

HYPOTHYROIDISM

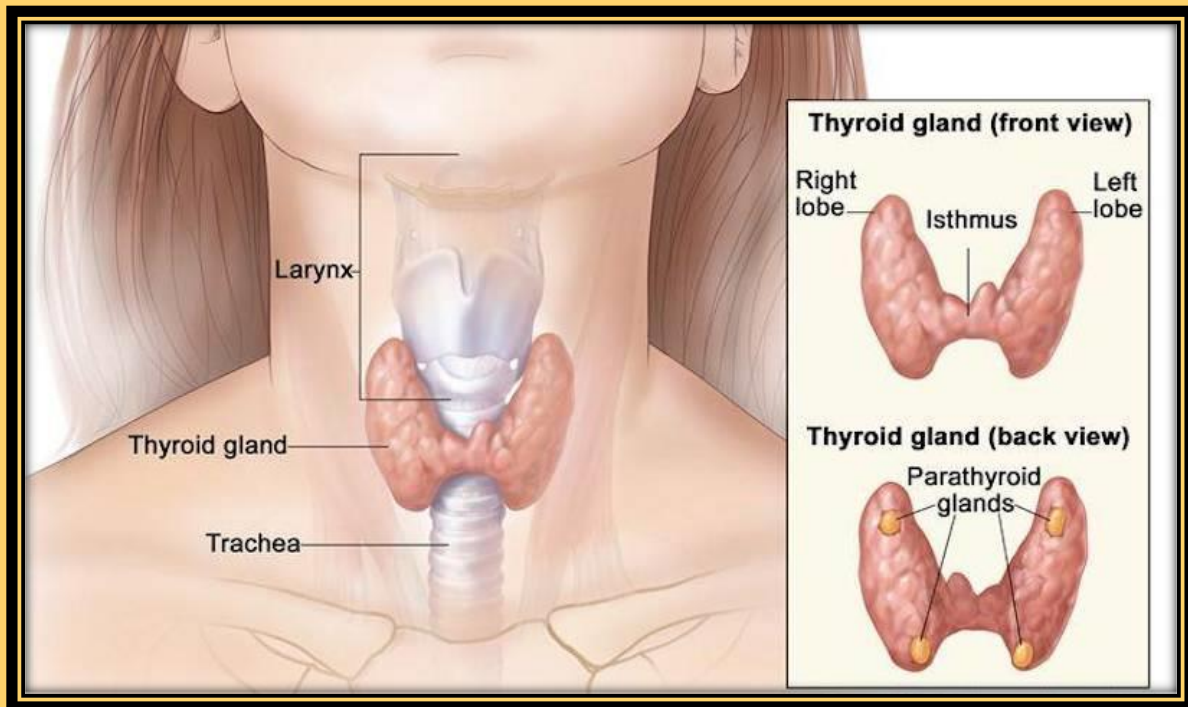
YOGIC MANAGEMENT

Chhavi Trivedi

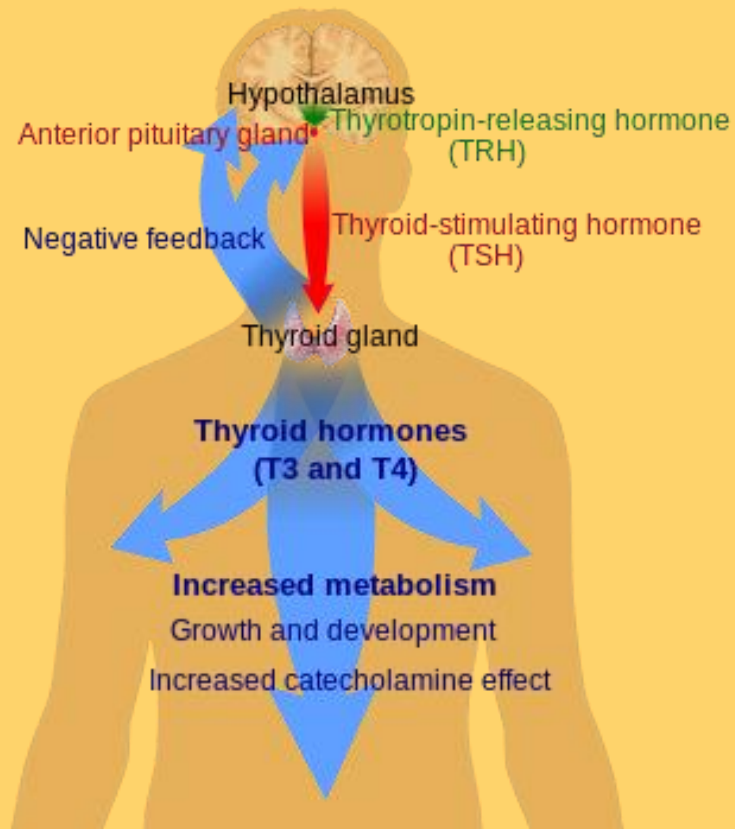


YOGIYOG

GUIDE TO NIRYANA



Thyroid system



CAUSES

Hypothyroidism (general background)

A clinical state defined as decreased production of thyroid hormone, by the thyroid gland resulting in deficiency of circulating hormone which regulates essential functions; such as heart rate, digestion, physical growth, and if left untreated, leads to multiple organ and tissues damage.

Thyroid hormone resistance: Mutation within thyroid hormone receptors (TRB) leads to poor hormone recognition by tissues and causes a condition similar to low thyroid production state.

Types of hypothyroidism:

Primary:

