

HEALTHY YOU HEALTHY BABY

A mother's guide to gestational diabetes

By the Doctor's Dietitian
Susan B. Dopart, MS, RD, CDE

**To our daughter Grace Anne.
You could not be a part of our lives,
but you are my little angel who helps me
support bringing healthy babies into this world.**

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A Note to Readers

The information in this book is not intended or implied to be a substitute for professional medical advice, diagnosis or treatment. All content in these pages -- including text, charts, illustrations, graphics and photographs -- is for general information purposes only.

You are encouraged to confirm any information obtained from or through this book with other sources, and to review all information regarding any medical condition or treatment with your physician or healthcare professional.

Never disregard professional medical advice, forego or delay seeking medical treatment because of something you have read in this book.

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Foreword

Dear reader,

Gestational diabetes mellitus (GDM) has become one of the major medical complications among pregnant women. On average, about one out of five American women develop gestational diabetes. However, the rates may be doubled among Asian or Hispanic women, obese women, or among women with high weight gains, especially in the early weeks of pregnancy.

Learning how to prevent GDM, or how to manage the disease if you have already been diagnosed, is the most important step you can take.

GDM has been treated by diet for more than 125 years. Today, diet is the first choice for managing blood glucose levels. Many women control their blood glucose levels by eating healthy foods so they do not need any medications. Registered dietitian Susan B. Dopart, one of my former students at UC Berkeley, has a personal interest in diabetes as it runs in her family. She has lived this diet and is sharing her own experiences with you.

As you read through the book, you will quickly learn how to adjust your usual pattern of eating to a more healthy one by adding some new foods and eliminating others. Also, your entire family can eat just like you, and there is no need to change your diet after the baby is born. Sometimes women who have GDM develop diabetes after their pregnancies. The diet described in this book will reduce your risk of diabetes throughout your life.

It is not easy to change your eating habits, and you don't have to do it all at once.

You might start by focusing on one aspect of your diet such as fruits and vegetables one week and then another the next week. Knowing why these changes benefit your health and that of your baby makes it a lot easier to shift your diet.

Remember, you are not alone in managing your health. You have a team of healthcare providers to help you. But, you are the head of your healthcare team, and you are the one who will benefit by making positive changes in your diet.

Finally, don't forget to enjoy your pregnancy. With this book in hand, you have started a journey of improving your health and that of your entire family. As you shift to more healthy foods, congratulate yourself for a job well done.

Janet C. King, PhD
Senior Scientist, Children's Hospital Oakland
Research Institute Professor, UC Berkeley and UC Davis

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Susan B. Dopart, MS, RD, CDE

What should I do now that I have Gestational Diabetes?

If you are holding this guide in your hands, you probably have more questions than answers right now:

Is my baby going to be okay?
Was it something I was eating?
Did I do something wrong?

Gestational diabetes (GDM) is a complex endocrinology disorder caused by multiple factors. It may be in your genes, your weight prior to pregnancy, what you ate, how active you are, etc. However, trying to solve this mystery is not going to help you now and may even hinder you from getting the information and treatment you need. It is more important to focus on **WHAT TO DO** next to keep you and your baby healthy for the remainder of your pregnancy.

My Approach

Diabetes runs strong in my genes. Although I have not had diabetes, I do everything possible to avoid getting it. I became a dietitian to help others avoid the occurrence and consequences of diabetes. I attend numerous diabetes conferences to make sure I am up-to-date on medical and nutritional information that will help me assist my patients.

With the goal of the best possible outcome for you and your baby, this book contains current, cutting-edge information on GDM from leading physicians and researchers from all over the world.

Most importantly, I will tell you exactly what you need to do to keep your blood sugars balanced and normal. With blood glucose testing, food combinations and exercise, I hope to help you eliminate your need for medications.

