Thyroid Disease and Yoga Therapy

Healing Hyperthyroidism from Within

Sabina Mykas
# TABLE OF CONTENTS

**WHAT IS THE THYROID?**..........................................................................................................................3

1.  **DIFFERENT TYPES OF THYROID DISEASE** .......................................................................................... 3
2.  **DIFFERENT TYPES OF HYPERTHYROIDISM** ...................................................................................... 3
3.  **SYMPTOMS OF HYPERTHYROIDISM** .................................................................................................. 4
4.  **HOW IS HYPERTHYROIDISM DIAGNOSED?** ....................................................................................... 4
5.  **WHAT CAUSES IT?** ............................................................................................................................ 4
6.  **ARE THERE ANY COMPLICATIONS?** ................................................................................................. 5
7.  **WHAT ARE YOUR TREATMENT OPTIONS?** ....................................................................................... 5
8.  **WHAT ARE PATIENTS SAYING ABOUT THE DISEASE?** ....................................................................... 8
9.  **YOGA THERAPY PROGRAM** ............................................................................................................... 9
    *Daily Yoga Practice Table* .................................................................................................................... 10
    *Detail of Each Asana* ............................................................................................................................. 11
10. **CONCLUSION** ....................................................................................................................................... 15
Supporting Research and Sources Used........................................................................................................ 16
WHAT IS THE THYROID GLAND?

The thyroid is one of the largest endocrine glands shaped like a flat shield-like surface that sits in front of the vocal cords, and just below your Adam’s apple in the root of your neck. The thyroid is responsible for production and secretion of thyroxin (T4) and triiodothyronine (T3) hormones and calcitonin throughout the body. This output of hormones is regulated by your pituitary gland. These hormones help set your basal metabolic rate by stimulating cell reproduction, affect bone growth in children, increase the body’s sensitivity to adrenaline, and stimulate vitamin metabolizing. They bind to receptors in our cells that activate genes to affect fat, protein and carbohydrate metabolizing and thereby control the body’s energy utilization in every cell. Therefore your thyroid gland is essential to balance and development of your body.

1. DIFFERENT TYPES OF THYROID DISEASE

   a. Hyperthyroidism: Hyperthyroidism is a clinical syndrome caused by your thyroid gland becoming overactive, producing and secreting excessive amounts of hormones resulting in increased Basal Metabolic Rate (BMR). In hyperthyroidism large quantities of thyroxin (T4) and triiodothyronine (T3) hormone levels are deposited into the bloodstream resulting in symptoms and signs such as high metabolism, high blood pressure, rapid heart rate, increased nervousness and agitation, digestion problems as well fatigue and complaints of muscle weakness. In some cases patients will develop a protruding, enlarged thyroid gland called a goiter. Hyperthyroidism is also referred to as thyrotoxicosis.

   b. Hypothyroidism: A common endocrine disorder often called underactive thyroid in which the thyroid gland does not produce enough thyroid hormone. In third world countries insufficient iodine levels in the diet are the primary cause of hypothyroidism. Most common symptoms include weight gain, intolerance of cold, fatigue, depression, and poor memory.

2. DIFFERENT TYPES OF HYPERTHYROIDISM

   In general the hyperthyroidism condition is more common in women then men in age ranges between 30 and 50+ years old.

   a. Goiters: During hyperthyroidism a goiter, or swelling of the thyroid can take place. A goiter is formed when T3 and T4 hormone levels are affected by an imbalance of iodine in the body. A goiter can be:
• Double the normal size of the thyroid gland
• Lumpy or bumpy to touch
• Tender and painful

b. Iodine Induced Hyperthyroidism: Taking too much iodine can force the thyroid to produce too much hormones and lead to further complications.

c. Grave’s Disease: A rare complication that causes over active thyroid disease affects your eyes and eyesight. Symptoms include bulging eye sockets, red or swollen eyes, and sensitivity to lightness.

3. SYMPTOMS OF HYPERTHYROIDISM

Hyperthyroidism can be difficult to diagnose as it affects many functions of the body and mimics several diseases of the body. If the following signs and symptoms are ignored, the disease will lead to severe problems in women.

• Swelling in the neck from a goiter
• Difficulty breathing
• Extreme and sudden weight loss
• Increase of appetite while losing weight
• Hair loss or thinning
• Sensitivity to heat or light
• Sleeping difficulty
• Bulging eye sockets, red/swollen eyes
• Dry brittle nails and itchy skin
• Fatigue
• Lack of concentration
• Mood swings
• Anxiety
• Nervousness
• Digestive problems such as diarrhea
• Irritability and depression
• Abnormal or changed menstruation
• Rapid heart beat and heart palpitations
• High blood pressure
• Weak muscles and complaints of weakness

*Due to general decrease in hormone production and secretion in older adults of 50+ years these symptoms will be even harder to diagnose compared to younger adults.

