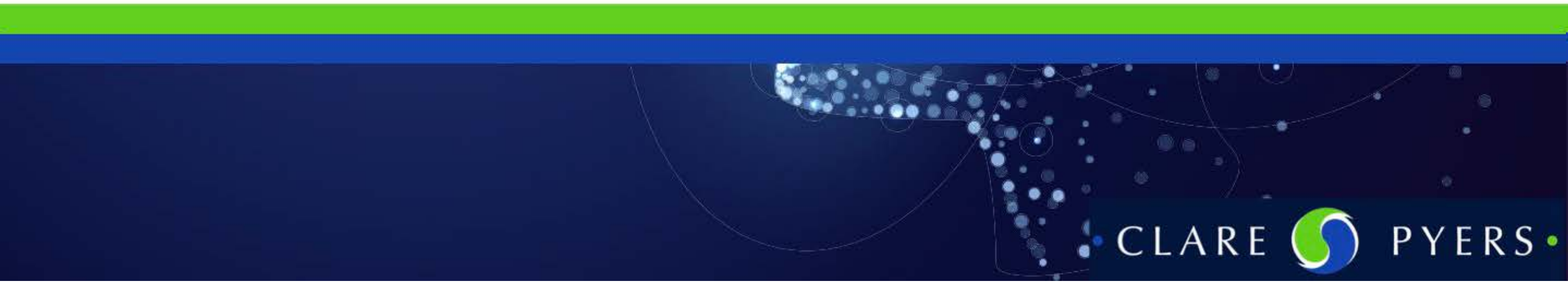




Treating Thyroid Conditions with TCM



Glad You're Here!



Clare Pyers

BHSc(TCM)

Full time clinical practice in Melbourne,
Australia since 2005
clarepyers.com

Author: [Integrative TCM Guide to Pathology](#)

Host: [Heavenly Qi Podcast](#)

Co-founder: [Alchemy Herbs](#)

Co-founder: [International Integrative
Chinese Medicine Conference \(IICMC\)](#)





