American Diabetes Association®

Living Healthy with Diabetes

A guide for adults 55 and up

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As people get older, their risk for type 2 diabetes increases. In fact, in the United States about one in four people over the age of 60 has diabetes. If you already have diabetes, you may find that you need to adjust how you manage your condition as the years go by. This booklet provides information to help you take care of your diabetes over the long term, so that you can avoid or delay complications and live a long, happy, and active life.

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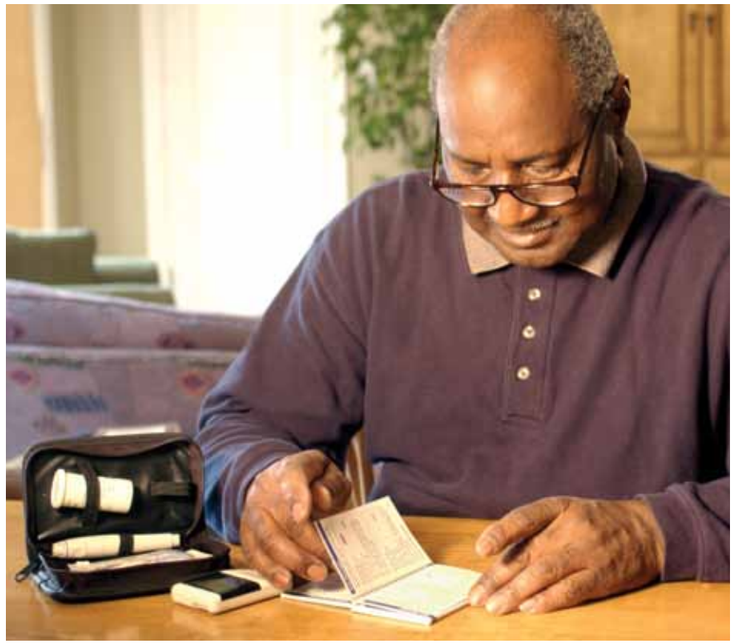
Diabetes Basics

What is type 2 diabetes?

When you eat, your food is broken down into a sugar called glucose. Glucose gives your body the energy it needs to work. But to use glucose as energy, your body makes insulin, which "unlocks" your body's cells so they can receive the glucose they need.



When you have type 2 diabetes, your body does not make enough insulin or use it well. This means your cells can't use the glucose as energy, so the glucose stays in your blood. Having high blood glucose can cause problems like eye, kidney, nerve, and foot disorders. People with diabetes are also at higher risk for high blood pressure, heart disease and stroke, and other serious conditions.

There is no cure for diabetes, but it can be managed. Balancing the food you eat with exercise and medicine (if prescribed) will help you control your weight and can keep your blood glucose in the healthy range. This can help prevent or delay diabetes complications. Many people with diabetes live long and healthful lives.

Taking care of your diabetes

Your diabetes care team will help you, but day-to-day diabetes care is up to you. Day-to-day care includes:

- Choosing what, how much, and when to eat
- Getting active
- Checking your blood glucose (if your doctor tells you to)
- Taking medicine (if your doctor prescribes it)
- Quitting smoking
- Going to your medical appointments
- Learning all you can about diabetes

LIVING HEALTHY WITH DIABETES

WHO'S ON MY DIABETES CARE TEAM?

Your diabetes care team may include a **doctor, nurse, registered dietitian, pharmacist, diabetes educator** and any other health care provider working to help you care for your diabetes. (See page 18 for a sheet where you can track all their contact information.) Your **family and friends** are important members of your team, too. But remember: **YOU** are the captain of this team.

Healthy Food Choices

Choosing what, how much, and when to eat

In the past, diets for people with diabetes were very restrictive. Things are different now. There isn't a "one size fits all" diabetes diet.

While you may need to make some changes in what and how much you eat, you have flexibility in deciding what's on the menu. With a little planning, you can still include your favorite foods.

A great way to begin meal planning is the "Plate Method". Look at the Create Your Plate graphic on pages 6 and 7 to learn more. You can use it anytime whether you are cooking for yourself or eating away from home.

Once you've changed how much you are eating, you can start to make healthier choices for each type of food. Focus on getting enough non-starchy vegetables and less starchy foods and meats. The Plate Method also shows you how to fit fruit, low-fat dairy, and whole grains into your meals. Keep meals healthy and limit added fats, sugars, and sodium (salt).

Practical food tips when eating away from home

- Start your meal with a broth-based soup or a salad.
- Ask for sauces and dressings on the side.
- Choose vegetable or fruit side dishes.
- Use the Plate Method.
- When your order arrives, divide portions before you start to eat. Take the extras home and save them for another meal.
- Try to avoid buffets and all-you-can-eat deals.
- If you want dessert, split it with friends or family.

LIVING HEALTHY WITH DIABETES

VITAMIN D:

Older Americans are not getting enough vitamin D. Make sure the dairy and soy products you consume are vitamin D-fortified. Ask your doctor if you should be taking a supplement.

Create Your Plate!

1 Imagine drawing a line down the middle of your dinner plate. Then on one side, cut it again so you will have 3 sections on your plate like the picture on your right.

2 Fill the largest section with non-starchy vegetables like salad, green beans, broccoli, cauliflower, cabbage, carrots, and tomatoes.

3 Now in one of the smaller sections, put starchy foods such as noodles, rice, corn, or potatoes.

4 The other small section is for meat, fish, chicken, eggs, or tofu.

5 Add an 8 oz glass of milk and one small piece of fruit or 1/2 cup of fruit salad and you've got a great meal. (If you don't drink milk, you can add an extra piece of fruit, light yogurt, or a small roll.)

Grains and Starchy Vegetables

- whole grain breads or crackers
- whole grain, high-fiber cereal
- oatmeal, grits, hominy, or cream of wheat
- rice, pasta, tortillas
- cooked beans and peas
- potatoes, corn, winter squash

Milk

- skim, 1/2%, or 1% milk
- low-fat or fat-free yogurt
- plain soy milk

Fruit

- fresh, frozen, or canned in juice or light syrup

* For the plate method, your food can be piled about the thickness of a deck of cards or the palm of your hand. Use a 9-inch plate like the one shown here.

Protein

- chicken or turkey (without the skin)
- fish
- shellfish
- lean cuts of beef and pork such as sirloin or pork loin
- tofu, eggs, low-fat cheese

Non-Starchy Vegetables

- fresh, frozen, or canned carrots, leafy greens, green beans, broccoli, cauliflower, tomatoes, vegetable juice, salsa, onion, cucumber, beets, okra, mushrooms, peppers, turnip

Your weight

If you are overweight, losing weight can help improve your diabetes management. You don't have to lose a lot of weight to start seeing results. Just 10 to 15 pounds can make a difference.

