

## Lesson 1: Food for the Preschooler

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### GROWTH OF THE PRESCHOOL CHILD

Andrew is a four-year-old boy. He enjoys outdoor play with his neighborhood friends. He loves the nursery school he attends and is well liked by the other children and teachers. He has a good appetite for a variety of foods. He is tall for his age and slim. His mother says he is growing like a weed! He is described by his nursery school teacher as healthy, well adjusted, and happy. How has Andrew achieved this healthy status? His environment has provided the care and nourishment he needed for growth and development.

Growth is one indicator of his healthy status. Growth is complex and dependent on genetics, age, nutrition, and other environmental factors. During growth the body increases in size, including weight and height. Growth does not proceed at a constant rate but goes through times of rapid change, or growth spurts, and periods of less pronounced change. Immediately after birth, the growth rate accelerates for a time, then slows during childhood, and accelerates again during adolescence. The preschool years are a period of rapid, active growth, but not a "growth spurt."

Each child follows his or her own unique pattern of growth and development. Patterns, however, follow a characteristic trend. The toddler will grow about five inches taller and increase weight by about five pounds between the first and second birthdays. From ages two

through five, there will be increases of about 2 1/2 inches in height and four to five pounds in weight each year.

#### Growth Standards

Several growth standards have been developed in the United States for the comparison of the growth of each individual child against the "norm." The most appropriate curves for assessing growth of young children are those recently developed by the National Center for Health Statistics. These guides are based on growth data gathered from a representative sample of the U.S. population and the general consensus of experts in nutrition, pediatrics, and physical growth. These curves provide a reliable guide for assessing growth and can assist in the identification of children who are not growing as they should be.

#### Use of the Growth Charts

Growth curves were developed for two age ranges: (1) birth to 36 months and (2) 2-18 years with separate curves for males and females. Effective use of the growth curves in assessing growth and development of infants and children requires an understanding of the measures and a realistic interpretation of these measures by the user. Measurements should be made in the same way as the original data for the charts were obtained: from birth to 36 months, weights represent nude weights, and the length is taken with the child lying

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down, not standing, and without shoes; in children from 2 to 18 years, weights are taken in light garments without shoes, and standing height is measured with the child wearing socks, but not shoes. The child should stand on a flat surface with the heels almost touching. The back is straight with heels, buttocks, and shoulders touching the wall on which a measuring stick or tape is mounted.

Your child's physician probably has a growth chart for your child. A growth chart is enclosed for your use. We have adapted the chart developed by the National Center for Health Statistics for use with males and females 2-18 years of age so that height and weight can be charted on the same page. Our version only covers ages 2 through 10, however. There are different standards for boys and girls, so be sure you are using the right one.

Knowing that the child is short or tall is probably less important than recognizing that the child is maintaining a consistent growth pattern. Children who fall between the 25th and 75th percentile are probably normal in growth and development. Children who fall outside these ranges may or may not be experiencing normal growth patterns. Genetics, nutrition, and environment may all be affecting growth in these children. Shifts in percentiles from the time of one measurement to the next may be indicative of medical and/or nutritional problems.

#### Nutritional Needs During Growth

Early childhood is a highly critical time in the growth and development of the youngster. As the child's diet during these growing years can affect the whole pattern of life, attention must be given to specific nutrient needs. Those will be discussed in future lessons.

## SNACK TIME

We've become a nation of snackers. Once upon a time we ate three times a day--morning, noon, and night. Between-meal eating was a treat-- popcorn at the movie, cake and ice cream at a birthday party, or a hot dog at the baseball game. These treats were so rare that we didn't worry about the calories they contained or whether they contributed any essential nutrients. But now almost two-thirds of us have one or more snacks (including coffee breaks) each day, if the respondents in the Nationwide Foods Consumption Survey are typical. Some of us get 15 to 20% of our calories in snacks.

Children who are active and growing probably have more need to snack than do their parents. Their capacity is small so more frequent eating is necessary. Snack time also represents a change of pace which can be refreshing, regardless of the food served.