Thyroid Physiology

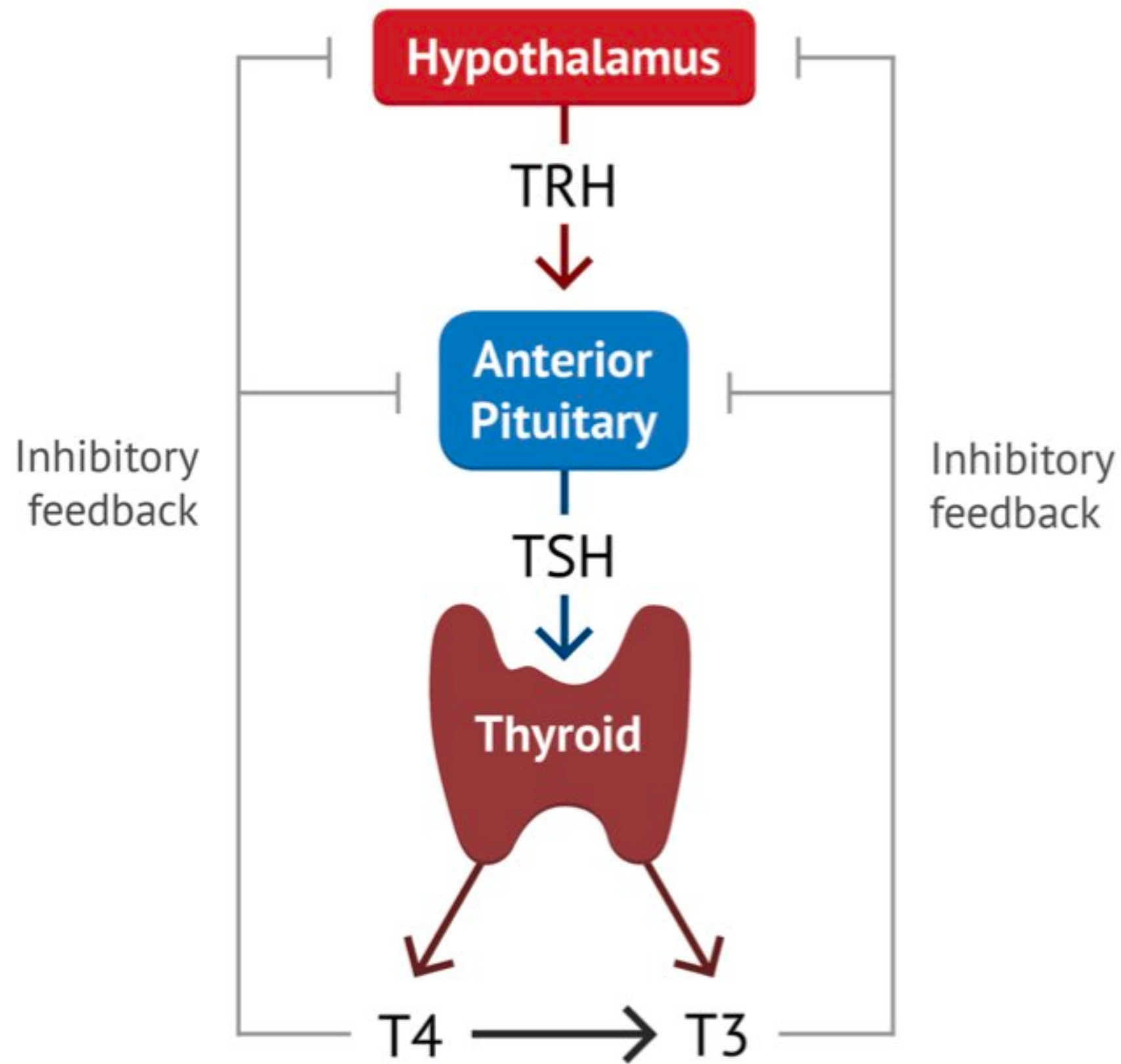


**How often do you
see patients
presenting with 3
or more of these
symptoms?**

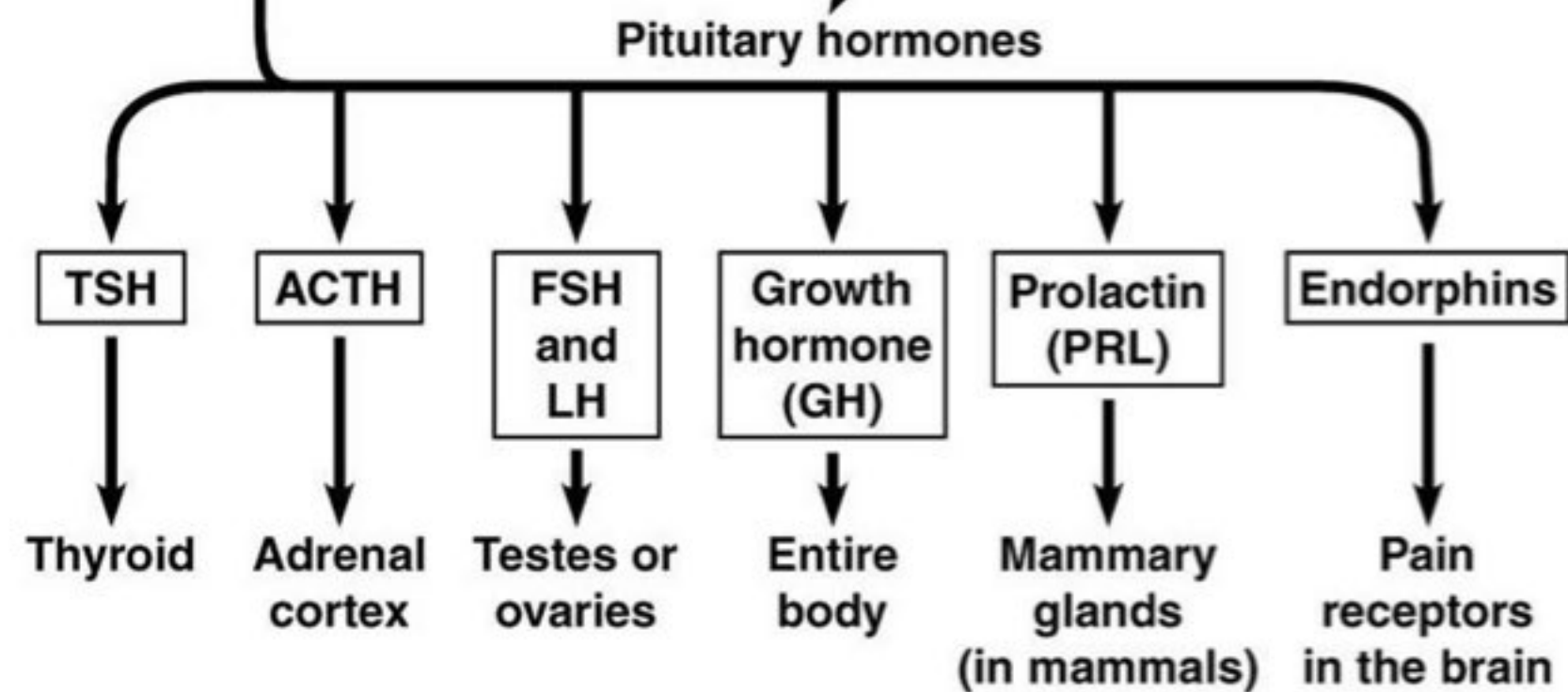
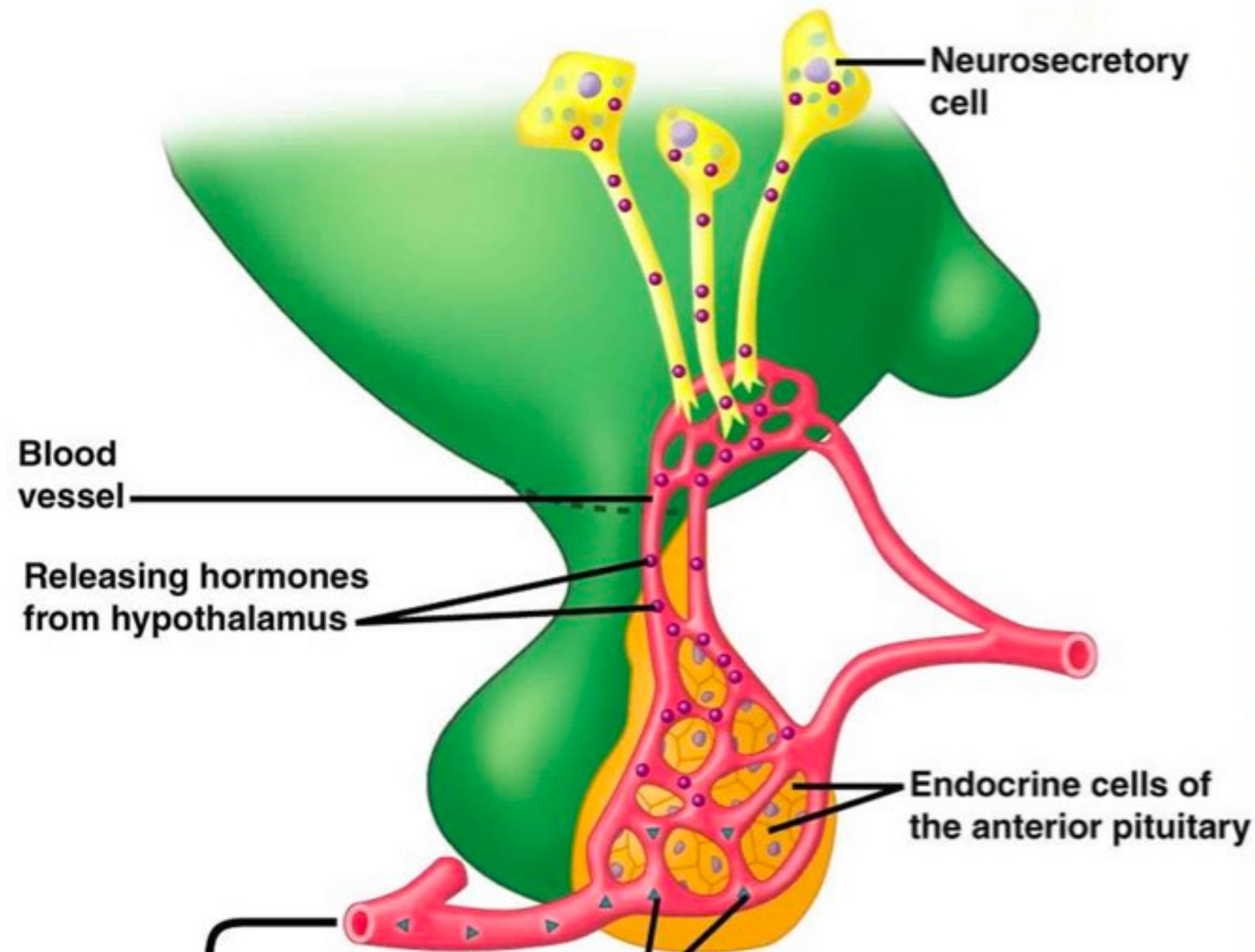
- Fatigue
- Feels cold
- Constipation
- Dry skin
- Weight gain
- Puffy face
- Fluid retention
- Hoarse voice
- Muscle weakness
- Heavy menstrual bleeding
- Pain/stiffness/swelling in joints
- Thinning hair, esp outer eyebrow
- Brittle nails
- Depression
- Slow HR
- Impaired memory
- Heart palpitations

