

## IN THIS ISSUE

### 2 Frontline

- Women with atrial fibrillation are at higher risk for blood clots
- Acupuncture can ease an overactive bladder
- Heart surgery is safe and beneficial in old age
- Aspirin may help prevent colon cancer

### 3 Prevention

The dangers of everyday radiation and what you can do to reduce exposure

### 4 Solutions

How to achieve functional fitness to make your later years more active

### 7 Body Wise

Vulvodynia: What you can do about chronic genital pain

### 8 FYI

News from the Society for Women's Health Research: Is there a female advantage in melanoma?

### 8 Ask Dr. Etingin

- Translating vitamin bottle terminology
- What is "burning mouth syndrome"?

Doctors have long wondered whether depression is a result of coronary heart disease (CHD) or a risk factor that contributes significantly to its development. Now new research confirms that major depressive disorder (MDD) is indeed as serious a risk factor for CHD as high blood pressure and cholesterol, obesity, smoking, diabetes, physical inactivity, and a positive family history. Even in healthy middle-aged women with no apparent signs of CHD, severe depression appears to dovetail with lifestyle habits that can sabotage heart health and promote the development of atherosclerosis (fatty plaques narrowing the insides of the arteries). Depression after a heart attack can make recovery more challenging and the risk of death greater.

#### The sad heart

"Studies suggest that depression often precedes a heart attack in up to 50 percent of cases, and is the single best predictor of cardiovascular events over the next year," says Barry Franklin, PhD,

director of the cardiac rehabilitation and exercise lab at William Beaumont Hospital in Royal Oak, Michigan. "In one study of about 4,500 elderly people who did not have heart disease, the risk of developing it and dying as a result was increased by 40 percent and 60 percent, respectively, for those who became depressed, compared to those who did not."

Depression is equally deadly after a heart attack. "According to two landmark studies conducted in the last decade, depressed individuals are three to five more times likely to die in the first year following a myocardial

infarction (MI) compared to those who aren't depressed," says Dr. Franklin.

The big question is why. "Clinically depressed people often have undiagnosed anxiety, don't take their medications properly or exercise regularly, and tend toward obesity because they eat comfort foods high in salt, sugar, and fat," notes cardiologist Erica C. Jones, MD, associate professor of clinical medicine at the Weill Medical College of Cornell University. "As a result, depression raises their risk for CHD, hinders recovery after a heart attack and increases risk for recurrent cardiac events. Factor in women's increased vulnerability to depression—according to the American Psychiatric Association, they have double the risk of major depression compared to men—and it's hardly surprising that heart disease kills more women than any other disease."

#### Depression and clogged arteries

The more frequently a woman experiences depression, the greater her risk of developing arterial plaques (a known risk factor for CHD), even before heart disease becomes clinically evident.

According to a study in the February 2003 *American Journal of Cardiology*, involving



We're all exposed to low levels of radiation from the environment we live in, the products we use, and the medical tests we have. This kind of radiation, which can't be seen or felt, is called ionizing radiation—and it has the power to harm human cells and increase the risk of cancer over a lifetime. According to a recent report from a committee of the prestigious National Research Council (NRC) in Washington, D.C., even small doses of low-level ionizing radiation have the potential to be harmful.

But the scientists who produced the report stress it's important to keep the risks from low-level radiation in perspective, and that consumers should continue to have medical tests and procedures that involve small doses of radiation. In the case of medical radiation, they say benefits clearly outweigh any increased risks.

#### Low-level radiation sources

Just by living on this planet, we're all exposed to constant, global low-level background radiation. According to the NRC report, 20 percent of this background radiation comes from the earth's rocks and soils, while 12 percent comes from "cosmic rays" that travel through the universe, and 7 percent comes from ingestion, such as radioisotopes present in the domestic water supply and foods. Radon, a colorless, odorless gas that emanates from the earth's surface, emits both high- and low-level radiation.