Since snacks appear to be here to stay, plan snacks along with meals. Instead of putting all of the day's food into three meals, divide it among four, five, or even six smaller eating occasions.

#### What makes a good snack?

1. It looks good and it tastes good.
2. There's enough to eat, but not too much. (It's a snack, not a meal.)
3. It has nutritional value, not just empty calories.
4. The child(ren) can help prepare and serve it.
5. It's not the same every day.
6. It's fun to eat.

Peanut butter has to be near the top of the list of favorite snack foods. Peanut butter and jelly sandwiches are easy and tasty but there are other ways to serve peanut butter. Spread peanut butter on apple slices, banana wedges, or in a celery stalk. Make Honey Milk

Balls, a no-bake cookie. Or serve a mug of peanut soup or peanut butter flavored milk.

#### Honey Milk Balls

1/4 cup peanut butter  
1/4 cup honey, syrup, molasses,  
or jelly  
1/2 cup nonfat dry milk (dry)  
1/2 cup crushed cereal flakes

Mix equal amounts of peanut butter and one of these--honey, syrup, molasses, or jelly. Add the dry milk a little bit at a time. Mix well after each addition. Form into small balls about 3/4 inch across with your hands. Roll the ball in crushed cereal flakes. Chill until firm. Makes 25 small balls.

### KIDS IN THE KITCHEN

Children like to imitate the work and leisure activities of grown-ups. Even very small children want to help in the kitchen. Encourage this interest as the kitchen can become an excellent learning laboratory. In addition, kitchen activities may afford a special time for sharing between a child and adult.

Each child develops at his or her own rate but generally the two-year-old can begin to learn food handling skills. The first thing the preschooler needs to learn is that an adult must be present when he is working in the kitchen. Identify activities which must be done by an adult. Some of these are jobs that are:

"hot" - handling hot pots and pans; cooking on or in the stove or with other electrical appliances  
"heavy" - lifting heavy pieces of equipment or full canisters  
"sharp" - cutting with sharp knives

Next, teach the young child kitchen cleanliness. The two-year-

old can learn to wash hands and to wipe counter and table tops. Sponges may be easier to hold than cloths. Don't worry about motions the child uses. But do give hints on how to check if the job is done - Are all the spills gone? Are there any crumbs? The child can use this same skill to help clean up spills at the table. Let the child practice this new activity of mopping or wiping up spills. Make sure the child knows which cloths or sponges are for the floor and which are for counter/table tops.

Another scrubbing skill is cleaning fruits and vegetables. Brushes or sponges can be used to wash potatoes, carrots, and many fruits. Scrubbing fruits and vegetables in the sink area helps keep water where spills are easier to clean. These activities might be called water play, so be prepared for enthusiastic workers. Plastic aprons help. Lay a cloth on the counter edge in front of the sink to help prevent water spills on the floor.

### MEALTIME MANNERS

A child has to grow into adult mealtime behavior. You can help by providing an opportunity to develop eating skills, by setting a good example, and by giving praise. Positive reinforcement works better than negative.

Mealtime is a social event as well as a time for taking in nourishment. Make it a time to share experiences and plans with others. Don't use it as a time to air grievances or decide on punishment for earlier infractions. If topics you find inappropriate for mealtime conversation come up, simply say "I'd rather not discuss that at the dinner table" or "that's not a mealtime subject." All family members should have the same option. Each family will have to decide what's inappropriate.

Set aside time for meals so there is time for conversation. Include the child but avoid making him the center of attention.

A child may find it difficult to sit still for as long as adults linger over meals. You can excuse the child early or provide a stretch break during the meal.

## FAMILY ACTIVITIES

Story books and recipe books help children learn about food - where food comes from, the forms in which food can be obtained, and about food mixtures.

Look for these qualities when selecting recipe books for children:

1. Nutrition - Recipes should emphasize nutritious foods.
2. Relevance - Ingredients should be those used by the family.
3. Role stereotyping - All family members, male and female, should be seen preparing food.
4. Skill level - Children should be able to prepare most foods with adult supervision
5. Reading level - Illustrations can substitute for reading skills.

