Hypothyroidism

The thyroid gland is in the front, lower part of your neck and makes thyroid hormone. If your thyroid gland does not make enough thyroid hormone, you develop a condition called hypothyroidism, or underactive thyroid. Thyroid hormone helps to control metabolism, which is the process your body uses to turn food into energy.

Women are more likely to get hypothyroidism than men. It’s more common as people get older and thyroid problems sometimes run in families.

Symptoms

Most people with mild hypothyroidism have no symptoms. If hypothyroidism is severe, you can experience some of these symptoms:

- Fatigue or lethargy (feeling weak and not wanting to move around)
- Feeling cold
- Dry skin
- Hair loss
- Unexplained weight gain (usually due to fluid building up)
- Constipation
- Menstrual irregularities (typically heavier periods than usual)
- Depression

These are very common symptoms and don’t necessarily mean you have hypothyroidism. Also, if the hypothyroidism is very mild, it’s more likely the symptoms are not due to hypothyroidism. In this case, you may have another health problem not related to the thyroid.

Causes

Hypothyroidism has several possible causes. Some of the most likely are:

- **Hashimoto’s disease.** This is the most common cause of hypothyroidism in adults. It occurs when the immune system mistakenly attacks the thyroid gland.
- **Medications and surgery.** Some drugs can affect your thyroid gland. Examples include drugs for heart disease, cancer, or bipolar disease. The removal of all or part of the thyroid gland can also affect your ability to produce enough thyroid hormone.
- **Hyperthyroidism treatments.** Some treatments for overactive thyroid conditions, called hyperthyroidism, can cause hypothyroidism.
- **Pituitary gland problems.** In rare cases, a problem with the pituitary gland (which regulates the release of thyroid-stimulating hormone) can cause hypothyroidism.
Diagnosis

A thyroid-stimulating hormone (TSH) blood test is the standard test for diagnosing hypothyroidism. TSH is released by the pituitary gland to control thyroid activity, similar to how a gas pedal controls the speed of a car. When the thyroid gland is underactive, the pituitary makes more TSH—resulting in a high value on the blood test. If your level of TSH is high, it’s a sign that you may have hypothyroidism.

Sometimes additional tests are also useful:

- **Thyroid antibodies.** The presence of thyroid antibodies is common and indicates possible autoimmune thyroid disease (Hashimoto’s).
- **Thyroxine (T4).** T4 is the main form of thyroid hormone made by the thyroid. If you have low T4 levels in your blood, you may have hypothyroidism. However, most people with mild hypothyroidism have normal levels. The TSH test is more sensitive than T4 in diagnosing hypothyroidism.

A combination of these results and a physical exam may help us determine whether you have hypothyroidism.

Treatment

The recommended treatment for hypothyroidism is a daily hormone replacement pill of levothyroxine (T4). The amount of T4 prescribed is based on thyroid hormone levels, weight, age, and other medical conditions you may have.

If you’re pregnant or thinking about becoming pregnant, you may need to take a higher level of thyroid hormone replacement. Most women will need to increase their dose of T4 during pregnancy and can usually go back to their pre-pregnancy dose after delivery.

Take T4 on an empty stomach 30 to 60 minutes before eating or taking other medications. If you take calcium or iron tablets, these supplements should be taken at least 4 hours before or after taking the levothyroxine tablet.

Thyroid replacement hormones are safe, and when taken as prescribed, very effective for keeping the amount of thyroid hormone at a normal level.

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Other resources

Visit kp.org/mydoctor to:

- View most lab results and check your preventive health reminders.
- Email your doctor.
- Use online tools to help you and your family stay healthy.

Contact your Kaiser Permanente Health Education Center or Department for health information, health classes, programs, and other resources.

This information is not intended to diagnose health problems or to take the place of medical advice or care you receive from your physician or other health care professional. If you have persistent health problems, or if you have additional questions, please consult with your doctor. If you have questions or need more information about your medication, please speak to your pharmacist.