#### Understanding How Children Grow and Develop

Understanding How Children Grow and Develop has been taken from Building Blocks for Fun and Healthy Meals--A Menu Planner for the Child and Adult Care Food Program, Chapter 1

**Developer:** USDA, Food and Nutrition Service, Team Nutrition **Author/Editor:** USDA, Food and Nutrition Service, Team Nutrition

**Publication Date: 2000** 

The Department of Agriculture's Team Nutrition publication entitled Building Blocks for Fun and Healthy Meals--A Menu Planner for the Child and Adult Care Food Program contains information on the *Child and Adult Care Food Program* meal requirements. Even though our centers do not participate in the *Child and Adult Care Food Program* the book contains valuable information and advice on how to serve high quality meals and snacks, nutrition education ideas and tips, and food safety facts.

http://www.fns.usda.gov/tn/Resources/buildingblocks.html

# Understanding How Children Grow and Develop...

Understanding how children grow and develop will help you plan and serve appropriate foods. You can create the best environment for children when you know what they are like at different ages and what each individual child can do.



# Baby's First Year

#### Birth to 6 months

- At this stage, infants have needs rather than wants. They have their own patterns and rhythms based on their physical needs. Holding and cuddling are very important for them. Children of this age cannot be "spoiled" by their child care providers.
- This is a time of rapid growth—they will double their birthweight in their first 4 to 5 months.
- At birth, an infant's eyesight is blurry. A newborn's eyes can only focus at about 8 inches away.
- They can hear, but do not understand words. They can only hear tones.
- Their sense of smell develops quickly. They can tell the difference between people by smell.

#### 7 to 12 months

- Attachments to others grow as the infant experiences pleasant interactions, especially with other babies and the caregiver.
- Children develop likes and dislikes—for people and for what they eat.
- Physical growth is tremendous during this stage. By the end of the first year, an infant may have tripled in birthweight and may have doubled in length.
- Babies learn to crawl, squat down and stand up, carry objects in their hands, and walk during these months.
- Things that are new to them (even pots and pans) fascinate children. They love to look at and feel different sizes, shapes, and textures (soft, hard, smooth, rough, spongy, furry).
- They recognize familiar voices and faces from far away. They also babble constantly, especially when someone talks to them.

## **Eating and Food Behaviors of Infants**

#### Here are some things to keep in mind:

- 1. Providing infants with the right foods will promote good health. It will also give them a chance to enjoy new tastes and textures as they learn good eating habits.
- 2. It is the responsibility of the infant's parents and child care provider to decide:
  - whether to serve breast milk or formula
  - if serving formula, what kind
  - when to introduce solid foods
  - what solid foods to introduce
- 3. It is important to talk with the child's parents about what type of food and food textures they want introduced. Introduce one new food at a time, with a week between each new food. If a food does not agree with the baby, you will know the foods to which the baby is sensitive.
- **4. Older infants enjoy and can usually manage finger foods (bite-size portions).** They have few teeth, but can chew with their gums. Chewing on small pieces of bread, crackers, zweiback, and teething biscuits can help ease their teething pains.

#### Here are some tips:

- Avoid giving infants foods that you do not want them to love when they get older. Occasionally feeding infants such foods as fast food and sweets is fine, but serving these foods on a regular basis can make them strong favorites that will be hard for children to eliminate later in life.
- Provide variety and repetition of food to keep it interesting. By doing this, you will get infants used to the foods you want them to accept.
- Make mealtime relaxed and enjoyable. At this age, mealtimes may take up to 45 minutes or longer. The more relaxed and cheerful the atmosphere, the more quickly foods will get eaten. Offer small portions, use a soft baby spoon, and wait while the child finishes each mouthful before offering more. Try not to overfill the spoon to try and speed things up—this will actually slow things down.
- **Be a food role model.** Practice the same eating habits you would want the children to follow. For example, if you eat fruit as a snack, the children will want to eat fruit as well.

# **Toddlers**

# At 1 year old...

- Teething is a source of irritation and pain. All of a baby's front teeth and one set of molars come in by his or her second birthday. Be prepared for lots of chewing because of teething.
- Playing consists of imitating others, building with blocks and other stackable items, and putting things into and pouring things out of containers. Spontaneous, unrecognizable scribbling often begins at this age. (Fat pencils, crayons, and non-permanent markers work best.)
- By the end of the first year, a child may have developed a vocabulary of 300 words. One-year-olds use and understand the words "Me," "Mine," and "No." They recognize their own name and can make two- to three-word sentences.

