

NATURAL THYROID HEALTH

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Connie's obstetrician was adamant, Connie must go on thyroid replacement medications or else she and her unborn baby would suffer significant long-term health consequences. Connie's thyroid hormone levels were far below normal, and she felt really tired and slow. As Connie thought about it and did some research she felt very uncomfortable with what she was learning about thyroid medication side effects, which she could anticipate would negatively impact her and her unborn child. Connie started looking for alternatives. We will come back to Connie and what become of her.

A lot of people suffer from thyroid disease and don't realize it. Knowing when you have it and what to do about it can be a life renewing experience.

LIFESTYLE CHOICES MAKE THE DIFFERENCE

Thyroid disease is largely caused by poor lifestyle choices. Most people with thyroid disease can recover with simple lifestyle changes and natural remedies. God works with natural remedies to bring about healing and restoration of health.

In this article we want to discuss how your thyroid functions. We want to take a look at things that can compromise the function of your thyroid; competitors, inhibitors, and toxins. We will finally consider some beneficial lifestyle choices that can make a difference in thyroid health and simple home remedies to aid in thyroid recovery and restoration.

An estimated 20 million Americans have some form of thyroid disease. Women are five to eight times more likely than men to have thyroid problems. One woman in eight will develop a thyroid disorder during her lifetime.¹ The thyroid's job is to make thyroid Hormones. Thyroid hormones affect every cell in and organ of your body. They regulate the rate at which

calories are burned, affecting weight loss or weight gain. They can slow down or speed up the heartbeat. They can raise or lower body temperature. They influence the rate at which food moves through the digestive tract. They control the way muscles contract. And they control the rate at which dying cells are replaced.²

In the thyroid gland hormones are made when iodine is added to tyrosine residues in thyroglobulin to make T4 and T3. When thyroid hormone is released from the thyroid as T4 it requires selenium, iron, and zinc to change it to the active thyroid hormone form, T3. Once the active thyroid hormone form (T3) is in the blood stream, omega-3 fatty acids help facilitate its movement into the cells.³ Magnesium and zinc are also necessary to help in stabilizing thyroid. Deficiencies in any of these nutrients could result in thyroid dysfunction.

Two autoimmune conditions commonly affect the thyroid. The first is Graves' Disease, where auto-antibodies actually stimulate the thyroid to produce excess thyroid hormone resulting in hyperthyroidism. The other is Hashimoto's thyroiditis in which anti-thyroid antibodies actually end up destroying or inhibiting thyroid function resulting in too little thyroid hormone being produced, this condition is called hypothyroidism.

Signs and symptoms of hypothyroidism may include fatigue, increased sensitivity to cold, constipation, dry skin, weight gain, puffy face, hoarseness, muscle weakness, elevated blood cholesterol levels, muscle aches, tenderness and stiffness, pain, stiffness or swelling in your joints, heavier than normal or irregular menstrual periods, thinning hair, slowed heart rate, depression, impaired memory, and/or enlarged thyroid gland (goiter).⁴

WHAT CAUSES THYROID DYSFUNCTION?

Believe it or not, meat eating tops the list, especially red meat, because it significantly increases the risk of autoimmune thyroiditis (Grave's/Hashimoto's).⁵ You may realize that meat eating goes hand in hand with a high total serum cholesterol. A high total serum cholesterol level suppresses the thyroid's function.⁶ It is the fat and cholesterol in the

meat that raises the cholesterol in your body. This dietary fat from meat increases the risk of thyroid dysfunction by 55%.⁷ That said, Omega-3 polyunsaturated vegetable fats are beneficial to the thyroid cells.⁸ This reminds me, God has weighed in on the animal fat issue, in Leviticus 7:23 He says, "Speak unto the children of Israel, saying, Ye shall eat no manner of fat, of ox, or of sheep, or of goat." So, you may be thinking, if I don't eat animals, what would I eat? For good thyroid health, studies reveal that: exclusion of all animal foods is associated with half as much thyroid dysfunction as compared with omnivorous diets."⁹

