

# changes During Puberty

## Physical

Grades  
4th & 5th

### what is puberty?

There comes a time of big change, when your body is getting ready for womanhood – it's called Puberty. This is when we mature in mind, body, and spirit and become interested in new things.

This important period of change can take from one to six years and marks a phase in your life when your body begins to look more like a woman's and less like a girl's. Keep in mind that every girl matures at her own pace, but eventually we all catch up.

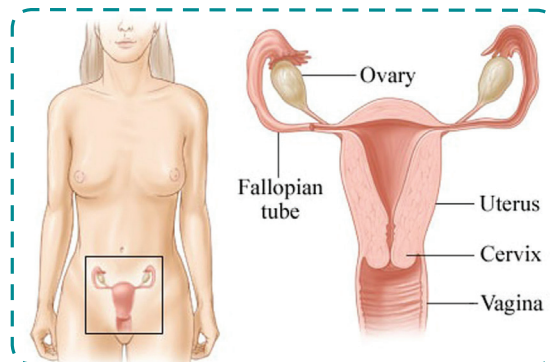


The changes of puberty and adolescence don't happen on a strict timeline or overnight; instead they occur at different times based on your unique internal calendar. We'll be honest -- adolescence can be a tough time. You may feel like you don't want to leave your childhood behind, or that you can't wait to grow up, and sometimes you might not know what to do or think.

### WHAT CAUSES ALL THESE CHANGES?

Hormones are the driving force for adolescent changes. Your brain knows when your body is

getting close to maturity and tells your glands to send out different hormones to signal changes in different parts of your body.



The brain and a little gland just under it called the pituitary gland, release hormones that tell your reproductive organs what to do. These hormones wake up your ovaries telling them it's time to start producing the female hormones called estrogen and progesterone.

Growth hormones are also jump started during puberty-- they make the body grow sometimes very quickly. Arms and legs grow longer and your internal organs get larger as your body experiences a growth surge. This lasts about two to three years.

Some girls can even grow four inches in one year during what's known as the "growth spurt". When this passes, you'll be near your adult height. As you grow taller, your body will change in other ways,

too. You'll gain a little weight and your overall shape will change. These changes all mark the normal development that happens during puberty.

### WHEN DOES PUBERTY HAPPEN?

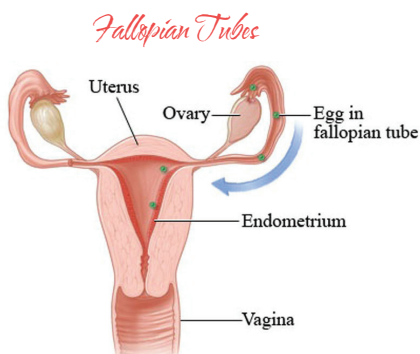
For girls, puberty can begin as early eight and as late as fourteen. Sometimes the physical and emotional changes of puberty don't happen at the same time. A girl can mature emotionally before she does physically. The opposite is also true. Sometimes kids who enter puberty early are not prepared for the many changes going on in their bodies. These feelings can make you very self-conscious and even feel kind of like an outsider. But you are definitely not, and are just going through normal changes!

### STAGES OF PUBERTY

There are 5 different stages that girls experience when they go through puberty. The timing of the stages might vary from girl to girl as each person develops when the time is right for their body, but below gives you an idea of what you should be seeing.

#### STAGE 1. Age Range: Usually 8-11

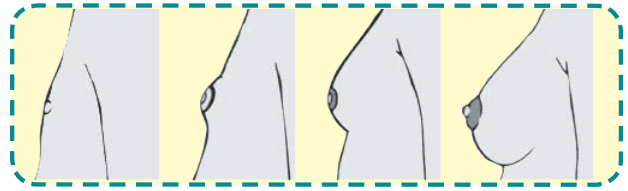
A girl's ovaries are enlarging and hormone production is beginning.



#### STAGE 2. Age Range: Usually 7-14. Average: 11-12

Breast growth begins, including “breast buds.” A girl may also grow considerable height and weight.

The first signs of pubic hair (hair down there) start out fine and straight, rather than curly.



#### STAGE 3. Age Range: Usually 9-15. Average: 12-13

Breast growth continues, and pubic hair coarsens and becomes darker, but there still isn't a lot of it. Your body is still growing, and your vagina is enlarging and may begin to produce a clear or whitish discharge, which is a normal self-cleansing process. Some girls get their first menstrual periods late in this stage.



