

IODINE DEFICIENCY AND ITS SYMPTOMS

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Introduction: The thyroid gland is located in the front of the neck. It affects the nervous system, digestion, bone tissue, and reproductive health.

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The gland secretes 3 types of hormones. If there are deficiencies in the synthesis of any of them, disruptions in the body's normal functioning and diseases occur.

Hormonal changes can occur for several reasons: taking medications, viral infections, weakening of the immune system, iodine deficiency, pregnancy and the postpartum period. A child can also be born with a weak thyroid gland.

The disease is called insufficient or excessive production of hormones. If the problem is not eliminated, it can lead to heart disease, severe complications of pregnancy and childbirth, miscarriage, and in some cases, coma.

Sometimes even mild symptoms can indicate serious diseases. But there is always a chance to notice them in time and save your life.

1. Weight changes

Doctors first pay attention to weight changes. If the hormones in the body exceed the norm, a person suddenly loses weight. Even when eating more than usual, weight loss continues - in this case, changing the diet has no effect.

A decrease in hormone levels, on the contrary, leads to weight gain. Metabolism slows down, and as a result, the body begins to store excess calories in the form of fat. Therefore, even diets and fitness classes cannot help to maintain a slim figure. The result can only be achieved after a course of treatment that normalizes changes in the hormonal background.

2. Mood disorders

Since hormones directly affect our nervous system, our mood depends on their level. Symptoms of malfunctions include apathy, emotional irritability, panic, anxiety, tearfulness or aggressive behavior.

It is not easy for a person to notice changes in himself. Often they can be attributed to fatigue after work, everyday stress and life difficulties. Pay attention to your mood: if it worsens without any good reason and you cannot come to your senses for several days, you have a good reason to visit a psychotherapist.

3. Discomfort in the neck

If you notice swelling and an increase in the size of your neck, difficulty breathing, pain when swallowing, or hoarseness, you most likely have an enlarged thyroid gland or nodules.

An enlarged thyroid gland is also called goiter. It goes away with treatment and hormone levels return to normal. However, discomfort in the neck can also be a sign of thyroid cancer. Therefore, if you feel unwell, see a doctor immediately.

4. Hair and nail brittleness

Hair and nails are very sensitive to hormonal changes. Therefore, when the disease occurs, they become thin and weak, easily break and fall out. This applies not only to hair, but also to eyebrows and eyelashes.

Severe hair loss can also lead to baldness. If treated in time and hormone levels return to normal, the hair layer will restore its previous state.



5. Menstrual cycle disorders

These disorders are the most common symptom of hormonal disruptions in women.

Problems with menstruation, scanty or scanty discharge, prolonged cycles, or excessive bleeding can be enough signs. Painful menstruation can also indicate problems with the thyroid gland, especially if such pain was not observed before.

The only condition that is not associated with any hormonal changes may be stress and severe fatigue, but even then women should see a doctor. It is not worth postponing this, because endocrine diseases increase the risk of infertility and adverse complications during pregnancy.

6. Changes in body temperature

Hormonal imbalances affect the body's ability to regulate its temperature. Patients report that many people feel cold when they are in the same room and others feel hot. Some experience the opposite. They suffer from a feeling of intense heat. The more hormones the thyroid gland produces, the higher the body temperature.

It also happens that people have a constant temperature that is either higher or lower than normal. There is no need to worry about this. However, if it changes suddenly and does not return to normal for a certain period of time, hormonal changes are likely.

7. Dry skin

Dryness and sensitivity can be a sign of various diseases - psoriasis, ichthyosis, fungi, allergies, liver failure and mental disorders.

However, if there are other symptoms of thyroid disease, dry skin can be a valuable sign. Especially in the elbow and knee areas, peeling is observed, and the skin becomes sensitive to external stimuli. Rashes, itching and inflammation are observed.

8. Digestive problems

Thyroid hormones also regulate the digestive system, controlling metabolism and gastrointestinal function.

Malfunctions can lead to muscle weakness and contractions in the colon. This can lead to constipation, diarrhea, and pain. Diarrhea, in turn, can lead to weight loss, and these two symptoms often occur together.

9. Changes in heart rhythm

A rapid or slow heartbeat can also be a symptom of endocrine system disorders. Blood pressure changes — it suddenly rises or falls. Even simple physical exertion can cause shortness of breath and rapid pulse.

Without medical supervision, this symptom can provoke tachycardia or heart failure. Therefore, it is not necessary to delay the appointment with a cardiologist and endocrinologist.

