Children aren't born with a set of food habits. They learn which foods to eat, how much to eat, and when to eat as they interact with people around them. Family members have a great influence on this learning process. Parents play many roles as they guide their children's developing food habits: model, teacher, mediator, provider, stage manager, and director. We'll discuss these in the four lessons of Food for Tots.

**Parents as models**

When couples marry, two sets of food habits are blended. There undoubtedly will be both likenesses and differences in types of food eaten, the ways they're prepared, and when they're eaten. Young children learn these food habits that are unique to their family.

**Talk about it**

What were some of your favorite childhood foods? As an adult, how often do you eat them? Do you eat foods today that seemed strange or unappetizing when first introduced to you? Compare your current food habits with those of the family in which you grew up. How have they changed? (Consider which foods are served, who prepares them, how many meals are eaten, and who eats meals together.) How have you and your spouse or partner blended the food habits that you learned as children? Have you started any new food traditions, such as eating certain foods on special occasions?

Analyze a grocery list. Why did you buy those foods for your family? (Consider the influences of cost, taste, convenience, nutritional value.) Would you like to change your family food habits? If so, how?

Although researchers can't say for sure how young children develop food preferences, parents and children often have similar tastes. The simplest explanation is that the same foods are available for all family members to eat. However, imitation is important, too. Children may copy what they see others eating. Parents, therefore, are models. A mother who drinks diet soft drinks all day is sending an unspoken message to her child. A father who says "I don't like peas—don't give me any," is likewise a model. Brothers and sisters who fight at the table also give messages about suitable mealtime behavior.

**Parents as teachers**

Parents have the primary responsibility for teaching their young children about a good diet. Sometimes parents and children talk together about kinds of food needed for good health. These talks might take place in grocery store aisles, in front of the television, or at the dinner table. At other times, teaching may be less formal. For example, children get interested in food when they help prepare it.
Food handling skills depend on muscular development and coordination of the child. A 2-year-old can most easily learn food handling tasks that require big arm muscles (such as scrubbing, tearing, breaking, and snapping). Next, the child develops coordination of hand muscles needed for pouring, spreading, and mixing. When finger dexterity develops, a child can roll, peel, and mash. Finally, the older preschooler develops fine motor coordination needed for cutting and grating.

Kitchen safety should be the first lesson. Teach your child the meaning of “hot,” “heavy,” and “sharp.” An adult must be responsible for handling hot pots and pans, cooking on the range, using electrical appliances such as blenders, and cutting with sharp knives.

Next, teach your young child about kitchen cleanliness. Two-year-olds can learn to wash their hands and to wipe counters and table tops. Sponges may be easier to hold than cloths. Don’t worry if your child tries to hold the knife to spread butter, margarine, or peanut butter on crackers, celery, or fruit slices. Before starting, count out the amount that can be eaten by the child or family members to discourage too much spreading practice.

Mixing. A 3-year-old can use a flat-bottomed container your child can hang on to tightly. Try soft bananas (for bread), cooked potatoes, stewed pumpkin (for pie), cooked eggs (for sandwiches), or cooked dried beans (for dip).

Cutting. A 5-year-old can use a table knife for cutting soft foods such as cooked potatoes, hard-cooked eggs, and bananas. Show your child how to handle knives safely; the sharp edge should point down when cutting; fingers should be away from the blade; knives should be passed handle first; knives should be carried blade-down and the child should not run.

Hands-on food experiences lead to more than positive attitudes toward eating a variety of foods. Children develop coordination as they become more skilful. As they measure ingredients, they learn about math. They learn to tell the differences among colors, shapes, and textures. Also they learn new words such as knead, mash.

Peeling. Children under 4 years can begin peeling by shaking corn. You’ll need to help remove the silk. A 4-year-old has the finger dexterity needed to peel oranges, shrimp, and hard-cooked eggs.

Pouring. Pouring skills develop as children play in the sandbox, bathtub, or kitchen sink. The task is easier if you follow this advice: Give your child a small, lightweight pitcher to use. Mark a “full line” on a glass with a rubber band or waxed pencil so your child knows when to stop pouring.

Tell your child to hold the handle of the pitcher with one hand and guide the spout with the other hand. This also helps to balance the pitcher.

Rolling with hands. Show your child how to roll food into a ball using both hands. Try cheese balls, meat balls, and cookie or yeast dough.

Mixing. A 3-year-old can use rotary beaters by themselves. Electric mixers should not be used unless you’re there to supervise.
Dear Parents: We're pleased that you've enrolled in this OSU Extension home study course. Food for Tots focuses on how you, as a parent, influence the food habits of your children. The letters explore the many roles you play and answer questions you've asked about feeding your children between ages 2 and 5. There are four lessons in the letter series. We encourage you and your family to talk about each one. This first letter concentrates on you, the parent, as a model, teacher, and mediator.

Carolyn Raab
Extension foods and nutrition specialist

Carolyn Raab, Extension foods and nutrition specialist, Oregon State University; with assistance from Donna Gregerson, Extension home economist, Oregon State University Extension Service; and Janet Jacobson, student, Food Systems Management, Oregon State University. Extension program materials from Virginia, New York, and Washington were used in preparation of this publication.

