Maximizing the Message:
Helping Moms and Kids Make Healthier Food Choices

U.S. Department of Agriculture
Food and Nutrition Service
The United States Department of Agriculture (USDA) Food and Nutrition Service (FNS) recognizes the following persons for providing their extensive technical expertise and guidance in the development of the FNS core nutrition messages:

**FNS Core Nutrition Messages Workgroup Members**

Jan Adams, MS, MBA, RD  
Child Nutrition Division  
USDA Food and Nutrition Service

Tom Baranowski, PhD  
Children’s Nutrition Research Center  
USDA Agricultural Research Service

Teresa Geldard, MPA, RD  
Nancy Gaston, MA, RD  
Food Distribution Division  
USDA Food and Nutrition Service

Wendy L. Johnson-Askew, PhD, MPH  
Division of Nutrition and Research Coordination  
National Institutes of Health

Jan Kallio, MS, RD  
Kara Ryan, RD, LDN, CLC  
Jean Heinz, RD, LD  
Vicki Flores, MS, RD  
National WIC Association

Alice F. Lockett, MS, RD, LD  
Melissa Walker, MBA, RD, LD  
Supplemental Nutrition Assistance Program  
USDA Food and Nutrition Service

Paul McConaughy, MA  
Michigan State University Extension

Linda Melcher, MS, RD  
Southwest Regional Office  
USDA Food and Nutrition Service

Doris Montgomery, MS, RD, LD  
Iowa Department of Public Health

Patricia O. Race, MEd, RD, CDN  
Patricia Jordan, MS, RD, CDN  
Association of State & Territorial Public Health Nutrition Directors

Tara Simpson, MPH, RD, LD  
Kristen Riehman Sullivan, MS, MPH  
Marie Shelton, MPH  
Centers for Disease Control and Prevention

Valery Soto, MS, RD, LD  
Supplemental Foods Program Division  
USDA Food and Nutrition Service

Janey Thornton, PhD, SNS  
Gretchen K. Schulz, MEd, RD, LD, SNS  
School Nutrition Association

Judy F. Wilson, MSPH, RD  
Office of Research and Analysis  
USDA Food and Nutrition Service

**Project Officer:**  
Alicia H. White, MS, RD  
Supplemental Foods Program Division  
USDA Food and Nutrition Service

**Project Team Members:**  
Judy F. Wilson, MSPH, RD  
Anita Singh, PhD, RD  
Office of Research and Analysis  
USDA Food and Nutrition Service

**Contractor Support:**  
Taryn Antigone  
Adam Burns  
Jennifer Dusenberry  
Rosy McGillian  
Porter Novelli, Washington, DC.

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Maximizing the Message: Helping Moms and Kids Make Healthier Food Choices

The United States Department of Agriculture’s Food and Nutrition Service (FNS) administers 15 nutrition assistance programs. In Fiscal Year 2008, an estimated $750 million in Federal funds was spent providing much needed nutrition education to program participants, empowering low-income families and children to use their food benefits to make healthful food choices. States also contribute millions to support this effort. Together, we can get the most out of this investment by maximizing our nutrition messages.

People are bombarded by various messages every day. How can we make sure our messages are heard, remembered, and effective in compelling the families we serve to take action? We can increase the visibility and repetition of our messages by “speaking with one voice.” We maximize our message impact when all FNS programs work together to deliver consistent, accurate, and consumer-tested messages. Together, we can make a greater difference.

This guide presents core nutrition messages and supporting content (e.g., bulleted tips, recipes, and stories) that are specifically designed for the low-income mothers and children participating in Federal nutrition assistance programs. These messages are based upon the 2005 Dietary Guidelines for Americans and MyPyramid and support program policies and food packages. Low-income mothers and children have guided the development of these messages—discover what they had to say about these new resources inside this publication.

We invite you to use the core nutrition messages and supporting content in your nutrition education efforts. Collaborating with others in your community to promote the core messages can take this effort to “speak with one voice” one step further. Other organizations may also be able to address broader environmental changes that make it easier for mothers and children to make healthy food choices. Inside this guide, we have provided tips for putting the core messages into practice, and we hope you’ll share your ideas with us.
Maximizing the Message…provides you with 16 audience-tested nutrition messages, as well as supporting content, that address important diet-related behaviors influencing the health of low-income mothers and children. Specifically, core nutrition messages are provided for the following audience segments:

- Low-income mothers of preschool-age children (2- to 5-year-olds)
- Low-income mothers of elementary school-age children (6- to 10-year-olds)
- Eight- to ten-year-old children

Low-income mothers and their children are served by several Federal nutrition assistance programs. When these programs communicate the core nutrition messages to their participants, we can reach millions of mothers and children. The opportunity for message repetition is also greater since many moms participate or have children that participate in multiple programs. Examples of programs include:

- Supplemental Nutrition Assistance Program (SNAP)*
  In Fiscal Year 2006, 3.7 million women ages 18 to 50 lived in Food Stamp Program (FSP) households with children 3 to 10 years of age.¹

- Special Supplemental Nutrition Program for Women, Infants and Children (WIC)
  In Fiscal Year 2006, on average, 2.7 million children 2 to 4 years old participated in WIC each month.²

- National School Lunch Program (NSLP)
  In 2006, an estimated 23.7 million children were between the ages of 6 and 11 years old.³ Most of these children were eligible to participate in the NSLP.

* Formerly known as the Food Stamp Program. The name changed on October 1, 2008.
Maximizing the Message: Helping Moms and Kids Make Healthier Food Choices

Messages directed to mothers have the potential to affect what moms eat and their children’s diets. Women are still the primary food shoppers and meal preparers in most households. Moms are also more likely than dads to eat breakfast and dinner with their children—even in two-parent households. As such, moms have the power to change what food is available in the home, how food is offered and prepared, and their children’s attitudes and feelings about food.

The core nutrition messages reflect USDA’s goals and guiding principles of nutrition education delivered through nutrition assistance programs. These messages can augment well-designed, theory-based initiatives that support the behavioral outcomes listed in Figure B.

Concepts for the core nutrition messages address five mediators (influences) of children’s dietary behavior. For instance, messages for moms of elementary school-age children address the availability and accessibility of fruits and vegetables in the home (a mediating environmental variable).

Message concepts (and the mediating variables they are based upon) apply to constructs in theories frequently used to explain dietary behavior (e.g., self-efficacy, observational learning, social influence/support, and skill building), as well as intrapersonal, social, and physical environmental factors outlined in ecological models. In other words, the core messages address factors that influence the likelihood that children will eat fruits and vegetables, drink fat-free or low-fat milk at meals, etc. Following our example above, kids are more likely to eat fruits and vegetables when they are available and accessible in the home. Message concepts are described in the following paragraphs.

Role Modeling
These messages encourage mothers to set a good example by eating fruits and vegetables themselves. Several studies have shown that children’s consumption of fruits and vegetables is correlated with parents’ intake and children’s attitudes about fruit. Children are also more likely to eat new foods when they see a parent consuming them.

Figure B: Behavioral Outcomes

- Mothers and their children consume recommended amounts of fruits and vegetables.
- Mothers eat and prepare foods together with their 2- to 5-year-old children more often.
- Mothers allow their 2- to 5-year-old children to decide whether and how much to eat.
- Six- to ten-year-old children consume recommended amounts of milk and milk products, choosing primarily low-fat and fat-free options.
Cooking and Eating Together
Families that eat dinner together tend to have more healthful dietary intake patterns that are higher in fruits, vegetables, and calcium and lower in saturated fat.\textsuperscript{11-14} Eating meals together also provides opportunities for role modeling as previously explained. Some research indicates that watching television while eating together may reduce the positive effects of family meals.\textsuperscript{15-16} Family meals may have a greater positive effect on children’s diets when the meal is prepared at home.\textsuperscript{15} Involving preschoolers in food preparation may also help make new foods more familiar and can help motivate children to try new foods.

