

Introduction: How Children Grow



Knowledge
to grow by

Models throughout are used for illustrative purposes only.



Welcome to the office of your endocrinologist, a specialist in growth. Your child has been referred for evaluation of his or her growth. A growth specialist helps children with growth disorders and their families.

A child's growth is closely watched by parents, and also by a child's doctor. For a parent, a growing child is seen as a healthy child. Likewise, a doctor watches a child's growth to keep track of the child's overall health. For this reason, a child should have his or her height and weight checked by a doctor at least once a year.

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What is short stature?

Some children may grow more slowly than their peers. Children who are shorter than average are said to have short stature. Short stature is not a disease. Often, it may just be a trait that a child got from his or her family. Short families tend to have short children. Tall families tend to have tall children.

But in some cases, a child is short because of a medical condition that affects growth. Medical conditions may either slow or stop growth in a child. If a medical condition is the cause of slow growth, there are medicines that may help.

If your child is shorter than average, he or she may need to see 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 slow or unusual growth. If there is a medical condition, the doctor can suggest medicines that may help your child grow.

How children grow

Growing is a process that involves many factors, such as diet, health, exercise, and emotional stress. But the two main factors are family genes and hormones.



Family genes

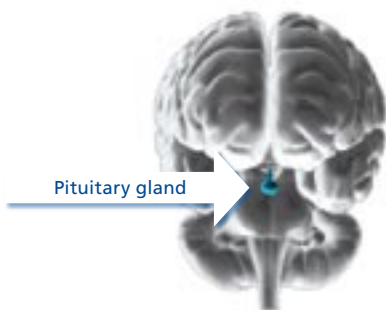
A child's height is mostly controlled by family genes. Genes are passed down from generation to generation. They control traits, like hair or eye color. A child receives height genes from his or her birth parents. Likewise, each parent gets height genes from *his* or *her* parents. And so on.

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 adult height tends to be in that range. For example, children of shorter families may be short as adults, even if their parents are tall.

Therefore, it is possible for a child of short parents to grow tall, or a child of tall parents to be short.

Hormones

Hormones are the second key factors in a child's growth. Hormones are chemical messengers. They are made in glands and sent through the blood to other parts of the body. They deliver messages that tell the body to perform certain tasks. One hormone that is important for a child's growth is growth hormone. It is made by the pituitary gland. The pituitary gland is a small organ in the body. It is the size of a pea. It sits in the middle of the head at the bottom of the brain, just behind the nose.





Growth hormone


Along with other hormones, growth hormone is important for a child's growth. The pituitary gland sends growth hormone into the body where it causes bone growth. Growth hormone helps the cells in a child's bones to grow and divide. Growth in the bones, especially the spine and the leg bones, makes a child taller.

What's next?

When it comes to height in children, there is a wide range of what is normal. Many children are short for their age, but only a few may have a medical issue that causes them to be short.

Regular visits to a doctor are important to keep track of your child's growth. If growth is slower than normal or stops, an endocrinologist should check it. This doctor will check to see if the pattern of growth is unusual. If needed, the doctor may choose treatment to help your child grow and develop.

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