Signs, Symptoms, and Solutions for Poor Thyroid Function

By Dr. Mercola

Hypothyroidism is far more prevalent than once thought. The latest estimates are that 20 million Americans have hypothyroidism, but the actual numbers are probably higher.

Some experts claim that 10 to 40 percent of Americans have suboptimal thyroid function.

Thyroid hormones are used by every cell of your body to regulate metabolism and body weight by controlling the burning of fat for energy and heat. Thyroid hormones are also required for growth and development in children.

Iodine is Key for Thyroid Health

Iodine is the key to a healthy thyroid and efficient metabolism, and even comprises a large part of the thyroid hormone molecule itself.

Even the names of the different forms of thyroid hormone reflect the number of iodine molecules attached -- T4 has four attached iodine molecules, and T3 (the biologically active form of the hormone) has three -- showing what an important part iodine plays in thyroid biochemistry.

Iodine deficiency is one of the three most common nutritional deficiencies, along with magnesium and vitamin D.

Since iodine is so important for thyroid function, wouldn’t you expect to see an increase in hypothyroidism with insufficient iodine levels?

Yes, and that is exactly what we have seen.

This means that your thyroid problem could actually be an iodine deficiency problem.

If you feel sluggish and tired, have difficulty losing weight, have dry skin, hair loss, constipation or cold sensitivity, it could all be related to hypothyroidism.

More than 100 years ago, iodine was shown to reverse and prevent goiter (swelling of your thyroid gland) and to correct hypothyroidism. But we now understand that iodine’s effects are much farther reaching.

Iodine has four important functions in your body:

1. Stabilization of metabolism and body weight
2. Brain development in children
3. Fertility
4. Optimization of your immune system (iodine is a potent anti-bacterial, anti-parasitic, anti-viral and anti-cancer agent)
While iodine levels have fallen, there have been simultaneous increases in rates of thyroid disease, breast cancer, fibrocystic breast disease, prostate cancer, and obesity in American adults, and an increase in mental retardation and developmental delays in American children.

**Why are Iodine Levels Dropping?**

Iodine deficiency is on the rise in the United States. Simple supplementation may not be the answer as the following issues also need to be addressed.

Recent national survey data suggest that just over 11 percent of the total U.S. population, and over 7 percent of pregnant women, and nearly 17 percent of all reproductive-aged women, are deficient in iodine.

The Total Diet Study, performed by the FDA, reported an iodine intake of 621 µg for 2 year-olds between 1974 and 1982, compared with 373 µg between 1982 and 1991. During this same time period, the baking industry replaced iodine-based anti-caking agents with bromine-based agents.

In addition to iodine’s disappearance from our food supply, exposure to toxic competing halogens (bromine, fluorine, chlorine and perchlorate) has dramatically increased.

You absorb these halogens through your food, water, medications and environment, and they selectively occupy your iodine receptors, further deepening your iodine deficit.

**Fluoridation of water** is a major contributor to iodine deficiency, besides being very damaging to your health in many other ways.

Additional factors contributing to falling iodine levels are:

- Diets low in fish, shellfish and seaweed
- Vegan and vegetarian diets
- Decreased use of iodized salt
- Less use of iodide in the food and agricultural industry
- Use of radioactive iodine in many medical procedures, which competes with natural iodine

**Crying Wolff**

A huge reason why iodine fell out of favor is the “Wolff-Chaikoff Effect,” which has been a disaster for public health.

An experiment was done that resulted in a case of hypothyroidism, which researchers misinterpreted as being caused by excessive iodine intake. However, the individual was given intravenous radioactive iodine -- which is toxic. It had nothing to do with food or supplement iodine intake, and the two are completely different.

Yet, tales of this experiment quickly spread, creating a fear of iodine that caused it to be removed from the American food supply for the last three decades.
Iodine deficiency is particularly profound in the Midwest and Great Lakes region of the United States because iodine is typically found only in soils close to the oceans, whereas soils of inland areas are iodine deficient. In fact, that region used to be called the “goiter belt” because of its extremely high incidence of people with goiters.

