



Diabetes Health Knowledge Brief Series

The Guardian Healthcare Diabetes Health Knowledge Brief Series is designed to provide members who are coping with diabetes or are in a pre-diabetes stage with some basic information about the disease and strategies for coping with the disease. Guardian Healthcare members are urged to communicate with their PCP regarding their disease and any questions or concerns they may have. Increased knowledge can lead to more effective disease care and management, and improved quality of life.

The Guardian Healthcare Diabetes Health Knowledge Brief Series is accompanied by the Guardian Healthcare Diabetes Patient Guide. The briefs and Patient Guide can be obtained by contacting the Guardian Healthcare Member Services Department, or downloading from the Guardian Healthcare website at myguardianhealth.com.



Diabetes Health Information Brief Series Topics

- **A1C—What's in a Name**
- **Diabetes—A Serious Disease**
- **Balancing Food, Exercise, and Medicine**
- **Diabetes and High Blood Pressure**
- **Does Your Blood Sugar Have Too Much Fat?**
- **Checking Your Blood Sugar—Keeping Your Diabetes on Course**
- **Exercise is Good for You and Your Diabetes**
- **Ordering Fast Food Wisely**
- **Feelings About Diabetes**
- **Put Your Best Foot Forward**
- **Keeping on Track**
- **Less is Better**
- **Kidney Disease and Diabetes**
- **Nerve Damage from Diabetes**

- **Sick Day Care**
- **Singing the Blues**
- **Don't Let Your Life Go Up in Smoke**
- **A Journey a 1000 Miles is Taken Step by Step**
- **Coping With Stress**
- **What is Type 2 Diabetes?**
- **What You Don't Know About Diabetes Can Hurt You**
- **The Eyes Have It!**



Health Knowledge Brief

A1C – What's in a Name?

The A1C blood test – quite a name isn't it? But it is a name you need to remember. (Sometimes the A1C test is called the hemoglobin A1C test, but that's the same thing.) This blood test is an important tool – the most important tool – to help you and your health care team care for your diabetes. This test shows the **average** level of sugar (glucose) in your blood over the last six (6) to eight (8) weeks. This test can be done in a laboratory, at your doctor's office or at home with a mail-in kit. The results give you and your doctor a "picture" of your diabetes control for the last couple of months. It also gives you an idea of your risk for the complications of diabetes.

With the information in the A1C test, you and your health care team can decide whether to make changes in your medication (insulin or pills), diet, and exercise plan. Then, by having your A1C tested two (2) to three (3) months later, you can see if the changes improve your blood sugar control. You can then make more changes in your care plan, if needed, and then test your A1C again to see how you are doing.

The process of changing your treatment plan and testing your A1C should continue until your A1C value reaches the target you and your doctor have set. Even when your diabetes is well controlled, you should continue to have your A1C tested at least two (2) times a year. This is because both you and your diabetes are constantly changing. By testing your A1C regularly, you will be able to change your treatment plan whenever it is needed.

Ask your doctor or health care team the following questions:

1. *Would you please check my A1C?*

2. *Would you please explain the results of my A1C test?*
3. *Are there things that I can do to lower my A1C level?*



Health Knowledge Brief

Diabetes—A Serious Disease

Some people who have diabetes think it's not a very serious disease. They may believe that their diabetes is not serious because they got it late in life or because they don't take insulin. There are people who believe that they only have a "touch" of sugar or "borderline" diabetes. These ideas are not correct – diabetes is **always** a serious disease.

The idea that diabetes is not a serious disease may have started in the 1920's. Before the discovery of insulin, diabetes was usually a fatal disease. Insulin was discovered in 1921, which allowed millions of people with diabetes to survive. Insulin was such a dramatic lifesaving discovery that many people came to believe that insulin "took care" of diabetes and that it was no longer a serious disease. This has turned out to be not true.

Whether you take insulin or not, your diabetes puts you at risk for the following complications:

- **Eye Disease** – Diabetes is a major cause of blindness: 12,000 to 24,000 people lose their sight because of diabetes every year.
- **Foot Amputations** – Diabetes is the cause of more than 80,000 foot amputations in the U.S. every year.
- **Kidney Failure** – Each year, almost 44,000 people suffer kidney failure because of diabetes. These people must get a kidney transplant or use an artificial kidney machine (dialysis).
- **Heart and Blood Vessel Disease** – People with diabetes are two to four times as likely as people without diabetes to have heart disease, high blood pressure, and strokes.

The real tragedy is that it has been shown that these complications can be delayed, or in some cases, prevented through diabetes self-care and careful blood sugar control. Diabetes can be a silent disease because it is possible to have high blood sugar and not feel any symptoms. The high levels of blood sugar may be doing serious damage to the body but the person with diabetes may not realize it until one of the complications appears. If you have diabetes, it is most important that you realize you have a serious disease and make a strong effort to keep your blood sugar as close to normal as possible. Through diet, exercise, and frequently medicine, diabetes can be managed. Blood sugar control, however, requires a team effort. This means that you, your family, and your doctor, nurse, and dietitian must all take your diabetes seriously and work hard.

Do you take your diabetes seriously? Are you doing everything you can to control your blood sugar?

Ask your doctor, nurse, or dietitian the following questions:

- 1. Is everything possible being done to lower my blood sugar?*
- 2. What tests should I have to see if I am developing any of the complications of diabetes?*



Health Knowledge Brief

Balancing Food, Exercise, and Medicine

Your blood sugar is affected by food, physical activity, and insulin. If you did not have diabetes, your body would balance these things all by itself. Your blood sugar would stay at about the same level, between 70-120 mg/dl most of the time. But because you have diabetes, your blood sugars goes up faster and higher after you eat and usually comes down more slowly. This happens because you do not have enough insulin at just the right time for your body to use. People with diabetes need to help their bodies keep their blood sugar levels close to normal by carefully balancing food, exercise, and medicine.

Food causes your blood sugar to go up. Some foods, like fruit juice, cause your blood sugar to go up fairly quickly. Other foods, like whole grain bread cause your blood sugar to go up more slowly. Your meal plan has different kinds of food to help keep your blood sugar on an even keel. You can find out how different foods affect your blood sugar by testing your blood about one to two hours after you eat. You will probably notice that very sweet foods cause your blood sugar to go up more than you like. This is why most people with diabetes limit the amount of sweets they eat.

Exercise will cause your blood sugar to go down. If you exercise every day, but miss one day, your blood sugar will probably be higher that day. It also works the other way too. If you usually don't exercise, but one day you are more active than usual, your blood sugar will probably be lower that day. Activities that you do once in a while, like mowing the lawn or shoveling snow, can cause your blood sugar to go down.

