Constitutional Delay of Growth

Knowledge
to grow by

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Introduction

What does it mean if the doctor says your child has short stature? It means that your child is shorter than average for his or her age group. There are many reasons for a child to be shorter than average.

In some cases, a child is short simply because being short runs in the family. In other cases, a child may be short because he or she is a late bloomer.

If your child is shorter than average, he or she may have a growth disorder and may be sent to an endocrinologist for evaluation. This doctor is a specialist who is trained to diagnose and treat children with growth disorders. The endocrinologist will evaluate your child to find the cause of your child's short stature. If there is a medical condition, or suggest evaluation by another specialist if needed.

Constitutional delay of growth

What does it mean if the doctor says your child has constitutional delay of growth, or CDG? Constitutional delay of growth describes growth that is normal, but a little bit slower from most other children. In time, your child should reach an adult height that is average for his or her family.

CDG is a type of normal growth

Constitutional delay of growth is not a disease. It is a type of normal growth. About 3 to 5 percent of people in the United States have CDG. Children with CDG are healthy—they just develop and grow a bit later than other children.

In a child with CDG, growth delay usually happens by age 2. Although the child will continue to grow at the same speed as the other children, his or her bone age will be less than their actual age during the growing years. For example, a 7-year-old boy's body thinks he is 5.

CDG and catch-up growth

Children with CDG will have catch-up growth when they reach puberty. Puberty is when a child's body matures into an adult body. As part of this, the child has a time of very rapid growth. This is called a growth spurt.

In children with CDG, puberty is delayed. This means their growth spurts are delayed as well. On average, girls enter puberty between the ages of 9 and 13; boys enter puberty between the ages of 11 and 15. Children with CDG enter puberty on the latter end of these ranges. This means they may not start their growth spurts until much later than other children. In fact, they may be the last person they know to go through puberty.

The delayed growth spurt can cause children with CDG to appear shorter in height. When other children are sprouting up, children with CDG will appear much shorter by comparison. When they do reach puberty, they should have normal growth spurts. They will keep growing throughout puberty. In time, a child with constitutional delay of growth should reach an adult height within the average range for his or her family.

What causes CDG?

Constitutional delay of growth may be passed on to a child through family inheritance/genes. Inheritance/genes has an effect on traits like hair and eye color. This is passed down from generation to generation. Just as children receive genes for hair and eye color, they receive genes for height and growth rate. These genes determine how tall a child may be and how fast a child may grow.

A child with CDG inherits a slow growth rate. Often, one of the child's parents or another relative also had delayed growth during childhood. This relative entered puberty late and had a late growth spurt. He or she was also a late bloomer. Constitutional delay of growth is more common in boys and tends to run in families.

A child inherits genes for height from his or her family. If the heights of family members are within a certain range, the child's height tends to be in that range. After completing puberty and growth, a child with CDG should reach an adult height within the normal range for the family.

Growth charts

Doctors and nurses use growth charts to track a child's height and weight over time. They also use these charts to compare a child's height and weight with their normal peers. This is the average height and weight of other children who are the same sex and age. Separate growth charts are used for girls and for boys.

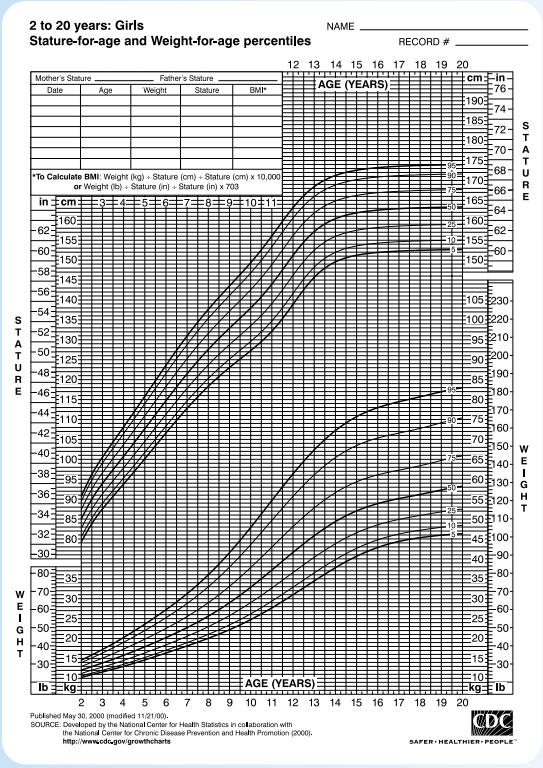
Each growth chart has lines, called percentile curves or percentiles. These lines represent the percentage of children at the same height or weight for that age group.

