



## Exercise

There are many health benefits to regular exercise. One important benefit is it helps to keep your blood glucose down. Exercise will also help you from gaining too much weight. While you are pregnant, it is important to:

- Choose an exercise that does not cause you to bounce up and down. Walking and swimming are good choices.
- Try to do some type of exercise 3 – 5 times/ week for 30 minutes. Remember, a little exercise (10 – 15 minutes) is better than none at all. You may need to gradually build up your time.
- Try monitoring your blood glucose before and after exercise. This will let you know how much exercise can assist in keeping your blood glucose in a healthy range.
- Avoid exercise if your blood glucose is too high or too low, during very hot weather, or if you are sick.
- Avoid lying on your back for exercise after the first trimester.
- Avoid exercising too hard. Talk with your doctor to know the level of exercise that is safe for you.

## What if I Need Medication?

If we are unable to keep your blood glucose in the target ranges with diet and exercise, we may need to start you on medication. The medication of choice is insulin. Oral medication can be used, but insulin does not pass through the placenta so it is the preferred choice during pregnancy.

Although women may feel hesitant to take medication when they are pregnant, the greater risk is allowing the blood glucose to remain elevated.

When 40 – 50% or more of the glucose results are over the target range in one week, medication will be considered. Please call us at any time if your fasting blood glucose is over 95 more than three times out of seven days, or if your after meal glucose is greater than 140 more than four times in a week. We will discuss medication in more detail at that time.

## Does Gestational Diabetes Go Away?

- Once you delivery the baby your blood glucose should return to normal.
- Your Obstetrician will schedule you for follow up lab work six weeks after delivery to check to see if your blood glucose has returned to normal.
- We will discuss steps for reducing your risk of developing type 2 diabetes in the future.

Targets recommended by the Braden Diabetes Center are based upon the American Diabetes Association and American Association of Clinical Endocrinologists 2012

## What is Gestational Diabetes?

Gestational diabetes is a type of diabetes which can occur during pregnancy and usually goes away after the baby is delivered. Gestational means “in pregnancy” and diabetes means having more sugar in the blood than normal.

Having gestational diabetes does not mean your baby will be born with diabetes or birth defects, but it does mean you may develop type 2 diabetes later in life.

## Why is My Blood Sugar Too High?

- Your pregnancy hormones make it difficult for your body to process the glucose (sugar) that comes from the food you eat. The body uses glucose for energy but the pregnancy hormones may cause your blood sugar to become higher than normal.
- Insulin is a hormone your body makes to lower your blood sugar and store glucose in your cells. Your pregnancy hormones may not allow your body to use the insulin as well as it usually does. One reason insulin may not work well is extra body weight and extra body fat. Be careful not to gain weight too quickly in order to control gestational diabetes.
- High blood glucose comes from the foods you eat. Eating too many calories and eating too many carbohydrates can cause elevated blood glucose. The Dietitian will teach you to eat a diet with the right amount of calories and carbohydrates to control your blood sugar.
- Women are more likely to get gestational diabetes if they are: older mothers (over 25 years), are overweight, have a family history of diabetes, have quick or excessive weight gain during pregnancy, had a baby who weighed more than nine pounds in the past, are of Hispanic, Asian, African, Native-American, and Pacific Islander background.



## What Can Happen to My Baby and Me?

When the blood glucose levels go too high and remain high, there is an increase for possible risks to occur for both the mother and baby.

### RISKS TO THE MOTHER MAY INCLUDE:

- Developing preeclampsia or high blood pressure which usually includes swelling of the hands and feet.
- Having frequent kidney, bladder, or vaginal infections.
- Needing to deliver the baby early.
- Needing a C-section if the baby is too big to deliver through the birth canal.
- Developing type 2 diabetes later in life.

