



Hypothyroidism in Menopause — a whole-body perspective

by Marcelle Pick, OB/GYN NP

I talk to women daily about hypothyroidism in my practice, and one thing I hear over and over in those who have been diagnosed is, *I thought I was healthy. How did this happen?* Many women with hypothyroidism are struggling with [weight gain](#), fatigue, poor concentration, hair loss, even depression — and they want answers about how to feel better.



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Research shows that at least 10% of midlife women have abnormal TSH levels. And it isn't just a problem for women who don't pay attention to their health — last year Oprah Winfrey, who's extremely health conscious, shared news about her hypothyroid condition. The fact is, menopause and perimenopause is often a time when women see high TSH levels and are diagnosed with hypothyroidism, but few conventional practitioners talk about this connection. And even fewer offer solutions outside of prescription medications like Synthroid, its generic, levothyroxine, or Armour Thyroid to bring TSH levels down.

I know women have questions about their thyroids and they want answers. One way to start is by realizing the thyroid — the master of our metabolism — doesn't act in a vacuum and we can only truly benefit if we stop treating it that way. My experience has shown me that hypothyroidism is rarely an isolated condition. There could be several factors leading to your thyroid disturbance, especially during the menopause transition, and these factors vary from woman to woman.

Let's look at the other pieces to thyroid imbalance — because there is so much more to the story than elevated TSH. When these surrounding issues are resolved, it's amazing how much better you can feel! So whatever your lab results may be, let's take a look at what might be leading to your hypothyroidism and how you can feel better naturally.

A natural desire for balance

Our bodies continually strive for balance — a *dynamic balance* that shifts according to positive and negative feedback messages from the brain and cells of the body. No matter what the disruption, the human body has amazing capabilities in terms of reverting to this dynamic balance. Centrally located between the brain and rest of the body, constantly up-regulating and down-regulating with delicate oscillations, the thyroid is poised as a major mediator of that balance.

The responsibility the thyroid carries is amazing. Its hormones affect how you metabolize food, how you store and use energy, how you think, talk, sleep and more! So it makes sense that when the thyroid isn't functioning properly, life can seem entirely off-kilter.

Typical thyroid hormone ranges*

It's a good idea to have your thyroid hormones checked once a year. Your practitioner should also check levels after two months if you're starting a new thyroid medication or dose. Here are the typical ranges:

- **T4:** 4.8–13.2 mcg/dL
- **Free T4:** 0.9–2 ng/dL
- **T3:** 80–200 ng/dL
- **TSH:** 0.4–4.0 mIU/L (if you have no hypothyroid or hyperthyroid symptoms)
0.3–3.0 mIU/L (if you're being treated)

Keep in mind that “normal” ranges vary by laboratory, and that anyone with a TSH >2.0 mIU/L and no other “abnormal” levels should be followed closely to watch for symptoms of hypothyroidism. I strive to keep TSH levels below 2.0 mIU/L in my patients, even though the normal range goes up to 4.0 mIU/L.

* Lombard, J. 2005. Chapter 32. Clinical approaches to hormonal and neuroendocrine imbalances. Section VI: Neurotransmitters: A functional medicine approach to neuropsychiatry. In [Textbook of Functional Medicine](#), ed. D. Jones & S. Quinn, 644. Gig Harbor, WA: Institute for Functional Medicine.

The hormones of the thyroid, *thyroxine* (T4) and *triiodothyronine* (T3), influence the metabolism of each and every cell in our bodies. Because T3 is the form of thyroid hormone our cells recognize best, it is more readily used and considered much “stronger” than T4. The more slow-acting T4 can be converted into T3 in the liver, kidneys and elsewhere.

When T3 and T4 are low in the bloodstream, the part of your brain known as the *hypothalamus* — the “command center” for hormones — sends a hormonal message in the form of TRH (*thyrotropin-releasing hormone*) to the pituitary gland. Functioning as a sort of “halfway house” between the brain and the endocrine system, the pituitary gland interprets the message to secrete more TSH (*thyroid-stimulating hormone*), which in turn prompts your thyroid gland to take up iodine and the amino acid tyrosine to produce more T3 and T4.