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Lesson 2
Parents as Providers

A letter series from the OSU Extension Service

EM 8351 • Revised October 1990
Parents are sometimes called "gatekeepers" because they determine what foods are available for children to eat at home. By providing a variety of nutritious foods, you expose your child to many good food choices. All family members need the same nutrients for good health. However, different amounts are needed depending on age (adults need more than children), sex (men require more of many nutrients because they are larger), and stage of growth (needs are high during adolescence and pregnancy).

<table>
<thead>
<tr>
<th>Key Nutrients</th>
<th>Function</th>
<th>Good Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protein</td>
<td>Builds and repairs body tissues.</td>
<td>Meat, poultry, fish, eggs, peanut butter, dried beans, and peas.</td>
</tr>
<tr>
<td>Vitamin A</td>
<td>Helps eyes adjust to dim light. Helps lining of mouth, nose, throat and digestive system healthy.</td>
<td>Liver, dark green and deep yellow vegetables (such as broccoli, dark greens, pumpkin, sweet potatoes), cantaloupe, egg yolk, whole milk, and fortified low-fat products.</td>
</tr>
<tr>
<td>Vitamin D</td>
<td>Helps body use calcium and phosphorus to build strong bones and teeth.</td>
<td>Fortified milk, fish liver oils, liver, fatty fish.</td>
</tr>
<tr>
<td>Vitamin E</td>
<td>Helps protect other nutrients and cell membranes from destruction by oxygen.</td>
<td>Vegetable oils (such as soybean, cottonseed, corn), wheat germ, liver, whole grains.</td>
</tr>
<tr>
<td>Vitamin K</td>
<td>Helps blood to clot.</td>
<td>Green leafy vegetables, milk products.</td>
</tr>
<tr>
<td>Thiamin (vitamin B1)</td>
<td>Helps release energy from foods. Helps keep nervous system healthy.</td>
<td>Pork, enriched and whole grains, dried beans and peas, liver.</td>
</tr>
<tr>
<td>Riboflavin (vitamin B2)</td>
<td>Helps release energy from food.</td>
<td>Milk and milk products, enriched grain products, meats, dark leafy greens, liver.</td>
</tr>
<tr>
<td>Niacin</td>
<td>Helps release energy from food. Keeps nervous system and skin healthy.</td>
<td>Poultry, fish, peanuts, enriched and whole grains.</td>
</tr>
<tr>
<td>Pyridoxine (vitamin B6)</td>
<td>Helps the body use protein and other nutrients.</td>
<td>Meat, poultry, fish, dried beans and peas, bananas, potatoes, whole grains, peanut butter.</td>
</tr>
<tr>
<td>Folacin</td>
<td>Helps body make genetic material and use protein. Helps build red blood cells.</td>
<td>Leafy greens, oranges, dried beans and peas, liver, whole grains, eggs.</td>
</tr>
<tr>
<td>Vitamin C</td>
<td>Helps form collagen which holds body tissues together. Helps body absorb iron.</td>
<td>Citrus fruits, cabbage, potatoes, tomatoes, broccoli, peas, strawberries, watermelon, cantaloupe.</td>
</tr>
<tr>
<td>Calcium</td>
<td>Helps build bones and teeth. Helps muscles to contract and blood to clot.</td>
<td>Milk, yogurt, cheese, ice cream.</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>Helps build bones and teeth and release energy from food.</td>
<td>Milk products, meats, eggs, legumes, whole grains.</td>
</tr>
<tr>
<td>Magnesium</td>
<td>Helps regulate various body processes and contractions of nerves and muscles.</td>
<td>Legumes, nuts, whole grains, milk, leafy greens.</td>
</tr>
<tr>
<td>Iron</td>
<td>Combines with protein to form hemoglobin which carries oxygen in the blood.</td>
<td>Meats, liver, oysters, legumes, enriched and whole grain cereals, leafy green vegetables.</td>
</tr>
<tr>
<td>Zinc</td>
<td>Helps promote sexual maturation, healing of wounds, and sense of taste.</td>
<td>Meat, poultry, oysters, legumes, whole grains.</td>
</tr>
<tr>
<td>Iodine</td>
<td>Becomes part of thyroid hormones.</td>
<td>Seafood, iodized salt.</td>
</tr>
<tr>
<td>Selenium</td>
<td>Helps protect body cells from destruction by oxygen.</td>
<td>Seafood, kidney, liver.</td>
</tr>
</tbody>
</table>
The specific amount of a nutrient needed to maintain health is called a Recommended Dietary Allowance (RDA). There are RDAs for both sexes in 10 age categories from infancy to older age. The functions and food sources of nutrients with RDAs are shown in the Key Nutrient chart. Although our bodies also need other nutrients, more research is needed before specific requirements can be set.

