Pre-pregnancy Counselling for Women with Type 1 and Type 2 Diabetes

In general, **YOU** control your diabetes, reduce symptoms and reduce the chance of long-term complications of your diabetes. It is important to avoid an unplanned pregnancy. Good blood sugar control before conception and throughout pregnancy reduces the risk of miscarriage, congenital malformation and stillbirth and complications for the baby after delivery. In pregnancy we recommend even better diabetic control than at other times in your life.

Your baby

Early on in pregnancy, high sugar levels can increase the chance of congenital malformation in your baby. This is where the baby is born with an abnormality, most are minor but some can be serious. 2% of all pregnancies can be complicated by congenital malformation and this risk is increased when you have diabetes. The risks are partly associated with sugar control at the time you fall pregnant. We aim for sugar control better than HbA1c (average sugar) 6.5% to 7.0%. Women with HbA1c (average sugar) above 10% should avoid pregnancy. Any reduction in HbA1c may reduce risks.

- We suggest you take Folic Acid 5 mg daily before conception and continued until 14 weeks of pregnancy.
- In addition to the routine scan that all mothers are offered, we would suggest you have an additional scan at 22 weeks pregnancy to look at your baby's heart.
- Later on in pregnancy, we are more concerned about your baby's growth. Your baby could grow too large if your blood sugar is high. This extra weight is not good weight and represents too much fat rather than muscle and bone. We therefore continue to aim for tight sugar control throughout pregnancy and we also suggest extra scans to check on your baby's growth in the last 3rd of pregnancy.
- Sometimes, your baby's growth can be excessive even when the sugar control is good. This is why we recommend delivery of your baby before 39 weeks of pregnancy.
- After delivery, your baby will not be diabetic. In fact, after delivery, the baby's blood sugar can go low. This will require special monitoring. Your baby may well have to go to a special care baby unit if his or her sugar falls or if his or her breathing is not good; for most infants this is only for a short time.

Your pregnancy

- Mothers with diabetes are slightly more likely to have blood pressure of pregnancy. This is especially the case of the blood pressure is high before pregnancy or if there is any protein in the urine. In this case, we suggest extra scan to look at the blood flow to your baby at about 22-24 weeks pregnancy.
- At the end of any pregnancy, there is a small chance of your baby suddenly becoming ill. This is a very rare event, but slightly more likely when you have diabetes. We cannot predict this with any certainty. We therefore suggest that as a diabetic mother, you deliver before 39 weeks of pregnancy. This is something we would very much want to discuss with you in the last 3rd of pregnancy.
- We can still aim for a vaginal delivery. However, when labour is induced at 39 weeks pregnancy, there is an increased chance that the womb is not ready to contract so there is an increased risk of Caesarean section.

Your diabetes

- If you have complications of diabetes such as retinopathy (diabetes in the eye) or nephropathy (diabetes in the kidney) these can worsen in pregnancy. We therefore need to seek them more carefully in pregnancy and treat them as needs be.
- All insulins appear safe in pregnancy. Insulin does not cross the placenta. However, we have less long-term experience of some of the newer insulins. They may allow mothers to improve their glucose control with less risk of hypoglycaemia which reduces the risk of congenital malformation (see above). Therefore, if diabetes is well controlled taking newer insulin, it would seem sensible to continue with that insulin.
- In the first trimester of pregnancy there is a greater risk of hypoglycaemia and hypoglycaemic unawareness.
- In the early stages of pregnancy, morning sickness (nausea and vomiting) may also effect your diabetic control
- We recommend more frequent checking of blood sugar through pregnancy to ensure sugars are kept as low as possible without hypoglycaemia. The need for insulin may increase three times during the pregnancy. This is quite normal.
- You may need insulin into a vein throughout labour.
- After delivery, there is a risk of hypoglycaemia and therefore we will adjust your medications. This is especially true when breast-feeding and therefore you should have some food before or during breast-feeding.
- In the long-term your diabetes will not worsen because you have had children.
- It is important that your diabetes continues to be checked in the Adult Diabetes Clinic after your baby is born.