Facing Up to Diabetes

Expert tips for managing your health

TYPE 2 KITCHEN MAKEOVER

FITNESS TIPS FOR BETTER CONTROL

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**Snooze Cues: How can you get a better night’s sleep?**

**Q**: I have diabetes, and I’m not sleeping well. Are the two related, and what can I do?

**A**: Yes, people with diabetes often have reduced sleep quality and quantity. Sleep apnea, medications, lack of exercise, and abnormal glucose and hormone levels—all of which are common in people with diabetes—can disrupt rest. So can nerve pain and frequent nighttime urination (called nocturia), which cause people with diabetes to wake up more often and have trouble falling back to sleep.

Restoring good sleep can be challenging. But many of the steps you take to manage your condition will also help you sleep more soundly and longer. A healthy diet, exercise, and good sleep habits (such as going to bed at a reasonable hour and relaxing in a long bath before bedtime) can make a real difference in both your diabetes and your sleep.

More specifically, you can reduce how often you urinate at night by drinking fewer liquids before bedtime and by elevating your legs for several hours in the evening. This prevents any fluid retained in your body from being reabsorbed into the body, resulting in more urine. If you have sleep apnea, work with your doctor on treatment. Finally, ask your doctor to adjust your medications (or add new ones) to help you sleep better.

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**KITCHEN CONFIDENTIAL**

Healthy food choices are easy when you’ve got the right items on hand. Make over your kitchen with expert tips

**By Erin O’Donnell**

WebMD Contributing Writer

One of the first stops on the road to a healthier you is your kitchen. When it’s stocked with good-for-you—but still tasty—foods, making type 2-friendly choices is a lot easier. Kathleen Zelman, MPH, RD, LD, WebMD’s director of nutrition, tells you what to toss and what to add for the healthiest fridge, freezer, and pantry ever. How’s that for a makeover incentive?

**REFRIGERATOR**

**Toss:** Sticks of margarine

**REPLACE WITH:** Trans fat-free spreads

Type 2 diabetes increases your risk of heart disease. So do the trans fats in some kinds of margarines because they raise LDL (bad) cholesterol and lower HDL (good) cholesterol. Choose trans fat-free brands instead. Also, consider spreads fortified with plant sterols, substances that help block your body’s absorption of LDL cholesterol.

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**KITCHEN MAKEOVER: KCUP HABIT**

By Laura J. Martin, MD

WebMD Contributing Writer

**Annie O’Donnell**

WebMD Senior Contributing Writer

**For a healthier you:**

Replace butter with low-fat yogurt or margarine, which has the right ratio of good vs. bad fats.

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**ASK THE EXPERTS**

**YOUR QUESTIONS ANSWERED**

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**KITCHEN MAKEOVER: KCUP HABIT**

By Laura J. Martin, MD

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**For a healthier you:**

Replace butter with low-fat yogurt or margarine, which has the right ratio of good vs. bad fats.
Toss: Sugar-laden yogurt
Replace with: Plain nonfat or low-fat Greek yogurt
Can you do without the excess sugar and calories of most yogurts? Yes, you can. Plain Greek yogurt skips the sweeteners and contains twice the protein, which helps keep hunger at bay. Add flavor and natural sweetness with fresh or frozen berries or a teaspoon of fruit preserves.

Toss: Sugary sodas
Replace with: Sparkling water
Soft drinks are a top source of empty calories for Americans and contribute to weight gain. They’re also packed with carbohydrates (up to 30 in one can!), which can throw your daily allowance out of whack. Opt instead for calorie-free sparkling water, flavored with sliced lemon, a splash of citrus or cranberry juice, or a few crushed mint leaves.

PANTRY
Toss: Sugar-cereals
Replace with: High-fiber, low-sugar cereals
For a healthy breakfast, Zelman chooses cereals with more than 5 grams fiber and 5 grams protein and less than 12 grams sugar per serving. The fiber and protein combo is filling, so you’re not famished an hour later.

Toss: Peanut butter with sugar and hydrogenated oils
Replace with: Healthier versions
The best butters contain only one ingredient: peanuts. But if your family dislikes “natural” versions, choose one with no partially hydrogenated oils (a source of unhealthy trans fat) and no more than 2 grams sugar per serving.

Toss: Regular chips
Replace with: Baked chips and popcorn
Baked chips have a fraction of the calories and fat of deep-fried chips. An even better choice: healthy versions of microwave popcorn (look for trans-fat-free, 100-calorie packs), a tasty source of whole grains.