Food composition tables could be used to plan meals that provide enough nutrients for all family members. However, even with a computer this would be time-consuming. Instead, nutritionists have developed a shorthand system. By grouping foods with similar nutrient values together, an easy-to-remember guide has been developed. Four types of food should be part of your daily family diet:

Fruits and vegetables
  - Vitamin A, vitamin C, vitamin B6, folic acid
Breads and cereals
  - Thiamin, riboflavin, niacin, iron
Milk and milk products
  - Calcium, phosphorus, protein, riboflavin, vitamin D
Meat and meat alternates
  - Protein, iron, zinc, vitamin B6, vitamin B12

Meals and snacks will also include “other” foods such as fats (margarine, butter, oils), sugars, and possibly alcohol for adults. While these provide additional calories, they should not be relied on to provide essential nutrients. Alcoholic beverages should not be offered to children.

Every day adults and children need the following:
- 4 servings fruits and vegetables
- 4 servings breads and cereals
- 2 servings meat and meat alternates
- 2 or 3 servings milk or milk products

Because of their high calcium requirements, children need 3 servings of milk and milk products daily, compared to 2 servings needed by adults.

Serving sizes will vary for family members. For young children, a very general rule is to serve 1 Tablespoon per year of age, or about ¼ to ½ of an adult serving. This will vary depending on the food served.

<table>
<thead>
<tr>
<th>Standard servings for children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serving size</td>
</tr>
<tr>
<td>for 2-3 years</td>
</tr>
<tr>
<td>for 4-5 years</td>
</tr>
</tbody>
</table>

- **Fruits and vegetables**
  - raw: ½ med. ½-1 med.
  - cooked: 2-3 Tbsp 4-5 Tbsp juice

- **Breads and cereals**
  - bread: ½ slice ½-1 slice
  - cooked cereal: ¼-½ cup ¼-½ cup rice, or pasta
  - ready-to-eat: ½ cup ½ cup

- **Milk and milk products**
  - milk, yogurt: ½-¼ cup ¼ cup
  - custard, milk pudding
  - cheese (1 oz = ½-1 oz 1 oz)

- **Meat and meat alternates**
  - meat, poultry, fish (1 oz) 2 Tbsp (2 oz)
  - eggs: 1 1
  - peanut butter: 1-2 Tbsp 2-3 Tbsp
  - cooked dried beans or peas: ½ cup ½ cup

How can I tell whether my child is getting nutrients that are needed?

You can rate your child’s diet as follows:
- On a separate sheet of paper, create three columns like those in the rating wheel example. Write down everything your child has eaten for the past 24 hours in column A — amounts of food as well as types.
- Using the chart on this page, copy the standard serving size for your child’s age in column B.
- Divide the amounts actually eaten (A) by the standard serving size (B) to figure the number of servings that your child actually ate of each food. Put this in column C. For example, 1 cup milk equals two ½-cup servings for a 2-year-old child.
- Transfer each food eaten to the right section of the rating wheel. Each line counts as one serving. If your child ate two standard-size servings of a food, write that food down twice to fill two lines. If your child ate one-half of a standard serving, you’ll need to match that food with another that provided a partial serving in order to complete one serving.

When all lines inside the wheel are filled, continue on the numbered lines outside the wheel. Put “other” foods such as sweets and fats below the wheel.

**Talk about it . . .**

Are any lines inside the rating wheel blank? What foods could you add to your child’s diet to provide the necessary nutrients? Rate your child’s diet again on another day. Are there differences? Similarities?
### Rating Wheel Example

**Foods eaten during 24 hours**

<table>
<thead>
<tr>
<th>(A)</th>
<th>(B) Serving size 2-year-old</th>
<th>(C) Servings eaten during 24 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/3 cup orange juice</td>
<td>1/3-1/2 cup</td>
<td>1</td>
</tr>
<tr>
<td>1 egg</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1/2 slice toast</td>
<td>1/2 slice</td>
<td>1</td>
</tr>
<tr>
<td>1 tsp margarine</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1/2 cup milk</td>
<td>1/2 cup</td>
<td>1</td>
</tr>
<tr>
<td>1/2 banana</td>
<td>1/2 medium</td>
<td>1</td>
</tr>
<tr>
<td>1 cup milk</td>
<td>1/2 cup</td>
<td>2</td>
</tr>
<tr>
<td>1 Tbsp peanut butter</td>
<td>1-2 Tbsp</td>
<td>1</td>
</tr>
<tr>
<td>1/2 slice bread</td>
<td>1/2 slice</td>
<td>1</td>
</tr>
<tr>
<td>1 sugar cookie</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1/2 cup cola</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1/4 apple</td>
<td>1/2 medium</td>
<td>1/2</td>
</tr>
<tr>
<td>2 Tbsp ground beef</td>
<td>2-3 Tbsp</td>
<td>1</td>
</tr>
<tr>
<td>3 Tbsp corn</td>
<td>2-3 Tbsp</td>
<td>1</td>
</tr>
<tr>
<td>1/4 cup rice</td>
<td>1/4-1/3 cup</td>
<td>1</td>
</tr>
<tr>
<td>1/4 apple</td>
<td>1/2 medium</td>
<td>1/2</td>
</tr>
<tr>
<td>1/2 cup milk</td>
<td>1/2-3/4 cup</td>
<td>1</td>
</tr>
</tbody>
</table>

