

Nourishing a Healthy Thyroid – Nutritionally!



Located just below the center of the neck, the thyroid gland is the body's internal thermostat. It regulates body temperature by secreting hormones that control how quickly the body burns calories and uses energy for all body functions. The thyroid is responsible for using iodine and protein from our diet to create thyroid hormone (especially T4). Our tissues then convert that T4 into the powerful metabolic hormone T3. This is critical foundational support, as every cell in the body relies on thyroid hormone for regulation of their metabolism. After all, if there's not a lot of gas in the car, it won't go far!

Hypothyroidism (or thyroid under-function) is a **common, under-diagnosed, under-treated ailment** affecting many millions of people, mostly women. Common symptoms include ongoing fatigue, inability to tolerate cold, easy weight gain, elevated LDL cholesterol, painful PMS, depression, hair loss (on the head), brain fog, poor GI motility (often including constipation), and muscle weakness or low stamina. Low thyroid function can be caused by a wide array of things including poor diet, low iodine, pesticides, ongoing chlorine exposure, fluoride intake, toxins, radiation, or over-consumption of inflammatory, dietary fats.

Hypothyroidism is also often an autoimmune dynamic (sometimes called Hashimoto's disease or thyroiditis), where the action of the immune system itself is actually negatively affecting our own thyroid function. Food sensitivities, toxins, microbial imbalances in the gut, intestinal permeability, viral infections, nutrient deficiencies: these may all contribute to triggering this type of autoimmune reaction. Many of those who have autoimmune thyroid feel better **pursuing a diet that reduces intestinal permeability and immune hyper-reactivity**. This typically includes 100% elimination of gluten and dairy foods, the most common culprits. Some individuals also benefit from fully eliminating all grains from the diet. Food sensitivity testing is never 100% comprehensive, but it may also help to highlight some foods that are contributing to inflammation in a specific person.

A fully balanced whole foods diet is key for the thyroid, one including vegetables, sea vegetables, nuts/seeds, fruits, and (if it feels good in your body) animal protein and fats. Legumes and gluten-free whole grains may also be nourishing if you digest them well and if they don't cause you to feel even more sluggish (they are heavy-carbohydrate foods and, as above, may promote inflammation).

Specific foods can contribute to thyroid health when added in moderation to your diet:

Sea vegetables can benefit the thyroid because they contain high concentrations of iodine, as well as supportive iron, phosphorous, potassium, sodium, zinc, magnesium, calcium, copper, chromium, vitamin A, and B vitamins.

Seafoods, especially those with a pink color, are also good sources of iodine and healthy fats. In particular, try shrimp, lobster, salmon, halibut, sardines, and crab meat. Choose wild-caught varieties.

Nuts and seeds. The thyroid absorbs iodine and combines it with tyrosine (an amino acid) to produce thyroid hormones. Nuts and seeds provide healthy fats and minerals and are also an excellent source of plant-based protein. We also need good "eating hygiene" (ample chewing is key!) and protein digestion (including ample stomach acid) to bring key amino acids into the body to support hormone and neurotransmitter synthesis.

Brazil nuts. Selenium is necessary for T4 to T3 conversion. The soil in some areas of the world (e.g. New England in the US) are particularly deficient in this mineral. Brazil nuts are one of nature's most potent sources of selenium, so you only need a few per day (very high intake can cause side effects and impair absorption of other minerals). Other sources (though much less potent) include turkey, smoked herring, scallops, chicken, eggs and walnuts. **If you try a selenium supplement, don't exceed 200 mg/day**, and be sure to take it on a full stomach.

Coconut Oil. Unlike highly refined, cheap vegetable oils that can promote inflammation in the body, coconut oil does not block thyroid hormone secretion. A medium chain saturated fat, coconut oil is nature's richest source of MCTs (medium chain fatty acids) which increase metabolic rate and can help increase energy for those who have insulin resistance or other forms of poor metabolism.