Diabetes pills and insulin also cause your blood sugar to go down. But if your dose of either is too big or you eat less than usual, your blood sugar will get too low. If you forget to take your diabetes medicine or you need a larger dose, your blood sugar will be too high. Keeping your blood sugar near the normal range can prevent or delay the

long-term complications of diabetes. You will also feel better. A good way to keep your blood sugar levels in balance is to plan ahead. Keep in mind the need to balance your food, activity, and medicine. Get to know how each of these things affects your blood sugar. You can do this by keeping a record of your blood sugar levels, and writing down the foods you eat, your activity level, and what medicine you took. Then your records can give you a picture of your blood sugar patterns all through the day. These records can help you make informed choices and help you and your doctor plan your care. It is not easy to keep everything balanced and stick to your treatment plan. If things do not go well one day, try again the next. When things go right, take time to feel good about what you have done. Keep trying. Balancing your diabetes is done one day at a time.

Ask your Doctor or nurse the following questions:

1. *Will you show me how to adjust my insulin to keep my blood sugars near normal?*
2. *Will you show me how to balance my exercise with my meal plan and medicine to keep my blood sugars near normal?*



Health Knowledge Brief

Diabetes and High Blood Pressure

Often diabetes and high blood pressure (hypertension) go hand-in-hand. It is thought that more than 70% of people with diabetes have high blood pressure as well. High blood pressure, like diabetes, is a lifelong disease. It can be treated but not cured. If you have both diabetes and high blood pressure, it will be especially important to work closely with your doctor and other health care professionals to manage both.

Blood pressure is the amount of force your blood exerts against the walls of your blood vessels. Blood pressure is usually measured as two numbers, such as 120/80 (normal blood pressure). The first and larger number (systolic pressure) is the blood pressure during a contraction (beat) of the heart. The second and smaller number (diastolic pressure) is the blood pressure when the heart is at rest (between beats). Your blood pressure can change many times during the day depending on physical activity, emotional state, and other reasons. Therefore a number of blood pressure readings are needed before a diagnosis of high blood pressure (hypertension) can be made. Blood pressure readings above 140/90 on two or more occasions mean you have high blood pressure regardless of age. For the person with diabetes who is found to have high blood pressure too, most diabetes specialists believe that the target of treatment of that high blood pressure should be 130/80.

Sometimes blood pressure that is too high will cause dizziness, headaches, or nosebleeds. Most often, however, high blood pressure causes no outward signs of trouble. Because of this, high blood pressure is often referred to as a "silent" disease. It can be missed in people who do not have their blood pressure checked regularly. Because usually there are no symptoms, people who have high blood pressure sometimes stop taking their medicine because they feel okay. This is a serious mistake. High blood pressure that is not treated can lead to a heart attack, stroke or kidney failure.

If you have diabetes and high blood pressure, it is very important to take care of them both. High blood pressure can cause the complications of diabetes to be worse.

High blood pressure can speed up the process of hardening of the arteries and kidney disease. This leads to an increased risk of heart attack, stroke, and kidney failure. High blood pressure further weakens damaged blood vessels in the eyes, and can make blood flow problems in the feet and legs worse. Taking good care of your diabetes and high blood pressure can decrease, delay, and sometimes prevent these problems.

The care of high blood pressure is somewhat like the care of diabetes. In fact, sometimes the same treatment works for both of them. Weight loss and regular exercise will often help control both diabetes and high blood pressure. Cutting down on salt may help lower blood pressure. People with high blood pressure also need to faithfully take any medicine or medicines prescribed. By working with your Doctor and following your treatment plan, you can meet the challenge of caring for diabetes and high blood pressure.

Ask your Doctor or nurse the following questions:

1. *What is my blood pressure?*
2. *What should it be?*
3. *What can I do to keep my blood pressure from going too high?*



Health Knowledge Brief

Does Your Blood Sugar Have Too Much Fat?

Cholesterol is a waxy, fat-type substance in the blood. Studies have proven that high levels of cholesterol in the blood increase the risk of heart disease. If your cholesterol is high, for every 1% you reduce it, you will reduce your chance for heart disease by 2%.

There are other risk factors for heart disease. Some of the risk factors are things that you cannot change. For example, men have a higher risk than women. Also, someone who has heart disease in the family has a higher risk than someone without heart disease in the family. Neither of these can be changed. There are several risk factors for heart disease that you can, however, change. One of the most important of these is smoking as smoking sharply increases the risk for heart disease. A second one is high blood pressure (hypertension), a major risk factor for heart disease, kidney disease and stroke and a risk factor that can be greatly reduced with treatment.

Cholesterol is a risk factor that can be changed also. It is important to realize that what you may think of as “cholesterol” is actually several different kinds of cholesterol: 1) the “good” cholesterol (medical term is high-density lipoprotein cholesterol, or HDL), 2) the “bad” cholesterol (medical term is low-density lipoprotein cholesterol, or LDL), and 3) triglycerides. The “good” cholesterol (HDL) actually protects against heart disease and the “bad” cholesterol (LDL) is a major risk factor for heart disease. Diabetes is also a risk factor for heart disease. For reasons that aren’t completely understood, diabetes appears to make the effect of all of the other risk factors worse. Reducing risk factors that can be changed is important for everyone, but

particularly if you have diabetes. The first step in dealing with the cholesterol risk factor is to find out what your cholesterol level is and the levels of its three parts, the “good”, “bad” and triglycerides. The good cholesterol (HDL) should be 45 or higher, the bad cholesterol (LDL) should be less than 100 and triglycerides should be less than 150.

One of the best ways to lower your bad cholesterol is to eat less fat and less

saturated or hard fat. One way to eat less fat is to find low-fat substitutes for the high-fat foods you eat. For example, if you drink whole milk you can switch to 2% or 1/2% milk. Eat meats low in fat and trim fat before cooking. Also, avoid fried foods. To raise your HDL, use canola or olive oil for salads and cooking and get more exercise. To lower your triglycerides, you can lower your blood sugar and eat fewer sweets and drink fewer sweet drinks and less alcohol. You can make a lot of changes in your diet that will help lower your cholesterol. If you make these changes one at a time, you can gradually work them into your eating habits.

Making dietary changes to reduce intake of fats is always part of the treatment for people who have a “cholesterol problem” whether they have diabetes or not. However, in addition to changes in diet and exercise many people will also need a medication to help correct abnormal cholesterol levels.

Ask your Doctor the following questions:

1. *What is my cholesterol? My HDL? My LDL? My triglycerides?*
2. *Will you send me to a dietitian who can help me plan a low-fat diet?*
3. *Do I need medication?*



Health Knowledge Brief

Checking Your Blood Sugar Can Keep Your Diabetes On Course

In the early days of flying, pilots seldom flew at night because they could not see how high or low they were flying. Today, most planes have modern instruments that allow them to be flown safely after dark. If you have diabetes, you are trying to keep your diabetes on course. Like a pilot, you need good information. Luckily, there are blood sugar monitors to help you as well. When you check the level of sugar (glucose) in your blood you can help keep your blood sugar from flying too high or too low.

