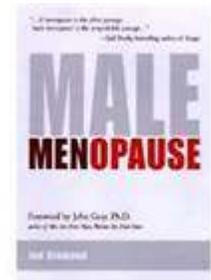


CERTIFIED MEN'S HEALTH COUNSELOR ONLINE COURSE: SESSION 7

- Male Menopause and Testosterone

Andropause: Dealing With Male Menopause

Hormonal changes that occur as a result of aging are generally associated with women. In fact, most people immediately think of women when they hear the term menopause. However, the term “male menopause” is often used when referring to men who experience a decrease in the amount of testosterone circulating in their bodies due to aging. This condition in men is also known as andropause.



About Andropause

Andropause, or male menopause, is the term commonly used by many physicians to refer to hormonal changes that occur in men as a result of aging. It is also referred to as androgen deficiency, hypogonadism or testosterone deficiency. Andropause is a gradual decline in the production of testosterone in males that occurs over a period of many years. Symptoms may or may not accompany the hormonal decline.

Menopause VS Andropause

It is normal for both men and women to experience hormonal changes as they age. There is a big difference, however, in the rate at which hormones change among men and women. When women experience menopause, there is generally a dramatic plunge in the production of reproductive hormones that occurs very rapidly. Women have a very specific, well-defined time period in which reproductive hormone production is no longer produced. Because women experience a rapid drop in hormones during menopause, they generally experience a rapid end to ovulation and menstruation, which occurs over the course of 12 months on average. The symptoms that develop as a result of plummeting reproductive hormones, such as hot flashes, increased sweating, irritability and lack of energy will usually disappear just as suddenly as they developed.

For men, the male menopause experience has a much more gradual onset and a longer duration. The side effects of the reproductive hormone decline, such as sexual dysfunction, mood changes and decreased energy, can be very subtle, and may go undetected for several years. The decline of male reproductive hormone production is a much slower process because the testes do not suddenly stop producing testosterone in the same way that a woman's ovaries stop producing hormones.

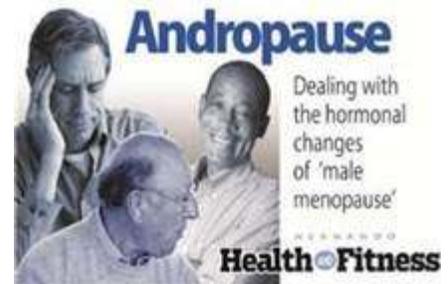
About Testosterone Levels

The level of testosterone present in the male body fluctuates and varies greatly among different men. Generally, as men age, the level of testosterone in their body declines, resulting in overall lower testosterone levels in older men. The decline in testosterone levels occurs gradually over time. The rate at which men experience testosterone loss averages at a 1 percent decline per year from the age of 30, with the levels being reduced by as much as 50 percent on average by the age of 70.

Symptoms of Andropause

Because testosterone levels do not plummet rapidly, men may or may not experience symptoms of andropause, or they may not be as apparent as menopause symptoms. Andropause symptoms are more likely to develop in men as they age, although men in their 30s can experience low testosterone symptoms. Symptoms of low testosterone levels include:

- Erectile dysfunction
- Decreased sexual desire
- Fewer spontaneous erections
- Infertility
- Decrease in the size of testes
- Sleep disturbances
- Insomnia
- Increase in body fat
- Reduced muscle mass
- Less endurance
- Decrease in strength
- Decreased bone density
- Swollen breasts
- Loss of body hair
- Decreased self-confidence
- Depression
- Inability to concentrate
- Impaired memory
- Hot flashes



Many of these symptoms may occur as a normal part of the aging process. Some of these symptoms can occur as a result of underlying medical conditions such as thyroid impairment or depression. Excessive alcohol use and medication can also cause many of these symptoms.

Treatment Options for Andropause

Before jumping into medications, try a more natural approach to treating symptoms associated with andropause. Be sure to eat a healthy diet and make daily exercise a part of your normal routine. Make healthy lifestyle choices that will help you to maintain lean muscle mass, keep your strength up and give you more energy. Good eating habits and regular exercise can also improve your sleep quality and prevent hormonal mood swings.

Some men look to herbal supplements to find relief from the symptoms associated with declining testosterone levels. Many men claim to see an improvement in their condition when using herbal supplements. Before using any herbal supplements, it is important to discuss them with your physician if you are on medications.

Testosterone replacement therapy can also be used both to improve symptoms associated with low testosterone and to restore any alterations in the body's normal physiology such as improving bone mineral density, increasing strength and improving cognitive function.

