

# For You and Your Baby

The health of you and your baby depends on how well you control your blood sugar. To do this, follow your meal plan every day. See your healthcare provider regularly. And, if you're asked to do so, check your blood sugar at home. Doing all of these things helps make sure you and your baby stay healthy.

## For More Information

To learn more about diabetes during pregnancy, contact the following groups:

**American Diabetes Association**  
800-342-2383  
[www.diabetes.org](http://www.diabetes.org)

**Academy of Nutrition and Dietetics**  
[www.eatright.org](http://www.eatright.org)

For the names of diabetes educators in your area, contact:

**American Association of Diabetes Educators**  
[www.diabeteseducator.org](http://www.diabeteseducator.org)

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[www.kramesstaywell.com](http://www.kramesstaywell.com) 800.333.3032

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## Gestational Diabetes

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# Gestational Diabetes

When You and Your Baby Need Special Care

Eat Right  
and Exercise

Monitor Your  
Blood Sugar



# A Healthy Pregnancy, A Healthy Baby

Your healthcare provider has given you this booklet because your blood tests show that you have **gestational diabetes**. This doesn't mean that you did anything wrong. And it doesn't mean that your baby will be born with diabetes. But it does mean that you need to take special care of yourself, so you and your baby stay healthy.

## What Is Gestational Diabetes?

Gestational diabetes is a special kind of diabetes that happens only during pregnancy (**gestation**). Changes that occur in your body while you're pregnant cause your blood sugar to be too high. Gestational diabetes is more likely in women who:

- Are overweight.
- Have a family history of diabetes.
- Have had a baby who weighed more than 9 pounds at birth.
- Have had a baby who died before birth.
- Have had gestational diabetes in the past.
- Are Latina, African American, Native American, South or East Asian, or Pacific Islander.

## Help from Your Healthcare Team

To have a healthy baby, you need to take special care of yourself. Your healthcare team will help you learn what to do.

- An **obstetrician** (a doctor who cares for women during pregnancy) or a family doctor will oversee your care.
- You may also see an **endocrinologist** (a doctor who treats diabetes) or a **perinatologist** (a doctor who treats high-risk pregnancies).
- A dietitian, a diabetes educator, a midwife, nurse, or a counselor may work with you, too.

This booklet is not intended as a substitute for professional medical care. Only your doctor can diagnose and treat a medical problem.

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# After Pregnancy

Your blood sugar will most likely return to normal after delivery. But having had gestational diabetes means you're at greater risk for developing diabetes later in life. You're also more likely to have gestational diabetes with your next pregnancy. But you can take steps to reduce these risks.

## Taking Care of Yourself

Even if your blood sugar goes back to normal, you still need to take care of yourself. This will help lower your risk for developing diabetes later in life.

- **Keep your weight down.** Eating food that is low in fat and sugar can help you control your weight. If you're overweight, your risk of getting diabetes is higher. Keeping your weight down also reduces your risk of having gestational diabetes with your next pregnancy.
- **Get regular exercise.** Exercise helps lower your blood sugar. It can also help you control your weight.
- **Have your blood sugar checked.** Make an appointment to have your blood sugar checked 6 to 12 weeks after delivery.
- **Have regular diabetes screenings.** Get checked as often as your healthcare provider advises.

## Breastfeeding

Breast milk is the best food for your baby. Breastfeeding can also help lower your blood sugar. Your healthcare provider can show you how to breastfeed. Be sure to eat healthy foods and drink extra water while you're breastfeeding.

## Planning Future Pregnancies

You need to be sure your blood sugar is back to normal before you get pregnant again. Have your blood sugar checked before you plan your next pregnancy. And remember that it's possible to get pregnant again soon after delivery. Talk to your healthcare provider about the best method of birth control for you and your partner.





# During Labor and Delivery

Your healthcare provider will work with you to plan your delivery. If you control your blood sugar, you are more likely to have a healthy birth. Taking a childbirth education class can also help you prepare for labor and delivery. You and your baby will be monitored to make sure you're both doing well.

## Planning Your Delivery

Your healthcare provider will recommend the best way to deliver your baby. If your tests are normal, you can probably go into labor naturally and deliver your baby through the vagina. If your baby is large or your tests show a problem, labor may be started early. The baby may also be delivered by cesarean section.