- Indicates decreased thyroidal secretion of thyroid hormone by factors affecting the thyroid gland itself

Secondary:

- Decreased thyroidal secretion of thyroid hormone can also be caused by insufficient stimulation of the thyroid gland by thyroid-stimulating hormone (TSH), due to factors directly interfering with pituitary TSH release.

Tertiary:

- Indicates decreased thyroidal secretions due to indirect reduction in thyroid releasing hormone (TRH) release from the hypothalamus.

Note: Clinically it is difficult to differentiate between the secondary and tertiary hypothyroidism so they are often collectively referred to as "central hypothyroidism"

Myxedema coma:

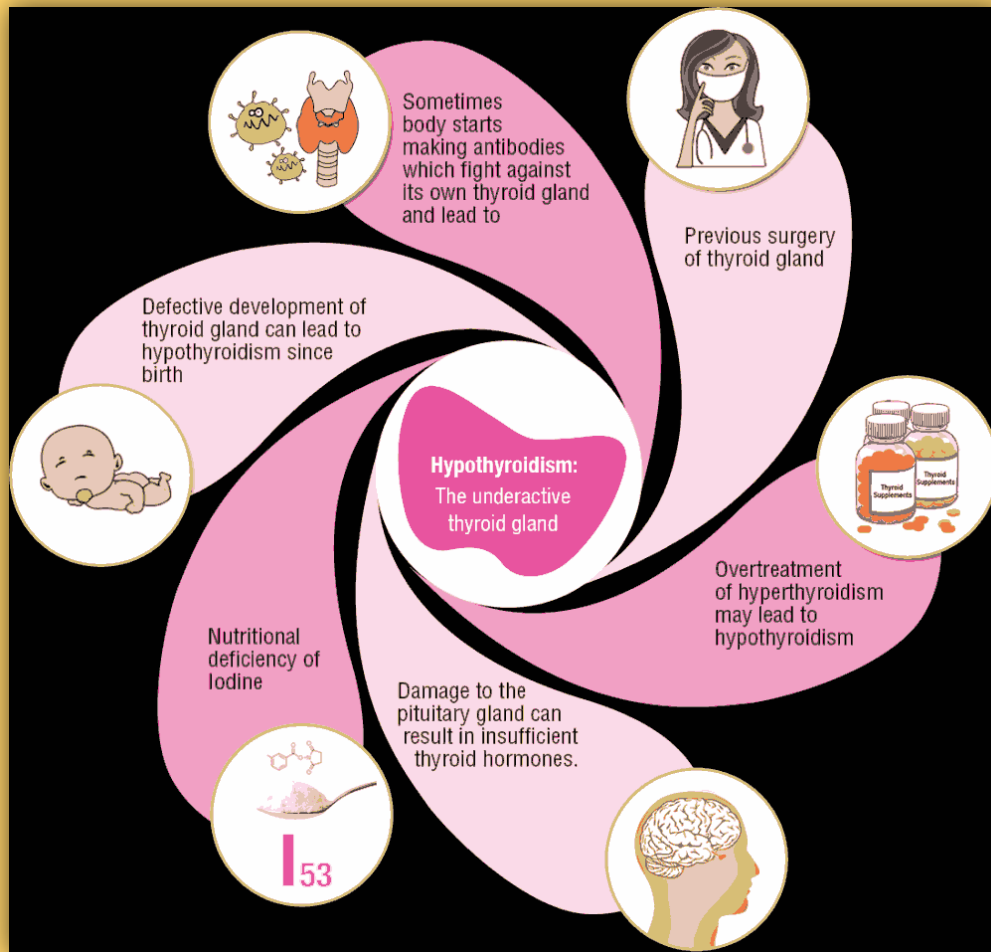
A severe state of hypothyroidism which, if left untreated, leads to severe stress and infections.