There are many types of weight loss plans to choose from. Even the Plate Method can help with weight loss. The key to losing weight in a healthy way is to do so gradually. Avoid extreme diets, and above all, follow the guidance of your doctor or dietitian to create a diet that will work for you.

CHANGES IN TASTE

You may notice that your sense of taste has changed over time. Some medicines can make food taste different. If you are having trouble with the flavors of your foods, try cooking with more herbs and spices to add flavor. But avoid adding extra salt, which can cause your blood pressure to rise.

LIVING HEALTHY WITH DIABETES

COMMUNITY FOOD PROGRAMS

Many communities have programs for seniors, including:

- **Congregate (or Group) Meals:** Often found in senior centers, churches, and schools. These programs are a great way to meet and socialize while eating a healthy meal.
- **Home-Delivered Nutrition Services:** This program (also known as "Meals on Wheels") delivers healthy meals to people who are homebound.
- **Senior Farmer's Market Nutrition Program (SFMNP):** This program provides coupons to lower-income seniors for certain foods at farmers markets, roadside stands, and community supported agriculture programs. To find out if you qualify, contact your state agency listed at: http://www.fns.usda.gov/wic/SeniorFMNP/SFMNPcontacts.htm
- **Supplemental Nutrition Assistance Program (SNAP):** Formerly called the Food Stamp Program, SNAP provides a monthly food subsidy to people of all ages who qualify. Go to: http://www.fns.usda.gov/snap/ to figure out if you are eligible.

Your local **Area Agency on Aging** (see page 30) can offer more information on these programs.

Physical Activity

Being active is another part of living healthy and managing diabetes. Any type of physical activity you do will help lower your blood glucose.

Other benefits include:

- Improving your A1C, blood pressure, and cholesterol
- Having more energy
- Relieving stress
- Burning calories to help you lose or maintain your weight
- Keeping your joints flexible
- Increasing your strength
- Improving your balance to prevent falls
- Lowering your risk for heart disease and stroke

Types of physical activity

Any activity you do is helpful, so you may as well do things that you enjoy. Exercise with friends and family for even more fun. There are four main categories of activity that all provide important benefits:

AEROBIC EXERCISE helps to keep your heart strong. Aim to do **30 minutes at least 5 times a week**. Start slowly!

- Walking
- Aerobics (floor, water, or chair aerobics)
- Bicycling
- Tennis
- Dancing
- Gardening
- Playing with grandchildren
- Swimming
- Raking leaves
- Golfing (walk the course!)

STRENGTH TRAINING helps to maintain and build muscle. Try to do strength exercises at least **twice a week**.

- Lifting free weights/using weight machines
- Using resistance bands
- Climbing stairs
- Calisthenics (this includes push-ups, pull-ups, sit-ups)
- Carrying groceries
- Gardening (like digging or hoeing)
- Doing yoga and tai chi exercises

STRETCHING helps you stay flexible and prevent stiffness. Stretch **as often as you can**.

- Basic stretches
- Yoga
- Pilates

BALANCE EXERCISES help you stay steady on your feet. They are especially important as you get older. Do balance exercises **3 or more days a week**.

- Walking backwards or sideways
- Walking heel to toe in a straight line
- Standing on one foot
- Standing from a sitting position

Exercise and blood glucose

How exercise affects your blood glucose will vary depending on how long you are active and other factors. If you take insulin or some diabetes pills, there are a few things you should do to prevent low blood glucose (hypoglycemia) when you exercise.

You can check your blood glucose before exercising. If it is under 100 mg/dl, eat some fruit, crackers, or have a glass of milk or juice. Check it again after exercising to learn how your blood glucose reacts to exercise. Bring a snack if you'll be out and moving for several hours.

Safe exercise

You should warm up, stretch, and cool down to prevent injuries. If you are not active right now, you need to start slowly. You should be able to talk while you are exercising to make sure you aren't working too hard. If you have other medical conditions or diabetes complications, talk to your doctor before increasing your activity. He or she will tell you what kind of activity is safe for you.

Once you can exercise for 10 minutes at a low intensity, add a few minutes each day until you are at your goal. For most people, walking is a good way to start. If you have trouble walking, try activities like swimming, chair exercise classes, or using a stationary bike.

DOES 30 MINUTES SOUND TOO LONG FOR YOUR BUSY SCHEDULE?

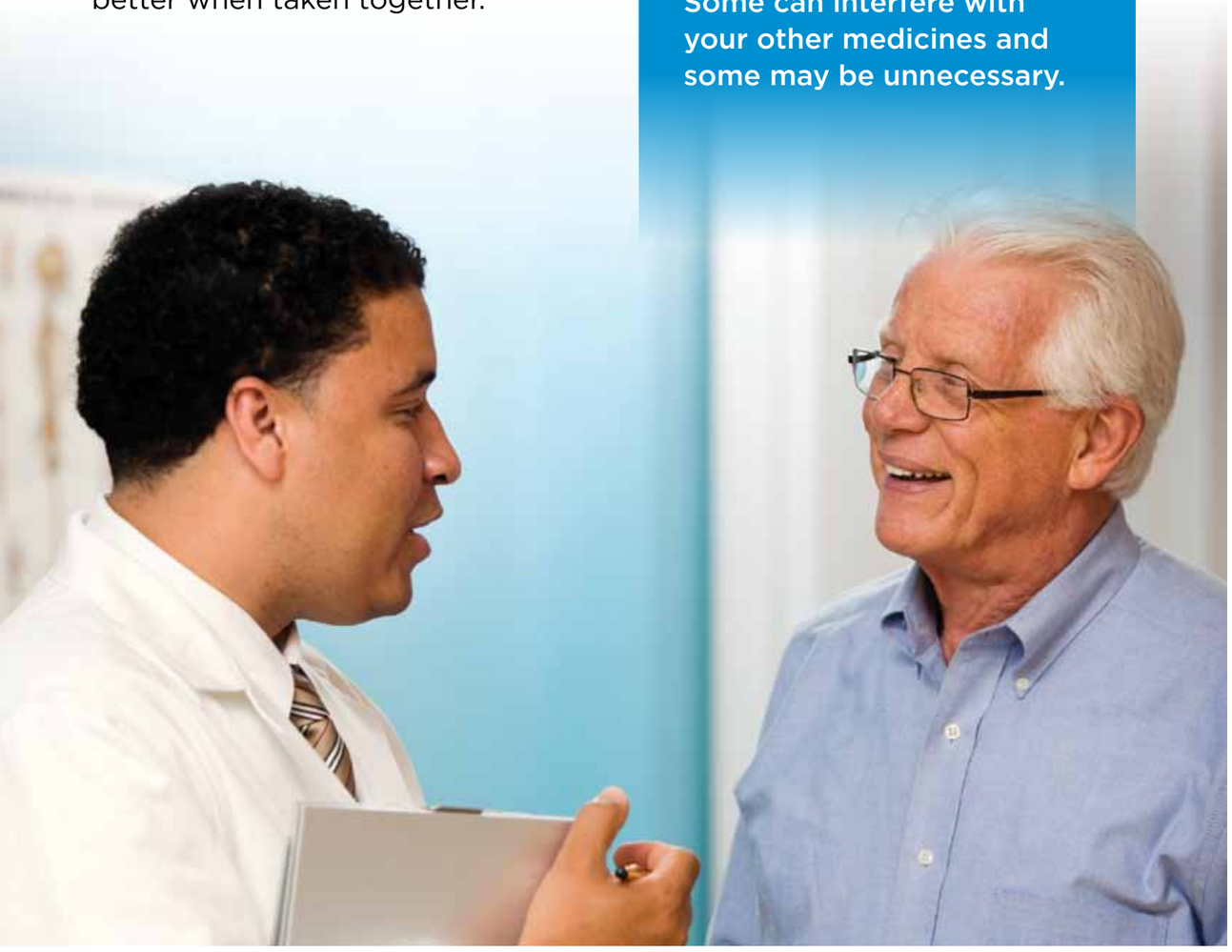
No problem! Three 10-minute spurts of activity throughout the day are just as good as one 30-minute session.

