## **HEALTH ADDITIONS, PLLC**

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## **FAQ: Testosterone Hormone Implants for Women and Men**

Data supports that Testosterone hormone replacement therapy with pellet implants is the most effective and the most bio-identical method to deliver hormones in both men and women. Implants, placed under the skin, consistently release small, physiologic doses of hormones providing optimal therapy.

**What are Pellets?** Pellets are made up of testosterone that is pressed or fused into very small solid cylinders. These pellets are slightly larger than a grain of rice. In the United States, the majority of pellets are made by compounding pharmacists and delivered in sterile glass vials. There is also a commercially produced 'FDA approved' 75 mg testosterone pellet.

**Why pellets?** Pellets deliver consistent, healthy levels of hormones for 3-5 months in women and 4-6 months in men. They avoid the fluctuations, or ups and downs, of hormone levels seen with every other method of delivery. This is important for optimal health and disease prevention. Pellets do *not* increase the risk of blood clots like conventional or synthetic hormone replacement therapy.

In studies, when compared to conventional hormone replacement therapy, pellets have been shown to be *superior* for relief of menopausal symptoms, maintenance of bone density, restoration of sleep patterns, and improvement in sex drive, libido, sexual response and performance.

Testosterone delivered by a pellet implant, has been used to treat migraine, PMS, and menstrual headaches. It also helps with vaginal dryness, incontinence, urinary urgency and frequency. In both men and women, testosterone has been shown to increase energy, relieve depression, increase sense of well being, relieve anxiety and improve memory and concentration. Testosterone, delivered by pellet implant, increases lean body mass (muscle strength, bone density) and decreases fat mass. Men and women need adequate levels of testosterone for optimal *mental* and *physical* health and for the prevention of chronic illnesses like Alzheimer's and Parkinson's disease, which are associated with low testosterone levels.

Even patients who have failed other types of hormone therapy have a very high success rate with pellets. There is no other method of hormone delivery that is as convenient for the patient as the implants. Pellets have been used in both men and women since the late 1930's. There is more data to support the use of pellets than any other method of delivery of hormones.

How and where are pellets inserted? The insertion of pellets is a simple, relatively painless procedure done under local anesthesia. The pellets are usually inserted in the upper buttocks through a small incision, which is then taped, closed. The experience of the health care professional matters a great deal, not only in placing the pellets, but also in determining the correct dosage of hormones to be used.

Are there any side effects or complications from the insertion of the pellets? Complications from the insertion of pellets include; minor bleeding or bruising, discoloration of the skin, infection, and the possible extrusion of the pellet. Other than slight bruising, or discoloration of the skin, these complications are very *rare*. Testosterone may cause a slight increase in facial hair in some women. Testosterone stimulates the bone marrow and increases the production of red blood cells. A low testosterone level in older men is a cause of anemia. Testosterone, delivered by implants or other methods, can cause an elevation in the red blood cells.

After the insertion of the implants, vigorous physical activity is avoided for 48 hours in women and

up to 5 to 7 days in men. Early physical activity is a cause of 'extrusion', which is a pellet working its way out. Antibiotics may be prescribed if a patient is diabetic or has had a joint replaced. However, this is a 'clean procedure' and antibiotics are usually not needed.

Why haven't I heard about Pellets? You may wonder why you haven't heard of pellets. Pellets are not patented and have not been marketed in the United States. They are frequently used in Europe and Australia where pharmaceutical companies produce pellets. Most of the research on pellets is out of Europe and Australia. Pellets were frequently used in the United States from about 1940 through the late 70's when oral patented chemically altered estrogens and testosterones were marketed to the public. This is changing! Currently, some of the most exciting data on hormone implants in breast cancer patients is out of the United States. Even in United States, there are clinics that specialize in the use of pellets for hormone therapy.

**Do men need hormone therapy?** Testosterone levels begin to decline in men beginning in their early 30's. Most men maintain adequate levels of testosterone into their mid 40's to mid 50's, some into their late 70's to early 80's. Men should be tested when they begin to show signs of testosterone deficiency. Even men in their 30's can be testosterone deficient and show signs of bone loss, fatigue, depression, erectile dysfunction, difficulty sleeping and mental decline. Most men need to be tested before 50 years of age. It is never too late to benefit from hormone therapy.

What if my primary care physician or my gynecologist says that there is 'no data' to support the use of pellet implants? He or she is wrong. There is a big difference between 'no data' and not having read the data. It is much easier for busy practitioners to dismiss the patient, than it is to question their beliefs and do the research. Patients need to make an informed choice. After pellets are inserted, patients may notice that they have more energy, sleep better and feel happier. Muscle mass and bone density will increase while fatty tissue decreases. Patients may notice increased strength, co-ordination and physical performance. They may see an improvement in skin tone and hair texture. Concentration and memory may improve as will overall physical and sexual health. There is data to support the 'long term' safety of hormones delivered by pellet implants.

**Do pellets have the same danger of breast cancer as other forms of hormone replacement therapy?** Testosterone pellets do not carry with them the increased risk of breast cancer as oral estrogens. In fact, there is evidence that bio-identical testosterone pellets decrease the rate of breast cancer. Data supports that *testosterone is* breast protective.

**Testosterone**, delivered by pellet implantation, has been shown to decrease breast proliferation and **lower the risk of breast cancer**, even in patients on conventional hormone replacement therapy. Clinical studies show that bio-identical testosterone balances estrogen and is breast protective. This is not true of *oral*, synthetic methyl-testosterone found in Estratest®, which gets converted to a potent synthetic estrogen, which stimulates breast tissue. In the past, testosterone implants have been used to treat patients with advanced breast cancer. In 1940, it was theorized that treating patients with testosterone implants earlier, at the time of diagnosis, would have an even greater benefit, preventing recurrence. Androgens have also been shown to enhance the effect of Tamoxifen® therapy in breast cancer patients. (References supporting these statements can be found in the data section of the website <a href="www.hormonebalance.org">www.hormonebalance.org</a> in the 'Breast Cancer Folder'. A power point presentation 'Nov 07', summarizing the full text references, may also be viewed.)

Will hormone therapy with pellets help with hair loss? Hormone deficiency is a common cause of hair loss and treatment with testosterone implants can help to re-grow hair in many women. Hair often becomes thicker and less dry with pellet therapy

**How long until a patient feels better after pellets are inserted?** Some patients begin to 'feel better' within 24-48 hours while others may take several weeks or two to notice the first changes. Diet and lifestyle, along with hormone balance are critical for optimal health. Stress is a major contributor to hormone imbalance and illness.