

## BELLY FAT

### *What Your Waistline May Say About Your Health*



Belly fat isn't limited to the extra layer of padding located just below the skin (subcutaneous fat). It also includes visceral fat — which lies deep inside your abdomen, surrounding your internal organs. Visceral fat is associated with far more dangerous health consequences.

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An expanding waistline is sometimes seen as the price of getting older. For women, this may be especially true after menopause, when body fat tends to shift from the arms, legs and hips to the abdomen. Yet an increase in belly fat may do more than make it hard to zip up your jeans. Research indicates that it also can raise your risk of numerous health consequences. The good news is that this health threat can be cut down to size.

#### Battle of the bulge

Your weight is largely determined by how you balance the calories you eat with the energy you burn. Overeating and lack of physical activity are the main reasons why people pack on excess pounds.

However, aging also can contribute to weight gain as well as to an increase in body fat. That's because as you age, you gradually lose muscle and fat accounts for a greater percentage of your weight. Less muscle mass also leads to a decrease in the rate at which your body uses calories, which can make it more challenging to lose or stay at the same weight.

At midlife, many women see their midsection start to widen, even if they aren't gaining weight. This is likely due

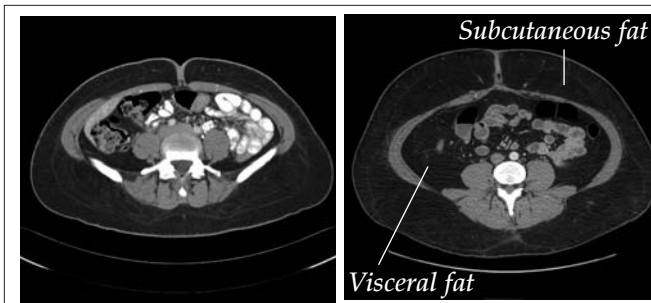
to decreasing levels of estrogen, which appears to influence where fat is distributed in the body. The tendency to gain or carry weight around the waist — have an "apple" rather than a "pear" shape — can have a genetic component as well.

#### More than skin deep

Although putting on too much weight, in general, can have negative effects on your health, abdominal weight gain is considered particularly unhealthy. In fact, research has shown that having a wide waist measurement — 35 inches or more in women and 40 inches or more in men — is an important, independent risk factor for disease.

The trouble with belly fat is that it's not limited to the extra layer of padding located just below the skin (subcutaneous fat). It also includes visceral fat — which lies deep inside your abdomen, surrounding your internal organs.

Subcutaneous fat is hard to ignore because you can see and grab hold of the extra layer of cushioning it creates. However, research has shown that visceral fat, although not clearly visible, is associated with far more dangerous health consequences. That's because an excessive



The CT scan at left shows the belly fat distribution in a woman with a normal body mass index (BMI). The scan at right shows belly fat in an obese woman. Note the increase in the fat located just below the skin (subcutaneous fat) as well as the fat surrounding the internal organs (visceral fat).

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amount of this fat produces substances that can raise blood pressure, negatively alter good and bad cholesterol levels, and impair the body's ability to use insulin (insulin resistance). All of this can increase the risk of cardiovascular disease, stroke, type 2 diabetes and other serious health problems. An excessive amount of any fat, including visceral fat, also boosts estrogen levels. This can increase the risk of breast and colorectal cancers.

Research has also associated belly fat with an increased risk of premature death — regardless of weight. In fact, some studies have found that even when women were considered a normal weight, according to standard body mass index (BMI) measurements, a large waistline elevated the chance of dying of cardiovascular disease, cancer and other causes.

### Trimming the fat

You can firm up abdominal muscles with exercises such as sit-ups. However, this won't get rid of belly fat. Fortunately, visceral fat responds to the same diet and exercise strategies that can help you shed pounds and lower your total body fat.

When it comes to your diet, emphasize plant-based foods, such as fruits, vegetables and whole grains, and choose lean sources of protein and low-fat dairy products. Dietary guidelines also recommend limiting saturated fats — which can be found in meat and high-fat dairy products, such as cheese and butter.

