

# Gestational Diabetes and Pregnancy

Maternal Fetal Medicine (MFM) Specialists of the Mountain States

# Diabetes management with Maternal Fetal Medicine (MFM)

Most visits will be done weekly by phone, in person, or virtually. Please schedule these visits.

Ultrasounds and Non-Stress Tests will be determined by our physicians. We will help you schedule these appointments.



# Gestational Diabetes

- ▶ This is a type of diabetes that occurs only during pregnancy. The placenta releases hormones that make you more resistant to insulin. This, along with other risk factors, can tip you into diabetes while you are pregnant. As a result, you can have elevated blood sugars. Left untreated, this can be dangerous for both you and your baby.
- ▶ Our focus is to help you manage your blood sugars by diet and exercise. Sometimes, the use of medications such as metformin or insulin may be required.
- ▶ Most of the time, gestational diabetes will go away once the placenta is delivered. However, you will have an increased risk for Type 2 diabetes in the future.



# Who is at risk for gestational diabetes?

- ▶ Gestational diabetes in a prior pregnancy
- ▶ Family history of diabetes
- ▶ Women who have delivered a baby larger than 9 lbs.
- ▶ Women of certain ethnicities
- ▶ Obesity
- ▶ Women with polycystic ovarian syndrome
- ▶ Advanced maternal age
- ▶ Multiple gestations (e.g. twins)

# Risks of Diabetes in Pregnancy

## ▶ Risks to Baby

- ▶ Large baby
- ▶ Polyhydramnios (increased amniotic fluid)
- ▶ Hypoglycemia (low blood sugar), jaundice, respiratory distress, NICU admission
- ▶ Stillbirth
- ▶ Greater risk for obesity and diabetes later in life

## ▶ Risks to You

- ▶ High blood pressure and pre-eclampsia
- ▶ Frequent urinary tract infections, yeast, or vaginal infections
- ▶ Difficult delivery and increased risk for c-section

# How do I manage diabetes?

- ▶ Checking your blood sugar
- ▶ Eating a well-balanced diet
- ▶ Exercise and staying active
- ▶ Stress management
- ▶ Getting good sleep
- ▶ Medications, if needed



# Glucose Meters

- ▶ A meter will be called in for you when you first schedule your diabetes care with MFM.
- ▶ Start checking and recording your sugars as soon as possible.
- ▶ You can find tutorials on how to use your meter online from the manufacturer or in LiveBinders.
- ▶ If you are having trouble with your meter, schedule an appointment to meet with a nurse in our office.





# Meter Tips and Information

- ▶ Never share your meter or testing supplies.
- ▶ Use new lancets each time, wash hands or use alcohol wipes.
- ▶ Store used needles/syringes and lancets in a sharps container; never throw sharps in the garbage.
- ▶ Don't leave your sharps out and keep them away from children and pets.
- ▶ Contact your local waste management when you are ready to throw your container away. They will give you instructions; different cities might have different rules.



# Blood Sugar Goals

- ▶ Fasting: 70-95
- ▶ 1 hour after meals: less than 140
- ▶ Or 2 hours after meal: less than 120
- ▶ Premeal: less than 95
- ▶ Middle of the night: 70-120



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# Hyperglycemia (high blood sugar)

Elevated blood sugar can be caused by:

- Consuming too many carbohydrates
- Lack of Sleep
- Illness
- Increased insulin resistance as pregnancy progresses.
- Not enough medication.



**If your blood sugars are consistently out of range, please call our office to schedule an appointment!**



# Hypoglycemia (low blood sugar)

Low blood sugar can be caused by taking too much medicine, not eating enough, or exercise.

1. If you feel shaky, sweaty, weak, confused or not well--check your sugar.
2. If sugar is less than 70, have 15 grams of carbohydrates. (Example: fruit snacks, 1/2 cup of juice or four glucose tablets)
3. Recheck blood sugar in 15 min.
4. Repeat until blood sugar is above 70 and eat a meal within one hour.
5. Treat any low blood sugars and contact MFM or your provider if you are having blood sugars less than 70.