Understanding
Thyroid disorders
is the key to
helping many of
your patients



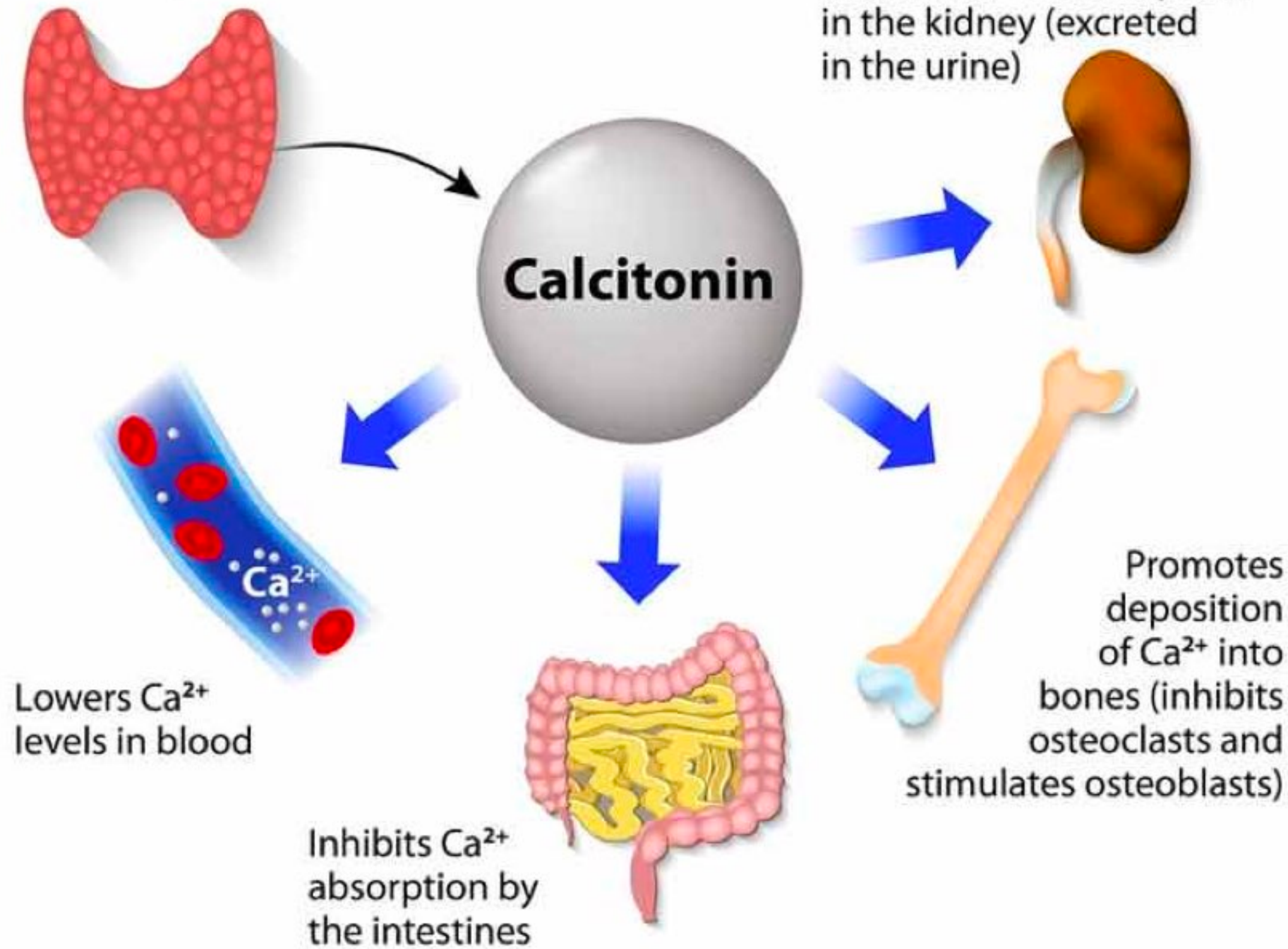


Hypothalamus