Other foods harmful to vibrant thyroid health include sugars/sweets¹⁰ and white flour products.^{11,12} Sugar is a very inflammatory food and increases the inflammation in the thyroid, which in turn compromises its function. This may seriously challenge your sweet tooth, but a little self-denial on this issue could just pay off in better thyroid health. The eating of refined carbohydrates—sugars, sweets, white flour, and white rice products—results in a low antioxidant status and the accumulation of advanced glycation end products (sugar coated proteins), which, in turn, leads to auto immune thyroiditis.¹³ Having said that, it may be becoming obvious that diabetes is not a friend to good thyroid function. Diabetes significantly increases the risk of hypothyroidism. The high blood insulin levels in diabetes destroys the thyroid gland. On the other hand, Hypothyroidism decreases insulin secretion increasing the risk of diabetes.^{14,15,16,17,18,19} What's more, consumption of refined cereal products (refined carbohydrates) compromises thyroid function,²⁰ and doubles the risk of thyroid cancer,²¹ and nobody wants thyroid cancer.

You may be thinking that the answer is artificial sweeteners, but let me caution you right here, artificial sweeteners, such as Aspartame, increase the risk of autoimmune thyroiditis too.²²

Studies show that if you replace all the refined carbohydrate foods in your diet with whole grains and vegetables, it will have positive effects on your thyroid function.²³ Some of this improvement can be attributed to the additional fiber you will consume. Consumption of sufficient dietary fiber, as opposed to eating refined carbohydrates which have no fiber, reduces the risk of Hashimoto's and hypothyroidism.²⁴ Fiber is what keeps your bowels regular and feeds the good bacteria in your gut. Improving gut flora has been shown to improve thyroid function.^{25,26} It might be referred to as the gut thyroid connection.

Really, the key to thyroid health and recovery from disease is reducing inflammation. Inflammation is a key ingredient in disorders of your thyroid. The best way to address thyroid inflammation is through eating an optimal, nutritious, antioxidant rich diet.²⁷ Are you eating your antioxidants?

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One very important and indispensable antioxidant is Vitamin C. As an antioxidant it helps preserve thyroid function.²⁸ It significantly helps improve autoimmune thyroiditis by decreasing TPO-Ab antibodies.²⁹ Vitamin C also counteracts the deleterious inflammatory effects of MSG on the thyroid.³⁰ What foods are rich in vitamin C? Oranges, red bell peppers, kale, brussels sprouts, broccoli, strawberries, grapefruit, kiwi, and green bell peppers, just to name a few.³¹

Eating your protection is really the answer. Dietary fresh fruits and vegetables help reduce the risk of thyroid dysfunction because of their high antioxidant levels.³²

Some people's thyroid problems stem from their inability to rein in their appetites. When they overeat, it increases thyroid oxidative stress/inflammation. On the other hand, caloric restriction decreases thyroid inflammation saving the thyroid from oxidation-induced autoimmune thyroiditis.³³

ENVIRONMENTAL THREATS

Diet is not the only lifestyle factor affecting thyroid function, there are also environmental issues. Electromagnetic Field (EMF) exposure, from cell phones and towers, WiFi, smart meters, etc., depresses T3 levels.³⁴ Cellular telephone EMF has been extensively studied, due to widespread usage, and has been found to decrease the levels of T3 and T4,³⁵ while it increases TSH levels.³⁶ TSH increases when the brain is trying to spur the thyroid on to catch up on the making of thyroid hormones.

Our environment is polluted with many thyrotoxic substances. The following substances have been shown to negatively affect thyroid

function: fluoride, bromide, chloride, perfluoroalkyl substances, perchlorate, folic acid supplementation, flame retardants,³⁷ nitrates,³⁸ pesticides, thiocyanate, triclosan, BPA, MSG, aluminum, and mercury.

Fluoride, bromide, and chloride are in the halide family together with iodine, and compete in the thyroid with iodine.

