Superfood Chain
Five essential nutrients you need to eat right now
PG. 4
**HOT TOPICS!**

**WHAT YOU NEED TO KNOW ABOUT DIABETES**

**1 in 4**

Number of people who underestimate the calories in a fast-food meal

*Source: British Medical Journal*

**UNDER CONTROL**

In the past 20 years, people with diabetes have made great strides in controlling blood sugar, blood pressure, and cholesterol. In a study of nearly 5,000 people with diabetes, 20% met all three goals in 2010 compared with only 2% in 1994. More than half met goals in at least one area in 2010. The researchers say the improvement is dramatic and reflects advances in medicine, but there is still work to do. Diabetes control is weakest among young adults and minorities.

*Source: Diabetes Care*

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**Food Facts**

Want to shed some pounds? Try eating at home. Many meals at national chain restaurants are high in calories—the calorie content is listed on the menu. But smaller restaurants that don’t publish nutrition information aren’t necessarily a healthier choice. A study of 157 popular meals at 33 individual or small-chain restaurants found that every meal had more calories than a single meal should. The average contained more than 1,300 calories, enough for two meals. Most people need no more than 2,000 calories a day—fewer if they want to lose weight.

*Source: JAMA Internal Medicine*

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**STEP TO IT**

Some health insurance plans may soon offer discounts of up to 20% to those who commit to healthy lifestyle changes. A recent study shows the plan might just work. When obese members of Michigan’s Blue Choice Plan had the option to pay a higher premium or walk 5,000 steps per day in an Internet-tracked program, nearly half chose to take the extra steps. After a year, 97% had met the program goals, and most had far exceeded them.

*Source: Translational Behavioral Medicine*

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**Fewer than 2**

Number of fruit and vegetable servings the average adult eats daily. The CDC recommends at least five.

*Source: CDC*
It’s not just what you eat. Experts agree that to manage type 2 diabetes and prevent serious complications, being active is key.

Diabetes puts you at higher risk for heart disease and stroke, but physical activity can help fend off both. Plus it can lower your blood glucose, blood pressure, and cholesterol while helping you lose weight (and keep it off) and making you feel stronger, more energetic, and happier.

Starting Line
If you’re new to exercise, start slowly. Try a five-minute walk at a comfortable pace, says Susan Renda, NP, a certified diabetes educator at the Johns Hopkins Diabetes Center in Baltimore. As your energy increases, add a few minutes. Your ultimate goal is 30 to 45 minutes of moderate activity, five days a week.

Time crunched? Breaking up your exercise into three 10-minute spurts has the same health benefits as one 30-minute chunk. You can also squeeze in activities that don’t feel like exercise, such as gardening, cleaning the house, and walking the dog—just be sure to do all these at a brisk pace.

Small things add up. Take the stairs instead of the elevator. “When you’re watching TV, pick up a couple of 2-pound weights and do some arm exercises,” Renda says.

If you have arthritis or leg, foot, or ankle pain, find creative ways to move, like sitting in a chair and dancing with your upper body or “jogging” in a pool.

Keep Going
If your motivation wanes, mix things up. Walk one day, bike the next. Join an exercise group or find a workout buddy. Setting specific, attainable goals and logging your progress can do wonders to keep you going.

Need more motivation? Consider this: Exercise gives you better control of your diabetes. “Look at your blood sugar before you get moving and again a couple of hours after,” Renda says. “Exercise is a powerful way to lower your blood glucose. And it can lower stress and help you sleep better.”

A balanced fitness plan has three components:

- **Aerobic exercise.** Also known as cardiovascular exercise, it increases your heart and lung function, works your muscles, and burns glucose and calories. Good choices: brisk walking, biking, tennis, dancing, swimming, or using gym equipment like an elliptical trainer or treadmill. Strive for 30 minutes, five days a week.

- **Strength training.** It builds muscles, strengthens bones, and prevents weight gain. Bonus: Muscles burn extra calories even when you’re resting. Try lifting weights (or soup cans), using elastic bands, or doing push-ups and squats. Aim for two to three times a week.

- **Stretching.** It keeps your joints flexible, increases your range of motion, and reduces your risk of injury. Five to 10 minutes of post-cardio stretching will do the trick. Also consider yoga or Pilates.

Your Plan
If you already exercise, Renda suggests 10 to 15 minutes of aerobic exercise, then 20 minutes of light to moderately heavy weights, then cardio for another 20 minutes. Finish with five to 10 minutes of stretching.
Take FIVE

The most important nutrients you need in your diet right now

By Kerri-Ann Jennings
Photography by Leigh Beisch

A sharper mind, stronger bones, better glucose control, and more energy: If you want these superpowers, you need superfoods.

And while it’s tempting to just list five must-have foods for your shopping cart, we’ll do you one better and reveal the five most important nutrients, what they do, and how to get them.

