



# A Functional Approach to Thyroid Health

The Hashimoto's Institute  
September 2014



# **Andrea Nakayama**

CNE, CNC, CHHC, pending MSHNFM

Founder, Replenish PDX and  
Holistic Nutrition Lab

[www.replenishpdx.com](http://www.replenishpdx.com)

[www.holisticnutritionlab.com](http://www.holisticnutritionlab.com)

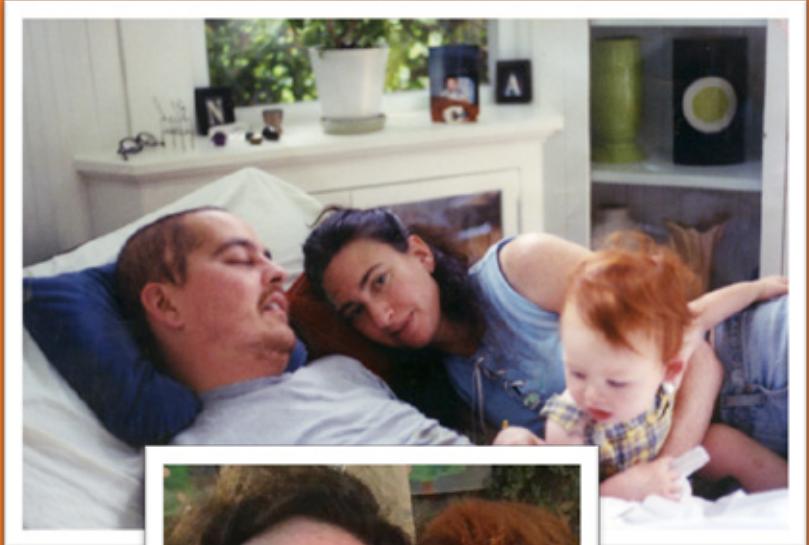




my wedding day, 1998



Isamu  
in hospice,  
July 2002



Gilbert and I  
at the farmer's  
market, 2011

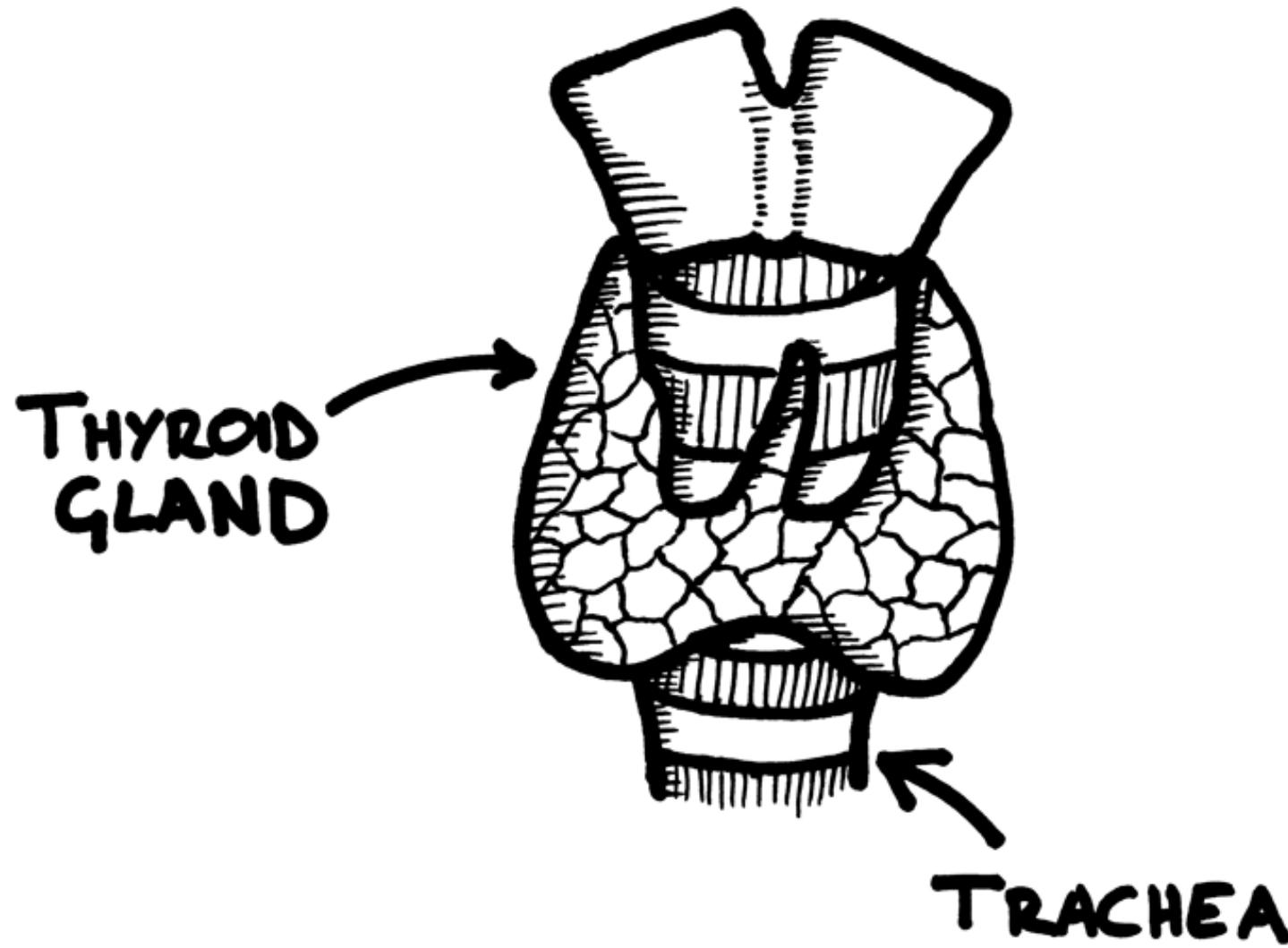


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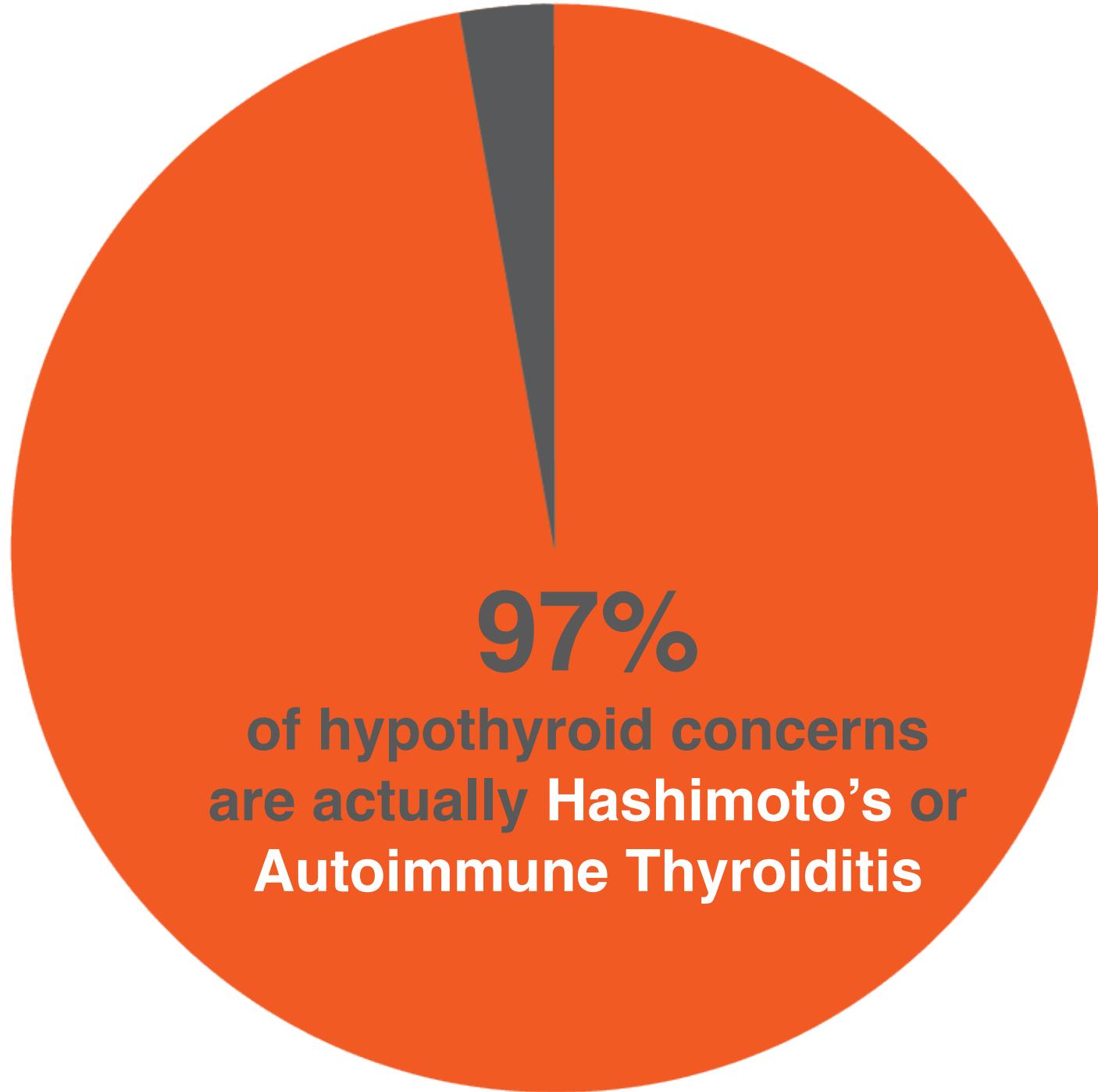
Gilbert  
and I  
in Israel  
2013





**1 in 5 Americans have hypothyroidism.  
Only half of them know it.**







10x



1x

**10 times**  
more females have Hashimoto's than males.



**1 in 5 Americans have hypothyroidism.  
Only half of them know it.**



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**97%**

**of hypothyroidism cases are Hashimoto's Thyroiditis,  
an autoimmune attack on the thyroid.**





Thyroid issues....  
Not just about the thyroid.  
Not just about the diet.  
What are they?



gluten?

grains?

synthetic  
hormones?

natural  
hormones?

alcohol?

leafy  
greens?

iodine?

extra T3?

seeds?

