

Eating to support your thyroid — simple ways to naturally preserve thyroid function

by Marcelle Pick, OB/GYN NP

Lately I've noticed there's a lot of misinformation out there about thyroid health. One recent favorite of mine was the Newsweek article discussing "harmful" medical advice dispensed on Oprah Winfrey's show. The section about thyroid health warns that taking iodine supplements and drinking soy milk are "just what [women] shouldn't do." The problem with these sound bites is that real information and solid science are lost. The fact is, there are many foods and nutrients that support our [thyroid health](#) naturally, including iodine-rich foods. And as the women of our generation discover imbalances in their bodies, they want useful facts so they can make choices to correct them — before they become more serious and irreversible.

Your thyroid is one of the most important glands in your body. It controls the way you metabolize food, the way you use energy, lose and gain weight, how well or poorly you sleep, and much, much more. We know that women are more prone to thyroid conditions than men, and that many of these problems first manifest during times of hormonal flux, such as perimenopause and childbearing.

One of the best ways to support the thyroid gland through all of life's important changes is by eating more carefully. As we approach these transitions, perhaps it's time for everyone to take a look at how the foods we eat can help — or hurt — our thyroid function. You may have heard conflicting information about iodine, soy, or even broccoli. Let's get the facts straight by looking at how specific foods and supplements influence this master gland, and learn what you can do to support your thyroid health.

The case for thyroid nutrition

Like every cell and organ in our bodies, the thyroid requires specific vitamins and minerals to carry out everyday functions. Though there are several nutrients the thyroid uses, I'll highlight those that research shows to be most crucial. We've evolved to extract these micronutrients from the foods we eat (see the [chart](#) below for foods you can eat to obtain these nutrients). You may also choose to supplement, but before starting any supplements for thyroid function, I encourage you to learn more about your individual needs. If you think you may have a thyroid imbalance, it's a good idea to see a healthcare practitioner to request a full thyroid hormone panel, as well as to have your iodine, selenium, and vitamin D levels tested. Most functional medicine practitioners are familiar with this style of testing.

What does active thyroid hormone (T3) do?

Like sex hormones, thyroid hormone alters the way our genes are expressed at the cellular level, and also signals non-gene-related actions.

Among its many functions, T3:

- Increases the rate of energy production and consumption at the cellular level.

- Helps us produce body heat.

- Increases cardiac output, blood pressure, and delivery of oxygen to our tissues.

- Increases the transport of glucose in our skeletal muscles.

- Helps regulate blood cholesterol levels.

[References](#)

Iodine (I). Your thyroid simply can't function without this crucial trace element, and if you are iodine-deficient, higher iodine intake could make all the difference for your thyroid. The essential thyroid hormones that circulate in our bodies, known as T4 (also called thyroxine) and the more active T3, are the only iodine-containing hormones in humans. According to a 2002 CDC nutrition evaluation, approximately 36% of women of childbearing age in the US may receive insufficient dietary iodine. If you are deficient in iodine, the thyroid just doesn't have the most basic building-blocks to make its key hormones, and all the tissues in the body are negatively impacted as a result. (Read our article on [iodine and thyroid health](#) to learn more.)

Selenium (Se). Selenium is another indispensable element to healthy thyroid function. An array of selenium-based proteins and enzymes help to do several things: they regulate thyroid hormone synthesis and metabolism; convert T4 into the more accessible form of thyroid hormone, T3; and maintain just the right amount of thyroid hormones in the blood and tissues, including the liver, kidneys, and thyroid gland, as well as the brain. Selenium-containing enzymes also function in a protective "detox" capacity, preserving the integrity of the thyroid gland when we're under all kinds of stress — oxidative, chemical, even social stress! Selenium also helps the body to more efficiently recycle its iodine stores, which can become an important concern as we grow older.

Zinc (Zn), iron (Fe), and copper (Cu). There is no doubt that iodine and selenium are the major players when it comes to trace elements. But there are three trace metals — zinc, iron, and copper — that play vital roles in healthy thyroid function as well.

While research has shown that both [hypothyroidism](#) (underactive thyroid) and [hyperthyroidism](#) (overactive thyroid) can sometimes result in a zinc deficiency, women with hyperthyroidism may be more prone to zinc deficiency because an excess of thyroid hormone can increase the elimination of zinc in the urine. When zinc is low in the body, TSH (thyroid-stimulating hormone), T4, and T3 can in turn become low in the body.