Division of Feeding Responsibility
Messages under this concept are based upon the delineation of parent and child feeding roles where the parents decide what, when, and where foods are offered and the child decides whether and how much to eat.\textsuperscript{17}

Research suggests that infants and very young children have the ability to self-regulate the amount of food they consume when given the opportunity.\textsuperscript{18-27} While intake at specific meals may be erratic, caloric intake over the course of the day is relatively well regulated. However, child feeding practices (i.e., when moms are not responsive to child feeding cues) may disrupt children’s abilities to eat when they are hungry and stop eating when they are full.\textsuperscript{18, 28-30} Differences in children’s abilities to self-regulate energy intake appear in preschoolers, and these differences are even more pronounced in older children.\textsuperscript{31-34}

The amount and way that food is provided can also make a difference. Mothers may serve larger portions than their children can consume and then use pressure or coercion to get their children to eat “enough.” Some research has shown that simply by serving large portions, moms may be causing children to eat more.\textsuperscript{35-37}

Child feeding practices may also influence the development of food preferences in children. Research suggests that the use of pressure or rewards may decrease children’s preferences for foods. Children may then eat less of these foods when the reward or pressure is no longer present. The number of times mothers expose children to new foods also appears to influence food preferences.\textsuperscript{38}

Availability and Accessibility
Messages under this concept focus on increasing the availability and accessibility of fruits and vegetables at home and encouraging/motivating kids to eat them. The availability and accessibility of (i.e., ready to eat and easy to get to) fruits and vegetables has been shown to be a critical factor in the consumption of fruits and vegetables by elementary school-age children.\textsuperscript{39-44} One study showed that accessibility is particularly important when children “dislike” fruits and vegetables.\textsuperscript{45}

Food Preferences, Beliefs, and Asking Behaviors
Messages for 8- to 10-year-old children are designed to make fruits, vegetables, milk, and milk products more appealing to children. The messages for children complement messages for mothers, providing motivation for children to consume the fruits, vegetables, and milk products that mothers are making available and accessible in the home. By influencing children’s beliefs about these foods, we can also increase the likelihood that children will ask mom to provide them. This reinforcement may further strengthen mom’s commitment to making fruits, vegetables, and milk products available and accessible.\textsuperscript{46, 47} The impact of messages designed to influence children’s food preferences and food purchase requests has been seen in commercial advertising.\textsuperscript{48} A major challenge in creating messages is that children see health issues as a distant problem and tend to base their food choices on taste, availability, and accessibility.\textsuperscript{48} Messages that appeal to children’s desires to have energy for play and sports and to “maximize their potential” are preferred.\textsuperscript{49} Including a sense of fun, fantasy, and challenge can also help capture kids’ attention and stimulate their motivation to learn.\textsuperscript{50-53}
**Figure C: FNS Core Nutrition Messages**

There are 16 core nutrition messages addressing 5 concepts: 7 for mothers of preschoolers, 4 for mothers of elementary school-age children, and 5 for 8- to 10-year-old children. These messages may be used alone or with others. Consumer-tested supporting content (e.g., bulleted tips, stories, or recipes) is provided for certain messages in the Appendices.

**For Mothers of Preschoolers**

*Role Modeling Messages*
1. They learn from watching you. Eat fruits and veggies and your kids will too.
2. They take their lead from you. Eat fruits and veggies and your kids will too.

*Cooking and Eating Together Messages*
2. Make meals and memories together. It’s a lesson they’ll use for life.

*Division of Feeding Responsibility Messages*
1. Let them learn by serving themselves.
   - Let your kids serve themselves at dinner. Teach them to take small amounts at first. Tell them they can get more if they’re still hungry.
2. Sometimes new foods take time.
   - Kids don’t always take to new foods right away. Offer new fruits and veggies many times. Give them a taste at first and be patient with them.
3. Patience works better than pressure.
   - Offer your children new foods. Then, let them choose how much to eat. Kids are more likely to enjoy a food when eating it is their own choice. It also helps them learn to be independent.

**For Mothers of Elementary School-Age Children**

*Availability/Accessibility Messages*
1. Want your kids to reach for a healthy snack? Make sure fruits and veggies are in reach.*
2. When they come home hungry, have fruits and veggies ready to eat.*
3. Let your kids be “produce pickers.” Help them pick fruits and veggies at the store.
4. They’re still growing. Help your kids grow strong. Serve fat-free or low-fat milk at meals.

**For 8- to 10-Year-Old Children**

*Food Preference, Beliefs, and Asking Behavior Messages*
Note: Milk and yogurt messages must be paired with image depicting low-fat or fat-free milk or yogurt.
1. Eat smart to play hard. Drink milk at meals.
2. Fuel up with milk at meals. And soar through your day like a rocket ship.
3. Snack like a super hero. Power up with fruit and yogurt.
4. Eat smart to play hard. Eat fruits and veggies at meals and snacks.
5. Fuel up with fruits and veggies. And soar through your day like a rocket ship.

*Consumer-tested supporting content (e.g., bulleted tips, stories, or recipes) is provided for these messages in the Appendices.*
The audience-focused approach used in the development of the core messages included input from program stakeholders and the target audiences via focus group testing. This process helped create core nutrition messages that are:

- **Accurate.** All messages and supporting content are accurate and consistent with the *2005 Dietary Guidelines for Americans* and *MyPyramid*.

- **Easy-to-read.** Messages and supporting content are written at a 4th-5th grade reading level as determined by SMOG and Fry readability formulas. Focus group testing also explored whether participants understood messages and content.

- **Emotionally based.** Focus group testing explored participants’ feelings about being mothers, feeding their children, and the emotionally based rewards of making changes in how and what they feed their children. This information was used in the early development of the messages to create an emotional pull that helps compel moms to take action. Later focus group testing assessed whether these messages resonated with the target audiences.

“I see my daughter peeping around the corner seeing what [I’m] eating and running in and saying, ‘I want some, I want some.’”
-Mother of preschooler, Birmingham, AL

**Core Messages Workgroup**
A Core Nutrition Messages Workgroup consisting of experts in nutrition education, communications, and FNS programs deliberated and made recommendations regarding the behavioral focus, target audience, concepts, and scope of the core messages and supporting content. Members included representatives from:

- Food Stamp, WIC, Food Distribution, and Child Nutrition programs
- U.S. Centers for Disease Control and Prevention
- National WIC Association
- School Nutrition Association
- Food Stamp Nutrition Education implementing agencies
- Association of State & Territorial Public Health Nutrition Directors
- National Institutes of Health
Messages That Matter: What Moms and Kids Told Us in Focus Group Testing

Thirty focus groups were held in eight States between December 2007 and July 2008 to guide the development of messages and supporting content and to test final products (see Table 1 for a list of States where focus groups were held).

In total, 140 mothers and 73 children participated in the groups. All participants had household incomes at or below 185 percent of the Federal poverty line; over half of the households were participating or had children participating in the FSP, NSLP, and/or WIC. Refer to Table 2 for additional information about focus group participants. We learned a lot from the focus group testing—what worked and what didn’t work. The findings provided in the following paragraphs explain why the core messages are worded a particular way. These insights can help you reflect the tone and spirit of the messages in other materials you may develop. Because this research was conducted among small samples of our target audiences, the findings should be viewed as instructive but not definitive.

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<th>Phase Two</th>
<th>Phase Three*</th>
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* Phase 3 included the testing of division of feeding responsibility messages with mothers of preschool-age children only.

Table 2: Demographic Information of Focus Group Participants

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<table>
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* On October 1, 2008, the Food Stamp Program changed its name to the Supplemental Nutrition Assistance Program.
General Findings
In our focus groups, mothers consistently described their lives as busy and hectic. This influenced their preference for messages and the likelihood that they would attempt the suggested behavior. Generally, moms preferred messages and supporting content that were practical and would fit into their busy schedules. For instance, moms found messages that encouraged them to offer fruits and vegetables at every meal to be unrealistic since their children were not with them at every meal. Moms were also less receptive to tips and activities that they felt would be too time-consuming or require a lot of cleanup. For example, moms disliked a tip on how to make “frozen banana pops” for this reason. Draft messages that had game-like associations (e.g., “follow the leader” or “make grocery shopping a fun adventure”) received mixed responses from moms. For some mothers, these messages implied that kids would be running all over the store or “playing around” at mealtime.

Messages that appealed to moms tapped into their desires to teach their children new skills and to help their children have a better future. Moms also preferred tips that suggested an activity would help their children learn, have greater self-esteem, or simply make them happy.