Conclusion: Iodine deficiency causes a number of changes in the human body, including weight changes, mood swings, swelling, brittle hair and nails, dry skin, and changes in the heart. Therefore, timely medical attention is extremely important for human health.

References:

1. Khayitova, M. Z. (2024). Modern views on the Causes and Treatment of Caries of Temporary Teeth in Young Children. *International Journal of Alternative and Contemporary Therapy*, 2(9), 123-127.
2. Khayitova, M. D. (2024). Morphological Features of Bottle (Circular) Caries. *American Journal of Bioscience and Clinical Integrity*, 1(10), 117-124.
3. Dzhuraevna, K. M. (2024). Features of Caries Morbidity in Preschool Children. *Research Journal of Trauma and Disability Studies*, 3(3), 300-305.
4. Hayitova, M., & Taylakova, D. (2023). DENTAL CARIES IS A DISEASE OF CIVILIZATION. *Центральноазиатский журнал образования и инноваций*, 2(8), 61-66.



5. Джураевна, К. М. (2024). Клинико-морфологические аспекты трещин на задних зубах у взрослых. *Научный журнал травматологии и инвалидности*, 3 (5), 429-432.
6. Dzhuraevna, K. M. (2024). Prevalence and Course of Dental Diseases Among Younger Patients. *Research Journal of Trauma and Disability Studies*, 3(5), 433-436.
7. Хайитова, М. Д. (2023). Особенности Возникновение И Течение Кариеса Зубов. *Research Journal of Trauma and Disability Studies*, 2(12), 356-363.
8. Хайитова, М., & Тайлакова, Д. (2023). ВЗГЛЯД СТОМОТОЛОГА НА ГИГЕНУ ПОЛОСТИ РТА У ДЕТЕЙ. *Инновационные исследования в современном мире: теория и практика*, 2(23), 58-59.
9. Хайитова, М. Д. (2023). РАСПРОСТРАНЕННОСТЬ И РАСПРЕДЕЛЕНИЕ ТРЕЩИН НА ЗАДНИХ ЗУБАХ СРЕДИ ВЗРОСЛЫХ ПАЦИЕНТОВ (ОБЗОР ЛИТЕРАТУРЫ). *Лучшие интеллектуальные исследования*, 12(1), 186-195.
10. Dzhuraevna, K. M. (2024). Clinical and Morphological Aspects of Cracks on The Back Teeth in Adults. *Research Journal of Trauma and Disability Studies*, 3(5), 429-432.
11. Dzhuraevna, K. M. (2023). THE FREQUENCY OF DENTAL DISEASES IN CHILDREN (LITERATURE REVIEW). *Лучшие интеллектуальные исследования*, 12(1), 159-168.
12. Dzhuraevna, K. M. (2023). FEATURES OF THE OCCURRENCE OF DENTAL DISEASES IN CHILDREN. *Лучшие интеллектуальные исследования*, 12(1), 178-185.
13. Khayitova, M. (2025). GUIDELINES FOR DENTAL EMERGENCIES DURING A PANDEMIC. *Modern Science and Research*, 4(1), 827-835.
14. Хайитова, М. (2025). СТОМАТОЛОГИК КАСАЛЛИКЛАР ПРОФИЛАКТИКАСИДА ФТОР САКЛОВЧИ БИРИКМАЛАРНИНГ АХАМИЯТИ. *Современная наука и исследования*, 4 (2), 1055–1065.
15. Тошбеков Б. и Хайитова М. (2025). ТИШ КАРИЕСИ ПРОФИЛАКТИКАСИНННГ ИНСОН ОРГАНИЗМИДАГИ АХАМИЯТИ. *Современная наука и исследования*, 4 (2), 591–594.
16. Khayitova, M. (2025). TISH YUZASIDA HOSIL BOLADIGAN KARASHLAR VA TOSHLAR (ШОКМАЛАР). *Modern Science and Research*, 4(3), 1405-1412.
17. Хайитова, М. (2025). ТИШ КАТТИК ТО'КИМАСИ РЕМИНЕРАЛИЗАЦИЯ КАРИЕС ПРОФИЛАКТИКАСИДАГИ О'РНИ. *Современная наука и исследования*, 4 (4), 1801–1806 гг.
18. Khayitova, M. (2025). BOLALARDA KARIES PROFILAKTIKASIDA FISSURALARNI MUHRLASH VA ULARNING АНАМИЯТИ. *Modern Science and Research*, 4(5), 504-507.