#### STAGE 4. Age Range: Usually 10-16. Average: 13-14

Pubic hair growth takes on the triangular shape of adulthood, but doesn't quite cover the entire area. Underarm hair is likely to appear in this stage, as is menarche – the onset of menstrual periods. Ovulation (release of egg cells from ovaries) begins in some girls, but typically not in a regular monthly routine until Stage 5.

#### STAGE 5. Age Range: Usually 12-19. Average: 15

This is the final stage of development, when a girl is physically an adult. Breast and pubic hair growth are complete, and your full height is usually attained by this point. Periods are well established, and ovulation occurs monthly but it's common to have irregular periods for up to 3 years.

## WHAT ARE GROWTH SPURTS?

A growth spurt is when your body grows a great deal in a short period of time. You may notice your arms, legs and feet growing at a fast rate. This may be the first sign of puberty you can see. Once your period begins, you may not grow much taller. If you do continue to grow, it will be at a much slower rate than before. However, your bones continue to get stronger. Girls add 40% of their bone mass after puberty begins. Your bones will continue to get stronger until about age 18 or 20. This is why it is so important for girls to get 4 to 5 servings of calcium (milk, yogurt, etc.) every day. This is when you want your bones to get as strong as possible, so you will have less of a chance of developing osteoporosis (weak bones) when you are older.

## WHAT ARE BREASTS AND WHY DO I HAVE THEM?

All mammals have breast. Breasts are milk-producing glands. The main reason we develop breasts is to feed babies. Since the beginning of the human race babies have been nursed straight from their mothers' nipples. Some babies are fed formula from a bottle, but doctors recommend breastfeeding as the best way to meet a newborn baby's nutritional needs. Breasts typically go through five stages of growth, until they reach full maturity. Girls go through these stages at different rates. While some girls will have fully developed breasts at the age of 12, others won't until they are 19. Anywhere within this range is normal, but the average girl will have reached full breast maturity at age 17.



The size of your breasts is determined, for the most part, by genetics, what you have inherited from your parents. Look at your mom and your sisters. You will probably end up somewhere in between when you are finally done growing. And remember, all breast shapes and sizes can be normal and healthy. Just take a look around. Breasts vary in shape and size as much as body shapes do.

## WHY DO WE HAVE PUBIC HAIR?

Pubic hair is another signal that puberty is beginning. Hair will begin to grow slowly at first. You'll see a few fine hairs scattered around the place above your vagina. As you continue through puberty, you will begin to notice that you have a lot more hair down there and it may even begin to creep down in between your legs. Eventually your pubic hair will cover the area above your vagina and be thick, dark, coarse and possibly even curly! Most girls find their pubic hair grows in sometime between the ages of 8 and 16. And once you notice you have pubic hair, your period is probably not too far behind.

## SHOULD I BE GAINING WEIGHT DURING PUBERTY?

As puberty is a time of growth toward becoming a woman, most girls do gain weight during puberty, some even doubling their weight. As you go through puberty, you will get taller, gaining more muscle, bone, and body fat. This will round out your hips, thighs and contribute to fuller breasts.





During this time, the bones in your hips will grow wider so your waist will look smaller, giving you a more hourglass shape. Of course, exercising daily and eating healthy is important in helping you maintain the weight you need for normal growth during puberty. But remember, all girls go through puberty on their own schedules, so you and your friend could be the same height and age and be totally different weights and shapes.

## WHAT IS ACNE?

One of the less exciting signs of puberty is acne, which is caused by the hormones that surge during puberty. These hormones tell your body to begin producing more oil in the skin. And, of course, because this is puberty, it is once again, something you can't control. This oil can get stuck in your follicles, the pores in your skin from which hair grows. Along with bacteria and dead skin, this can result in blackheads, whiteheads and pimples.



So it doesn't mean you aren't clean if you have acne, it just may mean you have very active oil glands. Some girls will only have the occasional breakout near the time of their cycle, but for others, acne can be a serious problem. For those girls that only get a few pimples, or very mild acne, there are a wide variety of over the counter acne cleansers and medicines available at any local drugstore. Try to find products for your face and hair that are oil-free, water-based or non-comedogenic (which means it won't clog your follicles) to keep pimples from starting. But for those who have continual breakouts, or those that affect large areas of skin, including your back, neck and chest, a doctor can prescribe something stronger. Your doctor may even refer you to a dermatologist,

a doctor that specializes in caring for the skin.