### RISKS TO THE BABY MAY INCLUDE:

- The baby growing bigger than he/she should. This can happen if the blood glucose is high. When your glucose levels are high, the extra glucose goes to the baby and the baby grows too rapidly and becomes too fat, which is not healthy. A large baby can lead to a difficult delivery that could cause injury to the baby.
- Sometimes a large baby can lead to an early delivery but if a baby is delivered too early the baby's lungs not fully developed.
- High blood sugar during pregnancy may cause the baby's blood sugar to get too low right after delivery. This is due to the baby no longer having the sugar being provided by the mother. If a baby has low blood sugar the doctor will need to start an IV to keep the glucose level steady.



## What Can I Do to Manage Gestational Diabetes?

- Go to all of your doctor and diabetes center visits. Each pregnancy is different and your body changes as the weeks go by so many visits are needed.
- Test and record your blood sugar and food in your diary
- Gain weight slowly
- Exercise regularly
- Choose the right foods and portion size
- Get enough sleep and control stress
- Do daily kick counts

### Your healthcare team will be checking:

- Your glucose meter — bring your meter to appointments
- Blood glucose numbers and food diary — bring your diary to appointments
- Weight gain
- The baby's growth

The goal is to manage the blood glucose levels through diet and exercise. We will work closely with you to adjust your diet, exercise, or medications as needed. With planning and hard work on your part, both you and your baby will have a healthy, full-term pregnancy without complications.

## Blood Glucose Monitoring

- A blood glucose meter and test supplies will be provided for you.
- Your blood glucose levels can change depending on the foods you eat, how much exercise you get, and how much stress or rest you get.
- You will need to test your blood sugar four times per day: first thing in the morning (as soon as you get up) and after your meals to be sure your blood glucose stays in the normal range.

### BLOOD GLUCOSE (SUGAR) GOALS DURING PREGNANCY

| Time                              | Target: Normal Blood Glucose |
|-----------------------------------|------------------------------|
| Fasting & before meals            | Less than 95mg/dl            |
| One hour from the start of meals* | Less than 140 mg/dl          |

\* For example, if you start to eat breakfast at 8 am, you would check your blood glucose (sugar) at 9 am. The timing starts from the first bite of the meal.

## Quick Tips for Meal Planning

Our goal is to ensure you and your baby receive adequate nutrition. We want to make sure you are eating healthy, well-balanced meals/snacks.

- Breakfast matters most: blood glucose levels often increase the most after breakfast. Avoid fruit, milk, juice, and cold boxed cereals at breakfast. Eat 1 – 2 choices of carbohydrates and always include protein at breakfast.
- Eat 3 meals and 2 – 3 snacks per day, and eat about every 3 hours.
- Allow no more than 10 hours from a nighttime snack to breakfast the next day
- Avoid foods that spike the glucose the most: sweets such as candy, cookies, pastries, desserts, honey, and syrup.
- Avoid drinks that are high in sugar and natural sugar such as fruit juice, regular soda, Gatorade, Vitamin Water, lemonade, etc.
- Carbohydrates affect the blood glucose, but you still need to eat them. Carbohydrates provide both you and the baby with energy for growth. It is reasonable to have 2 – 3 choices of carbohydrates for breakfast and 3 – 4 choices of carbohydrates food for lunch and dinner. Snacks should be 1 – 2 choices of carbohydrate food. See attached menu on separate page for more examples. Choose carbohydrates that are not processed. Good choices are whole grain bread, wild or brown rice, old fashioned oatmeal, beans, corn tortilla, etc.
- For all meals or snacks it is suggested to have a protein source (egg, cheese, cottage cheese, peanut butter, meats, etc), this will help keep you filling satisfied and keep your blood glucose level steady.
- Include two to three glasses of milk or yogurt in your meal plan. If you do not drink milk, there are other calcium food sources (i.e. low fat or nonfat yogurt, cheese or cottage cheese). If you are lactose intolerant there is other food sources that have calcium, for example: beans, leafy greens, nuts, fortified almond/soy milks.
- Artificial sweeteners like aspartame (NutraSweet®/Equal®), acesulfame-K (SweetOne®) or sucralose (Splenda®) may be used in limited quantities during pregnancy. Avoid use of saccharin.
- The dietitian will provide you with a complete meal plan during your appointment.