starts off the
process of
thyroid
hormone
production



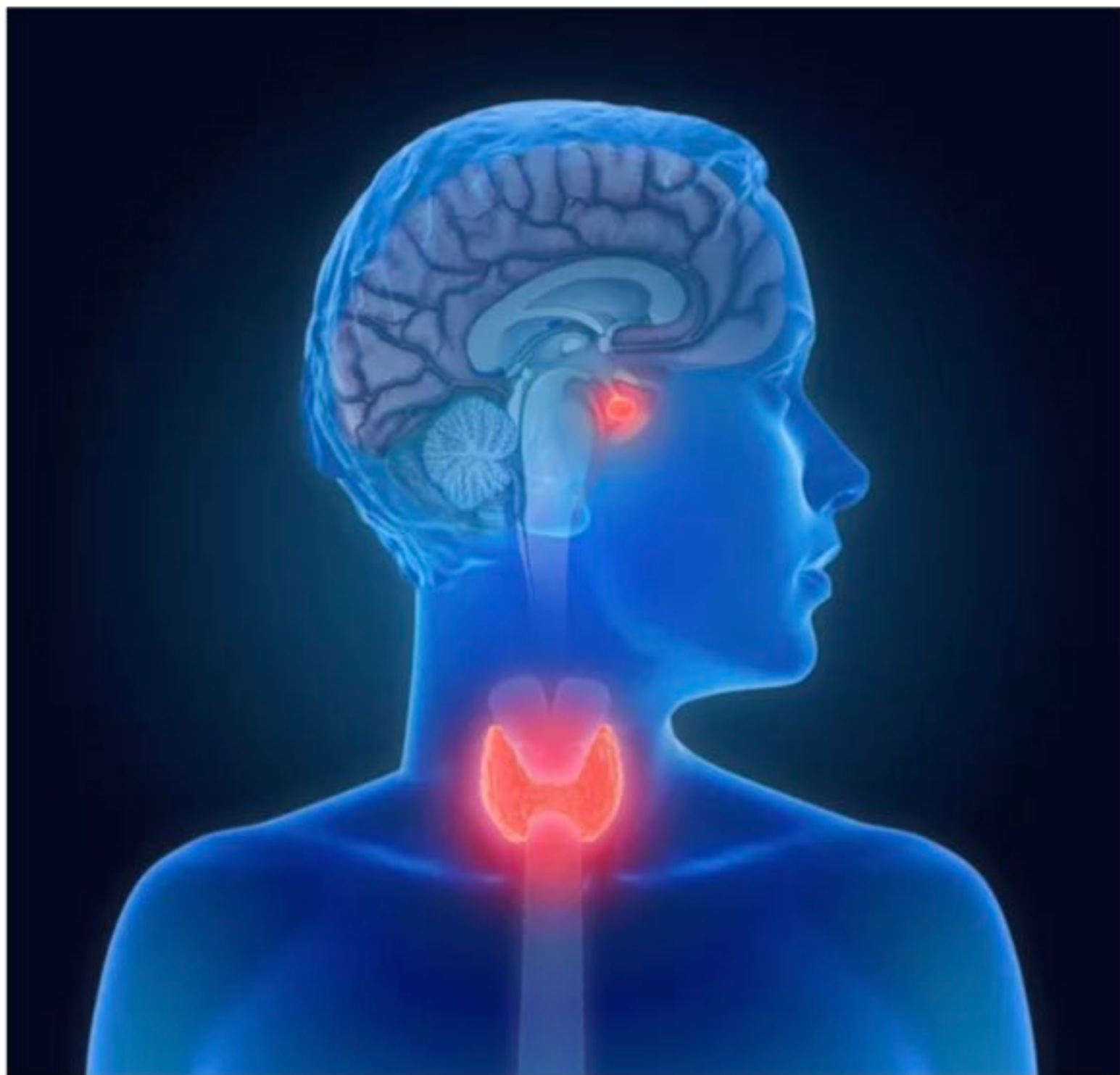
TSH is released from the anterior pituitary gland