4. HOW IS HYPERTHYROIDISM DIAGNOSED?

Hyperthyroidism is a disease hard to diagnose unless one is paying close attention to their body functions and the symptoms associated with the disease. In most cases, a sufferer will show symptoms and go to their doctor for help. The doctor will diagnose the problem with a blood test to confirm the levels of T3, T4 and TSH receptors in your body. In some cases of hypothyroidism the levels of T3 and T4 hormones have not been affected although the disease is already present. In this case the blood test is used to see levels of TSH receptors produced by the anterior pituitary gland. In the case of hyperthyroidism the doctor will be looking for higher than normal levels of all three hormones.

5. WHAT CAUSES IT?

Grave’s Disease (or Basedow-Graves disease): This is an autoimmune disease that commonly affects the thyroid. Often times the thyroid gland will enlarge to a protruding goiter, become over active causing hyperthyroidism. Symptoms of resultant hyperthyroidism include rapid heart beat, hand tremor, hyperactivity, hair loss, excessive sweating, shaking hands, itching, heat intolerance, weight loss despite increased appetite, diarrhea,
frequent defecation, palpitations, muscle weakness, and skin moistness, insomnia and irritability. If Graves’ disease affects the eyes patients develop bulging eye sockets. The disease can impact other areas of the body such as skin, heart, and circulatory system.

**Thyroiditis:** Happens due to a viral infection in the body that causes inflammation in the thyroid. The infection signs will include high fever, aches and pains in general neck area, sore throat, painful swallowing.

**Pituitary Gland dysfunction:** In rare cases a tumor in the pituitary gland may produce an abnormal secretion of TSH receptors, which gives a message to the thyroid to produce excessive amounts of T3 and T4 hormones.

### 6. ARE THERE ANY COMPLICATIONS?

- **Hypothyroidism:** Synthetic hormonal treatment and thyroid surgery can lead to under active thyroid and excessive weight gain.

- **Temporary Subclinical Hyperthyroidism:** Occurs in 10-20% of women during the first trimester of pregnancy due to an increase in HCG hormonal levels. Often doctors don't treat but monitor the temporary symptoms. The over active HCG levels in pregnant woman's body overly stimulate the thyroid gland. In few cases the problem will cause miscarriage and low birth weight babies.

- **Menstruation Problems:** Abnormal thyroid hormone secretion can interrupt a woman’s natural menstruation cycle. The amount of thyroid hormones in our bodies affects a woman’s ability to ovulate and can also hurt the ovulation cycle creating problems for women trying to start a family and get pregnant. One common menstruation problem experienced with over active thyroids is menorrhagia, or excessive bleeding during menstruation.

- **Thyroid Storm:** A thyroid storm is the sudden onset of a shock to the system of extreme hyperthyroidism. Symptoms include unable to breath, extremely high heart rate, fever, vomiting, and agitated mental processes. Patients will need to be treated medically immediately.

- **Osteoporosis:** Hyperthyroidism, if not properly treated, can cause other health problems such as irregular heart rhythms and osteoporosis.

- **Diabetes Type 1:** About one-third of type 1 diabetics have thyroid disease because diabetes and thyroid disease both affect the body's endocrine system, which regulates metabolism. Hyperthyroidism will cause worsening glycemic control and increased insulin requirements.

### 7. WHAT ARE YOUR TREATMENT OPTIONS?

**Modern Medical Treatments:** Doctors have a predisposition to overlook what is causing the underlying issue with an over active thyroid. Often times, doctors look to test results, medical protocol and the limitations of science alone to explain abnormalities. But our bodies are more than just the physical and you must try to keep an open mind and an open heart to look and heal what is beyond the physical.

**MEDICATION**

- **Anti-Thyroid Medications:** Anti thyroid medication does exist on the market today but the treatment and side effects associated with it are harsh. For purposes of overall well being anti thyroid hormonal replacement medications should be used as a last resort and often create consequent problems for the patient. Such medicines prevent and reduce the release of thyroxine (T4) and triiodothyronine (T3) hormone from the thyroid gland. Often times the medication needs to be continued for long periods of time up to years if not lifetime. These medications greatly damage the liver, expose the body and increase your susceptibility to infections, cause allergic reactions such as skin rashes and in severe cases lead to premature death.

- **Radioactive Iodine Therapy:** This form of treatment has been used for years to treat hyperthyroidism by shrinking the thyroid growth and thereby inhibiting thyroid gland hormone secretion. It is the preferred treatment for Graves’ disease. Radioactive iodine is safely taken once orally and ingested internally.
Radioactive iodine is picked up by the thyroid’s active cells and destroys them. The treatment will yield results after the first use for most but it can also be repeated. Although this form of treatment has been the most popular medical answer to hyperthyroidism in practice it is a limited treatment. If successful the thyroid will take 2-3 months to return to normal state. After completion of taking radioactive iodine thyroid levels are often eliminated and depleted to under active thyroid status. Thereby the hyperthyroidism is now switched to hypothyroidism. More than half of patients will develop hypothyroidism from this therapy. Medical treatment for hypothyroidism warrants lifetime use of hormone replacement medication.

- **Beta-Blockers**: Medication commonly known as beta-blockers will aid in resolving issues with high blood pressure and heart palpitations as a result of hyperthyroidism. Although this is not a direct treatment for the disease it will aid in maintaining daily activities and overall wellbeing. Beta Blockers should only be used in moderation and lead to side effects such as digestive problems, fatigue and headache.