Testosterone Replacement Therapy

The use of testosterone replacement therapy to treat low testosterone levels that occur as a result of the normal aging process is controversial. While some men show an improvement in symptoms associated with low testosterone, other men, particularly those of advanced age, do not clearly demonstrate any improvement.

There are also risks associated with testosterone replacement therapy, such as an elevated risk of developing prostate cancer. If you are suffering from male menopause and are considering the use of testosterone replacement therapy, speak with your doctor to learn more about the pros and cons of using this controversial treatment.

Hormone Imbalance in Women and Men

Most people are familiar with the hormonal changes that take place in women as they age, called menopause. But few people know that men experience similar changes over their lifetime as well. In addition, there are many more hormones in the body than just estrogen or testosterone. For the sake of clarity, this article will discuss hormone imbalance in adults. Hormone imbalance in children is another subject altogether.

What Are Hormones?



Hormones are the chemical messengers in the body. They are carried throughout the body in the bloodstream, so they are measurable by blood tests. Hormones work slowly over time and the body functions best when hormone levels are kept steady.

Hormones are made in the endocrine glands. The major endocrine glands are the pituitary, the pineal, thymus, thyroid, adrenal glands and the pancreas. Additionally, men produce hormones in the testes and women produce hormones in the ovaries.

Hormone Functions

Hormones are powerful substances that control a number of functions. Hormones regulate many processes including growth and development of the human body, metabolism, sexual function, reproduction and mood.

Different endocrine glands regulate different functions, and all of them work together to maintain homeostasis.

Hormone Imbalance

The body functions best when hormones are in balance, but it is surprisingly easy for them to become imbalanced. Hormones can become imbalanced in a variety of ways, but many of them stem from over-processed foods, environmental toxins and stress, and it doesn't matter if someone is a man or woman.

The Food/Stress Cycle

One of the most common hormone imbalances is the food/stress cycle. What happens is that when food is consumed, it causes blood sugar to rise. The hormone, insulin, is then released to distribute that sugar to the various cells throughout the body. Usually this process works well, regardless of sex.

However, in the hurried day-to-day lives that nearly everyone leads, it is common for the body to be inundated with refined carbohydrates, like white sugar, or foods that break down into simple sugar like potatoes. When this happens, the body has to try and compensate by releasing extra insulin in an attempt to use that sugar. This leads to the "crash" after the candy bar, so to speak. And because this whole process adds to stress levels in the body, cortisol, also known as "the stress hormone", increases sharply. This increase can cause sleep disturbances as well as causing a disruption in other hormones.



Environmental Toxins

Many of the products men and women use every day expose them to toxins that can greatly influence hormone levels. These substances often mimic hormones in the body and when they leach into the products that are consumed they can cause fluctuation which result in a number of problems.

BPA (Bisphenol A) - Effects

- Endocrine disruptor, strongest effects during early development
- Estrogen mimic
- Obesity
- Neurological disorders
- Thyroid function
- Cancer risk: breast, prostate, neuroblastoma
- Reproductive anomalies – ovarian development, ...
- DNA alterations related to estrogen
- Heart disease, diabetes
- Growth, reproduction, development of aquatic organisms, including fish, invertebrates, amphibians.

Bisphenol A, also known as BPA, is a chemical found in plastics. This substance mimics the hormone estrogen in the human body, and while that may not sound too bad, it really is. Some cancerous cells thrive on estrogen, so elevated levels could cause cancerous cells to develop and spread. In addition, elevated levels are linked to obesity, which has a whole host of problems associated with it.

Check plastic containers for the triangle marking that is typically on the bottom. If it has a 3, 6, or 7 in it, get rid of that container. These are the containers that leach the most BPA into foods and drinks.

Phthalates (pronounced they-lates) are another substance that mimic hormone action and have been shown to decrease levels of thyroid hormones. This can lead to obesity and fatigue. Phthalates are often found in artificial fragrances, which are used in nearly every cosmetic product on the market for both men and women, from deodorants to shampoo. Products that don't contain phthalates will be labeled so.



Rebalancing Hormones

Just as it's easy for hormones to become unbalanced, it's fairly easy to rebalance them again. Here are some simple ways to rebalance hormones without costly pharmaceuticals.

1. Eat small, well balanced meals frequently. This will help avoid the spike and crash associated with the food/stress cycle.
2. Take a good multi-vitamin and mineral supplement every day
3. Exercise regularly
4. Establish a bedtime routine that will promote healthy sleep
5. Reduce daily stress

If someone is still experiencing difficulties there are many supplements available over-the-counter to help.