Natural background radiation accounts for fully 82 percent of the exposure of the U.S. population, while sources of human-made radiation account for a much smaller portion of exposure (around 18 percent). According to the NRC, medical X-rays account for more than half (58 percent) of the human-made radiation we encounter, nuclear medicine (such as thallium stress testing) accounts for 21 percent, and consumer products such

as cigarettes, building materials, smoke detectors, televisions, and computer screens account for 16 percent. Job-related and other exposures make up less than 5 percent of human-made radiation. For example, people who travel by jet frequently are exposed to more ionizing radiation than those who don't (because of cosmic rays), as are people who live near a coal-fired power plant or within 50 miles of a nuclear power plant. People who work near X-ray machines in hospitals or X-ray luggage inspection scanners are also exposed to more ionizing radiation.

#### Put risks in perspective

How alarmed should you be by this? Ionizing radiation can be calculated in units that measure radiation energy deposited in living tissue. The committee defined "low doses" of radiation as those ranging from 0-100 millisievert (mSv). The average American is exposed to about three mSv of natural background radiation yearly, the committee calculates. About one in 1,000 people might develop cancer from exposure to 10 mSv. Over a lifetime, perhaps 42 out of 100 people will be diagnosed with cancers from causes unrelated to radiation; about one cancer in 100 (a solid

committee c radiation. 1 k0 -1.0909 (e to 1Sv). T)249(e)]tg tiss01.1(, (e to a.9(sd r)12.9(

# Exercise Helps You Age Gracefully

An ounce of prevention takes on new meaning as you age. The newest research suggests that the quality of your later years is directly related to how physically active you are now.

“The first step is to develop a lifestyle in which physical activity becomes integral to your daily routine,” says Sheila Dugan, MD, assistant professor of Physical Medicine and Rehabilitation at Rush University Medical Center in Chicago. “Climbing the stairs, parking at the far end of the lot, walking whenever possible, and doing stretches must become accepted activities of daily living rather than accessories to add or shed as desired.” This approach to physical activity is termed “functional fitness.”

## Being active, living Well

Too many women are missing out on the health-promoting benefits that come from being active. Worse, some confuse being busy with being active, or mistakenly believe that it is too late to begin an exercise program after menopause.

“It only takes 30 minutes of moderate activity most days to reduce your

health risks, which is something everyone can manage,” Dr. Dugan told the 13th annual Congress on Women’s Health in Hilton Head, South Carolina in June. To manage your weight, walk for one hour a day. This is the most effective way to maintain a healthy weight, which will also promote bone health.

“Most women over 65 have some medical concern that would be improved with the right exercises,” says Lisa R. Callahan, MD, director of the Women’s Sports Medicine Program at the Weill Cornell-affiliated Hospital for Special Surgery. “However, there is no right fitness strategy that is right for everyone. In fact, there are countless ways to be physically fit. The trick is to choose an approach that is enjoyable and that you will comfortably stick with.”

## Beyond the basics

Two recently released studies provide an ironclad argument for the necessity of daily physical activity. After age 30, body function begins to decline at a rate of two percent a year. Regular

physical activity can bring this loss to a near halt, slowing it to a mere half percent annually, according to a recent report in the *A* *J*

*P*

Women whose exercise effort falls below 85 percent of their functional capacity are twice as likely to die within eight years, according to data published in the August 11 issue of the

*J*

The level of physical activity needed was determined by researchers from the Health, Aging and Body Composition Study Research Group who found that it requires women to be active for at least 30 continuous minutes to gain any real long-term benefit. This refutes past recommendations that suggested that an accumulation of 30 minutes was sufficient.

“Achieving an appropriate level of activity is necessary to preserve physical independence, something that everyone should strive for,” says Dr. Callahan. “Women should find their comfort level by joining a gym, attending an arthritis pool class, taking a vigorous walk.”

