NATURAL SOLUTIONS
for a Healthy You

OPTIMAL THYROID FUNCTION
OPTIMAL BODY BALANCE

ROLE OF THE THYROID:

- Small, butterfly shaped organ in neck
- Vital in regulation of metabolism
- Filled with iodine-rich hormones: T4 and T3
- Primary function of T3/T4 is to convert food into energy and to regulate body systems

Deficiency in production or absorption of T3/T4 can cause a decline in metabolism and create many symptoms

Symptoms of Hypothyroidism

Up to 34% of adult population has some form of thyroid deficiency. More than 20 million Americans currently suffer from undiagnosed hypothyroidism.

Dry skin
Coarse, brittle hair
Hair loss (thinning of the eyebrows)
Cold hands and feet
Weakness and fatigue
Muscle weakness and or pain
Insomnia
Difficulty losing weight

Menstrual irregularities and PMS
Constipation
Swelling of the hands/feet
High total cholesterol / Low HDL
Dementia
'Brain fog"
Decreased immune function

Fluid retention
Drooping eyelids
Discoloration of the skin
Loss/gain in appetite
High triglycerides
Unexplained gain in weight
Depression
Loss of libido
High blood pressure

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Hypothyroidism and Weight Loss

- Thyroid is your metabolic powerhouse
- Not producing enough active thyroid hormone can have a HUGE impact on ability to lose weight
- Decrease basal metabolic rate (BMR)
- Easy to gain weight
- Very difficult to lose it
- Everything slows down

Under functioning thyroid affects many other Underlying Metabolic Imbalances (UMI's)

- Slows digestion and can lead to gut dysbiosis
- Decreased neurotransmitter function
- Increases cravings, appetite, depression and disturbs sleep
- Can cause or exacerbate insulin resistance
- Can cause or exacerbate hormone imbalances

Other UMI's can also negatively affect thyroid function

- Adrenal dysfunction and excess cortisol reduce thyroid function
- Sex hormone imbalances (estrogen dominance) reduce thyroid function

The Testing Controversy

- Thyroid stimulating hormone (TSH) is usually measured to diagnose hypothyroidism
- ‘High’ TSH = hypothyroidism
- The problem lies in defining the standard ranges for TSH
- Standard range is 0.2-5.5 µU/ml
- Studies show that TSH > 2.0 results in ‘subclinical hypothyroidism' and decreased health
- Do a full panel: TSH, Free T3 and Free T4

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Improving Thyroid Function

- Professional assessment and correction often necessary
- Supply the body with proper nutrients
  - Iodine – seaweed (dulse, kelp) or drops (150-300 mcg/day)
  - Selenium – Brazil nuts or supplement (100-400 mcg/day)
  - **Thyrosol** – 1-2 capsules 2x/day
  - **Thyroid Pro** – used as needed for low T3 or T4
- Avoid toxicity
  - 'Endocrine disruptors' – PCBs, insecticides, mercury, fluoride and chlorine
  - Choose organic foods
  - Filter your water – reverse osmosis and distilled best
  - Use fluoride free toothpaste and mouthwash
  - Do periodic detoxification or cleansing protocols- **a great 10 day program is a good place to start**
- Eliminate goitrogenic foods
  - They reduce the body's ability to use iodine sufficiently to convert T4 to T3
  - Foods that contain goitrogens: cabbage, cauliflower, kale, kohlrabi, mustard greens, rutabaga, turnips, soybeans, peanuts, pine nuts, walnuts and millet
  - Cooking and/or fermentation deactivate goitrogens

Top Worst Foods for Your Underactive Thyroid

White Bread: white bread does not contain significant nutritional value and for some people can contribute to difficulties with insulin resistance and hormonal problems.

Caffeine: examples include, but are not limited to, coffee, soft drinks, hot cocoa, chocolate and some herbal teas. All of these delicious comfort foods and drinks will depress proper thyroid function and make your underactive thyroid symptoms worse.

Broccoli: don't eat this raw or cooked. Broccoli is considered a goitrogenic food, which means that consuming broccoli can increase the likelihood that you'll develop a goiter somewhere on your body. This would be due to decreased thyroid hormone production.

