Transcript Details
This is a transcript of an educational program. Details about the program and additional media formats for the program are accessible by visiting: https://reachmd.com/programs/heart-matters/rethinking-hormones-testosterone-and-estrogen-in-womens-heart-health/37201/

ReachMD
www.reachmd.com
info@reachmd.com
(866) 423-7849

Rethinking Hormones: Testosterone and Estrogen in Women's Heart Health

Announcer:
You're listening to *Heart Matters* on ReachMD. On this episode, we'll hear from Dr. Susan Davis, who's an endocrinologist as well as the head of the Women's Health Research Program and a Professor of Women's Health at Monash University in Melbourne, Australia. She'll be discussing the role of estrogen and testosterone in women's cardiometabolic health, a topic she presented on at the 2025 American Heart Association Scientific Sessions. Here's Dr. Davis now.

Dr. Davis:
In women, traditionally, testosterone has been seen almost as the evil hormone—the hormone that makes women like men and potentially adversely affects cardiovascular disease risk. But when we've done studies looking at testosterone in women, we've really seen, in postmenopausal women, signals that testosterone has a cardioprotective function.

We came across these studies because we were looking at the safety of giving women testosterone for low libido, and in the process of doing safety parameters, we found that when we gave women testosterone, we caused blood vessel dilation, just like we saw when we gave women estrogen. And in fact, when we gave women an acute dose of testosterone, we found it dropped blood pressure, even with women lying supine in bed. So acutely, testosterone is a vasodilator, and chronically, it's a vasodilator.

And then when we've investigated testosterone blood levels in postmenopausal women, we found that from about the age of 60 years, testosterone blood levels start to increase, and that women beyond the age of 70 years who have the lowest testosterone blood levels have a two-fold greater risk of an acute myocardial event. We also found that women who have the lowest testosterone levels in this age group over 70 tend to have lower HDL cholesterol and higher triglycerides that is not explained by other hormones or other factors. So now we're trying to understand more about why testosterone may actually be beneficial to women as opposed to the old-fashioned belief that testosterone is bad for women.

If one looks at all the studies of estrogen in women, one sees consistently that estrogen has a protective cardiometabolic role. It reduces the likelihood of abdominal obesity. It improves the way our bodies metabolize glucose. And it has favorable blood vessel effects, vasodilation, et cetera. So that would lead you to believe that if we give postmenopausal women estrogen, it's actually going to protect them against cardiovascular disease. But although there are some signals in the big studies, the data really doesn't support that. At a population level, you would not be giving estrogen as a way to prevent cardiovascular disease in women. The data doesn't stack up in the large, randomized, placebo-controlled trials.

So while estrogen does not cause harm for cardiometabolic disease, I would not be recommending any woman take estrogen for the sole purpose of preventing heart disease, with the exclusion of women who go through a very early menopause. The data suggests that there may be a benefit for such women, but not for women who go through menopause at the average age.

We tend to cherry pick information that will perhaps support our beliefs in areas like hormones and cardiometabolic disease, and it's very easy to jump to conclusions. Unfortunately, presently, the information we have is somewhat fragmented. Hormones are complicated, and it would be really nice to give simple answers, but I think perhaps the simple answer that I would like to convey is that for the majority of women, hormone replacement therapy will do no harm. And the available data would even suggest that it will do no harm in women up to the age of at least 70 years or up to 20 years post-menopause. So all those women in their 60s who are being told they can't have estrogen because of their cardiometabolic disease risk, who have got horrible symptoms or bone loss, are being deprived of perhaps a hormone therapy that would be really relatively extremely safe.

Announcer:
That was Dr. Susan Davis talking about the impacts of hormones on cardiometabolic health in women, which she discussed at the 2025 American Heart Association Scientific Sessions. To access this and other episodes in our series, visit Heart Matters on ReachMD dot com, where you can Be Part of the Knowledge. Thanks for listening!