## Which exercises and how much?

Since muscle weakness, or deconditioning, is common among sedentary older adults, experts are encouraging

### THREE TESTS OF FITNESS FOR OLDER ADULTS

The American College of Sports Medicine advises you not to take these tests if your doctor has told you not to exercise or if you have chest pain, joint pain, dizziness, or uncontrolled high blood pressure. Do these tests with a partner. Do your best on each test but do not overexert yourself. Before starting, warm up with 5-8 minutes of walking and swinging your arms.

#### The 30-second Chair Stand measures lower body strength.

Sit in a chair (seat height: 17") with feet flat on the floor. Cross your arms over your chest, and count the number of times in 30 seconds you can come to a full standing position.

women to incorporate resistance-training into a fitness plan.

“Strength training may be as simple as learning to lift cans of fruit cocktail properly while you watch a favorite television show,” says Dr. Dugan.

“Machines may offer better posture and safety provided they are adjustable

# The Puzzle of Chronic Genital Pain

Vulvodynia is the name for a hidden pain suffered by untold thousands of women, many of whom never even tell their doctors. The burning, stinging, irritation, or rawness they feel around the opening of the vagina can make sitting in a chair excruciating, stop them from driving a car or exercising, interfere with social activities, and cause them to avoid intercourse. According to a survey by Brigham and Women's Hospital in Boston, 16 percent of women suffer from vulvodynia at some point in their lives, but 40 percent never sought treatment. Women who did seek treatment saw as many as five or more medical professionals before being diagnosed.

"It's a hidden epidemic," Christin Veasley, director of research and professional programs for the National Vulvodynia Association (NVA) told a recent congressional briefing in Washington, D.C., sponsored by the Society for Women's Health Research.

## A mystifying disorder

The International Society for the Study of Vulvovaginal Disease Terminology and Classification defines vulvodynia as discomfort, most often pain, which occurs without an identifiable, clinically visible cause such as infection, inflammation, cancer, or a neurologic disease in the tissues surrounding the opening of the vagina.

While there may be a definition, no one talks about vulvodynia, remarks John M. Gibbons, Jr., MD, professor of obstetrics and gynecology at the University of Connecticut and past president of the American College of Obstetricians and Gynecologists (ACOG). Part of the problem, says Dr. Gibbons, is that doctors don't really know the cause or causes of the problem. "Gynecologists have limited knowledge of vulvodynia," says Dr. Gibbons. "Patients are left to do the research and find help. It can take years of trial and error to find an effective treatment."

"Patients do not feel comfortable discussing these disorders. It's very different from discussing migraine or back pain," Dr. Gibbons told the Capitol Hill briefing in May. Doctors need to validate women's symptoms, which can be devastating, he adds. In Veasley's case, she says, she was told to "have a little wine and relax." Veasley lived with chronic pain for eight years until surgery finally brought her relief.

## Treatment options

According to the first comprehensive guidelines for diagnosing and treating vulvodynia, published in the January 2005 *J*

doctors can best identify specific vulvar pain locations by gently touching the area with a cotton swab.

The guidelines note that there is no single treatment that is successful in all women with vulvodynia. Treatments for vulvodynia include antidepressant drugs; anticonvulsant drugs; topical creams that can be applied to the vulva, such as lidocaine ointment; surgical techniques; biofeedback; physical therapy; behavioral therapy and counseling; and acupuncture. The choices "can confuse patients and providers," concedes Dr. Gibbons. Finding an approach that works may take awhile and trials of several different treatments.

The antidepressant ( ) was approved for vulvodynia by the FDA last year. It is a

( ), which blunts pain by masking more of these key neurotransmitters available in the brain.

