



# THE MAGIC OF YOUR THYROID

---

THE WONDERS OF THE THYROID GLAND

## Table of contents

1. Thyroid Introduction
2. Thyroid Dysfunction
3. The Solution: Diet, Lifestyle, Supplementation
4. Thyroid Markers and Functional Tests

# 1. THYROID INTRODUCTION

---



Thyroid gland is a small butterfly shaped gland at the base of your neck. This little butterfly is magic, it effects everything metabolic in the body.

Metabolism = making every cellular car in the body have enough gas to go - and to go swiftly.

What does it all impact? Or should we ask... what does it NOT impact?

Intestines/GI function	Skin	Mental Clarity
Mood/Emotions	Fertility and Sex hormones	Weight
Body Temperature	Cholesterol	Immune Function

The thyroid is even responsible for making other hormones in the body such as progesterone (think fertility here) and even cortisol (stress hormone)

# THYROID INTRODUCTION, CONT

---

## SPIRITUAL/EMOTIONAL CONNECTIONS

**Throat chakra:** Responsible for creative expression, speaking your truth

**Emotions:**

Feelings of humiliation

“I never get to do what I want to do”

“when is it my turn?”

Fearful of what others think of you

**Your body has been trying to communicate your need to address certain internal emotions. When you refuse to listen to your inner emotions relating to the thyroid, like any illness, thyroid problems are your bodies way of shouting its message to you.**

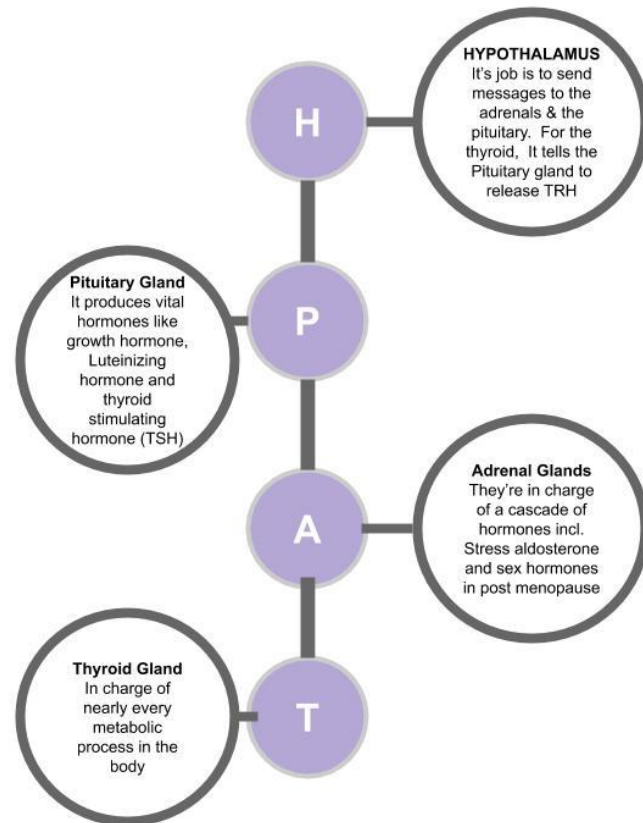
Source: Louise Hay, “You Can Heal Your Life.” 1984

# THYROID INTRODUCTION, CONT

---

## HPAT AXIS

- Hypothalamus decides whether or not to release Thyrotropin Releasing Hormone.
- TRH tells the pituitary gland to release thyroid stimulating hormone, TSH.
- TSH tells the thyroid to produce Thyroxine, T4 (thyroid hormone). The liver then converts T4 to T3 - the active thyroid hormone
- T4 also gets converted to T3 within the cells
- Thyroid & Adrenals are synergistic. Adrenals modulate production of thyroid hormone. If producing too much stress, thyroid hormone goes down and yet you need thyroid hormone to synthesize cortisol



\*Note: Image creation inspired by InformHealth

---

## Thyroid Stimulating Hormone (TSH)

- Brain hormone, NOT a thyroid hormone!

## 2 Primary Thyroid Hormones

### Thyroxine (T4)

- 4 Iodine particles
- Main hormone produced thyroid
- Inactive form

### Triiodothyronine (T3)

- 3 Iodine particles
- Converted from T4 in the liver, kidneys, GI tract
- Active form



# THYROID INTRODUCTION, CONT

---

## ADRENAL/THYROID CONNECTION

Adrenal glands produce hormones made from cholesterol. There are numerous hormones the adrenal glands produce, but for our focus today we'll focus on:

1. **Glucocorticoids:** predominantly cortisol (aka sustained stress hormone). This hormone is involved in the response to illness and also helps to regulate metabolism. Cortisol stimulates glucose production helping the body to free up the necessary ingredients from storage (fat and muscle) to make glucose. Cortisol also has significant anti-inflammatory effects.
2. **Catecholamines** include adrenaline, noradrenaline – these hormones are responsible for all the physiological characteristics of short term stress response, the 'fight or flight' response.

