

## What Happens in the Male Menopause?

In men, the menopause-or andropause, as some would call it, because the male hormones are properly called androgens-is a more unpredictable process than in women. Not only because of the gradual nature of its timing but because the order in which symptoms appear vary from man to man, based on lifestyle and genetic inheritance. What many men first notice is a loss of sexual desire. However, that can simply reflect the tremendous significance that many men give to sex.

I think that more often the first sign, perhaps passing unnoticed, is a subtle downward shift in strength and energy. In some men, a depressive change in personality quite apparent to wife and friends is the first indication.

Whatever comes first, the eventual effect of the male menopause is an erosion of the underpinnings of our personal strengths, whatever they may be. Loss of athletic ability, loss of dynamic executive capabilities, loss of self-confidence, eagerness, and aggressive energy-a sense of loss magnified and multiplied by the total unexpectedness of what we're undergoing. This is change, indeed. The sharp edges of youth are replaced by the well-traveled roads of habit and lethargy.

Very typically, men will put these changes down to overwork, stress, the vaguely understood concept of a midlife crisis. By and large, these explanations are pap.

The changes that men feel are hormonal, are real, and can be understood first and changed second. They can be measured, too. There isn't anything all that difficult about treating the male menopause and beating it. Complicated, yes, but not difficult. And the rewards are vast. Better life, longer life, brighter, younger, more vital life. Not to mention a remarkable decrease in the risk of major diseases that jut up like rocks in the road of longevity.

Testosterone is far more than just a sex hormone. Testosterone travels to every part of the human body. These are receptors for it from your brain to your toes.

Testosterone is vitally involved in the making of protein, which, in turn, forms muscle. Testosterone improves oxygen uptake throughout the body, vitalizing all tissues. Testosterone helps control blood sugar, helps regulate cholesterol, helps maintain a powerful immune system. Testosterone appears to help in mental concentration and improves mood. Testosterone is most likely one of the key components in protecting your brain against Alzheimer's disease. The "male hormone" is dynamite. Don't leave home without it.

It's very apparent that if you intend to live a long, vital, healthy life then, at some point, you and your physician are going to have to address the question of your hormone levels just as seriously as physicians currently address things like blood pressure and blood sugar.

You cannot retain the energy of youth-or even a small part of the energy of youth-without securing for yourself a reasonably constant supply of fairly optimal hormone levels.

If you're a man, the key is usually testosterone.

## **The Importance of the Male Menopause**

It would be impossible to overemphasize the devastating effects that the menopause has on millions of men and women. Doctors know because people come and sit in our offices and tell us secrets that they wouldn't even whisper to their spouses.

And once you've listened for a while to people telling you that their sex lives are crumbling, their energy is shattered, their health is growing shakier by the year-and one soon finds out that they're right on that point-one feels a very real compulsion to do something about it.

Is all this unpleasant change menopause? A whole lot of it is. Heart disease, high blood pressure, diabetes, arthritis, osteoporosis-indeed, most of the major risk factors for dying-are all intimately related to hormonal changes. To a surprising degree many of these dreadful conditions reverse themselves when a proper balancing of the hormones in the body is combined with sensible diet. As you'll see, that hormone balancing can be achieved either by various natural boosting techniques or by actual hormone replacement.

To say that the menopause is natural seems like a trivial distinction in the face of these calamities. Death is natural and inevitable, too, but many of us would like to postpone it.

## **Testosterone and Your Heart**

Could it be that there is a powerful relationship between a man's sexual function and his heart health? We have more and more reason to think so. Potency experts have long used a comparison between blood pressure in the penis and in the arm, the so-called penile/brachial ratio, as an index of erectile force and function. Ideally, the ratio should be one-to-one.

If the blood pressure in the arm is found to be significantly higher than the pressure in the penis, then the outlook for erectile health isn't bright. Recently, however, researchers have discovered that a low penile/brachial ratio also correlates with a high risk for heart attacks and strokes.

We don't normally regard the heart as a sex organ-except metaphorically-but you can be sure of one thing: testosterone, that preeminent male "sex hormone", is one of the most essential guardians of a healthy male heart. It plugs into the heart, hormone to receptor, as firmly as a light bulb screws into a socket.

Why is this the case? We could hazard many guesses. For instance, testosterone is a muscle-building hormone, and the heart is the hardest working muscle in the human body. Muscle and hormone should be logically compelled to forge a connection. They do. In fact, there are more cellular sites for receiving testosterone in the human heart than in any other muscle of the human anatomy!

If the number of receptors indicates the relative importance of a hormone, then the heart is certainly the major muscular target for testosterone. Carrying this concept further, if testosterone is integral to normal function, then testosterone deficiency must result in some decrement in function, some pathologic change.

Well, not only is testosterone the body's strongest factor for maintaining muscle protein, but, as a stimulator of arterial dilation, testosterone controls and increases production of nitric oxide, a natural form of nitroglycerin, the tablets heart patients take to open up the coronary arteries when angina pains arise. It's not surprising that the pumping power of the heart decreases when testosterone declines and that

angina pains begin when nitric oxide production also declines. As we shall soon see these effects can be reversed when testosterone is restored.

How often does one hear of a physician ordering a testosterone level when a patient comes in with cardiac complaints? Well, after they finish this chapter, most patients will demand it.

The fundamental fact is this: a clear and ever-increasing majority of medical studies report an association between high testosterone and low cardiovascular disease in men. This is not a coincidental association, since when testosterone is diminished well-accepted risk factors increase, and when testosterone is administered in appropriate doses most of the major risk factors for heart disease diminish.