



It all
STARTS in
your brain.

THE HORMONE

What kick-starts puberty?

1 A gene starts the ball rolling.

2 It wakes up the HORMONES responsible for all the changes experienced during puberty.

3 There is no going back now!

4 Let's meet the hormones...

5 GnRH hormone is made in the pituitary gland at the base of your brain. This hormone works constantly throughout puberty.

6 Human growth hormone, also made in the pituitary gland, does just what its name suggests—it makes you grow!

7 Estrogen is the female sex hormone. It is made in the ovaries and causes most of the changes to your body during puberty.

The *pituitary gland* and the *ovaries* are hormone factories. They increase production during puberty and that not only changes your body, but can affect your mood, too.



DID YOU KNOW?
Hormones are chemical messengers. They tell the cells in your body what to do when.

DID YOU KNOW?
30 different hormones work in your body, regulating such things as your sleep, temperature, and hunger.

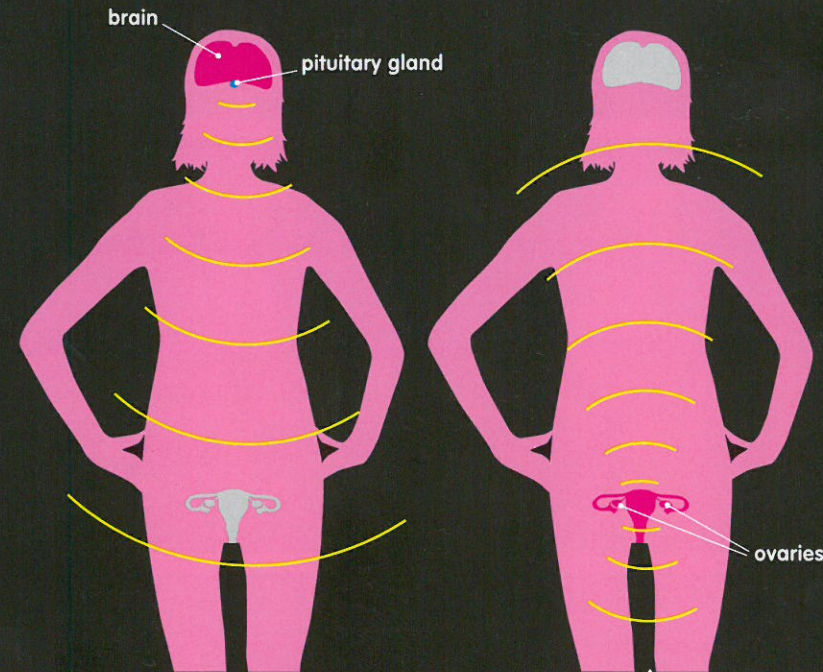
DID YOU KNOW?
Hormones can make you moody and tearful, and fill you with romantic feelings...

FACTORY

Follow the numbers around to find out.

WELCOME TO THE HORMONE FACTORY!

The pituitary gland sends hormones to the ovaries that make them come to life. Then the ovaries send hormones to the rest of the body, telling it to start changing.



average age **15½**
16
adult breast size
usual age 12-19

average age **13**
15
first period
usual age 10-16

average age **13**
14
underarm hair appears
usual age 10-16

average age **12½**
13
hips widen, body gets curvier
usual age 8-15

average age **12¼**
12
growth spurt peaks
usual age 8-14

8 Progesterone is also made in the ovaries and works with estrogen. Its job is to help control the menstrual cycle (periods).

9 Here's how your body changes...

average age **11¼**
10
breasts start to grow
usual age 8-14

average age **11¾**
11
pubic hair starts to appear
usual age 9-15