Luckily, your body will eventually regulate its oil glands and you will figure out what you need to do to manage the amount of oil your skin produces. So by the time you finish puberty, (around age 17-19) you will most likely also be finished with acne. But in the meantime, there are many things you can do to prevent acne outbreaks.



One of the most important things you can do to keep your face and body relatively free from acne is to keep it clean. Wash your face twice a day with a mild soap, and it can't hurt to keep those bangs off your forehead. You ever wonder why so many girls get pimples on their foreheads? The oil from your hair adds to what's already there on your face. Pretty much avoid anything that brings more oil to your skin; greasy foods, fried foods, make-up that is oil based and even resting your chin in your hands can cause a problem breakout. Create a skin care routine that works for you and stick to it. This routine should include things you shouldn't do, like pick and squeeze pimples, along with what you should do to keep your face clean and clear.

## WHY AM I SWEATING SO MUCH?

Along with your oil glands, glands that produce sweat also get stimulated during puberty. So, although it may be new and a bit embarrassing, sweating a lot more once you start puberty is totally normal. You may only notice sweating in your armpits, or feet, but some people sweat all over their bodies.



The one thing you may worry about with sweating is the body odor that can go along with it. Sweat actually doesn't smell. It is when it mixes with bacteria on your skin that it begins to have an odor. So again, just like with acne, keeping your body clean is one way you can keep body odor away.

An over-the-counter deodorant or antiperspirant is another good option for reducing odor. Deodorants eliminate bad smells but not the amount of sweat. They change the environment on your skin, making it more acidic, and therefore, more difficult for bacteria to grow and multiply. Deodorants usually use perfumes that hide the odor of sweat. They can be used on your feet as well as the underarm area.

Antiperspirants work by reducing the amount of sweat that reaches your skin by blocking the sweat gland ducts. Follow the directions for use on the bottle. Antiperspirants can cause irritation to sensitive skin so discontinue their use if redness, itching or swelling occurs. Antiperspirants are not usually recommended for young girls.

## WHAT'S GOING ON DOWN THERE?

Above the genital area is where your pubic hairs first begin to grow. This area will also become a little more rounded due to a pad of fatty tissue that will grow under the skin here.

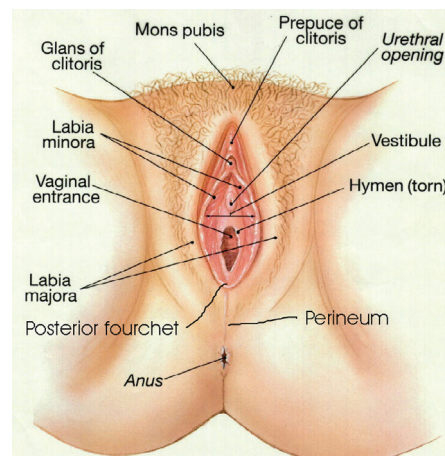
Below this, there are two flaps of skin, or lips, that overlie your vaginal opening. These are called the outer lips, or labia majora. During puberty, pubic hairs may start to grow here as well. Another change you may notice during puberty is that these lips become fuller and grow closer together. The reason for this is to protect the structures underneath. Over time, the labia majora will also become darker and a little wrinkled.

Just inside the outer labia, you will find a second set of labia. These are the inner lips, or labia minora. During puberty, these labia will grow in size. The final size and shape varies greatly. But however yours develop, they will usually become darker and more wrinkled

than they were before puberty. It's not uncommon for the inner labia to grow bigger than the outer labia and stick out from between the outer labia.

Underneath the inner labia there are three important structures. Near the bottom is the largest opening. This is the entrance to your vagina. Above this vaginal opening is another smaller opening. This is your urethra, the place through which you urinate. Above the urethra, where your inner labia come together, is a structure called your clitoris. The clitoris is a tiny, button like knob. Only the tip of the clitoris is visible and may vary in size from several millimeters to 1 cm.

Finally, down below your genitals, the opening in your bottom is your anus, the place where bowel movements come out of your body.



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