Monounsaturated and polyunsaturated fats found in fish, nuts and vegetable oils — such as olive, safflower, peanut and corn oils — are a good substitute for saturated fats. In fact, these "good" fats actually can improve blood cholesterol levels, which can decrease your risk of cardiovascular disease. However, even these fats should be used in moderation to avoid taking in too many calories.

If you want to lose weight, reduce your portion sizes and cut back on calories. Slow and steady weight loss — 1 to 2 pounds a week — is the best way to lose excess fat and keep it from coming back. Your doctor can provide more information on how to get started and stay on track.

Regular physical activity also can help reduce belly fat and the impact it can

have on your health. The Department of Health and Human Services recommends that healthy adults engage in moderate aerobic activity for 150 minutes a week or vigorous aerobic activity for 75 minutes a week. It's also recommended that you do some strength training at least twice a week. Moderate physical activity includes activities such as brisk walking, hiking, gardening and bicycling; vigorous physical activity includes running or jogging, swimming and fast walking.

Keep in mind that you may need to increase the amount of time you devote to physical activity each week to lose weight or keep it off. However, before starting any new activity program or increasing your current activity level, check with your doctor to find out what might be best suited to your current health condition and weight-loss goals. ■

### Measuring Your Middle

Like it or not, waist size matters. That's because your waist measurement is a good indicator of whether you're carrying too much fat around your belly.

Other measurements — such as your body mass index (BMI) or waist-hip ratio — can be helpful. Yet they may not be as good at showing your body fat percentage or fat distribution, particularly after menopause. To measure your waist circumference:

- Place a tape measure around your bare stomach, just above your hipbone (at about the level of your navel).
- Pull the tape measure until it fits snugly around you, but doesn't push into your skin.
- Make sure the tape measure is level all the way around.
- Relax, exhale and measure your waist, resisting the urge to suck in your stomach.

Having a waist circumference of 35 inches or more indicates that you have an unhealthy concentration of belly fat and are at a greater risk of problems such as cardiovascular disease, high blood pressure and type 2 diabetes. For men, a waist measurement of 40 inches or more is considered cause for concern. ■

## NEWS YOU CAN USE

### Diabetes Plus Depression Can Be Deadly Combination in Women

Diabetes and depression are serious illnesses on their own. Yet in combination, they can be quite deadly, according to a study in the January 2011 *Archives of General Psychiatry*.

Researchers collected data on more than 78,000 women, ages 54 to 79, participating in the Nurses' Health Study. After six years of follow-up, they found that women who had diabetes had about a 35 percent increased risk of dying of cardiovascular disease and other causes, and those with depression had about a 44 percent increased risk, when compared with women without either condition. However, women with both conditions had about twice the risk of death than did women without either disease.

Having diabetes can increase the risk of depression, and depression can make it more difficult to properly manage diabetes. Fortunately, both diseases can be effectively treated. If you have diabetes and develop symptoms of depression — such as a loss of interest in daily activities, feelings of hopelessness and trouble sleeping — see your doctor as soon as possible. ■

### Antibiotic Treatment May Ease Symptoms of Irritable Bowel Syndrome

A recent set of studies indicates that an antibiotic known for treating traveler's diarrhea could offer a new treatment option for irritable bowel syndrome (IBS) — a common gastrointestinal disorder characterized by abdominal pain, bloating, gas, and constipation or diarrhea.

The studies, reported in the Jan. 6, 2011, *New England Journal of Medicine*, involved 1,260 adults with a form of IBS that doesn't involve constipation. Each of the participants was given either the antibiotic rifaximin (Xifaxan) or a placebo three times a day for two weeks.

During the first month after treatment, nearly 41 percent of those who took rifaximin reported adequate symptom relief for at least two weeks. Only 32 percent of those who took the placebo reported relief.

