

Get the Skinny on Snacking

By Hope Warshaw, MMSc, RD, CDE



Three meals and three snacks a day used to be the standard advice given to people with diabetes, primarily because eating numerous times throughout the day was seen as a way to help control blood glucose levels.

However, that was before the development of quick-acting and long-lasting insulins and the availability of diabetes medications and easy-to-use blood glucose monitors. With these tools available to manage diabetes, snacking has become a matter of desire rather than necessity.

That was not always the case, however.

Snacking had been considered essential as recently as 1995, when the choices of diabetes medicines were slim. Regular insulin was short acting, and the only class of diabetes medications available was the sulfonylureas. A risk with these medicines was low blood glucose—hypoglycemia. In addition, prior to the mid-1980s people depended on urine testing to get—at best—a ballpark estimate of their blood glucose control.

Today, the risk of hypoglycemia is greatly reduced. There are oral medications that do not cause low blood glucose, such as metformin and glitazones. In addition, there are quick-acting insulins, such as

Humalog and Novolog, which can minimize the risk of hypoglycemia. Blood glucose monitoring helps people check their blood glucose level, know what it is and manage it accordingly. For all of these reasons, the days of three meals and three snacks are gone.

WHAT, WHEN AND HOW MUCH YOU EAT ARE STILL VERY IMPORTANT

In order to control your blood glucose levels, you need to tell your health care provider what, when and how much you eat to help design your food and medicine plan. Tell your health care provider whether you eat two meals a day or four small meals a day. They need to know if you eat full meals or prefer to nibble, as well as if your meals are at the same time every day or whenever you have a few minutes. The more your health care provider knows about you, the better he or she can match your eating style with available medicines.

It is common for many people with diabetes to find they eat more than they want or eat at times they do not want because of low blood glucose levels. This can result in blood glucose numbers that look like a roller coaster ride, more-frequent-than-necessary lows and undue hunger. It also can result in weight gain from too many calories and too much medicine. These are all signs that your medicines need adjustment. If you feel there's a mismatch between your food plan and medicines, alert your health care provider.

Learn more about nutrition at



www.walgreens.com/nutrition

What About Sugar-Free Foods?

The nutrition claim "sugar-free" or "made without sugar" may or may not mean calorie- or carbohydrate-free. For that reason, you need to know what these words mean and check the Nutrition Facts labels of products before you drop them in your shopping cart.

These foods fall into several groups:

- made with sugar alcohols and other regular sugars
- sweetened solely with a no-calorie sweetener, such as aspartame or sucralose
- sweetened with both sugar alcohols and no-calorie sweeteners
- sweetened with regular sweeteners and a no-calorie sweetener