STOCK UP
Be sure to always keep these items on hand:

Fruits and vegetables: Loaded with nutrients and fiber that help protect against disease (and lacking saturated fat), fruits and vegetables are healthy diet essentials. Fresh produce can be scarce and expensive in winter, so fill your freezer with frozen versions (but steer clear of those with added sugars). Toss frozen peas with pasta, roast frozen broccoli along with chicken breasts, and whip up smoothies from frozen berries, mango, and yogurt.

Eggs: Compact and inexpensive, eggs are packed with protein (more than 6 grams per egg). And they’re not just for breakfast. A veggie-stuffed omelet or spinach quiche makes a super supper.

Canned beans: A cost-saving and nutritious addition to soups, pasta dishes, and salads, beans deliver protein and fiber and help lower cholesterol. But beware—they’re also a sneaky sodium source. Choose low-sodium versions, and rinse them thoroughly, which lowers their sodium content by 40%, Zelman says. Better yet, go for no-sodium options.

Low-fat dairy: Lower-fat yogurts and cheeses offer all the calcium and protein of full-fat dairy with fewer calories and less saturated fat. Zelman says she almost always prefers low-fat over full-fat versions. “When you pull out all the fat, the texture and the taste are affected,” she says. One exception: fat-free milk. Zelman says she doesn’t miss the fat when she pours skim milk on cereal or vegetables.

Compared with their white-bread cousins, whole-grain rolls are packed with fiber, a nutrient that helps you feel fuller longer. Baked chips have a fraction of the calories for Americans and contribute to heart disease and diabetes. Zelman likes frozen whole-grain dinner rolls, which smell and taste can’t-resist appetizing after a few minutes in the oven.

Sugary cereal: Replace with high-fiber, low-sugar cereals.

TOSS: Premium ice cream
Replace with: Light ice cream or frozen yogurt
Just a half cup of some premium ice creams has more than 300 calories and 10 grams saturated fat—not healthy for people watching their weight and cholesterol levels. When you crave a treat, instead scoop a serving of frozen yogurt or low-fat ice cream, which is less likely to blow your daily fat and calorie allowance.

TOSS: White bread
Replace with: Whole-grain rolls
Compared with their white-bread cousins, whole-grain breads deliver more fiber and more nutrients, such as vitamin E and magnesium. Bonus: Studies show whole grains can help reduce your risk of heart disease and diabetes.

TOSS: Premium chocolate
Replace with: Dark chocolate
Zelman says she doesn’t miss the fat when she pours skim milk on cereal or vegetables. “When you pull out all the fat, the texture and the taste are affected,” she says. One exception: fat-free milk. Zelman says she almost always prefers low-fat over full-fat versions. “When you pull out all the fat, the texture and the taste are affected,” she says. One exception: fat-free milk.

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FRIED SNACKS
TOSS: 100-calorie packs

Baked chips and popcorn: A tasty source of healthy versions of micro-fries and fat of deep-fried chips.

GRILL MATE
LIGHTEN YOUR PLATE WITH THESE SUMMER RECIPES
Kathleen Zelman, MPH, RD, LD, WebMD’s director of nutrition, created this delicious and colorful meal of grilled salmon with black bean corn salsa and salad. It’s a low-calorie lunch or dinner that is rich in fiber, antioxidants, and heart-healthy omega-3 fatty acids. The balance of complex carbs, protein, and good fats makes it diabetes-friendly, too.

➜ Southwestern Grilled Salmon
Makes 4 servings
Ingredients
• 1 15.5–oz can low-sodium whole-kernel corn, rinsed
• 1 16-oz can low-sodium black beans, rinsed
• 1 cup chopped fresh tomato, or 1 14.5-oz can fire-roasted tomatoes
• 1 red pepper, finely chopped, or 1 12-oz jar roasted red peppers, drained and chopped
• 2 tbsp balsamic vinegar
• 1 tbsp olive oil
• 1 tbsp dried basil
• 1 tsp cumin
• 2 tsp lime juice
• Baked tortilla chips

Directions
1. Combine all ingredients except tortilla chips, refrigerate 1 to 2 hours before serving.
2. Serve salsa with baked chips, or top grilled chicken, halibut, or salmon.

Per serving: 118 calories, 6 g protein, 2 g fat, 6 g fiber, 4 mg sodium. Calories from fat: 40%.

➜ Black Bean Corn Salsa
Makes 16 2-oz servings
Ingredients
• 2 tbsp lime juice
• 1 tsp cumin
• 4 4-oz skinless salmon fillets
• 1 tsp chili powder
• 1 tsp salt
• 1 tbsp sherry vinegar
• 1 tbsp olive oil
• 1 16-oz can low-sodium black beans, rinsed
• 1 cup chopped fresh tomato, or 1 14.5-oz can fire-roasted tomatoes
• 1 large onion, peeled, cut into 4 pieces
• 1 yellow bell pepper, cut into 8 pieces
• 1 large clove garlic
• 1 tbsp chopped fresh basil
• dash of salt
• 1 extra-virgin olive oil

Directions
1. Prepare grill or nonstick grill pan to medium-high heat. Coat grill rack with cooking spray.
2. Divide grilled vegetables onto 4 plates, drizzle with vinaigrette, and set aside.