A percentile is a way to show ranking. For example, if a 10-year-old girl is in the 50th percentile for height, that means 50 percent of 10-year-old girls are taller and 50 percent are shorter than she is.

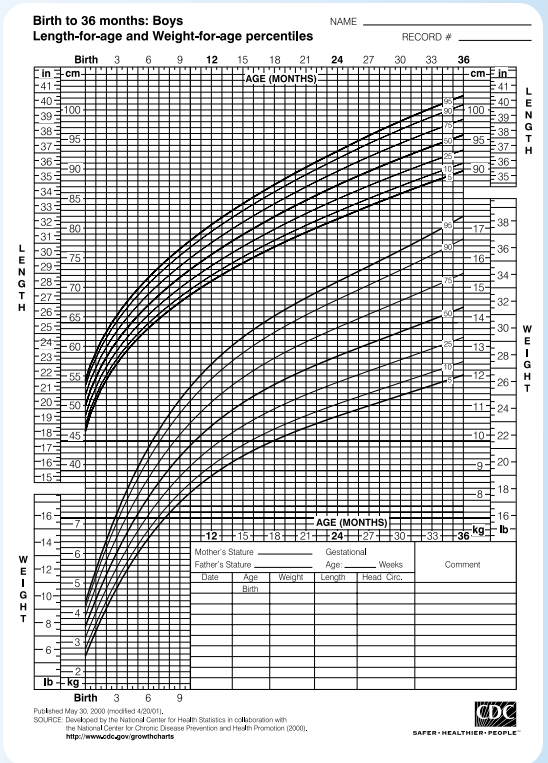
On the other hand, if a 2-year-old boy is in the 5th percentile for height, that means 95 percent of 2-year-old boys are taller and 5 percent are shorter than he is.

To record your child's growth, the doctor will draw a line connecting height measurements for your child at several points. This is called a growth curve. The growth curve for most children usually falls along one of the percentiles on the growth chart.

The doctor will also draw similar lines for weight.



Growth chart for girls aged 2 to 20 years.



Growth chart for boys from birth to 36 months.

Growth charts and CDG

Children with constitutional delay of growth are shorter than other children who are the same age. Their heights may be at or slightly below the 5th percentile throughout childhood. When children with CDG reach puberty, they have a growth spurt. Their growth curves may then move into the higher percentiles. They will eventually reach a height within the range defined by their family genes.

Medical tests

Children with CDG are healthy. In general, they show no signs of medical conditions that slow down growth. Before diagnosing your child with CDG, the doctor may do lab tests. This is to make sure your child's short stature is not due to a medical condition. The doctor will choose the tests based on your child's medical and family history.

Follow-up visits

After the tests, the doctor may ask for follow-up visits once or twice a year. This is to make sure your child continues to grow normally and that no medical condition stops your child from reaching a full adult height. The doctor may also check your child's emotional and social health. This is to see if being short is affecting your child's life at school and elsewhere.

Emotional effects of CDG

The self-esteem of children with short stature has much to do with how they see their bodies. Children who feel good about themselves and who feel loved by their families may feel fine about their short stature.

Still, a child with CDG may face social challenges because of height. For example, getting a date for a school dance or making the basketball team may be hard for shorter children. Some may be teased by taller children about their small size. This may be hurtful. Parents can help by steering their child toward a sport or other activity that does not rely on his or her height.

Support your child

Delayed growth tends to run in families. Tell your child if a parent or other relative was also a later bloomer. This may help to ease your child's worries.

Please remember to support your child. Let your child know that these problems will pass. In time he or she should reach an adult height within the normal range for the family. Your child may just get there more slowly than other children.

More important, remind your child that a person's worth has nothing to do with height. But it has everything to do with who that person is.

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