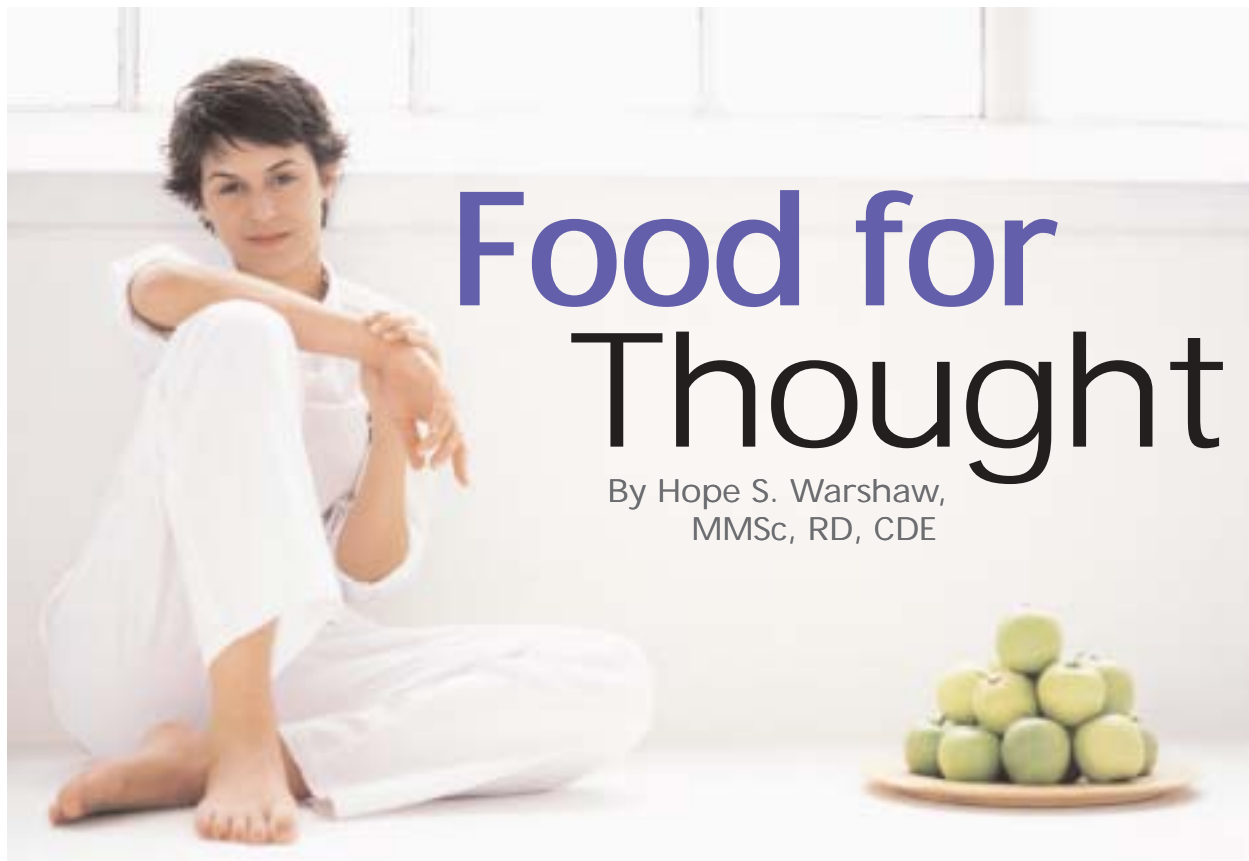
The latter two are increasingly common.

Foods made with sugar alcohols (polyols) and other sugars: Polyols are found in some hard and soft candies, chocolate bars, cookies and ice cream. The names that you see on the ingredient list are sorbitol, mannitol and lactitol. Many polyols have an "ol" ending. The benefits of polyols are that they have fewer calories than regular sweeteners, such as high-fructose corn syrup. They may also cause a lower rise in blood glucose than regular sweeteners.

However, according to the American Diabetes Association's nutrition guidelines, there are no studies that show that the use of foods with polyols help people with diabetes reduce their intake of calories or carbohydrate. Remember, these foods are sugar free, but not carbohydrate or calorie free. And often, they do not lower the calorie or carbohydrate content that much.

One note: polyols, if you eat enough products that contain them, they can cause gas and diarrhea, especially in children. For this reason, the FDA requires manufacturers to put a statement about this on some products.

Foods made with no calorie sweeteners: Familiar names of no-calorie sweeteners are acesulfame-k, aspartame, saccharin, sucralose and, the newest, neotame. These sweeteners contain next-to-no calories or carbohydrate. Foods sweetened with no-calorie sweeteners may or may not have calories and carbohydrates from ingredients other than the no-calorie sweetener. Foods, such as diet soda, diet gelatin and powdered drink mix, contain next-to-no calories. Other foods sweetened with no-calorie sweeteners, such as hot cocoa mix, fruit yogurt and maple syrup, contain ingredients other than the sweeteners that may contribute carbohydrates, other nutrients and calories.



Food for Thought

By Hope S. Warshaw,
MMSc, RD, CDE

Your kitchen is probably the source for most of the food you eat. For this reason, stocking your kitchen with the foods you need and removing foods that are not healthy to have around is important for you to manage your diabetes successfully.

The following is a list of important foods and ingredients that can help you manage your diabetes. Although fresh fruits and vegetables are best, most of the products listed below are easy to store for long periods of time. If you have these foods on hand, you'll be able to prepare quick meals, conquer a new healthy recipe and in general eat healthier. (Note: This list is geared toward people who need to lose weight or maintain weight loss, as well as keep blood glucose, blood fats and blood pressure in control. Look for salt-free products whenever possible.)