Today most people with diabetes try to keep their blood sugars as close to normal as possible (70-120 mg/dl). This can help prevent the short-term problems of diabetes such as dangerously high levels of blood sugar and the long-term complications of diabetes such as eye disease and kidney failure. To keep your blood sugar on course you need to make many decisions. Some of them are made by you and your Doctor together. Some are made by you alone. The information you get when you test your blood sugar allows you and your health care team to make wise choices.

For example, a record of blood sugar levels allows you and your doctor to see how medicines, physical activity, food, colds and flu, stress and other things affect your blood sugar each day. With the help of your doctor and diabetes educators you can learn to adjust your own insulin or other medications, level of physical activity, and meal plan whenever needed. If you are not already checking your blood sugar, ask your doctor or nurse if doing so would help you care for your diabetes.

There are a variety of meters on the market today. Although each works a bit differently, you need a drop of blood from your fingertip or elsewhere to do the test. Once the blood is on the strip, the meter "reads" the level of sugar in your bloodstream. Although most meters on the market today have a memory where your latest blood sugar readings are kept, it will be easier for you to look at your numbers if you keep a record. Your record helps you find patterns in your blood sugar levels. It also helps you to more easily see times when your blood sugar is often above or below your target level, so that you can

do something about it.

Keep in mind that you are testing your blood sugar for yourself, as well as your health care team. Your tests give you the information you need to help keep your blood sugar where you want it to be. Members of your health care team are like experts in the control tower who provide you with needed help. But, in terms of daily diabetes care, you are the pilot. Testing your blood sugar yourself can keep you flying safely.

Ask your Doctor, nurse, or dietitian the following questions:

- 1. What blood sugar meter would be best for me?*
- 2. What do the numbers mean?*
- 3. How can I use the results of my blood tests to improve my diabetes care?*
- 4. How can I make changes in my medications, meal plan or activity to improve my blood sugar?*



Health Knowledge Brief

Exercise is Good for You and Good for Your Diabetes

Our bodies were meant to be used. Benefits from exercise include conditioning of the heart, lungs, and muscles, as well as better skin tone, weight-control, and feeling more energetic and positive about your life. For adults with diabetes, exercise may improve blood sugar levels by helping the body to better use insulin and food.

It is often hard to change your behavior when the reward is a long way off. The beauty of exercise is that you will begin to feel the benefits almost right away. If you start a daily walk on Monday, you will probably be able to complete your walk more easily and feel less tired by Friday. Another benefit of exercise is that you will feel better all day and may sleep better at night. Exercise is also a good way to relieve stress and reduce tension.

One way to become more active is to build exercise into your daily life. Park further away from your destination and walk the rest of the way. Ten minutes of vigorous exercise three-times a day has the same benefit as 30 minutes of exercise once a day. Another way to become more active is to begin an exercise program. An exercise program usually includes a warm-up, 20-30 minutes of vigorous exercise and ends with a cool-down period. If you begin an exercise program after not being active for awhile, you may feel some muscle soreness at first. This should pass quickly—especially if you warm-up slowly and do some stretching exercises before and after your workout. The important part is to begin slowly and not push yourself. Doing too much too soon may cause injuries.

If you are not currently exercising, talk to your provider before you begin. For people with diabetes, there are several things to think about before starting. If your blood sugar is too high or low on a given day, you may need to wait until it is closer to normal before starting to exercise. If you take insulin, you may need to adjust your insulin and food to fit with your new level of physical activity. It is important to test more often at first to find out how exercise affects your blood sugar level. When you exercise, carry diabetes identification and if you take insulin, carry something with you to treat an insulin

reaction. You also need to protect your feet. Choose shoes that fit well and are made for the kind of exercise you do.

Talk to your Doctor about the type and amount of exercise that is right for you. If your doctor says it is safe for you to exercise, you might think about joining a program or class. Your local school, YMCA, or health center may have exercise programs. You will get expert help and meet new friends by joining a program with a trained leader. Exercising with others can also help you to exercise more faithfully. Almost everyone can benefit from regular exercise and, for people with diabetes, this is doubly true.

Ask your Doctor the following questions:

1. *Will exercise help lower my blood sugar?*
2. *What kind of exercise is safe for me?*
3. *What should my blood sugar be before and after I exercise?*
4. *How can I find an exercise program?*



Health Knowledge Brief

Ordering Fast-Food Wisely

About 46% of the average American's food budget is spent on eating out. Unfortunately, it's not always easy to eat a nutritious and balanced meal away from home. Fast-food restaurants are probably the biggest challenge. You can still have a healthy, relatively low-calorie meal that can fit into your diabetes meal plan, if you know how to order.

Fast-foods are generally very low in fiber and complex carbohydrates, but are high in fat, salt and sugar. Fat has twice as many calories as an equal amount of carbohydrate or protein, so most fast-foods are very "calorie dense." It doesn't take very much food to add up to too many calories. Fast-food dinners such as fried chicken or a fish sandwich and fries get about half their calories from fat. Such a meal could easily top the 1000 calorie mark – over half the total suggested daily calories for most adults!

The easiest answer to the fast-food dilemma is to keep such foods to a minimum. But fast-foods are here to stay and, admittedly, they're tasty, inexpensive and fast. Here are some suggestions for how to deal with them:

- When you eat a fast-food meal, try to balance this with healthier foods for the remaining meals of the day. Choose fresh vegetables and fruit, whole grain breads, and low-fat dairy products at your other meals.
- Don't assume that anything you get from a salad bar is low in calories and fat. A plate of prepared salads such as potato and macaroni salads, coleslaw, or salad greens covered with bacon bits, croutons, cheeses, and heavy dressings could be more calories and fat than a burger, fries and shake!
- Many fast-food restaurants offer broiled chicken, which is much lower in fat and calories than fried. For example, save 400 calories and 35 grams of fat by ordering a grilled chicken sandwich instead of a deluxe burger. But whether you order broiled or fried chicken, don't eat the skin, which is where most of the fat lies. Also, when ordering something fried, choose larger pieces rather than tidbits, which have more greasy batter.

- Shakes and colas are high in sugar and have little or no nutritive value. Skim milk, fruit juice, or even glasses of ice water or diet soda are healthier alternatives.
- Go easy on the condiments. Big Mac[®] sauce, tartar sauce and mayonnaise add more than 100 calories each. Most barbecue sauces add 60 calories. Try ketchup and mustard or order your sandwich plain.
- Many fast-food breakfasts are little more than grease on a bun. A croissant may contain as much as four and a half pats of butter or fat. If you're in a hurry, you're much better off having a quick breakfast of toast or a bagel.
- Fast-food portions are intended for large appetites. In fact, fast-food advertisers emphasize "BIG," "JUMBO," and "SUPER" portions. Order smaller versions when you can. Choose fast-food restaurants with salad bars and have a salad of fresh fruit and vegetables on the side if you want more food.
- Get information on the calorie/nutrient values of fast-foods so you know just what you're eating. Almost every fast-food restaurant has this information available.

