**PROGESTERONE USE IN MEN**

**Positive Progesterone Effects,**
- reduced stress and anxiety
- enhanced cognitive function
- facilitates thyroid hormone action
- normalizes blood sugar levels
- natural diuretic
- normalizes blood sugar levels
- normalizes zinc and copper levels
- restores proper cell oxygenation levels
- normalizes blood clotting
- reduced anxiety
- nerve growth

see information below towards the end for an even more information on actions of progesterone in men.

**Negative Progesterone Effects** are rare. Initially there may be lethargy and fatigue, but this passes as one adapts to therapy. In the long run there may be abdominal weight gain or loss, depending on the person.

**Why progesterone for men?**
Progesterone is commonly thought of as a 'female' sex hormone. This is misleading as it is vital to sustain not just health but life itself in all mammals of **both sexes.**

As a man gets older testosterone is converted into di-hydrotestosterone (DHT), which some believe is the cause of benign prostatic hyperplasia (BPH) and cancer, but some do not.

Oestrogen levels also increase as a man gets older. Oestrogen is known to stimulate cell growth.

Reading between the lines, because as yet, there is no definitive study done on this, it appears to be the increased oestrogen level which is the problem and not the two testosterones. As progesterone is a powerful counter-balance for estrogen, progesterone for men is essential.

If in fact testosterone were the culprit, then men aged 22 would have the highest incidence of BPH and cancer, as testosterone levels are at their highest point in the early 20's, but of course they don't. From the early twenty's to the late twenty's testosterone makes it's greatest drop, thereafter it continues to decline, but at a slower rate.

BPH starts affecting a man in his fifties and interestingly oestradiol levels start climbing from the age of fifty and are at their highest point in men in their late 60's, but during the same period progesterone levels are declining. Progesterone for men becomes that much more important with age.

5-alpha reductase inhibitors such as finasteride are usually given to prevent the conversion of testosterone to DHT, but research has found that progesterone is a natural inhibitor of 5-alpha reductase. Progesterone also down regulates the action of oestrogen if used in a sufficiently high dose. The endogenous oestrogen made by humans is now being supplemented by synthetic oestrogens found in the environment. They are now found in food, air, water, plastics, skin care products, no one can avoid them. Some authorities speculate this is the cause of the increase in problems such as hyperplasia or cancers of any hormonally sensitive tissues, such as the prostate, endometrium, cervix and breasts. So, despite often being, erroneously, thought of as a 'female' hormone progesterone for men is essential to preserve masculinity!

It's safety for men is without question. It's now given via IV transfusions for [Traumatic Brain Injury](#), over 70% of TBI victims are men.

Natural Treatment of excess estrogen man boobs. The safest route is to suppress oestrogen is with progesterone.
Progesterone is not a sex hormone, it plays no part in the secondary sexual characteristics which develop at puberty. It is secreted primarily by the testes in men and the ovaries in females. Smaller amounts are produced by the adrenal glands, the brain and glial cells.

There are no great quantitative differences between men and women (at least outside the woman’s luteal phase).

Progesterone is the precursor to the sex hormones oestrogen and testosterone, and to cortisol and aldosterone.

Progesterone has **several other advantages:**

- unlike oestrogen which can exacerbate brain injury, especially in animal models of ischaemic stroke, progesterone can be given to both males and females without affecting gender and sexual functions
- it's use in **TBI (via IV transfusion)** yielded extremely promising results and found no adverse events attributable to progesterone
- inhibits the mitogenic action of oestrogen
- protects against breast cancer which is increasing in men
- helps correct the hormonal imbalance commonly found in men with erectile dysfunction as it increases the production of nitric oxide. In much the same way as Viagra does, but with no adverse side affects
- as an anti-inflammatory agent, progesterone has been shown to reduce the response of natural killer cells as well as other known initiators of inflammation. Hence it's benefit for mastalgia (breast pain/inflammation)
- influences spermiogenesis, sperm capacitation/acrosome reaction and testosterone biosynthesis in the Leydig cells in men
- is used in the treatment of benign prostate hyperplasia (BPH) in men via a transscrotal delivery system
- is used to lower dihydrotestosterone levels in men. The progesterone metabolite 17-0H-progesterone was found to have the highest inhibitory effect on the enzyme 5-alpha reductase which converts testosterone into DHT
- is rapidly absorbed transdermally and its patterns of distribution and metabolism are comparable to those previously reported for intravascularly administered progesterone
- the progesterone metabolite allopregnanolone reduces the brain's response to stress
- progesterone regulates the secretion of catecholamines during stress
- prevents lipid peroxidation
- acutely inhibits cholesteryl ester formation which is associated with atherosclerosis
- confers coronary vascular protection
- improves sleep
- promotes regeneration and myelination of axons
- enhances remyelination in degenerative disorders
- has a neuroprotective and antioxidant effect in an injured nervous system
- has multiple effects on glial cells, it influences growth, differentiation and increases the expression of myelin-specific proteins in oligodendrocytes, and potentiates the formation of new myelin sheaths by Schwann cells in vivo
- it reduces programmed cell death and the synthesis of inflammatory factors that can kill neurons hours to days after traumatic brain injury
- systemic injections of the neurosteroid progesterone given after traumatic brain injury (TBI) have been shown to improve cognitive, sensory and motor recovery, enhancing both short and long term recovery
It is rapidly absorbed transdermally and its patterns of distribution and metabolism are comparable to those previously reported for intravascularly administered progesterone. For this reason alone it is preferable to the other routes. Another advantage is that it can be applied anywhere. Although progesterone is circulated rapidly throughout the body, applying it to the afflicted part brings quicker relief.