STOCK IN YOUR KITCHEN

VEGETABLES

- Frozen and canned
- Tomato products: canned sauce, whole, chopped and paste

FRUITS

- Supply of canned (light syrup or no sugar added) and frozen (no syrup) dried fruit (a great portable snack)

DAIRY

- Fat-free milk (calcium-fortified if possible)
- Non-fat dry milk
- Low-fat, or non-fat yogurt as a replacement for sour cream or light sour cream
- Reduced-fat or part-skim cheeses

STARCHES

- Frozen or canned corn and peas, canned beans, dried beans and peas
- Flour and corn starch for thickening sauces
- Loaf of whole grain bread
- Bagels
- Tortillas

FATS

- Oils: stock and use only canola oil and olive oil (Note: they are highest in monounsaturated fats); non-stick pan spray
- Spreads: tub margarine, light butter, margarine-butter combination or a trans fat-free

spread, or stanol and sterol spreads like Benecol or Take Control

- Salad dressings: Make your own with olive oil or light mayonnaise, use reduced-calorie commercial, or dilute your regular salad dressing with vinegar or lemon juice
- Nuts: Keep small amounts of a few nuts that you enjoy, use them for snacks and on salads and in stir-fry dishes
- Mayonnaise, cream cheese and sour cream: Take advantage of low or non-fat products that you enjoy

PROTEIN/MEATS

- Frozen chicken breasts, turkey sausage and flank steak
- Canned salmon, tuna or sardines
- Tofu (in boxes)

GRAINS

- Assortment of rices, pastas, couscous (cooks in 10 minutes), millet and barley

SEASONINGS AND FLAVORS

- Garlic or onion powder (Note: fresh is preferable)
- Peppercorns and peppermill
- Lemon and/or lime juice (bottled)
- Cooking wine: red, white, marsala and sherry
- Vinegars: assortment of balsamic, raspberry and red wine
- Mustards: assortment of regular, honey mustard and dijon
- Sauces: teriyaki and soy (low sodium if needed), salsa, Worcestershire and tabasco
- Bouillon: cubes or packets
- Herbs and spices: dried (Note: buy and stock in small amounts to get maximum flavor)
- Broth: cans of chicken, vegetable and beef (buy low-sodium if sodium is a concern)
- Flavoring syrups: vanilla, maple and straw-

berry (buy sugar-free if available, use small amounts in coffee, milk and yogurt to satisfy your sweet tooth)

SWEET TOOTH-SATISFYING ITEMS

- Hot cocoa packets (sugar-free and/or fat-free)
- Sorbets, frozen yogurt, fresh fruit popsicles, sugar-free or fat-free
- Low-sugar jelly or jam
- Diet gelatin
- Powdered drink mix sweetened with no-calorie sweetener
- No-calorie carbonated and non-carbonated drinks or bottle water
- No-calorie sweetener as sugar replacement

PREPLANNING IS A MUST

If your current style of shopping and preparing meals is on the fly, then it is time for a change. This style of feeding yourself typically leaves you light on the healthy foods—fruits, vegetables and whole grains—and heavy on the protein, fats and sugars. Believe it or not, it also costs you time and money. Set aside a few minutes each week to pre-plan what you will need to have on hand to eat well. This strategy will serve you well.

Shopping for and preparing healthy meals will be much easier if you stock your kitchen with the healthy basics and deplete your supply of foods that leads you astray. Also, keep a running shopping list. As you use up an item from your stock supplies, replace it so you have it on hand when you need it. And always have foods on hand to prepare a few fast meals, such as pasta with turkey sausage in tomato sauce, pizza, soup, cheese quesadillas or tuna fish sandwiches.

Learn more about nutrition at



www.walgreens.com/nutrition

Taking Medications Made Easier

By Amy Rogowski, BS, PharmD, CDOE

A challenging aspect of managing your diabetes is making sure to remember to take your diabetes medications on time.