**Rating Wheel Diagram**

- **Breads & Cereals**
  - 1/2 slice toast
  - 1/2 slice bread
  - 1/4 cup rice
  - 1/4 cup milk

- **Fruits & Vegetables**
  - 1/2 cup orange juice
  - 1/2 cup banana
  - 1/2 apple
  - 1 Tbsp peanut butter

- **Milk & Milk Products**
  - 1/2 cup milk
  - 1/2 cup milk

- **Other Foods**
  - 1 tsp margarine
  - 1/2 cup cola
  - 1 sugar cookie
  - 1 cup milk
  - 1 egg
How can I tell what nutrients are in the foods I serve my family?

Many packaged foods have nutrition labels. These tell you the number of calories in a serving as well as the amount of protein, carbohydrate, fat, and sodium. The (HG 72) is a useful listing of about 1,000 foods. Your county Extension office can tell you how to purchase a copy of this U.S. Department of Agriculture bulletin.

FOOD for TOTS

Food composition tables list the nutrient contents of a variety of fresh and processed foods. “Nutritive Value of Foods”

Does my child need vitamin/mineral supplements?

If there were no blank lines inside the rating wheel, your child is most likely getting all necessary nutrients. If there are nutrient gaps, try to add some foods to fill them. Keep in mind that a child who eats fortified breakfast cereals is already getting extra nutrients. Read the label to determine amounts provided.

A doctor may recommend a supplement for a few days if your child is eating poorly, but this is not a good long-term solution. No supplement will provide all necessary nutrients.

If you give your child a vitamin/mineral supplement, be sure to use the label. Overdoses can be harmful. Make sure that the pill or liquid does not have more than 100 percent of the U.S. RDA (Recommended Daily Allowance) for any one nutrient.

Treat a vitamin/mineral supplement as you would any “medicine.” Keep it out of reach and don’t refer to it as “candy.”
Dear Parents: The second letter in your OSU Extension Service home study course, Food for Tots, provides you with information about children’s nutritional needs. You will find suggestions for daily servings of the four major food groups that make up a balanced diet. A rating wheel helps you analyze your child’s diet and determine where you, as parent and provider, can help make improvements.

Carolyn Raab
Extension foods and nutrition specialist

Carolyn Raab, Extension foods and nutrition specialist, Oregon State University; with assistance from Donna Gregerson, Extension home economist, Oregon State University Extension Service; and Janet Jacobson, student, Food Systems Management, Oregon State University. Extension program materials from Virginia, New York, and Washington were used in preparation of this publication.

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Lesson 3
Parents as Stage Managers and Directors

A letter series from the OSU Extension Service

EM 8351 • Revised October 1990
Parents as stage managers

Parents set the stage for good food habits. The parent-child relationship can affect how well the child eats. Most research suggests that young children have better diets when their parents give them positive feedback. Other studies have shown that conflict and stress in the family may be linked to poor diets.

The style of the parent-child interaction may even play a role in the development of obesity and other eating disorders. In one study, overweight children received less appropriate attention from their mothers while they were eating together. On the other hand, mothers of normal-weight children responded more often with encouragement and approval.

A pleasant mealtime atmosphere can set the stage for development of good food habits. It will influence what foods children accept and how much they enjoy eating. Make meals a time for relaxed family interaction. Limit distractions to let your child focus on eating. Include your child in mealtime conversation and praise good behavior at the table. (This helps prevent children's attention-getting tactics!) Don't force your child to sit still until everyone else is through eating. Above all, remember that your child learns by watching how you eat and behave at the table!

How can I keep my child from gaining too much weight?

Several factors may work together to influence the development of obesity. These may include:
- Lack of exercise. Children who constantly watch TV miss out on needed exercise.
- Poor food choices. High-calorie foods are poor choices when children are inactive or growing slowly.
- Use of foods as rewards or pacifiers. When food is used as a bribe or reward, children learn that problems are solved by eating.
- Force feeding or large portions. Children may learn to tie eating with parental approval and love rather than hunger.
- Irregular meals and snacks. Children cannot judge how much to eat when they don't know how long it will be until they eat again.

Your family doctor can determine whether your child weighs more than other children of the same height. If your child is overweight, dieting isn't wise. Young children need enough calories for growth. Let them "grow into" their weight by keeping calories at a constant level as they grow taller. Also, plan family activities that provide chances for exercising.

Keep lower-calorie snacks on hand for overweight children such as celery sticks, apple slices, orange sections, tomato juice, and unsweetened breakfast cereals. Limit high-calorie/low-nutrient snack foods like chips and soft drinks. Offer second helpings of lower-calorie foods at meals in place of rich desserts. Praise your child when good food choices are made.

Talk about it . . .

How would you describe the atmosphere during your meals? Does everyone in your family eat together? Is the TV on? What do you talk about?