## STRESS



**“Life is about 10% what happens to you and 90%  
how you respond to it.”**

~Charles Swindoll

Source: <https://www.yourhormones.info/glands/adrenal-glands/>

# THYROID INTRODUCTION, CONT

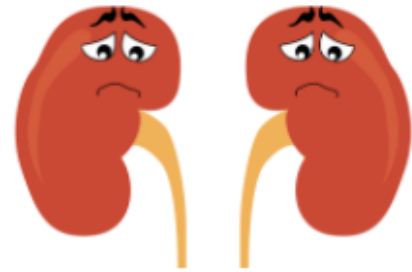
---

## ADRENAL/THYROID CONNECTION

Optimal cortisol drives thyroid hormone action WHILE optimal thyroid function drives cortisol secretion



Optimal thyroid function drives cortisol secretion

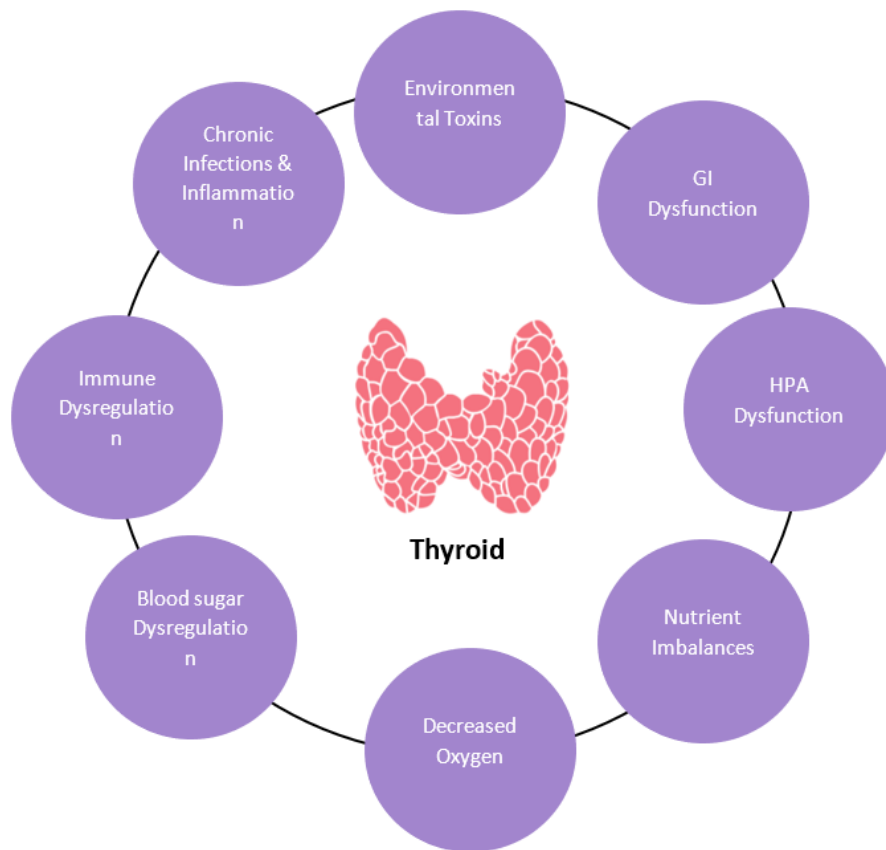


Optimal cortisol drives thyroid hormone

## 2. THYROID DYSFUNCTION

**“The Thyroid is perhaps the human gland that is the most exquisitely sensitive to change.”**

~ Tracy Harrison, Founder School of Applied Functional Medicine



# THYROID DYSFUNCTION, CONT

---

**Hyperthyroid**



**Happy Thyroid**



**Hypothyroid**



# THYROID DYSFUNCTION, CONT

---

## Spiritual/Emotional Connection



**Chakra's:** The seven chakras are the main energy centers of the body. You've probably heard people talk about "unblocking" their chakras, which refers to the idea that when all of our chakras are open, energy can run through them freely, and harmony exists between the physical body, mind, and spirit.

**Throat Chakra:** Governs communication, self expression, truth

**Hyperthyroid:** expending lots of energy and that generally is due to a great deal of outward focus rather than turning inward. Needing validation from others. Over opinionated, bossy, they often raise their voice and interrupt others.

**Hypothyroid:** Focus is inward; emotional hibernation. Feelings of being stuck. These folks can be afraid of taking over their lives, taking charge and stepping forward to what they want

**The thyroid is all about voicing your truth, your creative expression, being honest with yourself and others**

# 3. THE SOLUTION: DIETARY & LIFESTYLE TIPS

---

## STRESS



- The body follows the mind!
- The Adrenal Gland is the master gland over the thyroid. The body isn't designed to be "on" all the time.
- Long term stress will shut your thyroid down

### CHOOSE CALM & NURTURING

- Self care! Healing foods, gentle movement, clean water, lots of sleep, meditation, journaling, nature, snuggle pets, rest
- PLAY!!!!
- How do you perceive your world?

## SLEEP

High-quality sleep is vital for both healing and **sustained** wellness.