Other medications can help ease some signs and symptoms of IBS, but they work only while they're being used. Rifaximin may provide longer relief by altering an overgrowth of bacteria in the small intestine or affecting the type or quantity of bacteria living in the colon.

It's still not clear who might benefit most from taking rifaximin or whether this antibiotic can be used long term without causing antibiotic resistance. Widespread use of the drug for IBS may not be recommended until more research can be done. ■

### Age-Related Macular Degeneration May Be on Decline in U.S.

Age-related macular degeneration (AMD) is a leading cause of vision loss in older Americans. Yet even though the population is aging, a study in the January 2011 *Archives of Ophthalmology* suggests that AMD has become less prevalent in the last two decades.

Researchers collected data from the 2005 to 2008 National Health and Nutrition Examination Survey (NHANES) and compared it with another version of NHANES conducted between 1988 and 1994. Based on their analysis, the researchers found that the percentage of U.S. adults age 40 and older with signs of AMD declined from 9.4 to 6.5 percent.

AMD gradually destroys central vision — which is needed for reading, driving and other everyday tasks. Increasing age is the greatest risk factor. Yet other factors — including family history, smoking, obesity and high blood pressure — can increase the likelihood of developing the disorder.

Researchers say lower rates of smoking and improvements in blood pressure control may help explain the apparent decrease in AMD prevalence. However, that doesn't mean AMD is no longer a threat. In addition to not smoking and managing conditions such as high blood pressure, experts recommend maintaining a healthy weight, eating a diet that includes vitamin-rich fruits and vegetables, and getting routine eye exams. ■

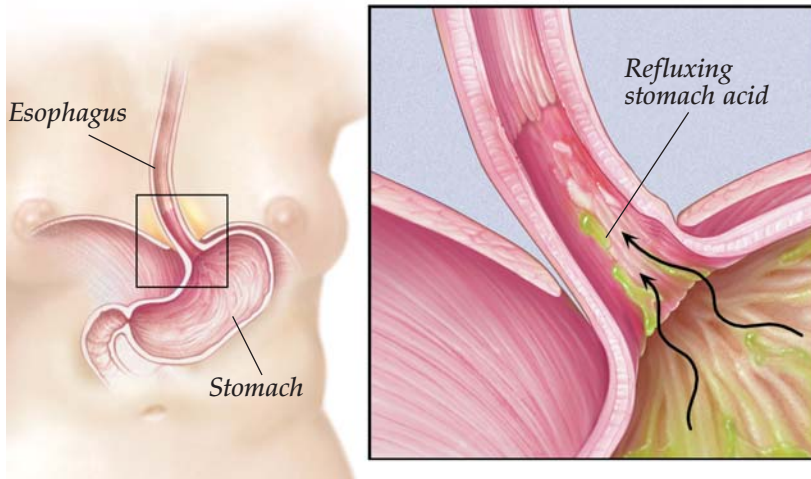
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# HEARTBURN

## *Find Relief Without Overdoing the Medications*



**Heartburn, also referred to as acid reflux, happens when stomach acid flows back (refluxes) into your esophagus. The burning sensation often begins in your chest and spreads toward your throat. Acid regurgitation also may occur and can lead to a sour or bitter taste in your mouth.**

The meal tastes great ... until you lie down and your chest starts burning. If you're like many people, you have some antacids or another medication on hand for heartburn — a problem so common that it has become a multibillion-dollar business.

Heartburn, also referred to as acid reflux, happens when stomach acid flows back (refluxes) into your esophagus. The burning sensation often begins in your chest and spreads toward your throat. Acid regurgitation also may occur and can lead to a sour or bitter taste in your mouth. Heartburn often follows a large meal and particularly may occur while you're lying down or bending over. Many women first experience heartburn during pregnancy, as a result of hormonal changes and pressure from the baby.

Often, occasional heartburn can be controlled with diet and lifestyle changes. Frequent heartburn may signal a more serious problem. Before you take a heartburn medication, however, take time to learn about the options. Heartburn drugs may be overused — and aren't always needed or helpful.

