



Iron plays an important role for the thyroid

About 5 percent of the U.S. population has hypothyroidism and most cases are in women. This is a condition in which the thyroid gland does not produce enough thyroid hormone. The symptoms can be variable and include fatigue, weight gain, cold intolerance, joint and muscle pain, thinning hair, heavy or irregular menstrual periods, and depression.

Identifying the causes has been elusive. Because iodine is needed to produce thyroid hormone, an adequate supply of iodine in the diet is the most basic nutritional concern. Although some people may be short on iodine, a deficiency of this mineral may not be the only cause. In fact, the condition often exists in people consuming adequate amounts of iodine.

Question: What other factors could cause impaired thyroid hormone production?

Answer: According to research conducted by Michael B. Zimmermann at the Swiss Fed-

eral Institute of Technology, a number of foods can interfere with thyroid hormone production. Common examples include the cruciferous (cabbage family) vegetables, soy and millet.

But Zimmermann also points out that a deficiency of other nutrients may impair thyroid function in some cases. Iron, vitamin A and selenium deficiency can all prevent the thyroid gland from functioning normally, even when iodine is adequate.

Q: Why are women more likely to develop this condition?

A: Researchers are not sure, but the most likely reason is iron deficiency. During their child-bearing years, women require more than twice as much iron as men. If the thyroid gland runs low on iron, the chemical reactions that produce thyroid hormone cannot proceed normally.

Q: Isn't iron status routinely evaluated in people with hypothyroidism?

A: Not necessarily. In most medical clinics in the United States, it is commonly assumed that if red blood cell quantity and quality (hemoglobin level) is normal, then iron status is normal. This may not always be the case.

Excessive iron accumulation also may impair thyroid function in rare cases, but iron deficiency is much more common. In either case, a full assessment of iron status could likely help to identify the cause of many cases of thyroid malfunction.

Frequently, people with a hypothyroid condition also have anemia. A common assumption is that low thyroid hormone levels caused the anemia. Maybe it is the other way around.

When thyroid hormone levels are too low, it makes sense to conduct a thorough assessment of iron status to completely eliminate iron nutrition as a potential cause.

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