Other goitrogenic foods: cabbage, rutabagas, coleslaw, sauerkraut, soybeans, kale, white turnips, horseradish, walnuts, peaches.

Peanuts: yes, they are salty, crunchy and delicious, but they aren't the best snack choice for someone with an underactive thyroid as they interfere with the production of thyroid hormones.

Fluoride: this is found in toothpaste and drinking water that comes from the tap. Fluoride essentially blocks iodine receptors in the thyroid gland which causes reduced iodine-containing hormone production.

Chlorine: not only for pools, it is found in pretty much everyone's drinking water that comes directly from the tap. Like fluoride, chlorine also blocks iodine receptors in the thyroid gland, causing reduced iodine-containing hormone production. So drink plenty of distilled or purified water.

Soy: soybeans are off limits, as they have an anti-nutrient that contains a chemical which reacts with iodine. Since iodine is critical to make the thyroid hormone, this food should be avoided if you have an underactive thyroid. Soy milk, soy flour, and tofu are also foods to add to the do not eat list.

Garlic: it may keep vampires away and it's great in spaghetti sauce, however, garlic also reduces iodine uptake in the body.

White flour: in the same family as white breads, this is a food that can, for some people, contribute to difficulties with insulin resistance and hormonal problems. White flour is a refined and over-processed food and has little, if any, nutritional value at all.

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Testing for Thyroid Fatigue

Barnes Basal temperature test: this simple at home test allows you to assess your basal body temperature, which has been shown to be an accurate measure of thyroid function. If your axillary (armpit) temperature is consistently lower than 97.6F it may indicate that your thyroid is under-functioning.

Thyroid panel: TSH, Free T3 and Free T4 – this test requires a blood draw and can be ordered through your physician or health care provider.

- TSH (thyroid stimulating hormone) – TSH is a hormone released by the pituitary gland (in the brain) that stimulates the thyroid to produce T4 which is converted into T3. The concentration of thyroid hormones (T3 and T4) in the blood regulates the pituitary release of TSH. When T3 and T4 concentrations are low, the production of TSH is increased; conversely, when T3 and T4 concentrations are high, TSH production is decreased. If TSH is high, it usually means that the thyroid is under-functioning and requires more stimulation to increase production of the active thyroid hormones (T3 and T4). However, even normal levels are TSH can be present when the thyroid is under-functioning.
- Free T3 and Free T4 - The thyroid produces two main hormones, T4 (tetraiodothyronine, or thyroxine) and T3 (triiodothyronine). T3, the more active of the two thyroid hormones, is produced in much smaller amounts than T4. The primary functions of the hormones T3 and T4 are to convert food into energy and to regulate the body's other hormone systems. A deficiency in the production or absorption of thyroid hormones can cause a decline in the body's metabolism and lead to a host of symptoms, including fatigue, weight gain, low body temperature, dry skin and eyebrow-hair loss.
  Most T3 and T4 are bound to proteins in the blood, which greatly reduces the ability of the body to use them. Free T3 and Free T4 (as opposed to Total T3 and Total T4) measures only the T3 and T4 hormones that are not bound to proteins and is a more accurate measure of active thyroid hormone. Measurement of Free T3 and Free T4 along with TSH provides a much more accurate measure of thyroid status than TSH alone.

Axillary Temperature Test

Upon waking, take your axillary (armpit) temperature BEFORE rising

Record the temperature for at least 3 mornings

Menstruating women: perform days 2-4 of cycle ideally

Take the average; any number below 97.6°F is an indication of subclinical hypothyroidism

Supplementation for Thyroid Fatigue

Supplementation can provide the thyroid the nutrients it needs to function properly. Be sure and check with your physician and/or work with a health care provider to determine the products that would work best for you, especially if you are currently taking thyroid or other medications.

Many people that suffer from and under-functioning thyroid benefit from taking supplemental iodine, either in a liquid form or by using a product like **Thyrosol** – 1-2 capsules twice daily or as directed by your health care professional. If additional support is needed or if your testing indicates a low Free T3 or low Free T4 level, you may want to add **Thyroid Pro**– 1-2 tablets twice daily.