Our research also showed that many moms of both preschool- and elementary school-age children considered canned and frozen fruits and vegetables to be less healthful (e.g., canned vegetables were too high in sodium, canned fruit had too much sugar) than fresh, and reported not purchasing them for this reason. This influenced moms’ receptiveness to tips and messages, with moms disliking any tips that referenced using canned or frozen fruits and veggies for meals or snacks. Many moms reported running out of fresh fruits and vegetables between shopping trips. Based on these findings, additional information on the benefits of frozen and canned fruits and vegetables, particularly when fresh is not available, was added to the supporting content.

Discussions With Mothers of Preschool-Age Children

Role Modeling

1: They learn from watching you. Eat fruits and veggies and your kids will too.

2: They take their lead from you. Eat fruits and veggies and your kids will too.

Focus group findings indicate that mothers consider themselves to be role models for their 2- to 5-year-olds and have observed their children copying or mimicking their behavior in the past. Participants connected strongly with the “learn by watching you” and “take their lead from you” aspects of the role modeling messages, noting that they were believable and conjured up strong mother/child images.

…I think of things my parents used to do and I think those are things I should try to do—they [kids] take their lead from you. They’re very impressionable. Whatever you do, they do, too.”

-Mother of preschooler, Chicago, IL
Supporting content accompanying these messages includes a brief narrative by “a mom” (see Figure D), as well as bulleted tips. Mothers connected with several phrases in the narrative and bulleted tips, particularly those that expressed moms’ desires to teach their kids and help them have a healthy future.

Overall, our findings indicate that these messages and the supporting content work because they help motivate moms to be good role models in a practical way that doesn’t make moms feel guilty.

**Cooking and Eating Together**

1: Cook together. Eat together. Talk together. Make mealtime a family time.

2: Make meals and memories together. It’s a lesson they’ll use for life.

Less than half of mothers of preschoolers in our focus groups reported eating together with their family on a regular basis. While some mothers ate breakfast or lunch with their children, dinner was the meal most frequently eaten together. On an emotional level, moms in our focus groups were engaged by the idea of mealtimes being an opportunity to create positive memories for their families and as a time for teaching their children healthy habits. Moms found the repetition of the word “together” and the use of “family time” in these messages compelling because they emphasized the shared aspects of mealtime.

“That’s how we grew up...sitting at the table, but now it’s different.”

-Mother of preschooler, Birmingham, AL

For some mothers, these messages reminded them of their own experiences of sharing family meals and learning healthy habits from their mothers and/or grandmothers.

Supporting content related to eating together (see Appendix B, page 29) addresses issues, barriers, and motivators that emerged during early focus group testing. Moms who did not eat dinner with their children mentioned scheduling conflicts, differences in preferred eating times and locations (e.g., family members wanting to eat later or in the living room), and challenges associated with feeding their preschoolers while trying to eat their own meals. While mothers emphasized the importance of eating together as a family to talk and connect with each other, many reported watching television while eating together during mealtimes. Focus group testing of the supporting content indicated that moms particularly liked tips about focusing on each other at mealtimes and making meals a stress-free time. Moms also liked interwoven role modeling tips in this content, specifically the “eat fruits and veggies and your kids will too.”

Our focus groups revealed that many moms did not currently involve their children in even the simplest food preparation activities, such as washing produce or adding ingredients. The core messages and supporting content appealed to moms because they emphasize the “teaching” and “learning” aspects of preparing foods together and the emotional benefits of such activities (see Figure E).

Initially, many moms had difficulty envisioning

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**Figure D: Sample Narrative-Style Supporting Content on Role Modeling**

“My 3-year-old picks up on so much. She loves to copy what I do. Sometimes she will ask for a food she saw me eat. And I didn’t even know she was watching me! So, I try to eat fruits and vegetables. That way she’ll want them too. My doctor told me that kids learn eating habits when they are young. I want my child to learn to eat fruits and vegetables so she’ll be healthy. It makes me feel good that I’m teaching her something she’ll use for life.”

*See Appendix A for full supporting content related to role modeling.*


“cooking” activities that 2- to 5-year-olds could do safely. The supporting content provides moms with cooking activities that are appropriate for 2- to 5-year-olds. Moms felt that these activities were not too time-consuming or too messy. Our findings indicate that moms are most skeptical about involving 2- to 3-year-olds in cooking activities. Additional hands-on activities during nutrition education classes may further help overcome this barrier.

Messages on the Division of Feeding Responsibility

Many nutrition education materials that address the division of feeding responsibility use language stating that parents and caregivers are responsible for what, when, and where a child eats and children are responsible for how much and whether they eat. In our first round of focus group testing, we tested several variations of this idea, including: “How much your child eats may not look like enough, but it probably is. Offer a variety of healthy food choices and let your child decide how much to eat. They’ll eat what they need throughout the week.” The reaction from moms to these messages was strongly and consistently negative. Moms did not find these statements to be true, believable, or motivating.

“I can't trust her when she says, ‘I'm all done,’ because it means… ‘I wanna go play.’”

-Mother of preschooler, Raleigh, NC

Based on these findings, we conducted additional focus group testing on this topic to better understand mothers’ thoughts, feelings, and practices regarding various tenets of the division of feeding responsibility. These focus groups revealed that low-income mothers did not believe that their children would or could make responsible choices on their own about what to eat and how much to eat. Moms felt that their children would say “I’m full” or “all done” to try to leave the table to avoid eating foods they do not like or to play, watch television, or do something they would rather be doing other than eating.

“Even though it’s a tiny little bit, well, you have to force them to eat. So if I just let them decide how much they’re going to eat, they won’t eat. But they’re going to be hiding behind me eating something else that they can find on their own.”

-Mother of preschooler, Dallas, TX

Interestingly, many moms felt that kids should not be made to “clean their plate,” yet moms openly stated that they would engage in a number of child feeding practices to get their children to eat “enough.” As such, messages related to not making kids eat everything on their plate may miss the mark because moms report not engaging in this particular behavior. However, they do use pressure and coercion to get their children to eat what they feel is “enough.”

Figure E: Sample Bullet-Tip Style Supporting Content on Cooking Together*

Teach your kids to create healthy meals. It’s a lesson they’ll use for life.
- Kids like to try foods they help make. It’s a great way to encourage your child to eat fruits and vegetables.
- Kids feel good about doing something “grown-up.” Give them small jobs to do. Praise their efforts. Their smiles will light up your kitchen.
- Kids love helping in the kitchen. Parents love knowing that their child is also learning skills they’ll use for life. Help teach them to follow instructions, count, and more!

* See Appendix B for full supporting content related to cooking and eating together.
The “moms provide, kids decide” concept was a very new and abstract idea for most mothers. The core messages on this topic help introduce this concept in specific ways and in areas where moms are more open to change. Specifically, the messages are designed to motivate moms to let children decide how much to eat when introducing new foods and by allowing children to serve themselves. For these messages, we found that a short “hook” followed by three to four sentences of supporting text worked better than the brief messages used for the other concepts.

During our focus groups, few mothers allowed their preschool-age children to serve themselves. Most mothers prepared their children’s plates in the kitchen and then put them on the table, serving their children portions based upon what their kids typically eat. When presented alone as part of supporting content, moms reacted negatively to the idea of letting kids serve themselves, saying that it would be too messy, unsafe (i.e., hot foods), or that their kids just weren’t capable of doing so.

However, when the message was presented in the context of allowing kids to “learn by serving themselves,” we saw a dramatic transformation. Moms started talking excitedly about how they would try this at home, and they saw this as a way to help their children advance developmentally.

“One of the things that I’ve taken out of [this discussion] is teaching my son how to serve himself so that he can learn good portion sizes and learn to become more independent. He likes to do things on his own now, and serving himself would be another milestone in growing up.”

-Mother of preschooler, Tampa, FL

The words “teach” and “learn” were key motivators in this message, with moms responding well to the idea of guiding their children toward independence. Moms liked the phrase “Tell them they can get more if they’re still hungry” because it made them part of the process and emphasized one of their favorite roles—teacher. Also, the ideas of practice and taking small amounts limit the chance for mess and wasted food.

