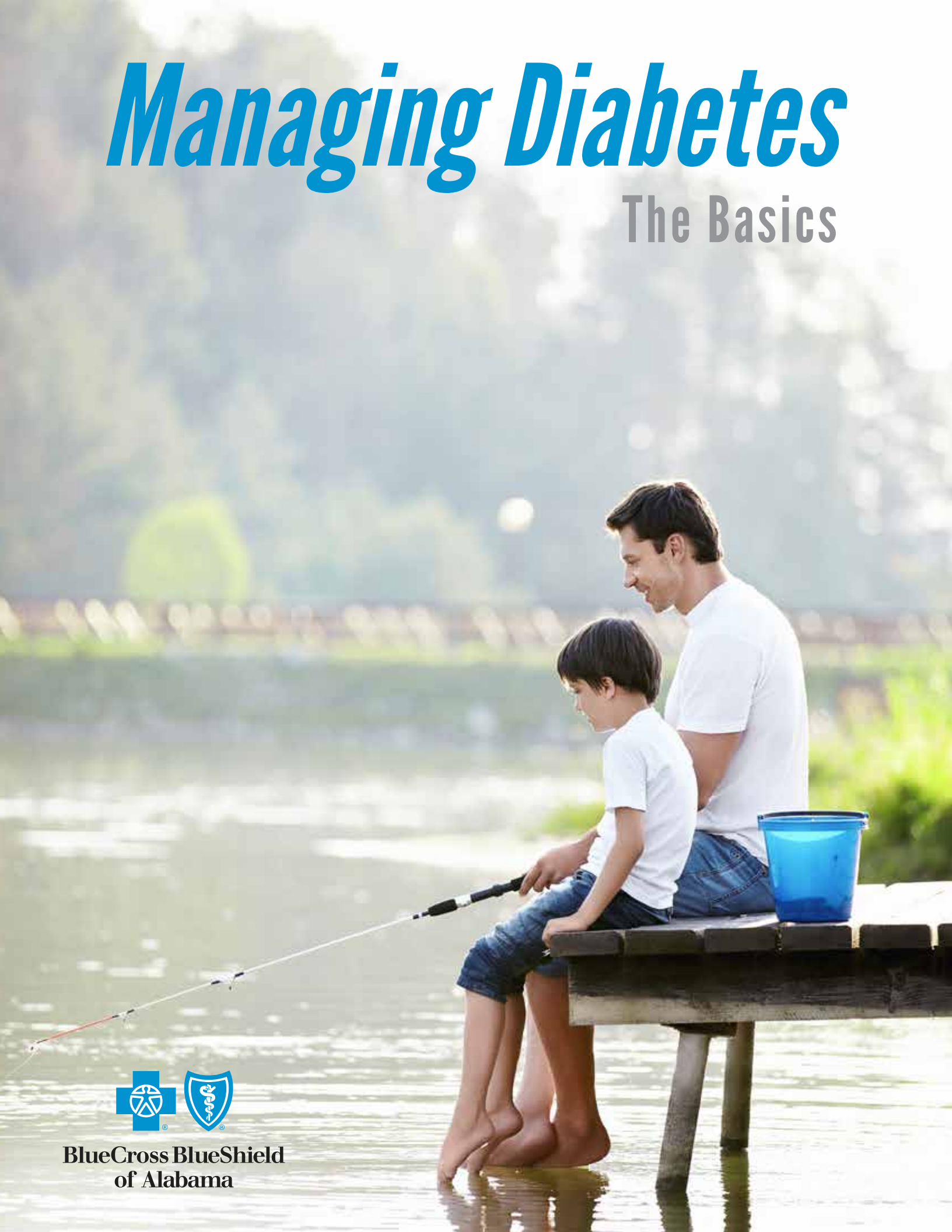


Managing Diabetes

The Basics



BlueCross BlueShield
of Alabama

Blue Cross and Blue Shield of Alabama cares about your health. We developed this publication as a guide to help you manage diabetes. We hope you find these pages helpful as you work with your physician to create a treatment plan.

While diabetes is a chronic condition, meaning that it does not go away, the good news is that it is manageable, controllable and does not have to affect your quality of life. Your life can potentially be as healthy, active and happy as it was before you developed diabetes.



You don't have to fight diabetes alone. Others can help.

This booklet is designed to give you information about diabetes:

what it is, how to treat it, control it, and it explains why diabetes management is so important.

big changes. Trained clinicians can also let you know if a nutritionist and/or diabetic educator is available.

- Family and friends can give love and support, cheer you up, and even offer physical assistance, if needed. Don't ever be afraid to reach out for help.

The best way to maintain or improve diabetes is through a solid diabetes management plan. Use the information in this book and your doctor's advice to create a management plan that works best for you.

Your Diabetes Team

- YOU are the most important part of the team because you are in charge of your actions 24 hours a day. Learn as much as you can about diabetes and how to take steps to manage it.
- Think of your doctor as a coach. Doctors understand diabetes and are the most qualified people to prescribe the best management plan for you and ensure that you can carry it out. They will meet with you regularly to monitor the success of your prescribed management plan and make changes as needed.
- A Blue Cross and Blue Shield of Alabama clinician can help you understand how to manage and live with diabetes. Through phone calls, clinicians will help you carry out your treatment plan and make sure it fits your lifestyle. You may need to take small steps toward making

25.9%

Percentage of
Americans over 65
with Diabetes ¹



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17

Seconds between
new diabetes
diagnoses in the U.S. ¹



67%

Percentage of
diabetics who have
high blood pressure ²

What is diabetes?

Diabetes is a potentially hazardous condition created when your body loses control over levels of glucose (sugar) in the bloodstream. When glucose levels in the body rise too high, it can cause potentially disastrous physical symptoms.

Common symptoms of diabetes include:

- *Increased urination*
- *Unquenchable thirst*
- *Extreme hunger, even when you're eating*
- *Injuries take longer to heal than they should*
- *Blurred vision*
- *Extreme fatigue*
- *Unexplained weight loss (most common with type 1)*
- *Feeling like your hands or feet are asleep or in pain (most common with type 2)*



What is insulin?

Insulin is a hormone that allows your body to use glucose (sugar) for energy. Specifically, insulin helps glucose move from your bloodstream into your body's cells. When your insulin level is off, glucose can build up in your bloodstream. When you have diabetes, you either don't make enough insulin or your body is resistant to your insulin. Both of these situations are controllable.



There are two types of chronic diabetes:

Type 1

Type 1 diabetes, also sometimes referred to as juvenile diabetes, is frequently diagnosed in children and young adults. People with type 1 diabetes cannot produce insulin. Less than five percent of people with diabetes have this type. People with this type are typically diagnosed before they are 20 years old. If you have type 1 diabetes, insulin is required daily, and you will learn to keep your blood sugar at an acceptable level by balancing your insulin with your food and activity.

Type 2

Type 2 diabetes is the most common form of diabetes. 95 percent of diabetics have type 2 diabetes. With this type, a person may still be able to produce insulin, but either their body does not produce enough, or their body's cells ignore the insulin present in the body (insulin resistance). With type 2 diabetes, you may need to take medications. Exercise and meal planning are extremely important to manage type 2 diabetes and keep your blood sugar levels healthy.

Gestational Diabetes

Women who are pregnant sometimes develop gestational diabetes. This is caused when a woman's hormones change during pregnancy and typically goes away once the baby is born. Women who experience gestational diabetes are more likely than other women to develop type 2 diabetes later in life.



18%

of women diagnosed
with gestational
diabetes ¹

Eat Healthy

Diet is possibly the single most important aspect of diabetes management. What you put into your body directly affects your body in many ways. As your body digests food, carbohydrates (starches and sugars) break

Diet is possibly the single most important aspect of diabetes management.

down into glucose which then enters your blood stream. Glucose can make your blood sugar levels spike above a healthy level.

For best results, be sure to read the labels on food and watch how many carbohydrates you take into your body. Try to eat the same amount of snacks and meals each day, and eat around the same time every day. Keeping your body's flow of carbohydrates consistent on a day-to-day basis can help you feel better and decrease the risk of unwanted complications to your diabetes.

It's important that you watch your carbohydrate intake and combine healthy diet with exercise and medication management as prescribed by your doctor.



Create Your Plate

One of the easiest ways to plan your diet is by following the Create Your Plate guidelines provided by the American Diabetes Association at diabetes.org. Half of your healthy plate should be non-starchy vegetables. The other half of your plate should be split between a healthy protein and grains/starches.

Non-Starchy Vegetables	Proteins	Grains and Starches
Spinach	Turkey	Cereals
Lettuce	Chicken	Oatmeal
Kale	Lean Beef	Grits
Green Beans	Pork	Cream of Wheat
Cauliflower	Shrimp	Rice
Broccoli	Oysters	Pasta
Greens	Grouper	Tortillas
Cabbage	Catfish	Bread
Cucumber	Salmon	Sweet Potatoes
Beets	Tuna	Baked French Fries
Okra	Tofu	Black-Eyed Peas
Mushrooms	Eggs	Winter Squash
Peppers	Low-Fat Cheese	Corn

2300 mg

Maximum daily
amount of
sodium the ADA
recommends ¹

1 Start Here
It's important to identify how many servings are in the package. The serving size listed is often much smaller than what you would expect. Some packages may appear to be only one serving, but may actually contain two or three.

2 Check Calories
The number of servings you consume actually determines the number of calories you eat. As a general rule, 40 calories is low, 100 calories is moderate and 400 calories is high for a serving of food.

3 Limit These Nutrients
These nutrients are often too high in our diet. Eating too much of these nutrients may increase risk for certain chronic diseases such as heart disease, cancer and high blood pressure.

4 Get Enough of These
This section includes the nutrients associated with good health, but are often the ones we do not get enough of.

5 Footnote
The footnote at the bottom of the label stays the same and will not change from product to product. It provides recommendations for certain nutrients based on a 2,000 or 2,500 daily calorie diet for all Americans.

6 Quick Guide to % Daily Value
This area is a quick guide to determine if a food is low or high in a certain nutrient. If the % Daily Value is 5% or less, it is considered low, and if the % Daily Value is 20% or more, it is considered high.

Learning how to read a food label is an important step in making better choices for your health. The food label can help you identify the best foods to choose, make food comparisons and balance your food choices.

30
Minutes of exercise a day to improve blood sugar control ³

1

2

3

4

5

6

Nutrition Facts			
Serving Size 1 cup (228g)			
Servings Per Container 2			
Amount Per Serving			
Calories		250	Calories from Fat 110
		% Daily Value*	
Total Fat	12g	18%	
Saturated Fat	3g	15%	
Trans Fat	3g		
Cholesterol	30mg	10%	
Sodium	470mg	20%	
Total Carbohydrate	31g	10%	
Dietary Fiber	0g	0%	
Sugars	5g		
Protein	5g		
Vitamin A		4%	
Vitamin C		2%	
Calcium		20%	
Iron		4%	
* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.			
	Calories	2000	2500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate	Less than	300mg	375mg
Dietary Fiber		25mg	30mg

Information adapted from the U.S. Food and Drug Administration

The Importance of Control

When your blood sugar rises too high too often, it can cause many serious health problems.

- *Changes to how your organs function*
- *Indigestion*
- *Dental issues*
- *Heart problems*
- *Vision changes*
- *Skin and infection issues*
- *Poor kidney function*
- *Pain and numbness in feet*
- *Decreased sexual function*
- *Damage to nerves and blood vessels*

Not only is high blood sugar dangerous, low blood sugar can also cause problems.

You are more likely to develop unhealthy conditions the longer your diabetes remains uncontrolled. Always try to keep your blood sugar levels close to what your

doctor recommends.

The single best method to avoid complications from your diabetes is prevention!

The single best method to avoid complications from your diabetes is prevention!

1,700,000

Number of adults diagnosed with type 2 in 2012 ²

Watch Your Sugar Levels

Your doctor may recommend that you test your blood sugar levels. To do this you would need a blood glucose meter, small needles (lancets), and test strips. You should check your blood sugar as directed by your doctor. It is often recommended that you test your blood sugar three or more times every day if you take multiple insulin injections or use an insulin pump. If you are not on any medications for your diabetes, your doctor will recommend a testing plan that works for you.

Before meals = **70-130 mg/dL**

Two hours after a meal = **<180mg/dL**

Four tips for controlling blood sugar

- *Regular testing as recommended by your doctor*
- *Exercise*
- *Eat healthy*
- *Taking medications as prescribed*



Your doctor will typically also recommend an A1C test 2 - 4 times a year. This blood test gives an estimated average of your blood sugar level for the previous two to three months. The goal for a healthy A1C is less than seven percent. However, some individuals may need to be below six percent to prevent health problems. Always talk to your doctor to determine your A1c goal.



Exercise: Do You Like to Move It, Move It?

Well, you should definitely get moving.

Did you know that physical activity makes your cells more sensitive to insulin? That means physical activity can actually make your body a more efficient glucose processing machine. When you exercise, your muscles burn glucose (sugar) for energy. You may be able to improve your blood sugar levels and better control your diabetes simply by moving more.

So how much should you move? When? What kind of exercise? These are ultimately matters of personal preference, and may depend on your current health and physical abilities.

A period of physical activity can lower your blood sugar levels for up to 24 hours. That's an entire day! However, your body burns most of that blood sugar during the

first four to six hours following your workout. To avoid a low blood sugar event, it's best to exercise around an hour after a meal because that's when your blood sugar levels are typically the highest.

The American Diabetes Association, and most health experts, recommends you exercise a minimum of 30 minutes a day, five days a week. This should be an aerobic exercise, meaning it gets your heart rate up a little. You decide on the intensity, but you should feel like you put some effort into all of your workouts. Aerobic activities are a great way to get in shape or maintain your weight, and staying a healthy weight can be crucial to controlling your diabetes and keeping your heart healthy.

30,000,000

Number of
Americans with
diabetes ¹

Aerobic Exercises 30 minutes a day, 5 days a week	Strength Training 3 days a week
Tennis	Lifting Weights
Walking	Squats
Swimming	Pushups
Running	Pull Ups
Basketball	Sit Ups
Hiking	Crunches
Biking	Planks



You may also want to do some strength training. It's often recommended that you fit in an additional three strength training workouts a week to complement your aerobic exercise routine. Lifting weights, pushups, pull ups, sit ups, squats and other strength training exercises have been shown to strengthen bones and create muscle mass that can protect you from injuries. Plus, strength training simply makes you feel stronger!

Always talk to your doctor before starting a new workout routine or adding intensity to your current routine.

***exercise a minimum of
30 minutes a day...***

Take Your Medicine

Not everyone with diabetes has to take medication. However, many people with diabetes must take medication to stay healthy. People with type 1 diabetes must take insulin to live. People with type 2 diabetes may have to take medicine if their bodies remain unable to control blood sugar levels through exercise and proper meal planning alone. If you require medicine for diabetes, your doctor will most likely prescribe pills, insulin shots or possibly a combination of medications.

Insulin works by helping the glucose in your blood move into the cells of your body so the sugar in your blood properly produces energy. Depending on your doctor's orders and your body's needs, insulin is injected through a tiny needle. Some people with diabetes who require insulin prefer insulin pump therapy. This involves a small device worn outside the body that supplies your body with precise dosages of insulin throughout the day through a needle usually inserted in your abdomen.

The amount and type of insulin you are prescribed will vary depending on your needs. You may need less insulin when you are particularly active. If you eat more than normal, you may have to take more insulin to keep your blood sugar levels under control.



5%

Percentage of
diabetics with
Type 1 ¹

If you take medications for diabetes, be sure to ask your healthcare provider questions.

How much medicine do I take?

How often should I refill my prescription?

When should I take my medication?

Does this medicine need to go on an empty stomach or be taken with food?

What if I forget to take a dose?

Will this medicine affect or cause problems with any other medications I take?

Are there any side effects I should be aware of?

When should I call the doctor about side effects?

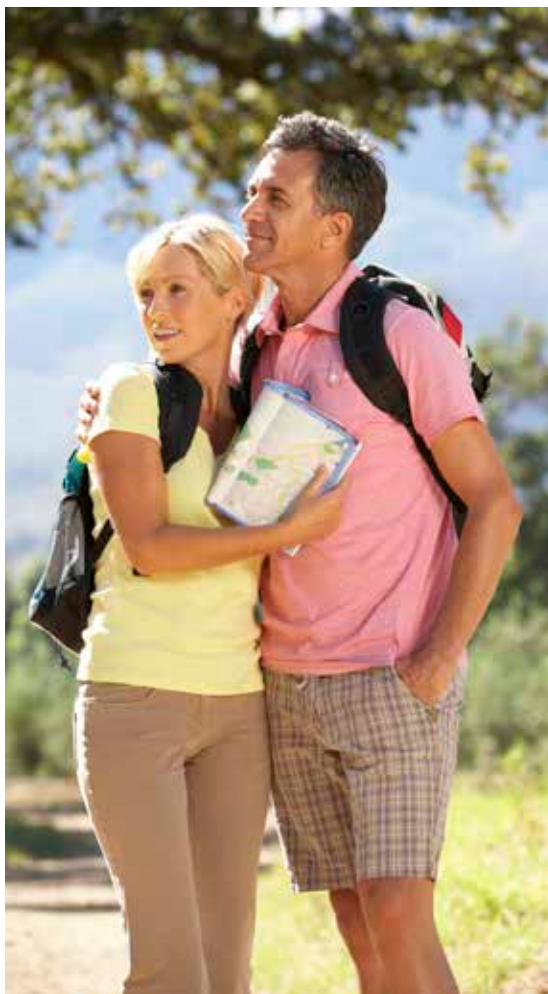
Remember: Never stop taking your medicine without first talking to your doctor.

Diabetes Management Quick Tips

As with any other health condition, taking preventive measures is the best way to prevent future complications to your diabetes.

- *Exercise regularly.*
- *Eat a healthy diet that safely spreads your carbohydrate and sugar intake throughout the day.*
- *Monitor your blood sugar levels as ordered by your doctor.*
- *Take medications as prescribed.*
- *Discuss with your doctor how to adjust your treatment plan if blood sugar remains uncontrolled by your current diet, exercise and medication plan.*
- *Take care of your feet by inspecting them every day, and watch out for any changes to your skin or nails.*
- *Get regular eye exams.*
- *If you smoke, quit!*

Don't forget diabetes affects your entire body, not just your blood sugar levels. Be sure to take care of your feet, skin and eyes. Watch your blood pressure. Your kidneys can be affected by diabetes, too. Be sure to talk to your doctor to see what screening tests may be required to ensure kidney health.



40%

of Americans will develop diabetes in their lifetime ²

Did you know?

People with diabetes who smoke are significantly more likely to experience the following complications:

Heart disease

Kidney disease

Blindness

Chronic nerve pain

Amputations

Fact Sources:

1. American Diabetes Association. www.diabetes.org.
2. Centers for Disease Control and Prevention (CDC). www.cdc.gov.
3. "11 Exercise Tips for Type 2 Diabetes." WebMD. www.WebMD.com.
4. "Diabetes and Exercise: When to Monitor Your Blood Sugar." Mayo Clinic Staff. www.mayoclinic.org.

All information current as of June 2015.

The content is not intended to be a substitute for professional medical advice, diagnosis, or treatment. Always seek the advice of your physician or other qualified health provider with any questions you may have regarding a medical condition.

Stay updated with what we are doing, learn healthy tips and contact us through any of the following:



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alabamablue.com

For more information, go to:

cdc.gov/diabetes

diabetes.org



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