# **NIH News in Health**

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## When Eating Goes to Extremes The Excesses of Eating Disorders

With summer just around the corner, we see constant reminders about getting in shape for swimsuit season. Magazines offer annual tips for slimming down. Pencil-thin models show us the bodies we can't possibly achieve. We may feel inspired to shed a few pounds, but most of us don't take these media messages too seriously. For the small minority of people with eating disorders, however, the relentless pursuit of an ideal body can have dire or even deadly consequences.

Scientists had long believed that eating disorders were primarily triggered by cultural pressures or psychology. "But over the past decade, there's been a real revolution in thinking about the factors that lead to eating disorders," says Dr. Cynthia Bulik, director of the Eating Disorders Program at the University of North Carolina at Chapel Hill. "We now have evidence of the substantial role that genes can play." People who are genetically vulnerable may be more susceptible to cultural cues. "They may start extreme dieting or binge eating. That could lead them down the path to an eating disorder," says Bulik.

The result is that, when faced with

Definition

#### Genes

Stretches of DNA, a substance you inherit from your parents. Genes define characteristics like height, eye color and how likely you are to get certain diseases. a full-length mirror, people with eating disorders take self-criticism to extremes. They excessively focus on body weight and shape. They have an out-of-control urge to eat either far too much or far too little.

Accurate data on the number of people with eating disorders has been scarce. Earlier this year, however, Harvard scientists reported results of the first nationally

representative study of eating disor-

all, 4.5% of adults, or over 9 million people, have struggled with eating

The study also found a surprisingly

high number of men with eating

disorders (see "Statistics" box).

ders in the U.S. They found that, over-

disorders at some point in their lives.

Eating disorders are complex con-

ditions. The three most widely recoa-

nized are anorexia nervosa, bulimia

nervosa and binge-eating disorder.

**Anorexia nervosa** is the least common but most deadly of the three. People with this disorder become dangerously thin, often by severely limiting their food intake, exercising excessively or using self-induced vomiting, laxatives or other "purging" techniques. Malnourishment may lead to osteoporosis and anemia. Women lose their menstrual periods.

People with **bulimia nervosa** are often normal weight. They feel an uncontrollable urge to eat large amounts of food, or binge eat. Then

they compensate by purging, fasting or exercising too much. Dr. Susan Z. Yanovski, director of NIH's Obesity and Eating Disorders Program, says, "Bulimia nervosa can cause a lot of medical problems, such as heart irregularities and difficulties with the digestive system. Self-induced vomiting can wear away tooth enamel."

The third disorder, **binge-eating disorder**, also involves frequent episodes of binge eating, but without the compensatory behaviors seen with bulimia nervosa. "As you can imagine," Yanovski savs, "if you fre-

quently eat large amounts of calories without compensating in other ways, you'll gain weight. That's why binge-eatcontinued on page 2

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ing disorder is often associated with obesity." And with obesity comes an increased risk for diabetes, stroke, heart disease and certain cancers.

Binge-eating disorder, unlike anorexia nervosa and bulimia nervosa, is not officially recognized as a psychiatric disorder. But the Harvard study found that binge-eating disorder is by far the most common

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#### Wise Choices Know the Signs of Eating Disorders

#### Anorexia Nervosa

- Refusing or unable to maintain at least 85% of normal body weight.
- Repeatedly checking body weight, carefully portioning foods and eating only very small quantities of only certain foods.

#### **Bulimia Nervosa**

- Recurrent episodes of binge eating at least twice a week for 3 months.
- Going to extremes to compensate for eating—for example, making yourself vomit or abusing laxatives.

#### **Binge-Eating Disorder**

- Feeling out of control when eating a large amount of food, at least twice a week, for 6 months.
- Experiencing extreme distress about overeating.

of the three, affecting nearly 3% of the population. In contrast, anorexia nervosa affects 0.6% and bulimia nervosa 1%.

Eating disorders are treatable, but better treatments are needed. Current therapies usually involve a combination of medical and psychological approaches. Doctors sometimes use antidepressants or other medications. But the only one approved by the U.S. Food and Drug Administration is fluoxetine (Prozac), for the treatment of bulimia nervosa.