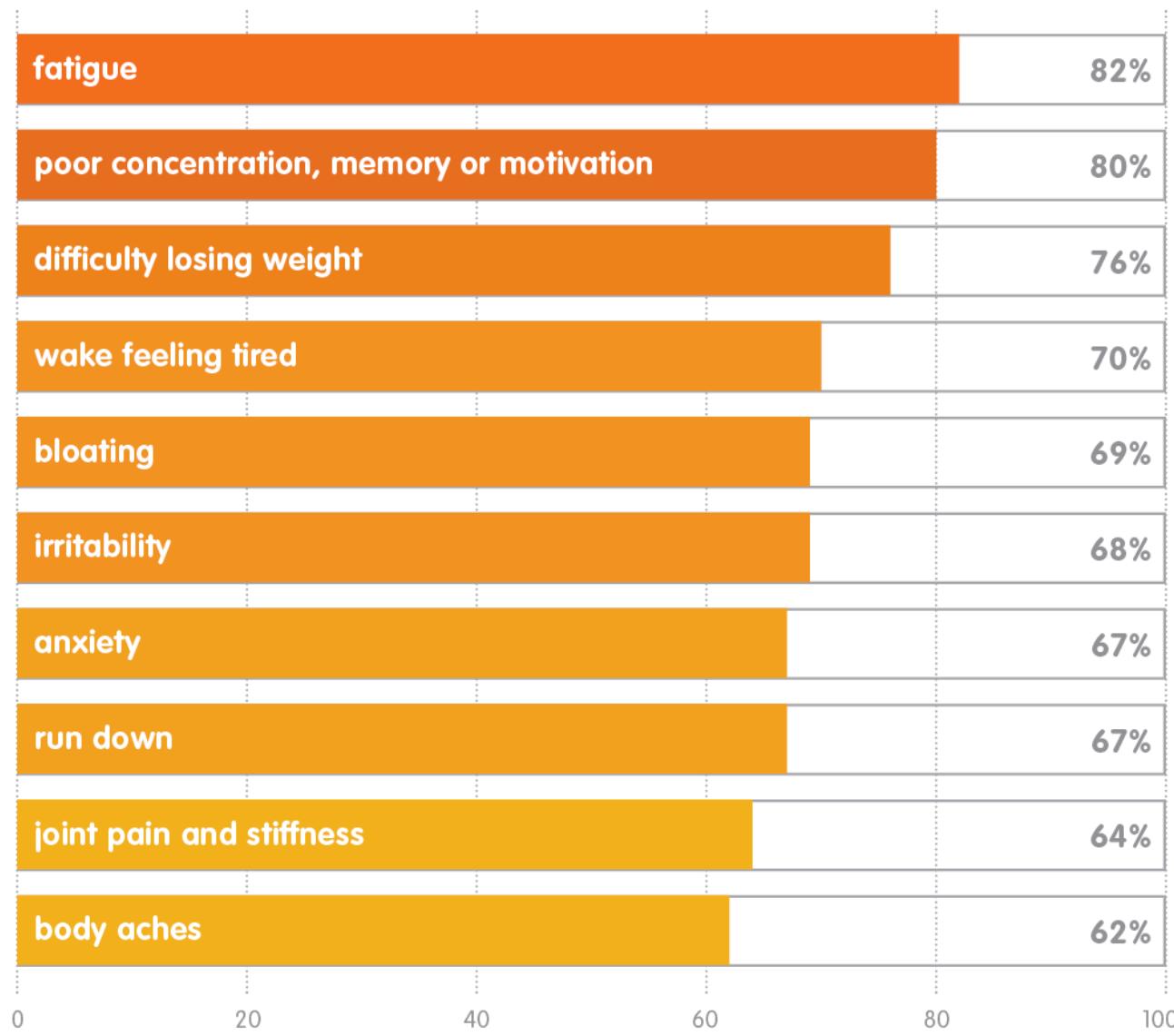


# Hashimoto's symptoms A to Z

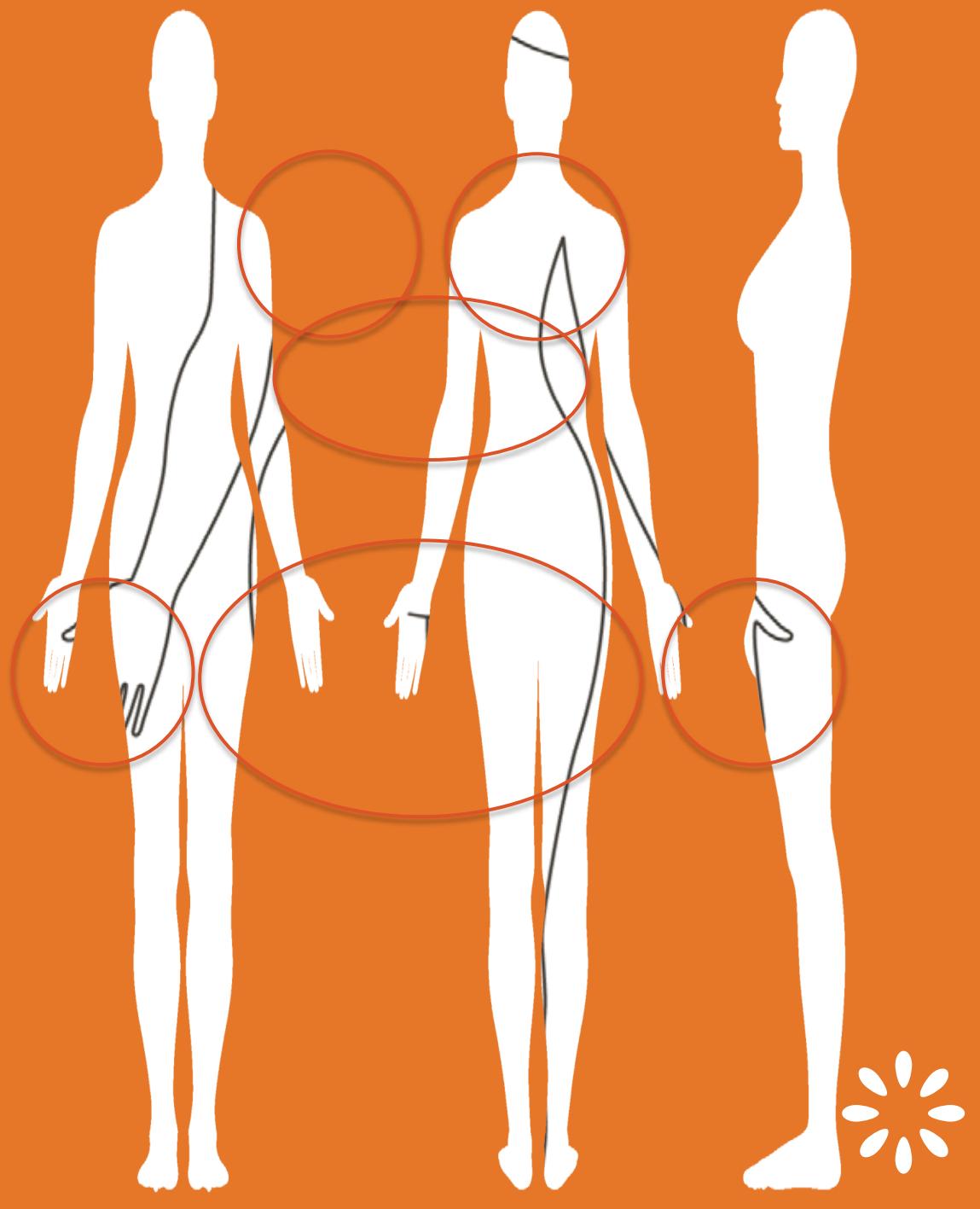
<b>Anxiety</b>	colds or flus	Low vitamin D levels	Skin problems (dryness, eczema)
<b>Bloating</b>	<b>Gluten sensitivity</b>	<b>Muscle aches</b>	<b>Throat discomfort, swelling or frequent sore throats</b>
<b>Body aches</b>	<b>GERD (gastro-esophageal reflux disease)</b>	<b>Nutrient deficiency, despite good diet</b>	
<b>Chronic candida</b>	<b>Heavy feeling throughout body</b>	<b>Neck discomfort or pain</b>	<b>Thinning eyebrows</b>
Cold all the time and/or cold extremities	Hormonal dysregulation (adrenal fatigue, PMS, PCOS)	<b>Osteopenia or Osteoporosis</b>	<b>Unease</b>
Constipation or sluggish bowels	Irritability	<b>Pale skin</b>	<b>Vitiligo</b>
<b>Depression</b>	Insulin resistance	<b>Palpitations</b>	<b>Water retention</b>
Difficulty losing weight	<b>Joint pain and stiffness</b>	Poor concentration, memory or motivation	<b>Weakness</b>
Diffuse hair loss	Kidney stones, infection or disease	<b>Quality of life compromised due to symptoms</b>	<b>Wake feeling tired</b>
Dry skin and hair	<b>Low ferritin, low iron (anemia)</b>	<b>Run down</b>	<b>Xeric (dry, deficient in moisture)</b>
<b>Eczema</b>		<b>Shortness of breath</b>	<b>Yellowish skin or nails</b>
<b>Fatigue</b>		<b>Sluggishness</b>	<b>Zero energy</b>
Fibromyalgia			
Frequent infections,			