Identify one way you would like mealtimes to be different. Make a plan for reaching that goal. Who needs to be involved? What will each person do? When will you evaluate how well you've done?

How do you give feedback to your child during mealtime? Do you communicate your expectations in a positive way? Are you consistent from one time to the next?

Parents as directors

In addition to setting the stage, parents are responsible for directing the child-feeding activity. Children eat best when parents recognize and respond in suitable ways to their needs. You'll have to be aware of feeding cues coming from your child.

Feeding is successful when parents are in tune with children's hunger, fullness, food preferences, and eating skills. Be sensitive to your child's developmental readiness to try new eating skills. For example, they'll be ready to use utensils when they develop muscle coordination in their hands. Watch for cues as they play with their toys.
Other feeding cues to recognize are signs of hunger and fullness. Children shouldn’t be forced to clean their plates if they’re full. Neither should a hungry child be forced to wait until mealtime to eat. A light snack such as a cracker or a apple slice can carry them over without ruining their appetite.

Give positive direction and feedback as children try new behaviors or make mistakes. For example, show your child how to hold a cup. Or make mistakes. For example, if there are spills, praise the child for trying. Be consistent — not rigid one time and indifferent the next. Mixed messages can be confusing to a child.

Set (and enforce) some meal- and snack schedule; a place for your child to sit comfortably while eating; a “preparation ritual” that includes handwashing.

Day-to-day variation in a young child’s appetite is common. There are several possible causes:
- Amount of physical activity. On active days, your child will probably be hungrier than on quiet days.
- Inappropriate snacking. Snacking too frequently or too close to meals could decrease your child’s appetite.
- Emotional distress. A child who is upset or tired may not eat well.
- Illness. Appetite will be affected when a child isn’t feeling well.
- Stage of growth. Appetite decreases when growth slows (at about 18-24 months).

Before worrying about your child’s appetite, check your own expectations. Too often parents overestimate their child’s food needs and judge their intake by what an adult might eat. Be patient if you do have concerns about your child’s appetite. If your child is healthy and growing steadily, a small appetite is probably nothing to worry about. On days when appetite seems smaller, let your child eat when hungry and offer foods that are enjoyed. Forcing or bribing your child to eat is usually not effective and may even have a negative impact on the development of good food habits.

Many children go through phases of liking and disliking certain foods. At times, a child may even refuse to eat to get attention.

Eating one food for days on end is common during the preschool years. A preference for one special food is usually short-lived. Offer other foods, but don’t force your child to eat them. In time, your child will usually turn to other available foods.

If the favorite food is not very nutritious, think about some creative ways to introduce an additional food with nutritional merits. For example, milk supplies protein and calcium. Try fortifying it with orange juice or blended fruit. If all else fails, try coloring the milk blue! A doctor may recommend a vitamin pill if your child’s diet is missing important nutrients for a prolonged time.

There is much interest in the potential links between what we eat and how we behave. In his book Why Your Child is Hyperactive, Dr. Benjamin Feingold linked artificial colors, artificial flavors, and naturally occurring salicylates with hyperactive behavior. As therapy, he recommended avoiding a wide variety of natural and processed foods. Unfortunately, this limited diet may not include all necessary nutrients. Several researchers have tested Feingold’s theories. They have not found links between diet and hyperactivity in their studies. However, some findings suggest that a young child may be sensitive to certain substances in foods.

There is no proven connection between sugar in foods and hyperactive behavior of children. In fact, sugar appeared to have a calming effect in one study!

- To avoid sugar in foods?
- How to encourage your child to eat new foods?
- What should I do when my child is on a “food jag”?
- Does a child’s diet affect behavior?
- How can I help my child master the mechanics of eating?
- How should I handle my child’s refusal to eat a food?
- How can I help my child learn feeding skills?
- What is the role of sugar in the development of hyperactive behavior?
- Should I be concerned when my child has a poor appetite?
- What would you do if your child refused to eat a food?
- How can I encourage my child to eat new foods?

There are several possible causes:
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Forcing your child to eat can lead to a long-lasting dislike of that food. Try to ignore the behavior and keep serving nutritious and attractive meals. The food dislike will most likely be forgotten in time. Meanwhile, praise good eating behavior.

It’s good for young children to be exposed to a wide variety of foods at an early age. Wait until your child is hungry to introduce new foods. Keep the menu simple so that there are just a few choices. Introduce only one new food at a time and serve a small amount. Set a good example by letting your child see that you eat and enjoy the food. If your child refuses to eat the food, serve it again in a few weeks. Children’s food preferences change very fast.

Self-feeding requires skillful coordination. Children will develop these skills in their own time. You can help by watching for signs of readiness. Let your child set the pace. A 1-year-old picks up food with fingers, begins to use a spoon, and can drink from a cup with help. At ages 2 and 3, children continue to use fingers and a spoon and can handle a cup themselves. By age 4, children feed themselves without assistance. Use of the knife and fork usually begins at age 5.