## Monitoring You and Your Baby

Both you and your baby are watched closely throughout your labor and delivery.

- **Your blood sugar is monitored.** If it's too high, you may need insulin. Keeping your blood sugar normal during labor helps keep your baby from having low blood sugar after birth.
- **Your contractions may be measured.** A monitor is placed on your abdomen.
- **Your baby's heart rate is monitored.** A monitor is placed on your abdomen. Or, a small device called an electrode is placed gently through your vagina onto your baby's head. The baby's heart rate is also checked after delivery.
- **Your baby's blood sugar is tested.** This is done in the first hour after delivery. If the baby's blood sugar is low, the baby will be monitored and treated for a few hours.



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# Understanding Blood Sugar

Your body turns food into blood sugar to use for energy. Your blood sugar also goes to your baby. If your blood sugar level gets too high, it can cause problems for the baby and for you. You can help prevent these problems by controlling your blood sugar.

**Your body turns the food you eat into blood sugar.** This sugar goes into your bloodstream. Your body then releases a substance called insulin to help your body use blood sugar. Blood sugar is used as energy for both you and your baby.

**Blood sugar goes to your baby through the placenta** (special tissue that connects the mother and baby). Your baby uses this sugar to grow. But the placenta also makes hormones that can change the way insulin works in your body.

**The umbilical cord** carries blood sugar from the placenta to your baby.

**The uterus** (also called the womb) is where your baby grows.

**The amniotic sac** (bag of water) holds the fluid your baby floats in while in the uterus.

**The vagina** is the canal through which the baby is delivered at birth.

## Too Much Blood Sugar Affects You and Your Baby

If your body can't use insulin properly, your blood sugar level gets too high. Then too much blood sugar goes to your baby. This can cause problems for both you and your baby.

# Checking On Your Baby

It's normal to worry about your baby's health. One way that you can know your baby's doing well is to record the baby's movements once a day. Your healthcare provider may also do tests to check on your baby's size and development. These tests help plan for your labor and delivery.

## Kick Counts

Starting around week 28 of your pregnancy, your healthcare provider may have you count your baby's movements once a day. This is called kick counts. Choose a time when the baby is active, such as after a meal. Here is one way to do it:

- Sit comfortably or lie on your side.
- The first time the baby moves, write down the time.
- Count each movement until the baby has moved 10 times. This usually takes 10 to 20 minutes.
- Write down the time you feel the baby's 10th movement. Take your kick count records to all your appointments.

## ! When to Call Your Healthcare Provider

Call your healthcare provider right away if you notice any of the following:

- Your baby moves fewer than 10 times in 2 hours while you're doing kick counts.
- Your baby moves much less often than on the days before or you notice a sudden change in your baby's movement.
- You have not felt your baby move all day.

## Other Tests

Your healthcare provider may order tests to make sure your baby is doing well. These may include:

- **Nonstress test (NST).** A special belt is put around your waist to count your baby's heart rate. The heart rate should go up when the baby moves.
- **Ultrasound.** Harmless sound waves make a picture (**sonogram**) of your baby on a screen. The picture shows your baby's size and position. This helps to plan the safest way to deliver your baby.
- **Amniocentesis.** A sample of the fluid around your baby is removed and tested to see whether the baby's lungs can work on their own. This test may be done if the baby needs to be delivered early.





# If You Need Insulin

If diet and exercise are not enough to control your blood sugar, you may need to take extra insulin. Insulin is a natural substance and is not addictive. Also, it is not harmful to your baby. You will likely be able to stop taking insulin after your baby is born. In some cases, you may be prescribed oral medications instead of insulin. Your healthcare provider can give you more information about this if needed.

## Learning to Take Insulin

Your healthcare provider will prescribe your insulin. You will need to inject it one or more times a day. Insulin is injected into fatty tissue. It does not cross the placenta. That means it does not affect your baby. Your healthcare provider will teach you how to give yourself a shot. With practice, you'll get comfortable doing it.

## Low Blood Sugar

Taking insulin puts you at risk of low blood sugar. Always treat low blood sugar right away.

- Symptoms of low blood sugar include shakiness, dizziness, weakness, and confusion.
- If you feel any of these symptoms, check your blood sugar right away.
- To treat low blood sugar, eat 15 to 20 grams of fast-acting sugar, such as glucose tablets. Check your blood sugar again in 15 minutes. If it's still low, eat another 15 to 20 grams of fast-acting sugar. Check again after another 15 minutes. If your blood sugar returns to normal, eat a snack or meal to keep it in a safe range. If it's still too low, call your healthcare provider right away.

