Diabetes and getting pregnant

Having a chronic condition such as diabetes (diabetes mellitus) takes careful monitoring of your health at the best of times, and this becomes even more crucial during pregnancy, a time when your body changes dramatically.

Most women who have pre-existing diabetes who become pregnant have type 1 diabetes (once called insulin-dependent or juvenile diabetes), although some may have type 2 (once called non-insulin dependent or maturity-onset) diabetes.

Another type of diabetes called gestational diabetes is a temporary type of diabetes that occurs in pregnant women who have never had diabetes before and it usually goes away after the baby is born. This article deals only with pre-existing diabetes — also known as 'pre-gestational diabetes'.

If you have diabetes, there's no reason that you can't have a healthy and successful pregnancy and deliver a healthy baby. What it does mean is that you will probably have to work closely with your doctor and other healthcare professionals to ensure you manage your diabetes well during your pregnancy.

I have diabetes and want to become pregnant: what should I do?

Seeing your doctor for pre-pregnancy planning is an important step in ensuring the best outcome for you and your baby. You have a pre-existing condition, so you can plan ahead and discuss with your doctor what you need to do before you become pregnant, and what you can do to manage your diabetes during pregnancy.

For example, if you have diabetes, you have a slightly higher risk than other women of your baby:

- having a birth defect;
- being born prematurely;
- weighing too much or too little;
- having jaundice; or
- having dangerously low blood sugar levels after birth.

You yourself have an increased risk of having a miscarriage or of developing high blood pressure during the pregnancy. However, you can minimise these risks by planning ahead and gaining the best possible control of your blood sugar at the time of conception and throughout the first 2 months of pregnancy.

If you have type 2 diabetes and are taking tablets to help control your blood sugar (oral hypoglycaemic medication), you can plan ahead and, if appropriate, switch to taking insulin instead, before you become pregnant. (Doctors usually recommend taking insulin instead of oral hypoglycaemic medication during pregnancy, as the oral medications are not known to be safe for the unborn baby.)

If you have high blood pressure (hypertension) now is the time to get your blood pressure under control using medications that are safe to continue once you are pregnant.

You may need to stop taking some medications, such as certain cholesterol-lowering medicines, while you are pregnant — check with your doctor.

Now is also the time to start taking a folate supplement. This is important for all women planning a pregnancy, as the fetus needs adequate levels of folate during the first few weeks (when you may not even know you are pregnant) for normal development of the nervous system. Your doctor can advise you about supplements.

How can I stay as healthy as possible during pregnancy?

Like any woman who becomes pregnant, your hormones behave differently during pregnancy than at other times. What this means for you is that you have to be aware of the impact of these possible changes to your hormones and your metabolism so that you can adjust your diabetes management accordingly. Your insulin requirements are likely to change throughout the period of your pregnancy and shortly after delivery.

For example, early in your pregnancy, your body might start using glucose more effectively than usual, which means you need less insulin. You may be more at risk of hypoglycaemia (low blood sugar) during this time, particularly if morning sickness or nausea affect your intake of carbohydrates.

You might also find that your usual symptoms of hypoglycaemia change during this period so be aware of any signs that you are experiencing a hypo. Common signs of hypoglycaemia include shaking, sweating, headache, confusion, paleness, and changes in mood or behaviour.

Later in your pregnancy, your placenta will have grown in order to provide your baby with the nutrition needed to develop. Unfortunately, it also starts producing hormones that adversely affect the ability of insulin to do its job properly, which can result in a state of insulin resistance from about the fifth or sixth month of your pregnancy. This means that you might need to take more insulin: some mums-to-be need as much as twice their usual insulin dose at this time.

In the final 4 to 6 weeks of pregnancy, your need for insulin might change again and you might need slightly less insulin at this time. Once the baby is born, your insulin needs will fall dramatically, compared with what they were while you were still pregnant. This can make controlling your blood sugar levels challenging.

What all these changes mean is that you will have to be extra-vigilant in monitoring your diabetes, and work closely with your doctor and other healthcare professionals to ensure you keep your diabetes under tight control.

Testing your blood glucose at least 4 times a day, and overnight, on occasions, will help you to monitor your condition and help you and your doctors adjust your insulin dosage, if necessary.

There are no hard and fast rules about your insulin regimen: your doctor will be best placed to recommend what's suitable for your condition and circumstances. Some mums-to-be can keep tight control of their blood glucose levels on their usual twice-daily insulin, while others might have to change their routine to include multiple doses of insulin.

I have some complications as a result of diabetes: how does this affect my pregnancy?

Kidney problems

If you have kidney problems as a result of diabetes (a condition known as diabetic nephropathy), you are most likely to have no major problems during pregnancy, although your doctor will be best placed to advise you about your particular circumstances. Severe kidney disease, for example, is a cause for concern, while mild nephropathy usually causes few problems. Unfortunately, any diabetes-induced renal disease can deteriorate during a pregnancy, but fortunately, things usually return to normal after the delivery (unless the kidney disease is severe).

You might find that you are susceptible to urinary infections during pregnancy so ensure you tell your doctor if you have any symptoms or feel feverish for any reason. Any urinary tract infection in a pregnant woman must be treated because there is a risk of the bacteria ascending from the bladder to the kidneys. Most pregnant woman are at risk of conditions such as high blood pressure and swollen ankles as a result of fluid build-up, especially in the later stages of pregnancy, so your doctor will be monitoring you carefully for any signs such as these.

