

Goiter and anemia nutritional diseases



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A nutrient is a substance in food used by the body to endorse standard maintenance, repair and growth. Nutrients are attained from food and throughout digestion, these nutrients are then broken down to proportions that can be absorbed by the body and then are transported in the blood. Within these sets of nutrients, are precise nutrients that are designated as the essential nutrients. Essential nutrients are fundamentally nutrients that humans cannot synthesize such as certain amino acids that are predominantly significant. The major nutrients for health are divided into six main categories which are as follows: carbohydrates, lipids, proteins, vitamins, minerals, and water. Unsuitable amounts of nutrients can lead to nutritional diseases. A nutritional disease is any of the many nutrient associated conditions that can cause ailments in humans. Diseases of nutrition integrate developmental abnormalities (that are avoidable with the aid of diet), hereditary metabolous disorders (that react to dietary treatment), the collaboration of food and nutrients with drugs, intolerance and allergic reactions with food and potential hazards in food supply. They may include eating disorders and obesity which is the result of deficiencies or perhaps and excess in the individual's diet. Two nutritional diseases of the vast topic that will be elaborated on in this paper are goiter and anemia.

Goiter

The nutritional disease goiter is an amplification of the thyroid gland. This gland is a tiny, butterfly shaped gland located in the neck, beneath the Adam's apple that yields the hormones thyroxine and a small quantity of triiodothronine. Most of the thyroxine is converted to triiodothronine outside of thyroid. These hormones created by the thyroid influence bodily functions

such a person's mood, pulse rate, digestive functions, excitability, body temperature and other processes necessary for life.

Goiter is also known, endemic goiters, grave's disease, simple goiters, sporadic goiters, Hashimoto's disease, and thyroiditis. Goiters have different causes based upon what type of goiter it is. The three classifications of goiters are hereditary, simple, or due to other causes. When the thyroid does not make enough thyroid hormones to meet the body's need, simple goiters develop. By enlarging, the thyroid believes that it will make up for this shortage. Simple goiters are classified as being either endemic or sporadic. The endemic goiter is associated with iodine deficiency. The endemic goiters have shown to occur mostly in people who, due to their geographic location, for example, parts of central Africa and Asia, do not get enough iodine in their diet. Iodine is important for the development of the thyroid. Another form of simple goiter, the sporadic goiters, has no source, in most cases. In some instances, certain types of drugs can cause this type of goiter. For example a drug approved for the treatment of tumors in adrenal glands can cause this type of goiter along with the very popular drug Lithium that is used to treat many mental health conditions like bipolar disorder, schizophrenia, and major depression). Factors like heredity can also cause goiter, for example having a family history of goiter and being over 40 are two factors for the development of goiters.

The main symptoms of goiter include a swelling in the front of the neck just below the Adam's apple (the size ranges from a small nodule to a massive lump), hoarseness, neck vein distention, dizziness with the arms raised above the head, a tight feeling in the throat region. Coughing and wheezing

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due to the compression of the windpipe, shortness of breath along with difficulty with swallowing due to compression of the esophagus are some rare symptoms. Minor symptoms include agitation, shaking, diarrhea, nausea, and vomiting, sweating without out increased body temperature due to exercise or room temperature, because some individuals with goiters may have an overactive thyroid (hyperthyroidism).

Goiter is diagnosed or evaluated by several testing methods such as

- Physical exams: when the doctor feels the neck area for nodules and signs of tenderness he should be able to detect the goiter.
- Ultrasound of the thyroid: With the image test, the thyroid gland's size and possible presence of nodules are revealed.
- Thyroid scan: A small amount of radioactive material will be injected into a vein and an imaging test provides information on the size and function of the gland. This is only useful in certain circumstances so it is scarcely ordered.
- Hormone tests: the blood is tested and the thyroid hormone levels are determined which tell if the blood is functioning properly.
- CT scan or MRI of the thyroid: The CT scan or magnetic resonance imaging is used to evaluate the size and extent of the goiter. This is done if the goiter extends to the chest and is large.
- Antibody tests: There are certain antibodies, which are produced in some forms of goiter, are that are observed.