- Myxedema coma is a potentially lethal but rare condition, occurring with severe hypothyroidism

Causes

Central (Hypothalamic/Pituitary) Hypothyroidism	
Loss of functional hypothalamic or pituitary tissue	<ul style="list-style-type: none"> Tumor (pituitary adenomas, metastasis, craniopharyngioma, glioma) Trauma (surgeries, irradiation and head injury) Vascular (Ischemic necrosis, hemorrhage, aneurysms) Infections (TB, abscess) Infiltrative lesions (sarcoidosis) Chronic lymphocytic hypophysitis Congenital (pituitary hypoplasia, basal encephalocele)
Functional defects in TSH biosynthesis and release	<ul style="list-style-type: none"> Gene mutation Drug-induced (dopamine, glucocorticoids)
Primary Hypothyroidism	
Loss of functional thyroid tissue	<ul style="list-style-type: none"> Chronic autoimmune thyroiditis (Hashimoto's thyroiditis) Reversible autoimmune hypothyroidism (painless and postpartum thyroiditis, cytokine-induced thyroiditis) Surgery (thyroidectomy) Radiation (I-131 or external irradiation) Infiltrative and infectious diseases, sub-acute thyroiditis Congenital defects (thyroid dysgenesis)
Functional defects in thyroid hormone biosynthesis and release	<ul style="list-style-type: none"> Congenital defects in thyroid hormone biosynthesis Iodine deficiency and iodine excess Drug-induced (antithyroid agents, lithium, amiodarone)
Peripheral (extrathyroidal) Hypothyroidism	
Resistance to thyroid hormones	<ul style="list-style-type: none"> Gene mutation





