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# HYPOTHYROIDISM

## (UNDERACTIVE THYROID)

### **I. Thyroid gland and its function**

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The thyroid is a small butterfly shaped gland located right below the Adam's apple at the base of the neck. The thyroid gland produces hormones that control the body's metabolism, i.e. heart rate, body temperature, energy usage etc.

The thyroid gland can produce too much hormone (hyperthyroidism), or too little hormone (hypothyroidism).

Hypothyroidism means an under active thyroid. There is too little production of thyroid hormones and metabolism is slowed down. In general, hypothyroidism is more common.

### **II. Who is likely to develop Hypothyroidism?**

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Hypothyroidism mostly affects women-frequently after childbirth and over age 50.

### **III. Symptoms**

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Hypothyroidism has many symptoms that are similar to other diseases and can be undetected. Symptoms may be mistaken for other reasons. Signs and symptoms include:

- Feeling sluggish or tired
- Depression
- Forgetfulness
- Feeling cold
- Hoarse voice
- Puffy face
- High LDL (bad) cholesterol
- Constipation

- Weight gain
- Slow heartbeat
- Dry skin
- Hair loss

### **IV. Diagnosis**

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There are blood tests to measure Thyroid Stimulating Hormone (TSH) and/or thyroid hormone (T3, T4) levels. A high TSH and low thyroid hormone level suggests hypothyroidism.

### **V. Causes**

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The following conditions can damage or destroy the thyroid gland leading to low thyroid hormone production or hypothyroidism:

1. Hashimoto's disease or Lymphocytic thyroiditis - an autoimmune thyroid disorder in which the thyroid gland is attacked by abnormal antibodies in the body.
2. Thyroid removal surgery - to treat thyroid problems.
3. Radiation therapy - to treat head and neck cancer.
4. Radioactive iodine treatments or anti-thyroid drugs - to control an overactive thyroid.

Iodine deficiency used to be a cause of hypothyroidism. Without

enough iodine in the diet, our bodies cannot produce thyroid hormones. Over-stimulation of the thyroid gland causes it to enlarge, resulting in a condition known as Goiter. Since the introduction of iodized salt in the 1920's, the problem is rare today in the United States. However, goiter is still a problem in many parts of the world.

## **VI. Treatment**

Daily intake of prescription synthetic thyroid hormones will be necessary to restore adequate hormone levels.

Treatment is usually life long. While under treatment, it is important to have regular blood tests to determine if the dose is appropriate. Too much thyroid hormone can speed up bone loss.

When the amount prescribed is correct, the risk of bone loss (osteoporosis) will not increase.

To learn more about thyroid disorders, contact the Thyroid Society for Education and Research at

[www.thyroid.org](http://www.thyroid.org)  
or (800) 849-7643