Thyroid gland



Calcitonin helps to regulate calcium metabolism:

- Increases calcium in the bones
- Lowers in in the blood
- Excrete more in urine
- Absorb less in digestion



TSH

Thyroid Stimulating Hormone

Hormone released from anterior pituitary gland

Stimulates the thyroid to produce thyroid hormone.

High: Spleen Yang xu, Heart Yang xu, Blood xu, Qi xu.

Hashimoto's disease, hypothyroidism, thyroiditis, pituitary disease.

Low: Internal Heat, Yin xu, Empty Heat, Heart Fire, Wasting of Qi, Yang and Fluids
Grave's disease, Hyperthyroidism, thyroiditis, pituitary disease

Ideal 0.5-2.0



fT₄
Free thyroxine

Thyroxine is the main form of thyroid hormone produced in the thyroid gland.

Thyroid hormones act to increase the basal metabolic rate, assist cells with protein uptake and increase the sensitivity of the cells to adrenaline

High: Heart Yin xu, Heart Fire, Heat in the Heart, Yang Rising.

Grave's disease, hyperthyroidism, thyroiditis

Low: Heart Blood xu, Heart Yin xu, Spleen Blood xu

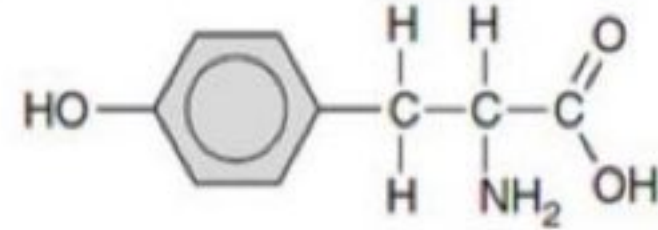
Hashimotos' disease, hypothyroidism, thyroiditis

Ideal 15-19

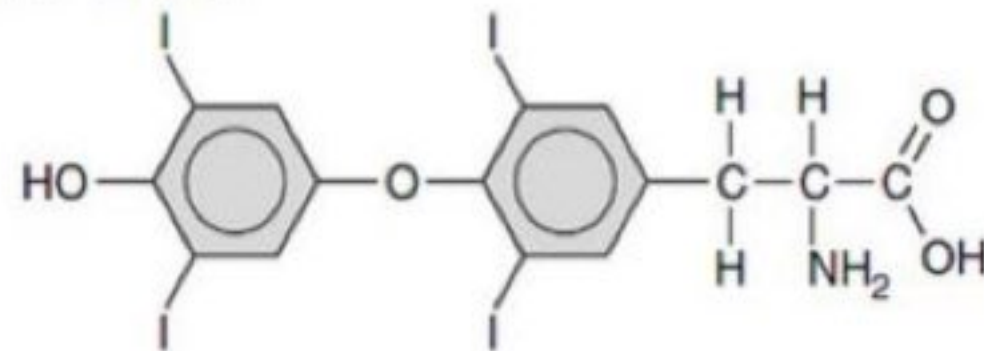
Tyrosine and Thyroxine (T4)