**SURGICAL PROCEDURE**

In the unlikely case that a goiter is placing pressure on the throat or the patient is not receptive to other treatments doctors may recommend a thyroidectomy to remove part of the abnormal thyroid. The procedure is not popular because doctors may accidentally remove too much of the thyroid and damage the vocal cords. Further complications could arise such as damage to the parathyroid glands, which are situated at the back of your thyroid and control the level of calcium in your body. In this case the patient would need to possibly start hormone as well as calcium replacement therapy.

*Although modern medicine advocates the use of hormones, hormone therapy, beta blockers and surgical procedures I personally have found in many cases that the side effects lead to prolong discomfort and loss of overall well being. Many practitioners of alternative medicine would recommend exhausting all other sources of thousands of years of spiritual healing before modern medicine. For years I have followed and monitored the progress of my mother who has used yoga and nutrition to regulate her hyperthyroidism. Through my personal experience I can conclude that balance of mind, body and breath, awareness and focus on the disease, and utmost relaxation of the mind and body coupled with taking care of your physical body empowers your well being to accomplish anything, even heal hyperthyroidism.*

*I recommend “healing from within” through the techniques and yoga therapy below.*

**HOLISTIC APPROACHES/TREATMENTS:**

**Healthy Diet Is Key!**

In today’s world our energy is pulled in several directions and maintaining a healthy diet, and nourishing our bodies with enriching foods is one of the first things that are neglected during times of stress. A poor diet and consequently impaired digestion of food, leads to blockages of energy channels and great imbalance of the functions of the thyroid gland. Therefore digestions can be a cause and a symptom of hyperthyroidism.

The tension throughout the body, created from increased exhaustion of the digestive system, deters healing of diseases such as hyperthyroidism. Digestive issues are a source for disturbed heart fire and too much fire in the heart chakra. Signs will include anxiety, nervousness, agitation, and excessive talking. Many people simply push too hard in their lives, and invite undue stress by overworking their body.

There are several very simple heart calming, and cooling practical tips one can follow to slow down while we eat and aid digestion:

1. Eat with love and gratitude
2. Give prayers before meals
3. Share your meals with loved ones
4. Go for bright and colorful fruits and legumes
5. Eat leafy green foods to symbolize the diamond shape of the heart chakra
6. Eat slow and conscious of every bite
7. Taste the food well and don’t swallow too fast
8. Practice silence during meals
9. Ask yourself the following questions each time you eat: Does this food provide good nutrition?
**Healthy food plan for Hyperthyroidism:**

Knowing your body and being gentle with it, not causing harm through improper diet is one of the most important steps one can practice in their life especially when your state is out of balance as in the case of hyperthyroidism. Following a simple diet plan of foods that are good for the disease is just one way we can heal our bodies. Nutritionists, others in the medical profession and alternative healers have all recognized the importance of food on healing our bodies. Useful tips below will start to heal your body and aid in strengthening the functions of your thyroid.

**Foods to stay away from:**

1. **Iodine:** The thyroid gland’s function is to remove the iodine from the blood supply. Maintain a low iodine diet so as not to aggravate the thyroid gland. Iodine is present in a diet full of seafood, breads and salts. Furthermore, iodine supplements and certain medications used to treat heart conditions will speed up the body’s production and secretion of hormones from the thyroid gland which will continue to stimulate your over active thyroid.

2. **Soy, Iron:** If you are currently taking thyroid hormone medications do not consume soy products. Soy interferes with the absorption of such medicines in your body.

3. **Large quantities of shellfish:** Patients have shown that large quantities of shellfish have caused a thyroid storm. The following testimony from one patient attests to the increased risk of aggravating your thyroid by consuming shellfish:

   “I was diagnosed with hyperthyroidism. I have all the signs, rapid heart, pounding heart, shaky, sweats on exertion, anxiety, erratic blood pressure, etc. I lost 22 pounds in one month. My first major attack came after eating a huge plate of shrimp. I have heard others say that after eating large quantities of shellfish has brought on a major episode.”

4. **Gluten Intolerance:** Thyroid disorder patients should be especially careful and consume a gluten free diet. Doctor’s advise to eliminate gluten from diet because the molecular structure of gluten, specifically the protein portion of gluten molecule closely resembles the properties of the thyroid gland. This means when gluten particles enter your body and your blood stream your immune system will work to eliminate it by attacking the thyroid itself. Research also shows that attacks from consuming gluten when intolerant are extremely sensitive, last for months and cause great damage. If you have any sensitivity to gluten and have a thyroid disorder you must completely eliminate gluten from your diet. Gluten is mostly found in wheat, rye and barley therefore grains and breads but there are plenty of healthy foods that don’t have gluten such as pulses (lentils, mung beans), fruits, vegetables, nuts and seeds.

5. **Fluoride:** Fluoride found in toothpaste or unfiltered water can aggravate the thyroid further.