# At 2 years old...

- This phase in a young child's life has been labeled the "terrible twos." Two-year-olds can be a handful sometimes due to their high energy level and because they are developing so many skills—including walking, running, and eye-hand coordination.
- They are curious and want to do things for themselves. This means you need a flexible schedule and a safe environment for them to explore.
- Imitation is a main method of learning.
- While 2-year-olds are no longer drinking from a bottle, they still use sucking, mouthing, and tasting to explore their world.
- Language ability grows by leaps and bounds during this period. Children speak in two- to five-word sentences, which is an indication of their developing mental abilities.
- Physical growth is not as rapid as before. On the average, by age  $2\frac{1}{2}$  years, children have reached 50 percent of their adult height.

## **Eating and Food Behaviors of Toddlers**

#### Here are some things to keep in mind:

1. Physical growth begins to slow down a bit, and the child's appetite may begin to decrease. This often causes parents and caregivers to be unnecessarily concerned that toddlers are not eating enough or are not eating enough of the "right" foods.

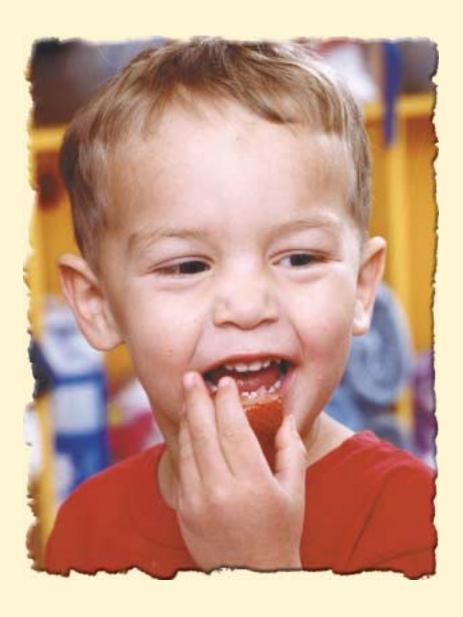
While a decrease in appetite is common at this age, if a toddler's *weight* does not seem normal, ask the parents to check with their doctor to be sure the child is in good health.

- 2. Children learn to hold and drink from a cup and will quit eating when they are full. Healthy toddlers will decide which foods and how much of the foods offered they will eat. They may enjoy one food for a few weeks, and then refuse it.
- **3. Definite food preferences begin to be established.** Toddlers prefer lukewarm foods over hot or cold foods. They usually do not like highly seasoned foods, but enjoy sweets.
- **4.** Children will try new foods if offered in a pleasant, appealing manner. Young children are learning what foods they like and dislike. Be sure to:
  - Offer new foods frequently. Toddlers may need to see a new food offered 6 to 12 times before they will decide to like it. Once children have accepted a food, continue to offer it so the food will remain familiar.
  - Let children know they do not have to eat foods they do not want. This attitude will help children feel comfortable when trying new foods.
- 5. While children know how much they need to eat, parents and child care providers are the "gatekeepers" who decide which foods to offer and when meals and snacks will be served. If nutritious foods are served, toddlers can't go wrong in what they choose to eat. Offering children nutritious and appropriate foods helps them get the nutrients and energy they need. It also sets a good example, starting at a very young age.

Good foods to try are: fresh fruits and vegetables; breads, crackers, low-sugar cereals, pasta, potatoes, rice, tortillas, and cooked grains; meats, poultry and fish; dairy products including milk, eggs, yogurt and cheese; beans and peas; and foods with small amounts of spices and herbs.

#### Here are some additional tips:

- **Don't serve large amounts of juice.** Try not to serve large amounts of juice throughout the day. It may fill up the child and take the place of other needed nutrients.
- **Don't serve items that contain too much sugar.** You can lessen a child's sweet tooth by keeping sugar to a minimum. Store sweets out of sight. What children cannot see, they probably will not ask for.



