

Dietary and Lifestyle Interventions to Support Functional Hypothyroidism

Assess and address adrenal insufficiencies and develop methods for avoiding or reducing stress before attempting to resolve thyroid problems.

Botanicals known to be helpful in balancing thyroid hormones may be helpful with functional hypothyroidism: **ashwaganda** supports thyroid hormone production; **Oregon grape**, *B. aquifolium*, stimulates the thyroid gland (Ritchason 160); **gentian**, *G. lutea*, has a normalizing effect on the thyroid gland (Ritchason 96); **bee propolis** is an antimicrobial that stimulate immunity and boosts thyroid function (Ritchason 22); **nettle**, *U. dioica*, is a source of iron and potassium for cellular homeostasis and support of thyroid hormone production and the adrenals; **parsley**, *P. sativum*, has good amounts of Vitamin A, Vitamin C, copper and manganese, nutrients that support thyroid hormone production (R. Wood 247, Ritchason 163); **black walnut**, *juglans nigra*, is a thyroid gland stimulant high in iodine (Karstens); **chickweed**, *stellaria media*, is useful when TSH levels are elevated, but T3 and T4 are below normal; and **bladderwrack**, is a source of iodine to help normalize hormone production. (Shomon 7, M. Wood 56-7).

Adaptogenic herbs, such as **rhodiola**, *R. rosea*, and **Siberian ginseng**, *E. senticosus*, normalize endocrine function (Hedberg, June 2009, Murray and Pizzorno “Eleutherococcus Senticosus” 921, Ritchason 104, Shackelton) and have been shown to increase a general sense of well-being (Murray and Pizzorno “Stress Management” 707). Siberian ginseng may have mild side effects if taken in large doses for longer than 60 days and may potentially be contraindicated in hypertensive persons (Brinker 86, Murray and Bongiorno “Eleutherococcus Senticosus” 923). Even though side effects are less likely than with other types of ginseng, prolonged use without periodic breaks is not recommended.

Associated Diseases and Disorders

Functional hypothyroidism may affect the function of all body systems. Dr. Mark Starr has revisited the work done by Dr. Barnes, who previously concluded that type 2 hypothyroidism is a causative factor in heart disease, autoimmune disorders, mental and neurological disease, chronic fatigue syndrome, high blood pressure, anemia, poor circulation, kidney disease, dizziness and vertigo, TMJ Syndrome, diseases of the digestive tract, eating disorders, MS, cancer, hypoglycemia, and disease of the gallbladder and bladder. Functional hypothyroidism may also be implicated in Meniere’s disease, menstrual disorders, problems associated with infertility and menopause, headaches and migraines, chronic pain, arthritis and fibromyalgia, obesity, and liver disease. Low thyroid hormone levels affect the face, skin, hair, nails, eyes, hearing, teeth, gums, swallowing, the tongue, speech, and body weight.

Low thyroid hormone levels can exacerbate other conditions, including anemia, inflammation, difficulty sleeping, fatigue, CFS, malnutrition, parasites, hyperthyroidism, toxicity, Lyme disease, allergy, lack of exercise and depression. These same conditions can make it difficult to assess a low thyroid condition as many conditions may coexist with low thyroid hormone output (Shames and Shames 22, 39, 47). A low T4 level is correlated with mortality in critically ill patients (Mechanick 599).

Research shows that thyroid hormones preserve cardiac function, help to prevent CVD, and that low levels increase the risk of CVD (In-Tele-Health). Low thyroid hormone levels have been shown to increase plasma concentration of cholesterol, phospholipids and triglycerides, homocysteine and C-reactive Protein, causing severe arteriosclerosis, decreased cardiac output and function (aortic stiffness), and hypertension (ATA 2002, Murray and Bongiorno “Hypothyroidism” 1793, Starr, 246). Results of a six month study showed that hypothyroidism, even at the subclinical level, is associated with increased risk for cardiac disease (Anderson 63). In a press release dated October 1, 2004, the ATA announced that individuals with subclinical hypothyroidism have twice the risk of developing heart disease compared with those with normal levels of TSH. However, proper thyroid supplementation is believed to prevent heart attacks (Starr 34-35).

Functional hypothyroidism can present similar clinical symptoms of and may be an underlying cause of fibromyalgia (Schneider and Brady 534, Hedberg Sept 2009). Hypothyroidism is a factor in affective disorders and depression (Murray and Bongiorno “Affective Disorders” 1431). One half of subjects with RTH hormones have some degree of learning disability, with or without attention deficit hyperactivity disorder, ADHD (Olateju and Vanderpump 434).

Mild, subclinical, hypothyroidism has been associated with higher incidence of atrial fibrillation in older persons, reduced bone mineral density, particularly in postmenopausal women, and palpitations (ATA “Screening for Thyroid Dysfunction”). There is a link between men with hypothyroidism and erectile dysfunction (ATA 2009).

Findings and Conclusion

Functional hypothyroidism, caused by faulty metabolism of T4 to T3 that results in an excess of rT3, or thyroid hormone resistance at the cellular level due to inherited defective mitochondrial or thyroid hormone receptor genes, is a function of diet and environmental factors. Persons may not be experiencing the major clinical signs of hypothyroidism, but may show more subtle signs of fatigue, impaired concentration, and persistent difficulty losing weight, which may make functional hypothyroidism difficult to assess.

Functional hypothyroidism is distinguished from clinical hypothyroidism by the absence of abnormal blood tests. When blood levels of TSH and T4 are “normal”, symptoms of functional hypothyroidism may persist since normal conversion to T3 is assumed. The absence of adequate biologically active T3 thyroid hormone, despite an adequate level of T4 and TSH, can cause symptoms of hypothyroidism – serum levels of fT3 and rT3 may be normal when T3 and rT3 are imbalanced.

The present reference ranges for serum levels of thyroid hormone are narrower than they were before 2003, however this simply served to increase the number of persons diagnosed with thyroid disease. Many persons with “normal” serum levels of thyroid hormones continue to experience symptoms. The

standard TSH test can still miss hypothalamic hypothyroidism, suppressed TRH production, common in fibromyalgia and affective disorders (Murray and Bongiorno “Affective Disorders” 143, Teitelbaum 121), and doesn’t take into consideration biochemical individuality.

There is lack of agreement about classification of types of hypothyroidism. Even given the new lower ranges, the upper limit of TSH, and therefore “normal” serum levels, has been the subject of considerable controversy. Consequently no normal TSH range limits have been determined and uniformly applied clinically. It remains a matter of interpretation, leading to confusion about what constitutes subclinical or functional hypothyroidism, and many persons remain undiagnosed and untreated.