# **Treatment Options for Gestational Diabetes**

## Patient Information – Nutrition & Dietetics

It is important to remember, that for some women, diet and exercise is not enough to achieve normal blood glucose levels. If you are unable to manage your gestational diabetes with diet and exercise, your diabetes specialist team will help select the best treatment options for you and your baby. In such cases tablets such as metformin or insulin injections are needed. The treatment is stopped after the birth of your baby. We will give you more information about treatment options if we think that you may need it.

All treatment options work best when combined with the diet and exercise recommendations for gestational diabetes. Continue to choose high fibre carbohydrate foods, reduce added sugars and takeaways, include non-starchy vegetables with two main meals each day and continue to make physical activity part of your family routine. Remember that a change in habit takes time and these changes should be for life. Changes made during your journey with gestational diabetes need to continue after the birth of your baby, as you are at increased risk of developing type 2 diabetes later in life.

## **TREATMENT OPTION — METFORMIN**

Metformin is a tablet that has been used for many years to treat diabetes outside pregnancy. It works by helping your own insulin do its job better — so that you are able to keep a healthy blood glucose level more easily.

Metformin does cross the placenta to the baby, however it is safe for your baby. Many trials have compared the outcomes of women treated with metformin and those treated with insulin, and these showed only minor differences:

- In women who were treated with metformin, fewer babies had very low blood glucose levels after birth and weight gain in the mother was usually less than women treated with insulin alone. Other pregnancy outcomes were no different between the treatments.
- In follow-up studies of the children whose mothers took metformin, some show no difference while others show that the children may be bigger in later childhood (but this may be due to lifestyle factors).

Metformin compared with insulin does not make the glucose level drop too low.

Metformin is not as strong as insulin, so women treated with Metformin may require some insulin as well. However, a lower dose of insulin is often required than that with women treated with insulin alone.

Some women (two out of every 10) experience side effects, typically diarrhoea, when they first start Metformin. This usually settles within a few days of starting treatment. We try to reduce this problem by starting with a low dose and increasing it until the blood glucose levels are in range and advise that it is taken during or just after the meal.

Metformin is not an option for everyone as there are certain medical conditions or pregnancy complications that mean insulin would be a better choice.

## TREATMENT OPTION — INSULIN

Your blood glucose level is elevated because the insulin your own body makes is not working efficiently and your body cannot make enough extra insulin to keep your glucose level in a healthy range.

If you take extra insulin by a simple injection into the fatty tissue, the glucose level will come down.

Some women only need background insulin that works overnight to bring the glucose level down in the morning.

Some women need mealtime insulin to stop glucose levels increasing too much after a meal.

Many women need both types of insulin and may require 4 injections a day.

Most women are anxious about the idea of insulin, but they are surprised how easy it is to give and the injection is less sore than the finger-prick tests.



#### How does it work

Insulin goes into your body to reduce glucose levels but does not cross to the baby. When the dose of insulin is right for you (and everyone needs a different amount) the glucose level in your blood will improve and this means that a healthier amount is going to the baby.

It is important that insulin is balanced with your food and activity. If the balance is not correct, the glucose level in your blood will remain too high or drop low.

If it drops low, your body will have symptoms of 'hypoglycaemia' (low blood glucose). The Diabetes team will teach you how to recognise and treat this. If you need insulin, we stop the treatment when you are in labour or when you stop eating prior to caesarean section.

Your body does not become dependent on insulin.

#### **Contact information**

This resource was written by New Zealand Registered Dietitians, Christchurch Hospital **Nutrition and Dietetics, Christchurch Hospital, PO Box 4710, Christchurch, Phone 03 364-0630, Fax 03 364-0636** Copyright © of this material is vested in **Te Whatu Ora**. Reproduction of the whole or any part of this material for any purpose without written consent of **Te Whatu Ora** is prohibited.

For more information about: hospital and specialist services, go to <u>www.cdhb.health.nz</u> | your health and medication, go to <u>www.healthinfo.org.nz</u>

