

## How to know if your child's growth is normal



Are you wondering whether your child is growing as fast as they should be? Leading endocrinologist Dr Helen Spoudeas explains how to work out your child's "target height" and how to use this to figure out if your child's growth is normal.

When is a child unusually short? What is the definition of short stature?

We have two ways to define short stature:

The first definition is: are you short for the population? If you are short for the population, then you are in the shortest 2.5% (percentile) of people for your age and sex.

It's important to understand that this might not be a growth problem. Our height is largely determined by the height of our parents. If you also have short parents whose heights sit around the 2.5% (percentile), you can be growing normally along this line – but still be short for the population.

But what if you are short for your parents? This is the second definition of short stature. We work this out by looking at your "target height".

Your target height is calculated by:

- adding together your parents' heights (in centimetres)
- dividing this by two
- adding seven

Your target height is anywhere up to 10 centimetres above or below this number. If you're below this range, this is defined as short stature, and may indicate a growth problem.

So how do you know whether your child is on track to reach their target height?

Tracking your child's growth

The good news is that all children grow at a steady rate through life. If you were tall as a child, you're almost certainly going to be tall as an adult.

All you need is a height chart. By tracking your child's height as they get older, you can work out whether their growth rate is normal. Generally speaking, a growth velocity of less than 4cm a year in childhood, and less than 6-7cm a year in puberty, might indicate growth failure that needed explaining.

However, every child is different, so the right growth rate for your child really depends on their target height. We should expect children with short parents to grow more slowly than the average. On the other hand, a very average growth in someone with exceptionally tall parents may be a cause for concern.

The definition of growth failure is that you have slipped from your trajectory downwards. This can occur as part of a significant pubertal delay in the ages between 11-15 years, but all causes require medical investigation.

When should I take my child to see a doctor?

If you're worried about your child, it's important not to wait until puberty is complete to see if your child will "catch up" on growth. During puberty, the bones fuse together and not much more growth can be achieved, even if there was a hormonally treatable cause. This is known as growth completion – and on average happens in girls aged 14, or shortly after their first period, and in boys aged 16-17, or shortly after they start growing a beard. In early maturers, this happens even sooner, whilst late maturers grow for longer. Therefore, if you want a review of your child's growth, it is important to come before this time.

At the appointment, it's useful to bring:

- detailed information on your child's growth over time
- information on your height and the height of the child's other parent
- birth records of your child's weight and length

We can then investigate whether your child's growth is abnormal – and if not, what might be the cause of the problem.

If you are a concerned about your child's growth, [click here](#) to book a consultation with Dr Spoudeas.