Although it sounds simple to remember to take your medicines, it can be difficult to practice in everyday life. This is true especially when you take many medications, which is often the case for people with diabetes and people older than the age of 65. The average person over the age of 65 takes four different prescription medications—and that does not include non-prescription items, such as headache remedies, allergy medications, vitamins and herbal or nutritional supplements. Once you and your health care provider understand why you are not taking your medicines or why you are not taking them on time, there are simple steps to take to make sure your medications are taken as prescribed.

OVERCOMING CONFUSION

One major reason that people do not take medicines correctly is confusing medication schedules. Depending on the type of medication involved, different prescriptions may specify that medications be taken at different times of the day, different days of the week or before or after meals. The more prescription medications a person takes, the greater the likelihood different medication schedules are involved, and the more likely it is that the medication schedule is confusing. If that is the case for you, a good first step is to talk with your Walgreens pharmacist or health care provider

to review the medications you take. With their help, you can develop a medication plan that is built around everyday events, such as eating meals. There also may be special instructions for taking certain medications, such as medications that cannot be taken with other medications or supplements.

WHEN YOU FORGET TO REMEMBER

Once your plan is complete, the issue of forgetfulness can be addressed. Not remembering to take medications is the most common reason for not taking your medicine. In most cases, this problem is easy to solve. Just post your medication plan in locations around the house that are part of your daily routine. The refrigerator is a good location for a morning reminder, as is the medicine cabinet in the bathroom. If a prescription calls for medicines to be taken during the middle of the day, your plan also may be put on a wallet-sized card so you can have it with you at all times.

If you forget to take your medications because they are not taken daily, it can be helpful to tape your medication plan to a calendar. Then, write the name of the medication on the days of the week when it is supposed to be taken.

Simply organizing your medication schedule by taking these few simple steps can make it easier to remember when to take your medications. With so many things to remember, better organization can go a long way toward helping you to better manage your diabetes.



Making Sense of Your Numbers

Do you understand your blood glucose numbers? The readings can be hard to comprehend, and the numbers may seem to go up and down for no apparent reason. At times it can be frustrating. But if you learn to understand what the numbers are telling you, it becomes valuable for you to test your blood glucose more often.

Your blood glucose meter tells you how much glucose, measured in milligrams, is in a deciliter of blood at the moment you do the test. Your blood glucose levels change based on what, when and how much you eat, your diabetes medicines, physical activity and stress. To learn more about your meter, read the booklet that came with the meter, or call the manufacturers' toll-free number.

The American Diabetes Association recommends that your blood glucose levels before meals are in the range of 90-130 mg/dL. About two hours after the start of a meal, your blood glucose should be less than 180 mg/dL. These numbers can be a guide to help you work with your health care provider to choose your own goals.

SET YOUR GOALS

As you set blood glucose goals, it is useful to set a target range for both before and after meals. You may not always hit your target, but it is where you want to be most of the time. Your fasting (before breakfast) blood glucose sets the stage for the rest of the day. If your fasting blood glucose reading is high, it is harder to bring it into range once you eat. Your fasting blood glucose can be affected by what and how much you eat at night, your dose of bedtime insulin or diabetes medica-

tions, the glucose that your liver makes during the night and hormones that cause your blood glucose to go up during the night. If your fasting glucose levels are consistently high, ask your health care provider how you can get these closer to your target range.

You can find out what happens to your blood glucose after you eat by testing one or two hours following a meal. This reading is affected by the type and amount of carbohydrate you ate, the timing and type of exercise before your meal, the medication you took and the amount of stress on your body. To lower your after-meal blood glucose, you can eat fewer carbohydrates if you are eating too many, or work with your health care provider to adjust your medicine.

BEST TIMES TO TEST

Knowing your fasting blood glucose gives you part of the picture, but testing after you eat helps you to see the whole picture. A plan that many people use is to test their blood glucose before breakfast every day and then once again at different times each day. The frequency of testing will be based upon the type of diabetes you have and your level of control.

Write down the results of your blood glucose checks so you can look for patterns. Look at all of your readings at the same time of day for a week or two. Is your blood glucose usually in your target range or too high or low most days at that time? On days when it was different from usual, can you think of a reason? If your blood glucose level is often out of your target range, your medicine, meal plan, activity or schedule may need adjusting.

