

4 Ways Your Heart Differs from a Man's Heart

Real Age August 2012

In love, the hearts of women and men often operate differently. What about when it comes to heart health? Are they the same, or different?



According to cardiac surgeon Marc Gillinov and cardiologist Steven Nissen, women's hearts are similar to men's hearts in some ways and different in others. "Women need to understand that the primary symptom of coronary heart disease -- chest pain -- and the principal strategies for prevention and treatment -- healthy lifestyle, medicine, angioplasty, and surgery -- apply equally to women and men," they say.

While chest pain is the most common heart attack symptom for *both* sexes, Gillinov and Nissen, co-authors of *Heart 411: The Only Guide to Heart Health You'll Ever Need*, note that biological differences do exist. These differences are important because they can affect how heart disease presents in women, how it's diagnosed, and how it's treated. Here are four key differences you should know:

1. **Women's hearts and arteries are smaller than men's.** "Small arteries in women are more than a simple reflection of smaller body size," Gillinov and Nissen explain. The difference is thanks, in part, to sex hormones: estrogen, progesterone, and testosterone. While male hormones enlarge arteries, female hormones make them smaller, making women's arteries more prone to blood clots or plaque blockages, and more difficult to repair with angioplasty or bypass surgery. Smaller blood vessels may also be behind

other vascular problems, such as migraines and inflammatory diseases (for example, lupus and rheumatoid arthritis), which affect more women than men.

2. **Plaques that cause heart disease are often different in women.** While most heart attacks in men and women are caused by blockages in the arteries, the type of plaque and where it forms may be different in women. While men with heart disease often have hard (calcified) plaque affecting all three coronary arteries, women with heart disease may have less overall plaque, affecting only one or two arteries. However, in women, plaque is more likely to be soft, making it more prone to dislodge, potentially causing a heart attack.
3. **Heart disease without blocked arteries happens more often in women.** According to Gillinov and Nissen, 30% of women who undergo cardiac catheterization for chest pain or a heart attack have unblocked coronary arteries "that look normal." Their heart disease is thought to be caused by low blood flow to the heart (sometimes called syndrome X), which doctors have yet to fully understand but think may be due to problems with smaller arteries in the heart. "This means that we need to think beyond the classic obstructing plaque when treating heart disease in women," Gillinov and Nissen say.
4. **Women's hearts are affected by estrogen.** While estrogen is thought to protect younger women's hearts, the drop in estrogen that comes with menopause has the opposite effect, raising your risk of cardiac problems with age. "The onset of menopause is a time to work with your doctor to develop a heart-healthy plan, including exercise, a low-salt Mediterranean-style diet, and annual checks of blood lipids and blood pressure," Gillinov and Nissen say. Don't accept a higher risk of heart disease just because you hit menopause. Be proactive and reduce your risk.