# top 10 symptoms

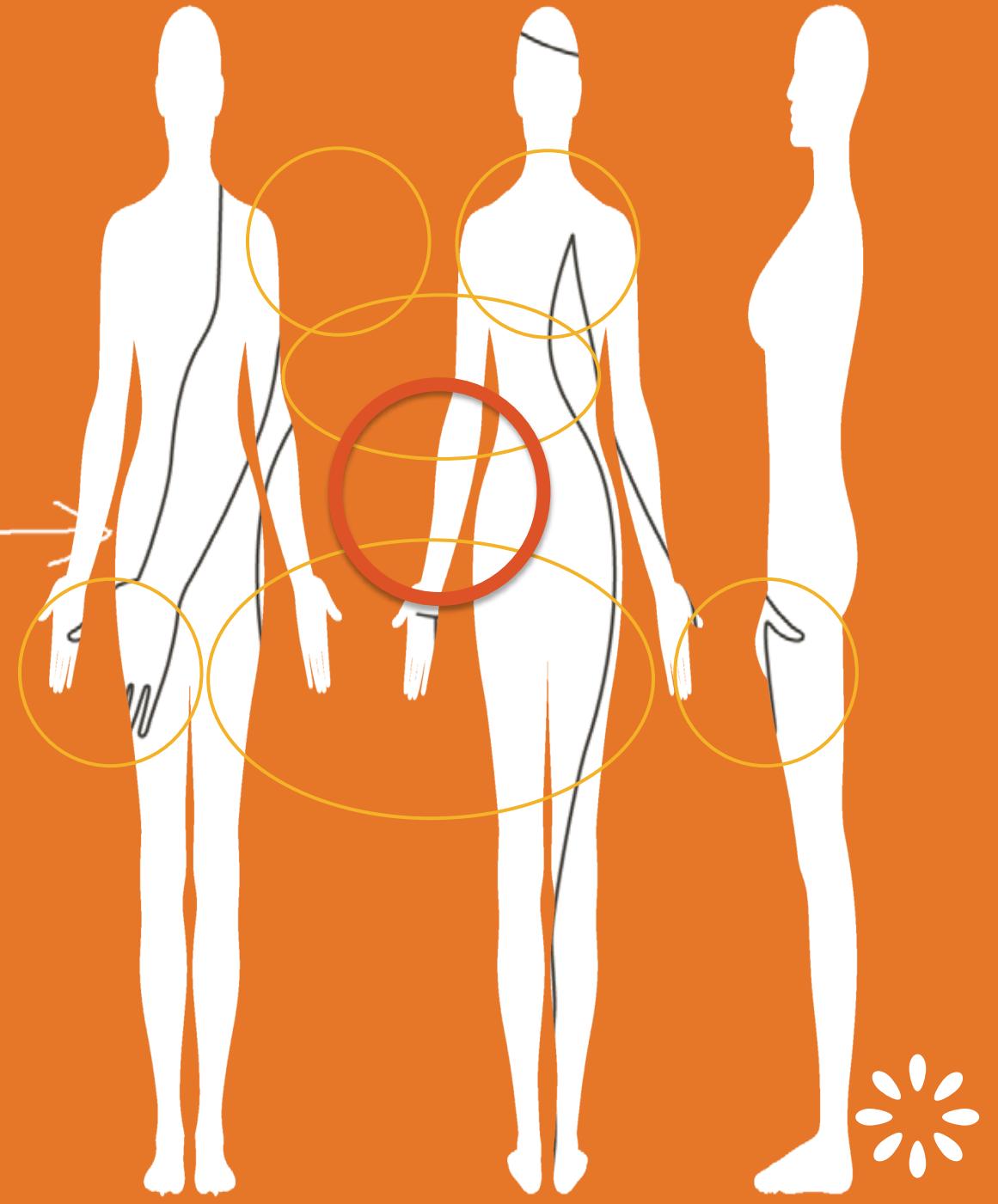


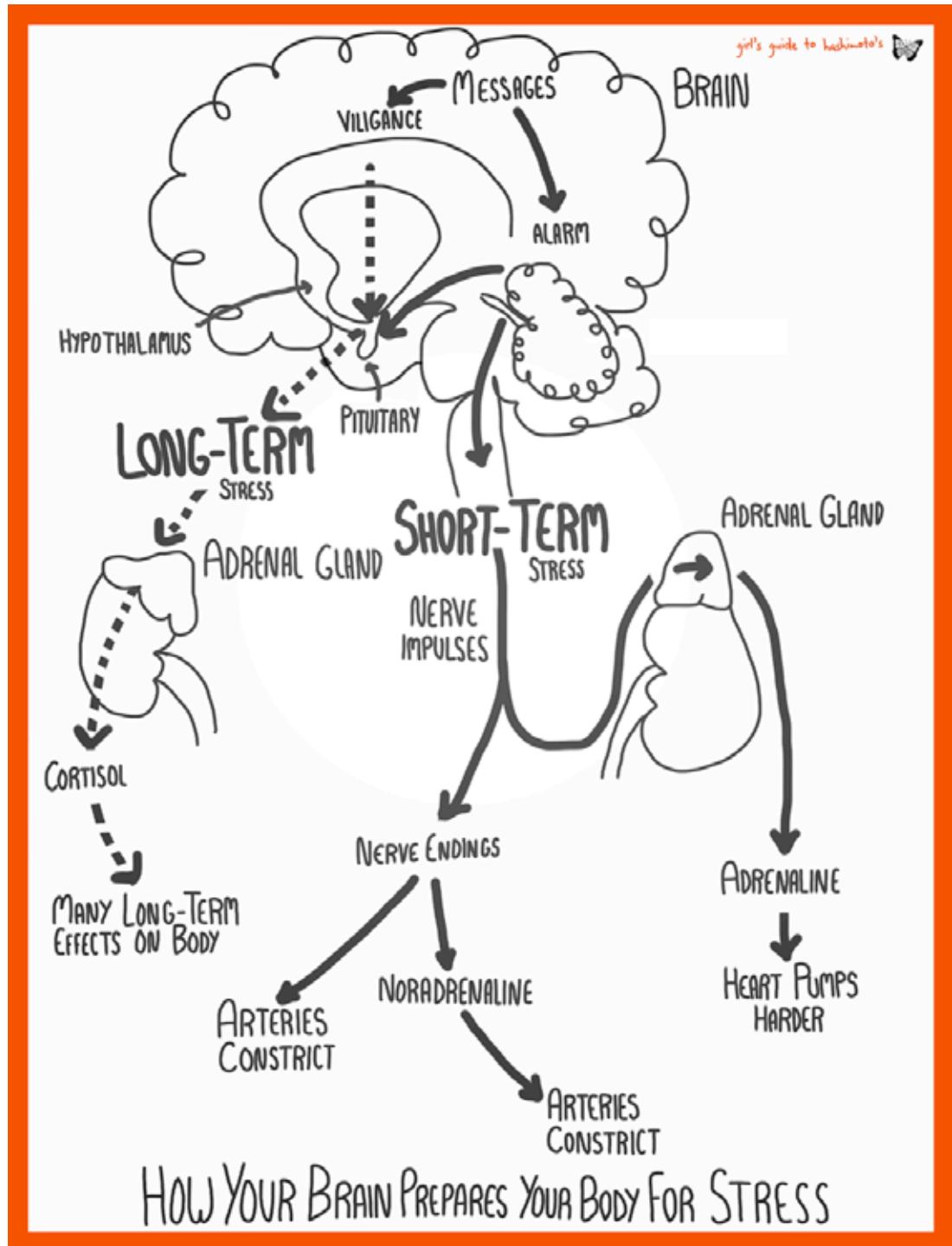
my symptoms



my symptoms

leaky gut and  
gut dysbiosis





# thyroid issues

hypo

hyper

viral load

toxins

inflammation

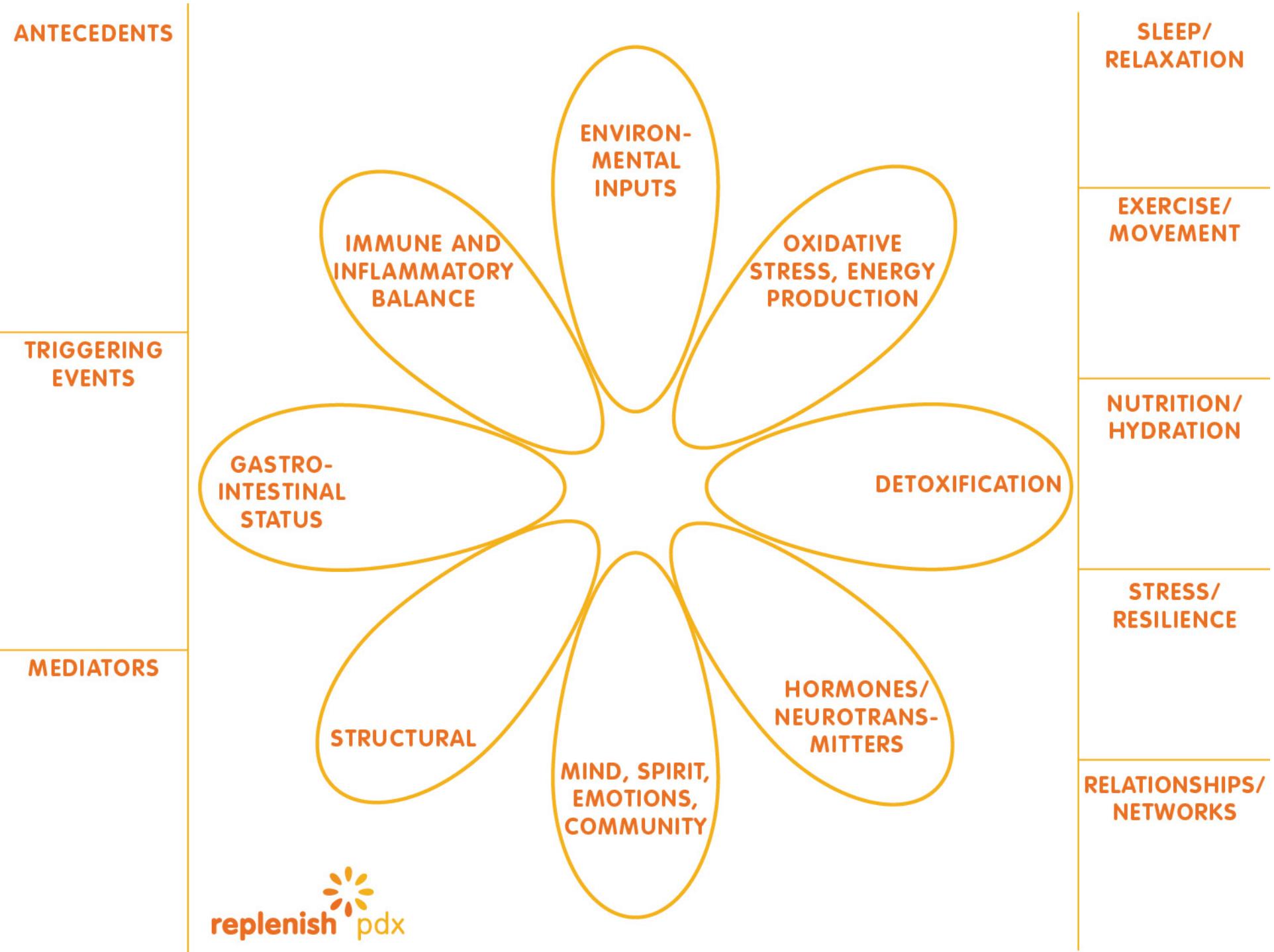
hormones

nutrients

neuro-  
transmitters

auto-  
immunity







You can't functionally address your Hashimoto's without fully understanding the physiology.



# Factors that Affect Thyroid Function

Factors that contribute to proper production of thyroid hormones

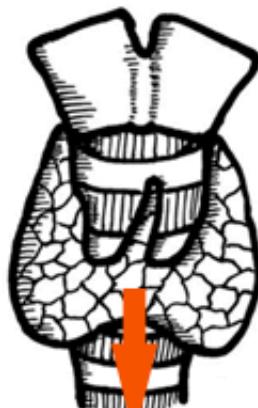
Nutrients: iron, iodine, tyrosine, zinc, selenium, vitamin E, B2, B3, B6, C, D

