

BHRT – BIOIDENTICAL HORMONE REPLACEMENT THERAPY



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

BHRT Fused Pellet Implant History

Hormone replacement using pellet implants has been used with great success in the U.S., Europe, and Australia since 1938. In fact, pellet implants were a very popular mode of hormone administration in the U.S. until the 1970s, when many oral and topical commercial products were developed. While the demand for pellets diminished in the U.S., pellet implants continued to be a very popular mode of hormone administration throughout Europe and Australia. In the last 10 years, due to advances made in processes and a better understanding of the benefits of fused pellet implants for hormone replacement, this mode of hormone administration has grown in popularity in the U.S. Over 70 years of research has illustrated the benefits of pellet implants in administering hormones in both women and men.*

- Pellet implants deliver consistent, physiologic levels of hormones.
- The consistent and physiologic dosing has been shown to maintain and improve bone density.
- Pellet implants bypass the liver and don't negatively impact clotting factors, blood pressure, lipid levels, glucose, or liver function.

Pellet implants have consistently been shown to improve:*

- Cardiovascular Health
- Sex Drive and Libido
- Headaches and Migraines
- Insomnia
- Hot Flashes
- Mood and Depression
- Joint Aches and Pains

What Is BHRT?

An individualized approach to hormone replacement therapy, using biologically identical hormones (BHRT), pinpoints a person's exact hormone levels, and what hormones are needed to balance his/her hormone deficiency. The differences between synthetic and biologically identical hormones are in their chemical structures and functionality.

Biologically identical hormones have the same chemical structure as the hormones created naturally in the human body.

How Does BHRT Work?

Bio-identical hormones have the exact same chemical structure as human hormones. The body recognizes them and allows them to mimic the function of the hormones the body produces on its own. BHRT may be useful for relieving the symptoms of a variety of conditions common among women of all ages, including:

- Hot Flashes
- Night Sweats
- Mood Swings
- Sleep Disturbances
- Decreased Libido
- Painful Sexual Intercourse
- Vaginal Dryness
- Decreased Energy Level
- Weight Gain
- Premenstrual Syndrom (PMS)
- Post-Partum Depression

What Are BHRT Fused Pellets Implants?

Fused pellet implants are compounded using biologically identical hormones (most often Estradiol or Testosterone). The hormones are pressed / fused into very small cylinders. Our compounding pharmacy also compounds DHEA, Pregnenolone, Progesterone, Biest, and Testosterone with Anastrozole fused pellet implants.



WHY PELLETS?

1. Pellets deliver consistent, healthy levels of hormones for 3-5 months in women and 4-6 months in men.
2. They avoid the fluctuations, or ups and downs, of hormone levels seen with every other method of delivery.
3. Estrogen delivered by these pellets, maintain the normal ratio of estradiol to estrone. This is important for optimal health and disease prevention.
4. Pellets do not increase the risk of blood clots like conventional or synthetic hormone replacement therapy.
5. In studies, when compared to conventional hormone replacement therapy, pellets have been shown to be superior for relief of menopausal and andropausal symptoms (male hormone decline or "male menopause"), maintenance of bone density, restoration of sleep patterns, and improvement in sex drive, libido, sexual response and performance.
6. Testosterone delivered by a pellet implant, has been used to treat migraine and menstrual headaches.
7. 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.
8. 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 and heart attacks, 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.

Do men need hormone therapy?

Testosterone levels begin to decline in men beginning in their early 30's and is routinely referred to as "andropause". 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 as mentioned. 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 around 50 years of age. It is never too late to benefit from hormone therapy.

Where Are BHRT Fused Pellet Implants Inserted?

Pellet insertion is a relatively simple in-office procedure done under local anesthesia. The pellets are inserted subcutaneously (under the fatty lining of skin), either in the lower abdomen or the upper buttocks through a very small incision. The incision is then closed with surgical glue or sterile-tape strips. If inserted correctly, patients cannot feel the implants under their skin. Implants placed under the skin consistently release small, physiologic doses of hormones, which have been shown to have many benefits.