LIVING HEALTHY WITH DIABETES

Medicine for Diabetes

Diabetes Pills

There are many different types of diabetes pills. Each type of pill works differently to help lower your blood glucose. You may need to take more than one because sometimes drugs work even better when taken together.



DIETARY SUPPLEMENTS

Taking a multivitamin can help fill nutrient gaps in your diet, but should not be used as a substitute for healthy foods. It is very important to talk to your doctor about any vitamins or supplements that you use. Some can interfere with your other medicines and some may be unnecessary.

Insulin

Many people with type 2 need insulin as time goes on. This is because the body makes less insulin over time. It doesn't mean your condition is worse or that you are doing something wrong. When you have had diabetes for a while, insulin may become the treatment you need to reach your A1C goal so you feel better and stay healthy. Insulin cannot be taken as a pill. It must be injected or given through a pump.

SPECIAL SUPPLIES

LIVING HEALTHY WITH DIABETES

If you have trouble opening small pill boxes, there are larger, easy-to-open pill boxes available. Some other special supplies include magnifiers for reading medicine labels and blood glucose meters that "talk". If you use reminder alarms for your medicine and also have trouble hearing, try an alarm with a vibration feature.

Keeping Track of Medicines

You may be taking a pill or insulin for your diabetes plus pills for other conditions like high blood pressure and high cholesterol. With a pill for this and a pill for that, keeping track can be a lot of work. Stay on top of your medicine schedule:

- Keep an updated list of your medicines (prescription, non-prescription, dietary supplements including vitamins, and herbal remedies). Record important information about each medicine. The chart on page 17 can help you get started.
- Take all of your medicines exactly as your doctor tells you.
- Use one pharmacy to fill all your prescriptions if possible.
- Keep medicines in a cool, dry place.
- Use a pill organizer.
- Use a reminder timer, an alarm clock, or your mobile phone alarm to remind you when to take medicine.
- Link pill-taking to something in your daily routine (for example, take your medicine right after you brush your teeth).
- Use a chart or dry erase board to keep track of your pill-taking.

What to Expect at Your Doctor Visits

There are several basic tests that can help you and your doctor monitor the effectiveness of your management regimen. Use the chart on page 18 to keep track of the goals you and your doctor set.

AIC – Tells you what your average blood glucose level has been over the past 2-3 months. A1C can also be reported as Estimated Average Glucose, or eAG.

Blood Pressure – Measures the force of your blood in your vessels.

Lipids – Lipids are blood fats. There are three main kinds of lipids.

- HDL: High density lipoprotein or "good" cholesterol
- LDL: Low density lipoprotein, or "bad" cholesterol
- Triglycerides: Another "bad" fat that can build up in blood and block arteries.

Weight – Check your weight at each office visit to see if you are meeting your goal.

Urine Albumin – Measures how well your kidneys are working.

Foot Exams – Take your shoes off at every office visit. Ask your doctor to take a look for any redness, blisters, or cuts on your feet. Your doctor will do a full foot exam to check for signs of nerve damage at least once a year.

Be prepared for your visit.

- Write down your questions beforehand and bring them in with you. See page 19 for a list of questions to ask about your medicines.
- Bring paper and a pen with you to take notes.
- Consider bringing a friend or family member with you too. They can help you keep track of important instructions.
- Bring all of your pill bottles, over-the-counter medicines, vitamins, and herbal remedies with you. Show them to your doctor to make sure that all of your medicines work together.
- If you do not want to bring everything in, bring a complete list of important information about your medicines.

We have included a chart on page 17 to help you keep track of your medicines.

FLU SHOT

Get one every year from your doctor or a clinic near you.

PNEUMONIA SHOT

Make sure you have had a pneumonia shot. You may need a second shot when you turn 65 or if you have other health issues, so be sure to ask your doctor.

LIVING HEALTHY WITH DIABETES

WHAT IF MY NUMBERS ARE HIGH?

Don't panic, but be ready to take action. A combination of meal planning, physical activity, and medicine can help lower your A1C, blood pressure, and cholesterol. Work with your health care team to make a plan.

My Medicines

List every prescription medicine, over the counter drugs, and herbal or vitamin supplements you take.

Note: You may want to make copies of this chart before writing on it for future use.

NAME OF MEDICINE	DOSE	NUMBER OF TIMES/DAY

My Numbers

Measurement		Visit Date _____	Visit Date _____	Visit Date _____	Visit Date _____	Your Goal	ADA Goal for Many Adults
A1C / eAG							<7% / <154 mg/dl
Blood Pressure							<130/80 mmHg
Lipids	Total Cholesterol						
	Triglycerides						<150 mg/dl
	HDL						>40 mg/dl
	LDL						<100 mg/dl
Weight							
Urine Albumin (Protein)							<30 ug/mg creatinine

Note: Your goals may be different from the American Diabetes Association's recommended goals. Talk to your doctor about what your individualized goals should be.