Yanovski and her colleagues hope to take a preventive approach to binge eating by spotting risky behaviors before a full-blown disorder and obesity develop. Yanovski explains, "If we can identify kids who may not yet be obese but who have problems with loss-of-control eating, they may be in a high-risk group. We're looking at ways to intervene to prevent obesity as well as eating disorders."

One path to improved therapies is a better understanding of the underlying genes and biology. Studies of families and twins provide strong evidence that genes contribute to all three major eating disorders.

An international research team led by Dr. Walter Kaye, now at the University of California, San Diego has found regions of DNA that may hold genes associated with anorexia nervosa and bulimia nervosa. Their findings inspired a 5-year NIH-funded study to identify specific genes that influence anorexia nervosa risk in

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## Web Sites

#### www.nimh.nih.gov/ publicat/eatingdisorders.cfm

#### win.niddk.nih.gov/ publications/binge.htm

hundreds of U.S. families. The initial results are expected later this year.

If you suspect someone you care about may have an eating disorder, Bulik says, "the most important thing is to talk about it with them directly. In a firm but compassionate way, let them know that you're concerned about their well-being. Do whatever you can to get them in for an evaluation as soon as possible."

Yanovski notes that most people with bulimia nervosa or binge-eating disorder will admit to their behaviors if asked directly. In contrast, those with anorexia nervosa often deny their symptoms. "If you ask why they're not eating, they may say they're not hungry or they've already eaten," Yanovski says.

If you're the parent of a child you suspect may have anorexia nervosa, don't hesitate to act. "Given that anorexia nervosa has the highest death rate of any psychiatric illness, it always should be taken seriously," Bulik says. "Never assume it's a passing phase."

## **In** Statistics

In a study of nearly 3,000 U.S. men and women, Harvard scientists found:

- Men account for 25% of Americans with anorexia or bulimia and 40% of those with binge-eating disorder.
- The median age of onset for eating disorders is 18-21 years.
- Eating disorders are often accompanied by other psychiatric conditions, like depression, drug abuse and anxiety disorders.
- Fewer than half of people with bulimia nervosa or binge-eating disorders have sought treatment for their condition.

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## **Speak Up** Become a Partner in Your Health Care

Many people go to the doctor ready to just listen and let the doctor take the lead. But the best patient-doctor relationships are partnerships. You and your doctor can work together as a team that includes nurses, physician assistants, pharmacists and other health care providers to address your medical problems and keep you healthy.

Your first step is to find a main doctor (your primary doctor or primary care doctor) that you feel comfortable talking to. Your doctor needs to understand your health concerns and problems. He or she will help you make medical decisions that suit your values and daily habits, and will keep in touch with any other specialists you may need. So spend some time finding a doctor you can trust and with whom you can talk openly.

Try drawing up a basic plan to help you make the most of your appointments, whether you're starting with a

#### Wise Choices Tips for Your Doctor Visit

- Make a list in advance of the things you want to discuss at your appointment.
- If you don't understand something your doctor is saying, ask questions until you do understand.
- Take notes, or get a friend or family member to take notes for you.
- Ask your doctor to write down instructions for you.
- Ask your doctor for printed material about your condition or suggestions for where you can get more information.
- Don't forget that other members of your health care team, such as nurses and pharmacists, can be good sources of information. Talk to them, too.

new doctor or continuing with the one you've seen for years. Make a list in advance of the things you want to discuss. Do you have a new symptom? Are you concerned about how a treatment is affecting your daily life? If you have more than a few items to discuss, put them in order with the most important ones first.

Good communication is key to good health care.

Tell your doctor if you have vision or hearing problems so he or she can accommodate you. Ask for an interpreter if the doctor doesn't speak your language.

Some doctors suggest you put all your prescription drugs, over-thecounter medicines, vitamins, and herbal remedies or supplements in a bag and bring them with you. You should at least bring a complete list of everything you take. A recent survey found that nearly two-thirds of older Americans use some form of complementary and alternative medicine—health practices outside the realm of conventional medicine, such as herbal supplements, meditation, homeopathy and acupuncture. Less than one-third of them, however, discuss these practices with their doctors. This news is a cause for concern because your doctor needs to have a full picture of everything you're doing to manage your health.