Lack of sleep increases stress hormones which impacts thyroid, sex hormones and even blood sugar

### CHOOSE CALM & NURTURING

- Relaxing bedtime ritual (warm bath, reading, meditation, legs up the wall, gratitude) @ least 30 min. Prior to bed
- Turn off all full-spectrum light for a full 1-2 hours before bedtime. Or wear blue light filtering glasses
- Quiet digestion! No food 2-3 hours prior to bed
- Sleep in a dark, quiet (with soft noise), cool space



# THE SOLUTION: DIETARY & LIFESTYLE TIPS, CONT.

---

## EATING HYGIENE

Which eating style would your body best respond to?



## EATING TIPS FOR NUTRIENT OPTIMIZATION & A CALM GUT







<b>Slow Down:</b>	Put down your knife & fork between bites.	Chew 20-30 times	Have a conversation
<b>Savor:</b>	Take calming breaths before eating & throughout eating	Relax and savor every bite - pay attention to aromas, flavors, textures	Sit down & relax!
<b>Focus on meals not hydration:</b>	Don't gulp water during your meal, stay hydrated in between meals		
<b>Priority</b>	Most importantly... make you and your meal time a priority!		



# THE SOLUTION: DIETARY & LIFESTYLE TIPS, CONT.

---

## NUTRITION

Selenium	Iodine	Vitamin A
 <p>8-9/day of brazil nuts</p>	 <p>Seaweed/Kelp</p>	 <p>Egg Yolk and Liver</p>
Zinc	Iron	Protein
 <p>Oysters, red meat, poultry, beans, nuts, seafood, whole grains, dairy</p>	 <p>Animal sources are easier to absorb than plant based sources</p>	 <p>Tyrosine (an amino acid) is required to make thyroid hormone</p>

### Fruits and Veggies



Plenty of vegetables and fruits for antioxidants to fight off inflammation that can harm your thyroid. Especially BERRIES and cruciferous veggies! But make sure most of the cruciferous veggies are cooked. Lots of healthy fats such as avocado, olive oil, nuts, seeds!






# THE SOLUTION: DIETARY & LIFESTYLE TIPS, CONT.

---

## NUTRITION

Avoid these foods as much as possible and completely eliminate gluten. Focus on eating \*more\* of the foods in the prior page

Sugar/Refined Carbs	Trans Fats	Gluten
 <p data-bbox="224 953 602 1056">Breads, pastas, crackers, chips, candy, cookies, cake, baked goods/pastries, sodas</p>	 <p data-bbox="651 953 1044 1094">Any fried food, processed food and any food that contains hydrogenated and partially hydrogenated oils</p>	 <p data-bbox="1101 926 1474 1062">Products with wheat, spelt, kamut, farro and durum, plus products like bulgar and semolina), barley, rye</p>

## FLUORIDE

Just say **NO** to Fluoride!

Fluoride competes with iodine. Iodine's only known function is the synthesis of thyroid hormone. That means if we consume it every day, we suppress iodine and as we know from earlier.



**Non Fluoride toothpaste options:**

Desert Essence

Tom's

Schmidt's

Jason

Dr. Brommer's

**Water filters:**

Berkey

Reverse Osmosis Systems

## MINDSET



Things that bring me Vitamin J (Joy) are:

Things that bring me Vitamin L (Laughter) are:

### **Mantra's to heal the Throat Chakra:**

- “I speak the truth to myself and others.”
- “I speak freely and with confidence.”
- “It is safe for me to express my feelings and to create the life I desire.”
- “Everything I do is an expression of love.”

### **Yoga poses to heal the Throat Chakra:**

Fish Pose

Hand Stand

### **Surround yourself with Music!**

**Act and speak from that place and trust that your voice has meaning, purpose and validity.**

# LAB MARKERS

---

## FULL THYROID PANEL

- |          |                                     |          |                               |
|----------|-------------------------------------|----------|-------------------------------|
| <b>1</b> | TSH                                 | <b>2</b> | FREE T3 (FT3)                 |
| <b>3</b> | FREE T4 (FT4)                       | <b>4</b> | TOTAL T3                      |
| <b>5</b> | TOTAL T4                            | <b>6</b> | REVERSE T3 (RT3)              |
| <b>7</b> | THYROID PEROXIDASE ANTIBODY (TPOAb) | <b>8</b> | THYROGLOBULIN ANTIBODY (TgAb) |

## ADDITIONAL MARKERS

- |           |              |           |                 |
|-----------|--------------|-----------|-----------------|
| <b>9</b>  | RBC SELENIUM | <b>10</b> | RBC ZINC        |
| <b>11</b> | IRON PANEL   | <b>12</b> | FASTING GLUCOS  |
| <b>13</b> | HBA1C        | <b>14</b> | FASTING INSULIN |
| <b>15</b> | DUTCH TEST   |           |                 |

PIECE BY PIECE  
**YOUR** UNIQUE  
PUZZLE  
PIECES **WILL** COME  
TOGETHER!



What pieces are coming together for you now?