

## Familial Short Stature



**Knowledge**  
to grow by

Models throughout are used for illustrative purposes only.



## 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 because of a medical condition that affects growth. In other cases, a child is short because he or she is a late bloomer. Sometimes, it is simply because being short runs in the family.

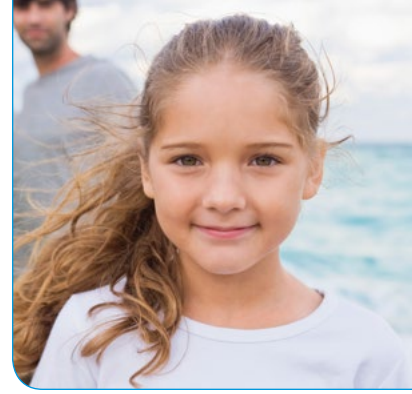
If your child is much shorter than average, he or she may be sent to an endocrinologist. This doctor is a specialist who is trained to diagnose and treat children with growth disorders. The endocrinologist will evaluate your child to find the cause of your child's short stature.

## Familial short stature

What does it mean if the doctor says your child has familial short stature, or FSS? *Familial* short stature is just a fancy name for shortness that runs in the *family*. It means that your child is shorter than average because his or her birth parents are also short.

Familial short stature is not a disease. It is a type of normal growth. Children with FSS are healthy. They show no signs of illness or medical conditions that affect growth. They are just naturally shorter than other children.

Children with FSS have growth spurts and usually enter puberty at normal ages. They should grow to be about the same height as their parents.



## What causes familial short stature?

Familial short stature is passed on to a child through family genes. Genes control traits, like hair or eye color. Genes are passed down from generation to generation. A child receives height genes from his or her birth parents. Likewise, each parent gets height genes from his or her parents. And so on.

In general, family genes determine the range for how tall a child may be. If the heights of family members are within a certain range, the child's height tends to fall in that range. For example, children of shorter families may be short as adults, even if one or both of their parents happen to be tall.

## Predicting your child's adult height

A doctor can predict how tall a child will be from how tall the birth parents are. This is called the child's genetic target height. Shorter parents tend to have shorter children. Taller parents tend to have taller children.

For boys, the genetic target height in inches is calculated as follows:

- 1. Height of father in inches plus height of mother in inches plus 5 inches.**
- 2. Divide that number by 2.**

For girls, the genetic target height in inches is calculated as follows:

- 3. Height of father in inches plus height of mother in inches minus 5 inches.**
- 4. Divide that number by 2.**

The final number is about the height that the child will reach as an adult. Remember, this is only an estimate. It may not be the exact height your child will reach.

### Example: Predict how tall Kimmy will be

$$[(\text{Dad's height} + \text{Mom's height}) - 5"] \div 2 = \text{Kimmy's genetic target height}$$

## 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 the statistical norm. 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.

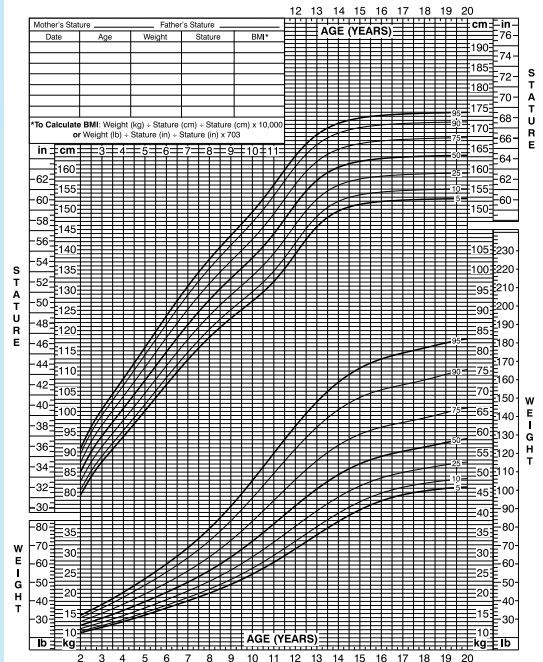
A percentile is a way to show ranking. For example, if a 10-year-old girl is in the 50th percentile for height, that means 50 percent of 10-year-old girls are taller and 50 percent are shorter than she is.

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.

### 2 to 20 years: Girls Stature-for-age and Weight-for-age percentiles

NAME \_\_\_\_\_

RECORD # \_\_\_\_\_

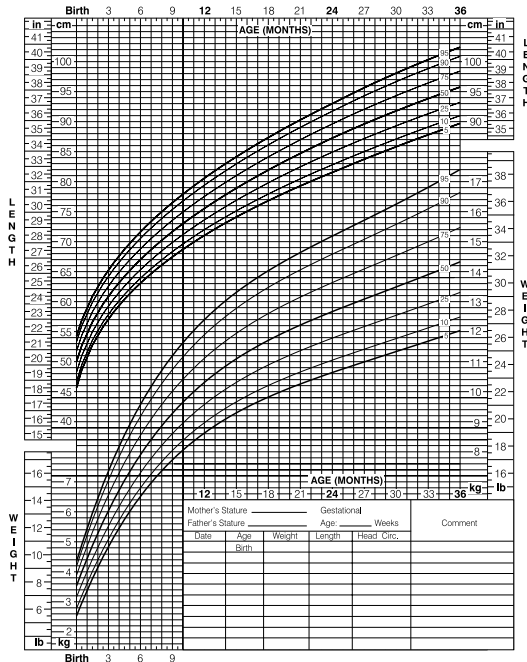


Growth chart for girls aged 2 to 20 years.



**Birth to 36 months: Boys**  
**Length-for-age and Weight-for-age percentiles**

NAME \_\_\_\_\_ RECORD # \_\_\_\_\_



Published May 30, 2000 (modified 4/20/01).  
 SOURCE: Developed by the National Center for Health Statistics in collaboration with  
 the National Center for Chronic Disease Prevention and Health Promotion (2000).  
<http://www.cdc.gov/growthcharts>



*Growth chart for boys from birth to 36 months.*

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 charts and familial short stature

Children with familial short stature are naturally shorter than other children the same age. This means their growth curve will follow a lower percentile throughout childhood. A child with FSS should eventually reach a height similar to the heights of his or her birth parents.



### Medical tests

Before diagnosing your child with familial short stature, 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. Medical treatment is usually not needed for FSS.

### Follow-up visits

After the tests, the doctor may ask for follow-up visits once or twice a year. This is to make sure 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.

### Support your child

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. But many children may face social challenges because of their height. For example, getting a date for a school dance or making the basketball team may be hard for short children.

Some may be teased by taller children about their small size. This may be hurtful. For these reasons, please remember to support your child. Let your child know that any problems will pass. In time, your child should reach an adult height that is average for his or her family.

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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