**Helpful foods for hyperthyroidism:**

1. There are several naturally occurring thyroid inhibiting compounds that are found in several species of plants and vegetables such as cruciferous vegetables. Bitter and slightly astringent foods such as spinach, collard greens, mustard greens dampen excessive energy levels in the body and therefore balance the samana prana and anahata chakra for a person with hyperthyroidism. Anyone experiencing increased thyroid function will benefit from focusing your diet on the following foods:
   - Kale
   - Broccoli
   - Cauliflower
   - Rutabagas
   - Radishes
   - Turnips
   - Cabbage
   - Brussels sprouts

2. **Nutritional Supplements:**
   - L-Carnitine is a supplement easily found in health food stores that will work with your body to decrease thyroid activity. L-Carnitine has blood-thinning effects it has to be monitored carefully.
• Calcium and Vitamin D: To prevent further complications of thinning bones and osteoporosis particularly in women over the age of 50, patients should make sure to get enough calcium and Vitamin D.

3. **Digestive Enzymes and Probiotics:** Supplements containing probiotics or good digestive bacteria and digestive enzymes are necessary to aid digestion and therefore very useful for gastrointestinal health. Both should be taken at least once a day. Natural probiotics can be found in foods like curds, yogurt and fermented vegetables such as pickles and sauerkraut. Digestive enzymes should be taken 30 minutes before eating heavy meals and will aid in the processing of foods such as dairy and heavy fats.

**Herbs to take:**

There are two particular natural herbs that have proven to be especially helpful in hyperthyroidism. These herbs contain a substance that easily attaches to the TSH receptor and inhibits hormone secretion in the thyroid.

**Bugleweed:** A perennial member of the mint family and easily recognized through the blue flowers on stem. This plant is used to lower high levels of thyroid hormones, menstruation problems and nervousness.

**Lemon Balm:** A perennial member of the mint family with a lemon aroma. This herb is used for digestive problems and has calming effects on anxiety, nervousness, high blood pressure and menstruation.

10. **Alternative Healing Therapies:**

In the study of Ayurveda for thousands of years, Indian practitioners have adopted ways to account for your body constitutional type: your physical, emotional, and psychological makeup in healing all ailments and restoring the body to its beautiful healthy state.

Chinese medicine has long since proven that therapies such as acupuncture and pressure point massage are helpful to relieve stress and correct hormonal imbalances.

**8. WHAT ARE THE PATIENTS SAYING ABOUT THE DISEASE?**

**Female patients between the ages of 19 to 24 years old say:**

"I was 16 years old when I was diagnosed with hyperthyroidism and until now, that is 21 years old, I still have this disease. I easily get tired and my heart beat fast. My hands sweat a lot and it's so embarrassing when I get to shake hands with other people. Then there are the bulgy eyes."

"I'm always tired. I eat a lot and keep losing weight. My resting heartbeat is 150 per minute. I have nausea always vomiting. I have no energy for anything. My eyes got bigger. I'm shaky fatigued, moody, and my hair thinned out."

"I experienced extreme intolerance to heat, excessive sweating, increased bowel movements, extreme fatigue and muscle weakness, rapid heart rate, shortness of breath, and tremors."

**Hyperthyroidism 50+ years old patient experience comments:**

"I'm used to exercise a lot. I used to hike and bike and be very active. Now (after diagnosis) I sometimes can't even get dressed because my legs are so weak and I can't lift them high enough! And an afternoon nap is almost a necessity. I feel like I'm 90 years old! My muscle tone has dropped considerably due to not being able to exercise. I can't even go for longer than a 15-minute walk and my legs start wobbling."

"I had severe headaches and tremors. I also experienced hair loss, some weight loss and a deeper voice. The headaches were my main concern and most publications don't list headaches as a major symptom of hyperthyroidism."
Large lump on left side of neck, palpitations and irregular heartbeat, hair falling out in patches, dry skin cracks on fingertips and toes and heels, can’t sing high notes, heat intolerance, poor vision, poor memory and concentration, always tired but have a hard time falling and staying asleep without meds, hands shake something fierce.

9. YOGA THERAPY PROGRAM

One can clearly see from the patient testimonials above that teaching yoga to sufferers of hyperthyroidism is very challenging. While developing a balanced yoga therapy plan I focused on the following factors that most students will be challenged with and that must be considered to prevent further strain on the student:

- Students might be fatigued, lethargic and frustrated at their inability to perform physical activity
- Students most likely will have muscle weakness and body shaking at times
- Although students are anxious to perform physical asanas they will quickly tire and have shortness of breath
- Students will be sensitive to all stimuli such as lighting and might have poor vision to focus with
- Breathing is very challenged with goiters and the thyroid must not be obstructed or stimulated
- Students will have poor digestion and heat intolerance
- Most importantly your students will have high blood pressure and heart rate irregularities

A proper yoga plan for such guidelines will include deep relaxation through meditation, slow and therapeutic asana practice that leads to strengthening the body and awareness on mind, body and breath, engaging pranayama and more meditation after asanas, and mudras for further meditation.

