## Hormone Article, March 2016

As we age, low energy levels, problems sleeping, mental fog, diminished libido, or fatigue may become part of our regular existence. In addition, we may experience a loss of muscle mass and increased central body fat no matter how much we exercise. Many of these symptoms are a result of a hormone imbalance that can begin as early as our 30s. The right balance of hormones is essential because hormones act as messengers, and control actions of cells and organs.

Traditionally, hormone imbalances have been treated with oral hormone therapy, a one-size-fits-all combination of synthetic estradiol and progesterone, or testosterone in the form of injections, patches, creams and gels, resulting in adverse side effects, such as increased risk of cardiovascular disease and certain types of cancer. The good news is that not all hormone therapies are created equal. Hormone balance can be restored with BioTE (Bio-identical Hormone Pellet Therapy), administered by licensed physicians with the proper medical background and training in pellet implant hormone replacement technology.

BioTE pellet therapy uses bio-identical, all-natural estrogen and testosterone, delivered by tiny pellets inserted into the fat layer just under the skin. The pellets are manufactured from natural plant sources in a sterile facility by a U.S. compounding pharmacy using strict federal guidelines and regulated by the FDA. These pellets act as a tiny storehouse of pure, compressed hormones which the body can access as needed. Pellets deliver a consistent level of hormones and outperform oral, injection, patch and cream prescriptions with fewer side effects. Pellets provide sustained hormone levels throughout the day, for up to four to six months.

This treatment is neither new, nor is it one of the latest fads. Hormone replacement using pellet implants has been used with great success in the United States, Europe, Asia and Australia since 1939. In the U.S., it has recently experienced resurgence in the South, and is making its way around the East and West Coasts. It is also coming around to the Midwest. This natural form of hormone replacement therapy has caught on with the rapidly growing anti-aging industry and is now available in Siouxland.

Local practitioners started offering BioTE pellet therapy in March of 2015 after looking into safe ways of providing hormone replacement and an alternate form of osteoporosis treatment for patients. Many potential patients, both men and women are needlessly suffering from symptoms such as low energy levels, menopausal fatigue, low sexual stamina, problems sleeping, moodiness and irritability, diminished libido, hot flashes and night sweats, among others.

Hormone replacement directly benefits the bones, and often practitioners are running out of options to help many patients with osteoporosis. Prior to the 2000's, oral estrogen and synthetic progesterone was used for hormone replacement. Estrogen provides cardiovascular protection, but there was a question of whether or not the progesterone negated the cardiovascular benefits. And there was an increased risk of breast cancer, heart attacks and strokes using the large doses of hormones necessary to be administered by mouth. Large oral doses are required since much of it is immediately processed by the liver, creating higher levels of toxic metabolites. The Women's Health Initiative came out with a study in 2002 that showed an increased risk of heart attacks in women taking oral conjugated estrogen derived from horse urine combined with synthetic progesterone. So doctors began taking women off of hormone replacement or not starting them on it. The pendulum swung from everyone being on hormones to virtually no one.

Men who were hormone deficient and symptomatic are either not treated or taking synthetic testosterone topically or injected into muscle every two weeks. They often experience major hormone

## **Hormone Article, March 2016**

swings with peaks and valleys, and then become profoundly deficient at the end of the cycle. It's not a good way to replace hormones. When men use topical hormone creams, the absorption rate is unpredictable and hormone levels are often inadequate to achieve adequate symptom relief.

Based on well published research the data indicate that bio-identical hormone replacement therapy with pellet implants is the most safe and effective route to hormone replacement. This research involves decades of medical studies with thousands of patients and published in respected, peer reviewed medical journals throughout the world. These studies consistently demonstrate that bio-identical hormone replacement therapy using pellets is a very viable option for many patients.

The treatment is only administered after appropriate patient selection, measuring the patient's hormone levels in the doctor's office with dosing calculations that use a proprietary computer program. It takes into account an individual's age, weight, physical activity and baseline hormone levels. Four to six weeks after implantation the hormone levels are measured again to make sure optimal levels have been achieved and to make minor dosing adjustments, if needed. This is not a one-size-fits-all approach. This is the most scientific method to dose hormone replacement.

The therapy offers many benefits. Both men and women who receive pellet implant therapy will experience greater mental clarity, increased libido, a decrease in central body fat with an increase in muscle tone and mass, enhanced energy level and less fatigue, and a decrease in depression, irritability and mood swings. The strategy with the BioTE program is to not only to replace hormones but to optimize hormone levels to what is typically present in healthy young adults for the best symptom relief and for patients to experience optimal improvement in muscle, body fat and bone quality.

The longer women go without the protection of estrogen or go without replacement therapy, the greater the risk of developing serious health problems including osteoporosis, diabetes, heart disease, deterioration of the collagen in skin and joints, impaired vision and Alzheimer's Disease.

Women may also need testosterone therapy. Healthy young ovaries make testosterone, which results in less central body fat. Women lose testosterone faster than estrogen. Women lose 50 percent of their testosterone production between the ages of 20-40 and this has been implicated in post-partum depression. Men typically begin losing 1-3 percent of their testosterone per year starting in their late 20s. With reduced testosterone levels, both men and women have more central body fat, loss of muscle mass, higher rates of diabetes and diminished libido.

Patients who are on the pellet implant therapy are experiencing some dramatic results. Nearly ninety-five percent of people who initiate the pellet implants return for further treatments. The pellets last an average of 3-4 months for women and 5 to 6 months for men. Hormone therapy is often augmented with nutraceutical grade supplements, such as iodine and Vitamin D, for adequate nutrient and mineral support to enhance breast, prostate, joint and bone health.

If you are looking for a natural way to regain your youthful vigor and energy with safe and effective hormone replacement therapy, then BioTE may have right answer for you.