Hashimoto's Thyroiditis

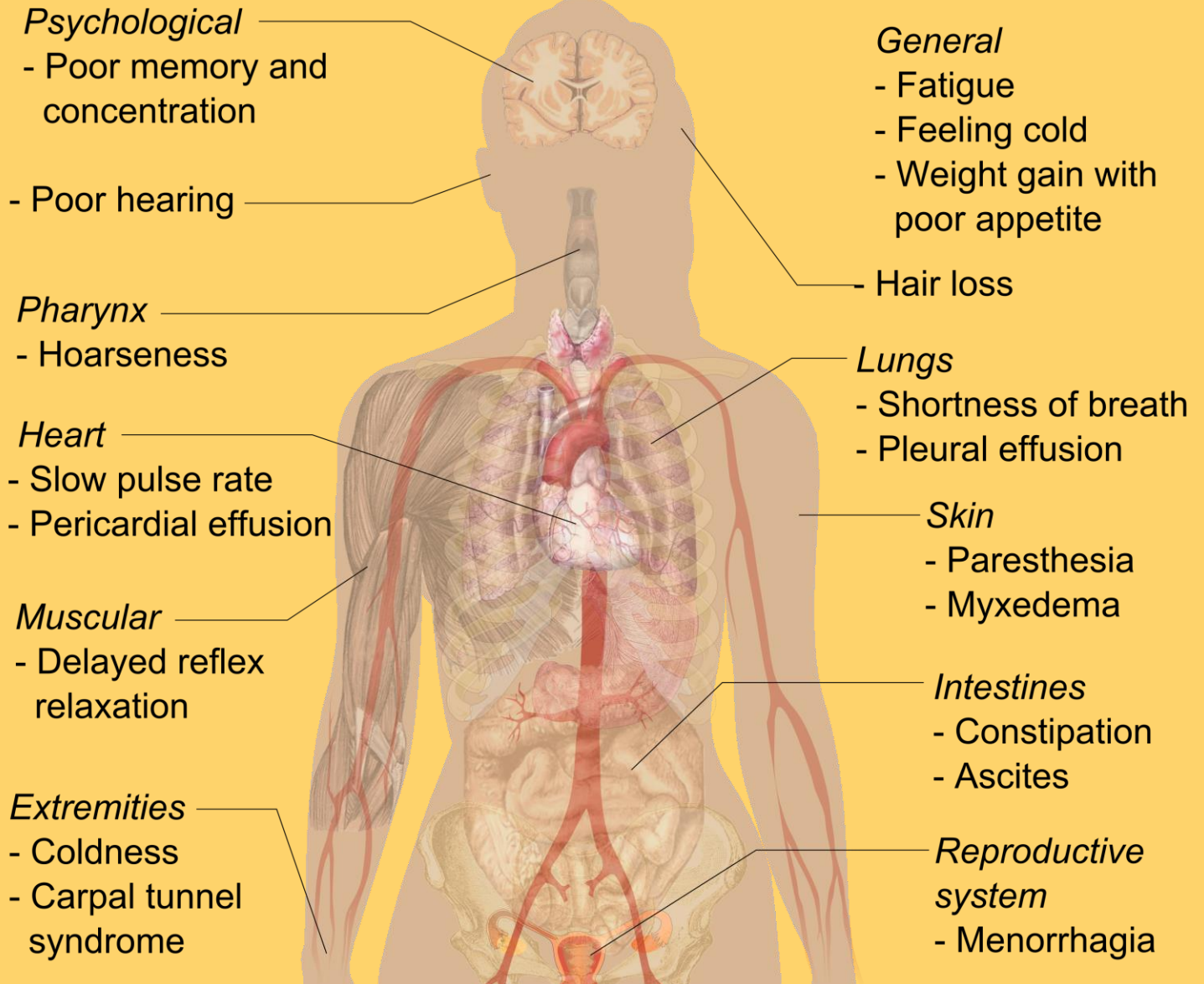
- Most common cause of goitrous hypothyroidism in iodine sufficient parts of the world
- Characterized by thyroidal lymphocytic infiltration with germinal centre formation, follicular damage or destruction with fibrosis
- Goitre develops gradually and is firm in consistency
- Presence of anti TPO and anti thyroglobulin antibodies favours the diagnosis
- History of other auto immune disorders like rheumatoid arthritis, pernicious anemia, diabetes mellitus should be ascertained

Hashimoto's - the most common cause of hypothyroidism, is an autoimmune disorder in which the body attacks the thyroid gland. This results in damage to the thyroid, preventing it from producing enough hormones. Hashimoto's Thyroiditis tends to run in families, so get tested!



SIGNS/SYMPTOMS

Signs and symptoms of **Hypothyroidism**



DIET DURING HYPOTHYROIDISM



Wild-caught fish

Balancing the level of omega-3 to omega-6 fatty acids in your hypothyroidism diet can reduce inflammation and support healthy thyroid and neurological function. Wild fish like salmon, mackerel and sardines are some of the best sources.



Coconut Oil

Provides medium-chain fatty acids support a healthy metabolism, increase energy and fight fatigue. It also nourishes the digestive system and has antimicrobial, antioxidant and antibacterial properties that suppress inflammation.



Seaweeds

Some of the best natural sources of iodine, these help prevent deficiencies which disturb thyroid function. Dried kelp, nori and dulse are the best choices.



Probiotic-Rich Foods

Probiotics help create a healthy gut environment by balancing microflora bacteria. These include kefir (a fermented dairy product) or organic goat's milk yogurt, kimchi, kombucha, natto, sauerkraut and other fermented veggies.



Sprouted Seeds

Flax, hemp and chia seeds provide ALA, a type of omega-3 fat that's critical for proper hormonal balance and thyroid function.



Clean Water

Water helps with hydration and digestive function while preventing fatigue and moodiness. Drink at least eight ounces every two hours.



High-fiber foods

A high-fiber diet helps with digestive health. Aim for 30–40 grams of fiber daily. Eat more fresh vegetables, berries, beans, lentils and seeds.



Fruits and Vegetables

These are high in vitamins, minerals and antioxidants that are necessary for combating free-radical damage and lowering inflammation.



Bone broth

Beef and chicken stock contain the amino acids l-proline and l-glycine, which can help repair the digestive lining and improve hypothyroidism.



How Hypothyroidism Affects Quality of YOUR Life?

