The thyroid gland lies in the neck just below the Adam’s Apple which is the apex of the larynx or voice box. It measures about two inches across and has two lobes, one on each side of the trachea or windpipe. It is joined in the center by a narrow section of tissue called the isthmus. The function of the thyroid gland is to produce two important hormones called thyroxin (T4) in the greatest amounts and triiodothyronine (T3) in smaller amounts. The third hormone produced by the thyroid gland is calcitonin. T4 and T3 regulate metabolism in the body. Metabolism is the chemical activity in the cells that increases cell oxygenation, releases energy from food and uses energy and nutrients to create other substances, such as proteins. Calcitonin works with the parathyroid hormone secreted by the parathyroid glands located within the back of the thyroid gland to regulate the level of calcium in the body. These three hormones produced by the thyroid gland are essential for normal physical growth and mental development in children.

Most doctors only test TSH or Thyroid Stimulating Hormone in regular blood tests. For a more thorough test of thyroid function, ask also for thyroid tests called T3 and T4. In some cases it is also wise to have a TPO or Thyroid Peroxidase tested. TPO is an enzyme normally found in the thyroid gland that plays an important role in the production of thyroid hormones. A TPO test shows if there are any antibodies fighting against Thyroid Peroxidase in the blood. If there are TPO antibodies in your blood, it can mean that the cause of the thyroid disorder is an autoimmune disorder. Autoimmune disorders include Hashimoto’s and Grave’s diseases. In an autoimmune disorder, your immune system produces antibodies that mistakenly attack normal tissue. Inflammation and impaired thyroid function are caused when antibodies
attack the thyroid gland.

**The Thyroid Gland Needs Iodine In Order to Function**

The thyroid gland must have iodine for the production of thyroxin and triiodothyronine. Iodine is transported into the thyroid gland and the concentration can be as much as 25 times that of the blood. If iodine is lacking in the diet, the thyroid gland becomes enlarged producing a goiter. In countries such as Japan where much of the food comes from iodine rich seafood, goiter is practically nonexistent. In Switzerland, a country that is far from the ocean, there is very little iodine in the soil and many people suffer from goiter. Foods rich in iodine are sea vegetables such as dulse, kelp, nori, and hijiki, and salt water fish.

**Thyroid Deficiency or Hypothyroidism**

Thyroid deficiency or hypothyroidism occurs when the thyroid gland is not producing enough thyroid hormone. Hypothyroidism often begins gradually. Facial expressions become dull, the eyes become swollen and puffy, and the person begins to experience feelings of depression. People with low thyroid function have a lower metabolic rate and are often tired, sluggish and cold. They suffer from constipation, infections, headaches, skin disorders, and obesity. Hypothyroidism can cause a condition known as *myxedema* which is characterized by decreased body temperature, slowed pulse rate, lethargy, weight gain, and hair loss. Psoriasis and eczema can be caused by low thyroid function. Fungal infections on the feet and toes can be the result of hypothyroidism due to poor blood circulation to the extremities of the body. Blood distributes oxygen which kills fungus and carries away toxicity. Broda Barnes, M.D. studied hypothyroidism during his 30 years of practice and wrote the book, *Hypothyroidism: The Unsuspected Illness*. In this book he explains how hypothyroidism can be the cause of many different illnesses and health disorders. He was not satisfied with results gained from blood tests so he developed a reliable test based on basal temperature that can be taken by the layperson at home.

The basal temperature test is quite accurate when the temperature is tested in the axilla (armpit) each morning for a period of six days. Women that are menstruating must begin taking their temperatures on the morning of the second day of menstruation. If the temperature is consistently low, then the thyroid is considered to be under active. To take this test, prepare the thermometer the night before by shaking it down below 97 degrees and placing it on a table near the bed. Immediately upon awakening (before moving out of the bed), place the thermometer under the bare arm, pressing your arm against the body with no clothing in between. Keep still and quiet. Any motion can upset the temperature reading. Leave the thermometer in place for ten minutes. If your thermometer is digital, leave it there until it beeps. Results should range between 97.8 and 98.2 degrees Fahrenheit. These temperatures represent normal thyroid function. If the temperature falls below 97.8 degrees on several days, thyroid function may be low, especially if symptoms also exist.
If you suspect you have thyroid gland deficiency, you should read Dr. Broda Barnes’ book. Nova Scotia Dulse from the cold waters of Nova Scotia comes in tablet form, liquid form and powder form. These are high in natural iodine and other minerals that can help to balance the thyroid gland. Dulse can be used in powder form as a seasoning on soups and salads. Our wonderful Whole Life Food Blend which has greens as well as dulse powder. This can be put in smoothies or stirred up in a glass of water with two ounces of unfiltered apple juice for a delicious, nutritious drink. Sun Food, comes in capsule form and contains dulse, chlorella, alfalfa, and beet. It is very supportive of alkalinizing the lymph fluids as well as nourishing the thyroid, liver, and lymph. The amino acid tyrosine can be most helpful as well and can be found in health food stores. L-Tyrosine is converted into thyroxin, or T4. This is a substance that some doctors give as medication. Natural glandular concentrates are available made from raw bovine thyroid substance and can be most helpful if the body temperatures do not improve with seaweeds. These thyroid tablets are available in low dosages in health food stores. Natural Armour Desiccated Thyroid tablets are also available but must be prescribed by a physician. Dr. Broda Barnes had great success with his patients using Armour thyroid. If your physician requests more information on natural glandular concentrates, contact the Broda O. Barnes, M.D. Research Foundation at P.O. Box 98, Trembly, CT 06611, (203) 261-2101.