Letting Children Serve Themselves

Let them learn by serving themselves. Let your kids serve themselves at dinner. Teach them to take small amounts at first. Tell them they can get more if they’re still hungry.
Moms also were especially responsive to a portion of another draft message, and we suggest that you consider using it in supporting content: “Even your 3- to 5-year-old child can practice by serving from small bowls that you hold for them.” For some mothers, this statement alleviated their concerns about children serving from a hot stove and provided a concrete and practical way that children could serve themselves.

In our early focus group testing mothers responded negatively to messages that implied that it could take up to 11 tries before a child likes a new food. Some moms thought this many repetitions suggested forcing a food on a child, while others suggested that the result was not worth the trouble. Instead of offering the same food to their children 11 times just to get them to eat it, they reasoned that there are other healthful options they can get their children to eat with less effort.

Moms were more open to messages that encouraged them to give their children many opportunities to have small tastes. The core nutrition message, “Sometimes new foods take time,” worked because it reflected reality. Moms agreed that it takes patience and persistence to get a child to eat a new food. Statements like this one confirmed they were doing the right thing and encouraged them to keep trying.

Moms also reacted positively to a part of another draft message we tested: “When they develop a taste for many types of foods, it’s easier to plan family meals.” We suggest that you consider making this part of your supporting content.

The “Patience works better than pressure” message worked because it helped mothers feel like they are part of the learning process, even if it is something the children need to learn on their own.

Discussions With Mothers of Elementary School-Age Children

**Trying New Foods**

**Sometimes new foods take time.** Kids don’t always take to new foods right away. Offer new fruits and veggies many times. Give them a taste at first and be patient with them.

**Patience works better than pressure.** Offer your children new foods. Then, let them choose how much to eat. Kids are more likely to enjoy a food when eating it is their own choice. It also helps them learn to be independent.

In our focus group testing, moms agreed that kids are more likely to eat foods that are visible and easy to reach. They particularly identified with the idea that kids are hungry when they get home from school and look for a snack. Moms liked that these messages reminded them of how to help their kids choose fruits and vegetables over other less healthy options. Supporting content includes a short narrative paragraph describing a mom’s experience in trying to get her child to eat fruits and vegetables, bulleted tips, and recipes (Appendix C, page 31).

**Making Fruits and Vegetables Available and Accessible in the Home**

1: Want your kids to reach for a healthy snack? Make sure fruits and veggies are in reach.

2: When they come home hungry, have fruits and veggies ready to eat.

In our focus group testing, moms agreed that kids are more likely to eat foods that are visible and easy to reach. They particularly identified with the idea that kids are hungry when they get home from school and look for a snack. Moms liked that these messages reminded them of how to help their kids choose fruits and vegetables over other less healthy options. Supporting content includes a short narrative paragraph describing a mom’s experience in trying to get her child to eat fruits and vegetables, bulleted tips, and recipes (Appendix C, page 31).
“When I get something that’s eye level or in reach, he will pick that because he’s very independent. He likes to do it himself. If it’s right in front of him, that’s what he’s going to choose.”

-Mother of elementary school-age child, Los Angeles, CA

Moms related to the idea that kids enjoy dipping vegetables and fruits into things such as fat-free ranch dressing. Many particularly liked (and thought their children would enjoy) the idea of giving yogurt dips fun names like “Swamp Slime” for lime yogurt and “Pink Princess Dip” for strawberry yogurt (Figure F).

Some mothers were apprehensive about whether their children would like dips made with yogurt or sour cream, even though most moms were enthusiastic about using low-fat ranch dressing as a dip. Likewise, some moms didn’t know if their kids would like dips made with curry powder or avocado. Taste testing activities would help moms and children try out “new” recipes and increase the likelihood that they would prepare them at home.

We removed some recipes/tips from the supporting content because moms felt they would be too time-consuming, require too much cleanup, or would not be appealing to their children. These included making yogurt parfaits (e.g., layering cereal and yogurt), frozen banana pops, and frozen grapes. Moms may be more receptive to these recipes if they prepare and taste them in a class activity.

The “produce picker” message engaged moms because they have seen the truth of the statement from their own experiences. For instance, one mom said, “If you let a kid pick something out, he’ll eat it.” Some respondents also pointed toward the emotional rewards “produce picking” gives their children, such as building their self-esteem.

“Let them do something big,” said one respondent. “They feel important, and they feel like they’re doing something good for me and for themselves.”

-Mother of elementary school-age child, Birmingham, AL

Some moms felt that it would be harder to engage their children in helping to pick out canned and frozen fruits and vegetables at the store because kids cannot touch and smell them. Creative ways to engage kids in selecting frozen and canned fruits and vegetables may be useful as an educational activity.

**Figure F: Sample Supporting Content on Availability/Accessibility**

**Dip-a-licious!**

**Fruit Wands with Pink Princess Dip or “Swamp Slime”**

- Put pieces of fruit on a toothpick, skewer, or straw.
- Cover with plastic wrap and store in the refrigerator until snack time.
- Serve with low-fat strawberry (Princess Dip), or lime yogurt (Swamp Slime) for dipping.

**Happy Snack Packs**

- Fill small containers or snack bags with cut-up veggies.
- Add a small container of fat-free ranch dressing for dipping.
- Decorate the outside of the bags with stickers.
- Store in the refrigerator on a shelf where they are easy for your child to see.

Message on Involving Kids in Shopping for Fruits and Vegetables

Let your kids be “produce pickers.” Help them pick fruits and veggies at the store.
“Oh, that produce pickers...with them helping to pick the vegetables that they may want to eat. That might be helpful to me, instrumental with me getting him to eat more of them, if he’s able to pick them out himself. I’m thinking I’m going to try anything to get him to eat more vegetables now.”
-Mother of elementary school-age child, Chicago, IL

Our focus groups with moms and kids both indicated that few children consume milk at dinner. At home, milk was typically only offered at breakfast on cereal or, at times, with cookies as a snack. Many mothers felt that milk was no longer a priority now that their children were older. They noted that their children preferred other beverages or could get the calcium they need through cheese or other foods.

“Now they’re older, they have choices, and they do other things to get their calcium. My kids are big cheese and yogurt eaters. So if they’re not drinking the milk, I don’t really care...[because] they’ll get it at school, ‘cause that’s all they have. But, other than that, they eat other choices.”
-Mother of elementary school-age child, Chicago, IL

In the core message about milk, moms readily connected with the phrase “they’re still growing,” which is designed to reinforce the idea that milk continues to be important in children’s diets as they grow. Moms found the message call to “help your kids grow strong” to be motivating, with some reflecting on how milk was valued when they were growing up.

“Oh, that produce pickers...with them helping to pick the vegetables that they may want to eat. That might be helpful to me, instrumental with me getting him to eat more of them, if he’s able to pick them out himself. I’m thinking I’m going to try anything to get him to eat more vegetables now.”
-Mother of elementary school-age child, Chicago, IL

Responses from moms indicate that supporting content needs to convey that fat-free and low-fat milk have the “same nutrition with less fat” than whole milk. Some mothers were unclear about the nutritional differences between the types of milk available. Findings also indicate that taste tests involving fat-free, low-fat, reduced-fat, and whole milk may be needed to bolster messages encouraging mothers to serve fat-free or low-fat milk. Finally, some mothers were not receptive to messages encouraging milk for the entire family at meals since they do not like/consume milk themselves. Additional messaging research in this area is needed.

Message on Providing Low-Fat or Fat-Free Milk at Meals

1. They’re still growing. Help your kids grow strong. Serve fat-free or low-fat milk at meals.

Maximizing the Message: Helping Moms and Kids Make Healthier Food Choices
Discussions With 8- to 10-Year-Old Children

Food Preferences, Beliefs, and Asking Behaviors

- Eat smart to play hard. Drink milk at meals.
- Eat smart to play hard. Eat fruits and veggies at meals and snacks.
- Fuel up with milk at meals. And soar through your day like a rocket ship.
- Fuel up with fruits and veggies. And soar through your day like a rocket ship.
- Snack like a super hero. Power up with fruit and yogurt.

In our focus groups with 8- to 10-year-old children, kids preferred messages that melded fantasy/aspiration with the reality of being the “best you can be.” These results echo findings from other researchers, indicating that this age group is motivated by the ideas of having more energy, being strong or fast, and maximizing their physical performance at play or sports.