Yoga Asanas, Pranayama & Meditation Will Awaken Your Energy to Heal!
## DAILY PRACTICE PROGRAM:

<table>
<thead>
<tr>
<th>No.</th>
<th>Asana Name or Technique</th>
<th>Duration in Minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Opening Meditation</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Opening Prayer</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>So Ham Meditation/Chant</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Joint Movements</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Ankle Stretching Breathing</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Hand Stretching Breathing</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Side Stretch or Ardha Kati Chakrasana</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Spinal Twist</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>Padangusthasana</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>Vajrasana</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>Anjaneyasana</td>
<td>3</td>
</tr>
<tr>
<td>12</td>
<td>Vagra Swasa Breathing</td>
<td>3</td>
</tr>
<tr>
<td>13</td>
<td>Tadasana</td>
<td>5</td>
</tr>
</tbody>
</table>

**Therapy Series Add-Ons:**

<table>
<thead>
<tr>
<th>No.</th>
<th>Asana Name or Technique</th>
<th>Duration in Minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Surya Namaskara</td>
<td>15</td>
</tr>
<tr>
<td>15</td>
<td>Padangusthasana</td>
<td>2</td>
</tr>
<tr>
<td>16</td>
<td>Vrikshasana</td>
<td>2</td>
</tr>
<tr>
<td>17</td>
<td>Garudasana</td>
<td>1</td>
</tr>
<tr>
<td>18</td>
<td>Uttitha Hastapadasana</td>
<td>2</td>
</tr>
<tr>
<td>19</td>
<td>Trikonasana Classical</td>
<td>2</td>
</tr>
<tr>
<td>20</td>
<td>Parshvottanasana</td>
<td>2</td>
</tr>
<tr>
<td>21</td>
<td>Virabhadrasana A</td>
<td>2</td>
</tr>
<tr>
<td>22</td>
<td>Adho Mukha Virasana</td>
<td>1</td>
</tr>
<tr>
<td>23</td>
<td>Bhujangasana Breathing</td>
<td>2</td>
</tr>
<tr>
<td>24</td>
<td>Dhanurasana (legs only)</td>
<td>1</td>
</tr>
<tr>
<td>25</td>
<td>Supta Virasana</td>
<td>2</td>
</tr>
</tbody>
</table>

**Foundation Sequence**

<table>
<thead>
<tr>
<th>No.</th>
<th>Asana Name or Technique</th>
<th>Duration in Minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>Dandasana</td>
<td>1</td>
</tr>
<tr>
<td>27</td>
<td>Paschimottanasana</td>
<td>1</td>
</tr>
<tr>
<td>28</td>
<td>Baddhakonasana</td>
<td>2</td>
</tr>
<tr>
<td>29</td>
<td>Gomoukasana</td>
<td>2</td>
</tr>
<tr>
<td>30</td>
<td>Urdhva Prasarita Padasana</td>
<td>4</td>
</tr>
<tr>
<td>31</td>
<td>Jathara Parivartanasana</td>
<td>2</td>
</tr>
<tr>
<td>32</td>
<td>Ananda Balasana</td>
<td>2</td>
</tr>
<tr>
<td>33</td>
<td>SAVASANA</td>
<td>15-25</td>
</tr>
</tbody>
</table>

**Therapy Series Practice Time = 90 Min**
### Pranayama, Bandhas, Kriyas

<table>
<thead>
<tr>
<th>No.</th>
<th>Technique</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>34</td>
<td>Closing Prayer</td>
<td>-</td>
</tr>
<tr>
<td>35</td>
<td>Shitali Pranayama</td>
<td>1</td>
</tr>
<tr>
<td>36</td>
<td>Bhramari Breath</td>
<td>1</td>
</tr>
<tr>
<td>37</td>
<td>Ujjayi Breathing</td>
<td>3</td>
</tr>
<tr>
<td>38</td>
<td>Nadi Suddi (no Kumbhaka)</td>
<td>5</td>
</tr>
<tr>
<td>39</td>
<td>Kapalbhati</td>
<td>5</td>
</tr>
<tr>
<td>40</td>
<td>Uddiyana Bandha</td>
<td>2</td>
</tr>
<tr>
<td>41</td>
<td>Agni Sara Kriya</td>
<td>2</td>
</tr>
<tr>
<td>42</td>
<td>Om Kara Chanting</td>
<td>6</td>
</tr>
</tbody>
</table>

**Extended Practice Time = 120 Min**

### A. Meditation:

Begin your practice with a meditation session to lengthen the breath, create awareness of breath, focus on the mind, relax the student and alleviate stress. Here are some useful tips for meditation:

- **Sit in a comfortable seated position:** Students may not be able to maintain an upright elongated spine with crossed legs for long periods at this point. It is more important to calm the mind and quiet the breath so ask your students to sit in a chair upright, or with their legs up against the wall.
- **Meditation techniques can included and are not limited to:**
  - Silently focus on your breath and how the body is feeling in that particular moment. Leave all thoughts behind. Focus your attention on one particular area of the body, the heart and then the throat.
  - Visualizing your thyroid being healed during meditation will help the body’s response to therapy
  - Focusing on the color blue or green: Vishuddha chakra is represented by blue color and Anahata chakra is represented by green. Visualizing and focusing on those colors will help student work prana to the throat chakra and calm the heart chakra.