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## DIRECTIONS FOR GROWTH CHART

Measuring: Take all measurements with the child in minimal indoor clothing and without shoes. Measure stature with the child standing.

Recording: First take all measurements. Then graph each measurement on the appropriate chart. Find the child's age on the horizontal scale; then follow a vertical line from that point to the horizontal level of the child's measurement (stature or weight). Where the two lines intersect, make a cross mark with a pencil. When the child is measured again, join the new set of cross marks to the previous set by straight lines.

Interpreting: Many factors influence growth. Therefore, growth data cannot be used alone to diagnose disease.

Each chart contains a series of curved lines numbered to show selected percentiles. These

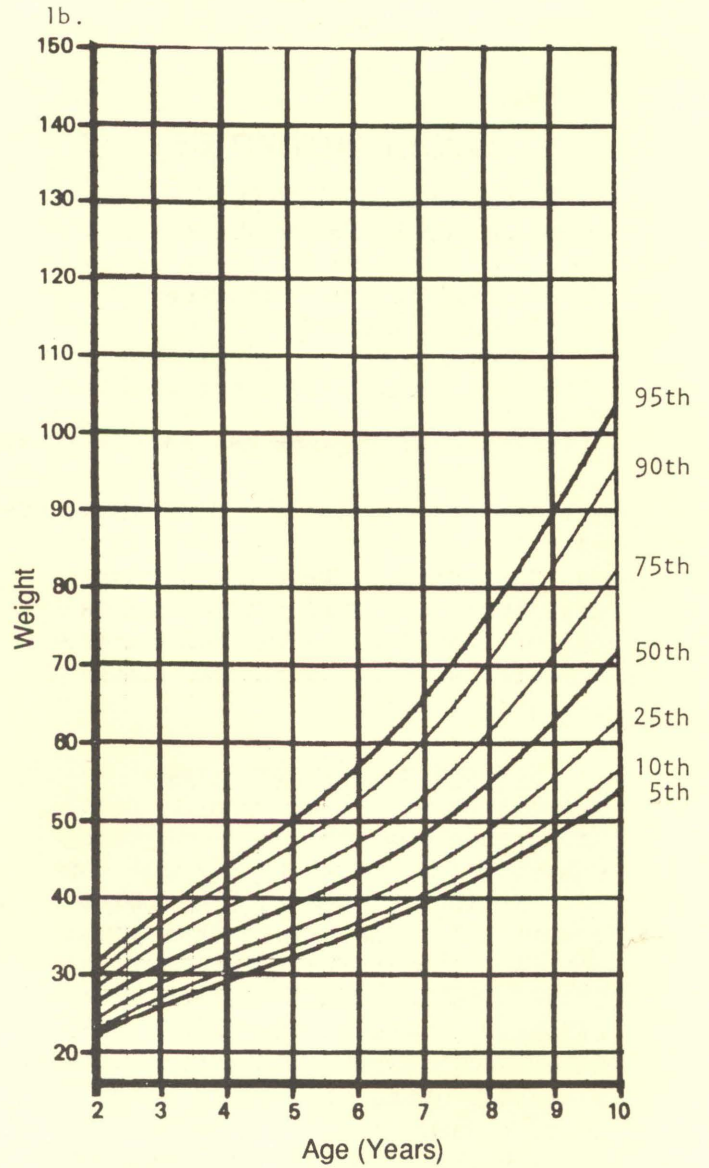
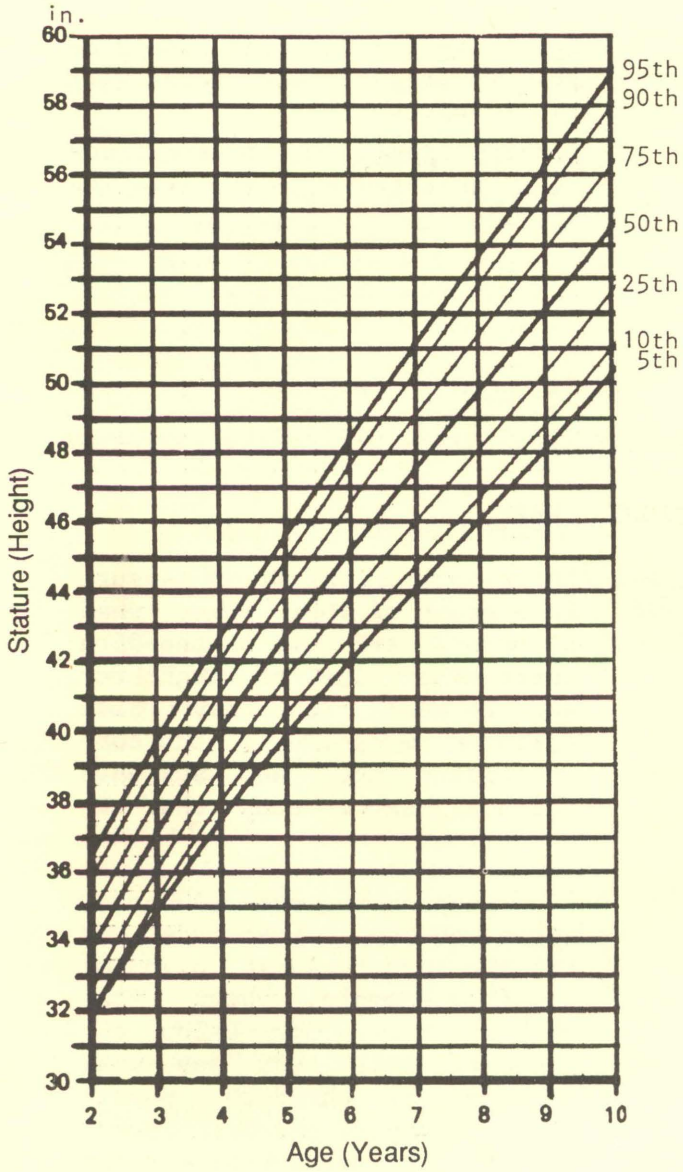
refer to the rank of a measure in a group of 100. Thus, when a cross mark is on the 95th percentile line of weight for age it means that only five children among 100 of the corresponding age and sex have weights greater than that recorded.