Fluoride decreases thyroid and brain function. The toxic effects are accumulative over multiple generations. Each generation gets dumber and more hypothyroid.³⁹ Know your sources of fluoride exposure. Toothpaste alone can exceed safe limits.⁴⁰ Fluoridation of drinking water has resulted in an increase in the mean content of fluoride in soft drinks, fruit juices and in canned goods (notably soups).⁴¹ Most soft drinks contain fluoride levels exceeding recommended levels.⁴² So can wines⁴³ and teas.⁴⁴ Often salt is fluoridated.⁴⁵ Processed foods such as cereals are a significant source of fluoride,⁴⁶ as are fish⁴⁷ and chicken.⁴⁸

Go easy on the salt! Sodium chloride (common salt) suppresses thyroid function, especially if you lack iodine.⁴⁹ This is because chloride is another one of those elements that competes with iodine.

Chlorine is a common disinfectant for tap water. Drinking chlorinated water suppresses thyroid hormone production in laboratory animals.⁵⁰ You may want to let your water sit out for a time to off-gas the chlorine, or run it through a filter that removes chloride before drinking it. Showering in chlorinated water is another way in which thyroid chlorine levels can be raised dangerously high.⁵¹

Bromide is in the same class of elements as iodine and competes with iodine in the thyroid, lowering thyroid function.⁵² Bromide is used in: pesticides (methyl bromide), some bread products (potassium bromate as a dough conditioner added bleach white flour),⁵³ brominated vegetable oil that may be added to citrus-flavored drinks, hot tubs, swimming pools and cooling towers, water cleansers, certain asthma inhalers and prescription drugs, fire retardants, plastic products, personal care products, such as hair lotions,⁵⁴ fabric dyes, and fire retardants.⁵⁵

What do microwave popcorn, fast food restaurant menus,⁵⁶ plastic food packages, non-stick cookware,⁵⁷ fish,⁵⁸ eggs, and meat⁵⁹ have in common? Perfluoroalkyl substances, which decrease your thyroid function.⁶⁰ These fluorinated substances are highly reactive and increase autoimmune thyroid disease.⁶¹ What about non-stick cookware? Perfluorinated chemical compounds,⁶² found all over our environment, are known to be endocrine

disruptors (the thyroid is part of the endocrine system)⁶³ and are used to coat “non-stick” cookware (Teflon).⁶⁴ They are also used as antifungals.⁶⁵ They are used to line your food packages.⁶⁶ Perfluorinated chemical compounds can compete with thyroxine (T4) for binding to the human thyroid hormone transport protein transthyretin so that your thyroid hormones get stuck in the thyroid.⁶⁷ Higher concentrations of serum perfluorinated chemical compounds are associated with increased thyroid disease.⁶⁸ They can also cause thyroid deficiency in unborn babies which leads to mental retardation.⁶⁹ So what should one cook food in? Good quality stainless steel cookware would be a first choice.

Go easy on the salt! Sodium chloride (common salt) suppresses thyroid function, especially if you lack iodine.

Bisphenol A (BPA), found in plastics, is a endocrine disruptor with effects on the thyroid as well as other endocrine functions.⁷⁰ BPA is a xenoestrogen commonly used in food storage plastics,⁷¹ vegetable cans, baby bottles, microwaveable containers, polyesters, adhesives and car parts.⁷² It is one of the highest-volume chemicals produced worldwide, human exposure to BPA is thought to be ubiquitous.⁷³ BPA causes an over-production of hydrogen peroxide by the thyroid, leading to oxidative damage and autoimmune thyroiditis.^{74,75}

Monosodium Glutamate (MSG), a common food flavor enhancer, significantly decreases serum free T3 and free T4 levels, while significantly increasing serum TSH. Oral intake of MSG results in degenerative changes in the thyroid gland,⁷⁶ as well as neurons and astrocytes in cerebellum.⁷⁷ It takes some research to discover all the ways industry hides MSG in common foods.⁷⁸ One good website for this is <https://truthinlabeling.org/>.

