarked, "The one with the red lid makes you gain weight and the lid... I don't know what color the other one is, the other one doesn't make you gain weight." Another student commented, "The one that says 1% is much better and the other one that has 2 is the fattest." Students understood that as they aged they did not need as much fat, "Because when we were little we had to drink pure milk," and "Because you had to drink that to make your bones stronger as you were growing."

Most students in our focus group admitted to drinking less milk now than when they were younger. Typically they drink milk now "In their cereal," sometimes "At school" and "When there are lots of cookies."

Students suggested many reasons why drinking milk was healthy for them. These reasons included, "To get strong," "To be healthy," "To have healthy bones," "To grow up," and "To make cookies taste better."

Students also suggested many reasons why they should eat fruits and vegetables. These reasons included, "More nutritious", "To help your body", "To help your sight and being strong as well," "To be healthier," "For your teeth," "To be strong," and "They give you vitamins." One student commented that he ate fruits and vegetables "To be more handsome."

3) Augmenting food choices: this domain includes two subcategories:

- a) Adding to healthy foods
- b) Multiple meal options

Like parents, students had creative ideas to enhance the flavor of fruits and vegetables by adding additional ingredients. Students enjoyed putting salt on vegetables, "I like vegetables with salt, like tomatoes, and I put ketchup on the vegetables and I eat them." Another student's idea was to "Put peanut butter in a salad," while other students added "Some crushed pepper" or "Lemon." Cheese was also commonly added to vegetables, "My mom puts nacho cheese, and she puts cheese on the cauliflower." Suggestions to make fruits tastier included, "Strawberries with chocolate" and a suggestion by one student, "If they don't like apples they can eat an apple with caramel on it." Not all students enjoyed their dinner meals, and some families made

multiple meals to accommodate the variety of tastes of their children. Students noted that their parents often accommodate the children's preferences, with one commenting, "They let us, my brother and I eat cereal or yogurt," while another student said, "A sandwich. If I don't like it [what parents are serving] I prepare something else, or a soup with salsa." Still others said it was a mixture of choices, "My dad doesn't like pizza, same with my sister, and my sister and I, my dad and my mom are different." For the most part, children and parents eat the same foods as their parents. Students said, "We all eat the same dish" and "We eat it... period," or "They make us." One student commented, "My dad eats everything my mom cooks."

4) Advice: this domain included three subcategories:

- a) Exercise and calories
- b) Parents comments to kids to eat healthy
- c) Influencing others to make healthier foods.

Students shared their knowledge of health including exercise and calories. Students said their favorite activity for exercise was to, "play." Many also suggested sports including, "soccer," "running," and "swimming." The children also shared what they knew about calories. They reported that men needed "1800 calories" and "woman 1200," and that "You are not allowed to go over."

Students reported wanting to share what they know about nutrition with their family and wanted to tell them, "Milk is healthy," and that "Milk gives you strong bones." Additionally, students wanted to share, "That all the fruits have lots of proteins and vitamins."

Students viewed themselves as role models. One student commented, "I have a lot of friends that have little siblings, they like a lot of superheroes, I would tell them that if you drink milk you will be strong like superman." Another student commented, "I have a brother and he likes the Hulk and he doesn't want to drink his milk and eat his vegetables, so I tell him if you want to grow big muscles you have to drink your milk and eat your vegetables." Students further saw the benefits of being a role model, "If I had a little brother to educate about eating vegetables I would eat more vegetables too!" And say, "Hey little brother this tastes better."

The students also expressed concern for family members who do not follow a healthy lifestyle, wanting to tell them they should not, "Gain a lot of weight and that they could die because of their health... they can have a heart attack." They also commented that "If they eat pizza and a lot of chips and soda, they will not fit through the door."

Students were asked what they would do to help their family members eat more fruits and vegetables and drink more milk. Students enjoyed imagining being the authority and developed some interesting strategies such as, "(I) will grab a rope and would tie him until he eats it" or "to yell at them" or "scold them." More ideas included "You would say drink this or go to your room" and "maybe it is a bad example: Grab the fruit and put it in their mouth." Other students suggested gentler means of encouraging healthy eating such as, "If you don't like the plain fruit put a little bit of sugar on it, but not too much and then later on keep eating the fruit but with no sugar."