How Long Do BHRT Fused Pellet Implants Last?

Fused Pellet Implants typically last between 4-6 months, depending on how rapidly the hormones are metabolized. After insertion of the pellets, vigorous physical activity should be avoided for 2-3 days, or as suggested by the healthcare practitioner. Some patients begin to feel symptom relief within 48 hours, while others may take up to two weeks to notice a marked difference. The pellets do not need to be removed. They are completely dissolved by the body.

Are There Any Side-Effects?

Generally, there are minimal side-effects associated with the pellet implant procedure. Complications include: minor bleeding, bruising, infection, and pellet extrusion. Other than slight bruising, the other complications are very rare.

Do pellets have the same danger of breast cancer as other forms of hormone replacement therapy?

Pellets do not carry with them the same risk of breast cancer as high doses of oral estrogens. Oral prescriptive estrogens do not maintain the correct estrogen ratio or safe hormone metabolites. Pellets do not increase the risk of breast cancer like the synthetic, chemical progestins used in the Women's Health Initiative Trial. Data supports that balanced, bio-identical hormones are 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.

Are there side effects to estrogen delivered by pellet implantation?

When a patient first starts on hormone therapy there may be mild, temporary breast tenderness, which resolves on its own. Hormone receptors may be very sensitive and take time to adjust. There may be a temporary water weight gain, which will also resolve on its own. Balancing the progesterone to estrogen ration can effectively curtail vaginal bleeding

Will hormone therapy with estradiol and testosterone pellets help with hair loss?

Hormone deficiency is a common cause of hair loss and treatment with estradiol and testosterone implants can help re-grow hair. Hair becomes thicker and less dry with pellet therapy.

How long until a patient feels better after pellets are inserted?

Most female patients begin to 'feel better' within 48-72 hours while others may take a week or two to notice a difference and up to 6 weeks to feel maximum benefits. Men usually take 2-4 weeks before they start to notice the benefits of the pellets. Diet and lifestyle, along with hormone balance are critical for optimal health. Stress is a major contributor to hormone imbalances and illness.

How Do I Know What Hormones I Need?

Before starting any hormone replacement therapy, patients should have hormone testing done to evaluate their personal hormone profile. Based on existing hormone levels and health history, then we will make a hormone replacement recommendation. Once pellets have been inserted, hormone levels will be reevaluated at 6 weeks and then yearly.



How are hormones monitored during therapy?

Hormone levels will be drawn and evaluated before therapy is started. This will include a estrogen, progesterone, testosterone, cortisol, and DHEA for women. Men will also need a PSA prior to starting therapy. Thyroid hormone levels will also be evaluated. Levels will be reevaluated during hormone therapy, usually around 6 weeks and then yearly.. Men must notify their primary care physician and obtain a digital rectal exam each year. Women are advised to continue their monthly self-breast exam and obtain a mammogram and/or pap smear as advised by their gynecologist or primary care practitioner.

Can a patient be allergic to the implants?

Very rarely, a patient will develop local zone of redness (3-8 cm) and itching at the site of the testosterone implant. There is minimal or no tenderness and no other sign of infection. Many pellet formulations include stearic acid and PVP (povidone). Patients may react to the PVP. Many patients who develop a local reaction to the implant have low cortisol levels and upon further questioning, have symptoms of adrenal insufficiency. Cortisol testing may be recommended. If needed, 25-50mg of benedryl works well for the itching.

How much does this cost?

The cost for the insertion of pellets will vary depending on the dose of the hormone and the number of pellets needed. Men need a much larger dose of testosterone than women and the cost is higher. Pellets need to be inserted 2 to 4 times a year depending on how rapidly a patient metabolizes hormones. When compared to the cost of drugs to treat the individual symptoms of hormone decline, pellets are very cost effective.

Will insurance cover the procedure?

Some insurance companies cover the cost of pellets. Others do not. Most physicians, like us require payment for their services. Patients may want to contact their insurance companies to see if their costs will be reimbursed. Prevention is much more cost effective than disease. Patients are able to 'appeal' a denied claim.