**OMEGA-3s**

Nutrition experts will tell you these unsaturated fatty acids are key to your health. But your body can’t make them, which means you need to eat them.

Omega-3s help quell inflammation and build cell membranes, and they also lower your heart attack risk and help your brain work better.

Of the three main types, you get two, EPA and DHA, primarily from fish and other marine foods, including seaweed and oily fish like salmon and mackerel.

The third, ALA, is abundant in some plant foods such as flax, chia, hemp seeds, and walnuts. You can meet your weekly need with two servings of fish and several small handfuls of walnuts and seeds.

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**Collard Greens and White Bean Soup With Italian Chicken Sausage**

White beans provide a healthy dose of lean protein and fiber, and a small amount of chicken sausage adds flavor and an extra helping of protein. Collard greens are extremely high in calcium, and this recipe supplies 19% of the daily value in a single serving. The greens are also high in two kinds of antioxidants—vitamin C and carotenoids—making the soup a superfood standby.

*Makes 4 servings*

**Ingredients**

- 2 tbsp olive oil
- 2 sweet or spicy Italian chicken sausages, cut into ½-inch coins
- 1 cup (about 1 medium) diced onion
- 1 large carrot, diced
- 1 large celery stalk, diced
- 1 lb (about 8 cups) collard greens, ribs removed, leaves stacked and thinly sliced crosswise
- 2 cups cooked white beans (if using canned beans, rinse before using)
- salt and freshly ground black pepper to taste
- 1 bay leaf
- 1 quart low-sodium chicken stock
- ¼ cup grated Parmesan for serving (optional)

**Directions**


2. To the pot, add remaining 1 tbsp olive oil. Lower heat to medium. Stir in onion, carrot, and celery. Cook until onion is translucent, about 8 minutes. Add collard greens, stirring as they wilt and shrink down into the pot.

3. Add beans, salt and pepper, bay leaf, stock, and additional water, as needed, to cover.

4. Simmer soup until the flavors meld, at least 15 minutes. Add sausage into the soup and simmer another minute to heat sausage through. Serve with grated Parmesan, if desired.

**Per serving**

374 calories, 23 g protein, 30 g carbohydrate, 15 g fat (3 g saturated fat), 31 mg cholesterol, 11 g fiber, 2 g sugar, 445 mg sodium. Calories from fat: 38%.

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Reviewed by Hansa Bhargava, MD
WebMD Medical Editor

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**PROTEIN** Made up of amino acids, proteins are the building blocks of every structure in your body, from cells to large organs. Eating protein helps you feel full, a bonus if you’re trying to lose weight. To keep calories, sodium, and saturated fat in check, go for lean proteins (think poultry, fish, lean meat, beans, non- or low-fat dairy products, tofu, and nuts.

Aim to get 10% to 35% of your calories from protein. So if you average 2,000 calories each day, you could eat between 50 and 175 grams of protein. To put that into perspective, an egg has 6 grams of protein; half a chicken breast has 27.

**ANTIOXIDANTS** Green tea and blueberries are just two of many great sources; lots of other plant foods deliver these powerful nutrients. These super molecules combat free radicals, compounds that cause oxidative stress—a chain of events that can lead to cancer, heart disease, and other chronic diseases.

Reap the benefits of antioxidants with a variety of plant foods. Oats, dark leafy greens, berries, avocados, garlic, and coffee are great sources. You may not need supplements or fortified foods that claim to be high in antioxidants.

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**Beef and Broccoli Stir-Fry**

Flank steak is a lean cut that’s a good source of protein and iron (if the steak is grass-fed beef, you’ll get a helping of omega-3s, too). Broccoli and red bell peppers are both loaded with vitamin C, an antioxidant, plus broccoli is a rich source of the carotenoids lutene and zeaxanthin, which promote eye health. Serve with brown rice. Makes 4 servings.

**Ingredients**

- 12 oz flank steak, trimmed and cut into thin strips 1 inch wide and 1 inch long
- 1 tsp fresh ginger, finely diced or grated
- 2 large cloves garlic, peeled and minced
- 1 tbsp low-sodium soy sauce
- ½ cup chicken stock or low-sodium chicken broth
- 4 cups broccoli florets
- 2 tbsp and 1 tsp canola oil
- 1 red bell pepper, cut into ¼-inch wide strips
- black pepper to taste

