Hypothyroidism

The thyroid gland is central to our metabolism. The major role of this gland is to produce thyroid hormones to control metabolic rate. Hypothyroidism, or underactive thyroid, often is undiagnosed and it is estimated that approximately 20 percent of the population has undiagnosed thyroid problems. This includes a population of people who even after heroic efforts at weight loss with ultra-low-calorie diets, cannot lose a single pound.

Chronic autoimmune thyroiditis, known as Hashimoto's thyroiditis, is the most common cause of hypothyroidism in the United States. It is characterized by inflammation and damage to the thyroid tissue. Other causes of hypothyroidism may include a deficiency in dietary iodine and/or selenium, stress and burnout, external radiation, surgical removal of the thyroid gland, estrogen dominance, overzealous dieting or eating disorders such as anorexia, medications such as interferon or chemotherapy drugs, or radioactive iodine treatment. Sometimes the thyroid gland can become enlarged from underactivity (goiter).

In the case of autoimmune thyroiditis, a gluten-free diet sometimes can decrease anti-thyroid antibodies. It is thought that people with autoimmune disease have a more permeable intestine (leaky gut) and that gluten and/or other undigested substances are leaking into the blood stream and causing autoimmunity through molecular mimicry. This is supported by a recent Italian study that found that individuals with gluten allergy also developed a significant allergy to their own thyroids, which disappeared when gluten grains were removed from the diet. Checking for serum levels of antibodies against gluten as well as thyroid antibodies is standard practice at the Hoffman Center.

The proper maintenance of thyroid hormones is contingent upon

adequate intake of high biological value (HBV) protein. Seafood, poultry, meat, eggs and cheese are the best sources of HBV protein. All too often I've seen vegetarian patients with inadequate HBV protein intake inadvertently set themselves up for underactive thyroid. Long-term low-calorie dieting does the same by depressing metabolism. You can't fool Mother Nature. She knows when you're starving yourself and will lower your metabolism in order to adapt because she wants you to survive!

Along with adequate HBV protein intake, the removal of toxic substances in the diet is critical to healthy thyroid function. Soy, which is a goitrogen (a thyroid antagonist found in food) has been implicated in interfering with thyroid function by inhibiting thyroid peroxidase catalyzed reactions essential to thyroid hormone production. Inhibition of thyroid hormone production can induce goiter.

In addition to soy, there are other goitrogens to be dealt with. Specifically, these are plants of the genus Brassica, which include Brussels sprouts, cabbage, kale, turnips, rutabaga, watercress, kohlrabi, cauliflower and broccoli. These very nutritious vegetables are found to block the uptake of iodine—albeit to a very low degree—particularly in their raw state. For this reason, the frequency of intake of these vegetables should be determined by a knowledgeable nutritionist and on a case by case basis according to the patient's individual tolerance and symptoms. This is an excellent example of why one standard healthful diet does NOT fit all. As a responsible nutritionist, I cannot indiscriminantely advise you to "eat your fruits and vegetables." As we clearly see in this example, individuals have different nutrition requirements depending on their unique symptoms and conditions. This is a core principle of Therapeutic Nutrition at the Hoffman Center.

The thyroid, under control of the hypothalamus, which secretes thyroid-stimulating hormone (TSH), produces the hormones

thyroxine (T4) and triiodothyronine (T3). T3, the active version of thyroid hormone, is responsible for fat-burning and other metabolism-stimulating effects. Selenuim has a very important function in helping enzymes in the body convert T4 to T3. Other key nutrients for thyroid support are CoQ10, EGCG, B complex, magnesium, zinc, iodine, NT Factor, ribose, coconut oil, Super CLA, borage oil and Orthomega along with a good multivitamin and mineral supplement such as Foundation Formula.

A diagnosis of hypothyroidism may be difficult to obtain. Mainstream physicians often rely on blood tests using outdated reference ranges. The combination of moderately elevated TSH with normal free thyroxine defines subclinical hypothyroidism, a condition which may evolve toward overt hypothyroidism, especially in individuals with anti-thyroid antibodies. Luckily, in January 2001, the American Association of Endocrinologists announced that any TSH score above 3 be considered an indication of probable hypothyroidism. According to the much-published British expert A.P. Weetman M.D., the ideal TSH score is 1-2. It is important to pay close attention to symptoms such as chronic constipation, chilliness, depression, severe PMS or heavy menstruation, dry skin, hair thinning or loss, fatigue, infertility and miscarriages, trouble getting started in the morning and unexplained weight gain or metabolic resistance to weight loss despite consistent low-calorie intake. Usually when there is a diagnosis of hypothyroidism, patients are prescribed replacement therapy with Synthroid (synthetic T4). This may not completely do the trick in normalizing hormone levels and diminishing symptoms. Many patients experience overall improvements when thyroid hormone is switched from Synthroid to Armour thyroid (natural T3 and T4).

Hypothyroidism does not have to be a lifelong struggle with low energy, depression and weight gain. A therapeutic diet coupled with effective supplementation, as well as thyroid

medication where appropriate, can reduce symptoms, regulate hormones and re-establish a healthy metabolism.

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