### **A symptom, not a disease**

Heartburn isn't a disease in itself, but rather a symptom of various conditions — most commonly, gastroesophageal reflux disease (GERD). Normally, the valve between your stomach and esophagus closes quickly after you swallow food to

prevent stomach contents from coming back into the esophagus. With GERD, problems with this valve may prevent it from closing all the way, allowing stomach acid to flow backward (reflux) into the esophagus and irritate it.

Other conditions associated with heartburn include an inflamed stomach lining (gastritis), peptic ulcer, chronic abdominal discomfort (dyspepsia) and hiatal hernia, which occurs when part of the stomach pushes into the chest.

### **Diagnosing the problem**

Frequent heartburn or acid regurgitation can lead to more-serious health problems if untreated. If you experience heartburn twice a week or more, have difficulty swallowing, or have accompanying nausea or unintentional weight loss, see your doctor. GERD can often be diagnosed based on signs and symptoms alone.

Tests may be done if your signs and symptoms indicate a more serious condition, if the diagnosis isn't clear or if your heartburn doesn't go away with treatment. For example, your doctor may do a procedure called endoscopy — which uses a thin, flexible tube with a light and camera on the end — to examine your esophagus for changes or signs of damage and take biopsy samples, if needed.

### **Treatment with lifestyle changes**

If you get heartburn just once in a while, changes in your diet and lifestyle might help prevent or control your signs and symptoms. Use a diary to track whether certain foods or activities trigger or worsen your heartburn. Try these strategies, as appropriate:

- Raise the head of your bed by putting blocks under the bedposts.
- Ask your doctor to help you quit smoking. Cigarettes aggravate heartburn.
- Work on shedding excess pounds.
- Avoid foods and beverages that give you heartburn. Common triggers

include coffee, alcohol, fatty and fried foods, chocolate, carbonated drinks, and mint.

- After meals, wait at least three to four hours before you lie down.
- Eat smaller meals.
- Ask your doctor if any medications you take might cause or worsen heartburn.
- Avoid tightfitting clothes, such as body shapers and belts at the waist.

### Treatment with medications

If lifestyle changes don't help, you might benefit from medication. Three main types of drugs can relieve heartburn.

#### Antacids

Over-the-counter antacids, such as Maalox, Mylanta, Pepto-Bismol, Phillips' Milk of Magnesia, Riopan, Roloids and Tums, are usually the first type of medication recommended for heartburn. They use different combinations of magnesium, calcium and aluminum with other substances to neutralize the acid in your stomach. Antacids provide rapid relief that lasts about 30 minutes. They can be helpful when taken after meals or at bedtime. Side effects may include diarrhea or constipation.

### Warning Signs

Chest pain from heartburn can be difficult to distinguish from pain caused by a heart problem. Get emergency medical help if you experience these warning signs of a heart attack:

- Sudden pressure, tightening, squeezing or crushing pain in the center of your chest that lasts more than a few minutes or goes away and comes back
- Pain spreading to your back, neck, jaw, shoulders or arms
- Chest discomfort accompanied by shortness of breath, sweating, dizziness, nausea or vomiting
- Pressure or tightness in your chest during physical activity or when you're under emotional stress

Also seek prompt medical attention if:

- Your heartburn seems worse or different from normal
- You experience new chest pain
- You have trouble swallowing or pain when swallowing
- You've unintentionally lost weight or have less appetite
- You're vomiting blood or have bloody or black stools ■

#### H-2-receptor blockers

Available with or without a prescription, histamine-2 (H-2) receptor blockers reduce the amount of acid your stomach produces. Brand names include nizatidine (Axid), famotidine (Pepcid), cimetidine (Tagamet) and ranitidine (Zantac). These drugs take longer to work than antacids do, but can provide relief for four to 10 hours. They don't work well for many people with GERD, however, and they aren't recommended for long-term use. Side effects may include headache, dizziness, diarrhea and fatigue.