During your visit, make sure to ask questions if anything is unclear to you. Bring up any problems or concerns you might have, whether or not the doctor asks about them. Ask about different treatment options. And don't hesitate to tell the doctor if you have concerns about a particular treatment or change in your daily life.

You might also consider bringing a



family member or close friend to your appointment with you. Let him or her know in advance what you want from your visit. Your companion can remind you what you planned to discuss with the doctor if you forget, or take notes for you and help you remember what the doctor said.

Take an active role in your own health care. Do everything you can to get the best care possible.

## Web Sites

www.nia.nih.gov/ HealthInformation/Publications/ TalkingWithYourDoctor

 www.niapublications.org/ pubs/conversando/ index.asp (Spanish)

www.cancer.gov/ cancertopics/factsheet/ Support/healthcare-team

- www.nei.nih.gov/health/ talktodoc.asp
- newsinhealth.nih.gov/2005/ November2005/docs/ 02capsules.htm#cap01

nccam.nih.gov/timetotalk/ forpatients.htm

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## **Health Capsules**

## **MRI Aids Cancer Detection in Other Breast**

When a woman is newly diagnosed with cancer in one breast, there's up to a 10% chance that doctor exams and mammography will miss a tumor in the other breast. A large NIH-funded study has now found that magnetic resonance imaging (MRI) can greatly improve detection of cancer in the second breast.

The study involved nearly 1,000 women who were recently diagnosed



Mammography An X-ray picture of the breast. It can detect breast cancer that is too small to feel. with cancer in one breast. Each patient's second breast was deemed cancer-free after mammography and clinical breast exams. Within 3 months of these exams, the women had MRI scans.

MRI detected 30 cancers in the second breast that had been missed by the other methods. The study also showed that if an MRI scan did not



www.cancer.gov/ newscenter/pressreleases/ MRIContralateralQ&A

www.cancer.gov/ cancertopics/types/breast

## **Keep Vision in Your Future**

May is Healthy Vision Month. To mark the occasion, NIH's National Eye Institute is focusing attention on a group of diseases called glaucoma. Left untreated, glaucoma can damage the optic nerve and destroy eyesight.

Glaucoma is a leading cause of blindness in the U.S. More than 4 million people nationwide have it, but nearly half of them don't realize it. That's because the condition has no early warning signs. Fortunately, glaucoma can be detected through a comprehensive dilated eye exam. Early detection can lead to earlier treatment, which can control the disease and prevent future vision loss.

Anyone can develop glaucoma, but some people are at higher risk than others. Those at increased risk



#### Optic Nerve

A bundle of nerve fibers that connects the back of the eye to the brain. A healthy optic nerve is needed for good vision. include African Americans over age 40; everyone over age 60, especially Mexican Americans; and people with a family history of glaucoma. If you are at higher risk, you should get a comprehensive dilated eye exam every 1 or 2 years.

During the dilated eye exam, you receive eyedrops that dilate, or widen, the pupil in the center of your eye. This allows your eye care professional to see inside the eye and detect subtle signs of glaucoma. The exam can also show if you have additional risk factors. In some people, certain medicated eyedrops can cut the risk of developing glaucoma by about half.

Protect your eyesight. Be sure to get regular eye exams, and spread the word about glaucoma to your family and friends.

Web Sites

- www.nei.nih.gov/glaucoma
  - www.healthyvision2010. nei.nih.gov/hvm

detect cancer in a woman's second breast, she had only a slim chance of later developing cancer in that breast.

One important advantage of breast MRI, the researchers explained, is that it can detect most cancers in the second breast at the time of initial cancer diagnosis. With early detection, both cancers can be treated at the same time. This increases the odds of successful treatment.

Women who have newly diagnosed breast cancer should talk with their doctors about whether to undergo an MRI of the second breast. Adding MRI scans to a rigorous clinical exam and mammography could lead to more informed treatment decisions and may give greater peace of mind to women with breast cancer.



#### Featured Web Site Be the Generation

#### http://bethegeneration.org

Can we be the generation that puts an end to AIDS? An AIDS vaccine may be our best hope. This national education initiative highlights the importance of HIV vaccine clinical trials. May 18 is HIV Vaccine Awareness Day. Find out how you can help—by spreading the word or becoming a trial volunteer. From NIH's National Institute of Allergy and Infectious Diseases.