## The Right Dosage for You

Your healthcare provider will work with you to find the right dosage of insulin for you. This may take time. That's because you need to balance your insulin with your food and exercise. Your body's need for insulin also increases as your baby grows. To be sure your insulin is working properly, you'll need to check your blood sugar several times a day. If your blood sugar is too high or too low, your healthcare provider will adjust your insulin.



**Note:** It's important to know that having gestational diabetes means you're more likely to develop diabetes later in life. See page 15 to learn more about how to take care of yourself to lower this risk.

## Risks to You

If you don't control your blood sugar, you are more likely to have these problems:

- **You may have high blood pressure.** High blood pressure during pregnancy is called **preeclampsia**. This is a danger to your health. It could mean that your baby will have to be delivered early.
- **You may have more infections.** High blood sugar makes you more likely to have bladder, kidney, and vaginal infections.
- **You may be uncomfortable or short of breath.** High blood sugar can cause too much fluid around the baby. This is called **polyhydramnios**. Your abdomen gets big and pushes on your lungs.
- **Your delivery may be harder, and recovery may take longer.** If your blood sugar stays too high, your baby can grow too large. A large baby might cause injury to you during birth. So the baby will have to be delivered by **cesarean section (C-section)**. This means making a cut (incision) in your abdomen and uterus. Needing a C-section is one of the most common risks of gestational diabetes.

## Risks to Your Baby

If you don't control your blood sugar, your baby is more likely to have these problems:

- **Your baby can grow too large.** This is called **macrosomia**. This can make it hard for your baby to come through your vagina without injuring the baby's arms and shoulders.
- **Your baby's organs may not be fully developed before birth.** If your baby's lungs are affected, he or she may have trouble breathing (**respiratory distress syndrome**). If your baby's liver is affected, he or she may have yellowing of the skin and eyes (**jaundice**) after birth.
- **Your baby's blood sugar may be low after birth.** If your blood sugar is too high, your baby makes extra insulin. The baby still makes extra insulin right after birth. Then he or she may have to be treated for low blood sugar.
- **Your baby could be stillborn.** This is not very common, but your baby could die before birth if your blood sugar stays high for too long.

## Controlling Blood Sugar Helps Prevent Problems

You can lower your blood sugar by eating right, exercising, and maybe by taking insulin. If you keep your blood sugar in control, the risks to you and your baby are the same as for a normal pregnancy.



# Eating Right

Eating the right foods is the main way to control your blood sugar. You need to eat a variety of foods from each of the food groups every day. To help you with changes that may be needed in your diet, you will likely work with a **registered dietitian** (an expert on food and nutrition). The dietitian can help you understand how specific foods affect your blood sugar. He or she can also teach you the skills you need to plan healthy, balanced meals.

## Protein

Protein is digested slowly, so it helps keep your blood sugar stable. Your baby also needs protein to have strong bones and muscles.

- Eat lean meats, poultry, and fish. (Ask your healthcare provider what kinds of fish are safe to eat.) Foods such as eggs, tofu, and nuts contain protein as well.
- Bake or broil. Remove the skin from fish and poultry, and trim fat off meat before cooking. Avoid frying. Also, avoid gravy, batter, and sweet sauces.



## Vegetables

Most vegetables don't raise your blood sugar. They are rich in vitamins and high in fiber.

- Eat plenty of fresh vegetables. Good choices include spinach, broccoli, cauliflower, kale, and eggplant.
- Limit starchy vegetables such as corn, potatoes, yams, peas, and beans. These are more likely to raise your blood sugar.
- Choose frozen and canned vegetables that are low in sugar, fat, and sodium.



## Whole Grains

Whole grains contain fiber and important vitamins. But they also raise blood sugar if you eat too much at one time.

- Choose foods such as whole-wheat pasta, bread, tortillas, brown rice, and oatmeal.
- Limit processed grains such as white rice and white bread.
- Toast or bake. Don't add sugar or jam.



# Monitoring Your Blood Sugar

The only way to be sure your blood sugar stays within a normal range is to check it. You will most likely be asked to check your blood sugar at home several times a day. Your healthcare provider will teach you how. He or she may also ask you to check your urine at home. Your blood sugar may also be checked every week or so in the lab.