Mothers with dental amalgam fillings, which contain the toxic element mercury, have significantly lower thyroid levels and their children can also have hypothyroidism as a result of this oral toxin, leading to mental retardation.⁷⁹

Aluminum suppresses TSH,⁸⁰ T4, and T3.⁸¹ Many people do not realize it, but tea⁸² can be a big source of unwanted aluminum, as can be cheese,⁸³ baking sodas, geoengineering,⁸⁴ and vaccines.⁸⁵ Please see our Alzheimer's article for more unwanted aluminum sources.⁸⁶

Perchlorate is a contaminant that is commonly found in surface and groundwater,

some foods such as dairy milk,⁸⁷ some fertilizers, road flares, car airbags, fireworks, explosives, and rocket propellants.⁸⁸ Perchlorate competitively inhibits the transport of iodide into the thyroid.⁸⁹ It is 30 times more potent to the thyroid than iodine. Its effect upon the thyroid is additive with other toxins such as thiocyanate and nitrates.^{90,91} Make sure the water you drink is pure.

Nitrates are commonly consumed from drinking water and some foods. Processed meats are high in nitrates.⁹² Some supplements can be extremely high in nitrates.⁹³ Nitrates from fertilizers often contaminate drinking water.⁹⁴⁻⁹⁵ high levels of nitrates in drinking water are a risk factor for thyroid dysfunction.⁹⁶ Nitrates impair thyroid function by interfering with the thyroid's relationship with the brain and thyroid stimulating hormone, and by competing with iodine uptake. The water used for drinking and cooking in areas where people get goiters has been found to have higher nitrate content.⁹⁷

Thiocyanate concentrations, equivalent to those obtained from tobacco smoke, have three independent antithyroid actions: (i) they inhibit iodide transport into the thyroid, (ii) They inhibit iodine organification into T3 and T4, and (iii) they increased iodide efflux from the thyroid.⁹⁸ Canola (rapeseed, the source of canola oil) can be a significant source of thiocyanate and glucosinolates which suppress the thyroid.⁹⁹ Thiocyanate can also be found in dairy milk.¹⁰⁰ Rats receiving milk from cows fed rapeseed meal (canola) developed thyroid enlargement, a sign of thyroid dysfunction.¹⁰¹ As much as brassicas get a bad rap, studies show that they are of little impact at <1 kg/d for several months,¹⁰² unless of course you are juicing large amounts of them. Attention to adequate iodine consumption is recommended in individuals consuming large amounts of brassica vegetables routinely.¹⁰³

Folate is a B vitamin readily available in vegetables like spinach. When folic acid is substituted, for example as in vitamin pills, hypothyroidism results. Excess folic acid during adolescence suppresses thyroid function causing permanent deficits in motivation and spatial memory.¹⁰⁴ Better to eat spinach and green leafy vegetables with folate, than to take laboratory concocted supplement pills of folic acid.

That caffeine during pregnancy causes hypothyroidism in your unborn baby and reduces their intelligence.

Triclosan is a potent antibacterial and antifungal compound that is widely used in personal care products, hand sanitizers, toothpaste, plastics, and fabrics. Recently, triclosan has been shown to alter endocrine function in a variety of species. It acts as an endocrine disrupter and significantly decreases total serum thyroxine (T4) triiodothyronine (T3).¹⁰⁵ Washing your hands with something else like a natural soap is better for your thyroid.