### B. Prayer and Chant:

Singing or chanting gently massages the throat and thyroid gland and therefore should be practiced with student. Since stress is the main cause of this disease the vibrational therapy and calming affect of chanting will help tremendously. Before the asana practice start with a slow and calming chant and opening prayer to continue student’s awareness on breathe and mind.

- **Om Kara:** Focus on repeating the three sounds of OM....AAAAA....UUUUU....MMMM to maintain focus on quieting the mind and lengthening the breathe. The positive vibrations that run through the body during this chant will stimulate your healing and have a beautiful healing affect on the thyroid and nervous system. Om Kara can be practiced in Savasana or a sitting position.
- **Repetition of So Ham:** The seed mantra of the Vishuddha (throat) chakra is Ham and this awareness will send breath and prana to the throat. This could be chanted out loud or repeated silently.

### C. Pranayama:

This is the single most important practice for hyperthyroidism sufferers. Pranayama nourishes the body with breath supplying essential nutrients to our vital organs and oxygen to the blood, which maintains the nervous system of the body. According to historical yoga texts pranayama helps cure diseases and dysfunctions in our bodies if practiced correctly. Pranayama invigorates and purifies flow of prana through the system of subtle channels called nadi in our bodies. These nadi are connected to our essential sheaths, or the pancha koshas through wheel like centers of energy called chakras. Therefore it is the pranayama that helps our prana flow upwards and gather through the chakras to heal from within and reach a state of pure mind relaxation and awareness of our bodies needs. The practice of pranayama will bring strength, knowledge of self, awareness of self and greater meaning of life, physical health, mental health, digestive health and a feeling of lightness and freshness in a beautiful state of serenity.

The following techniques should be practiced in a comfortable meditative position with a focus on engaging the Ida nadi for a cooling, calming and relaxing effect on the body that cools the fire in the Anahata chakra and inhibits the Vishuddha
chakra. Its best to perform a few rounds of relaxing and cooling pranayama techniques with your student before and after asanas due to the likelihood the student suffers from hypertension. Breath should be slow and controlled. Practice 5 rounds of 2 to 3 beginner techniques. More advanced practice then listed in the plan below should follow asana practice when the body is more open to the flow of prana.

1. **Candranuloma Viloma:** Breathing through one nostril at a time is particulary helpful to strengthen the Ida nadi balance your prana flow. Good to practice on an empty stomach during dawn and sunset. Start with 10 rounds and build up to 30 but remember that there should be no exhaustion. Perform with nastrika mudra. This technique is incredibly powerful for sufferers of hyperthyroidism because works the left nostril or Ida nadi for cooling down the body and subsiding some of the fire in the heart chakra. This practice will help with heart problems, high blood pressure, and control the heat in the body.

2. **Candra Bhedana:** Similar to Naddi Suddi. Focus on long and relaxed breaths. Perform 10 rounds. More balanced practice than candranuloma viloma. Practice carefully so as not to over heat the body.

3. **Nadi Suddi (Energy Channel Purification):** Continues to purify the Ida and Pingala nadis while working very effectively your breath. Retaining breathe will hurt high blood pressure and heart condition sufferers. This pranayama is a great prep for meditation and strengthens your lung capacity.

4. **Ujjayi Breath:** This technique without retention will provide so much calmness and sooth the nervous system, and all stress related problems. Furthermore this will help with more symptoms of hyperthyroidism such as insomnia and purify the nostrils and both Ida and Pingala.

5. **Shitali (Beak Tongue):** This technique will work on the Ida nadi cooling down the body and lowering high blood pressure. Practice for 10 rounds.

6. **Bhramari (Bee Humming):** Practice for 5 rounds

7. **Kapalabhati:** Very energizing, and cleansing technique. Prevents sleepiness and laziness which helps in case of depression and students frustration with disease. It has a good effect on the digestive system since it can be performed as a kriya as well.

**D. Mudras & Bandhas:**

The practice of mudras is a very powerful tool of holding your hands and fingers in positions to stimulate and signify the chakras and flow of pranas through the nadis. The practice is most applied during pranayama and meditation. For suffers of hyperthyroidism I don’t advise practicing the following mudras for longer than 3-5 minutes each time unless you are an experienced practitioner and do not show symptoms of depression or nervous system dysfunction. The following mudras are listed in order of difficulty and importance:

**Chin Mudra and Nastrika Mudra:** Beginner hand postures for practice in pranayama.

**Bhairavi Mudra:** Balance the feminine with masculine and the Ida and Pingala nadis but must be practice for longer periods of time to feel results.

**Yoni Mudra:** Balances Ida and Pingala and the hemispheres of the brain, intensifies flow of prana develops concentration, awareness, and relaxation.

**Hridaya Mudra:** Nourishes and enriches the heart with flow of prana from your hands. Helpful with emotional instability, heart ailments and increasing awareness of breathe on the chest and Anahata chakra.