**The Toxic Halides -- Iodine’s Fiercest Competitors**

Iodine is a member of a class of related elements called “halogens” that includes bromine, fluorine, and chlorine. When they are chemically reduced, they become “halides”: iodide, bromide, fluoride, and chloride. These are the forms you usually encounter in your foods, medications and environment.

Iodide and chloride are beneficial in small amounts, but bromide and fluoride are toxic. They grab onto your iodine receptors, blocking the action of iodide and thyroid hormones, resulting in, or at least contributing to many serious diseases.

One of the main problems is that the toxic halides become stuck in your body.

There is no known detoxification pathway for bromine and fluorine -- your body simply cannot break them down. So, they build up in your tissues and wreak havoc on your health.

**Bromides**

Bromides are a menace to your endocrine system and are present all around you.

Despite a ban on the use of potassium bromate in flour by the World Health Organization, bromides can still be found in some over-the-counter medications, foods, and personal care products.

The use of potassium bromate as an additive to commercial breads and baked goods has been a huge contributor to bromide overload in Western cultures.

Sodium bromate can be found in products such as permanent waves, hair dyes, and textile dyes.

Benzylation is used as a preservative in some cosmetics. Even trace amounts of bromine can trigger severe acne in sensitive individuals. And who needs skin care products that cause acne?

Bromine is also found in fire retardants used in carpets, mattresses, upholstery, and furniture and some medical equipment.

Based on animal research, bromides have been linked to behavioral changes and neurodevelopmental disorders, including **Attention Deficit Disorders**, in children.

The United States is quite behind in putting an end to the egregious practice of allowing bromine chemicals in your foods and products whereas other nations have taken the bull by the horns:

- In 1990, the United Kingdom banned bromate in bread
- In 1994, Canada did the same
• Brazil recently outlawed bromide in flour products
• The European Union has banned some PBDE compounds (polybrominated diphenyl ethers)

What’s taking us so long?

Again, corporate profits trump health concerns when it comes to doing what is best for the public.

**Great Resource for Learning More**

Author and patient advocate Mary Shomon is one of the leading educators on thyroid health in the U.S. and has led the most popular consumer forum, the About.com thyroid guide. Mary cautions thyroid patients not to run out to the health food store and load up on iodine or iodine-rich supplements like kelp and bladderwrack.

According to Mary, in someone who is not iodine-deficient, excessive iodine supplementation can actually worsen a pre-existing thyroid condition, or trigger further thyroid dysfunction. The key is in getting the right amount of iodine -- not too much, not too little.

The way to evaluate your iodine intake is a test that measures how much iodine you are excreting in your urine.

The general protocol requires you to take a dose of iodine, collect your urine for 24 hours, and then send the sample off to a lab where they calculate your iodine level based on how much iodine you are spilling into your urine. If you are interested in being tested for iodine deficiency, this urine iodine challenge test is the most accurate way to assess your iodine status.

**Getting Your Iodine Levels Up**

If you are iodine deficient, I recommend adding sea vegetables to your diet.

The best source of organically bound iodine that I know of is non-commercially harvested seaweeds. The dose is about 5 grams a day or about one ounce per week, so a pound would last about two months.

It is typically better to obtain a nutrient from a natural food whenever possible than from a supplement, so use supplements only as a last resort.

Some patients also report that they respond better to food-based forms of iodine -- like seaweeds - than the supplement forms. However, if you are going to use a supplement I would strongly advise using supersaturated iodine (SSKI) which is available as an inexpensive prescription. Typically 1-3 drops a day are all that are required.

Please avoid using Lugol’s solution or iodine, as that will actually worsen your thyroid condition.