#### Proton pump inhibitors (PPIs)

This class of drugs also reduces stomach acid. They're generally more effective and longer lasting than are the other types of heartburn drugs. Prescription PPIs include omeprazole (Prilosec), lansoprazole (Prevacid), esomeprazole (Nexium), pantoprazole (Protonix), rabeprazole (Aciphex) and dexlansoprazole (Dexilant). Some doses of Prilosec and Prevacid are available over-the-counter, as is Zegerid, another version of omeprazole.

Nonprescription PPIs are taken once a day, about an hour before you eat. Stop using the medication after 14 days, unless your doctor advises you differently. If you take a prescription PPI, follow your doctor's instructions for use. Side effects of PPIs may include headaches, abdominal pain, diarrhea, nausea, dizziness or lightheadedness, rash, and constipation.

A more serious issue for women who take PPIs is a possible increased risk of fractures in the hip, wrist and spine due to decreased absorption of calcium and vitamin D. People who take PPIs for a year or more are at greatest risk. Older adults who take PPIs may also be more vulnerable to certain infections, such as pneumonia. Finally, evidence suggests that some PPIs may reduce the effectiveness of the blood-thinning drug clopidogrel (Plavix).

#### Usually a temporary problem

Almost everyone experiences mild heartburn from time to time. Talk to your doctor if you have heartburn more than twice a week or if it persists despite the use of medications. Heartburn shouldn't be an everyday part of life. ■



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### Natural vs. Surgical Menopause

When menopause occurs naturally, the hormones produced by your ovaries typically decrease gradually, over several years. When menopause is brought on surgically, such as when both ovaries are removed (a bilateral oophorectomy), hormones decline suddenly. This event can cause severe menopause symptoms, such as hot flashes. Surgical menopause also increases the risk of serious long-term health consequences, especially when it occurs before age 45.

## Mayo Clinic Office Visit

# PROPHYLACTIC OOPHORECTOMY

*An Interview With Walter Rocca, M.D.*

Each year in the U.S., about 300,000 women elect to have their ovaries surgically removed in a procedure known as a prophylactic oophorectomy. Often, this procedure is performed along with a hysterectomy, which involves removing the uterus. For women who have yet to reach menopause, a prophylactic oophorectomy reduces the risk of ovarian cancer by up to 95 percent and cuts the chance of breast cancer development by about half. Yet having ovaries removed before natural menopause begins triggers the onset of menopause and raises the risk of serious health concerns. Here, Walter Rocca, M.D., a Mayo Clinic researcher who has spent years studying the effect of prophylactic oophorectomy on long-term health, explains why it's important for women to understand the benefits and risks of this procedure.

*WHS: Why might a prophylactic oophorectomy be recommended?*

Dr. Rocca: Some women and their doctors may decide to remove the ovaries when they are discussing a hysterectomy. Cancers affecting certain reproductive organs, such as the uterus, often require a hysterectomy. However, most hysterectomies performed in the U.S. are for noncancerous conditions — such as uterine fibroids and endometriosis, which cause pain and heavy bleeding. In this situation, the ovaries are perfectly healthy, but may be removed to reduce the risk of ovarian and breast cancers.

This is an important cancer-prevention option for women who have a particularly strong family history of ovarian cancer or who have gene mutations that significantly increase the risk of developing breast and ovarian cancers. However, it may not be the best decision for all women because the ovaries aren't just reproductive organs that become unnecessary after your child-bearing years. The hormones that ovaries produce — including estrogen, progesterone and testosterone — are also important to the health and functioning of many other organs and parts of your body. ■

*WHS: What health consequences can result when ovaries are removed before menopause?*