**Uddiyana Bandha:** Although the bandha is harder to enter into from a sitting position I recommend that it be practiced from a sitting meditative position such as Vajrasana so as not to aggravate and create tension in the neck or heart. This is a very powerful tool to strengthen abdominal organs and the breathing system but it can put stress on the heart and should be practiced slowly and carefully for short amount of time.

**E. Kriyas**

Kriyas are cleansing techniques to purify the body and mind to continue clearing out the pathways called nadis and keeping the chakras engaged. The advanced techniques are difficult on the body and include a healing crisis of sorts and lots of internal reflection because all toxins are eliminated from the body. For that reason I recommend only Agnisara for those with over active thyroid. This technique is a variation of Uddiyana Bandha and will continue to stimulate the nervous system and improve digestive system. This also helps greatly with depression and feelings of lethargy which most of the patients will have. Try Agnisara for only a couple of minutes of practice daily and work slowly with 4-5 rounds in the beginning focusing on not exerting too much force and tension on the body.
F. Daily Practice Program in Detail:
The therapy asana practice assumes that student is practicing 3 times per day for a length of at least 1 to 3 months.

Therapy Series:

- All joint movements: work slowly and carefully with neck movements.
- Ankle stretching breathing: good for concentration, increasing lung capacity and relieving shoulder, back, hips, and thighs stiffness. There should be no strain on the neck.
- Hands stretching breathing: good to relieve muscle stiffness while creating breath awareness
- Side Stretching or Ardha Kati Chakrasana (Half Waist Wheel): The difference between the two asanas is the placement of the feet. If legs are apart in side stretching the asana is easier than feet together in Ardha Kati Chakrasana. Work carefully to not hurt the neck. This asana is a great stretch to the sides of the body and improved circulation and concentration, massages abdominal organs
- Spinal Twist: great for releasing the back muscles and continuing the stretch to abdominal organs

Add-Ons to Therapy Series:
If the student is strong enough or has progressed from these poses the next step is traditional Surya Namaskara series, starting with Step 14. If the student is not comfortable and able to control breath in the above asanas continue with Step 9-13 followed by the finishing sequence.

- Padangusthasana (Big Toe Stretch): Works all muscles of the body for a head to toe stretch. This asana helps to lower blood pressure and lower heart rate in the most effective way so we will be repeating it through the sequence.
- Vajrasana (Diamond Shape): Strengthens digestive problems, very energizing and makes line of body and legs feel lighter.
- Anjaneyasana (Crescent Moon or Low Lunge): Ask student to enter the pose from Vajrasana and do a variation of keeping the hands on the bent knee and gaze forward so as not to strain the neck. Creates balance and mind, body, breath awareness. Strengthens legs, hips, quads and hamstrings.
- Vagra Swasa (Tiger) breathing: Start slow. Depending on the student’s condition neck movement can be incorporated but ask the student not to push too hard. Great asana for breath and body awareness, and releasing tension in the spine and back muscles from previous asana.
  - Vagra Swasa (Tiger) alternate leg raises: this is a variation of the previous asana.
- Tadasana (Stable Mountain) wall variation: Creates body awareness and strengthens alignment of the spine for all standing asanas. Practice with student against the wall to eliminate curvature of the lumbar and make student more comfortable and strong in the pose.
- Surya Namaskara (Sun Salutation): Active meditation to bring awareness to mind, body and breath. Energizes the body, works all parts of the body, flexibility, and lung capacity. Most importantly it reduces stress and balances the ida and pingala nadis to alleviate symptoms such as hypertension. Start with 6 rounds of both sides. Continue increasing rounds of as the student becomes stronger.
- Padangusthasana (Big Toe Stretch): Works all muscles of the body for a head to toe stretch. This asana helps to lower blood pressure and lower heart rate in the most effective way so we will be repeating it through the sequence. This asana helps with headaches as well.
- Vrikshasana (Tree): Work with a variation of placing the foot below knee if needed or holding the foot in place. Great pose for concentration and to strengthen the physical body and the nervous system. To keep the neck tension free place hands at your center of chest in Namaskar Mudra.
- Garudasana (Eagle): Work with a beginner variation of keeping both feet on the ground and elbows crossed but on top of each other while holding shoulders with hands if necessary. This asana will improve concentration and create lightness in the body while gaining strength in legs and shoulders.
- Uttitha Hastapadasana (Hand Foot Stretch): Improves breathing awareness and strengthens torso.
- Trikonasana (Triangle) Classical: Strengthens the back and reduces pain to a lot of areas of the upper body but most importantly it creates lightness and freshness. Arms will feel lighter and stronger which will keep student from feeling the symptoms of muscle weakness and from giving up emotionally. Trikonasana aids all abdominal organs without turning of the neck, which can be hard for some.
- **Parshvottanasana (Side Intense Stretch):** Great pose to work abdominal organs and increase flexibility in hamstrings and hips while keeping the body from inverting all the way down. This asana is especially useful for the student because it helps with high blood pressure and heart problems.

- **Virabhadrasana A (Warrior A):** At this point the student has practiced repeatedly anjaneyasana and has done some stretches on the ankles/hips to prep Virabhadrasana A. If any tension persists continue with Anjaneyasana to build more confidence. Variations can be used and make sure student does not tense the neck by looking too far up. This asana creates a presence of physical strength increasing courage and determination. Increased focus allows student to hold the pose for longer.