Keeping your iodine levels optimal is particularly important if you are a woman that is contemplating pregnancy, or are already pregnant Make sure you are taking seaweed or a prenatal vitamin with the right amount and form of iodide, not iodine, to help protect your baby.
Tips for Optimizing Thyroid Function

David Brownstein, M.D., has written several books on thyroid and iodine, which are a valuable resource for those of you who want more information.

Also, Dr. Hyman has made some good recommendations if you have a sluggish thyroid:

- Identify and treat underlying causes (e.g., iodine deficiency, hormone imbalance, environmental toxicity, inflammation)
- Adjust your diet and understand the role of nutrition (iodine, as well as tyrosine, selenium, vitamins A and D, zinc, B vitamins, and omega-3 fats), food allergies, gluten intolerance, and foods that contain goitrogens, such as soy, which interfere with the utilization of iodine
- Get plenty of exercise
- Reduce your stress
- Enjoy saunas and hot soaks for detoxification,
- Use supplements, if necessary for nutritional support
- If you are on thyroid hormones for less than five years, most people find that they respond far better to natural thyroid hormone supplementation that has both T1, T2, T3 and T4, not just T4 like Synthroid. Armour Thyroid and Nature-Thyroid are the best known, but compounding pharmacists can also produce natural thyroid hormone prescriptions.

The more you can rid your body of the toxic halides, the more iodine your body will be able to hang onto, and the better your thyroid will function.

Laura Power, MS, PhD, LDN, offers these suggestions for increasing secretion of fluorine and bromine:

- High-dose iodine
- High-dose vitamin C
- Unrefined sea salt
- Epsom salts baths
- Sweating in a far infrared sauna

The Future of Natural Thyroid Drugs

This is a surprising and shocking injustice that is occurring in the U.S. right now.

The FDA has shut down natural desiccated thyroid drug production and distribution by three major firms, and is now calling the century-old natural remedy an “unapproved drug."

One of the ways you can typically differentiate a natural physician from a conventional one is by the type of thyroid hormone replacement therapy they prescribe. Natural physicians will almost exclusively used desiccated thyroid hormone products like Armour Thyroid.
I have put thousands of patients on this and it was my consistent experience that most did far better on these than the synthetic versions. About the only exception were people that were taking synthetics for longer than 10 years. Seems like their body had a tough time adjusting back.

Taking desiccated thyroid hormone off the market will cause harm, danger and damage to hundreds of thousands and perhaps more than that, unless they are allowed access to this safe and superior thyroid replacement.

Two other major manufacturers/distributors now have long-term backorders for their bioidentical hormone products, which include Armour, Nature-Throid, and Westroid.

The uncertainty about the future of natural thyroid drug options has many patients and practitioners concerned, and the Save Natural Thyroid Coalition has been formed in response.

Along with recently holding its first kickoff teleconference to discuss the future of natural desiccated thyroid (NDT) drugs, the Save Thyroid Coalition has also created the Save Natural Thyroid YouTube channel, where patients and practitioners can create and post videos supporting natural thyroid.

I am actually serving on this committee and going to support it with as much media exposure is required to prevent this travesty of justice. It is depriving patients of a valid and natural way to support their thyroid function that has typically been damaged by toxins and stress.

They’ve also formed a Save Natural Thyroid Facebook Group to strategize and help keep thyroid patients informed. If you or anyone you love uses bioidentical hormones, you may want to join this group to keep up on the latest updates.

If you’re newly diagnosed with hypothyroidism, or have not been on synthetic hormones for very long, I strongly recommend Armour Thyroid -- a natural porcine thyroid extract, which provides not only T3 and T4, but also T1 and T2, which will help normalize your hormone response.

The fact that the FDA may now severely limit, or eliminate, this option is distressing, as it is clearly the best option for many people.

**Related Links:**

» What is Thyroid-Related Fatigue?

» Is the FDA Poised to Ban a Century-Old Natural Remedy?

» Avoid This if You Want to Keep Your Thyroid Healthy