Your body has the natural tendency to restore thyroid balance because nature has created an elegant system of setpoints, feedback loops, and checks and balances to support the thyroid's dynamic equilibrium. So as long as things haven't gotten too far out of whack, it will always move toward its default “normal” state if you support it. And support becomes increasingly important as we age, as many women who are approaching menopause come to realize.

Hypothyroidism and menopause

I think most of us would agree that menopause is a major life transition accompanied by profound changes on both emotional and physical levels. This period of time and the years leading up to it, known as *perimenopause*, can cause the body to temporarily shift its balance while hormones recalibrate and readjust to a new set of demands. No longer called on to bear children, the body intelligently conserves

its energy and slows the production of estrogen and progesterone. In many cases, progesterone is the first to decline, which temporarily leaves estrogen as the dominant hormone.

Some researchers and practitioners feel that estrogen dominance is a key factor in decreased thyroid function. Estrogen paired with lowering progesterone levels, a typical situation for many perimenopausal women, may block the action of the thyroid hormone and lead to symptoms of hypothyroidism, even as thyroid hormone levels appear normal on lab results.

Estrogen dominance may definitely contribute to perimenopausal and menopausal thyroid problems, but I've found that there are also additional factors to consider during this transition in our lives. The systems in our bodies are intimately connected, and a disease or disorder may not always begin with the tissue or organ exhibiting the problem. As my colleague Dr. Jeffrey Bland, researcher and founder of the Institute for Functional Medicine, writes, "Each disease has a past, a present, and a future..." And a disorder in the thyroid may very well have a "past" somewhere else in the body. Let's begin with how the adrenal glands influence thyroid function.