Ask your Doctor the following question:

1. *Can you help me learn how to make healthy food choices when I go to a fast-food restaurant?*



Health Knowledge Brief

Feelings about Diabetes

Diabetes can affect your whole self – not just your body. It can affect your feelings about yourself and how you get along with others. An important step in learning to live with diabetes is to become aware of how you are feeling. Each person has different feelings about having diabetes. When you first found out that you had diabetes, it might have been hard to believe. You may have been frightened or wondered "why me?" These are very real feelings that many people have when they first find out that they have diabetes. As you live with diabetes, you may find that your feelings change. Some common feelings are listed below. As you read the list, you may become aware that you've had some of these feelings.

Denial: Some people find it hard to believe they have diabetes. They may also believe that they do not really have to take care of their diabetes. This is called denial.

Anger: When people feel angry about having diabetes, they may wonder, "Why me?" They may act angry at family, friends or health care professionals. In fact, they are angry about having diabetes.

Depression: Sometimes when people are angry about having diabetes, they keep their feelings bottled up inside. As time goes on, they begin to feel very sad and blue – even hopeless.

Acceptance: Gradually people adjust or adapt to having diabetes. They still wish that they didn't have diabetes, but they are able to handle it.

These feelings do not always happen in this order. Most people find that these feelings come and go. Also, you may have two or more of these feelings at one time or you may have none of these feelings. You may have had some of these same feelings when you had other problems in your life. Think about how you handled your feelings then. The way you handled your feelings in the past can help you to find ways to deal with your feelings now. Many people find that it helps to talk about their feelings. Family, friends, and health care professionals can help by listening. Most of the time, other people want to be helpful. It's up to you to let them know the best way they can help you. Many areas have support groups especially for people with diabetes and their families. These are groups of people who talk about what it's like to have diabetes and ways to handle problems. Your Doctor can tell you about one in your area.

Other sources of support for you and your feelings about diabetes are available. Sometimes it helps to talk with someone who is not a friend or family member. It may help to talk to a:

- minister, rabbi, or priest
- mental health counselor
- social worker

You may find that you are feeling sad, down or depressed. If you feel depressed tell your physician. There are treatments for depression that are very effective. Learning to live with diabetes takes a long time. For most people, it is a lifelong journey. The first step is to learn to recognize how you are feeling. Think about how your feelings are affecting the way you cope with other stresses, get along with family and friends and take care of your diabetes. Most journeys are easier if you have some help along the way. Find someone to talk with and support you. Take one step and one day at a time and you'll reach your goal.

Questions to ask your Doctor, nurse, or dietitian:

1. *Can you tell me how to contact a diabetes support group in the area?*
2. *Is there someone I can talk with, one-to-one, about my diabetes?*



Put Your Best Foot Forward

Your head and toes may be at opposite ends of your body but, if you have diabetes, you need to keep your feet in mind. Diabetes can cause serious problems with your feet, including amputation. Diabetes is the cause of over 80,000 leg and foot amputations every year. The great tragedy is that most diabetes foot problems can be prevented. Diabetes can cause foot problems in two ways. First, diabetes can lead to decreased blood flow, which leads to slower healing of cuts or sores on the feet. Second, diabetic nerve disease can reduce your ability to feel pain in your feet. Because of this, injuries and infections in the feet may not be noticed until they have become very serious.

Daily foot care can prevent most of the serious foot problems caused by diabetes. Here are five basic rules of foot care.

Inspect Daily: Every day, look at your feet for blisters, calluses, cuts, sores, bruises, and cracks in the skin. Look for ingrown toenails, ulcers, and fungus infections such as athlete's foot. It is especially important to look at your toes, in between your toes, and at the bottom of your feet. Get help from another person or use a mirror if you cannot see your feet well enough.

First Aid: To treat small cuts, wash, rinse, and cover them with a sterile dressing. Avoid using home remedies or colored antiseptics such as iodine or Mercurochrome. If you have a blister, cover it with a sterile pad to protect it from breaking and from rubbing. Stop wearing the shoes that caused it. Tell your doctor or foot specialist about any cuts, sores, swelling, or redness that does not show signs of healing within two to three days. Ask your doctor to look at your feet at each office visit. Take your shoes off as a reminder.

Clean and Soften: Wash your feet frequently with mild soap and warm water. Dry gently with a soft towel and apply lotion or lanolin (except between the toes) to keep feet soft. Wear clean socks and well-fitting, comfortable shoes that protect your feet. If your feet are too moist, put on baby or talcum powder.

Trim Carefully: Reduce calluses by rubbing with a towel after a bath or with a pumice stone. Do not use store-bought corn or callus removers or razors. Carefully trim your toenails to follow the shape of your toe. A good time is after a bath when the toenails are soft. Use clippers made for toenails.

Prevent Injuries: Protect your feet from harm by avoiding harsh soaps or chemicals, heating pads and hot water bottles, frostbite, sunburn, and injuries caused by going barefoot. Do not reduce the blood flow to your feet by wearing garters, tight knee socks, or by sitting with your legs crossed for long periods. Walking or special leg and foot exercises can help increase blood flow to the legs and feet.

Taking care of your feet will allow you to put your best foot forward now and in the future.

Ask your Doctor or nurse the following questions:

1. *Would you please check my feet to make sure they are okay?*
2. *Would you please check to make sure I am taking care of my feet correctly?*
3. *Do I need to see a foot specialist?*



Health Knowledge Brief

Keeping on Track

Has this ever happened to you? You make a New Year's Resolution to make changes in how you care for your diabetes and everything goes really well for a few days. But then something happens one day that gets in your way. Things don't go so well, and you gradually go back to your old way of doing things. If this sounds familiar, you are not alone. Most people find that sticking to changes is harder than deciding on which changes to make. But the good news is that you can learn to change this pattern.

It sometimes helps just to think about why you were making the change in the first place. Reminding yourself that you want to live better longer, to be able to play with your grandchildren, fit into your clothes, or dance at your daughter's wedding may be enough to keep you going when it gets tough.

If that doesn't work, it may also help to think about why you are having trouble. The more precisely you are able to figure out the problem, the easier it is to come up with a good solution and a plan to fix it. Ask yourself the following questions:

- What is the hardest part about staying faithful to my plan and keep doing the changes I make?
- Given all of the other priorities in my life, how important is the one I have chosen for me?
- What do I feel I am giving up?
- What do I feel that I will gain from making the changes?
- Do I feel as if those around me are helping me or hindering me?
- For whom am I making this change?
- Are there certain situations that are hard for me?

What are your answers telling you? What is making it hard or getting in your way even though you have made up your mind? Do you feel as though you are giving up more than you are gaining? It is hard to stick with something if you do not see any benefit right away or the benefit is not immediate. For example, the benefit of exercise may be to live a longer, healthier life. But that does not always help when you are busy today and there are other demands on your time. It may be easier if you think about how it helps you to handle stress or look and feel better right now.