My Diabetes Care Team

Name _____ Phone Number _____

Name _____ Phone Number _____

Name _____ Phone Number _____

Name _____ Phone Number _____

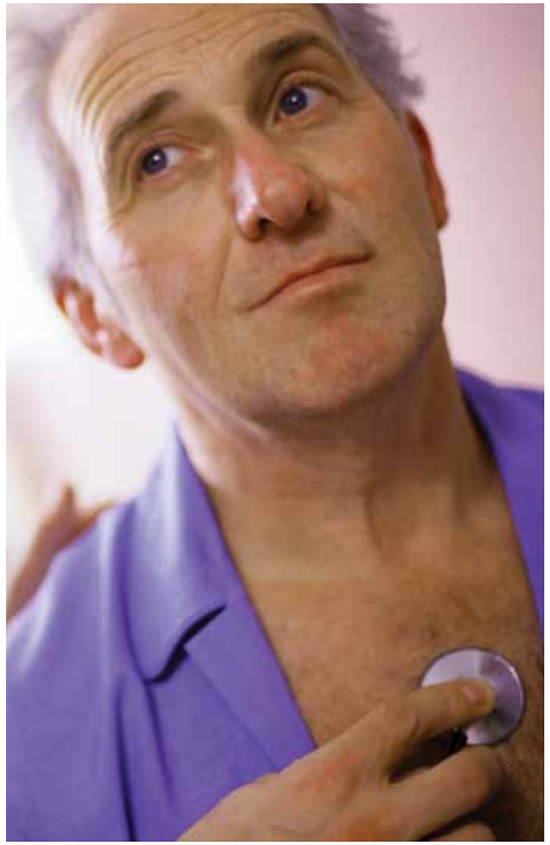
Name _____ Phone Number _____

My Pharmacy

Name _____ Fax Number _____ Phone Number _____

Know the basics about your medicines.

Be ready to ask questions at your next office visit. Here are some questions you may want to ask your health care provider. Make notes on your medication chart (on page 17) or on your own notepad.



- What are the names of my medicines (brand and generic)?
- What is this medicine for?
- When is the best time to take my pills?
- When is the best time to check my blood glucose?
- Are there foods I should NOT eat when I take this medicine?
- Can I drink alcohol with this medicine?
- Are there other medicines I should not take while I'm taking this medicine?
- Can I drive when I take this medicine?
- Are there any side effects? What should I do if I have side effects?
- What do I do if I forget to take this medicine?
- How long will this supply last me?
- How do I refill my medicine?

Traveling With Diabetes

When you have diabetes, you can still go anywhere and do almost anything. It just takes a little extra planning.

Before you leave, get two papers from your doctor: a letter and a prescription.

The letter will list what you need to do for your diabetes and the supplies that you use. Always keep the letter with you in case of emergency or if you are questioned at security. You need the prescription if you run out of medicine and/or insulin during your trip.

Important Travel Tips:

- Always wear a diabetes ID bracelet or necklace.
- Pack twice the medicine, insulin, and diabetes testing supplies as you think you will need in a bag. Keep this bag with you at all times whether you travel by plane, car, boat, bike, or foot.
- Always carry snacks with you that work with your meal plan.
- Have some juice, glucose tablets, or hard candy on hand to treat low blood glucose.

Before a long trip, have an exam to see how you are doing with your diabetes management. You should be in good control before leaving.

If you are going out of the country, learn to say "I have diabetes" and "sugar or orange juice please" in the language that the people speak there. You can also get a list of English-speaking doctors in other countries from the International Association for Medical Assistance to Travelers (IAMAT). Go to their website (www.iamat.org) or call 716-754-4883.

Keep Up Your Routine

Stick to your usual diabetes management plan when you travel: follow your meal plan, be active most days, take medicine as prescribed, and check your blood glucose regularly.

LIVING HEALTHY WITH DIABETES

TRAVELING WITH INSULIN

If you take insulin, do not store it in very cold or very hot places (like your glove compartment, in your checked luggage, car trunk, or in a bag that will be sitting in the sun). There are special packs designed to keep your insulin cool and protected.

Talk to your doctor about what to do if you run out of insulin during your trip. Your doctor can also help you figure out timing of injections and meals if you are crossing time zones. Keep your own watch on your home time zone to help.

Preventing and Treating Diabetes Complications

Having diabetes puts you at risk for other serious health problems.

The good news? You may be able to prevent complications by managing your diabetes. If you are not meeting your goals for A1C, blood pressure, and cholesterol, talk to your doctor about changing your treatment plan.

Here are the most common diabetes complications; if you think you may be developing any of them, contact your doctor as soon as possible.

Heart and blood vessel disease, also called cardiovascular disease, can lead to heart attacks and strokes.

Eye disease from diabetes is known as diabetic retinopathy. People with diabetes also have a high risk for eye problems like glaucoma, cataracts, and blindness. Have your eyes checked once a year.

Kidney disease, or nephropathy, can damage the kidneys' ability to filter out the body's waste products.

Nerve disease, or neuropathy, may cause tingling, pain, or weakness in the feet and hands. If not properly treated, it can lead to amputation.

Nerve disease may cause **digestive problems**, like feeling full early, unpredictable blood glucose levels, diarrhea, or constipation.

Nerve disease can cause **sexual problems** in both men and women.

- **Women** may experience dryness or pain during sex. Your doctor may be able to give you estrogen to treat these problems. Lubricants can also help. Talk with your health care team if you have other sexual problems.
- **Men** may develop erectile dysfunction (ED) due to diabetes. This means that the penis does not become or stay hard enough for sex. Erectile dysfunction can also be caused by other things. Talk with your health care team. They can help find the right treatment for you.

LIVING HEALTHY WITH DIABETES

PROTECTING YOUR FEET

When you have nerve disease, your feet can get hurt easily and you might not even feel it! Check your feet EVERY DAY for redness, sores, cuts, blisters, bruises, rashes, swelling, or ingrown toenails. If you are unable to check the bottoms of your feet, have a family member help or use a mirror.