According to Hypothyroid Patient Survey conducted on 1500 hypothyroid patients by Thyroid Patient Advocacy, UK:

93% OF RESPONDENTS HAD NOT BEEN TOLD OF ANY ALTERNATIVE TO T4-MONOTHERAPY!

78.4% DIDN'T REGAIN OPTIMAL STATE OF HEALTH ON T4-MONOTHERAPY!

20% HAD TAKEN TIME OFF WORK AS A RESULT OF THYROID ILLNESS!

38% DIDN'T BELIEVE THAT THEY WERE ON SUFFICIENT DOSE OF THYROID MEDICATION!

33.3% FELT THEIR CLOSE RELATIONSHIPS HAD BEEN AFFECTED BY THYROID ILLNESS

15.5% HAD TO LEAVE PAID EMPLOYMENT DUE TO UNRESOLVED THYROID ISSUES!

38.8% FELT THEY HAD "NOT BEEN DEALT WITH VERY WELL" OR "NOT VERY WELL AT ALL" BY THEIR DOCTOR WHILST SEEKING A DIAGNOSIS OF THEIR THYROID SYMPTOMS

42.1% HAD STOPPED OR ALTERED THEIR EXERCISE ROUTINES AS A RESULT OF THEIR THYROID SYMPTOMS

Graphic Presentation
by Thyroid Blog
OutsmartDisease.com

TABLE 3

Classifying hypothyroidism by laboratory values

Type	TSH level	Free T ₄ level
Primary hypothyroidism	Elevated	Low
Subclinical hypothyroidism	Elevated	Normal
Secondary hypothyroidism	Normal or low	Low

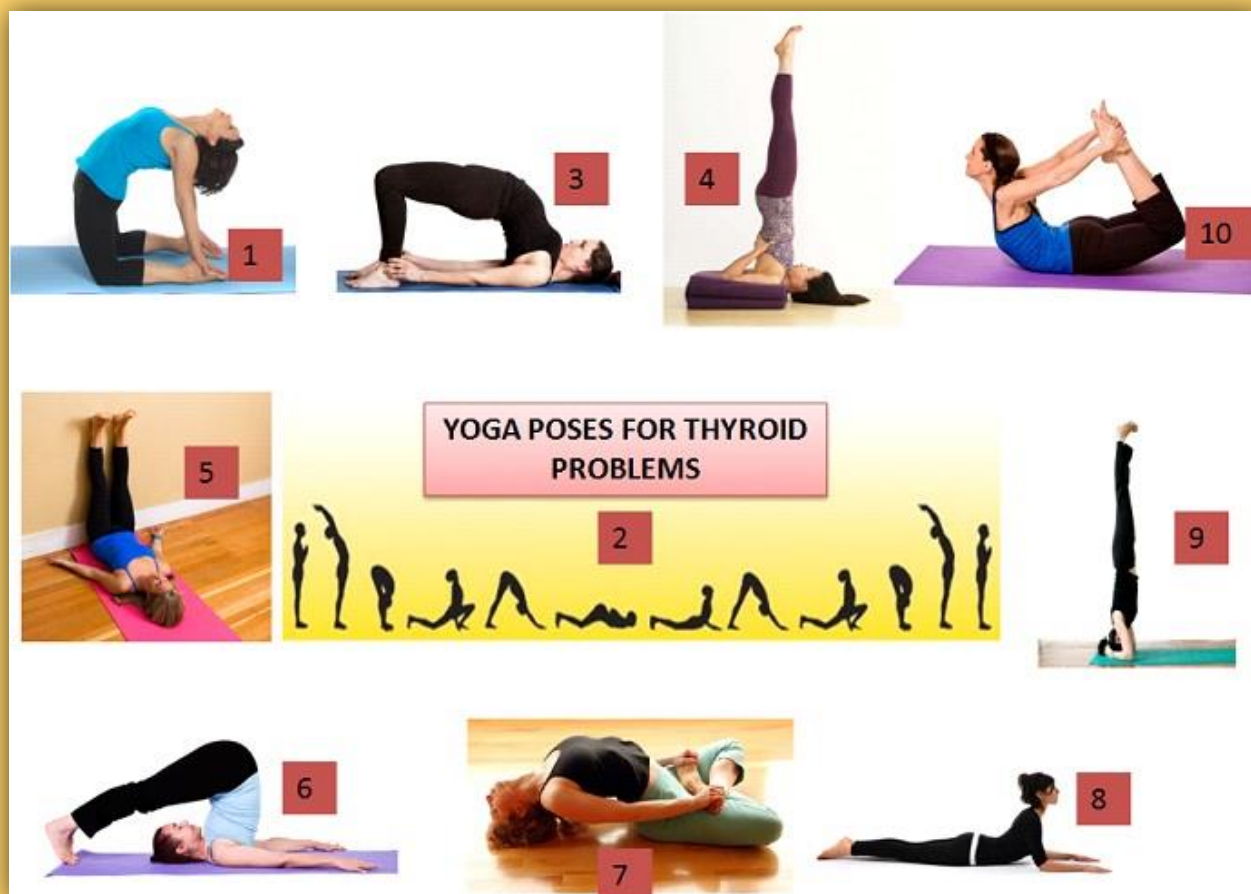
TSH, thyroid-stimulating hormone; T₄, thyroxine.