The students repeated some of the advice their parents had given them about eating healthy including, "That if we eat a lot of things like those that are good for our body, that we will be strong and that we will grow very tall."



"If I had a little brother to educate about eating vegetables I would eat more vegetables too!"

When students choose unhealthy options their parents tell them to, "Leave everything that has too many calories," and "Don't eat too much sweets," and "Stop with the junk food." Consequences for eating unhealthy are, "We are going to get

fat," or "They tell us we will die." Consequences for not eating healthy foods include, "He also punishes me" and, "They don't let me go out," and parents "Yell at us to go eat."

Discussion

Role of Culture

The role of culture and importance of extended family carried across all focus groups. Participants in all groups noted spending meal occasions with extended family members with varying effect on healthy eating behaviors. Grandparents serve fruits and vegetables, which influences parents to do the same. Conversely an aunt living next door provides a child with soda when the child's parent doesn't want them to drink soda at home. History plays a role as well, in that if a grandparent has always purchased whole milk, subsequent generations do the same out of habit. The role of extended families can therefore encourage or discourage healthy eating. Participants noted the importance of working together as a family to eliminate poor dietary habits.

School-age children typically have breakfast, lunch and, in some cases, afternoon snacks provided by the school nutrition program. In the Hispanic culture it was noted that many families have one large late afternoon/early evening meal. This finding may indicate the need for greater emphasis on nutrition messages related to the supper meal, rather than afternoon snacks, for this population.

Parents find pride in retaining their cultural heritage related to meals, particularly around festivities and holidays, and noted that while American parties have hot dogs and hamburgers, they make soup and chicharrones, although it is unclear if they felt this would be a healthier menu overall.

Parents

Parents of preschool children responded with tremendous enthusiasm as well as tremendous anxiety concerning their ability to provide their children with opportunities for healthy eating. They also acknowledged the cultural and linguistic barriers they encounter. Parents discussed the importance of involving children in food shopping and preparation, and mentioned that when they did not know the English words for foods, their children helped them identify them at the store. Parents understood the importance of early exposure to healthy habits for young children and felt highly responsible for educating themselves and their children regarding healthy eating habits. Parents overwhelmingly desired nutrition education information for their families. The importance of family mealtime was echoed throughout the group, as was presenting food in an attractive and colorful way. Parents also struggled with picky or excessive eating, even of healthy foods, among their children. Parental anxiety may be alleviated by educating them regarding adequate portion sizes for different age groups, as well as understanding that variable daily nutrition intake may still translate into an adequate dietary meal pattern over the course of a week. Parents were also frustrated,

particularly with older children, that their taste preferences change over time, and that they may refuse what were once favorite foods.

Parental understanding of the importance of exposure to new foods was mixed, with some understanding the need for repeated exposures and patience with trying new foods, while others stopped presenting a new food after only a few refusals by the child. Most parents acknowledged that repeated refusals of foods were frustrating, with varying degrees of willingness to continue to offer new foods. This indicates the importance of perseverance and patience when introducing new foods, one of the core nutrition messages of the USDA Food and Nutrition Service.

Parents use unique strategies to encourage their children to eat healthy foods. Food-related strategies include adding sugar to salad, cheese to many foods, hiding healthy foods within other foods, and making healthy foods more visible and readily available by having them out on the counter or in the front of the refrigerator. Cheese was added to so many foods that it may be a major source of dairy, particularly for children who drink less milk as they get older. It will be important to encourage parents to use low-fat or fat-free cheese, rather than cheeses typically high in fat (e.g. nacho cheese). Reward strategies include paying the child cash, promising candy, or allowing them to play outside if they eat a particular food. Punishment strategies included taking away television and video game privileges, and forcing children to



remain seated until they finish the food in front of them.