Factors that increase conversion of T4 to RT3

Stress  
Trauma  
Low-calorie diet  
Inflammation  
Toxins  
Infections  
Liver/kidney dysfunction  
Certain medications

RT3 and T3 competing for binding sites

Adapted from materials from  
The Institute for Functional Medicine



T4

RT3

T3

Cell

Factors that inhibit proper production of thyroid hormones

Stress  
Infection, trauma, radiation, certain medications  
Autoimmune disease  
Fluoride (antagonist to iodine)  
Toxins: pesticides, mercury, calcium, lead

Factors that increase conversion of T4 to T3

Selenium  
Zinc

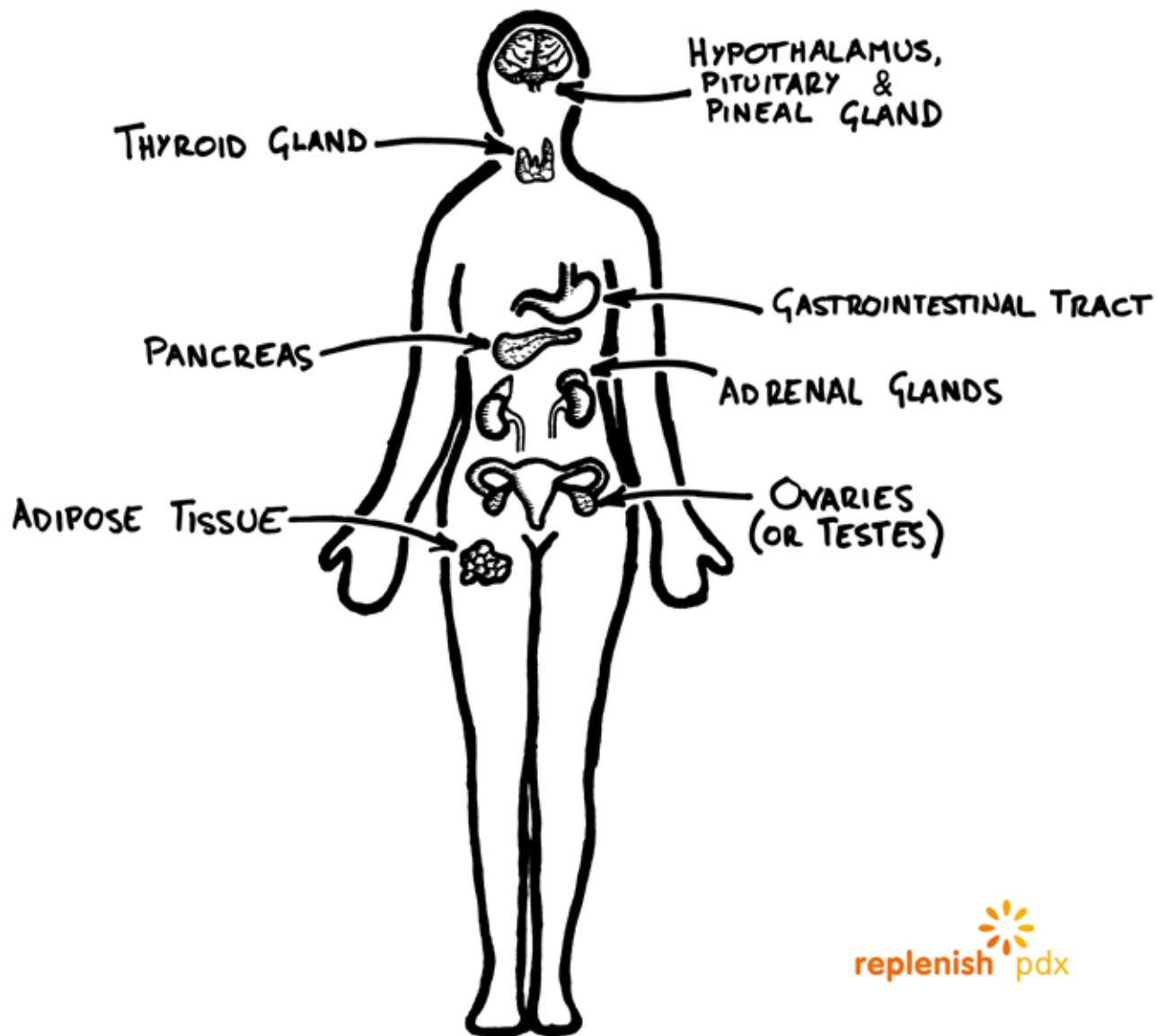
Factors that improve cellular sensitivity to thyroid hormones