The five core nutrition messages for children utilize a rocket ship, super hero, and an “Eat smart to play hard” theme:

- The “Eat smart to play hard” messages were the most popular messages tested. Kids understood the “Eat smart to play hard” messages to mean that consuming fruits and vegetables or milk would give them strength and energy for sports and play.
- The rocket ship messages also appealed to kids. Most understood these messages to mean that fruits and vegetables or milk would help them be faster or have more energy.
- Similarly, many liked the super hero-themed message, which conjured up ideas of being big and strong.

“If you eat smart...then you can play harder and be more active, and you can do more things because you have more energy.”

–Elementary school-age child, Chicago, IL

These fun themes can help you stimulate children’s curiosity in related educational games, challenges, and other activities designed to motivate kids to consume more fruits and vegetables and low-fat/fat-free milk or milk products.

“I like it ‘cause I actually want to soar, and I actually want to go to the moon and stuff, like an astronaut.”

–Elementary school-age child, Los Angeles, CA

Messages in which milk or fruits and vegetables were the reward for performing a requested behavior were not motivating to kids. For example, the message “Remind mom which veggies are your faves, then she will know to offer them at dinner” did not test well in our groups. Kids understood the benefit of “being healthy,” but it was not particularly motivating to them when presented as the only benefit.

To be consistent with the Dietary Guidelines for Americans, the core nutrition messages for 8- to 10-year-olds need to be paired with images depicting fat-free or low-fat milk or yogurt, when milk or yogurt appears in the text of the message. In our focus groups, kids did not understand the terms “low-fat,” “fat-free,” “1%,” etc. Many could not identify milk products as categorized in MyPyramid. Educational activities addressing these issues would be beneficial.
The core nutrition messages are designed for use in the Federal nutrition assistance programs and to reach and resonate with low-income mothers and 8- to 10-year-old children. The messages and their supporting content are tools that can enhance theory-based interventions that:

- Address the key behavioral outcomes on page 3,
- Use motivators and reinforcements that are personally relevant to the target audience,
- Employ multiple channels of communication,
- Actively engage the participant, and
- Provide multiple exposures to the messages.

This section of Maximizing the Message suggests ways you can integrate the messages and supporting content into ongoing nutrition education activities. We’ve also included strategies for incorporating the messages into communication channels that were identified through nutrition education research, focus group discussions with moms and kids, and feedback from program stakeholders.

**Connecting the Messages to Programs**
The core nutrition messages support national nutrition education goals and nutrition assistance program policies such as the Food Stamp Nutrition Education Guiding Principles, Child Nutrition School Wellness Policies, WIC Program Nutrition Education Guidance and WIC’s Revitalizing Quality Nutrition Services process.

Nutrition education implemented through the nutrition assistance programs utilizes a variety of educational approaches, including facilitated/participatory group discussions, anticipatory guidance, motivational interviewing, “hands-on” classes, social marketing campaigns, Web-based approaches, etc. With a little planning, you can easily incorporate the core nutrition messages into these efforts. Think of the core nutrition messages as building blocks that can enhance and add new vitality to your nutrition education efforts targeting low-income mothers and 8- to 10-year-old children.

**Consider Cultural Relevance**
When implementing the messages, consider cultural relevance and make adjustments as needed to make them appropriate for the population you serve. For instance, if a large portion of the population has religious beliefs or practices that preclude serving milk/milk products with certain foods at meals, supporting content can be modified to offer other approaches (e.g., serving milk at snack time instead of dinner). It will be important to test any modifications with the audience(s) to ensure they are clear and have the intended effect.
The core nutrition messages and supporting content were tested with Hispanic and non-Hispanic White and African American mothers and children who spoke English. If you wish to use the messages and content with other racial/ethnic groups or in other languages, consider conducting additional formative research to ensure that the messages are relevant, understood, and motivating to your audience. For example, the core message that encourages moms to “Let your kids be produce pickers” tested very well with moms in our focus groups. This message was overwhelmingly preferred in six groups and did not receive any negative comments from moms. Still, if your target audience is primarily migrant farm workers, we suggest you get feedback from these moms before using this message with them.

**Incorporating the Messages Into Facilitated Group Discussions and Interactive Classes**

You can use the core messages and related supporting content in a variety of group education settings. Here are six easy ways:

1. **Host mom “support” groups at WIC clinics, childcare centers, libraries, and other places that low-income moms of preschoolers frequent in your community.** Facilitate discussions on message concepts such as role modeling, eating together as a family, cooking with preschool-age children, and letting kids serve themselves at meals. Consider using the mom’s story about role modeling fruit and vegetable consumption as a starting point for the discussion (Appendix A, page 28). Or ask moms about ways they are teaching their kids to become independent. Encourage moms to talk about things their children might learn at mealtimes. Hearing from other moms can empower and give less experienced moms confidence to put the behaviors into practice. Provide a take-home handout featuring the core nutrition message and supporting content to reinforce the discussion.

2. **Provide opportunities for moms and elementary school-age kids to be “produce pickers.”** Hold events at schools, faith-based institutions, community gardens, or grocery stores that allow moms and kids to select and taste different fruits and vegetables. Emphasize how letting kids select fruits and veggies may increase their willingness to eat them. Also, highlight how the activity may help kids build new skills (e.g., kids learn how to grocery shop, identify fruits and vegetables of different colors, etc.). Follow up on your event with “Fruit or Vegetable of the Month” activities that focus on a fruit or vegetable that is in season and affordable for low-income families in your community. Suggest fun ways to inspire kids to choose frozen and canned fruits and vegetables as well.

3. **Make your class dip-a-licious!** Prepare and allow mothers (and their elementary school-age kids, if possible) to sample the dip recipes included in the supporting content for mothers of elementary school-age children (Appendix C, page 32). A chance to see how easy recipes are to prepare and how good they taste will enhance skill building and increase the likelihood that moms will prepare these recipes at home. Include a discussion about how moms can make veggies and small containers of dip easy for their children to “reach” for an afternoon snack. Giving the dip a fun name such as “swamp slime” or one related to the rocket ship or super hero theme can also help encourage kids to eat it (and the veggies that go with it). Invite moms to suggest fun names for the dips.

4. **Expand a “Loving Your Family: Feeding Their Future” class series.** Add a discussion about ways to make fruits and vegetables accessible to elementary kids as after-school snacks. Encourage moms to set goals and have them share “success” stories during the next class. Loving Your Family...discussion guides are available at [http://snap.nal.usda.gov](http://snap.nal.usda.gov).
5. **Encourage moms to keep milk on the table.** Facilitate discussions with moms of elementary school-age children on kids’ continued need for low-fat and fat-free milk and milk products. Specifically discuss serving low-fat or fat-free milk at dinner and limiting other beverage options. In our focus groups, few children drank milk at dinner. For those who did, milk was the only beverage option their parents provided. Hold a “milk taste challenge” to help overcome perceived taste barriers to consuming fat-free and low-fat milk. Provide parents with activity sheets for their children that are based on the core message for kids.

6. **Use core nutrition messages with MyPyramid for Kids classroom materials on fruits and vegetables.** These classroom materials are available at [http://teamnutrition.usda.gov/resources/mypyramidclassroom.html](http://teamnutrition.usda.gov/resources/mypyramidclassroom.html). For the Vegetable Ad Campaign Activity included in Level 2, Lesson 3, ask children to create an ad campaign for a vegetable based upon the super hero, rocket ship or “Eat smart to play hard” theme. Have students use their creativity to create a poster and perhaps a TV ad—a jingle, a skit—that they can perform for the class.

**Using the Messages in Counseling Sessions**

**Motivational Interviewing.** Motivational interviewing is a counseling method that you can use to influence a mom’s motivation to change her behavior. Use the focus group findings presented in this guide to help you understand some of the challenges moms face when trying to change behaviors related to child feeding practices. This may help you in developing open-ended questions that identify personal challenges experienced by moms. It can also help you connect with moms during your counseling sessions. You can also use the core messages and supporting content as a reference on which to base feedback and choices for moms who are interested in ways to overcome child feeding problems. For instance, if a mom expresses a desire for ways to help her child eat more fruits and vegetables, you could ask her permission to share some of the strategies provided in the supporting content on role modeling. For more information on motivational interviewing, see the WIC Learning Online module on Motivational Interviewing under the Counseling Skills at [http://www.nal.usda.gov/wicworks/WIC_Learning_Online/index.html](http://www.nal.usda.gov/wicworks/WIC_Learning_Online/index.html).