Herbicides (e.g., glyphosate) and pesticides (e.g., pyrethrin) interfere with thyroid function, increasing the risk of thyroid disease.^{106,107} Herbicides are toxic chemicals that kill plants. Glyphosate is a herbicide, sold under the name "RoundUp", that kills plants by depleting their selenium and compromising their ability to produce the amino acid tyrosine.^{108,109} Glyphosate exposure is associated with an increased risk of hypothyroidism.¹¹⁰ In Humans tyrosine is essential to the production of thyroid hormones. The Canadian Food Inspection Agency found that 90 percent of pizza, 88 percent of wheat flour, 84 percent of crackers, 84 percent pasta, 75 percent of oats, 70 percent of chickpea flour, and 67 percent of lentils samples contain unwanted glyphosate.^{111,112}

HABITS

Have you had your caffeine hit yet this morning? In animal studies, caffeine significantly reduces T3 levels.¹¹³ If you are pregnant and interested in the thyroid health of your child, it will be of interest to you to know that caffeine during pregnancy causes hypothyroidism in your unborn baby and reduces their intelligence.¹¹⁴ One popular source of caffeine is coffee. Thyroid function already declines with age; coffee prematurely hastens this decline.¹¹⁵ Methylxanthines found in coffee, tea, colas, and chocolate have been shown to be mildly antithyroid and strongly goitrogenic in laboratory animals.¹¹⁶ Goiters, or enlargement of thyroid, occurs when the thyroid is pushed, by excess TSH, to make thyroid hormone, but lacks the nutrients, such as iodine, to do so.

People who drink coffee or take caffeine often have a difficult time sleeping. Sleep is very important. Both shorter (<7 h/day), or longer (>8 h/day), sleep times increase the risk of thyroid dysfunction compared to the optimal sleep duration (7-8 h/day).¹¹⁷ Another thing that compromises sleep and your thyroid is an evening meal. Two meals a day with no snacking between meals is healthier for your thyroid.

PSYCHOLOGICAL

How are you feeling today? Both stress¹¹⁸ and anxiety¹¹⁹ significantly suppress thyroid function.¹²⁰ We have discovered, in recent years, that the impact of psychological stress on health is enormous. Stress management is key to thyroid health.

BODY MASS INDEX

Another factor weighing in on your thyroid health is your body mass index—whether or not you maintain a healthy weight. For some, aggressive weight loss may ease hypothyroidism. About 10% of obese subjects are hypothyroid. Weight gain has been associated with hypothyroidism while weight loss normalizes it.^{121,122} Obesity also increases autoimmune thyroiditis.¹²³

A very good therapeutic approach to hypothyroidism and obesity can include eating less food—caloric restriction. Caloric restriction decreases hydrogen peroxide production potentially saving the thyroid from oxidation-induced autoimmune thyroiditis.¹²⁴

Are you having trouble losing weight? It could be the thyroid replacement medication's fault. Thyroid hormone supplementation increases obesity.¹²⁵ Levothyroxine (a popular thyroid hormone replacement drug) is not benign, it can increase your chances of developing lung cancer¹²⁶ and pancreatic cancer.¹²⁷ What's more the use of thyroid hormones can increase the risk of cataracts in your eyes.¹²⁸ Thyroid replacement drugs can also increase the risk of osteoporosis.¹²⁹

OSTEOPOROSIS

Speaking of osteoporosis, thyroid dysfunction itself can cause osteoporosis. Thyroid disorders have an important impact on bone metabolism and fracture risk, such that hyperthyroidism, hypothyroidism, and subclinical hyperthyroidism are associated with a decreased bone mineral density (BMD), and increased risk of fracture.¹³⁰

TRAUMA

Incidentally neck injury can impact your thyroid. Whiplash and cervical nerve pressure can cause hypothyroidism with resultant 10-30 pounds weight gain over the next 3-4 months.¹³¹

HYDRATION

Drink pure, uncontaminated water; rehydration helps balance and regulate the thyroid hormones.¹³²

HELP FOR THYROID FUNCTION

So, what is the secret to getting your thyroid working again. I have personally seen people with a long history of thyroid replacement hormone therapy get off their pills and achieve normal thyroid function. Besides avoiding all the thyroid competitors, inhibitors, and toxins we have discussed, my recommended approach includes such modalities as; assuring adequate body levels of iodine, selenium, tyrosine, zinc, iron, and magnesium, use of helpful herbs, taking time for appropriate exercise; proper application of hot and cold hydrotherapy treatments, oral and topical use of charcoal, exposure to thyroid stimulating sunlight, gentle massage to encourage blood flow, and thyroid friendly clothing.