Appropriate utensils will help your child develop feeding skills:
- Cup: lightweight, small (6 ounce or less), easily hugged by both hands; steady (weighted base); easy to grasp (large handle)
- Flatware: child-size (short, thick handles; short fork tines; shallow spoon)
- Dishes: Unbreakable, steady (wide base); appropriate shape (deep enough to prevent spills).

- What should I do when my child is on a “food jag”?
- Are you concerned about any of your child’s eating habits? How have you handled these?
- Does a child’s diet affect behavior?
- There is no proven connection between sugar in foods and hyperactive behavior of children. In fact, sugar appeared to have a calming effect in one study!

Talk about it:
- Are you concerned about any of your child’s eating habits? How have you handled these?
- List three things about your child’s eating behavior that make you happy (such as good appetite, liking for milk).
- Identify something about your child’s eating behavior that you’d like to change (such as table manners, snacking habits). What will happen if the behavior continues? How can you guide a change?
- What would you do if your child refuses to eat the broccoli you’ve served him for the first time?
- Tiffany has only eaten one type of meat her whole life. What should you do?
- Michael refuses to eat the broccoli you’ve served him for the first time.
- Christopher plays with his food rather than eating it.

Forcing your child to eat can lead to a long-lasting dislike of that food. Try to ignore the behavior and keep serving nutritious and attractive meals. The food dislike will most likely be forgotten in time. Meanwhile, praise good eating behavior.

It’s good for young children to be exposed to a wide variety of foods at an early age. Wait until your child is hungry to introduce new foods. Keep the menu simple so that there are just a few choices. Introduce only one new food at a time and serve a small amount. Set a good example by letting your child see that you eat and enjoy the food. If your child refuses to eat the food, serve it again in a few weeks. Children’s food preferences change very fast.
Dear Parents: As a parent, you set the stage for good food habits and direct the child-feeding activity. The third letter in your OSU Extension Service home study course, Food for Tots, explores your role as a stage manager and director. Questions about children’s eating patterns and behavior are also answered.

Carolyn Raab
Extension foods and nutrition specialist
You've asked us a lot of questions about feeding young children. There are no set rules. We offer these suggestions for you to adapt to your own family situation.

Is snacking bad for my child?

Most children need food between meals. Because their stomachs are small, they may not get all the necessary nutrients at mealtime. Plan on offering snacks at about the same time each day. This discourages all-day nibbling that leads to overeating and poor dental health.

Select snacks from the following: fruits and vegetables, breads and cereals, milk and milk products, meat and meat alternates. Suggestions are given in the chart below. Children under age 2 should not be given foods that might cause choking, such as carrot and hot dog slices, peanuts, grapes, hard candies, or popcorn.

Snack ideas

Fruits and vegetables

<table>
<thead>
<tr>
<th>Fruit juices</th>
<th>Amount</th>
<th>Milligrams of iron</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gelatin dessert (using fruit juice as half of liquid)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruits, canned or raw (cut into small pieces; peeled for child under 2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>apple wedges</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pears</td>
<td></td>
<td></td>
</tr>
<tr>
<td>peaches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>bananas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dried fruits (for child over 2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>raisins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>prunes, cut up and pitted</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Vegetables, raw (for child over 2)
- green pepper sticks
- turnip sticks
- cucumber slices
- celery sticks
- cauliflower or broccoli florets

Milk and milk products
- mild cheese (cubes or fingers)
- milk (with vanilla or orange juice for variety)
- yogurt
- pudding

Meat and meat alternates
- meat (cubes or strips)—soft or hard-cooked eggs (wedges or slices)
- peanut butter (on crackers or stuffed into tender celery sticks, strings removed)

Breads and cereals
- cookies (with significant amounts of oatmeal, peanut butter, raisins)
- ready-to-eat cereals (not sugar-coated)
- crackers
- toast

Talk about it...

How could you improve your child’s snacks? Consider variety and nutritive value.

Analyze the rating wheel in Lesson 2. What snacks could improve your child’s nutrient intake?

How can I be sure that my child is getting enough iron?

Many young children do not have enough iron in their diets. This may affect their growth, health, and energy level.

Because few foods are excellent sources of iron, you’ll need to include several iron-containing foods in your child’s diet (see chart). Iron from cereals and vegetables will be better absorbed when eaten with a vitamin C source (see key nutrients chart in Lesson 2).

If you think your child needs an iron supplement, check with your doctor.