# **Preschoolers**

# At 3 years old...

- Preschoolers enjoy activities that allow them to express themselves as they wish—art, pretend and dramatic play, and music. While they occasionally share their toys, they are still likely to play alone.
- The "average" 3-year-old child weighs more than 30 pounds and is approximately 36 inches tall.
- The primary teeth have come in. Teething pain and chewing on things are no longer problems.
- Eye-hand coordination becomes more refined. Children this age use a fork or spoon and draw and paint with more control and direction.
- Their vocabulary increases tremendously. They know their first and last names, age, and some parts of their address.



#### At 4 years old...

- Sharing and cooperative play occur more frequently now than at 3 years old.
- Children want more freedom and independence to explore their abilities. They like to be praised for what they do.
- The average weight of a healthy 4-year-old is 36 pounds. Average height is 40 inches.
- Motor skills become better controlled. This allows them to draw clearer pictures, cut with scissors, and make crude numbers and letters with pencil and paper. They can also throw a ball more accurately, pump on a

swing, and dress themselves.

- Intellectual skills are advancing. They understand numbers and letters, size and weight differences, distance and time, and colors.
- Verbal skills continue to expand rapidly. They make up words, enjoy rhyming words, and repeat words and phrases that sound interesting.

#### At 5 years old...

- Independence continues to be an important issue. Five-year-olds enjoy helping and having responsibilities that they can successfully complete.
- They ask many questions, but now more for information than just social contact. Sentence structure is much more complex. They can carry on a lengthy discussion.
- The brain is 90 percent of its mature size, but the body is only 50 percent of its mature size. The average weight of a healthy 5-year-old is 43 pounds. Average height is 44 inches.
- They have better small motor control. They can copy designs, shapes, figures, letters, and numbers.
- Their attention span continues to grow. A hands-on group activity—or a sit-and-listen activity—is now possible.

# **Eating and Food Behaviors of Preschoolers**

#### Here are some things to keep in mind:

- **1. Preschoolers' eating habits may be erratic.** They may be too busy and active to want to sit and eat. Their rate of growth is slowing down, so they may eat less food. They may simply talk throughout the entire meal and forget to eat.
- **2. They are establishing food preferences.** They know what they like and don't like. Be sure to pave the way for good habits in the future by providing healthy meals and snacks.
- **3. They may enjoy learning about food.** There are many ways to spark children's interest in food. Some suggestions:
  - Discuss different foods with the children.
  - Mix nutrition information in with reading, story telling, and other activities.
  - Allow the children to have input on what is served.
  - With proper supervision, let them help prepare various food items for a meal.
  - Get books and videos for the children. Select ones that send good nutrition messages about food.



# A Closer Look at Eating Habits

Eating habits are formed during the early childhood years and may last a lifetime. Good eating habits do not just happen—they must be learned.

Presenting children with a variety of nutritious foods—and limiting their access to low-nutrient foods—can help them learn to make nutritionally sound food choices.

All child care providers can support positive eating habits. On the following pages, you will find tips for:

- successfully introducing new foods
- encouraging favorable attitudes toward food
- encouraging good eating habits



# **Introducing New Foods**

#### Think about timing...

- Introduce only one new food at a time. Offer a very small amount (one to two bites) of the new food at first, so that a child learns new flavors and textures.
- Offer new foods at the beginning of the meal when children are hungry. Also, allow children plenty of time to look at and examine the new food.
- Offer new foods to children when they are healthy and have a good attitude.

#### Be positive...

- When introducing a new food, encourage teachers and staff to display a positive attitude toward it. Children will pick up on adults' attitudes toward foods.
- Enlist the help of an eager child. It is often useful to have a child who is usually open toward trying new foods to taste the new food first. Children will often be more willing to try a food if another person has already tried and liked it.
- Serve a new food with a familiar food. Point out the similarities between the two foods.
- Expect that the new food will be liked.
- Praise the children when they try a new food.

#### Keep trying...

- Offer new foods periodically and remember that toddlers may need to see a new food offered 6 to 12 times before they will decide to like it.
- If a food is still not accepted after several tries, change the way it is prepared and/or served.
- If children accept a new food, serve it again soon so they become accustomed to it.

# Encouraging Favorable Food Attitudes and Good Eating Habits

#### Be sensitive to children's needs...

- Try to understand each child's personality and reactions to food.
- Serve age-appropriate portions. Dish out child portions instead of adult portions.
- Use child-sized tables, chairs, dishes, glasses, silverware, and serving utensils that young children can handle.

