

PUBERTY AND DIABETES: DISPELLING THE MYTHS



Q What exactly is Puberty?

A Puberty is a time of physical and psychological upheaval that is triggered by the release of sex hormones and marks the onset of sexual maturity. The length of time that puberty lasts can vary – it can be as short as one year or as long as six. For girls, puberty can start between the ages of 9 & 14. For boys it begins anywhere between 10 & 17. However, it is not unusual for there to be a slight delay of puberty in young people with diabetes, especially if there is poor control of blood sugar levels.

Q How does Puberty affect diabetes?

A Insulin is also a hormone, so the body has quite a time during puberty dealing with competing hormones, each with its own mission to bring about change in the body. One of the hormones involved in puberty - growth hormone – prevents the body being able to use insulin effectively: in fact it makes the body resistant to insulin. This results in higher blood glucose levels and the need to increase the insulin doses. Somebody going through puberty may need up to 2 units of insulin per kg of body weight spread over 24 hours. For example somebody weighing 50kgs might need up to 100 units of insulin/day! Even with increased insulin, blood glucose levels can vary a lot due to the hormones testosterone (male hormone) and oestrogen (female hormone) circulating in greater quantities. All in all, it is hard work to maintain the recommended blood glucose levels during puberty.

Q What can I do to keep my diabetes control OK during puberty?

A Despite everything we've discussed so far, higher blood glucose levels may also be due to things like overindulgence at the local dairy. Your Mum and Dad will probably accuse you of not sticking to a healthy diet – just try to chill when then happens. Whatever the cause of high blood glucose levels, it is important to continue testing. Don't stop testing just because you've had another row you're your parents over doing blood tests – it is just not worth it! It is important test at different times of the day, and to note any events or activities that may have affected the result. This record will help the healthcare team to get a clearer picture of what is happening with your diabetes control.

Q Will periods affect diabetes?

A Girls will often find that their blood glucose levels rise either before or at the time of their period. They should note whether or not this happens, and if it does, discuss it with the team to see if their insulin regimen might need changing.

Q What about sex and diabetes?

A It is important to remember that during puberty young people are developing socially and may be considering having a sexual relationship. Even if you are not at this stage, you need to understand that this may involve strenuous physical activity and can cause hypoglycaemia if not enough carbohydrate has been taken beforehand. Please talk to the team if you have specific questions about sex and diabetes

Girls thinking about going on the contraceptive pill should ensure that the health professional prescribing this is aware of their diabetes as certain types of the pill are better for young women with diabetes. The diabetes team don't usually prescribe contraception however we can give you advice about keeping yourself safe and where to go if you need specific help in this area.

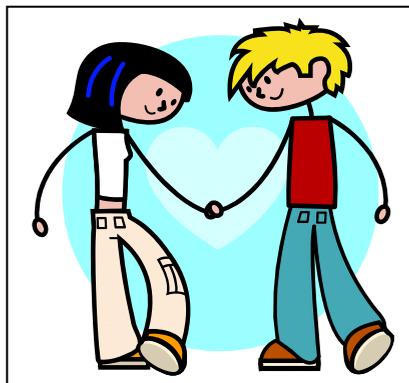
Impotence (erectile dysfunction) can occur in men as they get older. It may also occur in male adults with diabetes of long duration as a result of nerve damage or as a result of poor blood supply to the penis. Increasing age, duration of diabetes and poor glycaemic control are all risk factors for erectile dysfunction. However impotence is rare in the adolescent age group and may well be minimised or prevented by good glycaemic control.

Q Puberty is the peak time for exams and I am completely stressed out. Will this affect my diabetes?

A Yes – absolutely right. Not only are young people dealing with raging hormones, they also need to handle the enormous stress of exams. Elevated stress levels cause the body to produce even more hormones to help them deal with the stress, which in turn cause blood glucose levels to rise. Try to be aware of this stress and allow yourself time and space to relax. You also need to monitor your blood glucose levels more often and to seek advice from the healthcare team as to whether or not you need to adjust the doses of insulin.

Q What about the future?

There is no recognisable pattern of inheritance with type 1 diabetes. Basically the risk of diabetes to an identical twin of somebody with type 1 diabetes is about 36%, compared to a lifetime risk of about 6% for a sibling. If you have diabetes and you are a female then the risk of you having a baby with type 1 diabetes is 1.3%. If you have diabetes and you are a male then the risk of you fathering a baby with type 1 diabetes is higher.



Top Tips for dealing with your Parents

DO

Talk to each other rather than “at” each other

Encourage your parents to talk about how they feel about your diabetes – this makes it easier for you to be “open” about any issues you may be having

Bring your parents to clinic appointments and keep them involved in your diabetes

Be positive about the good things they do for you

Thank them when they encourage you to carry ID

Talk to them about your social life

DON'T

Get angry – it can prevent you dealing effectively with a situation

Manipulate your parents using your diabetes

Constantly tell them what they do wrong – understand that parents find it hard to let go

Shut your parents out – they love you!