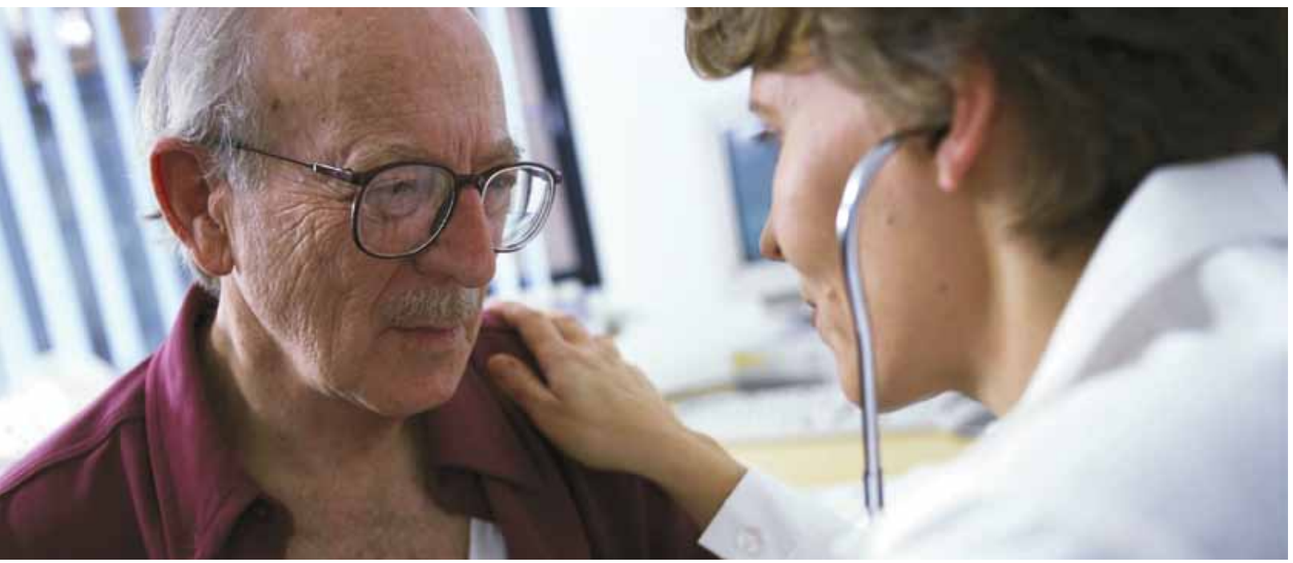
Hearing loss can happen at any age. It is more common in people with diabetes. Family and friends usually notice hearing loss first. Common signs of hearing loss include:

- Frequently asking others to repeat themselves
- Having trouble following conversations that involve more than two people
- Thinking that others are mumbling
- Having problems hearing in noisy places such as busy restaurants
- Having trouble hearing the voices of women and small children
- Turning up the TV or radio volume too loud for others who are nearby

Your doctor may not always screen for hearing loss during a physical. If you know you have trouble hearing, tell him or her right away to avoid miscommunication. Having family or a friend there to listen and write down instructions can also help.

Dental problems and gum disease are more common if you have diabetes. High blood glucose levels weaken your ability to fight germs. Blood flow to your gums is also impaired. If your gums bleed or are red, see your dentist.

Depression is common among adults. It is normal to feel sad sometimes, but if you feel down for more than 2 weeks, you might be depressed. Don't be afraid to ask for help. There are medicines that can help you get back to feeling like yourself. Counseling or psychotherapy with a mental health professional is also an option.



LIVING HEALTHY WITH DIABETES

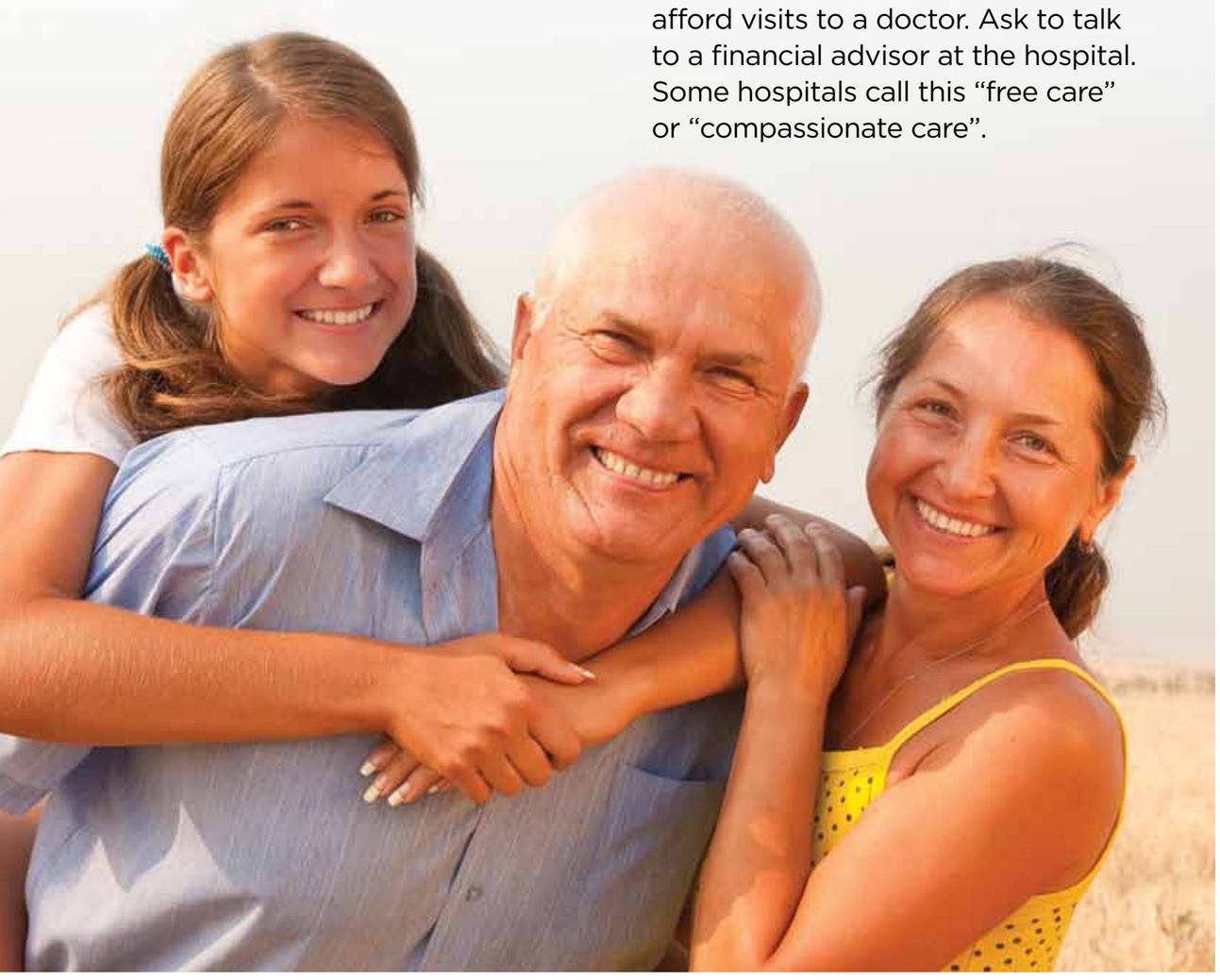
HYPOGLYCEMIA or low blood glucose can be a problem for those who use insulin and some diabetes pills. Signs of hypoglycemia include:

- Shakiness
- Dizziness
- Sweating
- Hunger
- Headache
- Pale skin color
- Sudden moodiness or behavior changes, such as crying for no apparent reason
- Clumsy or jerky movements
- Seizure
- Difficulty paying attention, or confusion
- Tingling sensations around the mouth

TO TREAT HYPOGLYCEMIA:
Eat at least 15-20 grams of sugars or carbohydrates. Use labels to help estimate the number of carbs in a food. Some good quick-glucose sources are ½ cup of regular soda or juice, 1 tablespoon honey or corn syrup, 4-5 saltine crackers, or glucose tablets. After eating, wait 15-20 minutes and check your blood glucose again. If you are still low, repeat the above treatment.

Paying for Healthcare

Healthcare is expensive, and managing diabetes can cost a lot. Here are some tips to lower the cost of healthcare services, medicines, and supplies.



Doctor's visits

- Some doctors will work with patients who can't afford doctor visits because they have no insurance. Ask your doctor if you can be put on a payment plan.
- If your doctor is unable to work with you, find a free or low-cost health clinic near you.
- Most hospitals will provide financial assistance to people who cannot afford visits to a doctor. Ask to talk to a financial advisor at the hospital. Some hospitals call this "free care" or "compassionate care".

Medicine, diabetes supplies, and other services

- Ask your doctor for the generic version of your medicine instead of the name-brand version.
- Check with a local community center or clinic about free or lower-cost test strips.
- Many pharmaceutical companies have prescription assistance programs for people without health insurance. These programs may cover some of the cost of medicines and diabetes supplies. Contact the company directly to ask about these programs or call the American Diabetes Association Center for Information and Community Support at 1-800-DIABETES.
- If test strips are only partially covered by your insurance, shop around for the lowest cost.

Long-Term Care

It may be hard to imagine needing help with everyday activities, but at least 70% of people over the age of 65 will need some kind of help as they age.

Long-term care is any kind of help with routine personal care (feeding, bathing, dressing, etc.). It can be provided at home, in a community center, at a nursing home, or at an assisted living facility.

It may be hard to talk about, but you should discuss the following questions with your loved ones. This will prepare your family to make decisions about long-term care:

- Who do you want to make decisions regarding your care if you are unable to?
- How can you make sure you ease the potential burden on your family?
- What long-term care options are available for you (or for your aging parents)?

It is essential to plan financially for the coming years. Remember that Medicare and health insurance do *not* usually pay for long-term care. Long-term care is usually paid for with your own money. The **National Clearinghouse for Long Term Care Information** can help you explore your options. Just go to www.longtermcare.gov

Medicare

Medicare provides health insurance benefits to people 65 years and older, those under 65 who are disabled, and people with End Stage Renal Disease (ESRD).

There are a few different types of plans. Depending on your plan, cost, benefits, doctor choice, convenience, and quality will change. **For more Medicare information,** call 1-800-MEDICARE or visit www.medicare.gov.

For Caregivers

Most of us will take care of a family member or friend at some point in our lives. Taking care of a loved one as they get older can be hard for the person receiving help as well as the person giving help.

As a caregiver, you should know the basics of diabetes management. This booklet can help, and so can caregiver training if it is available in your community. There are also training books, websites, and videos.

Caregiving can be stressful. Some ways to manage your stress are:

- Continue to take care of your own health. Stay physically active, eat well, and go to the doctor regularly.
- Find someone to talk to when caregiving gets to be too much.
- Avoid taking on additional responsibilities and learn to say "no".
- Ask for and accept help. Involve other friends and family in care.
- Stay organized and prioritize what needs to be done.

CARING FOR SOMEONE WITH DEMENTIA

LIVING HEALTHY WITH DIABETES

There may be a link between diabetes and dementia. Many people have a hard time remembering things as they get older. Being forgetful sometimes is normal, but some people experience serious memory loss, personality changes, or major confusion.

Make things as simple as possible for the person you are caring for:

- **Use a meal plan like the Plate Method.**
- **Create a reminder or alarm system for when to take medicines.**
- **Use a pill box to organize medicines.**
- **Put medicines and glucose checking supplies where they are easy to find.**
- **Use a chart to check off when medicines/insulin are taken to avoid an overdose.**

American Diabetes Association (ADA) Resources

If you have diabetes, then your loved ones are at risk for developing it too. Help them prevent diabetes. Encourage them to live a healthy lifestyle. ADA has many resources to guide you in proper management AND prevention of diabetes.

1-800-DIABETES (342-2383) – ADA representatives from the Center for Information and Community Support are your personal guides to information on diabetes.

Diabetes.org – Find information about living with diabetes, food and fitness, register for special events, buy books, make a donation, and much more.

LIVING HEALTHY WITH DIABETES

SOME ADDITIONAL RESOURCES

The Eldercare Locator will link you to various services. Just call 1-800-677-1116 or visit www.eldercare.gov.

Your Local Area Agency on Aging should be listed in your phonebook in the city or county government section under "Aging" or "Health and Human Services".

National Diabetes Education Program (NDEP) provides other diabetes resources. Just call 1-888-693-NDEP (6337) or visit http://ndep.nih.gov/.

A special message about diabetes and the link to hearing loss

Diabetes and hearing loss are two of America's most widespread health concerns. Nearly 26 million people in the U.S. have diabetes, and more than 34 million* experience some type of hearing loss.

Interestingly, there may be a connection between diabetes and hearing loss. The National Institute of Health (NIH) has concluded that hearing loss is twice as common in people with diabetes than in those who don't have the disease. What's more, among the estimated 79 million adults with prediabetes, the rate of hearing loss is 30% higher than in those with normal blood glucose.

"Hearing loss may be an under-recognized complication of diabetes," states Catherine Cowie, Ph.D., of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) and senior author of a NIH-funded study. "As diabetes becomes more common, it may become a more significant contributor to hearing loss."

How does diabetes contribute to hearing loss? Hearing depends on small blood vessels and nerves in the inner ear. Researchers believe that, over time, high blood glucose levels damage these vessels and nerves, diminishing the ability to hear.

*According to the Better Hearing Institute.

Top 4 myths about hearing loss

MYTH: "I would know if my hearing was bad."
FACT: Because hearing loss often happens gradually, the person experiencing it is often the last to recognize it.

MYTH: "Hearing loss only affects older people."
FACT: Only about 35% of the country's hearing-impaired are older than age 64.

MYTH: "My hearing problem can't be helped."
FACT: Nearly 95% of people with a high-frequency hearing loss (the most common type) can be helped with hearing aids.

MYTH: "I can live with my hearing loss."
FACT: Studies have shown that untreated hearing loss can significantly reduce quality of life.

Visit www.hearpo.com for more facts about hearing loss and hearing aids.

Do you need a hearing test?

Should you get your hearing tested by a HearPO provider? Hearing-impaired individuals (or their loved ones) may notice a number of common symptoms that include:

- ☐ Frequently asking others to repeat themselves
- ☐ Trouble following conversations that involve more than two people
- ☐ Believing that others are mumbling
- ☐ Extreme difficulty hearing in noisy environments, such as busy restaurants
- ☐ Difficulty hearing the voices of women and small children
- ☐ Turning up the TV or radio volume too loud for others who are nearby

If one or more of these symptoms apply to you, call HearPO toll-free at **1-877-785-3790.**

HearPO: a leader in hearing health benefits

HearPO, one of the largest providers of hearing health benefits in the United States, was designed and is managed by audiologists. HearPO offers several key advantages, including:

- **Credibility** — Many years of partnering with prominent employers, insurance companies and private organizations
- **Convenience** — Outstanding hearing care from more than 2,300 credentialed hearing care providers across the country
- **Choices** — Access to thousands of high-quality, name-brand hearing aids
- **Value** — The lowest price on your hearing aids, guaranteed*
- **High satisfaction** — A customer satisfaction rating of at least 90% for more than a decade

Anyone can take advantage of the HearPO plan! Call HearPO toll-free at 1-877-785-3790.

*Competitor coupon required for verification of price and model. Limited to manufacturers offered through the HearPO program. Local provider quotes only; no internet quotes accepted.

HearPO®
Hearing Benefits Made Simple™

a national strategic partner of American Diabetes Association.

HearPO, a National Strategic Partner, aims to make a difference

The good news is, nearly 95% of people who are diagnosed with hearing loss can benefit from hearing aids.

This message is being heard across the country, thanks to the efforts of HearPO, one of the largest providers of hearing health benefits in the country and a National Strategic Partner of the American Diabetes Association.®

"As with many health concerns, hearing loss is most treatable in its early stages," says Dr. Carrie Browning, Au.D., HearPO staff audiologist. "The first step is to be evaluated by a qualified hearing care professional. For anyone who suspects a hearing loss or is at a high risk for a hearing loss, I urge you to get your hearing tested."

Besides promoting awareness of the link between diabetes and hearing loss, HearPO is proud to support the American Diabetes Association's mission to prevent and cure diabetes and to improve the lives of all people affected by diabetes.

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was funded by a grant from

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What Is Prediabetes?

By Kareen Turner, MPH, RD

It's estimated that 79 million adults aged 20 and older have prediabetes — a condition that raises the risk for developing Type 2 diabetes, heart disease and stroke. Also referred to as impaired fasting glucose or impaired glucose tolerance, prediabetes occurs when your blood glucose (blood sugar) levels are higher than the normal range but not high enough to be diagnosed with Type 2 diabetes. If left untreated, 15 to 30 percent of people diagnosed with prediabetes will develop Type 2 diabetes within five years. Fortunately, changes in lifestyle — such as managing food choices, losing weight and increasing physical activity — can help return blood glucose levels to normal.

What Are the Risk Factors?

A direct cause for prediabetes has not been determined, but excess body fat, especially in the abdomen, and inactivity are two key factors. There are few symptoms associated with the onset of prediabetes.
You are at higher risk if:

- You are 45 years old or older and overweight; or
- You are younger than 45 years old but overweight with a history of inactivity, high cholesterol, high blood pressure, or have a family member with diabetes.

What Does a Diagnosis Mean?

With prediabetes, your body may be producing less insulin, your insulin sensitivity may be decreasing, or a combination of both. Insulin regulates the level of blood glucose helping your body turn carbohydrates into energy. Having high blood glucose puts you at risk for developing some long-term effects associated with diabetes such as blindness, damage to nerves and kidneys, and circulatory system problems.

Managing Prediabetes

Studies have identified two effective strategies, to help manage prediabetes.

1. Reduce your body weight by 7 percent. That's about 15 pounds if you weigh 200 pounds. A 7 percent weight loss may not put you at your goal weight but it is a step in the right direction toward managing your blood glucose levels and increasing your sensitivity to insulin.
2. Get at least 150 minutes of exercise a week. A great way to get started is by walking. Aim for 30 minutes of brisk walking five times a week.

A Healthy Meal Plan

Following a balanced diet and eating meals at consistent times can help with weight loss and blood glucose control. Glucose comes primarily from the foods that we eat, specifically carbohydrates — and it's not just sweets. While all carbohydrate-containing foods affect your blood glucose levels, they also play an important role in your overall health by providing energy for your daily activities.
When putting together a meal plan, include a variety of the following foods:

- Grains – whole-grain pasta, breads and cereals, and brown rice
- Vegetables – spinach, romaine, tomatoes and other colorful vegetables
- Protein – lean meat, chicken, fish, lentils and beans
- Dairy – low-fat or fat-free yogurt, low-fat or fat-free milk, and low-fat cheese
- Fats – avocado, walnuts, olive oil

A registered dietitian or registered dietitian nutritionist can help you create a customized plan that takes into consideration your food preferences, age, sex, activity level and medical diagnoses.

Reviewed June 2013

Kareen Turner, MPH, RD, is the director of food and nutrition services at Loma Linda University Medical Center – Murrieta. She is a writer and speaker and specializes in weight loss, medical nutrition therapy and plant-based hospital food service.

Retrieved from: http://www.eatright.org/Public/content.aspx?id=6442477242

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Diabetes Resources for Older Adults

American Diabetes Association®

Diabetes 101

As we age, our risk for diabetes increases. Most older adults who develop this disease have type 2 diabetes. If you already have diabetes, as you grow older you may need to adjust your diabetes care plan.

What Is Diabetes?

Diabetes is a group of diseases. Type 2 is the most common. Other common forms include type 1 diabetes and gestational diabetes.

When you eat, your food is broken down into a sugar called glucose, which gives you energy. To use glucose as energy, your body needs insulin. In diabetes, the body does not make enough insulin or use it well.

The exact causes of diabetes are still not clear. However, we do know that genetics and environmental or lifestyle factors can play an important role in the development of type 2 diabetes and its complications.

Warning Signs & Symptoms

- Unusual thirst
- Frequent urination
- Blurred vision
- Feeling tired for no apparent reason
- Extreme hunger
- Irritability
- Tingling/numbness in the hands or feet

Living With Diabetes

Diabetes is a common disease, yet each of us needs unique care. Blood glucose monitoring is the main tool for checking your diabetes control.

Ask Your Doctor about the ABCs of Diabetes

Hemoglobin A1C tells you your average blood glucose level for the past 2 to 3 months. It can also be reported as Estimated Average Glucose, or eAG.

Blood Pressure control is very important for decreasing the strain on the heart, blood vessels and kidneys.

Cholesterol – lowering cholesterol and fat can help reduce your risk of having a heart attack or stroke.

Choose a Legacy of Health

Learn as much as you can about the latest medical therapies and approaches. Learn how to make healthy lifestyle choices:

- Choose what, how much and when to eat.
- Get moving and stay active.
- Check your blood glucose at home, as needed.
- Take your medicines, as needed.
- Carry a list of your medicines in your wallet and share it with your healthcare provider at each visit.
- Quit smoking.

STOP DIABETES®

Facts & Figures

- Seniors have more diabetes than any other age group – 25 percent of those over age 60 have diabetes.
- Prediabetes occurs when a person's blood glucose levels are higher than normal but not high enough for a diagnosis of type 2 diabetes.
- Type 2 diabetes occurs because the body cannot properly use the insulin it makes.
- Being overweight or obese is a leading risk factor for developing type 2 diabetes and makes treating diabetes more difficult.
- Older adults with diabetes often have high blood pressure, high cholesterol, erectile dysfunction and infections that heal slowly.
- You can help prevent and manage diabetes by losing weight and becoming more active.
- Older adults with diabetes are at risk for heart attacks, stroke and kidney failure.
- Seniors with diabetes are also more likely to have memory problems, depression and difficulty with diabetes self-care.

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Recursos para personas mayores con diabetes

American Diabetes Association®
Por tu familia®

Datos sobre la diabetes

Con la edad corremos mayor riesgo de que nos dé diabetes. Casi todas las personas mayores con diabetes tienen la de tipo 2. Si ya tiene diabetes, quizá con la edad se le haga necesario modificar su plan de cuidados para la diabetes.

¿Qué es la diabetes?

La diabetes es un grupo de enfermedades. La de tipo 2 es la más común. Otras son la diabetes de tipo 1 y la diabetes gestacional (del embarazo).

Al comer, los alimentos se transforman en un tipo de azúcar llamada glucosa, que le da energía. Para poder usar la glucosa como energía, el cuerpo necesita insulina. La diabetes hace que el cuerpo no produzca suficiente insulina o no la utilice bien.

Todavía no se conocen las causas de la diabetes. Sin embargo, sabemos que factores genéticos, ambientales y relacionados con el estilo de vida desempeñan un papel importante en el inicio de la diabetes y sus complicaciones.

Indicios y síntomas

- Sed fuera de lo normal
- Ganas de orinar con frecuencia
- Visión borrosa
- Cansancio sin particular motivo
- Hambre extrema
- Irritabilidad
- Cosquilleo/adormecimiento de las manos y los pies

La vida con diabetes

A pesar de ser común, la diabetes requiere cuidados específicos según cada persona. Estar al tanto de la glucosa en la sangre es la mejor manera de controlar la diabetes.

Consulte con su médico acerca de los conceptos básicos relativos a la diabetes

La prueba de A1C (también llamada hemoglobina glucosilada o hemoglobina HbA1c) le indica el nivel promedio de glucosa en la sangre durante los dos o tres meses anteriores. Los resultados también pueden darse con el Promedio estimado de glucosa (eAG por sus siglas en inglés).

El control de la presión arterial es muy importante para disminuir el esfuerzo que deben hacer el corazón, los vasos sanguíneos y los riñones.

Reducir el nivel de colesterol y grasa le puede servir para disminuir el riesgo de que le dé un ataque al corazón (infarto) o derrame cerebral.

Opte por un legado de salud

Entérese lo más que pueda acerca de lo último en terapias y métodos médicos. Aprenda a tomar decisiones que lleven a un estilo de vida saludable:

- Decida qué, cuánto y cuándo comer.
- Manténgase activo, haga ejercicio.
- Mídase el nivel de glucosa en la sangre según sea necesario mientras este en casa.
- Tome sus medicamentos según sea necesario.
- Lleve en su cartera o billetera una lista de los medicamentos que toma y enséñesela a su proveedor de atención médica en cada consulta.
- Deje de fumar.

ALTO A LA DIABETES®

Datos y cifras

- 25% de las personas mayores de 60 años tienen diabetes. Es la edad que más se ve afectada.
- La prediabetes ocurre cuando el nivel de glucosa en la sangre de la persona es más alto del normal pero no tan alto como para poder diagnosticar diabetes de tipo 2.
- La diabetes de tipo 2 ocurre debido a que el cuerpo no está en condiciones de utilizar de forma adecuada la insulina que produce.
- El sobrepeso y la obesidad están entre los más importantes factores de riesgo para el inicio de diabetes de tipo 2 y dificultan el tratamiento de la diabetes.
- Las personas mayores que tienen diabetes suelen tener presión alta, un alto índice de colesterol, problemas de erección e infecciones que tardan en sanar.
- Usted puede ayudar a prevenir y controlar la diabetes si pierde peso y hace más ejercicio.
- Las personas mayores que tienen diabetes corren el riesgo de tener ataques al corazón, derrames cerebrales y problemas de riñón.
- Las personas mayores que tienen diabetes también tienden a tener problemas de memoria, depresión y dificultad para dedicarse al cuidado de su enfermedad.

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