Surgical treatments include shallow local excision of the painful area(s) of the vulva to remove hypersensitive nerve endings; (to remove nerve endings in the vulvar vestibule); and (which includes vestibulectomy and removal of some tissue of the , the area between the vagina and anus). In a study reported by Dr. Gibbons, after six months 88 percent of women who

## WHAT YOU CAN DO

To learn more about vulvodynia

- See the web site of the National Vulvodynia Association: [www.nva.org](http://www.nva.org) or [www.vulvarpainfoundation.org](http://www.vulvarpainfoundation.org), the web site of the Vulvar Pain Foundation.

had surgical treatment for vulvodynia reported that the pain had not returned at all or was minimal.

Self-treatment strategies include the following: Wear cotton underwear in the daytime and no underwear at night; avoiding anything that could irritate the vulva, such as perfumes, shampoos, detergents, douches, and soaps. The guidelines suggest cleaning the vulva gently with water and patting it dry. After cleansing, apply a preservative-free emollient (such as vegetable oil or plain petroleum jelly) to help hold moisture in the skin and reduce irritation. Cool gel packs may also be helpful.

## Genetic clues

The ultimate key to treating vulvodynia successfully lies in new research, according to speakers at the briefing. Two scientists at the Weill Medical College of Cornell University discovered that a rare form of a gene that regulates inflammation is found in more than 50 percent of women with

(VVS), a subset of vulvodynia.

The pain of VVS appears to be caused by an inflammation of the four small glands (two on each side of the vagina) that secrete lubricating fluid, according to research by William J. Ledger, MD, professor emeritus of Ob/Gyn and a professor of immunology in Ob/Gyn at the Weill Medical College. This inflammation seems to be triggered by white blood cells producing a chemical (or ) called IL-1 ( ). The activity of IL-1 is inhibited by a second chemical, IL-1.

According to the Cornell researchers, VVS symptoms in women who have a specific version of the IL-1 receptor agonist gene may be due to an immune dysregulation of localized inflammation. Finding ways to correct this imbalance could eventually lead to new therapies for VVS. 🌟

blockages in coronary arteries after having symptoms such as chest pain. Six months later they completed a standard questionnaire on hostility, such as levels of cynicism and rudeness, and then were followed for 3-6 years. Over that period, those with higher hostility scores had a 50 percent greater risk of dying or suffering cardiovascular "events" such as a heart attack, stroke, or hospitalization for chest pain. Women with hostile temperaments also tended to have lower levels of "good" HDL cholesterol, higher blood pressures, and larger waistlines—all risk factors for heart disease, according to the study in the July issue of *P*.

The findings were in line with past studies that have linked chronic hostility and anger to a higher risk of heart disease and poorer outcomes from CVD, but most of those studies have been done primarily among men.

#### **A greater risk of dying**

Significant depression after a heart attack can compromise recovery, upping the risk of death by a factor of 2-4, according to an August 16 report in the *J* *A*

