

# HIS HEART HER HEART

Vive la différence! Sex matters, in everything from the size of the heart to the most appropriate tests to screen for problems. Here, a tale of the tape in cardiology.

By **BECKY BATCHA**

**The average man's heart weighs 10 to 12 ounces.** The left ventricle, which does the yeoman's work of pumping the blood, weighs about 6 ounces on average — a beefy 28 percent more than a woman's left ventricle.

Researchers in Germany have just discovered fundamental and surprising differences in the pumping motion that men's and women's hearts use to move blood through the body. New high-tech imaging shows that **men's hearts twist more vigorously than women's**, for example.

Federal health guidelines say **men should have a fasting lipid-profile blood test every five years starting at age 35** — or starting at age 20 if they have other risks for heart disease. The American Heart Association calls for *everyone* to have one starting at age 20.

These are the numbers to aim for if you're a guy: **HDL (good) cholesterol, 40 or higher; LDL (bad) cholesterol, under 100; triglycerides, under 150.**

Blood pressure is another heart-health number that the American Heart Association says everyone should know.

**A healthy blood pressure is less than 120/80, for men and women alike.**

Just being a man is a risk factor, according to the American Heart Association. **Men older than 40 have a 49 percent lifetime risk for heart disease, compared with 32 percent for women.**

Smoking, heredity, high cholesterol, high blood pressure, diabetes, and being overweight or inactive are other risks.

**Erectile dysfunction can be an indication that your arteries are clogging.** Cardiologist Robert Schott of the Deborah Heart and Lung Center says ED and heart attacks are both caused by gunk that blocks the flow of blood through blood vessels. Men with gunk in their trunks, so to speak, are likely to have plaque building up in their coronary arteries too.

In addition, **a man's waist size can help predict his risk of dying from heart disease.** Men with waists 37 inches or larger have an increased risk, according to a recent study in Europe. Researchers classified 37 inches as the entry-level number for being overweight if you're a man.

The American Heart Association recommends that both men and women **put in at least 150 minutes a week of moderate exercise.** Dietwise, eat a variety of fruits and vegetables, choose whole grains, limit saturated fats and trans fats, **have some fish and some nuts several times a week and eat less than 2,300 miligrams of sodium a day.** Stay under 1,500 grams of sodium if you're middle-aged or older, African-American or someone with high blood pressure.

A new study from Spain, based on data collected from more than 40,000 participants, showed that **moderate drinking was associated with a 30% lower risk of heart disease in men.** The American Heart Association defines "moderate" as no more than two drinks a day for men and no more than one for women. It is not recommended that nondrinkers start using alcohol or that drinkers increase how much they drink.

**The average age for a first heart attack is 64.5 in men,** according to the latest statistics from the American Heart Association. The vast majority of victims who reach the hospital alive after a heart attack will survive. That said, about 18 percent of men will have another heart attack within six years.

A study last year by researchers at the Cedars-Sinai Medical Center in Los Angeles found that men account for about two-thirds of all "sudden-death" heart attacks (cardiac arrests). When this very dangerous type of heart attack strikes, **men are slightly less likely to be revived than women.**

For men with heart disease symptoms (chest pain, shortness of breath, etc.) or risk factors, **an electrocardiogram (EKG) taken both at rest and while you're on a treadmill is the reliable standard** for detecting blockages in arteries, says Sara Sirna of Temple's Institute of Preventive Cardiology. Doctors may also order an imaging test that uses either a sonogram (called an echocardiogram) or a small amount of radioactive tracers (known as nuclear imaging).

If the testing suggests problems, an angiogram — a specialized X-ray image that involves a catheter being placed in a blood vessel in the groin area or the arm — can confirm that there's a blockage and help doctors plan the best treatment.

**Statin drugs and a daily low-dose aspirin are two medicines that can help prevent heart attacks in men,** Schott says. The statins manage cholesterol levels. Both medicines help reduce inflammation — now known to be an important contributor to cardiovascular disease.

**Chest pain or discomfort is the number-one symptom of a heart attack, in both men and women,** the American Heart Association says. Other common signs are discomfort elsewhere in the upper body (an arm or both arms, your back, your neck, your jaw or your stomach), shortness of breath, a cold sweat, nausea and lightheadedness.

You should call 911 immediately if you think you're having a heart attack. But Schott says **one in 14 men misguidedly drives himself to the hospital.** "My own father drove himself to the emergency room and dropped dead in the ER. That to me is emblematic of men and heart attacks."