As for iron, research is showing that there is a link between iron deficiency and decreased thyroid efficiency. If you are both anemic and iodine-deficient, supplementing with iodine alone is unlikely to resolve the thyroid imbalance

— you will also need to replenish your iron stores.

Copper is a metal that is needed in trace amounts to produce thyroid-stimulating hormone (TSH). It's also required for oxidizing iodine to form T4, so when your body's supply of copper is poor, your rate of T4 production will be impeded. T4 keeps your body's cholesterol synthesis on track, and one theory has it that copper deficiency could be what makes people with hypothyroidism more prone to developing high cholesterol and heart problems.

Whole foods to support your thyroid

This chart provides whole food sources of the vitamins and minerals discussed in this article. There is a wide variety to choose from, so treat your thyroid to a good meal!

Iodine	Primary sources: sea vegetables (kelp, dulse, hijiki, nori, arame, wakame, kombu) and seafood (clams, shrimp, haddock, oysters, salmon, sardines), as well as iodized sea salt. Secondary sources: eggs, asparagus, lima beans, mushrooms, spinach, sesame seeds, summer squash, Swiss chard, garlic
Selenium	Brazil nuts, tuna, organ meats, mushrooms, halibut, beef, soybeans, sunflower seeds (Note: selenium content of land-based foods is contingent on soil substrate selenium levels.)
Zinc	Fresh oysters, sardines, beef, lamb, turkey, soybeans, split peas, whole grains, sunflower seeds, pecans, Brazil nuts, almonds, walnuts, ginger root, maple syrup
Copper	Beef, oysters, lobster, shiitake mushrooms, dark chocolate, crabmeat, tomato paste, pearled barley, nuts, beans (soybeans, white beans, chickpeas), sunflower seeds
Iron	Clams, oysters, organ meats, soybeans, pumpkin seeds, white beans, blackstrap molasses, lentils, spinach
Vitamin A (beta-carotene form)	Kale, sweet potatoes, carrots, winter squash/pumpkin, spinach, cantaloupe, broccoli, asparagus, liver, lettuce
Vitamin C	Guava, peppers (chili, Bell, sweet), kiwifruit, citrus, strawberries, broccoli, cauliflower, Brussels sprouts, papaya, parsley, greens (kale, turnip, collard, mustard)
Vitamin E	Whole grains, almonds, soybeans and other beans, sunflower seeds, peanuts, liver, leafy green vegetables, asparagus
Vitamin B2 (riboflavin)	Brewer's yeast, organ meats, almonds, wheat germ, wild rice, mushrooms, egg yolks
Vitamin B3 (niacin)	Brewer's yeast, rice bran, wheat bran, peanuts (with skin), liver, poultry white meat
Vitamin B6	Brewer's yeast, sunflower seeds, wheat germ, fish

(pyroxidine)

(tuna, salmon, trout), liver, beans (soybeans, lentils, lima beans, navy beans, garbanzos, pinto beans), walnuts, brown rice, bananas

Antioxidants and B vitamins. Oxidative stress is what scientists have found to be associated with degenerative diseases and the aging process in general, you've no doubt heard that [antioxidants](#) are good for you. Many common micronutrients have antioxidant qualities, but beta-carotene (vitamin A), vitamin C, and vitamin E — along with selenium and iodine as mentioned above — are important antioxidants that help your thyroid gland neutralize the oxidative stress it encounters on a daily basis.

In hyperthyroidism, the most common form of which is Graves' disease, oxidative stress in the body can be particularly high. The theory is that because the thyroid is more active, it's using more oxygen, which leads to an accumulation of oxygenated compounds that can harm your cells. This is why antioxidants are recommended, especially in hyperthyroidism. The B vitamins (B2, B3, and B6) are also important for thyroid function because they are involved in manufacturing T4.

What about soy and thyroid health? Foods that may disrupt thyroid function

If you read the Newsweek article ("Live Your Best Life Ever!") about the "bad advice" Oprah's medical experts dispense, you might be confused about soy. In the article, Dr. David Cooper of Johns Hopkins Medical School explained that if you have hypothyroidism and take thyroid hormone replacement, eating soy can block your ability to absorb the medication. My objection to such an oversimplification is that it glosses over the very information women would find so useful. Let's look more closely at the science.