CORRECTION: The test time for the OneTouch InDuo meter is only 5 seconds, not 25 to 30 seconds as stated in the previous issue. For more information or to purchase the OneTouch InDuo meter go to www.walgreens.com/diabetes.

Learn more about diabetes at



www.walgreens.com/diabetes

A1C Offers Insight into Blood Glucose Control

When Brian Segrin discovered he had diabetes in his early 30s, he knew better than most how important it was to manage the disease. If he wanted to reduce his risk of developing long-term complications he would have to play an active role in gaining control of his glucose levels. He worked for the LifeScan division of Johnson & Johnson, makers of the One Touch brand of blood glucose meters.

Segrin had joined LifeScan in 1990, and two years later, while demonstrating a blood glucose meter on a sales call, he tested his own blood and was alarmed by the elevated reading.

"When I discovered I had diabetes, it sort of knocked the air out of me. But at that point in time, I already knew a lot about the disease," Segrin said. "I knew what I needed to do, and if I ate right, exercised and took medications, I could get my diabetes under control."

Even so, Segrin was like many people with type 2 dia-

betes in that he displayed no negative symptoms, so he saw no urgency to do any of the things he knew he was supposed to.

Instead, Segrin continued with his hectic work schedule that included frequent business travel, lots of late-night meals and never enough time for exercise.

"I was never in the same time zone for more than three days in a row," Segrin said.

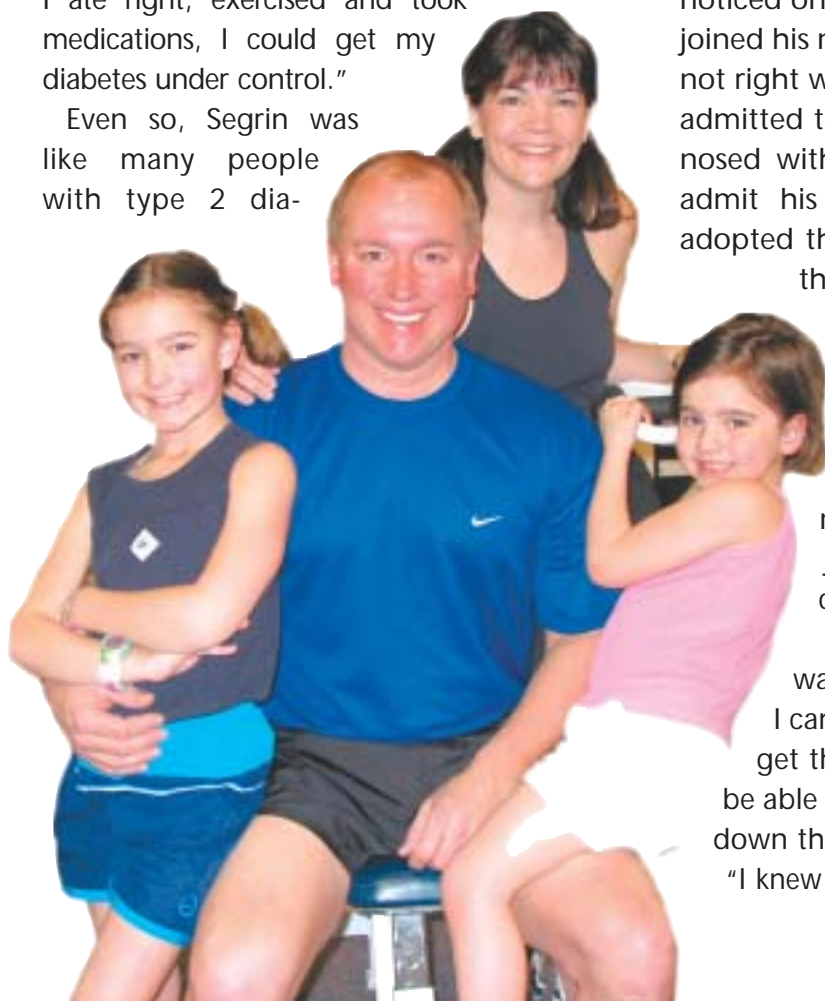
Roughly a decade after his initial diagnosis and despite being employed by a blood glucose meter manufacturer, Segrin still was not managing his diabetes. Then a series of events was set in motion that jarred Segrin to the realization he really needed to do something about controlling his diabetes.