If you have kidney problems and/or high blood pressure, there is a risk of preeclampsia, (also known as toxaemia of pregnancy), a condition in which your blood pressure increases, there is protein in the urine and you experience fluid retention resulting in swelling of the limbs, face and hands. If you have preeclampsia during pregnancy, your doctor may recommend medications, bed rest, early admission to hospital or early delivery of your baby, depending on the severity of the condition.

Eye problems

Eye problems (diabetic retinopathy) frequently get worse during pregnancy (although this may reverse after the baby is born). If you're planning to become pregnant, you should have your eyes assessed beforehand and get treatment before you become pregnant. However, if your eye problems need treatment during pregnancy, you should be able to have laser treatment without damaging your baby.

Nerve problems

Nerve problems as a result of diabetes (diabetic neuropathy) don't usually cause additional problems during pregnancy. One common concern is carpal tunnel syndrome (a condition in which the nerve that travels through the wrist becomes compressed, resulting in numbness, tingling and pain) but this often resolves after delivery.

What if I become ill during pregnancy?

If you have another illness during pregnancy you should see your doctor as soon as possible. This is because illness might make you more susceptible to losing control of your blood glucose. For example, your risk of hyperglycaemia (high levels of blood glucose, characterised by symptoms such as increased thirst, urinating frequently, and fatigue) is also increased if you are stressed or suffer from a cold or 'flu.

Uncontrolled blood sugar during pregnancy can also place you at risk of high blood pressure, and can worsen the diabetic complications you may already have, such as eye disease (diabetic retinopathy).

How can I keep my baby healthy during pregnancy?

Any woman who is pregnant is usually concerned about keeping her growing baby healthy and if you have diabetes you are likely to have to be even more vigilant. For example, if your blood sugar is too high in the first 8 weeks of your baby's development, the time when your baby's major organs such as the heart, lungs, brain and kidneys are developing, your baby has a higher-than-normal risk of having birth defects.

Also, you have a higher-than-usual chance of having a miscarriage if you have a high blood acid level (ketoacidosis) as a result of poorly controlled diabetes. Later in your pregnancy, poorly controlled blood glucose levels could result in premature birth, stillbirth, or death shortly after birth.

However, you will increase your chances of having a normal pregnancy and birth if you keep tight control of your blood glucose both before and during your pregnancy.

Excess blood glucose as a result of diabetes can increase your chances of having a baby with macrosomia (an overly large body), which can cause complications during delivery. But by keeping good control of your blood sugar in the second half of your pregnancy, you can minimise your chances of having a large baby.

As with other pregnancies, your baby's health will be monitored by healthcare professionals throughout its development and especially in the last 4 to 6 weeks before birth. Having an ultrasound periodically helps to monitor your baby's development, and can help doctors to check if there are any possible abnormalities, such as kidney problems or problems with your baby's heart or nervous system.

Will my diabetes affect how I give birth?

In the past it was traditional, if you had diabetes, to deliver the baby about 2 weeks before full-term (at about 37 or 38 weeks). Nowadays, however, pregnancy often goes to full-term, although you may still be required to plan the date of delivery, rather than waiting to go into labour 'naturally'. If your doctor has doubts about the well-being of your baby, he or she may suggest earlier delivery and/or delivery by Caesarean section.

In general, it's safer to deliver your baby in a hospital setting rather than at home, due to the increased potential for problems as a result of your diabetes. Also, your baby will need close monitoring after birth for problems such as excessively low blood sugar levels.

Your diabetes shouldn't pose any barriers to the method of delivery you choose, whether it be vaginal delivery or a Caesarean section, as your healthcare professionals should be able to administer the insulin and glucose you need intravenously, if necessary. Your doctors will be able to advise you about what's right for your individual circumstances.

What happens after the birth of my baby?

Your health

After the birth of your baby, the metabolic changes that affected your insulin levels go into reverse. The need for insulin is likely to plummet for 2 or 3 days and, afterwards, your insulin requirements will gradually adjust again and will go back to about the same level as you had before becoming pregnant. The process of readjusting your insulin dose and stabilising your diabetes could take several weeks, so follow the instructions of your doctor closely at this time.

Your baby's health

There is a chance that your baby may be born with low blood sugar (hypoglycaemia), or your baby may have jaundice (characterised by a yellowish skin tone) as a result of old blood cells building up because your baby's liver can't clear them away fast enough.

Your baby is likely to be carefully assessed for any signs of hypoglycaemia and jaundice, as well as breathing problems, especially if your baby is born prematurely. However, your baby can be treated, for example, if your baby has hypoglycaemia, hospital staff can give your baby glucose intravenously, if necessary.

Can I breast feed my baby?

If you have diabetes, you will still be able to breast feed your baby if you want to, as insulin won't be passed to your baby in your breast milk. However, if you have type 2 diabetes, be aware that tablets (oral hypoglycaemic agents) are passed on through your breast milk so you should keep taking insulin, rather than tablets, while you are breast feeding.

While you're breast feeding, you might need slightly less insulin so be aware that you might be at greater risk of hypoglycaemia at this time.

Last Reviewed: 30/09/2009