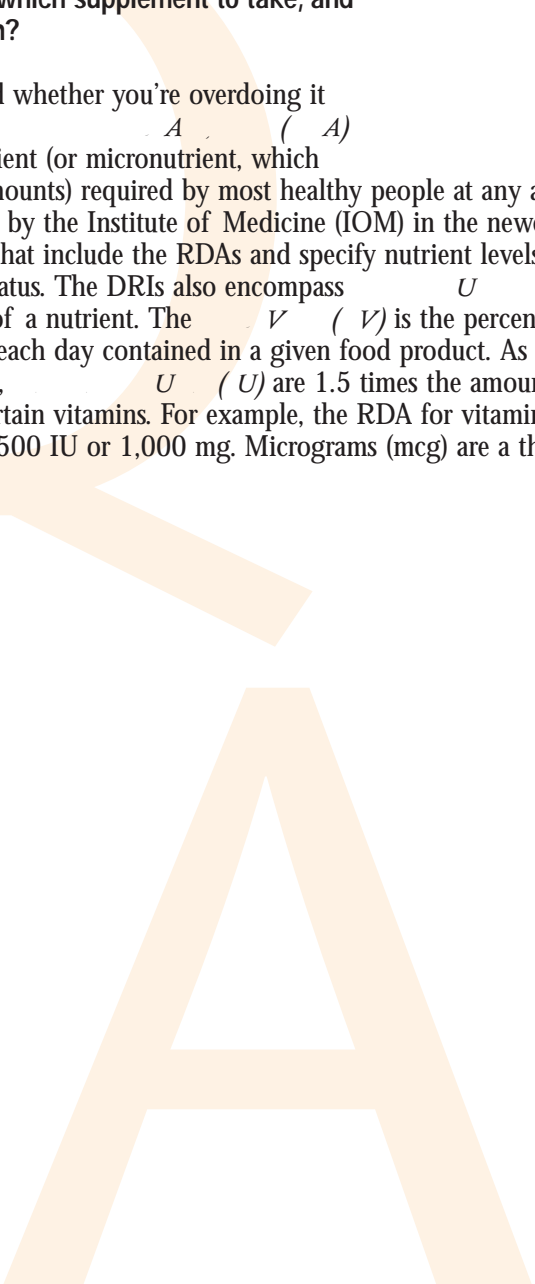
To find out why, researchers studied 143 patients with a mean age of 63 who had CHD and evaluated them for depression using a questionnaire called the Beck Depression Inventory. Forty-seven patients (33 percent) were classified as significantly depressed and 21 were taking antidepressants. To assess how well the vascular endothelial system allowed blood flow through the arteries, the team used an inflatable cuff to measure the dilation of the brachial artery that runs from the shoulder to the arm. The depressed patients had significantly greater impairment in dilating the brachial artery compared to nondepressed patients. But those taking antidepressants did a lot better.

"To our knowledge, this is the first study showing that symptoms of depression are associated with impaired vascular endothelial function in patients with CHD," says lead author Andrew Sherwood, PhD, of the Duke University Medical Center. "By gaining a better understanding of how depression may influence cardiovascular risk, we may be able to develop interventions better tailored to benefit individuals." If you are diagnosed with depression and are prescribed antidepressants, take them faithfully. "Experts strongly suspect that medication reduces risk of dying from heart disease," says Alexander H.

Glassman, MD, chief of clinical psychopharmacology at the New York State Psychiatric Institute. "More than a million Americans per year experience myocardial infarction or unstable angina, a combination referred to as acute coronary syndromes, and about 20 percent of patients with acute coronary syndromes will hiedh acute cD4centtdr

I found your article on vitamins and minerals in the September issue very interesting. But I'm confused by the numerous ways supplement ingredients are listed on packages. For example, some supplements go by RDAs and others the Daily Value. How can we tell the difference between IU, mg, and mcg when we decide which supplement to take, and whether we're taking too much?

Figuring out what you need and whether you're overdoing it can seem complicated. The *A* (*A*) is the average amount of a nutrient (or micronutrient, which the body only needs in trace amounts) required by most healthy people at any age. More detailed guidelines are set by the Institute of Medicine (IOM) in the newer (*U*), that include the RDAs and specify nutrient levels by age, gender, and reproductive status. The DRIs also encompass (*U*), the maximum safe level of a nutrient. The *V* (*V*) is the percentage of a specific nutrient you need each day contained in a given food product. As for the differences in measurements, *U* (*U*) are 1.5 times the amount stated in milligrams (mg) for certain vitamins. For example, the RDA for vitamin E is 22.5 IU or 15 mg; the UL is 1,500 IU or 1,000 mg. Micrograms (mcg) are a thou-



**EDITORIAL CORRESPONDENCE**

The Editor  
P.O. Box 5656,  
Norwalk, CT 06856-5656  
CornellEditor@aol.com

**SUBSCRIPTIONS**

\$39 per year (U.S.)  
\$49 per year (Canada)  
Single copies of back issues are available for \$5.00 each.  
Call 800-571-1555.

For subscription and customer service information, write to:

P.O. Box 420235  
Palm Coast, FL 32142-0235

**OR CALL TOLL FREE:**  
800-847-7131