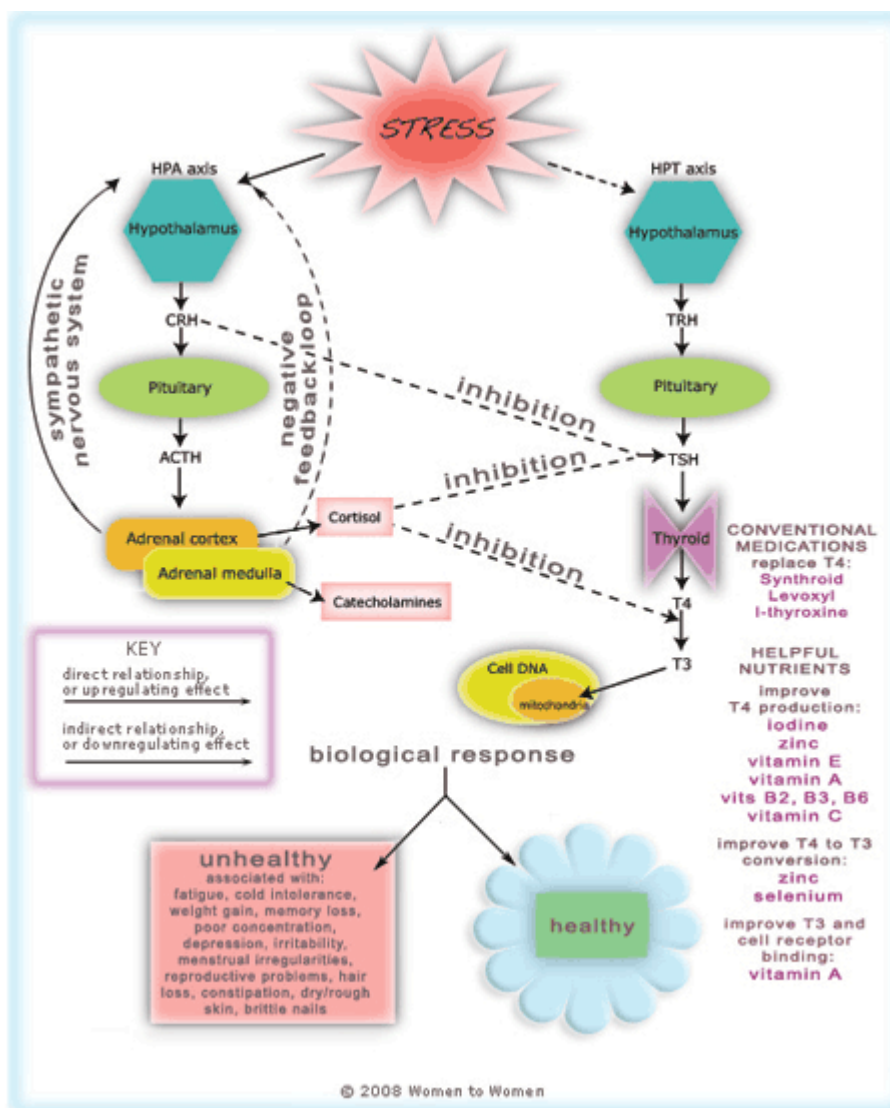


Diagram of interconnections between the HPA and HPT axes

We hear more about our thyroid glands than we do about our adrenal glands, so many women are surprised to learn about the connection between the two. But I've found one of the most important contributors to hypothyroidism in my patients is overstressed adrenal glands. The condition of too much — or too little — cortisol can lead to all sorts of health problems.

If you take a look at the diagram above, you can see that stress of any kind — psychological, allergic, infectious, dysbiotic, toxic, chemical or otherwise — stimulates the *hypothalamic-pituitary-adrenal axis (HPA)*, the dynamic feedback system between the brain and the adrenal glands. This stimulation has huge implications throughout the body, especially in the gut, brain, adrenals and thyroid.

The short-term result of a stimulated HPA axis is higher cortisol production from the adrenals. We know high cortisol (*hypercortisolism*) in the bloodstream can affect thyroid function in more ways than one. For starters, it directly inhibits production of TSH (thyroid-stimulating hormone). It also inhibits the conversion of T4 to T3.

But cortisol can't remain high forever. Eventually, the adrenal glands reach exhaustion and too little cortisol is produced (known as *hypocortisolism*), which comes with another set of problems. For more on this topic, see our article on [adrenal fatigue](#).

Either way, with lower levels of T3 in the blood, your cells are operating without the necessary information to produce a healthy biological response. This is when women begin to see [hypothyroidism symptoms](#) like fatigue, cold intolerance, weight-gain, memory loss, poor concentration, depression, infertility, hair loss and more.

Prescription drugs like Synthroid or Levoxyl act by replacing the body's T4. Though some women feel better on one of these thyroid replacement drugs, many do not. That's because, as you can see from the diagram, when overstressed adrenals are at the root of your thyroid trouble, feeding the body more T4 is only a Band-Aid solution. What's more, this approach can eventually prevent the thyroid from being able to produce its own T4. My experience has shown me that looking deeper into the origins of the thyroid disorder can be much more helpful in bringing TSH down, while at the same time creating whole-body wellness.

If patients come to see me with symptoms of hypothyroidism, one of the first things I do after [thyroid testing](#) is test their adrenal function. I see adrenal fatigue during perimenopause and menopause in so many of my patients, and it may be that their bodies are finally reacting after years of taking the stress associated with caring for other people, working full-time jobs, keeping the house in order, eating meals on the go — the list goes on and on.

But the adrenal glands are one piece to the thyroid equation. For other patients, autoimmune concerns, low iodine, food sensitivities or something entirely different can be the cause of a sluggish thyroid.

Factors in the **hypothyroidism** equation

On top of the physical and emotional stress women feel at menopause, there are some very real biological stresses on the thyroid to consider. First and foremost are low iodine levels. Iodine is the most central ingredient in thyroid hormones T3 and T4. Trying to produce T3 and T4 without iodine is like trying to make an omelet without the eggs! We need about one milligram of iodine a week to form the required amount of thyroxine.

But iodine is not all that widely distributed in nature. Despite iodine being added to our commercial table salt, even in America iodine status was recently deemed “marginal” by the World Health Organization. Many of the world’s crop-growing soils are devoid of iodine, and as fewer people eat foods rich in iodine and more and more stop using iodized table salt, we are seeing lower iodine levels.