Vitamin A  
Exercise  
Zinc

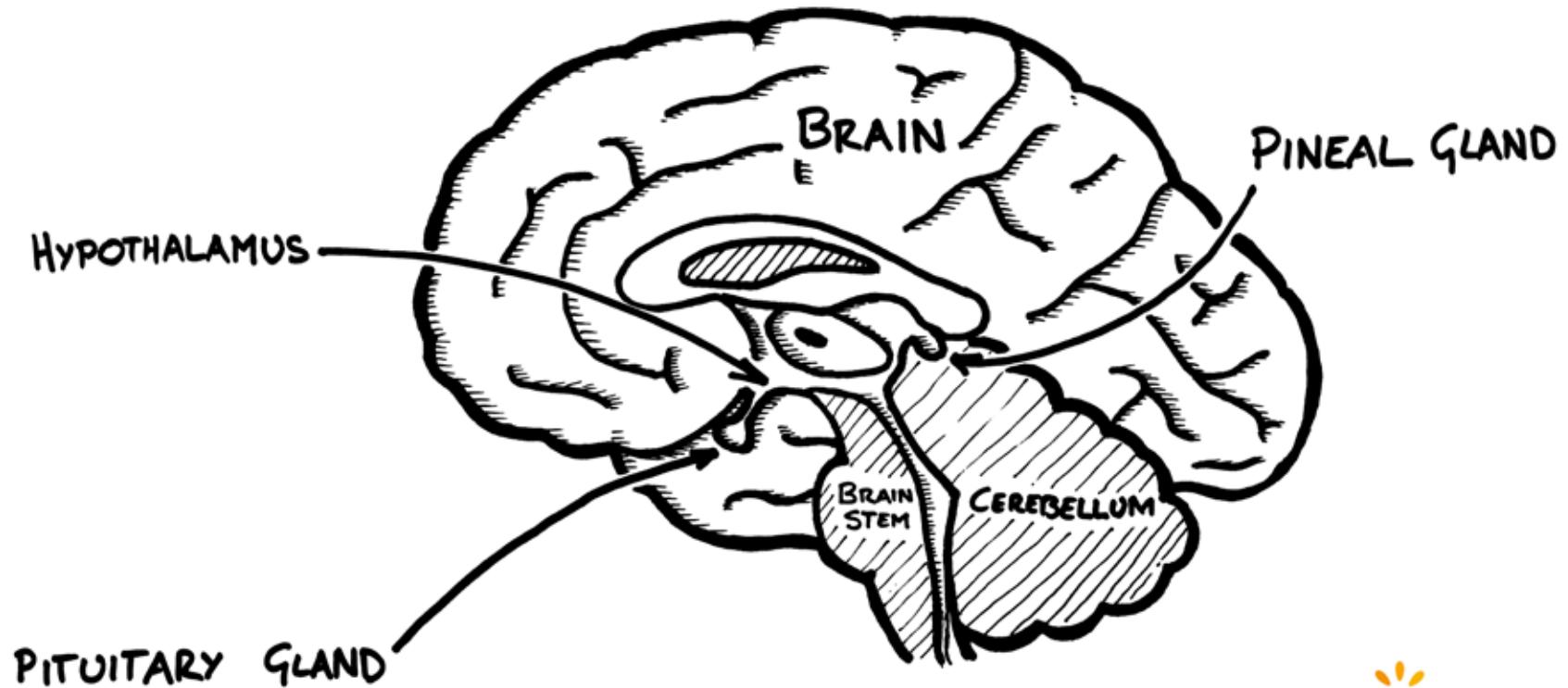


girl's guide to hashimoto's  
[replenishpdx.com/hashimotos](http://replenishpdx.com/hashimotos)

## ENDOCRINE ORGANS



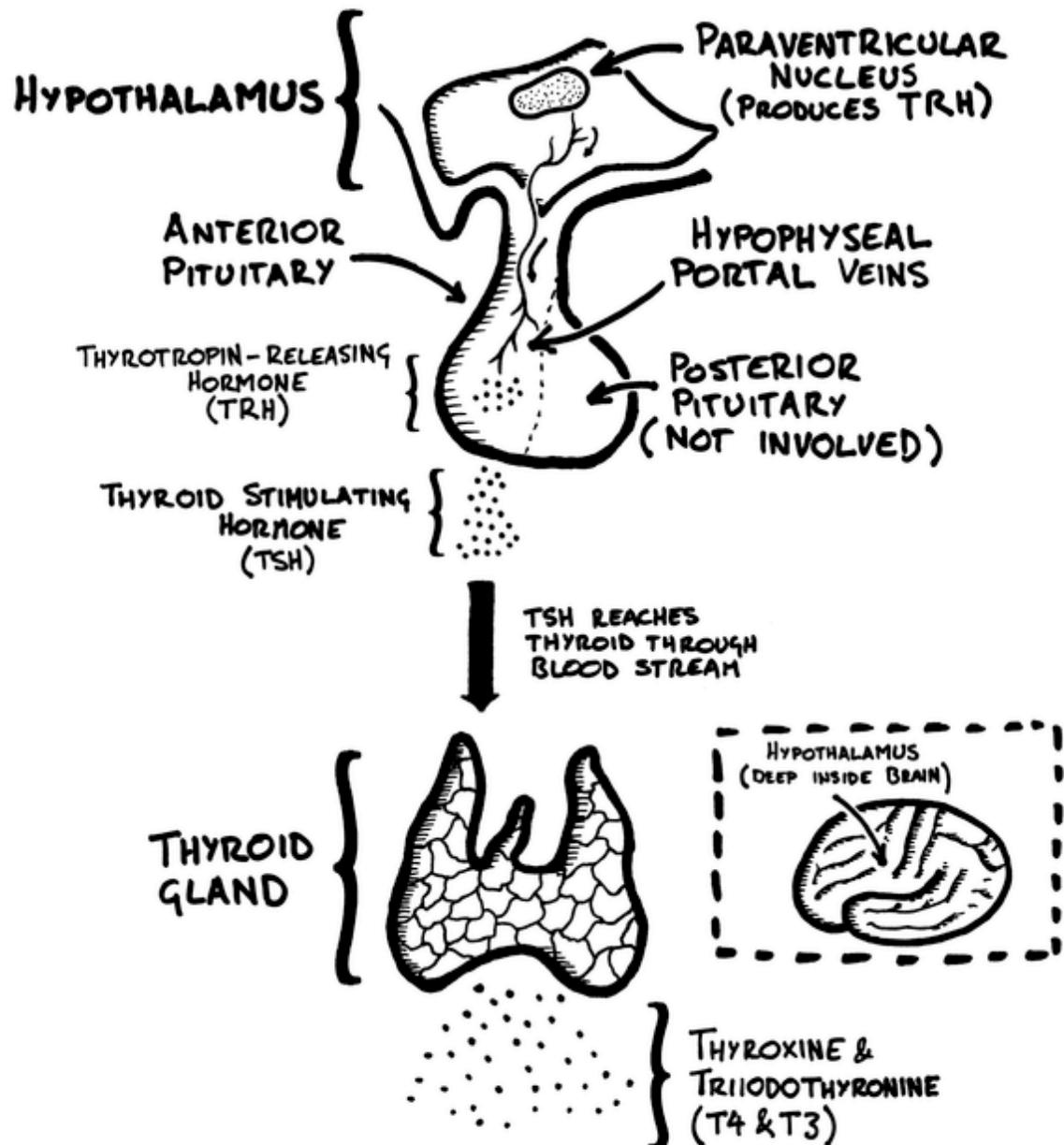
## HYPOTHALAMUS, PITUITARY & PINEAL GLAND