- **Adho Mukha Virasana (Downward facing Hero):** This pose creates coolness, calmness, rest, and soothes the nervous system. It will quiet the mind, elongate breath, reduce high blood pressure, aid in headache relief, help with menstrual pain and stretch the spine while massaging the abdominal organs.

- **Bhujangasana (Cobra) Breathing:** This asana is beneficial to breathing awareness and coordination as well as helps with menstruation disorders and problems with pancreas, spleen and liver. Great gentle backbend without over stimulating the thyroid gland from being upside down or tilting neck back.

- **Dhanurasana (Bow) variation:** Perform a variation of the asana by lifting the legs off the ground but not your upper body. This will ensure there is no tension in the neck. Asana will strengthen abdominals, relieve any digestive problems and help with gastrointestinal problems. Also improves circulation to the pelvic region for improved menstruation.

- **Supta Virasana (Lying down Hero):** Will relax the student after the exertion of previous asana while working all the digestive organs and increasing breathing capacity. This asana is helpful for high blood pressure, headaches and insomnia. It is a gentle backbend that stretched the psoas muscle. A variation of Ardha virasana is available to most.

**Finishing Sequence (Variation for Hyperthyroidism)**

- **Dandasana (Staff/Rod):** This asana improves circulation to the pelvic region for reproductive organs, helps to calm the mind and create body awareness, strengthens the trunk and creates length in spine and works the digestive system.

- **Paschimottanasana (Intense stretch):** Neck up, slight bend in the knees. This asana will stretch out the spine after backbends and is excellent in improving high blood pressure and heart problems. But the focus must be not to get your neck down. Do this pose for short time so as not to exaggerate depression. Otherwise this asana will calm the student and relax them after standing asanas and backbends.

- **Baddakonasana (Caught Angle):** Straight spine lifted up variation without bending forward. Great hip opener and helpful for menstruation problems.

- **Gomukhasana (Cow Face):** Improves circulation to the pelvic region for problems with menstruation. A subtle twist will also work on digestion and compression of the abdominal organs while increasing body and breath awareness. Hold ankles with hands variation will prevent straining the neck.

- **Urdhva Prasarita Padasana (Supine Leg Raising):** Improves heart and head circulation. Strengthens pelvic region to help menstruation. This asana is truly beneficial for heart conditions such as heart disease.

- **Jathara Parivartanasana (Stomach Turn):** This is a nice gentle abdominal twist to stretch the spine, upper back and abdominal organs while keeping your neck free.

- **Ananda Balasana (Happy Baby):** Good stretch for hips and your back. Relieves remaining tension, stress and fatigue to prepare for the most important asana, Savasana.

- **Savasana (Corpse):** Remind student to let breath happen naturally and relax and pay attention to their body. Savasana for hyperthyroidism therapy should take anywhere between 15-25 minutes.

Now enjoy the beautiful affects of the practice on your mind, body and breath!
10. CONCLUSION

The seriousness of hyperthyroidism depends on the body’s capability to react to the changes resulting from excess thyroid hormones and ultimately from the stress level in your daily life and mind. Thyroid disease is becoming common - with proper attention and awareness of the deep physiological therapies available through yoga one can find personal freedom from the disease and in some cases reverse the disorder.

My personal opinion from my mom’s experience with thyroid disease is that you should try all available remedies and lifestyle changes before surgical treatment that does more bad than good. Don't trade one set of problems for another but rather treat the source with the life source that is within you. You are your best medicine so if you don't have to pollute your body with chemicals then DON'T! Focus your attention on your mind, body, and breathe connection. Practicing the fundamentals of yoga will strengthen your emotional well being, healing you from past experiences that caused the disease. Focus on removing from your life the most harmful STRESS. Once you remove stress, continue with meditation, asanas and breathing pranayama to nourish your body. Yoga teaches us that the body is a tool for reaching the experience of bliss; therefore treat your body right from this day forth. Change your diet to a healthy thyroid inhibiting plan, take natural supplements and engage your mind to learn more of holistic practices to try. As the yoga sutras point out you must become your own student in life. Your mind and spirit will open up to the positive changes in due time and teach you how to progress. Your breath, mind and body connection will guide your journey to eternity.
Supporting Research and Sources Used:

Webpages:

1) http://en.wikipedia.org/wiki/Hypothyroidism
2) http://en.wikipedia.org/wiki/Hyperthyroidism
3) https://umm.edu/health/medical/altmed/condition/hyperthyroidism
4) http://www.patient.co.uk/forums/discuss/new-hyperthyroidism-diagnosis-103931
7) http://en.wikipedia.org/wiki/Thyroid_hormone
8) http://en.wikipedia.org/wiki/Thyroid
9) http://chriskresser.com/the-gluten-thyroid-connection

Books:

Light on Pranayama by B.K.S. Iyengar

Yoga: Asanas, Pranayama, Mudra, Kriyas by Vivekananda Kendra Prakashan