Dr. Rocca: In the Mayo Clinic Cohort Study of Oophorectomy and Aging, women experienced a number of major consequences when oophorectomies were performed before age 50 or 51. These consequences included an increased risk of overall death, cardiovascular disease, dementia and cognitive impairment, Parkinson's disease and parkinsonism, and psychiatric symptoms, such as anxiety and depression. Other research has found an increased risk of stroke, osteoporosis and bone fractures, lung cancer, and impaired sexual function. The data regarding women who have oophorectomies after natural menopause is more limited. But this surgery could present potential problems because your ovaries continue to produce some beneficial hormones, even after menopause. ■

*WHS: What can be done to address these health consequences?*

Dr. Rocca: Younger women may be advised to take hormone therapy until age 45 or 50. In women who also have undergone a hysterectomy, this usually involves taking estrogen alone. Estrogen may reduce some, but not all, of the potential health consequences. The use of hormone therapy sometimes is discouraged because studies have found that it could increase the risk of other problems, such as breast cancer. However, evidence suggests that these same risks shouldn't be applied to women with premature or early menopause. Therefore, I think it's reasonable to consider estrogen use up until age 50 if you've had a prophylactic oophorectomy.

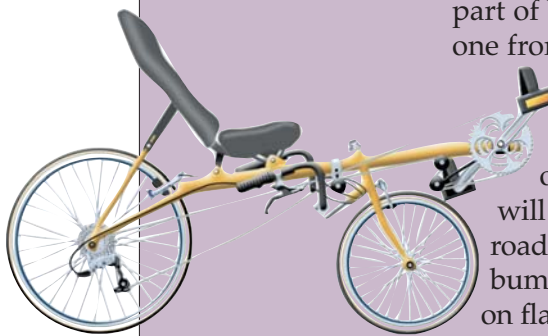
Deciding whether to use hormone therapy or have a prophylactic oophorectomy can depend on many factors — including your family history, results of any genetic tests and other existing medical conditions. In the end, it's important to consider all the advantages and disadvantages involved. ■

## A BICYCLE BUILT FOR YOU

### Getting a Handle on Your Options

Cycling can provide an excellent cardiovascular workout, whether you're new to the sport or training for a triathlon. Even a casual ride with your grandchildren or in your favorite park can help you stay fit and enjoy the outdoors.

If your bike is more than 10 years old, you might want to consider getting a new one. A more modern bike is likely to perform better than the old one rusting in your garage. You also have more styles to select from. In fact, the hardest part of buying a bike might be choosing one from among the many options.



**Recumbent bike**

#### Choosing a bike

Finding the right bike depends on how you plan to use it. Where will you typically ride — on paved roads, bike paths, or over rocks and bumps? Up and down hills, or mostly on flat ground? How far will you go, and how fast? Choose the style of bike that best suits your goals:

- **Road bikes.** Built to go fast for long distances on smooth pavement, these bikes have narrow tires, a lightweight frame, a narrow seat, and curved or drop handlebars that allow you to vary your posture during rides.
- **Mountain bikes.** A shock-absorbing front fork and fat, knobby tires give you trac-

tion to tackle steep hills and rugged dirt trails. Flat, wide handlebars provide good control. These bikes aren't as well suited for riding on pavement.

- **Hybrid bikes.** Hybrids combine the lightweight frame and narrow seat of a road bike with the more upright riding position and horizontal handlebars of a mountain bike. Medium-size tires allow you to ride on pavement, rough roads and bike paths.
- **Comfort bikes.** With an upright riding position, high handlebars and wide, cushy seats, these bikes are designed for leisurely rides on pavement or smooth dirt. Wider tires give you some cushion over bumps. Comfort bikes can be harder to pedal up hills.
- **Recumbent bikes.** They allow you to sit back with your feet out in front of you while you ride. This type of bike can be a good choice for people with knee or back problems or older people.

Within each category, you'll find bikes at a wide range of prices, depending on the quality of the parts. Comfort bikes tend to be the least expensive, starting at \$200 to \$300, while road bikes can range from \$700 to \$4,000 or more.