Current research shows that women with GDM who are successfully treated have outcomes equal to women without GDM. How's that for some good news? In addition, 70 percent of women with GDM can develop type two diabetes within 10 years if their diets or lifestyles remain unchanged. Therefore, a lifestyle change now is an opportunity to lower your risk of future diabetes - a blessing in disguise!

As you go through this book, you will hear from women with GDM. I hope their stories will encourage you and help you realize that taking steps to help your baby will also help your own future health. Changing your lifestyle can influence the health of future generations of women and children in your own lineage.

So, put aside your worries, and together we will embark on a journey to better health, a successful pregnancy and a healthy baby.

Susan B. Dopart, MS, RD, CDE

2 Checking Your Blood Glucose Levels

One of the best and most efficient ways to know exactly what is going on inside your body is to check your blood glucose levels. With the right equipment, you can do this at home, and it is a powerful tool for gathering information. Trading off a little inconvenience, you'll be able to find out what impact different food combinations are having on your unique physiology.

The times to check your glucose levels are first thing in the morning and then 1-2 hours after the first bite of each meal.

Test your blood glucose:

- Within a few minutes of waking before you eat anything (fasting level)
- 1-2 hours after the first bite of breakfast, lunch and dinner

Testing your fasting blood glucose within a few minutes of waking is important since moving around and starting your day can raise your glucose levels slightly, which skews the ability to get an accurate reading.

The fasting level should be less than 90 mg/dl. If it is higher than 90, your diet and/or exercise level need an adjustment. A poor night's sleep or an illness can also raise your blood glucose levels.

Normal blood glucose values are 70-130 mg/dl. Glucose levels after meals are known as postprandial levels and should be less than 130 mg/dl. However, during the third trimester, blood glucose levels can drop as low as 50 mg/dl, which is considered normal in pregnancy.

Blood Glucose Goals:

Fasting	Less than 90 mg/dl
1-2 hours after first bite of meal	Less than 130 mg/dl

Glucometers

You will need to buy a glucometer to check your blood glucose levels. There are many different types, but they all do essentially the same thing. Ask your healthcare professional or pharmacist which one he or she recommends for ease and cost. In addition to purchasing a glucometer, you will need:

- Lancets (the needle that is inserted into the lancing device which draws your blood)
- Test strips

Some glucometers come with a few of these items for starters, but most do not. Glucometers and lancets are reasonably priced, but test strips are more costly. Many times your healthcare provider can provide you with a complimentary glucometer.



When you get ready to check, wash your hands with warm water and soap and dry with a paper or cloth towel. You can use the needle for the lancet up to three times or for 24 hours (**and only on you**). You may be able to use a needle more than three times, but the lancets will become dull and you will have greater difficulty in getting enough blood for testing.



IMPORTANT: If you are sharing a glucometer with someone else, you will need to change the lancet each time.

Prick on the sides of your fingers and alternate both the sides and the fingers. Pricking the finger tips is not only more painful, but increases the possibility of infection since we use our fingertips constantly.

Important!

Blood Glucose Levels and Your Baby

If your blood glucose levels are in the 140 range, your baby will not be harmed, but he or she may be larger at delivery. If your values are in the 160-180 range, it puts stress on your baby's pancreas as it is developing. Insulin does not cross the placenta but glucose does.

Having a chronically high glucose level during pregnancy wears out the pancreas of the baby before it is born, which predisposes your child to adult diabetes later in life.

Factors Affecting Glucose Levels

Blood glucose levels are a curious thing and can be influenced by anything from food to your activity level to the weather. (Really!)