Goiter is treated depending on the size of the enlargement, the underlying cause, and the symptoms. Treatments typically include:

- Medications: Small doses of iodine can be prescribed in the case of iodine deficiency. Aspirin if the cause is due to inflammation, for overactive thyroids, methimazol and propylthiouracil, and if an underactive thyroid, Levothyroxine.
- Biopsy: A removal of a sample of tissue or cells may be required the presence of large nodules is in the thyroid gland. It is to rule out cancer.
- Surgery: This is important for the removal of the enlarged thyroid gland that may be causing difficulty breathing. The surgery may either remove all or parts of the thyroid and depending on the amount, replacement treatment may needed which is a lifelong thyroid hormone replacement therapy.

Anemia

Hemoglobin is the substance in red blood cells that makes it possible for the blood to transport oxygen through the blood. Anemia is a disorder of the blood that occurs when enough hemoglobin is not present in a person's blood. When a person is said to be anemic, it is because they have developed anemia. Each type of anemia there is has developed because the body cannot make enough hemoglobin, the body breaks down red blood cells too quickly, or the hemoglobin that the body develops doesn't work properly. There are several different types of anemia. Some types of anemia present but a mild health problem while on the other hand there are others that have a much more severe effect.

When the body lacks iron, anemia is caused in the individual. The body uses iron to make hemoglobin and without the needed amount of iron, your will

inevitably be unable to make hemoglobin. This is the most common cause of anemia in a person. This type of anemia is called iron-deficiency anemia.

There are a few factors that can decrease your body's stores of iron. These factors are: blood loss which is caused within the body by some cancers, ulcers, other conditions, and during monthly periods in the cases of women, an iron-poor diet, and in women during pregnancy whose body has an increased need for iron.

Anemia, or as it is also referred to as folic acid anemia, iron deficiency anemia, hemolytic anemia, and pernicious anemia, have a number of symptoms that are common to all these different types of anemia. These symptoms include the feeling of being tired, having headaches, having difficulty breathing, feeling cold, and feelings of dizziness. With iron deficiency anemia, there is blood loss and a lack of iron in the diet which is caused because the body cannot make enough red blood cells. With hemolytic anemia, the disease is caused due to the inherited or acquired disease that enables the red blood cells to be deformed, or a result of another inherited blood disorder, some drugs taken for illnesses or harmful substances. A factor of hemolytic anemia is the body breaks down red blood cells too fast. With pernicious anemia, the body cannot absorb vitamin B12 and a factor is that the body cannot make enough red blood cells. With folic acid deficiency, there is a lack of folic acid in the diet, a preexisting illness, or the body is unable to use folic acid. A factor of this type of anemia is the body cannot make enough red blood cells. Now, with sickle anemia, hemoglobin doesn't work right and the shape of the red blood cells causes them to clog blood vessels and break down easily. This is due to

inherited disease most common amongst those of African descent when the red blood cells become sickle shaped. Certain individuals have a higher risk of developing iron deficiency anemia because anyone can develop this type of anemia. Those with a higher risk include those who are:

- Children age 1-2: this is because the body needs more iron during growth spurts.
- People over 65: these individuals are more likely to have an iron -poor diet.
- Women: during monthly periods and childbirth there is blood loss, and this can develop anemia.
- Infants: Iron from solid is not easily taken up in the body so when infants lack iron the significant amount of iron in their diet when they are weaned from breast milk to formula or solid food.
- People on blood thinners: people who are medication such as Aspirin, Heparin, Plavix, or Coumadin.

If a woman is pregnant, she is more likely to develop iron deficiency anemia because the unborn child relies on you for iron and other essential nutrients. Many women who are pregnant take iron pills to prevent anemia. The woman must eat balanced meals and ensure that she is taking vitamins to provide the unborn child and herself of the iron and other essential vitamins needed. Foods that are high in iron are peanut butter, tuna, brown rice, raisin bran, shrimp, beef, beef liver, tofu, whole wheat bread, oysters, eggs, kidney beans, and leg of lamb. Iron deficiency anemia can be treated and cured after checking with a doctor to be sure that it is caused by a poor diet and that it is not a more serious health problem. This type of anemia can be

treated with iron supplements that are taken orally or by one of the foods listed above that are high in iron.