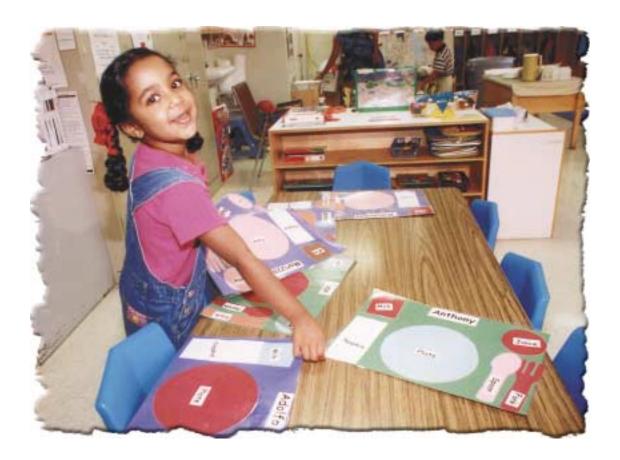
#### Help children feel ready to eat...

- Provide a short transition time between activities and mealtimes.
- Tell children a few minutes ahead of time that it will soon be time to eat. This helps them slow down and get ready.
- Provide some activities that will help them slow down, such as...
  - ...coloring or drawing.
  - ...playing with blocks.
  - ...listening to soft music.
  - ...reading a story.
  - ...talking about the meal.



#### Get children interested and involved...

- Encourage children to participate in mealtime. With your careful supervision, invite them to help with...
  - ...setting the table.
  - ...bringing food to the table.
  - ...clearing and cleaning the table after eating.
- Before the children sit down at the table, discuss the foods that will be served.
- Encourage children to do as much as possible for themselves. First efforts are an important step toward growth.
- Initiate nutrition education activities.



#### Make eating a pleasure...

- Serve meals in a bright and attractive room.
- Select and arrange food on plates in ways that make meals interesting and attractive.
- To make meals interesting, include a variety of colors, flavors, textures, and shapes.

  Differences in temperature can also add interest for example, crisp, cool, raw vegetables can be a nice contrast to a warm soup.
- Set a good example. Eat at the table with the children and encourage conversation. Invite the children to talk about their food experiences; how the food tastes and smells.

#### Foster positive feelings...

- Allow children to leave food on their plates. They may learn to overeat if they are told to finish their meals or clean their plates.
- Plan plenty of time to allow children to eat without feeling rushed.
- Avoid allowing children to use food to gain special attention.
- Never use food as a reward or punishment.



# Things to Keep in Mind About Overweight and Underweight Children

It is important that growing children have healthy diets. Children must eat enough food to allow for adequate height and weight gain. Physical activity is an important component in maintaining proper weight.

A determination of whether a child is overweight or underweight should be made only by a licensed physician. Caregivers should never place any child on a special diet without documentation from a physician or other recognized medical authority. Check with your State agency for the documentation you will need to maintain on file for special diets.

## **Overweight Children**

- Overweight children are usually not placed on calorie-restricted weight loss diets. This is because their diets must supply them with enough energy and nutrients for proper growth and development.
- When physicians diagnose children as overweight, they usually want children to maintain a constant weight, rather than lose weight. This way, as the children grow and get taller, they will "grow out" of their overweight condition.
- Physicians concerned about a child's excess weight usually recommend changes in the family's food choices. They emphasize balanced meals that contain lower fat meats, lower fat dairy products, and more fruits, vegetables, and whole grains.
- Physicians usually recommend changes in the family's physical activities. Often they suggest increasing physical activities that the family can do together, such as hiking, walking, washing the car, and doing yardwork.

#### **Underweight Children**

- Many children are underweight for a short period of their childhood. With time, their weight should catch up to their height.
- Only a physician should determine if being underweight is a serious condition in a child and if dietary changes should be made.

#### To ensure good nutrition and health for ALL children...

#### Caregivers should plan meals that:

- meet the appropriate meal pattern(s).
- contain plenty of fruits, vegetables, and grain products, especially whole grains, with little added fat.

In addition, the child care program should include sufficient *physical activity* every day to promote fitness.

#### It is important to note...

ALL foods can fit into a child's diet. There is no "good food" or "bad food."

**Moderation, balance, and variety are important.** In fact, these are the KEYS to a healthy eating pattern for children.