# Exercise and Pregnancy

- ▶ 150 minutes of exercise per week is encouraged. Examples are walking, cleaning, dancing, yoga, and exercise programs for pregnancy.
- ▶ Do not exercise if you are on bedrest, or you are on restrictions.
- ▶ Always consult your doctor before starting an exercise program.
- ▶ Schedule walks into your day. Walking for 10 minutes after eating will help decrease your blood sugars.
- ▶ Do not lift heavy weights or engage in activities where you can lose your balance.
- ▶ Always stay hydrated. If you are on medication for your diabetes, it's best to exercise after a meal or snack. Do not exercise if your blood sugar is less than 100. Keep a snack and your meter close by for symptoms of hypoglycemia.



# Importance of nutrition and pregnancy

- ▶ According to the American Journal of Obstetrics and Gynecology, “A diet with balanced macronutrient intake provides the best chance for a healthy pregnancy and optimal perinatal outcomes. Nutritious diets are those that include ample quantities of vegetables, fruits, whole grains, nuts, legumes, fish, oils enriched in monosaturated fats, and fiber AND are lower in fatty red meat and refined grains. Furthermore, healthy diets avoid simple sugars, processed foods and trans and saturated fats.”



# Diet

A healthy diet is known to decrease risks to mom and baby.

Poor nutrition can have negative effects on the baby before birth and later in life.

# How Much to Eat:

- ▶ **Three meals per day:** 45 grams of carbohydrates with a protein. Eat lots of veggies--it's a good idea to start each meal with a veggie.
- ▶ **2-3 snacks per day.** Always have a bedtime snack. Snacks should include 15-30 grams of carbohydrates and a protein. Adding veggies to your snacks is also a good way to get extra nutrients and fiber into your diet.



# Nutrition Recommendations in Pregnancy from the American Diabetes Association (ADA)



**Protein:** at least 71 grams per day, and 50 additional grams if you are having twins.

**Carbohydrates:** at least 175 grams of carbs per day

**Fiber:** 28 grams per day.  
Examples: beans, fruit, and veggies.

**Healthy fats:** 6-8 teaspoons per day depending on your trimester. 1 tsp of fat= $\sim$ 4-5 grams.  
Examples: olive oil, nuts, avocado.





# Carbohydrates

- This is *not* a low carb diet.
- Babies need carbohydrates for brain development and fetal growth. Do not restrict carbohydrates.
- Our nurses can help you with carb counting. You can also meet with a nutritionist/dietician for further nutritional assistance. Please let our staff know if you would like a referral.



# Eating carbohydrates

- ▶ **KEEP EATING HEALTHY CARBS**
- ▶ Choose healthy carbs such as: fruits, vegetables, beans, whole grains and whole wheat, brown rice.
- ▶ Try to avoid processed foods and white products such as white rice and white bread.
- ▶ Try not to eat more than a ½ cup to 1 cup of pasta or rice in any meal, or more than a ½ of a large potato.
- ▶ Cereals, regardless if they are “healthy” or not, will typically cause elevations in blood sugar. This might be a food you want to avoid during pregnancy.
- ▶ Try to avoid fruit juices, sugary drinks, candy, cakes, cookies, added sugar and processed sugary snacks.

# Proteins

- ▶ Protein is very important to our body's function. It slows down the rate we digest sugar and helps to maintain a healthy blood sugar during digestion.
- ▶ Protein is highly recommended at each meal and snack. Pregnant women should eat 71 grams of protein per day. If you are pregnant with twins, you should have an additional 50 grams of protein daily.

Protein	Amount
3 oz. of Fish	19-26 grams of protein
4 oz. of Chicken	30 grams of protein
4 oz. of Beef	33 grams of protein
One Egg	6 grams of protein
Cottage Cheese ½ cup	12 grams of protein
Greek Yogurt	13-18 grams of protein
8 oz. of Milk	8 grams of protein
Protein nut bar	5-10 grams of protein
1 TBS of Peanut Butter	4 grams of protein
½ cup Lentils	7 grams of protein
2 TBSP of Chia Seeds	6 grams of protein



Some of the foods listed above may contain carbohydrates too.

# How to Read a Food Label

Important things to look for on a food label:

Serving Size

Carbohydrate

Protein

Using a smart phone, an app or a smart home device such as an Alexa or Google Home can help in finding nutritional content in food.

