

'Puberty Blues'

Information for Young People

As if it is not hard enough trying to keep blood glucose levels (BGL's) under control then along comes puberty and there are all these hormones which not only affect your body but also your emotions and your blood glucose levels (BGL's).

Puberty, what is it?

This is when some of your glands and hormones become active. Your body starts to produce larger amounts of growth hormone and sex hormones like testosterone and oestrogen. These hormones play an important role in growing and developing your body into its adult shape.

Hormones are chemicals produced within the body and carried by the blood to stimulate changes, e.g. growth hormones that stimulate the growth of bone and muscle during puberty.

When does it begin?

Puberty begins over a wide range of ages for all teenagers - usually at about 10-14 years of age for girls and 12-14 years for boys.

How can puberty affect diabetes?

These hormones have an effect on blood glucose levels because they make the body resistant to insulin. This in turn causes the BGL's to rise making it harder to control your diabetes. In other words, during this time you will probably need a lot more insulin to get the same effect on your BGL than you did before.

Due to these fluctuations in insulin requirements, you will probably have to adjust your insulin dosage more frequently. It can be frustrating when you are trying hard to maintain good diabetes control and the balance is still not right.

What physical changes take place during Puberty?

In boys

- Growth of muscle and bone, and a big increase in height
- The voice "breaks"
- Growth of hair on the face, underarms, chest, abdomen and pubic area
- Enlargement of the penis, the scrotum and prostate gland and spermatozoa is produced

In girls

- The reproductive organs i.e. the uterus (womb), the uterine tubes and the ovaries reach maturity
- The menstrual cycle (periods) and ovulation (production of eggs) begins
- The breasts develop and enlarge
- Pubic and underarm hair begin to grow
- There is a widening of the pelvis
- There is an increase in the amount of fat deposit in the body which results in your body changing shape.

Do periods have any effect on diabetes?

The menstrual cycle (periods) affects every female differently with or without diabetes. In girls with diabetes it is common for the monthly changes of hormone levels to have an effect on their BGL's. It is not uncommon to see a rise in the blood glucose levels in the days leading up to the period and then a fall when the period starts.

It is important to look for a pattern in the blood glucose levels around the time of the period in order to make the appropriate adjustments to the insulin doses.

Your doctor or diabetes educator can help with this.