Let's start with micronutrients that the thyroid needs for good health and the production of adequate thyroid hormones. Iodine,¹³³ selenium,^{134,135} iron,¹³⁶ magnesium,¹³⁷ zinc,^{138,139} vitamin A,¹⁴⁰ chromium,¹⁴¹ and copper¹⁴² all matter to your thyroid's health.

Iodine is the key element in thyroid hormone synthesis. The iodine content of plant foods depends on the iodine levels in soil and in groundwater used in irrigation, in crop fertilizers, and in livestock feed. Iodine concentrations of plants grown in soils of iodine-deficient regions may be very low.¹⁴³ Milk alternatives contain far less iodine than whole milk.¹⁴⁴ Pasteurizing milk decreases its iodine levels.¹⁴⁵ There is some iodine in a few common foods, and there has been a push in the past to put it in salt.¹⁴⁶ My favorite go to source for iodine is kelp, and the product I find well-stocked with iodine is "Maine Coast Sea Vegetables Organic Kelp Granules Salt Alternative." I often have people take between ¼ and 1 teaspoon per day. The goal is to get somewhere between 1 and 12.5 mg of iodine per day.

I would not attempt to increase my iodine intake without making sure that my selenium intake levels were good. The goal is to get around 400 mcg of selenium per day. The best food for accomplishing this is Brazil nuts. One ounce of Brazil nuts, (6–8 nuts) contains around 544mcg of selenium.¹⁴⁷

Iron deficiency increases the risk of hypothyroidism by 500%.¹⁴⁸ So, where can one find good iron for a good diet? Some iron rich

foods include soybeans, sesame seeds, bran, lentils, wheat germ, tofu, oats, walnuts, peas, lettuce, and alfalfa sprouts, just to name a few. Vitamin C also helps with iron absorption, so include some good vitamin C foods in your meal plans as well.

I have personally seen people with a long history of thyroid replacement hormone therapy get off their pills and achieve normal thyroid function using natural remedies.

Tyrosine can best be obtained from foods such as: seaweed, spirulina, soy, parsley, peanuts, pumpkin and squash seeds, broad beans (fava beans), sesame seeds, mungo beans, cowpeas (blackeyes), lima beans, black walnuts, tahini, wheat germ, oat bran, wild rice, chia seeds, oats, tofu, macadamia nuts, pine nuts, sunflower seed, flaxseed, navy beans, yellow corn, almonds, Brazil nuts, pistachio nuts, walnuts, edamame, hazelnuts, lentils, spinach, and chickpeas. Be aware that B vitamin deficiency can compromise tyrosine absorption, the two go hand in hand.¹⁴⁹

As we think about thyroid and improving its function we do not want to overlook the value of medicinal herbs. The Bible tells us that God intended the herbs for our service. "He causeth the grass to grow for the cattle, and herb for the service of man: that he may bring forth food out of the earth;"¹⁵⁰ I recommend acquiring the herbs and then making them into a medicinal tea. There are a lot of good herbs for thyroid. Ashwagandha Root because it improves TSH, T3, and T4.^{151,152} Chamomilla improves TSH, T3 and T4, and improves pathological changes in the thyroid tissues.¹⁵³ Bauhinia purpurea significantly increases the thyroid hormones T3 and T4.¹⁵⁴ Rhodiola helps all the symptoms of hypothyroidism.¹⁵⁵ Coleus forskohlii increases T4 and T3 secretion from the thyroid.¹⁵⁶ Commiphora guggul reverses the effects of toxins that cause hypothyroidism.¹⁵⁷

Some herbs are valuable for hypothyroidism because of their mineral content. As we mentioned earlier, seaweed is good for the thyroid because of its high iodine content.¹⁵⁸ Basil is a good source of selenium.¹⁵⁹

There are some herbs that are helpful because they reduce autoimmune thyroiditis. For example, Cordyceps sinensis: restores the balance between helper T and cytotoxic T cells in autoimmune thyroiditis.¹⁶⁰

Not all people suffer with hypothyroidism when their thyroids go haywire, they get the opposite complication of hyperthyroidism, or

too much thyroid hormone. In which case, Bugleweed improves symptoms of hyperthyroidism by decreasing excess T4, so do foods from the cabbage family.¹⁶¹ So, if you have hyperthyroidism, make it a point to include more foods from the cabbage family in your menus.