When Segrin began working for Metrika, manufacturer of the A1cNow test, his wife noticed one day about a month after he had joined his new employer that something was not right with their eldest daughter. She was admitted to the hospital and later was diagnosed with diabetes. After not wanting to admit his daughter had diabetes, Segrin adopted the view that, "This is going to be

the best thing that could happen to our family." He felt that way because it was an opportunity for the whole family to begin living a healthier lifestyle, while he and his daughter traded notes on who was doing a better job of managing their blood glucose levels.

"She was doing really well, and I was doing poorly," Segrin said. "Then I came to the realization that if I do not get this under control, I'm not going to be able to walk either of my two daughters down the aisle when they get married."

"I knew I had to make a change, so on Dec.





22 of last year I woke up and said 'today is the day I make a difference.'"

He changed his diet, began exercising and managing his blood glucose levels through daily monitoring and monthly testing of his A1C levels. Once he set his mind to it, the progress Segrin made was dramatic.

On Dec. 22, 2002, his A1C was an alarmingly high 10.4, but through diet, exercise and proper medication use, it was down to 9.1 just four weeks later. Further progress was made the following month, and by March, his A1C had dropped to 7.1, surpassing his original goal of 7.5.

"I thought it would take a year to get there," Segrin said. "Now my new goal is to get to 6.5."

The dramatic results Segrin was able to accomplish may not be typical of what others could expect, but his example serves to illustrate some irony of managing diabetes. While the methods available to control the disease are well known by many people—even those employed by companies who manufacture diabetes care products—the discipline of routinely engaging in those activities that are central to controlling the disease is a big challenge.

"As a nation, we are big procrastinators, but you just have to start today by making simple choices," Segrin said. "It means walking around the block at night after dinner, taking your medications and having a small order of fries instead of the large one. The little changes that you make every day have a way of building on themselves until eventually it becomes a way of life."

Brian Segrin, at 41 with a loving wife and two daughters ages 5 and 8, aggressively managed his blood glucose levels and took control of his life. Now he no longer worries about walking his daughters down the aisle at their weddings.

THE ABCs OF A1C

The A1C test is one of the most important tools in the management of diabetes. Daily measurements of blood sugar plus periodic A1C measurements will give you the whole picture of whether glucose levels are in control. The A1C test is a measurement of blood glucose levels in your blood stream, but the type of information the test provides is different from conventional blood glucose meters. Those products offer a snapshot of your blood glucose level at a specific point in time, while the A1C test shows your average blood glucose level over the past three months.

While everyone with diabetes should have their A1C tested, recommendations on the frequency of the test vary. For example, it previously was thought that for those with good control of their blood glucose, having the A1C test conducted twice a year was sufficient, while those with higher blood glucose levels should have the test performed at least quarterly. The standard medical guidelines still call for testing two times to four times per year, but because 50 percent of the A1C result is from the last 30 days, many patients are finding it useful to test more frequently, such as monthly, to better measure results of changes in diet and exercise and to use that feedback to keep in better control. The availability of a convenient and easy-to-use home test makes this practical.

The A1C test provides a big picture of how well your diabetes is being controlled by measuring the amount of sugar that sticks to the hemoglobin in red blood cells. Sugar in the bloodstream can become attached to the hemoglobin during a process called glycosylation. Once the sugar is attached, it stays there for the life of the red blood cell, which is about 120 days. The higher the level of blood sugar, the more sugar attaches to red blood cells and the higher your A1C number will be. The goal for people with diabetes is to have an A1C number less than 7 percent. At levels higher than that, the risk for diabetes-related complications increases considerably.

Taking the Confusion Out of Insurance Coverage

By Martha Funnell, MS, RN, CDE

Have you ever wondered why insurance pays for some of the things you need to care for your diabetes but not others? The fact is that insurance coverage can be confusing because different plans provide different benefits, and coverage can change from year to year. For example, in the last few years Medicare Part B began to pay for blood glucose testing strips for everyone with diabetes, even if they do not take insulin. Insulin pumps and supplies now are covered by Medicare for people who meet very specific criteria.