**Anticipatory Guidance.** Anticipatory guidance can help moms prepare for expected physical, social, and behavioral changes during their children’s current and approaching age of development. You can share the core messages and supporting content with mothers to help them identify ways to help their children develop healthy eating habits. The messages address several hallmarks of preschoolers’ development, including their reluctance to try new foods, desire to “do it on their own,” and development of motor skills. Work with moms to identify strategies and set goals for eating together, introducing new foods, and eating fruits and vegetables.

**Counseling on Food Benefits.** When discussing changes to the WIC food package with participants, share how fat-free and low-fat milk have the “same nutrition but less fat” than whole milk. In our focus groups most moms did not understand the differences among fat-free, low-fat, reduced-fat, or whole milk (other than perceived taste differences and an assumption that lower fat milk was less nutritious). Moms were interested in having more information on this topic.

**Enhancing or Creating a Social Marketing Campaign Featuring the Core Messages**

Social marketing involves the selection of a narrowly defined target audience and involving them in the formative stages of your campaign. The focus groups conducted for the development of the core nutrition messages...
can contribute to this phase of your campaign development. You can use this research and the resulting messages and supporting content to:

- Refresh current fruit and vegetable or milk/milk product promotion campaigns by incorporating core nutrition messages.
- Create a new social marketing campaign around one or more of the messages and use the related message supporting content found in the Appendices.
- Collaborate with colleagues in other nutrition programs and/or partners to get even better results.

Collaborating With Others To Maximize Message Impact

Collaborating with others in your community to promote the core messages can increase message exposure. This includes working with other nutrition education providers serving low-income mothers or kids, such as the Expanded Food and Nutrition Education Program (EFNEP). Other intermediaries, or third parties, that have connections to the same target audience can also be valuable partners. Consider collaborating with:

- Coordinators and volunteers of food banks and pantries and soup kitchens
- Pediatricians
- Teachers, principals, nurses, foodservice staff, and school wellness councils that work with schools where many kids receive free or reduced-priced lunches
- Coordinators of afterschool programs serving low-income children
- Childcare providers and Head Start teachers;
- Religious leaders and members of faith-based institutions working with low-income neighborhoods
- Managers of grocery stores and farmers’ markets where SNAP and WIC participants shop
- Community garden coordinators
- Grantees and coordinators of programs that are funded to implement environmental changes that make it easier for mothers and children to make healthy food choices

Collaborating with others can increase access to the target audience, create synergy, and expand the credibility of your activities. These core nutrition messages are an opportunity to work with existing partners and to engage new ones.

- Share the messages with potential partners; explain their purpose, audience, and potential uses.
- Provide details on how you will use the messages and content in the community and offer suggestions on how you can work together.
- Share the benefits of collaboration and offer specific ways organizations and individuals can participate as full partners or as supporters, such as by:
  - Featuring articles that communicate the messages in community newsletters;
  - Including messages in educational activities for children and parents;
  - Adding messages and related content to a Web site and/or linking to the State or national Web site with information about messages; and
  - Disseminating materials conveying the messages at events.
- Conduct a seminar or training for intermediaries to acquaint them with the messages. After the presentation, discuss the messages and supporting content in small groups and brainstorm ideas for using the messages, including opportunities and barriers. Have the entire group rate and rank ideas and form a workgroup to outline ways to implement the top-ranked idea.
Research indicates that using multiple delivery points, as well as a variety of communication tools and approaches to disseminate consistent messages to the individual, family, and community, increases the likelihood of success. These methods increase the audience’s exposure to the messages and the opportunity to engage them at critical decision points. Therefore, it is important to know where to reach moms and to understand communication methods that engage them. Ideally, selected channels should enable you to reach a high percentage of the target audiences repeatedly during a given period of time. Use of multiple channels also exposes mothers to messages using different methods in a variety of environments and at different times.

**Learning About Your Audience/Community**

Audience research and community assessment can provide insights on how to reach low-income mothers, such as where they live, work, shop, get services, and spend free time; what nutrition programs they participate in; and how they like to receive information.

Federal nutrition assistance program data can provide valuable information, such as authorized WIC and SNAP stores with high average monthly benefit redemptions, program sites serving large numbers of moms, schools with high percentages of kids receiving free meals, and childcare and after-school programs participating in the Child and Adult Care Food Program. Nutrition assistance programs may also conduct consumer surveys to get feedback on services. These may be useful in your planning, providing information on things such as Internet access, shopping habits and preferences about ways to receive information. There may also be other State and local surveys conducted in your community that include useful data about low-income moms and kids.

National surveillance data may also be useful. The Centers for Disease Control and Prevention’s Behavioral Risk Factor Surveillance System (http://www.cdc.gov/brfss/) provides State-specific data about health-related behaviors. The United States Census Bureau provides demographic data such as age, gender, household size, and language spoken at home (http://www.census.gov/).

Local nutrition educators are also valuable sources of information. They may know, or can ask, moms where they go for health information, the types of media they like, etc. Learn the primary sources of news and health information for moms (e.g., newspapers,
radio stations, etc.). Consider the types of transportation used. Could you reach moms with information in bus shelters and subway stations? Determine if their children participate in afterschool programs and, if so, where? These locations may be good sites for reaching kids and their moms.

National consumer marketing data sources can be helpful in learning more about how to reach moms and kids. For example, ConsumerStyles is a national annual mail survey conducted in June 2007 that included more than 11,750 respondents, including an oversampling of low-income households. Results from the survey indicate that doctors, television, and the Internet are top sources for health and nutrition information among low-income moms of 2- to 10-year-olds.

Channels To Communicate the Messages
To support and reinforce nutrition education activities, educators use an assortment of materials, including consumer pamphlets, handouts, recipes, posters, activity sheets, school menus, newsletters, Web-based instruction, public service announcements and/or paid ads on television or radio, billboards, bus wraps, articles in community or religious bulletins, reinforcement items, and more.

Each approach and communication method has its benefits and constraints. Make sure that the resources fit the activities and channels you use and that the costs are both affordable and allowable. Use your knowledge of the population and what works with them to guide your decisions. Program funding and guidance vary and may affect which channels you can use to reach participants. Consider the guidance from your funding agency in making final decisions.

If you plan to develop new materials, consider working with other programs and stakeholders. Partners bring expertise and resources that can result in a more comprehensive effort reaching mothers, children, and the community in a way that is more likely to get results.

Using Print Materials To Reach Moms
Brochures, posters, handouts, and other print materials are commonly used to reinforce adult counseling and educational sessions. Your choice of format will depend upon what you learned from moms about how they like to receive information, what has been effective in the past, and your budget. Consider adapting or modifying your existing nutrition education materials to include the core messages, especially if your materials already focus on one of the behaviors addressed by the core messages. Whether incorporating the core nutrition messages into existing communication activities or using them in new materials to support a campaign, it is important to communicate the information in a way that is consistent, accurate, easy to understand, appealing, and relevant to your audience. Test the material with the target audience and get input from intermediaries during development. See Figure G for an example of print materials for low-income mothers.

Figure G: FNS’ Loving Your Family, Feeding Their Future Participant Materials

The Loving Your Family... “Healthy Family Guidebook” and participant handouts provide examples of how nutrition messages, narrative stories, and bulleted tips can be used in print materials in a way that is appropriate for audiences with limited literacy skills. View these resources at: http://snap.nal.usda.gov.
Ten Important Tips for Designing Print Materials for Moms:

1. The core nutrition messages contain the “emotional hook” for moms. Feature a message prominently (e.g., on the front of a brochure) to entice moms to read more.

2. Include interactive elements in brochures and handouts, such as an area for mothers to record the goal they will strive to achieve.

3. Emphasize information with bolding, arrows, boxes, or circles instead of all capital letters.

4. Make your material easier to read by using short bulleted lists (as done with the supporting content included in Appendices), short sentences, and a serif font.

5. Use left justified and right ragged margins.

6. Limit the amount of content provided. Focus on action-oriented tips and strategies that support the message and resonate best with moms.

7. Use attractive designs with similar color themes, fonts, and types of images (e.g., illustrations versus photographs, etc.) for a consistent look.