As a member of the halide group of elements, iodine shares a similar size and shape to the other halides: fluoride, bromine, chlorine and astatine. These molecules can compete with iodine for the receptors on the thyroid gland, possibly interfere with iodine transport in the body, and compromise normal thyroid function. This problem of inadequate iodine intake is worsened by excessive levels of these other halide molecules in our environment.

All environmental toxins, like halides, heavy metals, pesticides, and antibiotic leftovers from our agricultural, meat and dairy industries can influence thyroid function. Metals like lead, cadmium, and mercury not only disrupt the way your thyroid produces thyroid hormones, but they also impair your liver’s ability to convert T4 to T3. Pesticides and antibiotics have also been shown to inhibit thyroid function. It’s always best to limit your exposure to these toxins as best you can, but increasing iodine intake and implementing a regular detox program to help with your body’s [natural detoxification](#) can make a difference.

Food allergies and sensitivities — including to gluten — can have a tremendous impact on the thyroid. Many of my patients with hypothyroidism see positive results when they eliminate gluten from their diets. This is a connection I’ve noticed for several years, and research being done worldwide is bearing this out.

Thyroid dysfunction can be the result of an autoimmune response, where the body’s immune system attacks the thyroid as it would attack a foreign invader in the body. More research is needed in this area, but it helps to remember that the food we eat “talks” to our genes. And when we suffer from allergies in the gut, the chemical signals that result influence the DNA in our cells. Unfortunately, the messages food stressors bring can turn off the default “healthy” processes and turn on the ones that lead to disease.

A long list of prescription medications can also negatively affect thyroid function. For starters, lithium, amiodarone, somatostatin and certain antipsychotics influence how the thyroid produces and delivers hormones. But these and other drugs can disrupt the thyroid hormone balance at any level — from synthesis, secretion and transport, to how thyroid hormones act in our organs to regulate metabolism — with an unintended outcome of hypothyroidism *or* [hyperthyroidism](#). Most pharmaceutical drugs place a strain on our bodies overall. I don’t deny that prescription medication save lives, but we have to be mindful of the fact that this often comes at the expense of other systems in the body. Sadly, the targeted strength provided by many prescription medications can be overwhelming — in some cases destructive — to the health of the thyroid system.

I’ve found that working with the body’s natural pathways by providing natural vitamins, minerals, [omega-3 fatty acids](#), and extra antioxidants can offer great results without the side effects. Selenium, for example, is needed for the conversion of T4 to T3, so increasing the selenium in your diet may make a difference in how you feel. And as I mentioned above, *iodine is absolutely essential* for making thyroid hormones. It might help to have your iodine levels tested and to work with your practitioner on supplements if needed. Vitamin A, EPA and DHA, and zinc all act to improve T3 binding in your cells. The bottom line is that when we give our bodies the gentle support they recognize, we often see positive results that last.

Natural hypothyroid relief — from Women to Women

Menopause is a time of transition, and both my personal life and my experience with women in the clinic over the years have shown me that this transition can take its toll on the mind and body, particularly the thyroid. Hypothyroidism may be the manifestation of many different imbalances, and the best way to restore healthy thyroid function in the present is by looking into the problem's past to address the root causes.

After years of clinical experience, I've seen women make great improvements by working with their body's internal mechanisms to support thyroid health. Here are some elements of the natural approach I've used to give women with hypothyroidism a better future. Also, remember to have your practitioner examine your thyroid and thyroid hormone levels once a year to stay on top of any imbalances.

- **Support your adrenals.** If this is the only thing you do, I promise it will benefit your health on so many levels. Not only will it take some of the burden off of your thyroid, but supporting your adrenal glands will help to restore your energy and overall wellness. Learn more about how to [support your adrenal glands](#).
- **Introduce a quality multivitamin–mineral complex.** A high-quality supplement like our Essential Nutrients will provide a healthy base of vitamins and minerals for the production and action of thyroid hormones in your body. This may be all the boost you need to get your thyroid back on track or to prevent hypothyroidism. I urge all of my perimenopausal and menopausal patients to take a high-quality multivitamin–mineral — regardless of thyroid function — because we can't always rely on our diets to provide us with the essential vitamins and minerals our cells need to operate.