Hormone imbalance can make people feel like they are going crazy. But by simply being mindful of one's diet, and careful about the products one use's, many hormone problems can be avoided. While menopause and andropause can't be avoided, following the same tips can make all the difference between just getting old and growing older gracefully.

Pros and Cons of Male Hormone Replacement Therapy

What Is It?

Testosterone is the main male hormone responsible for both development of the testes and the secondary male sexual characteristics. When levels become low, whether it's due to aging, injury or a medical condition, symptoms may develop. Hormone replacement therapy for men is the administration of testosterone to restore levels to within normal ranges.

If a testosterone deficiency is suspected, a blood test to measure total testosterone levels will be performed. According to the University of Rochester Medical Center, a normal testosterone level in men ranges between 300 and 1,000 nanograms per deciliter (ng/dl). Levels below 250 ng/dl are considered low and hormone therapy may be recommended, especially if symptoms are present.

Indications

A deficiency in testosterone is the main indication for hormone replacement therapy in men. Although a gradual decrease occurs with aging, other conditions can cause a younger male to have a low testosterone level. According to The Cleveland Clinic, side effects from **chemotherapy**, renal failure, injury to the testicles and stress can all lead to a testosterone deficiency. Klinefelter's Syndrome, which is a genetic disorder, also causes low testosterone levels.

Pros: Benefits

For men who have symptoms due to low testosterone, there are several benefits with taking male hormone replacement therapy. Although hormone therapy is not a treatment for all causes of **erectile dysfunction**, it may restore sexual function in some men. Increasing levels of testosterone to normal will also usually increase sex drive.

Therapy can also improve memory and mood in some men. Male hormone replacement therapy may also prevent bone loss, and some evidence suggests it may lower cholesterol levels. Some men also have an increase in their energy levels. Although **testosterone therapy** won't usually improve strength, it can help a man become leaner.

Cons: Side Effects

Although hormone replacement therapy may be recommended in men with a deficiency, there can be side effects. **Sleep problems**, acne and fluid retention can develop. Some men may also have low sperm counts, which can lead to infertility. An increase in red blood cell counts may also occur.

Hormone replacement therapy in men can also stimulate prostate tissue growth. An enlarged prostate may lead to symptoms, such as trouble urinating or frequent urination. In men who already have an enlarged prostate, testosterone replacement therapy may not be recommended.

Testosterone therapy should never be taken by men diagnosed with **prostate cancer**. Although testosterone therapy does not appear to cause prostate cancer, it may make it worse by increasing tumor growth.

How Is It Taken?

Men who are prescribed hormone replacement therapy have three main options for administration. Each method has advantages and disadvantages, which need to be discussed with a doctor. The options include:

- **Injection:** Hormone replacement therapy taken by injection causes a higher fluctuation in testosterone levels than with other methods of administration. For instance, testosterone levels are highest in the body immediately after the injection and low levels are present when the next injection is due.
- **Patch:** A patch containing testosterone is worn daily on the arms, back or abdomen. A patch is also available, which can be worn on the scrotum. An advantage to using the patch is, if it is worn daily as prescribed, levels of testosterone are kept steady. One disadvantage is the patch can cause skin irritation.
- **Gel:** A testosterone gel is also available, which needs to be applied daily. Similar to the patch, testosterone is absorbed through the skin after the gel is applied. Although the gel can cause skin irritation, it appears to occur less often than with the patch. One disadvantage is patients have to remember to apply the gel every day in order to keep testosterone levels steady.



Herbal Program for Andropause

- Fish oil supports hormone balance.
- Black Cohosh, Arginine, Ginkgo Biloba, Ginseng, and Damiana can help with the some of the sexual effects of menopause.
- Soy has estrogen properties and is widely used for menopause support.
- SAMe and St. John's Wort can help with the depression and anxiety that accompany menopause and andropause.
- Magnesium and CoQ10 are helpful with fatigue. CoQ10 is also helpful with diabetes, another hormone imbalance.

**CERTIFIED MEN'S HEALTH COUNSELOR ONLINE COURSE - SESSION 7
QUESTION & ANSWERS**

NAME: _____
ADDRESS: _____
CITY, STATE, ZIP, PC: _____
PHONE: _____
FAX: _____
E-MAIL: _____

Please be sure to fill out the information above, complete the test and e-mail or mail it back to us at iridology@netzero.net or P.O. Box 485, Weimar, CA, 95736-0485. We will grade your question & answer session and will let you know if we have any questions or concerns. **Please use a separate sheet to do this assignment.**

1. What is Andropause?
2. What are the symptoms of Andropause?
3. What are the medical treatments of Andropause?
4. What alternative treatments can be used for Andropause?
5. What is testosterone and how does it affect a man's body?