Per serving: 135 calories, 7 g protein, 14 g carbohydrates, 7 g fat (1 g saturated fat), 6 mg sodium, 14 g fiber, 6 g sugar, 60 mg sodium. Calories from fat: 44%.
Two years ago, when Jennifer Auyer’s father died at age 64 from complications related to type 2 diabetes, she faced a turning point in her own struggle with the disease.

Her father’s diabetes had led to heart disease, a quadruple bypass, a foot amputation, and vision problems, among other serious health troubles. “It was a really painful experience, for him and for all of us,” says Auyer, 40, of Nashua, N.H.

Four years ago, she, too, was diagnosed with type 2 diabetes, shortly after giving birth to her child, Grace. “If I were to pass away in 20 years, where would my daughter be?” she asks.

By Katherine Kam, WebMD Contributing Writer

When Auyer was growing up, she never saw her father, a heavy man, exercise. She had become overweight, too. In addition to caring for Grace, she commutes to Boston to work as director of sales for a hotel company. But she eventually decided her busy life could no longer be an excuse to keep from getting into shape.

“I said, ‘I don’t want to go through what he went through.’ I was following the same path, and what am I going to do differently? I wanted to find something to help me. I was desperate.”

When she found out about a weight loss and exercise class at Joslin Diabetes Center in Boston, she signed up fast. In the course, Jacqueline Shahar, MD, a clinical exercise physiologist at Joslin, taught her to do the best exercises for people with type 2 diabetes.

For example, Auyer is now a believer in resistance training and works out with elastic bands to improve muscle strength. This form of strength training helps patients use glucose more efficiently. Shahar says, “If we can get them to do some resistance training, they’re going to be able to increase their muscle mass so they’re actually burning more glucose.”

Other payoffs come, too. “They increase their metabolism and they lose weight,” Shahar says. Resistance training also helps people with diabetes improve their cardiovascular health, lower blood pressure, and reduce abdominal fat. It benefits posture and helps strengthen muscles to prevent injuries. In another big step, Auyer began interval training, which involves repeatedly mixing bouts of high-intensity aerobic activity with less intense work—the segments are called “intervals.” For example, you can pedal fast on a bike for 30 seconds, then go at a slower speed for 90 seconds.

Auyer says of interval training, “It keeps everything fast-paced and fresh.”

At home, long stretches of treadmill walking bored her. But now, she’ll walk on the treadmill for 10 minutes, then run for another few minutes. “Then I’ll jump off and do the resistance bands for a few minutes, then squats or side steps, then maybe I’ll jump back on the treadmill for 10 minutes,” Auyer says. “The next thing you know, an hour has gone by, and I feel so invigorated.”

Shahar advises Auyer and other diabetes patients to exercise at least three or four times a week. Blood glucose levels can keep dropping up to 48 hours after exercising, says Shahar; “I always use this analogy in people with diabetes: Their muscles are kind of sleeping, so they’re not burning glucose or calories. But if they exercise, they keep their muscles awake all the time. They keep burning calories, they lose weight, they make the glucose work more efficiently in their body.”

Auyer is delighted with her improved blood glucose levels. “Almost immediately, I noticed a change in my morning blood sugars, which are always really high,” she says. But after she started exercising, “they were dropping from an average of about 140 to 110. I was so excited one day—I had one under 100.”

She exercises in class once a week to make sure she’s doing it right, then repeats the routines at home. She aims to lose weight gradually—she has about 80 pounds to go—and hopes to eventually run a 5-kilometer race.

Grace is already following by example, playing with the resistance bands when she doesn’t have to go through. “I’m setting her up for potentially having diabetes as well because of the history in my family,” Auyer says. “Hopefully, that won’t be her curse, but if we can cut it now—get her to see that this is what Mommy does, we exercise—then it’s not so foreign.”

Like every working mom, Auyer sometimes gets off her exercise routine for a few days. But she gets back on track by reminding herself why she started. “For me, that reason was my father. This is what he would want and this is important,” she says. “That’s the motivation to keep going.”
It was the 2000 Summer Olympics in Sydney, Australia. Eight of the top swimmers in the world were lined up, ready to hit the pool for the 50-meter freestyle. The buzzer sounded. They propelled themselves into the water. In just under 22 seconds, the race was over. American Gary Hall Jr. had won gold, tying with teammate Anthony Ervin for the medal.