Food

Keeping your diet in balance is the most important thing in regulating your glucose levels. Including protein at meals and snacks is essential since it is proven to lower the blood glucose spike and resulting drop. Carbohydrate in the allowed amounts is also critical. Your body cannot handle a large amount of carbohydrate at one sitting due to the changes in hormones caused by pregnancy. In addition, regular meals are essential to keeping blood glucose values normal. *Make sure you eat every 2-4 hours depending on your values and hunger levels.*

To keep your blood glucose in control:

- Start with a protein source (refer to page 25) such as meat, chicken, fish, cottage cheese, yogurt, etc.
- Balance it with a healthy source of carbohydrate (in the recommended amount), such as a fruit, vegetable, or small amount of non-processed starch (brown rice, quinoa, yam)
- Round out your meal with a healthy fat such as nuts/seeds, avocado or olive oil

Exercise

It is only recently in Western culture that we have begun to look at pregnancy as a delicate state. When you look at civilizations since the beginning of time, there was little change between the activities women did when they were pregnant versus not pregnant. Gestational diabetes is considered a new phenomenon that started in the Western world and is rising due to our food supply, eating habits, and lack of exercise/activity.

Exercise might be the magic pill that wins the blood glucose race, and is equally as important as diet. Raul Artal, MD, an expert in pregnancy and exercise states:

“Pregnant women should walk after each meal to help their insulin work more effectively or walk at least 30 minutes per day. Within 10 days of initiating an exercise program, 60 percent of women with GDM will attain normal blood sugars.”⁴

Exercising at least a half hour per day is important and can be divided up in segments. The most important thing is the total time. For women with a high morning blood glucose, a walk after dinner can be very helpful in lowering morning



glucose levels.

Other Factors

Other variables that raise blood glucose levels are:

- Weather shifts
- Colds and flu
- Poor sleep
- Stress

Although weather changes are beyond our control, getting your rest is important in controlling your glucose level. Getting proper rest is essential to wake up to a good blood glucose reading. Less sleep raises the blood glucose since it makes the insulin more resistant and less effective.

If someone in your family is sick, try to avoid or limit your contact and frequently wash your hands. Remember to limit touching your face to prevent the spread of germs. If you have a high level of stress, prenatal yoga or meditation can be very helpful. Yoga can re-balance your hormone levels, which will lower your level of insulin resistance hence lowering your blood glucose levels.

“Children are a handful sometimes,
a heartfull all the time.”

- Author unknown



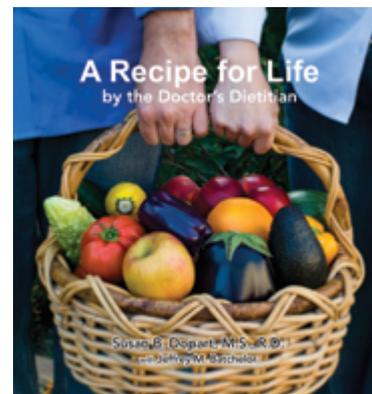
About Susan

Susan B. Dopart, MS, RD, CDE, is a nutrition and fitness consultant who has been in private practice for more than 20 years. Susan specializes in child and adult medical nutrition-related issues associated with insulin resistance, diabetes and endocrinology, pregnancy, infertility, PCOS and exercise. Before establishing her own practice, Susan worked at UCLA as both a medical and kidney dietitian.



As a consultant, Susan has worked for UCLA Medical Center, UCLA Extension, the Beverly Hills Country Club, Sebastian International and Procter & Gamble. She has written for and contributed to many national and international publications and online websites including, *The Huffington Post*, *SELF Magazine*, *UCLA Medicine*, *Sports and Cardiovascular Nutritionists (SCAN)*, *Best Life*, *Men's Health*, *Message Magazine*, *Diabetes Health* and *Diabetes Forecast*.

After receiving her bachelor of science degree in nutrition and clinical dietetics from UC Berkeley, Susan earned a master of science degree in exercise physiology and sports medicine from California State University, Hayward. She is a certified diabetes educator (CDE) and a member of the



International Motivational Interviewing Network of Trainers, which practices a collaborative, person-centered form of behavioral change.

Susan is the author of *A Recipe for Life by the Doctor's Dietitian* – a nutrition guidebook, resource, and teaching tool with cutting-edge nutrition information. Her mission and passion are helping her clients find lifestyle solutions for optimal health and well-being. Connect with her online at www.susandopart.com.