replenish  pdx



# HYPOTHALAMIC - PITUITARY - THYROID AXIS



## **TIMELINE**



Client: \_\_\_\_\_ DOB: \_\_\_\_\_ Date: \_\_\_\_\_

## **CLIENT'S GOALS WORKING WITH REPLENISH:**

- • •

## **RECOMMENDATIONS/ACTION ITEMS:**

- • •

#### **NUTRITION DETAILS:**

- • •

## TOPICS WE DISCUSSED:

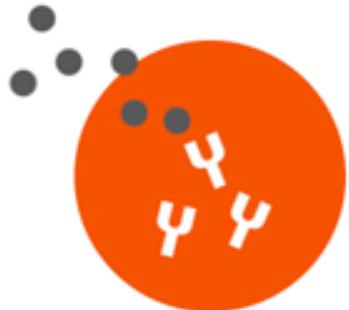
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### **IMPRESSIONS/THOUGHTS:**

- 11



## Normal Immune Response



Antigens invade &  
Antibodies form



Antibodies remove  
invading antigens



Antibodies remain  
and protect

## Autoimmune Disease



Immune system forms  
antibodies to self-antigens



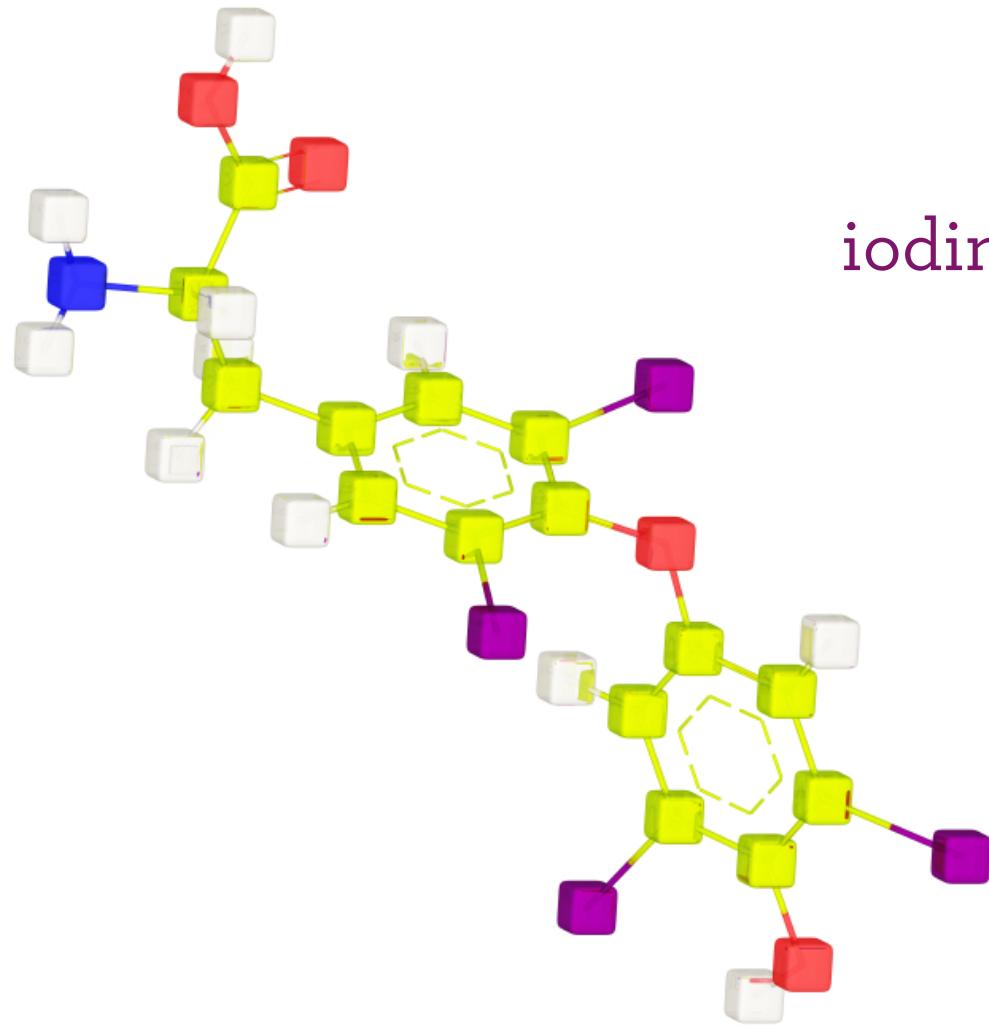
Antibodies attack  
self-antigens



Inflammation and  
tissue damage



# T<sub>4</sub> molecule



iodine = purple



# replenish thyroid lab wish list

- TSH
- Free T<sub>4</sub>
- Free T<sub>3</sub>
- Reverse T<sub>3</sub>
- Thyroid antibodies TPO and TgAb
- Methylmalonic acid
- Ferritin
- 25-hydroxy vitamin D