Hyperthyroidism

Hyperthyroidism occurs when the thyroid gland produces too much thyroxin. When this happens the bodily processes speed up and metabolism is overactive. People become hyperactive, nervous, jittery, irritable, and fatigued. They have trouble sleeping at night, sweat more, have increased bowel movements, rapid heartbeat, and protruding eyeballs. The thyroid gland often becomes enlarged, causing goiter to form. A common type of hyperthyroidism is Grave’s Disease.

People with hyperthyroidism should avoid stimulants such as caffeine found in coffee, chocolate, sodas, and black tea. They should avoid sugar and artificial sweeteners which can also act as stimulants to the body. Cruciferous vegetables can be very helpful to balance thyroid hormone production. Since these people digest too rapidly, they often don't absorb the nutrients they need so a good digestive enzyme just before meals can be helpful. A multiple vitamin high in B complex and ionic liquid trace minerals can help to calm the nervous system. The herbs, Lemon Balm or Melissa, Motherwort, and Bugleweed are wonderful herbs that help to soothe the thyroid and are supportive in calming a thyroid that is over-active.

Possible Contributors to Thyroid Imbalance

There are many things that may cause the thyroid to become imbalanced. Here are a few:

1. An inadequate amount of natural iodine in the diet
2. An acid pH in the lymph fluids
3. Gluten sensitivity
4. Candida albicans
5. Various viruses and/or high fever
6. Fluoride
7. Prolonged stress

Thus, it is helpful if you have thyroid issues or would like to prevent thyroid issues to consume seaweeds in your salads such as dulse flakes or powder, hijiki, and nori. Eat a diet rich in living greens that promote alkalinity in the lymph fluids. Drink lots of green vegetable juices made of celery, parsley, cucumber, zucchini and green sunflower sprouts. Avoid gluten, especially in wheat, rye, barley, teff, spelt, and triticale. Many people are also having reactions to soy, corn, oats, and rice. Grains that are gluten free are quinoa, millet, buckwheat, and amaranth. **Make sure that all of the foods you eat are are free of GMO's or genetically modified organisms.** Avoid foods high in sugar that feed Candida albicans or yeast in the body. Avoid water and toothpaste with fluoride.

**Emotional Therapies That Release Energy in the Thyroid Gland and Throat**

People are often afraid to speak their truth. They remain silent and “stuff” words in because they are afraid they might hurt someone’s feelings. Children may not speak because they are afraid of criticism and this fear stays with them after they become adults. Practice saying what you need to say. Speaking up often “clears the air” and allows feelings to be released rather than held inside. Singing is also a wonderful exercise for the throat and thyroid gland. Soothing music, yoga, and meditation are wonderful therapies to help balance metabolism and calm the mind. Be at peace.

**Nourishing Smoothie Recipe**

Try this delicious nourishing smoothie for breakfast. The liver cleanses itself between 3:00 a.m. and 12:00 noon. This recipe will help with the cleansing of the liver, purification and alkalination of the lymph fluids, and nourishing the thyroid and blood.

In the blender put:

- Juice of 1 lemon
- Juice of 1 lime
- ¼ cup water or unsweetened almond milk
- 1 tablespoon of [Whole Life Food Blend](#) or one teaspoon [Dulse powder](#) or 4 capsules
  - [Sun Food](#) broken open and poured in
- 1 hand full of mixed greens such as dark green leafy lettuce, spinach, kale
- ½ cucumber peeled and chopped
- 1 apple with peeling chopped
- 1 inch thick slice of raw red beet
1/4\textsuperscript{th} cup almonds that have been soaked over night
1 tablespoon chia and/or hemp seeds

Blend until smooth and enjoy! This is a very satisfying nourishing, cleansing, drink.