

## Natural Thyroid Replacement

What is your thyroid? What does it do?

- Butterfly shaped organ located low in the front of your neck
- Receives input from your pituitary (in your brain) from the hormone TSH, **Thyroid Stimulating Hormone**
- Initiates CNS maturation during growth, regulates your metabolism, increases cardiac output, regulates skin turn over, hair growth, nail growth, mental function, and energy output
- Releases T4 (Thyroxine) which is **converted** to T3 (Triiodothyronine) which is what your body uses for energy

But my doctor said my thyroid is fine!

- Mainstream medicine only tests **TSH** (brain to thyroid message)
- A 10x range is used as “normal”, which is why you probably still don’t feel at your best
- It is the **Free T3** (the actual energy made) is not checked, which is the most important part!
- Many medicines, diseases, low vitamins & minerals (zinc, iron, selenium and iodine), gut issues and STRESS can stop the conversion from T4 to T3

Ok, so what does low thyroid feel like?

- Fatigue / weakness
- Constipation
- Hair loss & loss of the outer eyebrow hair
- Depression, inability to focus
- Cold intolerance
- Dry skin
- Weight gain & Irregular periods

But I take Synthroid, isn’t that thyroid?

- Synthroid (levothyroxine) is T4, which still has to be converted to T3 to do its job
- Medications (beta blockers, anti-depressants, heavy metals, cortisol) block that conversion
- Dosed based on your TSH and T4, NOT on your T3
- Synthroid stays in your system for days and has never had a proven study showing it works effectively
- Not a natural replacement, that your body understands
- Many studies have shown that patients on Synthroid complain of being depressed, slow and having a foggy mind

Natural Thyroid Replacement

- Based on the actual energy output you are making, your T3 – the most important part, which most physicians don’t check.
- Uses desiccated thyroid hormone that contains T3 and T4
- Shorter half-life, only stays in your system for a day, thus safer
- Brings you back to your optimal function and health
- Increases your immune system, cardiac function, mental function, energy, overall sense of well being
- Fights against the metabolic syndrome (high blood pressure, high cholesterol, diabetes, obesity)

Functional Medicine Lab Tests

- We check your TSH, T4, Free T3 and monitor you closely
- We also check for antibodies against your thyroid and important vitamins and minerals that help support your thyroid as well

## Bioidentical Hormone Replacement Therapy

### Why Bioidentical Hormones?

- Synthetic hormones give incomplete signals and have carcinogenic metabolites since your body does not understand the chemical structure.
- WHI study in 2002 had to be stopped (they were using equine conjugated estrogens and fake progesterones) due to breast cancer, strokes and heart attacks in the studies!
- *Bioidentical hormones* offer a relief of symptoms, a prevention of memory loss, increase in heart health, bone production and decreased incidence of cancer.

### Women - Menopause Symptoms (low estrogen, progesterone, DHEA and testosterone)

- Hot flashes, night sweats, vaginal dryness, anxiety, mood swings, irritability, insomnia, depression, weight gain, hair growth on face, UTIs, bloating, panic attacks, loss of sexual interest, osteoporosis, hair loss, memory lapses

### Estrogen functions

- Stimulates the function of choline acetyltransferase, an enzyme that protects against Alzheimer's disease
- Increases metabolic rate and energy
- Improves insulin sensitivity
- Regulates body temperature
- Helps maintain muscle and helps with fine motor skills
- Improves sleep and helps maintain memory
- Reduces the risks of cataracts
- Dilates small arteries and maintains the elasticity of arteries, as well as increasing blood flow
- Decreases accumulation of plaque on arteries and decreases blood pressure and LDL
- Maintains collagen and water content of skin

### Progesterone Functions:

- Improves mood and reduces anxiety
- Helps improve deep sleep and REM sleep
- Reduces pain and inflammation in the body and the brain
- Reduces headaches and migraines, and increases metabolic rate
- Acts as a natural diuretic.

### Men – Andropause (testosterone, DHEA, DHT and estrogen)

- Testosterone decline begins early, around 30 years old. 25-75 years old, 30% decrease in total testosterone. Losing about 2% a year.
- Severe deficiency can start very early in the 20's.
- Testosterone is getting lower every year due to environmental toxins acting like estrogens blocking the receptor sites
- The levels of testosterone are lower in the blood of men with prostate cancer and associated with HIGH estrogen.

### Low Testosterone Symptoms

- Loss of drive and competitive edge
- Stiffness and pain in muscles and joints
- Falling level of fitness & reduced libido
- Decreased effectiveness of workouts, due to less muscle and more fat
- Osteoporosis and anemia
- Increased cancer
- Increased fatigue, depression and mood changes

### Testosterone Deficiency Repercussions

- Increased aging of the heart and circulation, causing increased chance for heart attacks and strokes
- Increased aging of the brain, causing decreased memory, intelligence, increased dementia and Alzheimer's
- Increased risk of diabetes and increased LDL, as well as bone loss