<table>
<thead>
<tr>
<th>ready-to-eat food</th>
<th>Amount</th>
<th>Milligrams of iron</th>
</tr>
</thead>
<tbody>
<tr>
<td>beans, dry, cooked</td>
<td>¼ cup</td>
<td>1.3</td>
</tr>
<tr>
<td>beef, ground, cooked</td>
<td>1 oz</td>
<td>1.0</td>
</tr>
<tr>
<td>bread, white enriched</td>
<td>1 slice</td>
<td>0.7</td>
</tr>
<tr>
<td>bread, whole wheat</td>
<td>1 slice</td>
<td>0.8</td>
</tr>
<tr>
<td>broccoli, cooked</td>
<td>¼ cup</td>
<td>0.4</td>
</tr>
<tr>
<td>chicken, canned</td>
<td>1 oz</td>
<td>0.4</td>
</tr>
<tr>
<td>corn flakes, fortified</td>
<td>¼ cup</td>
<td>0.3</td>
</tr>
<tr>
<td>custard, baked</td>
<td>¼ cup</td>
<td>0.5</td>
</tr>
<tr>
<td>egg, medium</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td>liver, beef</td>
<td>1 oz</td>
<td>2.5</td>
</tr>
<tr>
<td>macaroni, cooked</td>
<td>½ cup</td>
<td>0.7</td>
</tr>
<tr>
<td>oatmeal, cooked</td>
<td>¼ cup</td>
<td>0.7</td>
</tr>
<tr>
<td>peanut butter</td>
<td>1 Tbsp</td>
<td>0.3</td>
</tr>
<tr>
<td>pork, cooked</td>
<td>1 oz</td>
<td>0.9</td>
</tr>
<tr>
<td>raisins</td>
<td>1 Tbsp</td>
<td>0.2</td>
</tr>
<tr>
<td>spinach, cooked</td>
<td>¼ cup</td>
<td>1.3</td>
</tr>
<tr>
<td>tuna, canned</td>
<td>1 oz</td>
<td>0.4</td>
</tr>
<tr>
<td>watermelon, diced</td>
<td>¼ cup</td>
<td>0.1</td>
</tr>
</tbody>
</table>

*Children aged 1 to 16 need 10 milligrams of iron daily.

Talk about it...

What iron-rich foods are part of your family’s usual diet?

Which of the iron-rich foods in the chart would your child enjoy as a snack?

How can you include more iron-rich foods in family meals?
Is it wise to feed my child a low-fat/low-cholesterol diet?

Americans have been encouraged to reduce fat, cholesterol, sodium, and sugar in their diets. However, these guidelines may not be appropriate for all family members. Low-fat, low-cholesterol, low-calorie diets can slow the growth and development of infants and young children. Serving low-fat foods (such as skim milk) and denying snacks (which provide needed calories) may not be in the best interest of children under age 2. Moderation and variety continue to be keys to a healthy diet.

Should I limit the sweets in my child's diet?

The total amount of sugar in a child's diet is a concern if sweet foods or drinks take the place of nutrient-dense foods (for example, if soda pop replaces milk). But the type of sugar-containing foods and when they are eaten may have more impact on tooth decay than the amounts eaten.

Sweet foods that stick to the teeth cause the most problems, particularly if they are eaten between meals. Bacteria in the mouth feed on these sugars and produce acid which slowly dissolves the surface of the teeth.

Children's teeth can be protected by:

- Cutting down on high-sugar foods, especially between meals.
- Brushing teeth after meals and snacks.
- Visiting the dentist regularly beginning at age 2.
- Drinking fluoridated water.

Sugar is hidden in many foods. Look for words like these when you read ingredient listings on labels: sucrose, glucose, fructose, corn syrup. All of these are forms of sugar that can contribute to tooth decay. Taking the sugar bowl off the table may remove the temptation to add more sugar.

How can I encourage my child to drink milk?

Children need calcium for bone growth. Milk and milk products are the best sources. If plain milk isn't your child's favorite, flavor it with fruit juice or blended fruit. The fruit can be raw, frozen, or canned (preferably in juice or light syrup).

Frozen or nonfat dry milk can be "hidden" in a variety of foods: pudding, soup, mashed potatoes, cooked cereal, casseroles, and molded gelatin salads.

Yogurt and cheese are also good calcium sources. Children enjoy bite-sized cubes of mild-flavored cheese such as American or cheddar. Yogurt is a good dip for fresh vegetables.

Frozen yogurt and ice cream provide calcium, too. They're higher in calories than some other choices, however.

How can I encourage my child to eat vegetables?

Vegetables provide not only vitamins A and C, but other important vitamins and minerals as well. Experiment with some new ways of serving them to see what your child enjoys.

Try them raw... bite-sized broccoli and cauliflower make a satisfying, nutritious snack for older preschoolers. (Younger children may choke on them.) Add variety to tossed green salads with spinach and vegetables in season (such as green peppers, tomatoes, and cucumbers).

Try them cooked... new vegetable combinations, spices, or sauces can add interest. A sprinkling of grated cheese or sunflower seeds adds appeal (and nutritional value, too). If your family doesn't care for vegetable side dishes, add the vegetables to main dishes such as soups or stews.

How can I plan nutritious meals that will appeal to my child?

Start with the Basic Four food groups (fruits and vegetables, breads and cereals, milk and milk products, meat and meat alternates), then add variety. Keep color, flavor, texture, and shape in mind as you plan:

- Color—orange carrots, purple plums, green peas, red radishes
• **Flavor**—mild milk, sweet applesauce, spicy chicken coating, tart pickled beets
• **Texture**—soft mashed potatoes, crispy celery, creamy pudding, cutter. Make pancakes into art-works by forming shapes with the batter. Hard-cooked eggs can be dyed any time of the year.
• **Shape**—triangular toast, cucumber strips, round peas, diced potatoes, grated carrots

For a special treat, let your child decorate ordinary foods. Make faces on hamburger buns with green olives and pimiento. Turn a pear half into an animal with raisin eyes and apple slice ears. Decorate open face sandwiches with processed cheese slice designs created with a cookie cutter. What foods are good choices for my child when our family eats out?

