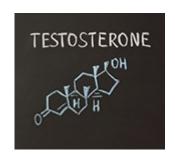
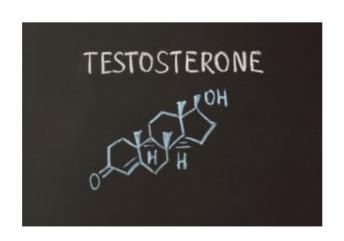
## Testosterone bad for men's hearts? So NOT!



This month, at one of our Wednesday night seminars at the Hoffman Center, we tackled head-on a widespread media report that testosterone treatment increases cardiovascular risk for men. You can listen to an Intelligent Medicine podcast wherein I provide an extensive analysis of this story: http://www.dev.drhoffman.com/podcasts/channel-1/drhoffman-com-2014-01-15-134.mp3

The study in question was performed at VA hospitals and it purports to show that men with low testosterone who were given testosterone replacement therapy had slightly more strokes and heart attacks than those who received no testosterone.



There are severe problems, however, with this study.

First of all, it contradicts much of what we know about testosterone in men. Some studies now suggest that low testosterone is as serious a risk factor for heart disease as high cholesterol and triglycerides, or low HDL—maybe even more so.

As early as the 1940s it was shown that giving testosterone augments heart circulation. But, because men get heart disease

earlier and more commonly than women, it was thought testosterone was the culprit, so research languished for decades.

Then, studies demonstrated that low testosterone was almost a universal feature of type II diabetes in men. Testosterone administration was shown to improve the heart's pumping action in congestive heart failure; it even helps to avert amputations by enhancing circulation in patients with diabetic foot disease. And, in a different VA study, done just months before the one that showed ill effects of testosterone, there was a more than 20 percent reduction in bad heart outcomes in men given testosterone.

Low-testosterone men are typically pudgy and insulinresistant; they're tired and unmotivated to exercise.

For many of the overweight, insulin-resistant and pre-diabetic or full-blown diabetic men I see at the Hoffman Center, testosterone provides them with a jump-start toward improvement of their fat/lean ratio and blood sugar optimization.

So what went wrong in the latest VA study?

First, the patients selected were a pretty sick bunch, many of them older, obese, diabetic and with pre-existing heart disease. It just might be they were too far gone to experience the benefits of testosterone for heart disease.

Besides, just as in the Women's Health Initiative Study of the 1990s, when hormones were given to older, sicker women, they might indeed increase the risk of blood clots; by contrast, when estrogen was given to younger, healthier women, it was found to do the opposite—it prevented heart disease. Probably works the same way with testosterone in men.

Other problems with the VA study: The men received inadequate doses of the wrong kind of testosterone. For most men, their

testosterone barely budged; it certainly didn't reach the targets I shoot for in men that I treat at the Hoffman Center.

Additionally, many of the men got testosterone injections, which consist of synthetic testosterone, notorious for increasing blood counts and creating "sticky" blood cells.

Finally, these studies need to be done for longer periods of time. The men in the VA study got testosterone for less than two years. In the previous VA study, which showed benefits of testosterone, the average duration of therapy was four years. Reversal of heart disease does not occur overnight.

Unfortunately, the media picked up the theme of "testosterone is bad for your heart" and many men will be denied the very real cardiovascular benefits of this great medicine. When used properly and judiciously, testosterone can help men live healthier, longer lives.