## Checking Your Blood Sugar at Home

Your healthcare provider will discuss the best way and times for you to check your blood sugar, and show you what to do. Your blood sugar is usually highest about an hour after you eat. You can check it using a meter.

- Be sure to read the instructions that come with your meter. Follow them carefully.
- Record your blood sugar level every time you check it. Bring your records and your meter to all your appointments with your healthcare provider.
- If your blood sugar is unusually high or low, check it again as directed. Call your provider as directed if your blood sugar remains higher or lower than your target range.

## If You Check Your Urine at Home

If you don't eat enough, your body will burn fat to get energy. This leaves **ketones** in your urine. Your healthcare provider may have you check your urine for ketones each morning. You'll use special strips that change color if there are ketones. If you have ketones, this can mean that you're not getting enough calories. Your healthcare provider may make changes in your meal plan.

## ✓ Your Blood Sugar Should Be:

\_\_\_\_\_ when you get up.  
\_\_\_\_\_ after breakfast.  
\_\_\_\_\_ after lunch.  
\_\_\_\_\_ after dinner.

Check your blood sugar when you get up and \_\_\_\_\_ hour(s) after breakfast, lunch, and dinner.

## When to Call Your Healthcare Provider

- Your blood sugar is above \_\_\_\_\_ for more than \_\_\_\_\_.
- Your blood sugar is below \_\_\_\_\_ for more than \_\_\_\_\_.
- You have ketones in your urine for more than \_\_\_\_\_ days in a row.





## Getting Exercise

Exercise can help you keep your blood sugar within a normal range. That's because your body uses more blood sugar when you exercise. Your healthcare provider may want you to exercise every day. Together you can decide on the best kind of exercise for you, and the best times for you to exercise. Keep in mind, if you're exercising 2 or more hours before your next meal, eat a light snack before getting started.

### Exercise Safely

Walking, swimming, and low-impact or water aerobics are the safest things to do.

- Avoid activities in which you jump, turn, twist, stop or start quickly, or are likely to lose your balance. Also avoid heavy lifting.
- Try to talk while exercising. If you are too short of breath to speak a sentence, you're working too hard. Ease off a bit.
- Be sure not to get overheated.
- Drink plenty of water.
- If you use insulin, be sure to carry a carbohydrate snack with you. Avoid exercise when your insulin is peaking.
- If you walk or do low-impact aerobics, be sure to wear sturdy shoes.

### Exercise Regularly

You may need to exercise each day. The best time to exercise depends on when your blood sugar is highest. Make sure to talk with your healthcare provider before starting your exercise program.

- Aim to exercise for at least 30 minutes a day.
- Try breaking up daily exercise into 2 or 3 sessions. For example, go for a 15-minute walk after each meal.
- Exercise with a friend or your partner. This can help you stick to your exercise plan.
- Go at a comfortable pace. Don't tire yourself out. You should be able to talk while exercising.



### Milk and Yogurt

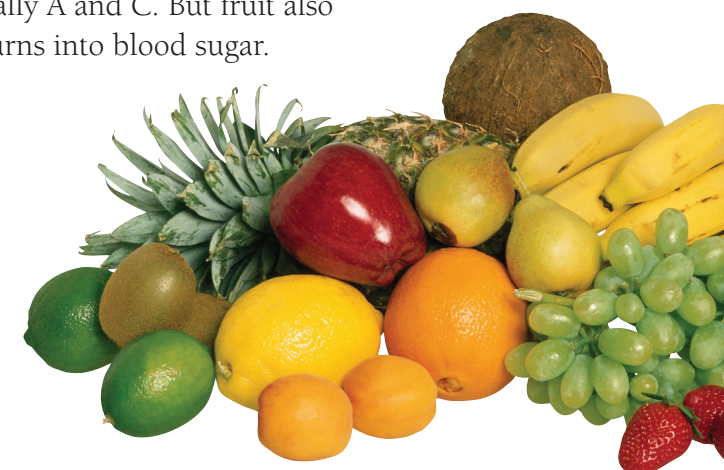
Milk and yogurt are rich in calcium and protein. But they also contain sugar, even if they're not sweetened. They raise blood sugar fast.