You may not feel like exercising when your thyroid hormones are suboptimal, but exercise is actually part of the solution. Physical activity significantly improves all important thyroid function laboratory values.¹⁶² Being sedentary tends to lower thyroid function.¹⁶³ Having regular times for exercise can be of great benefit.

Hydrotherapy can be most beneficial when approaching thyroid dysfunction. Hydrotherapy is the application of hot and/or cold water to a part of the body. In this case the thyroid, which surrounds our voice box or Adam's apple. I usually use hot water bottles or gel packs, or a cloth dipped in hot water for the hot application, and ice bags or a cloth dipped in cold water for the cold application. Our regimen is to apply hot to the thyroid for 3 minutes. Then cold to the thyroid for one minute. Then to repeat this cycle of alternating hot and cold for 5 cycles. Then end with the cold application. To finish we would wrap the neck with a cloth or scarf and let the patient rest for at least 20 minutes. This can help reduce inflammation, improve circulation, and stimulate hormone production.¹⁶⁴

Get some sun today! Especially direct sunshine to the thyroid area for at least 20 minutes a day.

We recommend charcoal poultices to the thyroid gland overnight for toxin, inflammation¹⁶⁵ and edema removal while you are seeking to restore function. Our procedure is to take one cup of water and put it into a sauce pan on the stove. Add 3 tablespoons of activated charcoal powder and 3 tablespoons of ground flax seeds and bring it to a boil. Stir well. Turn off the heat and let cool. This can be applied one fourth inch thick to the thyroid and surrounding neck area, and then covered with a plastic wrap for overnight treatment. Leave this on all night and remove it in the morning. The next night, turn the poultice over and use the other side. You can even make a lot of these poultices ahead and store them in a freezer for future use.

Have you heard of the sunshine vitamin? Being low in Vitamin D increases the risk of autoimmune thyroid disease.^{166,167} Suboptimal

vitamin D status is associated with more Hashimoto's thyroiditis¹⁶⁸ and more aggressive thyroid cancers.¹⁶⁹ Increases in blood vitamin D levels can be achieved equally by supplementation or by natural sun exposure.¹⁷⁰ So get some sun today! Especially direct sunshine to the thyroid area for at least 20 minutes a day.

Ever had a neck massage? Massage has the ability to increase thyroid blood flow and to increase the release of thyroglobulin from the thyroid.¹⁷¹ You can massage your thyroid yourself or get someone else to do it for you.

It has been said that perfect health depends on perfect circulation. It would be helpful to clothe all parts of your body (head, neck, arms, ankles, and especially legs, etc.) evenly and adequately, especially in cold weather.¹⁷² I believe turtlenecks are good for the thyroid health recovery, where practical, because they cover the neck and keep it warm.

Connie made some lifestyle changes and started taking natural sources of iodine,

selenium, and an herb tea blend. Connie's thyroid picked up to within normal limits and she delivered a normal happy child.

IN SUMMARY:

- Avoid all the competitors, inhibitors, and toxins that affect the function of your thyroid.
- Adopt some of the beneficial lifestyle choices that we have discussed.
- Try some simple home remedies to aid in thyroid recovery and restoration.

For further ideas on how to incorporate what you have just learned into your daily life, see the article entitled, "How Can I Apply Healthy Principles in My Daily Life". Or Lifestyle Choices.

¹ <https://www.thyroid.org/media-main/press-room/>

² <https://www.uofmhealth.org/health-library/ug1836>

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