Diet:

Restrict or avoid carbonated beverages or “soda”, sugars and grains with gluten. Limit grass fed red meat to 3 or fewer times per week. Choose organic vegetables for carbohydrate loads. Limit alcohol use as this causes estrone secretion to increase. Estrone levels can increase 300% for up to 5 hours after ingestion of alcohol. Dairy products are not necessary. Avoid sugar, refined carbohydrates, and refined fats, choosing instead plenty of fresh vegetables of all sorts particularly broad leafy greens. Consume up to 60% of daily calories in the form of good fats or essential fatty acids as from Chia or hemp seeds, coconut oil, flaxseed oil, fish oil, or Borage oil, CLA (conjugated linoleic acid), and Black Currant oil.

Daily recommendations:

- Vitamin D: 5000-10,000 I.U. daily.
- Vitamin C: 1 to 2 grams twice daily.
- Vitamin E: 400IU twice daily.
- Selenium: 150mcg twice daily.
- Betacarotene: 25,000iu/day (and/or Vitamin A 20,000IU/day).
- Zinc: 50 to 100 mg a day.
- Calcium: Seek to obtain 800 to 1000mg/day by diet and supplements.
- Magnesium: 400 to 800mg/day supplement.
- Essential Omega 3 and 6 Fatty Acids, Fish, Chia, Flax seed oil, CLA, Borage oil 2000mg 2 to 3 x daily.
- Friendly force Probiotics: 25 billion cultures per capsule, use one to two capsules 2 times a day.
- Proanthrocyanadins (Grape seed extract or pychnogenol): use one to two 100mg capsules a day.

Pycnogenol and Grape See Extract are antioxidant's that potentiate vitamins A, E, and C. (It has been shown in some studies to shrink tumors, improve rheumatoid arthritis, asthma, multiple sclerosis, and other autoimmune disorders. Dosage should be increased in autoimmune cases to 50mg, four capsules bid.) Antioxidants can help prevent and/or slow the progression of Alzheimer’s disease, arthritis, cancer, cataracts, diabetes, heart disease, all forms of hepatitis, immune weakness, inflammatory disorders, macular degeneration, and Parkinson’s disease.

Suggestions for better nutrition try,
Potency Guaranteed Supplements Beginning with;

1.) Multi-Vitamin Mineral Trace Mineral Support Formulas
These are all high quality THERAPEUTIC multi-vitamins. They include B-vitamins which are used in the production of energy and essential trace minerals. It is in a specialized base that contains herbs, digestive enzymes, amino acids, and other compounds to assist in balancing for each specific problem area. The dose is 2 tablets twice daily, preferably with food. Each formula also contains therapeutic amounts of the following:

Vitamin C 1000mg
should be taken daily for immune system enhancement, heart protection, and anti-aging. Vitamin C is a powerful antioxidant. If you smoke it is very important to take this vitamin to prevent depletion. It is also necessary for the body to fight infection

Vitamin E 500 IU
Vitamin E is another powerful antioxidant. Studies have shown that Natural Vitamin E helps with heart protection, anti-aging, prevents breast tenderness, and is helpful in the prevention of a number of illnesses. Water soluble Vitamin E is processed by the body efficiently. Patients on blood thinners should consult their physician prior to starting high dose Vitamin E therapy.

Vitamin D3 5000-10,000IU
Needed for proper immune function via macrocytic activation factor pathways.

Selenium 200mcg
Selenium is also an antioxidant mineral that complements vitamin E to boost the immune system. It is also one of the more important cancer inhibiting nutrients available to man. This source comes from kelp.

Elemental Magnesium 400mg and Calcium 300mg
Magnesium is deficient in most American diets. It is essential for bone health but must be in balance with Calcium to function properly. It also helps reduce spasm in the coronary artery and has a calming effect on nerves.

2.) Osseoappatite Plus or CalApatite w/Magnesium
This form of calcium is the best absorbed and has been shown to increase bone density in clinical practice. It is combined with other minerals and herbs essential for bone health. Take one tablet daily with your individual Support formula multi-vitamin.

3.) Super EPA or Barlean’s Omega 3 Fish Oil
This Omega 3 supplement is literally brain food. It improves thinking and memory. There is also heart protection and arthritis prevention in this product. It is an essential fatty acid or a ‘good’ fat that can not be made into fat but is used for energy production in the body. It is highly recommended for balanced nutrition. Take one 500mg capsule 2 to 4 times a day.

4.) Grape Seed Extract 100mg
This antioxidant is 20 times more powerful than vitamin C, 50 more times powerful than vitamin E, and has been shown to help with auto-immune disorders. It also strengthens the Multi-Vitamin Support Formulas and, Vitamins C and E. Take 1 or 2 capsules daily.
Steroidogenesis Pathways

Pregnenolone→17Alpha-hydroxypregnenolone→Dehydroepiandrosterone→Androstenediol

17Alpha-hydroxyprogesterone→Dehydroepiandrosterone→Androstenedione→Androstenedione

Progesterone→Androstenedione→Testosterone

11-deoxycorticosterone→Androstenedione

11-deoxycortisol→Androstenedione

Estrone→Estradiol

Corticosterone→Estrogen

Cortisol→Estriol

18-hydroxycorticosterone

Aldosterone

(Note: Dehydroepiandrosterone (DHEA) is an alternative pathway to androstenedione and the gonadal hormones.)