Influence from school meals appears to both hinder and help parents provide healthy foods to their children. Some parents said that meals and tasting opportunities at school make it easier to provide healthier foods at home, while some stated that their

children no longer like healthy meals served at home. Parents presume that this is due to the sometimes fast food nature of school meals, and feel that the school meals are not healthy.

Related to dairy consumption, all groups identified milk by the color of the cap or packaging. Red milk (whole) and Blue milk (sometimes considered 2%, sometimes skim by participants) were commonly mentioned. While whole milk is commonly packaged in a red carton or with a red cap, in New Mexico there is no standard color coding system for milk packaging. In our work in grocery stores across the state, we have seen blue labels on 2%, 1% and skim milk, indicating that further education regarding label reading is warranted, especially for those with limited ability to read English, in order to avoid purchasing milk solely based on color of packaging. In addition, researchers noted that parents associated blue labels with "light" food items of many types, not only dairy. Reasons for this are unclear and warrant further investigation. Parents of the older children also noted that their children seemed to age out of drinking milk, indicating that there may need to be more emphasis on other low-fat dairy sources for this age group, such as yogurt or smoothies, and at the same time ensure that alternatives are not high in added sugar.



"If we eat a lot of things that are good for our body, we will be strong and we will grow very tall."

Parents receive and rely on nutrition information from multiple sources. Both groups mentioned what they had learned from the Special Supplemental Nutrition Program for Women Infants and Children (WIC), indicating that those parents with older children either recalled

information from years past, or that they were currently receiving WIC due to having younger children in the home. This indicates the importance of consistent messaging across USDA nutrition programs, since many families participate in multiple programs over time, and there is a potential synergistic layering effect from nutrition messages and education. This should carry over into primary care as well, since parents also noted that their doctor had told them to stop giving their kids whole milk and to switch to 2%. The current recommendation is for 1% or skim milk after age two, so working with healthcare professionals to deliver the same consistent messaging is crucial.

Multiple issues emerged related to food shopping. Most parents viewed including children in the food shopping as a help to healthy eating, although in the case where children filled the shopping cart with unhealthy items, it was seen as a hindrance. Parents also noted that buying larger packages of foods (e.g. donuts) led to higher consumption and that purchasing smaller packages would be better to reduce consumption of unhealthy foods. This has tremendous implications for SNAP participants, since bulk foods and larger packages are typically less expensive than single serve packages. Expense is also a concern with fresh fruits, vegetables, and whole grain foods, with one parent noting that they want to eat healthfully, but get "scared" at the store because they perceive healthier foods to be too expensive. Eliminating fear of healthy eating related to budget constraints should be emphasized by nutrition assistance programs, particularly those with an education component. These types of responses reiterate the need to educate families regarding the entire household budget, not just that for food.

Children Ages 8-10

Students reported that the dinner meal was often with extended family members, again indicating the importance of culture and family. Some also noted that their parents worked nights, so that they do not have dinner as a family, that some children eat dinner alone, and others have dinner very late. Some children reported that they are not allowed to operate the stove when an adult was not at home, so they rely on preparing food for themselves that does not require cooking on a direct heat source.

Students reiterated the identification of dairy products based on the color of the lid on the carton, understood that they no longer required higher-fat milk and identified that consuming milk, fruits and vegetables are important for overall health and specific nutrition benefits, as well as to be strong and more attractive. Students also mirrored parent responses regarding strategies for eating more fruits and vegetables, including adding salt, sugar or high fat foods (e.g. cheese). Students saw themselves as role models for other children, particularly for younger children and siblings, which was also reflected in the parent focus groups. Interestingly, students suggested highly authoritarian and, in some cases forceful, techniques to encourage others to eat healthier foods, suggesting that these may be techniques employed by their parents at home. They stated that parents tell them they would "get fat" or "die" from



eating unhealthy foods and that they are punished for doing so.