When Medicare adds benefits or adjusts coverage, it is important to take note because even if you do not have Medicare, other insurance plans often use it as a guide. The following are some of the new benefits provided by Medicare Part B:

- Ten hours of initial diabetes self-management training and two hours per year of follow-up. The education programs must be recognized by the American Diabetes Association, and you will need a referral from your doctor or nurse practitioner.
- Three hours of initial medical nutrition therapy with a registered dietitian. Not all dietitians choose to become Medicare providers, so be sure to check before scheduling a visit.
- Dilated eye exams.
- Annual foot examinations by a podiatrist for

people with neuropathy or loss of sensation in their feet. Therapeutic shoes also are covered for people with neuropathy or other specific foot problems from diabetes. One pair of shoes and three pairs of inserts are covered.

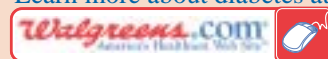
If you are not sure what your insurance company covers, you can find out from your benefits office, insurance company or case manager. If you have questions about Medicare call (800) 633-4227.

Medicare Guidelines

To receive your diabetes equipment and supplies under Medicare, you need a prescription from your health care provider. It should indicate that you have been diagnosed with diabetes and specify the following:

- How many test strips and lancets you need in a month
- What kind of meter you need. For example, if you need a special meter for vision problems, the doctor should say so
- Whether you use insulin
- How often you should test your blood glucose

Learn more about diabetes at



www.walgreens.com/diabetes

Gestational Diabetes

By Hope Warshaw, MMSc, RD, CDE



If you are among the 7 percent of women who experience diabetes during pregnancy, also known as gestational diabetes, or if you gave birth to a child that weighed more than nine pounds, research indicates you are at high risk to develop type 2 diabetes.

In fact, nearly 50 percent of women who had gestational diabetes go on to develop type 2 diabetes. The chances of developing diabetes are even greater if you have other risk factors. These include parents or siblings with diabetes, obesity, lack of physical activity, as well as being a member of a high-risk ethnic group, such as African-Americans, Hispanics or Native Americans.

WHAT IS GESTATIONAL DIABETES?

Gestational diabetes is the onset or first recognition of high blood glucose levels during pregnancy. Blood glucose levels start to increase midway through pregnancy, at a time when the baby requires more nourishment and the mother subsequently consumes more calories. These extra calories require the mother to make more insulin—most women can keep up with the demand for extra insulin. However, in women who develop gestational diabetes, blood glucose rises above levels that are ideal for the health of the baby and the mother.

If you have gestational diabetes, you have some resistance to your own insulin. This insulin resistance can cause high triglycerides, low HDL (good cholesterol) and high blood pressure. It also can lead to high blood glucose levels. In addition, you are not able to make enough insulin because the demand for insulin has increased. If a controlled eating plan and physical activity are not enough to manage blood glucose levels, you will need insulin for

the remainder of the pregnancy. Oral diabetes medications are not used during pregnancy because of their potential harm to the baby. After delivery, the blood glucose levels of most women return to normal. However, those women whose blood glucose levels remain elevated are at risk of developing type 2 diabetes.

DELAY OR PREVENT TYPE 2 DIABETES

What can you do to prevent or delay the onset of type 2 diabetes? Insulin resistance and a relative lack of insulin from gestational diabetes can reappear later in life, as glucose tolerance tends to decrease and as weight often increases. Stay at a healthy weight, and become more physically active. Studies show that the loss of 10 pounds to 20 pounds and 30 minutes of activity five times a week can do the trick. Achieving a healthy weight and being active also can help reduce the odds of having insulin resistance.

Make sure your health care provider knows if you have gestational diabetes or large babies. Regarding gestational diabetes, the American Diabetes Association recommends that if blood glucose levels were normal when checked six weeks after delivery, they should be checked at least every three years, regardless of age. If blood glucose levels are higher than normal, but not high enough to diagnose diabetes, blood glucose levels should be checked once a year.

Be aware of the common symptoms of diabetes: thirst, frequent urination, weight loss, tiredness and hunger. If you think you might have diabetes, contact your health care provider immediately. The goal is to detect diabetes early so it can be managed, thus reducing the risk of long-term complications.