## SIZE

**The average woman's heart weighs 8 to 10 ounces.** Besides being smaller than a man's heart, it's attached to skinnier blood vessels. Women's coronary arteries are about 2 millimeters narrower than men's.

The difference is significant when it comes to inserting a stent to hold an artery open, according to Robert Schott, chairman of the department of cardiology at Deborah Heart and Lung Center in Browns Mills. In "tiny little vessels," he says, "the stents tend to clog up faster." **Bypass surgery is also less successful in women.**

## VITAL HEART-HEALTH STATS

Estrogen keeps women's HDL cholesterol higher and helps to delay heart disease by 10 years compared with men, according to Sara Sirna, director of the Temple Institute of Preventive Cardiology.

The government's health guidelines say that **women should have a fasting lipid profile every five years starting at age 45** — or starting at age 20 if they have other risks for heart disease.

These are the numbers to aim for: **HDL (good) cholesterol, 50 or higher; LDL (bad) cholesterol, under 100; triglycerides, under 150.** High triglycerides may be riskier for women than for men, according to the American Heart Association.

## KEY RISKS FOR HEART DISEASE

Smoking, heredity, high cholesterol, high blood pressure, diabetes, and being overweight or inactive are also risks for women. **For pre-menopausal women, smoking is the No. 1 risk,** Sirna says.

Men's risk is higher than women's, but health statistics show that **heart disease is the No. 1 killer of women and men alike.**

## EARLY WARNING SIGNS

A woman's waist size can also help predict her risk of dying from heart disease. **A waist measurement of 31½ inches or larger puts a woman into the overweight category and at higher risk,** according to a recent study in Europe.

In addition, **a low HDL cholesterol reading before menopause can be a red flag** for underlying heart disease in women, Sirna says.

## GOOD PREVENTIVE MEASURES

The American Heart Association diet and exercise recommendations for women are the same as those for men. **Exercise at least 150 minutes a week** and eat a variety of fruits and vegetables, along with whole grains and low-fat proteins that aren't loaded with salt.

The Spanish study found some protection against heart disease in women who drank alcohol, but it wasn't statistically meaningful. On the other hand, a recent report in the International Journal of Cardiology showed that **drinking a moderate amount of coffee reduced women's risk for heart disease by 18 percent.** Ask your doctor for guidance because caffeine can aggravate some health problems.

## HEART ATTACK FAQs

**The average age for a first heart attack is 70.3 in women.** Although women were once more likely than men to die after reaching the hospital, the American Heart Association says the survival rate for both sexes is now comparable. On the other hand, **women are twice as likely as men to have a second heart attack within six years.**

Women account for about one-third of sudden-death heart attacks. **Females are less likely to have been diagnosed with heart disease beforehand,** the Cedars-Sinai study found.

## KEY DIAGNOSTIC TESTS

**Exercise EKGs are not as accurate in women as in men,** so cardiologists will often order an imaging test as an automatic add-on, Schott says.

By adding either an echocardiogram or nuclear imaging to the standard exercise stress test, doctors can better detect blockages. As with men, an angiogram would be the typical follow-up if the initial round of testing suggested trouble.

## HIS DRUGS / HER DRUGS

**Aspirin helps prevent heart attacks and strokes in women who are 65 and older, and helps prevent strokes in younger women.** According to the national Women's Health Study, it does not prevent heart attacks in younger women.

A clinical trial called JUPITER has shown that **statins can prevent heart attacks in both men and women who have normal cholesterol levels but elevated amounts of C-reactive protein (CRP).** CRP can be measured with an inexpensive blood test known as an hsCRP. (The "hs" stands for "high sensitivity.") The American Heart Association does not recommend hsCRP screening across the board for everyone, but Schott says it's something you might discuss with your doctor.

## TIME TO CALL 911

Chest pain or discomfort is women's main heart attack symptom, as well, but **women are more likely than men to have symptoms other than chest pain — especially shortness of breath, nausea or vomiting and back or jaw pain,** the American Heart Association says.

Possibly because of this, a study last year by researchers at Tufts Medical Center in Boston found that **women were 52 percent more likely than men to experience delays after calling 911.** This compounds a dangerous delay that heart attack victims bring upon themselves. Half wait more than two hours before seeking help, according to the American Heart Association. Women wait longer than men.