Protein and Iron. Be sure to get adequate protein from a variety of forms, including fish, chicken, eggs, seafood, cheese, or plain yogurt. If you do well with hardier meats, include beef and organ meats such as liver as well. Choose organic and grass-fed varieties. You need iron to convert T4 hormone to T3; many of those with sluggish thyroid also have low iron (best blood test for this ferritin) which can escalate symptoms over time. You also need sufficient Vitamin A to allow thyroid hormone synthesis. If you are diabetic or have low thyroid function, Vitamin A often must come from animal protein sources to be well absorbed (these individuals often cannot synthesize it effectively from carotenes in vegetables). Natural Vitamin A also comes from cod liver oil and egg yolks.

Zinc: A very common American deficiency! Meats and seafood are wonderful sources of zinc; oysters are the most potent foods source overall. Pumpkin seeds and chickpeas are some of the best vegetarian sources for zinc. Individuals with vegan diets often struggle with an imbalance of zinc and copper with insufficient zinc.

Some common foods are mistakenly regarded as universally “healthy” and can contribute to thyroid dysfunction:

Process, packaged convenience foods. Because these are typically depleted of minerals, regular consumption reduces overall body nutrition (empty calories) and can inhibit thyroid function.

Unfermented, Processed Soy Products. Americans overconsume refined and highly-processed soy products such as soy milk and “fake meat” products marketed to vegetarians. Soy must be fermented to release its natural **goitrogens, anti-nutrients which inhibit the body's ability to use iodine, promote goiter formation and act like anti-thyroid drugs.** Fermented soybean products, a healthy staple in many Asian cultures, include tempeh, miso, natto, shoyu, and tamari (natural soy sauce) can be consumed in small quantities. If you do choose to consume soy products more often, it is particularly key to ensure you have adequate selenium and iodine intake.

- Surprised? While soy foods share many common ingredients, it is the isoflavones in soy that have been associated with decreased thyroid hormone output. Isoflavones are naturally-occurring substances that belong to the flavonoid family of nutrients. Flavonoids, found in virtually all plants, are pigments that give plants their amazing array of colors. Most research studies in the health sciences have focused on the beneficial properties of flavonoids, and these naturally-occurring phytonutrients have repeatedly been shown to be highly health-supportive. The link between isoflavones and decreased thyroid function is, in fact, one of the few areas in which flavonoid intake has been called into question as problematic. Isoflavones like genistein appear to reduce thyroid hormone output by blocking activity of an enzyme called thyroid peroxidase. This enzyme is responsible for adding iodine onto the thyroid hormones.

Too much Raw Cruciferous vegetables. These are *very healthy* foods and should definitely be part of your daily diet. This family of vegetables includes goitrogens which are deactivated with heat (not so with those in processed soy). Foods from these families (e.g. Brassicaceae) contain goitrogenic compounds: broccoli, kale, collard greens, mustard greens, cauliflower, Brussels sprouts, radishes, turnips, bokchoy, arugula, daikon, and rutabaga. Small servings of these veggies raw are fine, so don't be afraid of them. If you have low thyroid function and tend to indulge heavily in these vegetables, good for you; just choose most of them in a cooked form.

Fluoride, as found in toothpaste and tap water, **Chlorine**, found in municipal water supplies, pesticides, and numerous household cleaners, and **Bromine**, as found in many pesticides and almost all commercial baked goods and flours (and flour-containing foods). These three all block iodine receptors in the thyroid gland. Many alternative types of toothpaste are available. Many water treatment systems filter out chlorine and fluoride; when buying water outside the home, choose distilled or spring water. Look for unbleached and unbromated flours.

Caffeine and Stress. A life fueled by caffeine to make up for lack of rest and sleep (and to enable you to be stress-riddled most of the time) often leads to exhaustion of the adrenal gland. Stress hormones secreted by the adrenal gland can block thyroid hormone function and lower your metabolism as a protective mechanism.

Resources and References for this Article

1. *Prescription for Nutritional Healing*, by Phyllis A Balch, Penguin Books, 2006, pages 501-504.
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3. *The Coconut Diet*, by Cherie Calborn, Warner Books, 2005.
4. *Ultra-Prevention*, by Mary Hyman MD and Mark Liponis MD, Simon & Schuster, 2003.