Relation to the FNS Core Concepts for Nutrition Messages

The above findings relate to the core concepts for nutrition messages determined by FNS for this population: parent-directed concepts of role

modeling, cooking and eating together, the division of feeding responsibility, and availability and accessibility of healthy foods. There is considerable overlap among concepts and across age groups, such as the interface between role modeling (FNS message for preschool mothers) and having healthy foods available at home (FNS message for mothers of elementary schoolaged children) and the importance of the family meal (preschool mother message).

Parents had differing ideas about role modeling. Some understand the importance of modeling healthy behaviors, and practice these so their children will mirror their behavior, while others model unhealthy behaviors and tell their children not to be like them. This suggests the need to further explore parents' understanding of role modeling and what makes it successful for establishing and maintaining healthy eating behaviors in children. The "do as I say, not as I do" approach may not be effective. Although parents see a role in educating other parents about healthy eating, they were concerned that direct nutrition messages would be offensive.

The division of feeding responsibility was not explored in the focus groups we conducted. FNS conducted additional focus groups when this concept was challenging for mothers to accept in their formative research. Further research is warranted to expand on the division of feeding responsibility, particularly in the areas of allowing children to serve themselves, and that young children know when they have eaten enough.

Parents noted that preparing fresh fruits and vegetables are more work, and that they feel too "lazy" to prepare them. Parents are conflicted about eliminating junk food from the home, since they themselves find it difficult to resist, and they will often store unhealthy food and beverages out of sight from their children or hide themselves while eating unhealthy foods. Some participants noted that it is important to buy only healthier foods to start with, so that those are the only foods available in the home. Parents also reported limiting certain foods and not purchasing them for their children, and suggested these as slogans (e.g. "Don't Buy Them Soda"). Use of this messaging or slogan would however, violate the SNAP-Ed Plan Guidance provision that no messages may "disparage any specific food, beverage or commodity." As the scientific evidence connecting specific foods and beverages to certain dietrelated morbidities and chronic disease builds, parents and caregivers continue to indicate their positive response to these messages, the USDA may want to revisit this provision to allow for more directed messaging toward these foods.



"We have dinner with father, siblings, grandma, and great grandma."

Next Steps

The focus groups provided the first set of key information in a three phase strategy aimed at encouraging Spanishspeaking SNAP participants to achieve the target dietary

outcomes of SNAP. Throughout Phase One, focus group parents repeatedly asked for further nutrition education. Hence we propose the following for phase two and phase three of our strategy for a science-based, consumer-focused behavioral intervention:

Phase Two: Planning and Development

- 1. Develop nutrition messages which are acceptable and appropriate for use with Spanish-speaking audiences. These messages will be based on the 2010 Dietary Guidelines for Americans, the findings from the focus groups, current related research, and aligned with the USDA core nutrition messages.
- 2. Conduct tests of these messages with the intended audience of SNAP-eligible, Spanish-speaking participants, specifically: 1) Mothers of preschool-age children; 2) Mothers of elementary school-age children; and 3) Children ages 8-10 years. These tests will determine acceptability, appropriateness and effectiveness of messages to affect behavior change.

Phase Three: Development, Implementation, and Evaluation

- 1. Develop and implement a multi-level social marketing intervention utilizing messages and related themes from focus groups and formative testing phase and in alignment with SNAP-Ed Plan Guidance.
- 2. Evaluate the effectiveness of the social marketing intervention using a mixed-method (qualitative and quantitative) approach to determine effect on dietary outcomes and behaviors related to the goals of increased fruit, vegetable, whole grain and low-fat dairy consumption and increased occasions of families eating meals together.
- 3. Develop educational modules for use in SNAP-Ed and other USDA Food and Nutrition Services programs, specifically designed for the Spanish-speaking population eligible for SNAP and other FNS nutrition programs in the state of New Mexico.

REFERENCES

- 1. USDA, FY 2012 SNAP-Ed Plan Guidance, FNS, Editor. 2011.
- 2. USDA, *Maximizing the Message: Helping Moms and Kids Make Healthier Food Choices.* October 2008 FNS-409. Available at http://www.fns.usda.gov/
- 3. Denzin, N., Handbook of Qualitative Research. 1994: Sage Publications. HB.