#### Buying a bike

Here are tips for successful bike shopping:

- Find a good bike shop. It can be tough to judge a bicycle's quality or fit if you buy it online or unassembled.
- Take a few bikes out for a test ride.
- Work with the retailer to get the right size and fit. The length of your inseam determines the frame size you need. When your foot is on the pedal at the lowest point, your leg should be nearly straight. If you don't want to sit this high, ask about a "crank forward" design that allows you to put your feet on the ground.
- Try models designed specifically for women. These bikes may have a closer reach to the handlebars, flared seats and narrower handlebars. ■

#### Helmet Do's and Don'ts

A bicycle helmet can help prevent a life-threatening head injury. Follow these tips for selecting and using a helmet:

- **Make sure the helmet is safe.** Look for a seal of approval from the Consumer Product Safety Commission (CPSC).
- **Make sure it's snug.** You shouldn't be able to move the helmet more than one inch in any direction, front to back or side to side. The sizing pads can help make the fit more secure.
- **Wear it flat on the top of your head.** Make sure it covers the top of your forehead without tilting forward or backward, and the straps form a V shape under each ear. To keep the helmet flat on your head, tighten the chin strap.
- **Replace it after an accident.** Even if the helmet doesn't appear damaged, it may not be able to withstand the force of another blow. ■

**Clinical Trial Eligibility**

**Q** How can I find out if I'm eligible for a clinical trial?

**A** Researchers need volunteers for research studies (trials) designed to answer specific health questions, such as how well a new drug works compared with existing treatments or if a new screening approach is safe and effective.

Each clinical trial has its own guidelines for who can participate, based on factors such as age, gender and smoking status. Some studies are limited to healthy people, while others enroll people with a particular disease who haven't started treatment or for whom standard treatment has failed.

Although no single list of all clinical trials exists, some studies advertise for

volunteers through local media. These postings usually include a general description of who would qualify. Your health care provider may have information about trials. Or you can search on your own. (See Finding a Trial.)

Be sure to print the summary of any trial that interests you. If you're eligible for one, contact the trial team directly using the information provided on the summary. ■

**Cinnamon for Diabetes?**

**Q** Is it true that cinnamon can lower my blood sugar levels if I have diabetes?

**A** Since ancient times, people have turned to cinnamon to treat diabetes. And some modern research has suggested that the spice might mimic the effects of insulin and reduce blood sugar (glucose) levels. But studies testing the effectiveness of cinnamon for treating diabetes have shown mixed results. In one trial, 500-milligram capsules of cinnamon taken twice a day for 90 days improved hemoglobin A1C levels — a reflection of average blood sugar level for the past two to three months — in people with poorly controlled type 2 diabetes. Another study, involving older women with type 2 diabetes, found no effect from cinnamon.

While cinnamon may be helpful as a supplement to regular treatment if you have type 2 diabetes, in itself the spice isn't likely to make a significant difference. Diabetes management requires a lifelong commitment to blood sugar monitoring, healthy eating, regular physical activity and, for many women, medications or insulin therapy. ■

**Finding a Trial**

**ClinicalTrials.gov**

[www.clinicaltrials.gov](http://www.clinicaltrials.gov)

Database of more than 100,000 studies throughout the U.S. and around the world for a wide range of diseases

**Mayo Clinic**

<http://clinicaltrials.mayo.edu>

Database of studies taking place at Mayo Clinic in Minnesota, Florida and Arizona

**National Cancer Institute**

[www.cancer.gov/clinicaltrials](http://www.cancer.gov/clinicaltrials)

1-800-422-6237

Comprehensive database of cancer clinical trials in the U.S.

**National Institute of Mental Health**

[www.nimh.nih.gov/trials/index.shtml](http://www.nimh.nih.gov/trials/index.shtml)

Studies involving mental health ■

**Next Issue**

**Countdown to Good Health**

**Know Your Numbers**

**Cultivating Contentment**

**Arthritis**

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We regret that we can't publish an answer to each question submitted to "One on One" or respond to inquiries regarding diagnosis and treatment of personal health conditions.

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