It also helps to know what situations are hard for you and cause you trouble. Many people find that they do really well keeping their meal plan on track until they get stressed or depressed. Once you know that stress is a negative trigger to overeat, then you can learn other, more effective ways to cope with stress.

It is true that it is easier to make and sustain changes if you get the help and support of others. But at the same time, you are more likely to stick with changes when you make them for yourself—not your spouse, family, doctor, nurse, or dietitian. One of the keys to long-term behavior change is that it needs to come from within you. Others can be your **inspiration**, but you need to be your own **motivation**.

Ask your Doctor or nurse the following question:

1. *I am really struggling with sticking with my plan. Do you have any ideas that will help?*



Health Knowledge Brief

Less Is Better

Extra weight makes diabetes harder to manage. Losing even small amounts of weight can lower your blood sugar. The most obvious way to lose weight is to eat less food. You can start by eating less of the same foods you are eating now. Every bit of food you

eat, or do not eat, makes a difference. If you cut back a little at every meal, you will lose some weight. Here are some other ways to eat less food.

Eat fewer sweets. Sweet foods are usually high in calories. One piece of pie can have as much as 400 calories. If you like sweets, eat smaller portions or try to find substitutes. For example, choose fresh fruit or frozen yogurt instead of pie or frosted cake. Sugar substitutes and diet soft drinks may help. Try using diet jam, jelly, and syrup. You do not have to give up all sweet foods - just cutting down will help.

Eat less fat. Foods that are high in fat are also high in calories. Too much fat will also damage your heart and blood vessels. Some high fat foods are whole milk, butter, some margarine, cheese, ice cream, meat, and many salad dressings. The way you fix food can help too. Frying foods, and using salad dressings, butter, gravy and sauces, increase the amount of fat in your diet. Again, you do not have to give up all of these, just make some changes. Bake or broil meats. Use low-fat cheese, salad dressing, and margarine. Eat leaner cuts of meat. Take the skin off the chicken before eating. Use low-fat or skim milk instead of whole milk.

Eat regular meals. Skipping meals may seem like a good way to lose weight – but it's not. When people skip meals, they may feel like they are starving at the next meal and then overeat. It's better to spread your day's food out over the day in three or four smaller meals and snacks, rather than eating one large meal. Try to eat reasonable amounts of food at regular times.

Physical activity is a good way to help lose weight. Walking is one exercise most people can do. If you walk for 30 minutes a day, 5 days a week, you can lose weight. During the winter you can walk in shopping malls, indoor tracks, or school gymnasiums. If the weather is too bad to go out, you can walk in place while watching T.V. in your own home. If you have a favorite program that you watch each day, try walking in place as you watch. You do need to check with your doctor before you begin any exercise program.

If you are overweight, losing weight by improving your food and exercise habits is one of the most helpful things you can do for your diabetes and your health in general.

Ask your Doctor, nurse, or dietitian the following question:

1. *How would losing weight affect my blood sugar and my health in general?*



Health Knowledge Brief

Kidney Disease and Diabetes (Nephropathy)

Over time, diabetes can cause changes in many parts of your body. These are called long-term complications of diabetes. Diabetes can affect the large blood vessels that go to the heart, brain, and legs. Diabetes can also damage the smaller blood vessels (capillaries) of the eyes and kidneys.

Your blood carries nutrients to all of the cells in your body. As the blood flows through the vessels in your kidneys, blood is filtered or cleaned. Waste products (such as extra sugar) that have collected in the blood are removed and leave the body in the urine. Nutrients that your body needs (such as protein) are kept. The cleaned blood leaves the kidneys ready to collect more wastes.

When people have had diabetes for a long time, their kidneys may become damaged. The kidneys can no longer filter the blood as well as before. The waste products that would normally leave the body in the urine stay in the blood. Proteins that the body needs that would normally stay in the blood are lost in the urine. This is called **nephropathy**, the medical term for kidney disease.

In the early stages of kidney damage, you won't feel any different. The kidneys are able to work harder and make up for the damage. They work well enough so that there are no symptoms. Over time, however, the kidneys may become worse, and may not be able to make up for the damage.

One way to find out how well your kidneys are working is to have your urine tested for protein. Protein is normally found in the urine in only very tiny amounts. A urine test for the slightest increase in the tiny amount of protein in the urine is called the "micro albumin" test, which should be performed at least once a year in all persons with diabetes. Even the slightest increase in protein in the urine can indicate early stages of diabetic kidney disease and should be treated. (Your doctor will need to test for bladder infection as the reason for elevated micro albumin levels and treat that accordingly.) Blood tests of kidney function can also be done. Ask your doctor if you need these tests, and what any results mean. If you have protein in your urine due to the effect of diabetes on your kidneys, or high blood pressure, medications known as ACE inhibitors or ARBs will lower your blood pressure and slow the rate of further damage to your kidneys.

High blood pressure can be one sign that your kidneys aren't doing their job. Other signs of advanced kidney damage that you might notice are itchy skin, extreme tiredness, chronic nausea, and swollen ankles and legs. You might also notice that you have to urinate less often. (This can also be a good sign for another reason. Urinating less often can mean that your blood sugar is dropping into the target range.) It is

important to report any changes you notice to your doctor. Changes do not always mean that your diabetes is getting worse.

Another risk factor for kidney disease is bladder infections. These can lead to kidney infections and damage. If you notice that you are urinating more often, that it hurts or burns to urinate, or there is blood or pus in your urine, you may have a bladder infection. Bladder infections can be treated with antibiotics. You need to call your doctor if you have these symptoms so you can start treatment right away.

In the early stages, kidney problems can be treated with medicines. Your doctor may prescribe a diuretic (water pill), which will cause you to urinate more often. This gets rid of extra water in your body. The swelling in your ankles will go down. One or more pills to lower your blood pressure may also be used. It's important to take these pills even on days you feel well. If left untreated, high blood pressure increases the rate at which the kidneys fail. High blood pressure can also cause strokes.

Not everyone who takes a diuretic or blood pressure pills has damage to their kidneys from diabetes. Ask your doctor or nurse to tell you the reason for each pill. Ask what each pill does, and about any side effects you might have.

Research has shown that keeping blood sugar levels near normal can prevent kidney damage. Research is being done to find out more about these problems. In the meantime, managing your blood sugar and blood pressure may be your best defense against kidney damage.

Questions to ask your Doctor or nurse:

1. *Has diabetes affected my kidneys?*
2. *What can I do to prevent my diabetes from affecting my kidneys?*
3. *If diabetes has affected my kidneys, what should I do now? Should I be taking an ACE inhibitor or an ARB?*
4. *What is my blood test for kidney function results? Should I see a kidney specialist (called a nephrologist)?*



Health Knowledge Brief

Nerve Damage From Diabetes (Neuropathy)

Over time, diabetes can cause changes in many parts of your body. These are called the long-term complications of diabetes. These changes can cause eye and kidney problems and heart and blood vessel disease.