## Nutrition Facts

Serving Size 1 Cup (227g)  
Servings per Container About 4

Amount per Serving

**Calories** 160 Fat Cal 80

%Daily Value

**Total Fat** 9g **14%**

Saturated Fat 6g **30%**

*Trans* Fat 0g

**Cholesterol** 30mg **10%**

**Sodium** 110mg **5%**

**Potassium** 370mg **11%**

**Total Carbohydrate** 12g **4%**

Dietary Fiber 0g **0%**

Sugars 11g

**Protein** 8g **16%**

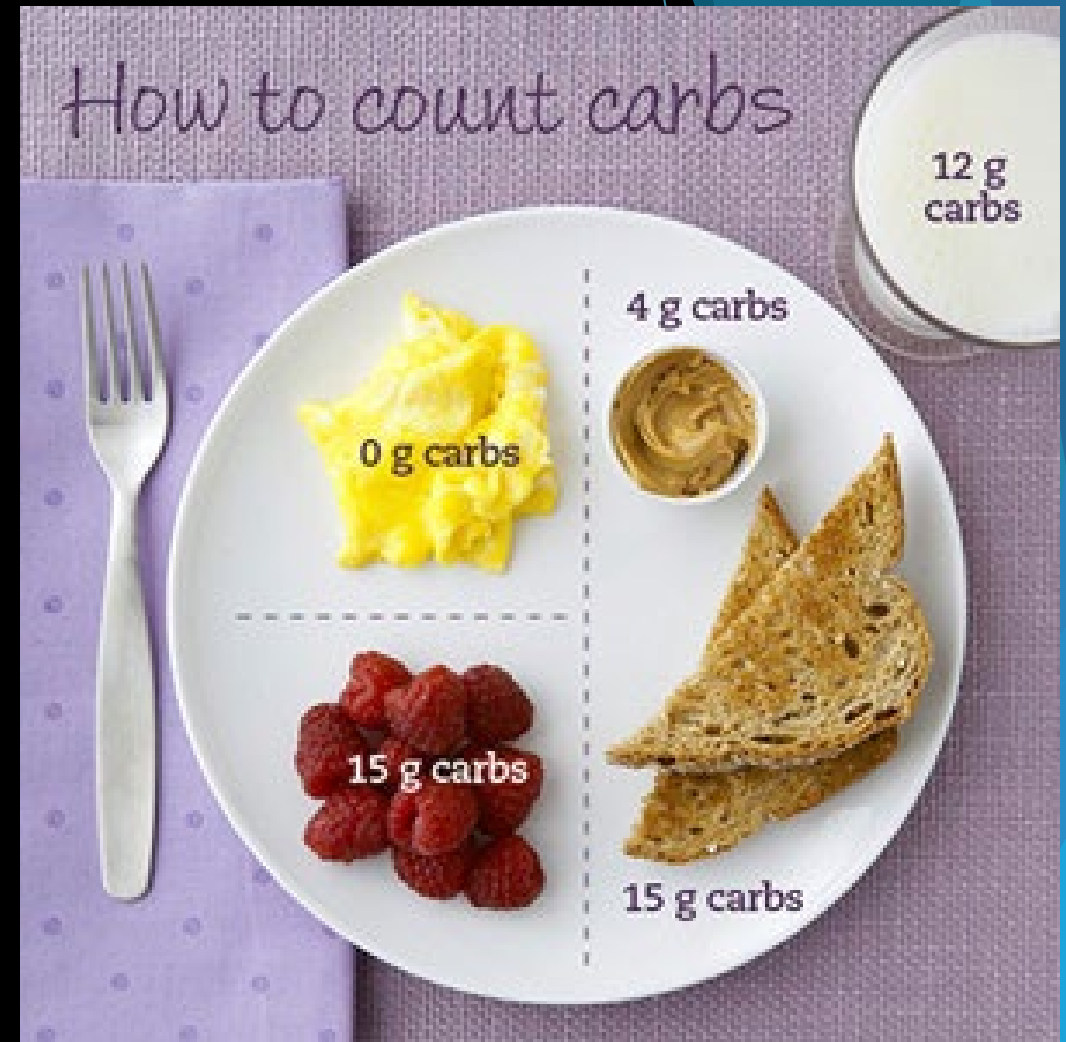
Vitamin A 8% • Vitamin C 0%

Calcium 30% • Iron 0%

Vitamin D 25%

# How to Carb Count

- ▶ Start counting your carbohydrates.
- ▶ It is recommended to eat:
  - ▶ 45 grams of carbs at EACH meal.
  - ▶ 15-30 grams of carbs at EACH snack.
  - ▶ A pregnant woman should eat at least 175 grams of carbs each day, with 3 meals per day and 2 to 3 snacks per day.
  - ▶ Every meal and snack should include a carbohydrate and a protein.