8. Use photographs or realistic line drawings that support the message and allow the target audience to “see themselves” practicing the behaviors. Test graphics with your audience to make sure they are appropriate and motivational.


10. Include a source to contact for more information.

Using Print Materials To Reach Kids

While many of the tips above apply to materials for kids, there are differences. Content needs to be sequential, developmentally appropriate, behaviorally focused, and interactive. Activity sheets, interactive stories, self-assessments, and other resources that get kids actively involved and allow them to practice simple cognitive and behavior skills are engaging and support behavior change. Making materials fun and challenging can also help capture kids’ attention and stimulate their motivation to learn.

Seven Tips for Designing Print Materials for Elementary School-Age Children:

1. Keep materials simple with direct messages.

2. Integrate the theme of the message (e.g., “Eat smart to play hard”) in the material design to capture kids’ attention and motivate them to learn.

3. Conduct formative research periodically to make sure messages and materials are still appealing to kids. What children perceive as “cool” changes over time.

4. Provide concrete ideas rather than abstract concepts (e.g., focus on specific foods to eat rather than nutrients).

5. Include a parental component. Provide either complementary take-home materials for moms or include activities that kids can do with their moms.

6. Use engaging pictures. In our focus groups, kids said that they wanted “action-oriented” images. For example, kids wanted images of a super hero flying through the air or children playing a sport (“playing hard”) such as soccer or baseball.

7. Include interactive components such as puzzles, challenges, and games.
Using Technology To Reach Moms and Kids

Many of the moms in our focus groups reported using the Internet as a primary source of information on nutrition and health. The 2007 ConsumerStyles survey also found that 40 percent of low-income moms go to Web sites first when looking for health and nutrition information. Over 60 percent of moms also reported using e-mail regularly, but most did not use blogs (i.e., online journals about specific topics). The 2003 Census data indicates that even among family households with incomes below $25,000, 31 percent had Internet access. Children who do not have Internet access at home may have it at school. Overall, kids 9 to 11 years old now use computers and the Internet to play games, send e-mail, and even do homework. Formative research with your audience can tell you more about moms’ and kids’ use of technology and factors associated with using it for message delivery (e.g., use of high-speed Internet access, frequency of interruptions in service, etc.).

Realizing that moms and kids may be using technology in some specific ways (i.e., e-mail for moms, games and homework for kids as discussed earlier), it is one possible way to disseminate nutrition messages and related content. Depending on resources, Web activities could range from messages on an existing Web site to developing a Web-based activity for moms and kids. Some specific ways technology could be used include:

- **Reach moms through Web sites and e-mail.** Consider ways you are already using the Web to communicate with moms and kids. Are there areas where you can insert these messages? For instance, e-mails and other electronic communications can include short articles that convey a message and tips from the supporting content. Provide ideas for involving children in meal preparation with the related messages and a Dip-a-licious recipe as a “topic of the month” in e-newsletters for moms.

- **Display messages digitally.** Use digital frames, computer monitors, message boards, and digital advertising displays to display the core messages in waiting rooms, subway tunnels, cafeterias, and more.

- **Issue an online competition for kids.** Kids prefer computer games that allow them to be part of the story. Encourage children to become their own super hero by tracking how many fruits and vegetables they eat each day or how much milk they drink. Children can log in the numbers each day or week, selecting a “super hero” name for themselves along the way. Like with video games, children can view the top scorers by “super hero” name to compare their progress to their peers. Depending on your resources, the activity could be designed and maintained through your facility, a partner, or perhaps a local university’s digital media or elementary education department.

- **Tap into children’s game time.** Consider developing educational Web activities that feature core nutrition messages. Work with an animation designer to bring the rocket ship theme into your existing Web site (or partner Web sites). Create activities children can do with their parents, such as helping their moms create a grocery list or searching for healthy recipes online.

**Figure H: MyPyramid Blast Off Game**

The MyPyramid Blast Off game provides an example of how an interactive computer game with fantasy elements can help motivate children to learn how to make healthy food choices. View this resource at: [http://www.mypyramid.gov/KIDS/index.html](http://www.mypyramid.gov/KIDS/index.html).
The core nutrition messages and content have been developed as tools to help change certain behaviors among the target audiences. The developmental process involved **formative evaluation** procedures designed to capture information about the audience and input from them to formulate messages that resonate and motivate them to take action. As you implement these messages, it may be useful to get feedback from participating moms on the messages and your approach. If you develop new or adapt current activities to include the messages, conduct additional formative research with your target audiences. Likewise, evaluation is essential during subsequent stages (i.e., during implementation and at the end of the intervention) to document the effect and provide information to improve future efforts.

**Process Evaluation** is a useful tool for monitoring and can identify areas that require a mid-point adjustment. It includes such measures as tracking the number of people reached, number of times messages and materials reach the target audience(s), locations or places that moms and kids were exposed to the messages, the service provider involved, resources and training needed by educators, barriers and facilitators, etc. Process evaluation provides valuable information about key elements of the projects that may help to explain the results of an impact evaluation.

**Outcome Evaluation** demonstrates changes that occur in the presence of an intervention but do not establish a cause-and-effect conclusion. It shows how well the program has met its communication objectives and potential ways to make it more effective.

**Impact Evaluation** indicates how effective the intervention was in changing the target population’s attitudes, awareness, and/or behaviors. Although impact evaluation is highly valued, conducting this type of evaluation may be complex, time-consuming, and resource-intensive.

The type of evaluation will depend on funding, staff time and expertise, time available for the evaluation phase, etc. It is important to evaluate since the results can provide you with solid evidence to share with your colleagues and managers. Evaluation also helps quantify how your work affects low-income mothers and children and can help justify continued intervention.

When planning your intervention consider the following:

- What are your objectives?
- What evaluation approach/method should you use?
What do you want to measure and what questions do you want to address? (Note: when deciding what to measure, think about what will be important to your organization’s leaders and your overall program objectives. Consider asking partners, for instance, what they would consider as successful).

What approach do you want to use to conduct the evaluation? How will you collect the data you are measuring? What is the scope and design? Will you build in a comparison group?

What timeframe have you set for completing the evaluation? What plans do you have for using and disseminating the results?

What resources do you have for the evaluation?

The following resources provide additional guidance for developing evaluation plans:

- Nutrition Education: Principles of Sound Impact Evaluation [URL]
- The National Cancer Institute’s Pink Book—Making Health Communication Programs Work [URL]
References


40. Cullen KW, Baranowski T, Owens E, Marsh T, Rittenberry L, deMoor C. Availability, accessibility and preferences for fruit, 100% fruit juice, and vegetables influence children's dietary behaviors. Health Educ Behav. 2003;30:615-626.
Appendix A:
Supporting Content for Mothers of Preschoolers on Role Modeling

The following content supports core nutrition messages on role modeling and offers mothers additional tips, strategies, and encouragement to facilitate behavior change. Content is provided in the form of a narrative story by a mother of a preschooler and as short bulleted lists. This content reflects tips, strategies, and language that resonated with mothers during our focus group testing. See the section of this guide on “Putting the Messages Into Practice” (page 16) for ideas on how to incorporate the messages and supporting content into your nutrition education activities.

Role Modeling

Message 1: They learn from watching you. Eat fruits and veggies and your kids will too.
Message 2: They take their lead from you. Eat fruits and veggies and your kids will too.

Narrative-Style Content:

“My 3-year-old picks up on so much. She loves to copy what I do. Sometimes she will ask for a food she saw me eat. And I didn’t even know she was watching me! So, I try to eat fruits and vegetables. That way she’ll want them too. My doctor told me that kids learn eating habits when they are young. I want my child to learn to eat fruits and vegetables so she’ll be healthy. It makes me feel good that I’m teaching her something she’ll use for life.”

Bulleted Tip Style Content:

How can I help my child eat more fruits and vegetables?
• *Eat together*. Let your child see you enjoying fruits and vegetables at meals and snacks.
• *Take it with you*. Show your child how whole fruit is a great snack to eat at the park or in the shopping mall. Put apples, oranges, or bananas in your bag for quick snacks.
• *Share the adventure*. Try new fruits and vegetables together.
• *Fix them together*. Teach your child to tear lettuce or add veggie toppings to pizza.