Another complication of diabetes is diabetic neuropathy or nerve damage from diabetes. In fact, this is the most common complication of diabetes. The nerves in the feet and legs are the ones most often damaged. Sometimes the nerves in the hands and arms

are also affected. No one really knows exactly why this happens, but it is mostly due to the effects of high blood sugar.

Having neuropathy does not mean that you will feel or act nervous. Neuropathy has to do with your sense of touch. When nerves are damaged by diabetes, they become either **less** sensitive (you feel less than before), or **more** sensitive (you feel more than before). The way that you will feel depends on which nerves are affected and how they are affected.

Less sensitive nerves do not send feelings of pain, heat, or cold to the brain as easily. Some people notice numbness or heaviness (similar to when your foot "goes to sleep"). Other people don't notice any symptoms. Feeling pain is one way that the body protects itself. If you aren't able to feel pain, you can hurt yourself very easily. For example, you could burn your foot with your bath water if you can't feel that it is too hot. You might walk around with a tack in your shoe and not know that you are hurting your foot.

Before your feet lost their sensitivity, they would let you know when something was wrong. Now you need to do what the nerves in your feet used to do for you. Take extra care with your feet and legs. Wear shoes that fit well to avoid blisters. Look at your feet (top and bottom) each time you take a shower to see if there are any cuts, red areas, signs of infections or other changes.

If your nerves become more sensitive, you may feel burning, numbness, tingling of feet, pain from the weight of clothing or sheets, or shooting pain in the legs and feet. These signs usually do not happen all at once. They may seem to come and go. You need to tell your doctor about these feelings, even though they may not seem very important at the time. Pain from neuropathy can be severe. It can also be hard to treat. Pills with narcotics in them are not the best choice for this type of pain. There are medicines you can take that are better for the long-term.

Keeping your blood sugar in the target range has been shown to prevent and may also ease the pain.

Other ways of helping the pain include:

- Relaxation exercises and walking for leg pain.
- Transcutaneous Nerve Stimulation (TENS) unit. A TENS unit is a box you wear which provides an electric shock to the painful nerves.

- Pain clinics. Your health care team can give you more information on a pain clinic in your area.

Neuropathy can also damage the nerves that control your stomach, your bladder, and how you digest food. Signs of this damage include diarrhea, nausea, vomiting, and urine staying in your bladder.

In the past, there was often very little that could be done to ease the pain of neuropathy but this has been an area of a great deal of research. New medicines are available and more are being tested. Most often you will try one type of pill first and then add others as needed. Ask your Doctor about a diabetes specialist, a diabetes center, or a neurologist if you need more help with your neuropathy. In the meantime, keeping your blood sugar on target can do a lot to ease the pain of neuropathy.

Ask your Doctor or nurse the following questions:

1. *Has diabetes affected my nerves?*
2. *What can I do if my diabetes has affected my nerves?*
3. *Should I see a specialist or go to a Diabetes Center for treatment of my nerve damage (neuropathy)?*



Health Knowledge Brief

Sick Day Care

People with diabetes can get the flu or a cold just like anyone else. But a cold or flu can throw off your blood sugar if you are not careful. You need to take special care of diabetes when you are sick. First, check your blood sugar at least every three (3) to four (4) hours and write down the results. Drink some fluids every hour to help keep you from getting dehydrated.

It is also important to eat the same amount of high energy foods (carbohydrates) that you usually eat. If you can, eat your usual meal plan. If you have a sore throat and cannot swallow, eat soft foods in place of your usual carbohydrates. If you are sick to your stomach or vomiting, drink enough liquids to equal the calories you get from the carbohydrates in your plan. If you need to, space your liquids out over the day by taking a sip every 15 minutes. Drink fruit juice, tea with sugar, or regular soft drinks. Diet sodas will not work because they do not have any calories. You need to get your usual amount of calories when you are sick.

An illness can make your blood sugar go up. That is why it is important to test your blood and to take your usual diabetes medicine. If you take insulin, take your usual dose. Even if you don't feel like eating, take your insulin. **Call your Doctor right away if you have any of the following:**

- blood sugar level over 250 for more than one day
- vomiting for more than 6 to 8 hours
- a high or rising fever
- if you are sick for more than two days and not improving
- if you are unable to eat for more than one day
- signs of very high blood sugar levels
- you are very sleepy or confused
- you have stomach or chest pains, or difficulty breathing
- you have any concerns or questions

Have your records nearby when you talk to your Doctor. If you cannot reach your doctor, go to an emergency room. Call for help if you are alone and cannot take care of yourself. Even when you start to feel better you will need to check blood sugar more often than usual until you are well. You may want to eat liquids and soft foods until your appetite is back to normal. Remember, a cold or flu can send your blood sugar out of control. This is an important time to pay careful attention to your diabetes.

Ask your Doctor or nurse the following questions:

1. *If I have a cold or flu, when should I call you?*

2. *What is the most important thing I should do to take care of my diabetes when I am sick?*

Ask your dietitian the following question:

1. *What foods should I eat when I have a sore throat or I am sick to my stomach?*



Health Knowledge Brief

Singing the Blues

Everyone has the blues now and then. It's common to feel down when there is a lot of stress in your life, you have money or other worries or bad things happen to you or your family. Some people feel blue just thinking about diabetes and trying to do all they can to manage it.

There are things you can do to better handle your down days. You can ask others for support, learn new ways to cope with stress, solve the problems that can be solved and

practice your religion. Taking care of your diabetes can also help. People with type 2 diabetes who have blood sugars closer to normal levels report feeling more zest for living and an improved quality of life.

But sometimes feeling down is more than just the blues—it may be clinical depression. Depression is about twice as common among people with diabetes. Clinical depression is more than feeling sad. It is a serious condition that can have long-term effects on both your quality of life and your health.

People have different symptoms of depression. Some find they aren't hungry at all, while others eat to feel better. Some people sleep all of the time, while others find that they toss and turn. It is also common to withdraw from family and friends or stop doing things you enjoy.

When you are stressed or depressed, your body releases hormones. These hormones can raise blood sugar and have other negative effects on your body. In addition, some people who are depressed neglect taking care of their diabetes. They just don't have the energy to take medicines, check their blood sugar levels, and be more active. They find it's all they can do to just get through the day. All of these make it harder to manage diabetes, which can add to guilt and depression. It becomes of vicious cycle.

The good news is that depression can be treated. Medicines and counseling are both effective for treating depression, and people who get the best results use both. Once depression begins to improve, many people find that they are more able to take care of their diabetes. Their blood sugar levels improve and they feel better emotionally and physically.

