



hypothyroidism

Hypothyroidism refers to any state in which thyroid hormone production is below normal. There are many disorders that result in hypothyroidism. These disorders may directly or indirectly involve the thyroid gland. Because thyroid hormone affects growth, development, and many cellular processes, inadequate thyroid hormone has widespread consequences for the body.

Symptoms of hypothyroidism include fatigue, loss of appetite, intolerance to cold, slow heart rate, weight gain, painful periods, fertility problems, dry and scaly skin, hair loss, recurrent infections, constipation, difficulty concentrating and depression.

nutritional influences:

- Iodine is an essential component of thyroid hormones, T3 and T4. Symptoms of iodine deficiency include hypothyroidism and goiter (enlargement of the thyroid gland).
- Selenium is required for a number of enzymes known as selenoproteins. The chemical reaction, which converts thyroid hormone T4 into T3, is catalyzed by specific selenoproteins. Selenium deficiency can impair thyroid function.
- Tyrosine is a non-essential amino acid, which is an essential component of thyroid hormones.
- Zinc is required for the action of Thyroid Stimulating Hormone. The zinc/copper balance also has a big influence on the progesterone/estrogen balance in women, which has a significant influence on thyroid function. People with Down Syndrome are often low in zinc, with thyroid function improving on supplementation.
- Dietary intolerances can contribute to hypothyroidism. Research reveals a high incidence of hypothyroidism in coeliacs not consuming a gluten-free diet.
- Iron is essential for the conversion of phenylalanine, an essential amino acid, to tyrosine.
- B2 (riboflavin) supports the secretion of thyroid hormones.
- Goitrogens are naturally occurring thyroid inhibiting substances found in foods. They suppress thyroid function by interfering with iodine uptake. The thyroid inhibiting effect of these food components are thought to be largely inactivated by cooking. Foods containing goitrogens include brussels sprouts, turnips, soy, cauliflower, cassava, millet, cabbage, kale, flaxseeds, brocolli, peanuts, bok choy, cabbage, kohlabri, mustard, radish, peach, pinenut, artificial sweeteners and the following oils: canola, corn, cottonseed, margarine, safflower, sunflower.
- Heavy metals such as cadmium, lead & mercury can inhibit thyroid function