Some studies have shown that the isoflavones in soybeans inhibit the enzyme responsible for adding iodine to thyroid hormone, thyroid peroxidase (TPO). These and other studies also demonstrate, however, that soy's effect on the thyroid involves the critical relationship between your iodine status and thyroid function. This means that if you have low iodine in your body, the soy isoflavone could bond to what iodine you do have, leaving you with an inadequate reserve for thyroid hormone production. Evidence suggests that if you have sufficient iodine in your body, eating soy will most likely not be a problem. And I've seen soy help so many women with menopausal symptoms that it would be a shame not to consider it as an option. (Just be sure it is not genetically modified soy.)

More to the point, there are hundreds, if not thousands of other compounds found in edible plants that inhibit the TPO enzyme. The isothiocyanates found in the Brassica family of vegetables — broccoli, cauliflower, cabbage, Brussels sprouts, and so on — can reduce thyroid hormone in the same way. An enlarged thyroid is sometimes referred to as a goiter, and these compounds are sometimes categorized as goitrogens. Such compounds have also been found in very small amounts in countless other foods — from

peaches and peanuts to strawberries and spinach! But, again, as long as you get enough iodine from your diet, as well as other micronutrients essential to thyroid function, I would not recommend cutting all these healthy foods out. Simply pair these foods with the iodine-rich and micronutrient-rich foods listed in the chart above, or lightly steam them to counteract their activity. See our article on [goitrogens](#) for more about how to address the goitrogenic compounds found in certain foods.

There is one food I do strongly recommend avoiding if you have a thyroid condition: gluten. A distinct connection between celiac disease, [gluten intolerance](#), and autoimmune thyroid issues has been observed, and many of my patients find that when they remove gluten-containing foods, they feel much better and notice fewer problems with their thyroid.

Finding your balance — the Women to Women approach

I know that supporting your thyroid naturally can be more complicated than simply popping a pill, so I want to recap some key points about how to eat for thyroid health. One thing I can say for sure: as you learn more about your body and how to support it, I promise you'll feel better and better!

Your thyroid doesn't operate well under continued stress

One way to minimize physical stress in the body is by eating well and often. We suggest 3 balanced meals and 2 healthy snacks a day. See our article on [eating for adrenal health](#) for other ways to minimize stress by being conscious of how, what, and when you eat.

Start with whole food, and supplement as needed. Getting as many pro-thyroid nutrients through wholesome foods is ideal, but I know this isn't always easy or even possible in our busy lives. Supplementing with a top-quality multivitamin–mineral complex, like the one we offer in our Personal Program, will provide the foundation you need for preventive thyroid health. If you already have thyroid imbalance, talk to your practitioner about using supplements before a prescription. The problem with prescriptions like Synthroid (levothyroxine) is that once you go on them, your thyroid backs down, and it can be difficult to get off of thyroid replacement drugs.

Get tested. I recommend having a full [thyroid hormone panel](#), which is routine for many practitioner visits. But I also recommend testing your iodine, selenium, and [vitamin D levels](#). Together, the results of these various tests should give both you and your practitioner a better sense of underlying conditions and how to begin your treatment.

Too much can be as bad as too little. While all of the micronutrients I've discussed above are important, overloading on just one will not help your thyroid or resolve your imbalance! There are many complex interactions between the pro-thyroid nutrients, especially iodine and selenium, so please work with your practitioner to find a gentle balance that is right for you.

Support your adrenals. I've so often seen that the underlying problem in a thyroid imbalance is overworked adrenal glands. To learn more about the intimate connection between stress, your thyroid and adrenal glands and how to better support them, see our articles on [adrenal health](#).

You and your thyroid deserve a break — sit and enjoy!

This is perhaps one of the most overlooked pieces of advice in our modern lives: sit and enjoy your food! As women in today's world, we are expected to do and be so many things that eating while standing at the kitchen counter, driving, or seated at your computer seems normal. But as you may have read in my article on [hypothyroidism in menopause](#), the thyroid is very sensitive to stress. Give your mind, your body, and your thyroid a break by sitting in a comfortable space while you eat. Enjoy your meals in peace with friends and family, and talk, laugh, and allow the food you consume to nourish your thyroid, too. You deserve this break, and your body will thank you for it!

<http://www.womentowomen.com/hypothyroidism/foods-naturalthyroidhealth.aspx?>