**Directions**

1. Combine steak with ginger, garlic, soy sauce, orange juice, and 2 tbsp chicken stock. (Steak can marinate several hours ahead of cooking).
2. Steam broccoli until bright green (about 3 minutes) and remove from heat.
3. In a wok or large sauté pan, heat 1 tbsp canola oil over medium-high heat. Remove steak pieces from marinade, brushing off garlic and ginger and reserving marinade. Add steak to pan and cook until starting to brown (about 3 minutes). Remove steak from pan and set aside.
4. Add 1 tbsp canola oil to pan, heat, and add pepper strips. Cook 1 minute. Add steamed broccoli florets and another 1 tsp oil if mixture starts to get dry. Cook another 30 seconds.
5. Add marinade, along with remaining 2 tbsp of chicken stock and cooked steak (if more sauce is needed, add additional chicken stock).
6. Stir and continue to cook another 1-2 minutes, until peppers and broccoli are tender. Per serving (does not include rice)

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**Coconut-Date Muesli**

This take on the classic Swiss breakfast cereal meal delivers a plentiful helping of fiber, a dose of heart-healthy omega-3s from both the walnuts and flaxseed, and antioxidants from the oats and dates. To serve, combine with one-third cup plain low-fat yogurt and one-third cup low-fat milk per half-cup serving of cereal. Let soak at least five minutes, or overnight if you like muesli softer. You can also add grated apples, pears, or frozen berries.

Makes 6 servings.

**Ingredients**

- 2 cups oats
- ¼ cup wheat germ
- ¼ cup flaked coconut
- ½ tsp vanilla extract
- ½ tsp cinnamon
- 5 pitted Deglet noor dates, chopped (not Medjool dates, which are higher in calories)
- 1 tbsp flaxseed, ground (or chia seeds), chopped

**Directions**

1. Preheat oven to 350ºF.
2. In a medium bowl, toss oats, wheat germ, and coconut. Spread into a large rimmed baking sheet. Toast in the oven until coconut starts to get golden and oats become fragrant (12–15 minutes).
3. Remove mixture from oven and sprinkle with vanilla extract and cinnamon.
4. Transfer back to the bowl and add dates, flaxseed (or chia seeds), and walnuts. Stir to combine.
5. Store in an airtight container.

Per serving (½ cup, does not include yogurt, milk, or extra fruit)

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**FIBER** The indigestible part of plant foods helps regulate your digestive tract and lowers cholesterol and blood glucose levels. For people with diabetes, one kind of fiber—soluble fiber—is particularly important. It helps your body absorb sugar from carbohydrates more slowly, which keeps blood sugar from spiking.

When you eat fiber, you feel full longer. The Institute of Medicine (IOM) recommends at least 25 grams of fiber a day for women, 38 grams for men. For example, three-fourths of a cup of oatmeal (13 grams), one cup of cooked winter squash (6 grams), one-half cup of beans (8 grams), and 1 cup of raspberries (8 grams) would meet the daily quota for women. For men to get to the 38 grams they need, add an artichoke (10 grams) and an ounce of almonds (5 grams).

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**CALCIUM** It’s important for building strong bones, and calcium also plays a critical role in blood clotting and sending nerve signals throughout the body. The IOM recommends that most adults get 1,000 milligrams a day, while women over age 50 and men over age 70 need 1,200 milligrams.

Obvious sources are low-fat and nonfat dairy products and fortified nondairy products, but calcium is also plentiful in kale, bok choy and collard greens, white beans, canned sardines and salmon (if you eat the bones), and rhubarb.
If you have type 2 diabetes, you no doubt have a checklist of management tools to help keep your blood sugar under control. Is getting enough good-quality sleep on your list? Increasingly, research suggests it should be.

“A very large proportion of people who have type 2 diabetes have self-reported poor sleep and short sleep,” says Eve Van Cauter, PhD, professor of medicine and director of the Sleep, Metabolism, and Health Center at the University of Chicago. “We don’t know why that is,” she adds. But researchers do know that about two out of every three people with type 2 diabetes have a sleep-related disorder called obstructive sleep apnea (OSA).

With OSA, your upper airway partially collapses during sleep, causing frequent pauses in breathing. As a result, you wake up dozens of times a night, often gasping for air, but may not remember doing so. That’s why many people with type 2 diabetes have OSA and don’t even know it, says Van Cauter. One 2012 study suggests that as many as 19 million people with type 2 diabetes have undiagnosed OSA.

What does insufficient shut-eye have to do with blood sugar? “First of all, people who have short sleep or sleep disorders tend to have lower brain glucose utilization during the daytime, so the tired brain uses less glucose, the main fuel for the brain,” Van Cauter explains. “Second, there’s evidence that sleep disorders, insufficient sleep, [and] poor-quality sleep are associated with increased sympathetic nervous activity—a kind of stress response known to promote insulin resistance,” she says. This stress response not only makes your body less sensitive to insulin but also inhibits insulin from being released by the pancreas, both of which hurt glucose regulation, she says.

While researchers speculate that lack of sleep and poor-quality sleep make managing type 2 diabetes more difficult, they’ve yet to prove a cause-and-effect relationship.

Still, there’s no need to wait until all the evidence is in. See your doctor if you suspect you have sleep apnea, and practice good sleep hygiene.

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