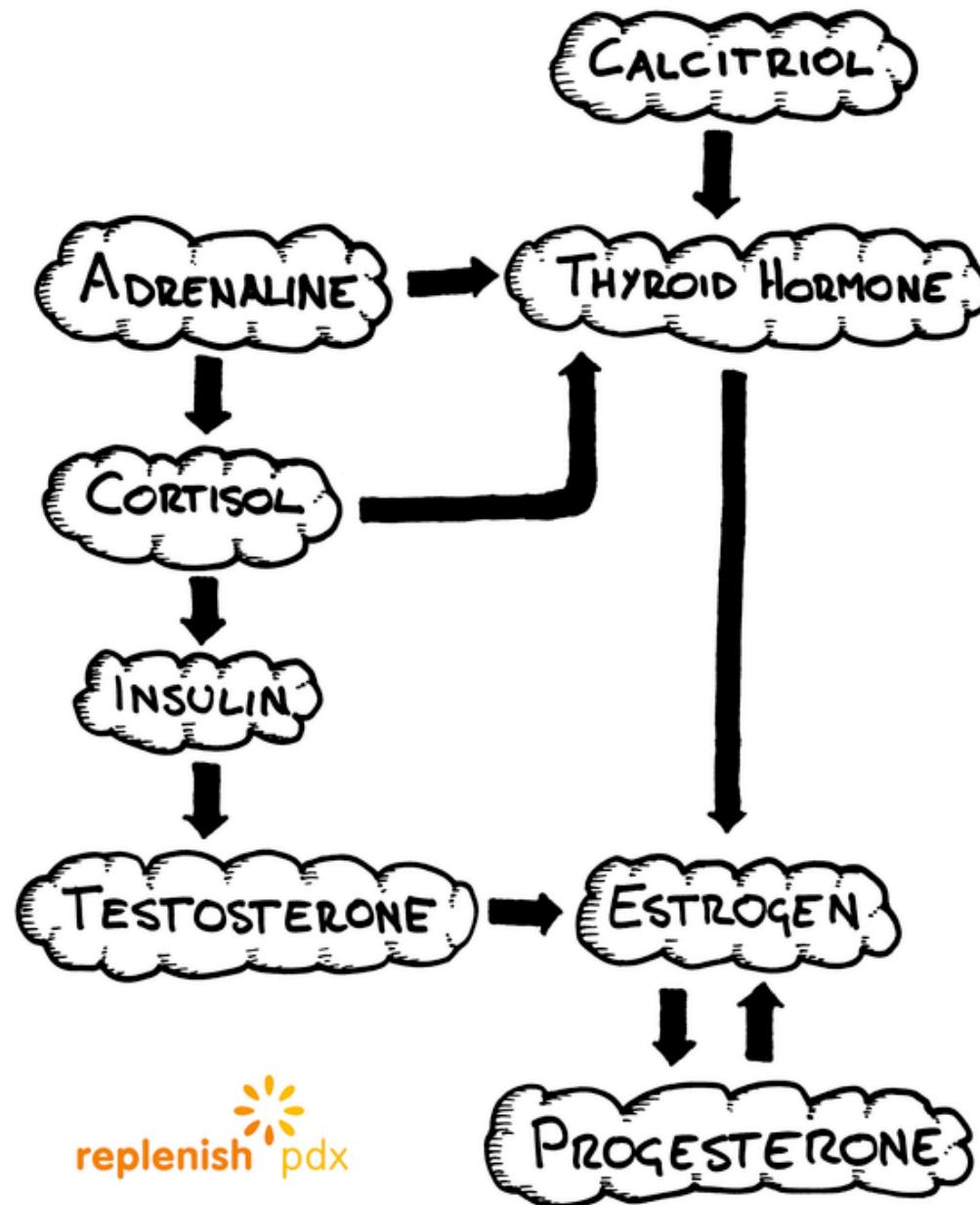


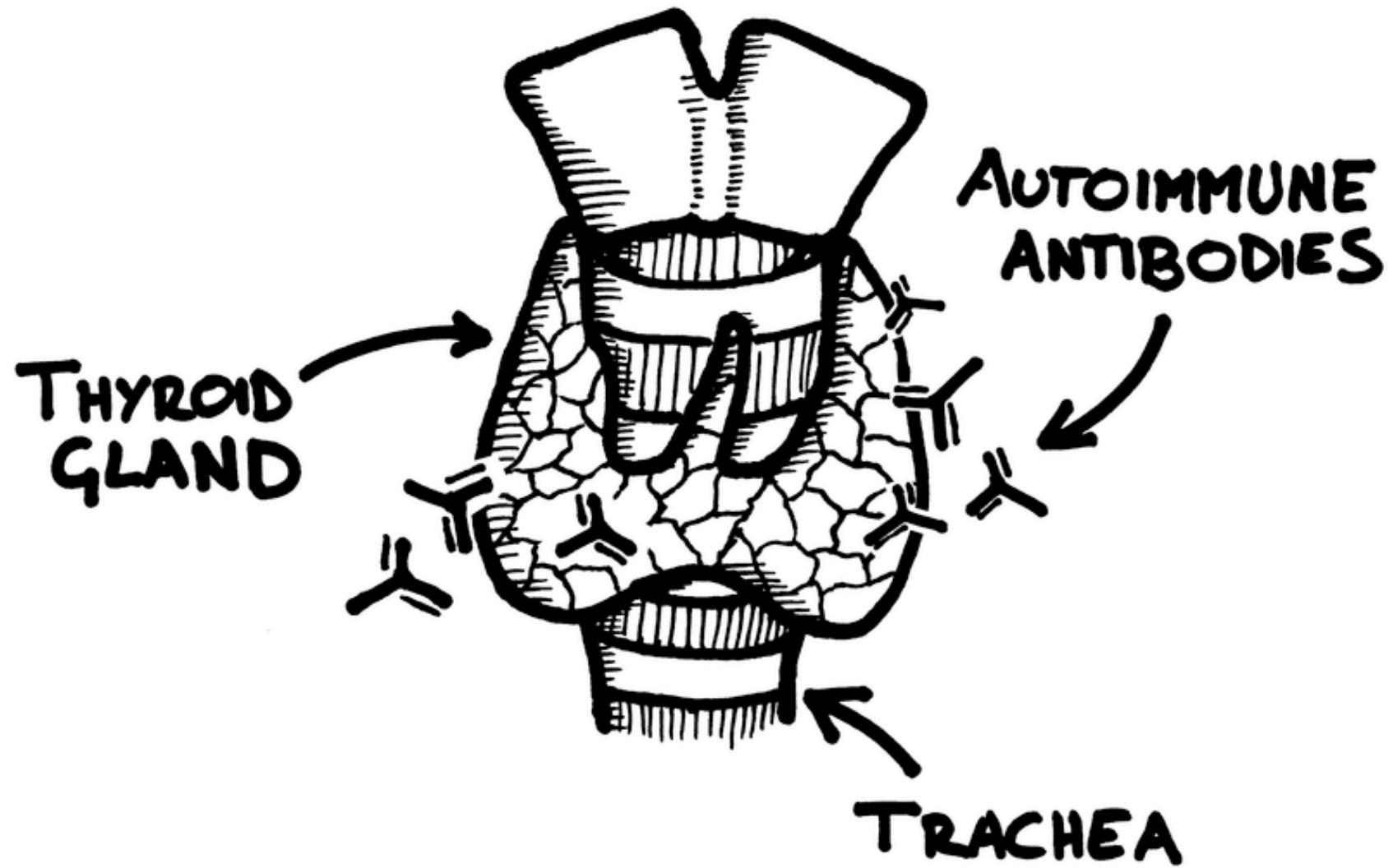




I want my Free T3!

## INTERACTION OF HORMONES







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# eight foundational aspects to health

- gastrointestinal health
- immune and inflammatory response
- environmental inputs (external and internal)
- levels of oxidative stress and cellular energy
- health of your detoxification systems and organs
- function of your hormones and neurohormones
- musculoskeletal and structural integrity
- spirit, soul, love, connections, sense of purpose



My mission is to reignite hope and provide possibility for remedy to the millions of people suffering with chronic illnesses by deepening their understanding of where their food meets their physiology and why it matters, and to teach health care practitioners to do the same with success so that we can touch all the people who need us.



# Andrea Nakayama

[andrea@replenishpdx.com](mailto:andrea@replenishpdx.com)

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