Why does it matter what I do?
• *They learn by watching you*. Kids get curious when they see you eating fruits or vegetables. Before you know it, they’ll want to taste what you are having.
• *You teach them lessons they’ll use for life*. It’s normal for 2- to 5-year-olds to be “picky” eaters. Help them increase the types of fruits and vegetables they like by setting a good example.

What kinds should we eat?
• Fresh, frozen, and canned fruits and vegetables are all smart choices. Buy some of each to last until your next shopping trip.
  - Frozen vegetables have as many vitamins and minerals as fresh. Choose packages that contain vegetables and nothing else—no added fat, salt, or sugars.
  - Buy canned fruits that are packed in “100% juice” or water.
  - Rinse canned beans and vegetables with cold water to make them lower in salt.
  - Look for canned vegetables that say “No added salt” on the front of the can. Buy them when they go on sale.
• Cooked vegetables or ripe fruits that are cut into small pieces are easy for your child to eat.
• Cut whole grapes and cherry tomatoes into smaller pieces to prevent choking.
The following content supports core nutrition messages on cooking and eating together and offers mothers additional tips, strategies, and encouragement to facilitate behavior change. Content is provided in the form of short bulleted lists. This content reflects tips, strategies, and language that resonated with mothers during our focus group testing. See the section of this guide on “Putting the Messages Into Practice” (page 16) for ideas on how to incorporate the messages and supporting content into your nutrition education activities.

**Cooking and Eating Together**

**Message 1:** Cook together. Eat together. Talk together. Make mealtime a family time.

**Message 2:** Make meals and memories together. It’s a lesson they’ll use for life.

**Bulleted Tip Style Content (Eating Together):**

It takes a little work to bring everyone together for meals. But it’s worth it and the whole family eats better.

- Start eating meals together as a family when your kids are young. This way, it becomes a habit.
- Plan when you will eat together as a family. Write it on your calendar.
- You may not be able to eat together every day. Try to have family meals at least four times a week.

**How to make family meals happy**

- Focus on the meal and each other. Turn off the television. Take phone calls later.
- Talk about fun and happy things. Try to make meals a stress-free time.
- Encourage your child to try foods. But, don’t lecture or force your child to eat.

**Fast family meals**

- Cook it fast on busy nights. Try stir-fried meat and vegetables, quick soups, or sandwiches.
- Do some tasks the day before. Wash and cut vegetables or make a fruit salad. Cook lean ground beef or turkey for burritos or chili. Store everything in the fridge until ready to use.
- Find quick and tasty recipes that don’t cost a lot to make at [www.fns.usda.gov/eatsmartplayhardhealthy lifestyle/](http://www.fns.usda.gov/eatsmartplayhardhealthy lifestyle/).

**Text Box Style Content (Eating Together):**

**Talk to me!**

What made you feel really happy today?
What did you have to eat at lunch today?
What’s your favorite veggie? Why?
Tell me one thing you learned today.
What made you laugh today?
Bulleted Tip Style Content (Cooking Together):

Teach your kids to create healthy meals. It's a lesson they'll use for life.
- Kids like to try foods they help make. It’s a great way to encourage your child to eat fruits and vegetables.
- Kids feel good about doing something “grown-up.” Give them small jobs to do. Praise their efforts. Their smiles will light up your kitchen.
- Kids love helping in the kitchen. Parents love knowing that their child is also learning skills they’ll use for life. Help teach them to follow instructions, count, and more!

Prepare fruits and veggies together.
- Children learn about fruits and vegetables when they help make them. And all of that mixing, mashing, and measuring makes them want to taste what they are making. It’s a great trick for helping your “picky eater” try fruits and vegetables.

On busy weeknights…
- Cooking together can mean more “mommy and me” time on busy days. Ask your child to help with easy tasks, like adding veggie toppings to a cheese pizza.
- Let your child choose which veggies to add to soup. Only an adult should heat and stir hot soup.
- Make sandwiches together.

Make some meals special.
- Have a color contest and see how many green, red, yellow, and orange fruits and vegetables you can include in one meal.
- Name a food your child helps create. Make a big deal of serving “Karla's Salad” or “Corey's Sweet Potatoes” for dinner.
- Try a “Make Your Own” night. Let your family put together its own soft tacos, sandwiches, pizza, or salads. Place the ingredients within easy reach and let the fun begin.

Text Box Style Content (Cooking Together):

Cooking Activities by Age

2-year-olds
- Make “faces” out of pieces of fruits and vegetables.
- Scrub vegetables or fruits.
- Tear lettuce or greens.
- Snap green beans.

3-year-olds
- Add ingredients.
- Stir.
- Spread peanut butter or other spreads.
- Shake a drink in a sealed container.
- Knead bread dough.

4- to 5-year-olds
- Peel some fruits and vegetables like bananas.
- Peel hard boiled eggs.
- Cut soft fruits with a plastic knife. Only adults should use sharp knives.
- Wipe off counters.
- Mash soft fruits, vegetables, and beans.
- Measure dry ingredients.
- Measure liquids with help.
The following content supports core nutrition messages on making fruits and vegetables available and accessible for children to eat and offers mothers additional tips, strategies, and encouragement to facilitate behavior change. Content is provided in the form of a narrative story by a mother of an elementary school-age child, short bulleted lists, and recipes. This content reflects tips, strategies, and language that resonated with mothers during our focus group testing. See the section of this guide on “Putting the Messages Into Practice” (page 16) for ideas on how to incorporate the messages and supporting content into your nutrition education activities.

### Availability/Accessibility

**Message 1:** Want your kids to reach for a healthy snack? Make sure fruits and veggies are in reach.

**Message 2:** When they come home hungry, have fruits and veggies ready to eat.

### Narrative-Style Content:

“I’m hungry.” That’s the first thing my kids say when they come through the door. I need something to feed them—fast. Sometimes they go to the kitchen and get their own snacks. I found that when I put fruits and vegetables in a place where my kids can see them—they eat them. Now I keep cut up veggies on a low shelf in the fridge and a bowl of fresh fruit on the counter. When I don’t have fresh fruits and veggies, I use canned or frozen. It takes a little planning, but it’s worth it. I know fruits and vegetables help them stay healthy.

### Bulleted Tip Style Content:

**Make Fruits and Veggies Easy To See**

- Keep a bowl of washed fresh fruits on the kitchen table.
- Put washed and cut fruits and vegetables on a shelf in your refrigerator where your child can see them.

**Make-Ahead Fruit and Veggie Snacks From the Fridge**

- Toss veggies with cooked pasta and fat-free Italian dressing.
- Slice apples. Dip them in pineapple or orange juice to keep them from turning brown. Store apples in plastic snack bags or covered bowls in the fridge.
- Kids love to dip fresh veggies in low-fat ranch dressing. Cut up veggies. Store them near the dip on a low shelf in the fridge.
Recipe-Style Content:

**Dip-a-licious!**

**Fruit Wands with Pink Princess Dip or “Swamp Slime”**
Put pieces of fruit on a toothpick, skewer, or straw.
Cover with plastic wrap and store in the refrigerator until snack time.
Serve with low-fat strawberry (Princess Dip) or lime yogurt (Swamp Slime) for dipping.

**Happy Snack Packs**
Fill small containers or snack bags with cut-up veggies.
Add a small container of fat-free ranch dressing for dipping.
Decorate the outside of the bags with stickers.
Store in the refrigerator on a shelf where they are easy for your child to see.

**Dip Your Favorite Veggies In These Tasty Dips**
(1 serving is 2 tablespoons of dip)

**Honey-Mustard Dipping Sauce**
1/4 cup fat-free plain yogurt
1/4 cup low-fat sour cream
2 teaspoons honey
2 teaspoons spicy brown mustard
Mix all ingredients together. Store in a covered container in the refrigerator.
Makes 4 servings.

**Curry Dip**
1 cup fat-free sour cream
1 cup of fat-free plain yogurt
1 tablespoon curry powder
Mix all ingredients together. Store in a covered container in the refrigerator.
Makes 16 servings.

**Avocado Dip**
2 medium ripe avocados
1 tablespoon lemon juice
¼ cup salsa
1/8 teaspoon salt
Peel and chop avocados. Toss avocado with lemon juice in small bowl. Add salsa and salt. Mash with a fork.
Cover and store in the refrigerator. Makes 12 servings.

Acknowledgements: