

FREE

DOWNLOAD  
THIS ISSUE  
ON YOUR  
MOBILE DEVICE  
FROM THE  
APP STORE!

WebMD

# diabetes

at *Walgreens*

FLIP OVER FOR  
WOMEN'S HEALTH  
SECTION

**SAVOR  
SUMMER**

New ways  
to bring  
sweet corn to  
your table

**ALSO**

**WORKOUT MOTIVATION  
PREVENT KIDNEY DISEASE  
FIND THE RIGHT METER**

SUMMER 2017  
WIC: 912141





# SAVE UP TO \$200

annually on average with Walgreens  
**TRUE METRIX® Self-Monitoring Blood Glucose  
Test Strips co-pay out-of-pocket.<sup>1</sup>**



**FREE METER!**  
Get a Walgreens  
TRUE METRIX® AIR  
Meter FREE!<sup>2</sup>  
(after mail-in rebate†)

Only \$15 Co-Pay for a 30-day supply of Walgreens  
TRUE METRIX® Test Strips.<sup>3</sup>



Find what you need to live better with Diabetes. Expert advice, supplies,  
medications and savings.



\*Walgreens Pharmacist Survey, November 2014. 1. Data on file. 2015-2016 Prescription Drug Benefit Cost and Plan Design Report. 2. Offer not valid for patients with prescriptions reimbursed by: (i) any government program, including without limitation Medicare or Medicaid or (ii) any third-party payer in the state of MA. Rebate amount cannot exceed: (i) purchase price and (ii) total-of-pocket expenses indicated on receipt. See rebate forms for additional terms and restrictions. 3. Insurance coverage required. Offer not valid in AR, CA and MA. Offer not valid for anyone who is: (i) a beneficiary of a Medicare Part B, Medicare Advantage, Medicaid, TRICARE or other federal healthcare program and/or (ii) a member of certain private health plans. Consult with your Walgreens pharmacist for details. †Rebate form in package. See form for terms, exclusions, expiration, restrictions, and details. Rebate offered by manufacturer. Card required for sale price but not to redeem rebate.

# Summer 2017 CONTENTS



## SAVOR SUMMER

Find new ways to bring sweet corn to your table



Cover: Photography by Rick Lozier  
Food styling by Charlie Worthington



### 4 diabetes Wire

Walking programs, weight loss stats, and more



### 9 diabetes 101

Learn how to involve others in your care for better control

### 10 pop QUIZ

Is your diabetes under control?



### 12 fitness MATTERS

Stay motivated with these tips to keep moving

### 13 body SHOP

Prevent kidney disease with a few key strategies



### 14 health SMARTS

How to find the right glucose monitor

### 16 food IQ

Get the scoop on carbs and keep your blood sugar in check

 **Plus:** Look for this icon to get more information at WebMD.com.

**EDITOR IN CHIEF**

Kristy Hammam

**EDITORIAL DIRECTOR**

Colleen Parety

**SENIOR EDITOR**

Sylvia Davis

**VICE PRESIDENT, EDITORIAL DEVELOPMENT**

Stephanie Snipes

**ART DIRECTOR**

John Todd

**DIGITAL EDITOR**

Alyson West

**CHIEF MEDICAL EDITOR**

Michael W. Smith, MD

**MEDICAL EDITORS**

Brunilda Nazario, MD  
Hansa Bhargava, MD  
Arefa Cassoobhoy, MD, MPH

**VICE PRESIDENT, PUBLISHER**

Vanessa Cognard

**SENIOR DIRECTOR, GENERAL MANAGER**

Mathew Reynders

**SALES OPERATIONS ANALYST**

Kisha Jackson

**CHIEF EXECUTIVE OFFICER**

Steven L. Zatz, MD

**CHIEF FINANCIAL OFFICER**

Blake DeSimone

**CO-GENERAL COUNSEL & SECRETARY**

Douglas Wamsley

**CO-GENERAL COUNSEL**

Michael Glick

**VICE PRESIDENT, FINANCE**

James McCann

**DIRECTOR, POLICY & GOVERNANCE**

Theresa Saladino

**CHIEF COMMUNICATIONS OFFICER**

Adam Grossberg

**ADVERTISING SALES**

**NEW YORK**

Michele Brown  
mbrown@webmd.net  
212-624-3819

Claudia Fern  
cfern@webmd.net  
212-624-3728

Patria Rodriguez  
prodriguez@webmd.net  
212-417-9542

John Schaeztle  
jschaeztle@webmd.net  
212-624-3787

**WEST COAST**

Nicole Jones  
njones@webmd.net  
213-718-5550

**CHICAGO**

Tracy Kennedy  
tkennedy@webmd.net  
312-416-9275

Anna Novinger  
anovinger@webmd.net  
312-416-9278



**PRESIDENT**

Georgine Anton

**CREATIVE OPERATIONS OFFICER**

Dan Davenport

**EDITORIAL**

**EDITOR**

Michelle Rubin

**ASSISTANT EDITOR**

Erin Malloy

**FOOD EDITOR**

Elizabeth Elliott

**HEALTH EDITOR**

Martina Gago

**COPY CHIEF**

Grant Fairchild

**ACCOUNT MANAGEMENT**

**GROUP DIRECTOR**

Marissa Bryan

**ACCOUNT DIRECTOR**

Eric Meisner

**MANAGEMENT SUPERVISOR**

Billie Koester

**PROJECT MANAGER**

Kellie Kramer

**CREATIVE**

**GROUP DESIGN DIRECTOR**

Missy Bergwall

**SENIOR ART DIRECTOR**

Casey Gradischgn

**ART DIRECTOR**

Mekala Johnson

**ASSISTANT ART DIRECTORS**

Amber Hanson, Brittany Long

WebMD Diabetes is distributed at Walgreens stores and to doctors' offices throughout the U.S., online at WebMD.com, and by download from the App Store or Google Play. WebMD Diabetes is not responsible for advertising claims. WebMD Diabetes (ISSN 1553-9948) is published by WebMD, LLC and may not be reproduced in whole or in part without written permission of WebMD, LLC. All WebMD editorial content is reviewed by our board-certified physicians, is for informational purposes only, and is not intended to be a substitute for professional medical advice, diagnosis, or treatment. WebMD does not endorse any specific product, service, or treatment. Always seek the advice of your health care provider with any questions regarding a medical condition and never disregard professional medical advice or delay seeking it because of something you have read in WebMD Diabetes. If you think you have a medical emergency, call your doctor or 911 immediately. © 2017 WebMD, LLC, except as noted. All rights reserved.

# WebMD diabetes

at Walgreens

**WHAT'S HOT AT WEBMD.COM**



Connect and share!  
Join more than 500  
conversations in the  
**Diabetes Community.**



**DOWNLOAD THE FREE APP**

Look for the *WebMD Magazine* app  
in the iTunes App Store.

## Be healthy. Get rewarded.



More ways to get more points  
and more rewards:



**POINTS**  
at the pharmacy\*



**POINTS**  
on products\*



**POINTS**  
for healthy choices†

Start today at [walgreens.com/points](http://walgreens.com/points)

\*Due to state and federal laws, points cannot be earned or redeemed on some items, and points will not be earned in a transaction where store credit or redemption dollars are used. Excludes prescriptions and immunizations purchased in AR, NJ, or NY or on prescriptions transferred to a Participating Store located in AL, MS, OR, or PR. Points on prescriptions and other pharmacy transactions limited to 50,000 per calendar year. Restrictions and other limitations apply. See full terms and details at [Walgreens.com/Balance](http://Walgreens.com/Balance).

†Limitations apply to earning points. Information provided to Walgreens online is covered by the terms of our Online Privacy and Security Policy and the terms and conditions of Balance Rewards. Personally identifiable information reported to earn points is not covered under HIPAA or the Walgreens Notice of Privacy Practices. For full program terms and conditions, visit [Walgreens.com/healthychoices](http://Walgreens.com/healthychoices).



# Diabetes won't slow you down

With a pharmacy that really cares, feeling good every day isn't a stretch. That's why Walgreens is right around the corner for expert pharmacy care in store or online via pharmacy chat. You can count on us for medications you rely on and get \$0 out-of-pocket costs\* on diabetes testing supplies.

Learn more at [Walgreens.com/Diabetes](https://Walgreens.com/Diabetes).

**Walgreens**  
at the corner of **happy & healthy**



\*When billed to Medicare Part B and full coverage supplemental insurance

# 49%

Percentage of overweight and obese adults who are trying to lose weight. Overweight and obesity are on the rise, but those trying to lose weight are on the decline. Researchers say an increasing acceptance of all body types might be the cause.

Source: JAMA

## WALK IT OFF

You know that exercise is an important part of diabetes self-care, but which type is best? Researchers recently compared two different walking programs. For two weeks, adults with type 2 diabetes walked at a moderate pace for an hour a day. During another two-week period, they broke their hour-long walks into intervals of three minutes of fast walking and three minutes of slow walking. During the interval program, people had better blood-sugar control for a full 24 hours after the walk than during the moderate program.

Source: Obesity



# 277

## CALORIES

a 250-pound adult  
burns washing the car  
for half an hour.

Source: USDA



BY Kerri-Ann Jennings  
REVIEWED by Hansa Bhargava, MD,  
WebMD Medical Editor

# SAVOR SUMMER

Sweet and juicy golden corn is a summer staple. Find new ways to bring it to your table with these three recipes.



YOU CAN ALMOST TASTE SUNSHINE WHEN YOU BITE INTO A FRESHLY PICKED EAR OF CORN. A flavorful sign of summer, it's also nutritious. The bright yellow color is a good indication that it's chockful of carotenoids—the nutrients that turn into vitamin A in the body. It's also a starchy vegetable, easily rounding out your plate with more fiber than a refined grain.

## RAW CORN & BLACK BEAN SALAD

Fresh corn shines in this brightly flavored salad. For a mess-free way to cut kernels from the cob, try standing each shucked cob in the center of a bundt pan. The pan will collect the kernels as they fall, ready to team with a sweet-spicy lime dressing. **SERVES 6**

- 4 fresh ears of corn
- 2 cups cherry tomatoes, halved
- 2 cups arugula
- 1 15-oz can black beans, rinsed well (~1 ½ cups drained beans)
- 1 cup packed fresh cilantro, chopped
- ¼ cup minced red onion
- 3 tbsp canola oil
- 2 tbsp fresh lime juice
- 1 small jalapeño, seeded and minced
- 1 tsp honey
- ¼ tsp salt
- ¼ tsp cumin
- ½ cup cotija cheese (optional)

1. Use a large sharp knife to cut kernels off each cob of corn.
2. For salad, combine the corn, tomatoes, arugula, beans, cilantro, and red onion in a large bowl.
3. For dressing, in a small bowl, combine canola oil, lime juice, jalapeño, honey, salt, and cumin.
4. Pour dressing over the salad and toss.
5. Crumble cotija over the top, if using.

**Per serving (without cheese):** 197 calories, 7 g protein, 28 g carbohydrate, 8 g fat (1 g saturated fat), 0 mg cholesterol, 151 mg sodium, 6 g fiber, 5 grams sugar. Calories from fat: 37%.

## SOY-LIME CHICKEN & CORN SKEWERS

These skewers are a perfect meal on a stick, giving you a serving each of protein, carbohydrates, and vegetables. Round out the meal with a big green salad. **SERVES 6**

12 skewers  
⅓ cup water  
¼ cup low-sodium soy sauce  
3 tbsp lime juice  
3 tbsp olive oil, divided  
1 tbsp honey  
3-inch piece of fresh ginger, peeled & grated  
4 cloves garlic, minced  
½ tsp red pepper flakes  
1 ½ lbs boneless, skinless chicken thighs, cut into 1½-inch pieces  
6 small ears of corn, cut into 1½-inch chunks  
2 zucchini, sliced into 1-inch rounds  
2 red bell peppers, cut into 1½-inch wedges  
1 cup crimini mushrooms, washed

1. In a large bowl, combine water, soy sauce, lime juice, 2 tbsp of the oil, honey, ginger, garlic, and red pepper flakes. If you have a small food processor, process the mixture to finely mince the ginger and garlic.
2. Place the chicken in a sealable plastic bag, add the marinade, and let stand in the fridge for 4 to 8 hours.
3. When you're ready to cook, soak 12 skewers in cold water for 30 minutes.
4. While skewers are soaking, heat grill over medium-high heat. Add corn, zucchini, red pepper, and mushrooms to a large bowl and mix in remaining 1 tbsp olive oil and salt.
5. Thread the chicken and vegetables on the soaked skewers. Grill for 12 to 15 minutes or until chicken juices run clear, turning once and brushing with reserve marinade once halfway through grilling. Watch out that the grill doesn't get too hot so the honey doesn't burn.

Per serving: 301 calories, 29 g protein, 22 g carbohydrate, 12 g fat (1 g saturated fat), 92 mg cholesterol, 488 mg sodium, 4 g fiber, 13 grams sugar. Calories from fat: 34%.

➔ For more recipes, search for the Healthy Recipe Finder at [WebMD.com](http://WebMD.com).

## SPICY SHRIMP & SUMMER CORN CHOWDER

You get a double dose of corn in this lighter corn chowder. A bit of cornmeal helps thicken the soup, while a splash of whole milk adds just the right amount of creaminess. Top the chowder with sautéed shrimp for a protein boost that turns it into a complete meal. **SERVES 6**

### FOR THE CHOWDER:

5 ears of fresh corn  
(or 3 cups frozen corn)  
1 tbsp canola oil  
2 celery stalks, chopped (~1 cup)  
1 red bell pepper, diced (1 cup)  
1 large carrot, peeled and  
diced (~3/4 cup)  
½ medium white onion, diced  
2 garlic cloves, minced  
3 cups low-sodium vegetable broth  
¾ tsp smoked paprika  
½ tsp salt  
½ tsp black pepper  
2 tbsp cornmeal  
1 cup whole milk  
Garnishes: cilantro or chives,  
red pepper flakes

### FOR THE SHRIMP:

1 lb shrimp, peeled, deveined,  
tails removed  
1 ½ tbsp canola oil  
½ tsp salt  
½ tsp garlic powder  
½ tsp black pepper  
¼ tsp cayenne pepper

1. Mix the shrimp, oil, salt, pepper, garlic powder, and cayenne in a small bowl and set aside to marinate.
2. Cut the corn off the cobs and set aside in a small bowl.
3. For the chowder, heat a large pot over medium heat, then add the oil. Sauté the celery, red pepper, carrot, onion, and garlic for about 5 minutes, or until fragrant.
4. Add corn kernels, vegetable broth, paprika, salt, and black pepper to the pot. Bring to a slight boil, and then simmer uncovered for about 5 minutes, stirring occasionally.
5. In a small bowl mix together cornmeal with a couple tablespoons of the soup. Pour it into the pot, stir thoroughly and continue to cook for another 10 to 15 minutes or until thickened.
6. Remove from heat and blend the soup to desired consistency.
7. Add milk, and cook on a low heat until heated through.
8. To prepare the shrimp, heat a large skillet over medium-high. Add the marinated shrimp to the pan, cooking 2 to 3 minutes per side until they are opaque with a pink color.
9. Serve the soup in a bowl topped with the sautéed shrimp and optional garnishes.

**Per serving:** 397 calories, 30 g protein, 40 g carbohydrate, 14 g fat (2 g saturated fat), 156 mg cholesterol, 500 mg sodium, 6 g fiber, 12 grams sugar. Calories from fat: 32%.

## ASK YOUR DIABETES EDUCATOR

Mary Moyer Janci of the University of Washington Medical Center advises her patients to come to appointments with their top three questions written down and mention their concerns first thing during the appointment.

**Where can I get good information about diabetes?** Your provider can refer you to classes and support groups. Or visit the American Diabetes Association website ([diabetes.org](http://diabetes.org)) or call 1-800-DIABETES for reliable information about the disease.

**Could I have depression or anxiety?** This is common in people who are newly diagnosed, and it can derail your attempts to adopt diabetes-friendly habits. Your provider can refer you to a mental health counselor or support group for help.

**I have trouble paying for medicines or test strips. How can I make these items more affordable?** Skipping insulin or blood-sugar tests to save money can lead to dangerous complications. Your provider can guide you to get help through Medicare or prescription-assistance programs can refer you to a mental health counselor or support group for help.

➔ Search for the article [Straight Talk about Diabetes](#) at [WebMD.com](http://WebMD.com).

# Helping Hands

Don't go it alone—involve others in your care for better control

BY ERIN O'DONNELL

For people newly diagnosed with type 2 diabetes, one important factor can help ensure success: the support of friends and family.

A 2015 analysis of 26 different studies found that when people with diabetes include others in their care, they have better blood sugar control and fewer diabetes-related complications.

Help from friends and family makes a person more likely to adopt the daily habits that keep diabetes under control, explains Mary Moyer Janci, ARNP, CDE, BC-ADM, clinical provider, educator, and researcher at the Diabetes Care Center at the University of Washington Medical Center. “Patients with support test their blood sugars more often,” Janci says. “They take their medication on a regular basis, change their diet, and incorporate exercise into their life.”

She adds that depression and distress are common, especially at first. “I see it a lot in my patients in those early visits,” she says. “They’re just overwhelmed.” Involving relatives and friends helps ease the pressure.

In her 14 years of providing diabetes care to patients, Janci has gathered these tips and tricks.

**Ask for company at doctor visits**—or at least ask someone to sit with you as you wait for the doctor. “That presence is huge. It says, ‘I care about you, and I’m going to help you with this,’” Janci says.



**Bring a pal for education sessions.** Attend classes or one-one sessions with a certified diabetes educator or registered dietitian, and ask a friend to accompany you. It helps to have an extra set of ears to absorb the torrent of new information you receive when first diagnosed.

**Find a shopping buddy.** Supermarket shopping can seem especially daunting in the early days after diagnosis. “We all know how grocery stores lay things out to look so delicious,” Janci says. A supportive friend can accompany you through the aisles and boost your chances of choosing diabetes-friendly fare, such as apples instead of chips or beans over bacon.

**Make meal prep a social activity.** Invite a friend to make and eat meals with you. Janci knows one woman with diabetes who prepares the week’s meals with her husband over the weekend. They refrigerate them in single-size portions so they have healthy dinners ready for easy re-heating during the workweek.

**Tag-team on medicines.** Keeping track of injections and pills can be tricky at first. Ask a relative or friend to help you remember your medication routine with aids such as cell phone alarms and well-placed sticky notes. “That’s probably one of the most important ways to be helpful,” Janci says, because taking medicine correctly helps keep glucose levels stable.

REVIEWED BY AREFA CASSOQBHOY, MD, MPH, WEBMD MEDICAL EDITOR

## ASK YOUR DOCTOR

**Q.** What kinds of dietary and fitness changes should I make?

**A.** Your doctor or diabetes educator can help you set goals.

**Q.** What other doctors and medical professionals should I see? How often?

**A.** These may include an optometrist and a podiatrist, among others.

**Q.** Will I need injections like insulin or take medications? If so, how often?

**A.** Make sure you understand how to take your medications, and what to do about any side effects.

**Q.** How do I avoid complications? What do I need to be aware of?

**A.** Tight control goes a long way toward heading off any complications of the disease.

➔ Search for the blog post [Why I'm Ashamed to See My Doctor \(But Will Anyway\)](#) on WebMD.com.



# Tight Control

If you have diabetes, monitoring and managing your blood sugar levels to keep the disease from getting worse is crucial. Is your diabetes in control? Take this quiz to find out.

## QUIZ

### 1. I follow a diabetes food plan:

- Every day
- Some days
- I don't have a food plan

### 2. I check my feet for cuts and sores:

- Daily
- Sometimes
- When my doctor reminds me

### 3. I exercise:

- Regularly, checking my blood sugar before and after
- Rarely or not at all

### 4. I check my blood sugar levels:

- Per my doctor's instructions
- When it's convenient
- I rarely remember

## ANSWERS

**1.** A healthy diet and regular exercise are the cornerstones to maintaining good blood sugar levels and controlling type 2 diabetes. If you don't have a diabetes food plan, ask your doctor about seeing a dietitian or nutritionist who specializes in creating these.

**2.** Chronically elevated blood sugars can damage the nerves, including those in your feet, which can make it hard to feel pain. Diabetes can also damage circulation to your feet, which can make it harder for sores to heal. To prevent foot problems, check your feet every day for cuts, blisters, red spots, and swelling. Take care of your nails and skin and wear shoes that fit properly.

**3.** Regular exercise helps maintain blood sugar levels and keep you fit. Get 30 to 60 minutes of activity on most days of the week. Before changing your level of routine physical activity, however, check with your doctor.

**4.** Monitor your blood glucose the way your doctor tells you to. High blood sugar can make you feel thirsty and tired, cause blurry vision, or make you urinate often. Low blood sugar can make you feel weak, tired, confused, or shaky.



## Get vaccinated today

Pneumonia has serious consequences, but getting vaccinated can help keep you healthy. Just talk to your pharmacist.

**\$0 copay with Medicare Part B**

*Walgreens*

at the corner of **happy & healthy**

Vaccines subject to availability. State-, age- and health-related restrictions may apply.

©2017 Walgreen Co. All rights reserved. | 419919-957

# Stay on Course

Feeling your motivation wane?  
Try these tips to move forward.

BY KARA MAYER ROBINSON

## EXPERT TIPS

Manage your workouts with pointers from fitness expert David Weingard.

**Carry fast-acting carbs.** Have energy bars, electrolyte drinks, and glucose tabs to treat low blood sugar during or after exercise.

**Pushing hard? Tap into your stash.** Hypoglycemia is more common for workouts that are vigorous or longer than an hour.

**Drink up.** Dehydration may cause your blood glucose to rise. Sip water before, during, and after workouts, especially in warmer weather.

**Monitor your levels.** Bring a meter and check your blood glucose regularly, especially if you're trying a new activity.

**Test more often in water or cold air.** If you're swimming or exercising in the cold, you may not notice lows as much, so test more frequently.



You know exercise is great for managing diabetes, so you've made it a priority and settled into a groove. Congratulations! But what do you do when it feels like a drag? Conquer roadblocks with these solutions.

**Just lace up.** David Weingard, CEO of the diabetes coaching platform Fit4D, knows how it feels to want to bail on a workout. His trick: Simply lace up.

"Lots of days I wake up with a high blood sugar and just get myself out the door to exercise," he says. "By the time I get back, I've brought my blood sugar levels under control, and I'm mentally pumped up for the day."

**Slip but don't slide.** Expect days when you want to slack off. Highs and lows are normal. The

trick is to accept them and get back on track tomorrow.

Avoid the trap of focusing on negative thoughts. Tell yourself one down day is fine—if it doesn't become a string of them.

**Have fun.** If you dread exercising, you may be doing the wrong activity.

Find something you like. Cardio choices go beyond running and spinning. Try swimming laps or loading your video console with dance games. Not a gym lover? Walk, bike, or run outdoors. Love walking but ditch your plans whenever it rains? Drive to the mall and do laps indoors.

**Try zigzagging.** Doing the same thing day after day can be a slog. Change your patterns and choices. Exercise indoors

one day, outdoors the next. Push yourself extra hard today, go easier tomorrow. Do an elliptical workout one day, a Zumba class the next.

Bonus: Switching it up works different muscles and prevents overuse injuries.

**Join forces.** "Having a good training partner will make workouts more fun and enjoyable," says Weingard.

Recruit friends, family, or others in your community to exercise together. Join a group and sign up for regular workouts. Next time you go walking, invite a neighbor to tag along.

**Log it.** "Detailed record keeping is a key factor in realizing the benefits of exercise and minimizing blood sugar swings," says Weingard.

As part of that record-keeping, start a fitness journal. Record when and how much you exercise, your blood sugar levels, and how exercise impacts them.

Then look for patterns and find what works best for you. Maybe you do better in the morning but not so great at night. Maybe you stick with certain workouts but not others.

**Time travel.** Remember how amazing you'll feel when your workout's in the bag. You'll carry a sense of accomplishment and pride with you all day—and keep your glucose in check.

If that doesn't work, says Weingard, envision tomorrow. "Hang in there on the tough days. Easier moments are right around the corner."

➔ Search for the video **5 Tips to Get You Moving** at [WebMD.com](http://WebMD.com).

REVIEWED BY MICHAEL W. SMITH, MD, CPT, WEBMD CHIEF MEDICAL EDITOR

# Filtered Truth

You can prevent kidney disease with a few key strategies

BY CHRISTINA BOUFIS

You probably don't often think about your kidneys—your body's filtration system—but you need to protect them when you have diabetes. Why? “Three things can contribute to kidney disease. The first is high blood sugar,” says Jason C. Baker, MD, endocrinologist and assistant professor of clinical medicine at Weill Cornell Medical College in New York City. “If it remains high, it can lead to damage of the kidneys—both to the blood vessels that feed the kidneys and to part of the kidneys that filters the blood.”

High blood pressure and high cholesterol are two other things that can damage the blood vessels, “essentially putting pressure on the kidneys,” causing them to work harder and “to leak important things like proteins,” says Baker. A sign of early kidney disease is small amounts of protein in the urine, called microalbuminuria.

How can you prevent kidney disease? First up, keep blood sugar controlled. Studies show that intensively managing blood glucose can halve your risk of developing kidney disease—or halt its progression, if you do have it.

One way to achieve tight control is to test and monitor your blood sugar often at home. “Knowing what your blood sugar is before you eat and drink and knowing what it is one to two hours after is extremely important in understanding if you've eaten the appropriate food or beverage,” says Baker.

In addition to eating foods that help you stay in control of your blood sugar, follow a lower-sodium diet such as the DASH (Dietary



Approaches to Stop Hypertension) diet, says Baker. Research shows that this plan—which emphasizes vegetables, fruit, low-fat dairy, whole grains, fish, and nuts and limits salt, meat, and sweets—is effective for lowering blood pressure. Also, talk to your doctor about blood pressure-lowering medications, such as ACE inhibitors, to see if they're right for you, says Baker.

Next up? “Exercise, which is essential for the health of blood vessels and can protect the kidneys,” says Baker.

Start gradually and build up to the recommended 30 minutes most days. “Something is better than nothing. Take even 10 minutes to exercise. This might mean taking the stairs instead of the elevator,” Baker says, “or getting off the subway a few stops early. These are very simple lifestyle changes that can help prevent diabetes-related kidney disease.”

As for lowering cholesterol, a healthy diet is key, but so is knowing your family history, since cholesterol levels are influenced by your genes. “Talk to your health care provider about your individualized cholesterol goals,” says Baker.

Finally, because most people with early kidney disease have no symptoms, see your doctor regularly to be tested, says Baker. “If we deal with early kidney disease aggressively, many times we can reverse it.”

## ASK YOUR DOCTOR

1. What are my blood sugar goals?
2. What are my blood pressure goals?
3. What are my cholesterol goals?
4. Am I on any medications that can affect my kidney function?
5. How frequently should I get tested for kidney function?
6. What should I eat to control blood sugar, blood pressure, and cholesterol?

➔ Search for the video **5 Facts about Your Kidneys** at [WebMD.com](http://WebMD.com).

# Glucose Check

A blood glucose monitor is an essential tool to help keep your diabetes under control. Here's how to find the right one.

BY STEPHANIE WATSON

With diabetes, numbers are everything. How you feel on any given day hinges on your blood glucose numbers. When they're too low, you feel shaky, dizzy, and irritable. When they're too high, you're tired, thirsty, and unfocused—and you increase your risk for complications like nerve and kidney damage.

“The thing about diabetes is we know all the complications can be prevented by aggressively, effectively managing blood glucose,” says Evan Sisson, PharmD, a certified diabetes educator and associate professor in the Virginia Commonwealth University School of Pharmacy. “The only way for patients to know their blood glucose is to test it.”

## How to Choose a Meter

All blood glucose meters today work in essentially the same way. You put a drop of blood on the test strip. The strip contains chemicals that react to glucose in your blood. When you insert the strip into the meter, the reaction between the chemicals and the glucose creates an electrical current. The more glucose is in your blood, the stronger the current.

Since the basic mechanism is the same, which model you choose largely comes down to features. “It's like buying a car,” Sisson says.

Consider the following when buying a meter:

## Technology

Blood glucose meters have gone high-tech. Many offer features like Bluetooth, which lets you wirelessly transmit readings to your smartphone, tablet, or computer; others have cellular capability that automatically sends data to the cloud so you and your doctor can access it online.

## Size

Meters come in many sizes. Some are about the length and width of a credit card. Others are as large as a smartphone. Which size you choose is mainly based on convenience. A small monitor is more discreet and easier to fit in your purse or pocket. “People with poor dexterity might want to choose a meter that's bigger and easier to hold,” Sisson says. A large, illuminated display is easier to read if you have vision problems.



## Accuracy

All meters have to conform to accuracy standards set by the FDA. Those standards stipulate that 99% of meter readings need to be within plus or minus 20% of your blood sugar level. So if your true blood sugar is 200 milligrams per deciliter (mg/dL), your meter results must be in the range of 160 to 240 mg/dL. As long as your reading falls within that range it shouldn't affect your treatment, Sisson says.

You can check your own meter's accuracy by doing a trial run with the test solution that comes with it. If you have any concerns about your meter, check with your doctor.

## Blood Sample

How much blood you need to draw with each test varies slightly between meters. “The smaller the amount of blood, the more

REVIEWED BY BRUNILDA NAZARIO, MD, WEBMD LEAD MEDICAL EDITOR



comfortable the testing tends to be because the lancet doesn't have to drive as deeply into the finger or create as big a hole," Sisson says. A meter that uses a smaller sample also allows you to draw blood from alternate test sites—such as your palm or forearm. You do need to be more mindful of accuracy when measuring from alternate sites, though. Blood sugar levels in these areas lag behind levels in your finger. They tell you what your blood sugar was 20 minutes ago—not what it is right now. For example, it takes about 20 minutes after a meal for the blood in your palm or arm to reflect your circulating blood sugar levels.

### **Software and Storage**

Blood sugar readings alone might not give you a clear picture of your diabetes control. "Looking at a stream of numbers is often

overwhelming to patients," Sisson says. "Remember in *The Matrix*, when the numbers were all falling down and it looked like rain? When you show patients a stream of numbers written on a page, it doesn't make any sense." Some meters turn this mystifying array of numbers into more readable pie charts or graphs. Then you can easily see your seven-day blood sugar average, or analyze changes in your readings after meals or exercise.

### **Compare Models**

When choosing a new diabetes meter, shop around. Compare the features and costs of several different meters, and get advice from your diabetes educator and pharmacist to find the best meter for you, Sisson suggests.

## **STRIP SENSE**

"The biggest challenge of blood glucose meters is affordability, especially for patients without insurance," says Evan Sisson, PharmD. "A lot of times people think the cost is coming from the meter itself. Really, the cost comes from the strips." Some facts to know:

Most meters cost between \$10 and \$50.

Test strips can run from \$.25 to \$2 per strip, but the cost multiplies with each use. So if you test four times daily, you'll pay between \$7 and \$56 a week in strips.

Medicare will cover part of the cost, as will some private insurance companies. Anyone who doesn't have health insurance needs to calculate how often they check their blood glucose, and the price of their strips, Sisson says.

➔ Search for the video [How to Check Your Blood Sugar](#) at [WebMD.com](#).

# Energy Rewards

Get carb-smart and keep your blood sugar in check

BY SONYA COLLINS



## ASK YOUR DIETITIAN

How many carbohydrates should I eat at every meal?

What's the best timing for meals and snacks?

How does medication affect the foods that I eat?

How can I make healthy choices at restaurants, parties, and family gatherings?

Confused about carbs? Chances are you either think they're the enemy, or you're not sure what they have to do with diabetes at all. Let's get one thing straight. Carbs are not off-limits by any means. But too many—especially the wrong kind—can wreak havoc on blood sugar.

“Carbohydrates—in fruits, vegetables, and starches like bread and pasta—are the body's main source of energy,” says Lori Zanini, RD, a California-based dietitian. The body turns carbohydrates into sugar (glucose), and sugar fuels your cells.

How your cells get that fuel can be tricky when you have diabetes. “Insulin is like a key that unlocks your red blood cells to let the sugar in,” says Zanini, a certified diabetes educator. But if insulin doesn't unlock those cells so they can burn sugar for fuel, the sugar flows freely in the bloodstream and raises blood sugar.

That's why you want to enjoy carbs in a way that will have the least impact on blood sugar. Zanini offers these tips:

**Have a carb routine.** “You want to have the same amount of carbs, around the same time every day, so your body knows what to do with the insulin that it's making or that you're giving it,” Zanini says. Your doctor or dietitian can tell you exactly how many carbs you should get at each meal, but the rule of thumb is 45 to 60 grams.

**Choose “slow” carbs.** “Some carbs digest faster than others, and when it comes to managing diabetes, you want to choose carbs that digest slowly,” Zanini says. Carb-rich foods with more nutrients in them, especially fiber, digest more slowly.

Consider these swaps:

- Whole-wheat bread instead of white
- Whole-wheat pasta instead of regular
- Brown rice instead of white
- Sweet potatoes instead of white potatoes
- Whole-grain oatmeal instead of boxed cereal
- Whole fruit instead of fruit juice
- Naturally sweet foods, like fruit, instead of sugar-sweetened ones like cookies

Under-ripe, rather than over-ripe, bananas go through your system more slowly. Slightly undercooking rice and pasta can slow digestion, too. “Cooked al dente, it's going to have less effect on your blood sugar because the fiber stays intact,” Zanini says.

**Pair with protein.** Because carbs raise blood sugar to some degree, get the most bang for your buck when you eat them. “Combining a carb with a protein will not only keep you full longer, but it also helps stabilize blood sugar because protein doesn't raise blood sugar,” Zanini says.

You may typically serve up protein and carbs at mealtimes, but don't forget to add protein to snacks, too. Rather than having an apple alone, spread a little peanut butter on it. Eat a stick of string cheese with wheat crackers.

**Save carbs for last.** In a small study, blood sugar was significantly lower after mealtimes for people who ate their veggies and protein first and saved their carbs for the end of their meal. Give it a try.

REVIEWED BY HANSA BHARGAVA, MD, WEBMD MEDICAL EDITOR

# HEALTH HAPPENINGS

Products, Ideas & Promotions for Healthy Living



## The Almased Weight Loss Phenomenon™

All-natural formula helps keep your metabolism active, burn fat while retaining muscle mass, and maintain healthy blood sugar levels.

[Almased.com](http://Almased.com)



## Get Healthy Feet with O'Keeffe's

O'Keeffe's® for Healthy Feet provides guaranteed relief for extremely dry, cracked feet. This highly effective formula restores moisture and creates healthy-looking, hydrated skin.

[okeeffescompany.com](http://okeeffescompany.com)