Americans spend about 40 percent of their food budgets eating away from home, so it pays to choose wisely. Select a restaurant that offers familiar foods and child-size servings. Children will feel more at home if you take along their cup and tableware. Ask for a high chair or a booster seat to make your child as comfortable as possible.

Suggest two or three food choices, rather than overwhelming your child with the whole menu. Try to include a fruit or vegetable, bread or cereal, milk or milk product, and meat or meat alternate. Perhaps sharing some of your own food (such as a roll or a spoonful of vegetable) would be a better choice than ordering a full serving of everything. When eating at a fast food restaurant, keep in mind that many foods such as french fries are very high in fat and salt. Salad bars often have nutritious finger foods that children enjoy. Order milk rather than soft drinks. Eat a piece of fruit when you get home instead of ordering dessert.
Goodwin, Mary T. *Creative Food Experience for Children.* Washington: Center for Science in the Public Interest, 1980. This book highlights ways to make food experiences creative and a learning experience for your child. The four food groups are covered along with recipes.


Martin, Elizabeth. *Very Little Chef Series.* Viking Penguin. These plastic-laminated cookbooks have picture recipes. The series includes pretzels, muffins, cookies, pizza.


**Other OSU Extension Service Publications**

The OSU Extension Home Economics program helps individuals and families manage their resources. Contact your county Extension office to find out about publications and programs that we offer on food, clothing, finance, shelter, parenting, and human relationships. The following publications may be of particular interest to families with young children.

**Learn-at-Home Letter Series**

These letter series are mailed periodically by county Extension offices. Contact your local office (listed under county government in the telephone directory) to find out when they will next be offered in your area.

EM 8255, *Oregon's Children: Letters for parents of infants and toddlers*—six letters about caring for infants and young children

EM 8256, *Oregon's Children: Letters for parents of preschoolers*—six letters about children’s growth and development from 3 to 5 years of age

**Publications**

Order the following publications from Publications Orders, Agricultural Communications, Oregon State University, Administrative Services A422, Corvallis, OR 97331-2119, telephone (503) 737-2513. Prices listed are based on the production cost and may change as we revise and reprint publications. You may order up to six no-charge publications without shipping and handling fees.

If you order publications requiring shipping and handling, add 25 cents for orders up to $2.50. For orders between $2.50 and $100, add 15 percent shipping and handling. Make checks, purchase orders, or money orders payable to Oregon State University; be sure to include shipping and handling fees.

EC 1267, *Financial Planning: Family Goals* (no charge)

FS 313, *Estate Planning for Families with Minor Children* (no charge)

PNW 250, *You Can Prevent Food Poisoning* (50¢)

PNW 258, *Budgeting for the Young Couple* (25¢)

PNW 279, *Especially for Parents—Understanding Babies and Toddlers* (25¢)

PNW 280, *Especially for Parents—Understanding Three to Six-Year-Olds* (25¢)
**Books for parents about child nutrition**


**Cookbooks suitable for children**


Edge, Nellie. *Kids in the Kitchen*. Peninsula Publishing, 1979. ($9.95 softcover). Recipes are intended especially for kids. Pictures are used so recipes can be easily understood by the child. Super cookbook for kids!

Wilms, Barbara. *Crunchy Bananas (and Other Great Recipes Kids Can Cook)*. Layton, Utah: Falcon Books, 1984. ($5.95 softcover). Selection of recipes that match a child’s ability is discussed as well as how to simplify recipes for those who can’t yet read. Type of equipment that is handled best by the child cook is also noted.

**Storybooks for children about food and nutrition**

*Alligator Arrived with Apples: A Potluck Alphabet Feast*. Crescent Dragonwagon, 1987. ($15.95 hardback). All of the animals arrive at the feast with food that begins with the same letter as their species.

Barrett, Judi. *Cloudy with Chance of Meatballs*. Atheneum, 1985. ($12.95 softcover including cassette). This is a fictional story about a town called Chew and Swallow where food falls from the sky.


**Look for the following at your public library**


Dear Parents: The final letter in your OSU Extension Service home study course, Food for Tots, provides answers to your questions about snacks, nutrition, and diets for children. You'll find suggestions for nutritious and healthful snack foods and ways to encourage your children to enjoy foods that are good for them. A list of books shows you where to get more information. We hope that Food for Tots has been useful. We'll look forward to your continued participation in our programs.

Carolyn Raab
Extension foods and nutrition specialist

Carolyn Raab, Extension foods and nutrition specialist, Oregon State University; with assistance from Donna Gregerson, Extension home economist, Oregon State University Extension Service; and Janet Jacobson, student, Food Systems Management, Oregon State University. Extension program materials from Virginia, New York, and Washington were used in preparation of this publication.

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