Nutrient-rich foods to replenish thyroid health

- **Iodine (I):** seaweed (e.g., nori), clams, shrimp, haddock, oysters, salmon, sardines, pineapple, eggs.
- **Selenium (Se):** smoked herring, smelt, wheat germ, Brazil nuts (just one nut provides ~139 mcg), apple cider vinegar, scallops, barley, lobster.
- **Zinc (Zn):** fresh oysters, ginger root, pecans, dry split peas, Brazil nuts, egg yolk, whole wheat, rye, oats, peanuts.
- **Vitamin E:** wheat germ oil, olive oil, sunflower seeds, almonds, peanuts.
- **Vitamin A:** dark green leafy veggies, liver, winter squash, cantaloupe, stone fruits, papaya, and cod liver oil.
- **B vitamin complex:** brewer's yeast, wild rice, brown rice, whole wheat, beans, peanuts.
- **Vitamin C:** Red chili, guava, parsley, dark green leafy veggies, strawberries, papaya, citrus fruits.*

* Pizzorno, L., & Ferril, W. 2005. Chapter 32. Clinical approaches to hormonal and neuroendocrine imbalances. Thyroid. In [Textbook of Functional Medicine](#), ed. D. Jones & S. Quinn, 647. Gig Harbor, WA: Institute for Functional Medicine.

Liska, D., and S. Quinn, eds. 2004. *Clinical Nutrition, A Functional Approach*, 184. Gig Harbor, WA: Institute for Functional Medicine.

- **Consider supplementing with extra selenium and iodine.** Oftentimes women with hypothyroidism need more nutrient support than one quality multivitamin can provide. Ask your

practitioner to test your iodine levels, and talk about working with your body's natural pathways by including more iodine and selenium in your diet. You can do this through the foods you eat or with supplemental forms, but if you are using supplements of selenium, I do not recommend taking more than 200 mcg/day. Also keep in mind that studies on both humans and animals indicate that increasing iodine intake when increasing soy in the diet is the missing piece to avoiding problems associated with [soy and hypothyroidism](#). For both selenium or iodine supplementation, however, please work with a professional healthcare provider so you can have your levels monitored appropriately.

- ***Change your diet.*** Gluten or other food sensitivities could be adding to the stress on your thyroid. Try an elimination diet to investigate any food allergies. A gluten-free diet has been extremely helpful for many women I've seen at the clinic.
- ***Find ways to eliminate stress and speak your truth.*** By the time we arrive at perimenopause, many of us find we're giving too much to the world around us and not enough to ourselves. This is the time to speak out, to share your opinions, to explore the things that make your life meaningful. Don't feel guilty about asking for more support, getting a massage, going to yoga, reading a book on the couch. Though it's easier said than done for many women, this may be the perfect time in your life to learn to say "no." You deserve a break — and so do the cells in your body!
- ***If you need additional support, talk to your practitioner about Armour Thyroid or compounded T3 and T4.*** Armour Thyroid is a natural thyroid replacement prescription that provides both T4 and T3, and can often make a dramatic difference for women suffering from symptoms of severe hypothyroidism. However, the levels of T3 and T4 cannot be adjusted to meet unique needs, so you might talk to your practitioner about prescribing compounded individualized levels of T3 and T4. Keep in mind that both Armour Thyroid and compounded forms are somewhat controversial; some practitioners might be unwilling to consider it an option, so you may need to seek a second (or a third) opinion.

Your thyroid, your voice

Eastern medical paradigms associate the thyroid with our "sacred voice." As part of the fifth chakra, difficulty with the thyroid can be linked to an inability to speak your truth, follow your dream, or fully express yourself. Anatomically, the thyroid sits right over your voice box, and one of the symptoms of thyroid dysfunction is a gravelly or "muted" voice. When the thyroid is underactive, it doesn't hurt to step back and evaluate how well you're expressing your individual needs, wants, and opinions to those around you.

Remember that your voice doesn't serve to merely communicate — it is connected to your whole being. Likewise, your thyroid doesn't simply produce thyroid hormone. It is connected to every cell in your body and can be influenced by physical as well as psychological factors. My advice is to look at the whole picture when it comes to your thyroid, and you will find the dynamic balance your body is naturally seeking.