Depression isn't always obvious. The people in your life and your health care team won't know you are struggling if you don't tell them. Even if they don't ask, talk with your health care team about any symptoms of depression. Feeling depressed is not a sign of weakness or a reason to feel ashamed. Letting your Doctor know about your feelings is the first step to getting treatment and starting to feel like yourself again.

- Ask yourself the following questions:
- Have you been sad and down most of the time for two weeks or more?

- Have you lost interest in things that you used to enjoy?
- Have you lost or gained a lot of weight?
- Are you eating more or less than usual?
- Have you had trouble sleeping or are you sleeping too much?
- Have you had trouble making decisions or focusing on things?

Ask your Doctor or nurse the following questions:

1. *I am feeling very sad all of the time. Could I have clinical depression?*
2. *Are there medications that can help my depression?*
3. *Can you refer me to a mental health counselor who can help me with my depression?*



Health Knowledge Brief

Don't Let Your Life Go Up In Smoke

You may be wondering why a newsletter about diabetes has an issue on smoking. The reason is if you have diabetes, you have another reason not to smoke. If you don't smoke, don't start. If you do smoke, this is a good time to think about quitting. You know some of the reasons not to smoke. For example, smoking is the #1 cause of lung cancer and lung cancer causes over 160,000 deaths each year. Illnesses related to smoking cause more than 430,000 deaths each year. In fact, smoking is the number one cause for early death. Almost everyone who smokes will damage their health and shorten their life.

But why is smoking a special problem for people with diabetes? The reason is because both smoking and diabetes are risk factors that greatly increase your chances of getting heart disease. Smoking does a lot of things to your heart—all of them bad. Smokers have a 40-90% greater chance of having a heart attack than nonsmokers do. Also, when people who smoke have heart attacks, they are more severe than when nonsmokers have them. For example, smoking makes high blood pressure worse. It also increases the chances of getting angina (a severe chest pain caused by not enough blood getting to the heart). Smoking also restricts blood flow to your hands and feet.

You may already know many of these facts. You may want to quit smoking but believe that you just can't do it. Maybe you have tried quitting in the past and failed. Each year in this country, over 1 million people stop smoking. Most of these people have failed many times before. If they can do it, so can you. Keep trying. Ask yourself, "Am I ready and willing to give up smoking?" If the answer is yes, many programs in your community can help you learn not to smoke. Find out about them and join one. This may be one of the hardest things you'll ever do but it is worth it!

You can buy gum or patches with nicotine that may help you quit. These are usually safe for people with diabetes, but you should check with your doctor before using them since they can affect your heart. There are also medications that your doctor can prescribe to help you stop smoking. But neither the gum, patches or the medication can do the job alone. It takes a firm decision that only you can make to stop smoking.

Ask your Doctor or nurse the following questions:

- 1. How does smoking affect my chances of getting diabetes complications?*
- 2. Will you refer me to a program to help me learn not to smoke?*



Health Knowledge Brief

A Journey of A Thousand Miles is taken Step-By-Step

Caring for your diabetes means making changes—sometimes lots of them. You may decide to change things about the way you eat and your activity level. You may also take pills or learn how to take shots, check your blood sugar, and know the signs of low and high blood sugar. It's not always easy to make changes in your life, but there are ideas that can help you. You may be able to make big changes in your diet and level of activity all at once; however, many people who try to make big changes do not succeed. Trying to change too much at one time is one reason why crash diets seldom work. For many people, a good way to make a big change is to break it down into small steps. If you have tried to change your diet before and it did not work, the step-by-step approach may be for you. Make a list of daily changes you can make in your diet. Each of these steps can be taken one at a time. This way, a big change can be made bit-by-bit.

You will probably have much more success in making a big change in the way you eat if you make it slowly. If you tried to stop eating all the foods that are high in sugar and fat, it might be too big of a change for you to make. You might feel upset and hungry much of the time and, there is a good chance that you would go back to your old way of eating. However, you could cut down on sugar and fat a bit at a time. For example, if you drink whole milk, which is high in fat, you could change to low-fat milk. A good way to make the change is to switch to 2% milk for a while. When you are used to that, you can switch to 1/2% milk or skim milk. It's easier to make the change a little at a time.

You can substitute many low-fat and low-sugar foods for foods that you may now be eating. Replace high-fat and sweet foods one at a time. For example, if you use mayonnaise, switch to a light or diet mayonnaise. After you are used to the diet mayonnaise, switch from your regular butter or margarine to diet margarine. Wait another week and then make another change and then another. If one change doesn't work for you, try a different one.

Over time, you will change your entire way of eating. As your body becomes used to the new way of eating, you will come to like and enjoy more of the new foods.

So if you want to eat a more healthy diet, think about changing what you eat one step at a time. It isn't easy to change your food habits, but by making one change a week you will find yourself eating foods that are low in fat, sugar, and calories. As time goes on you will notice that you have lost weight and lowered your blood sugar level. Remember; always talk about any changes you plan to make in your diet with your Doctor.

Ask your Doctor or nurse the following question:

Where is there a dietitian I can see to help me create a meal plan?

Ask your dietitian the following questions:

- 1. Can you help me make a list of diet changes and substitutions that will help me manage my diabetes?*
- 2. Which of the food changes on my list will do me the most good?*



Health Knowledge Brief

Coping with Stress

Stress is part of life and we all have things happen to us now and then that we define as stressful. Each person defines what is stressful to him or her. Some stress in our lives is good. It makes our lives more interesting and gives purpose and meaning. Things that we believe are harmful or causing a great deal of change may be too stressful. Too much stress at one time can also cause an overload.

The body responds to stress by making certain hormones. These can cause the heart to beat faster, the blood pressure to go up, and faster breathing. If this energy is not used to either fight or run away, you may feel tense, tired, or have a headache.

Stress can also affect your diabetes. The hormones your body makes when it feels stress can cause the blood sugar to go up. However, some people find that their blood sugar goes down during stressful times. Thus stress can make your diabetes harder to manage. It can lead to blood sugars that are too high, too low, or changing often. Some people find that they do not handle stress as well when they have diabetes. They spend so much energy taking care of their diabetes that they don't feel like they cope with other problems as well as they used to do.

Before you can cope with stress, you first need to be aware of when you feel under stress. There are some signs that your body needs a rest. These are headaches, tight muscles in your neck or jaw, a change in eating or sleeping patterns, feeling angry or tense most of the time, loss of interest in sex, and not feeling sure of yourself. Some people find it helps to keep track of how they feel under stress, what causes the stress, and how they handle it. This information can be added to your blood sugar record or food diary. Putting these facts together can give you a picture of how your blood sugar levels, exercise and eating habits are affected by stress.

Everyone handles stress in their own way. Some ways of coping give you more problems even though they may help at the time. Eating too much, smoking, alcohol, drugs or not taking care of a problem are not positive ways to cope with stress. Positive ways to cope with stress help you to feel in control, informed, and supported by other people.