TABLE 1

LABORATORY VALUES USED TO DIAGNOSE HYPOTHYROIDISM

Thyroid State	TSH	Free T ₄
Normal	0.4 to 4.0 mIU/L	0.8 to 2.7 ng/dL
Primary hypothyroidism	>4.0 mIU/L	Decreased
Subclinical hypothyroidism	>5.0 to 10.0 mIU/L	Normal

Note. TSH = thyroid-stimulating hormone; T₄ = thyroxine.
Adapted from Almandoz and Gharib (2012) and Wilson (2008).



GUIDE TO NIRYANA



HYPOTHYROIDISM

WHAT'S THAT?

Hypothyroidism, is a condition where the thyroid gland does not secrete enough of a thyroid hormones. Thyroid hormones regulate the way in which the body uses energy for metabolism and without enough of these hormones many of the body's functions slow down.

SYMPTOMS OF HYPOTHYROIDISM



Gaining Weight



Fatigue and Low Stamina

Low Body Temperature

Infertility
Irregular Menstrual Cycles

Depression
Sleep Disturbances
Difficulty in Concentrating



Joint Aches



Hair Loss

Hoarseness upon Waking

TIPS FOR LIVING GREAT LIFE WITH HYPOTHYROIDISM



Do Cardio Workouts for 30+ Minutes a day

Stretching is beneficial
Try to take some time out for Yoga



Stick to a Sleep Schedule
Make Sure you Sleep for 7-9 Hours a Day

Add Strength Training in your workout sessions



Try to Reduce Stress
It has a very bad effect over thyroid

SOME MORE THINGS TO REMEMBER



Drink Coffee according to thyroid medication



Add High Fibre Foods to your diet to reduce your weight gain



Limit Goitrogens (Foods like Broccoli). It makes thyroid functioning difficult

Dr. Axe
FOOD IS MEDICINE

Top 9 Natural HYPOTHYROIDISM REMEDIES

1 ASHWAGANDHA (500 MG DAILY)

Ashwagandha helps lower cortisol and balance T4 levels.

2 IODINE (150-300 MCG DAILY)

For 10% of people the mineral iodine can resolve thyroid dysfunction. This should not be taken with Hashimoto's disease.

3 SELENIUM (200 MCG DAILY)

Selenium is necessary for the production of the T3 thyroid hormone.

4 L-TYROSINE (500 MG 2X DAILY)

An amino acid used in the synthesis of thyroid hormones.

5 FISH OIL (1,000 MG DAILY)

Essential fatty acids found in fish oil are critical for thyroid function.

6 VITAMIN B-COMPLEX (ONE B-COMPLEX CAPSULE DAILY)

Vitamin B12 and thiamine are important for neurologic function and hormonal balance.

7 PROBIOTIC SUPPLEMENT (50 BILLION CFU PER SERVING)

Probiotics can help heal the gut and aid in nutrient absorption while reducing inflammation.

8 FRANKINCENSE ESSENTIAL OIL (FIVE PARTS LEMONGRASS OIL AND FIVE PARTS CLOVE OIL)

Rub these directly on the thyroid, which is located at the front lower part of your neck.

9 LEMONGRASS AND MYRRH ESSENTIAL OILS (2-4 DROPS)

Try rubbing directly on the thyroid area along with the reflexology points on the feet (big toes) and on the wrists multiple times per day.