Inspect the set of cross marks you have just made. If any are particularly high or low (for example, above the 95th percentile or below the 5th percentile), you may want to take the child to a physician. Compare the most recent set of cross marks with earlier sets for the same child. If he has changed rapidly in percentile levels, you may want to take him to a physician. Rapid changes are less likely to be significant when they occur within the range from the 25th to 75th percentile.

# GROWTH CHART - GIRL

Name \_\_\_\_\_

Date of Birth \_\_\_\_\_

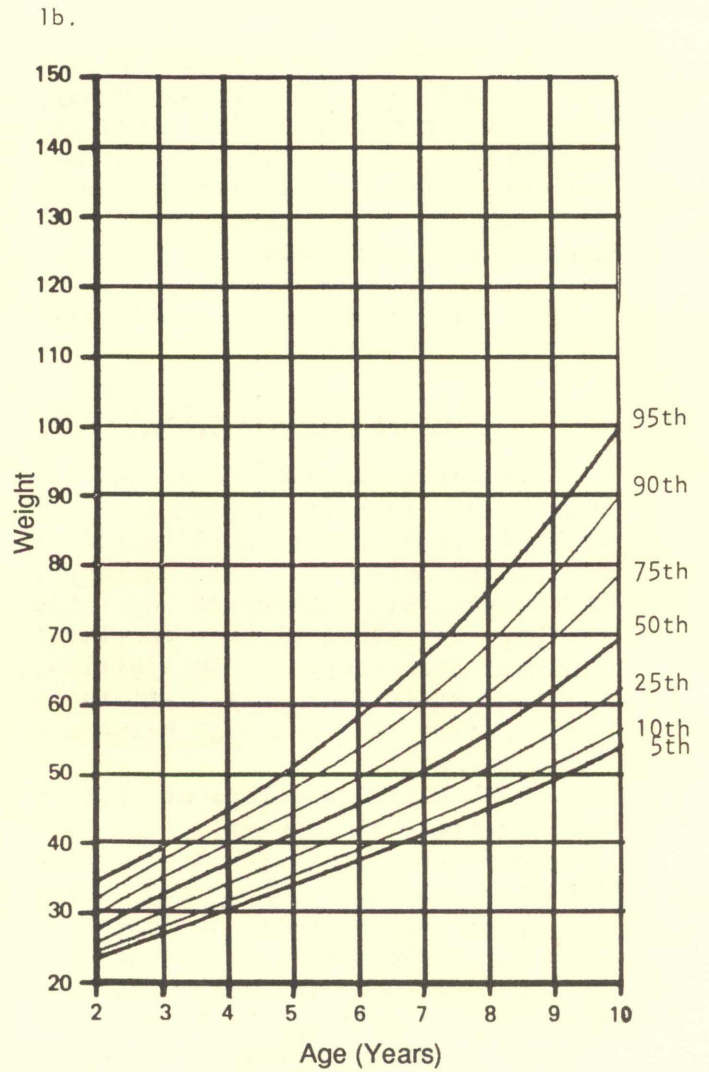
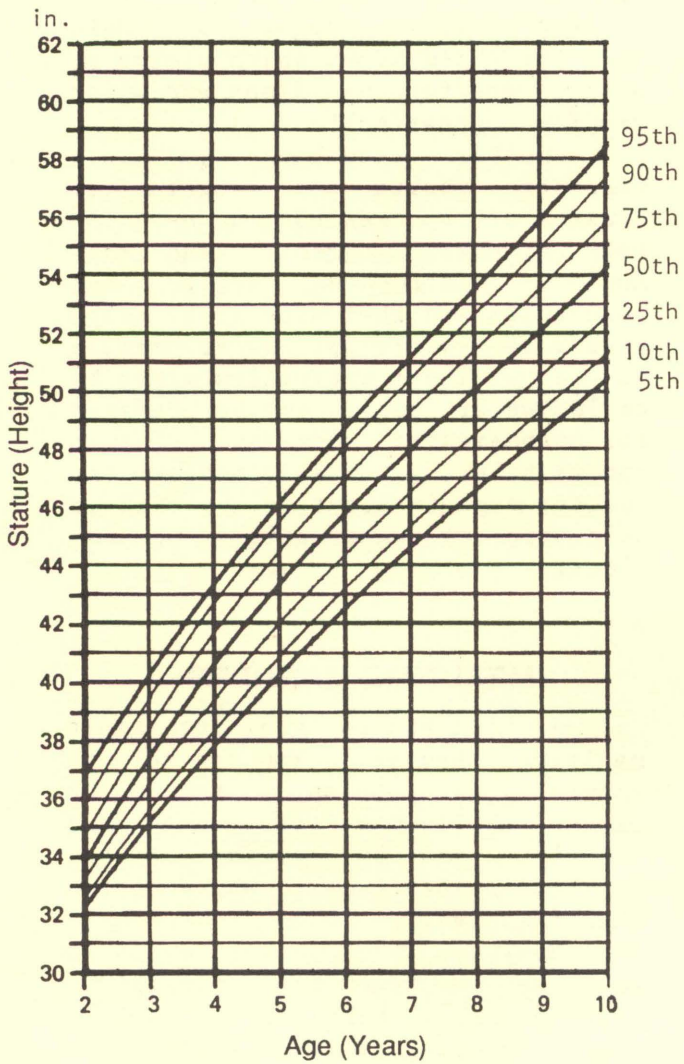


Source: National Center for Health Statistics and Center for Disease Control

# GROWTH CHART – BOY

Name \_\_\_\_\_

Date of Birth \_\_\_\_\_



Source: National Center for Health Statistics and Center for Disease Control