- Choose only low- or non-fat milk and yogurt products when you include them in meals.
- Limit milk or yogurt at breakfast. At the first meal of the day, they may make your blood sugar rise too high.

### Fruit

Fruit is high in fiber and vitamins, especially A and C. But fruit also has lots of natural sugar, which quickly turns into blood sugar.

- Eat fresh fruit such as apples, bananas, oranges, and berries. Dried fruit is a good choice as well.
- Limit canned and frozen fruit. These often have added sugar.
- Don't drink fruit juice. All types of fruit juices are high in sugar.



### Fats

Fat does not raise blood sugar. But fat is high in calories. Eating too much fat can make you gain weight too fast. This can make your blood sugar harder to control.

- Use vegetable fats (oils). Choose canola, olive, sunflower, safflower, or peanut oil.
- Avoid frying. Soften onions and garlic in water. Toast tortillas. Brown meat under the broiler.



### When to Stop Exercising and Call Your HCP

Call your doctor or other healthcare provider if you have any of the following:

- |  |                                  |
|--|----------------------------------|
| • Bleeding from your vagina            | • Muscle weakness                |
| • Increased shortness of breath        | • Calf pain or swelling          |
| • Dizziness or feeling of faintness    | • Contractions of the uterus     |
| • You have a headache                  | • Decreased fetal movement       |
| • Pain in your chest, back, or abdomen | • Fluid leaking from your vagina |



# Planning Meals

**Carbohydrates** or “carbs” (sugars and starches) raise your blood sugar more than other foods. Sugars are found in milk and fruit. Starches are found in grains, beans, and some vegetables. To keep your blood sugar in a healthy range, you need to control the amount of carbohydrate you eat at one time. You need to eat regular meals and snacks. You need to avoid certain foods. And you need to gain the right amount of weight.

## Eat Regular Meals and Snacks

It’s best to eat small meals throughout the day. If you eat less often, you’re more likely to eat too much at once. This can make your blood sugar rise too high. So spread your meals and snacks evenly through the day. And keep the amount of food you eat the same each day.

- **Follow your meal plan as directed.** Your dietitian will help you create a meal plan that is tailored to your needs. Your meal plan will tell you when to eat your meals and snacks. It will also tell you what types of food to eat and how much of each food to eat at each meal. If you miss a meal or a snack, don’t have more food the next time you eat. This can raise your blood sugar too high.
- **Count carbohydrates.** Your dietitian will teach you how to read food labels for serving size and total grams of carbohydrate. This will help you plan meals and snacks.



## Avoid High-Sugar Foods

Eating foods that are high in sugar (simple carbohydrates) raises your blood sugar more than most other foods. You know that candy and desserts are high in sugar. So are lots of other foods, such as baked beans and spaghetti sauce. Follow the tips below:

- **Read the ingredients on the food label.** Avoid foods that list any of these kinds of sugar in the first four ingredients:

sugar	corn syrup	fructose
honey	sucrose	glucose
molasses	dextrose	corn sweetener
- **Low-fat doesn’t mean low sugar.** Low-fat versions of foods, such as salad dressing or ice cream, can be high in sugar. Read the label.
- **Beware of sauces.** Barbecue sauce, teriyaki sauce, hoisin sauce, ketchup, chutney, and most other condiments have added sugar. Read the labels.
- **Avoid alcohol.** Alcohol can affect your blood sugar in ways that are hard to predict. Drinking alcohol also raises your baby’s risk of having problems after birth.
- **Use sugar substitutes in moderation.** The effect of aspartame and other sugar substitutes on mother and baby is not well understood.

Meal Tips

- Pack the next day’s lunch and snacks the night before. This saves time for breakfast in the morning.
- Keep a timer or beeper with you. Set it to remind you when to eat.
- Try to have your family eat the same foods you do. This makes meal planning and shopping easier.

## How Much Weight Should You Gain?

You need to gain some weight so your baby will grow. But gaining too much weight can make your blood sugar harder to control.

Your Weight, Age, Circumstance Before or During Pregnancy	Weight Goal
Your weight was normal before pregnancy	Gain 25 to 35 lbs.
You were overweight before pregnancy	Gain 15 to 25 lbs.
You were underweight before pregnancy or are under 18 years old	Gain 28 to 40 lbs.
You are having twins	Gain 35 to 45 lbs.
Your total weight gain should be (ask your healthcare provider)	