Only a few elite athletes can claim a gold win at the Olympic games, but what makes Hall’s achievement even more exceptional is that he did it only a year after he was diagnosed with type 1 diabetes. At the time, his doctors had told him he’d never swim competitively again. His reaction? “Despair. Utter despair,” he says. “You spend so much time dedicated to fine-tuning your body to be able to compete with the best athletes in the world, and to have your body fail you at a young age—it’s scary.” Hall was 24 at the time, and had no family history of the disease.

The news was devastating to someone who has, as Hall has said, “chlorine in the bloodline.” His father, Gary Hall Sr., was a three-time Olympian who competed on the 1976 U.S. Olympic team along with Hall Jr.’s maternal uncle, Charles Keating III. His mother was also a nationally ranked swimmer. All six of the Hall children were expected to swim, which Hall Jr. began doing competitively by his early teens.

At the 1996 Olympics in Atlanta, he swam away with two silver medals, but he was still reaching for gold. “Winning an Olympic gold medal is the pinnacle, I believe, in any athletic endeavor,” he says.

Winning for the 2000 Olympics while enduring diabetes symptoms like blurred vision and crippling fatigue wasn’t easy. “It was baby steps from the very beginning,” he says. “We did it through trial and error. There weren’t any books on how to win the Olympics with diabetes.”

As a member of the Juvenile Diabetes Research Foundation’s Government Relations Committee (jdrf.org), Hall travels around the country advocating new therapies for the estimated 3 million Americans living with type 1 diabetes. People with type 1 do not produce enough insulin, a hormone needed by the body to use blood sugar (glucose) for energy. Though type 1 used to be known as juvenile diabetes, it can be diagnosed in adults, like Hall, too.

One of his pet projects is the artificial pancreas, a breakthrough system that continuously monitors blood sugar levels and automatically releases insulin to accommodate changing blood sugar levels. He wants to work with insurance companies to get this product to patients who need it. “We need to get this out there as quickly as possible,” he says. Hall has also testified before the Senate, encouraging lawmakers to renew the Special Diabetes Program, which funds diabetes research as well as treatment and prevention programs for Native Americans.

When he’s not focusing on advocacy, Hall serves on the Sanford Children’s International Board, a part of Sanford Health, the nation’s largest nonprofit health care system, which provides medical services to rural communities. Sanford has several diabetes clinics and is engaged in research to find a cure for type 1 diabetes. Hall also promotes a line of nutritional supplements designed to enhance athletic performance. And he’s a consultant for a diabetes documentary tentatively titled Big Shes, profiling famous athletes and musicians with the disease, to highlight the realities of living with type 1 diabetes. Hall says the goal is to release the film in November, coinciding with American Diabetes Month.

These days, what time Hall does spend in the pool is usually in the company of his two children, ages 4 and 6. Yet he’s not pushing them to follow him into the Olympic record books. “I’m more interested in teaching them the proper form of the cannonball,” he says.
Diabetes Quiz
Is your diabetes in control?

If you have diabetes, “tight control”—monitoring and managing your blood sugar levels to prevent the disease from getting worse—is crucial. It’s not always easy.

“It sounds like you are not feeling well and, based on the information you’ve received, you’ve realized it’s time for change,” WebMD member jambajujice recently told a member in the WebMD diabetes community. “Congratulations on the hard work you’ve done to this point...the only thing left is to take the last step: Get control.”

Have you taken that step? Take our quiz.

1. I follow my diabetes food plan:
   - Every day
   - Most days
   - What 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
   - I prefer spectator sports

4. I check my blood sugar levels:
   - Per my doctor’s instructions
   - When I feel like it
   - I rarely remember

Answers: 1. Follow your diabetes food plan. If you don’t have one, ask your doctor about seeing a dietitian/nutritionist who specializes in diabetes. 2. Check your feet every day and maintain proper foot care, including nails and skin. Check for cuts, blisters, red spots, and swelling. 3. Get 30 to 60 minutes of activity on most days of the week. Before changing your level of routine physical activity, check with your doctor. 4. Check 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.

Source: American National Diabetes Education Program and the WebMD Diabetes Health Center

DID YOU KNOW?

Blood glucose levels should be between 70 and 130 before meals (readings taken from monitors that read whole blood).

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QUESTIONS FOR YOUR DOCTOR

1. What kinds of dietary and fitness changes do I need to make?
2. What other doctors and medical professionals should I see? How often?
3. Will I need to inject insulin or take medications? If so, how often?
4. How do I avoid complications? What kinds of things do I need to be aware of?