Here are some tips that can help you to deal with stress each day.

- Talk about your stressors with others.
- Know your limits and don't try to do more than you can.
- Realize that it is okay to cry.
- Realize that it is good to laugh each day.
- Exercise or become more active.
- Take care of yourself and your health.
- Plan your day and set goals you can meet.
- Take breaks during stressful times.
- Don't try to do everything yourself.
- Practice your religion.
- Do fewer things and do them better.
- Avoid stressful situations when possible. If you can't, plan ahead how you will handle the stress.
- Use the energy in other ways. Hobbies, exercise, shopping, or spending time with others can reduce stress.
- Join a support group.

Feeling under stress happens to everyone. Therefore, it is important to learn to cope with stress. Your diabetes control, your overall health and the way you feel about yourself will all be better if you do.

Questions to ask your Doctor, nurse, or dietitian:

1. *How can I learn more about stress and diabetes?*
2. *Are there any programs or groups that can help me manage my stress?*



Health Knowledge Brief

What is Type 2 Diabetes?

Type 2 diabetes (formerly called non-insulin-dependent diabetes mellitus or NIDDM) is the most common form of diabetes. Approximately 90% of the people with diabetes have this kind. Unlike type 1 diabetes (formerly called insulin-dependent diabetes mellitus or IDDM), in which the pancreas makes little or no insulin, people with type 2 diabetes usually have a pancreas that will make some insulin even though it may not be enough. Also, some persons with type 2 diabetes make large amounts of insulin but are resistant to its action. Generally, type 2 diabetes occurs in people over the age of 30. Most of the people who have this type are overweight. The tendency to develop this can be inherited.

The goal of treatment for type 2 diabetes is to maintain a healthy, productive life. The person with diabetes can work with members of the health care team to achieve this goal. Treatment for type 2 diabetes involves managing diabetes carefully by eating nutritionally balanced meals at regular times and in consistent amounts, following a physical activity plan that is balanced with the food plan, and for many people, taking pills and/or insulin in order to keep the blood sugar levels near normal.

Until recently, type 2 diabetes was not taken as seriously as it should be. In fact, for

years it was referred to as "mild" or "stable" diabetes because symptoms are often not very severe and come on gradually. But research has shown that the terms "mild" and "stable" no longer apply. Type 2 diabetes can cause a variety of serious health problems including heart, blood vessel, nerve and eye disease, ones that are as serious in the person with type 2 diabetes as they are in the person with type 1.

Recent research has shown that control of your blood sugar, blood pressure and cholesterol values can dramatically decrease the risk for long-term complications in people with type 2 diabetes. Scientists continue to study the causes and treatment of diabetes. More is learned about this disease and its management every year. For people with diabetes, developing a treatment plan with their health care team and using this plan to manage their diabetes provides the best chance for a healthy future.

Questions to ask your Doctor or nurse:

- 1. Which type of diabetes do I have?*
- 2. Is there an education program that I can attend to learn more about type 2 diabetes?*
- 3. What can I do to lower my blood sugar levels, blood pressure and cholesterol?*



Health Knowledge Brief

What You Don't Know About Diabetes Can Hurt You

If you have diabetes you need to care for it every day. Your Doctor and other health care professionals will work with you to develop a daily treatment plan but you are the one who carries it out. That means you need to learn about diabetes because with diabetes, what you don't know can hurt you. Here are just three of the many reasons why you should learn as much as you can about caring for your diabetes.

First, safety. Many people with diabetes (especially people taking insulin) must make daily and sometimes emergency self-care decisions. For example, if you take insulin you must know how to give it safely. You should learn how to identify, treat, and prevent both low blood sugar and high blood sugar. You also need to know about monitoring your blood sugar and what to do when you have a cold or the flu, and much more. Whether you take insulin or not, you need to learn about diet, exercise, foot care, and sometimes diabetes pills. The problems caused by not managing your diabetes may take a long time to appear, but when they do they can be tragic.

Second, motivation. Sometimes people avoid learning about diabetes because not knowing makes it easier to believe that their diabetes is not serious. Diabetes is always

a serious matter. Learning about diabetes not only gives you knowledge and skills but can help you feel like caring for your diabetes as well. Learning all the things you and your health care team can do to keep you well, may help you prevent major problems with your diabetes later on.

Third, team care. Taking care of your diabetes is a team effort. In addition to yourself, your health care team may include your family, Health care doctors, nurses, dietitians, pharmacists, psychologists, ophthalmologists, social workers, foot and exercise specialists, and others. All of the professionals on your health care team have the knowledge and skills needed to help treat diabetes. However, you are the key member of the team; it's your diabetes. In order for you to be a good team member you need to learn about diabetes care as well.

How can you tell if you know enough about your diabetes? Ask your Doctor or diabetes educator to review your diabetes knowledge and skills with you. They can help you correct any misinformation. Remember, learning about diabetes can help you to control your diabetes rather than being controlled by it.

Ask your Doctor, nurse, or dietitian the following questions:

- 1. Is there a diabetes patient education program in this area that I can attend?*
- 2. Would you please check my diabetes knowledge to make sure I know how to take care of my diabetes correctly?*



Health Knowledge Brief

The Eyes Have It!

Sometimes people are surprised to find out that diabetes can affect their eyes – especially if they find out after damage has been done! One of the major dangers of diabetic eye disease is that it can cause serious damage to the eyes before either the patient or the doctor finds out about it. The time to think about diabetes and eye disease is before problems occur.

Diabetic retinopathy is the name for the eye disease caused by diabetes. Retinopathy affects the small blood vessels in the back of the eye (retina). As time goes on, these blood vessels get weaker and may break. Diabetic retinopathy can cause vision problems and even blindness if not treated. In fact, it is the major cause of new blindness among adults in the United States. The sad thing is that much of this blindness could be prevented if the eye disease was found and treated in time. Laser therapy is used to treat retinopathy. Thin beams of light are used to seal the broken blood vessels. Laser treatment is safe and effective.

You can do three important things to preserve your eyesight. First, have a dilated exam (requires drops in your eyes) once a year by an eye care specialist. This will ensure that any eye disease is found and treated in the early stages.

Second, if you have high blood pressure (hypertension), make sure your blood pressure stays near 130/80. Take your medicine as prescribed and have your blood pressure checked often. High blood pressure can cause narrowing of the blood vessels in the eye. This can speed up the onset of diabetic eye disease.

Third, keep your blood sugar levels as close to normal (70-120 mg/dl) as possible. High blood sugar is known to add to your risk for diabetic eye disease.

Diabetes can cause damage to the eyes, but vision loss and blindness can be prevented if diabetic eye disease is found and treated early. See your eye care specialist each year and keep your blood pressure and blood sugar on target.

Ask your Doctor the following question:

1. *Can you refer me to an eye specialist who can check my eyes for diabetic eye disease?*