Here are examples of 45-gram carbohydrate meals with a protein.

Make sure to add extra veggies to each meal. Ideally, each meal will include a  $\frac{1}{2}$  a plate of veggies.



# Snack Ideas

- ▶ Eating 6 times a day can be challenging. Here are some ideas to get you started.
- ▶ Each of the snacks below contains 15-30 grams of carbohydrates and a protein or healthy fat.

1 English Muffin with Peanut Butter

1 Large Apple with Peanut Butter

Fruit with String Cheese

Crackers and Cheese Slices

Trail Mix

3 cups of popcorn with  $\frac{1}{4}$  Cup of Nuts

Whole Wheat Avocado Toast

Greek Yogurt Smoothie (watch carb count)

Small Whole Wheat Chicken and Veggie Wrap

1-2 Cups of Melon and  $\frac{1}{2}$  Cup of Cottage Cheese

2 Graham Crackers w/ Peanut Butter and Milk

Crackers,  $\frac{1}{2}$  Cup of Cottage Cheese, and Tomatoes

Wheat Toast with Cream Cheese and Cucumbers

Greek yogurt, berries and nuts

$\frac{1}{2}$  Pita with Hummus and Veggies and Nuts

Egg Salad Sandwich or Peanut Butter Sandwich

1 Protein Bar and 1 Cup of Milk





# Sugar Substitutes

Sugar substitutes are found in sugar-free or diet foods and drinks. They are a sweetener added to foods and drinks that do not elevate blood sugars. Below are examples of sweeteners that have been approved in moderation during pregnancy.

- ▶ Examples: Splenda, Equal, Stevia, Sunett, NutraSweet, Newtame
- ▶ Contact MotherToBaby if you are unsure if a sweetener or other item is safe during pregnancy.
- ▶ MotherToBaby is a helpful resource to find out the safety of medications, chemicals and substances while pregnant and breastfeeding.
- ▶ [MotherToBaby Link](#)

# A routine is helpful!

- ▶ To keep blood sugar steady throughout the day, it is best to eat every 2-3 hours.
- ▶ Eating 3 meals a day with snacks in between can help prevent your blood sugar from dropping too low or becoming too high.
- ▶ A bedtime snack is important to make sure you have enough food to last while you are sleeping.
- ▶ Routine is important. Eat well and get rest.



# Daily Fetal Kick Counts

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Do fetal kick counts daily starting at 28 weeks gestation

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Do a fetal kick count each day.

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Pick a time each day when your baby is usually most active to monitor movement.

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Have something to eat and drink before starting.

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Look at the clock and starting counting movements.

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Make sure you feel 10 kicks in one hour. You can stop counting after 10 kicks are felt.

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If you DO NOT feel 10 kicks in the hour, contact your doctor right away.

# Management During Your Labor and Delivery Stay

- ▶ Every laboring patient is different. It is a great idea to discuss your labor plan with your OB provider.
- ▶ If you are having a scheduled c-section or induction, please talk with our team about how to dose your medications prior to admission to the hospital.
- ▶ Goal for blood sugars in labor is ~70-125. This decreases the risk for your baby to have low blood sugars and low oxygen levels (hypoxemia) at birth.
  - ▶ Some patients need iv insulin in labor to control blood sugars.
- ▶ After delivery, the newborn nurse will monitor your baby's blood sugars per hospital protocol.
- ▶ Once delivered, your OB provider will review your diabetes plan with you.
  - ▶ Most women with GDM can stop their medications at delivery.

# Follow-Up Care After Delivery

- ▶ A 2-hour Glucose Tolerance Test is recommended at 6-12 weeks after delivery to screen for diabetes. Then a diabetes screening is recommended every 1-3 years as directed by your primary care physician.
- ▶ A Diabetes Prevention Program is recommended after delivery to continue education and to prevent Type 2 Diabetes.
- ▶ Diabetes Prevention Program





# Thank you!

Please reach out to our staff if you have any questions or concerns.

If you have concerns after hours, please call your OB provider and follow the prompts to reach a provider after hours.

Below is our clinic website where you can find our locations, phone numbers and other helpful information.

[Maternal-Fetal Medicine Specialists of the Mountain States |](#)  
[Pediatrix \(mednax.com\)](#)