5

Tyrosine



Thyroxine (T₄)



T₄ (Thyroxine)
is made up of
tyrosine and 4
molecules of
iodine



fT₃
Free tri-iodothyronine

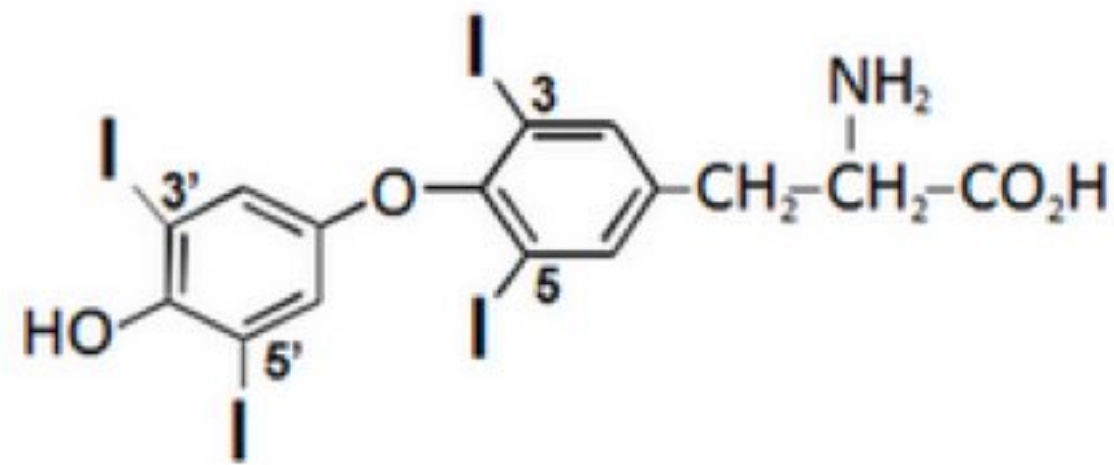
Triiodothyronine is produced by the thyroid gland, and by the deiodination of T₄ thyroxine in various organs and body tissues.

T₃ is the active form of thyroid hormone, and is the most biologically potent.

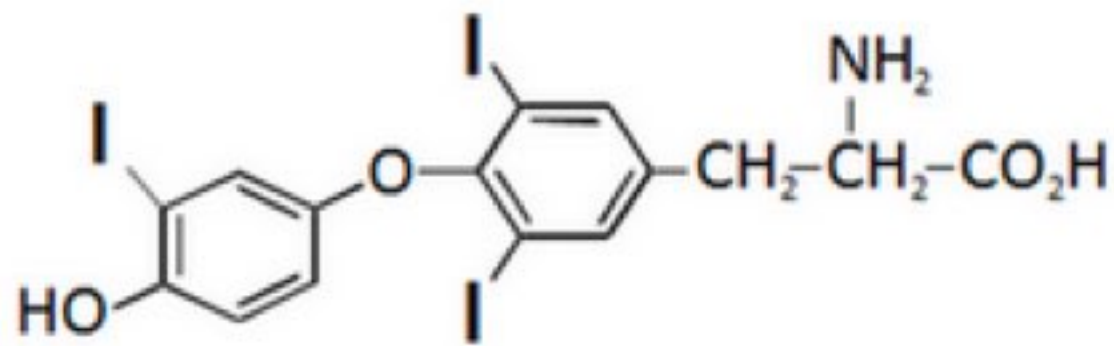
High: Heart Yin xu, Heart Fire, Heat in the Heart,
Yang Rising
Grave's disease, hyperthyroidism

Low: Heart Qi xu, Spleen Qi xu, Heart Yang xu,
Spleen Yang xu.
Hashimoto's disease, thyroiditis, liver disease,
kidney disease

Ideal 4.5-6.0



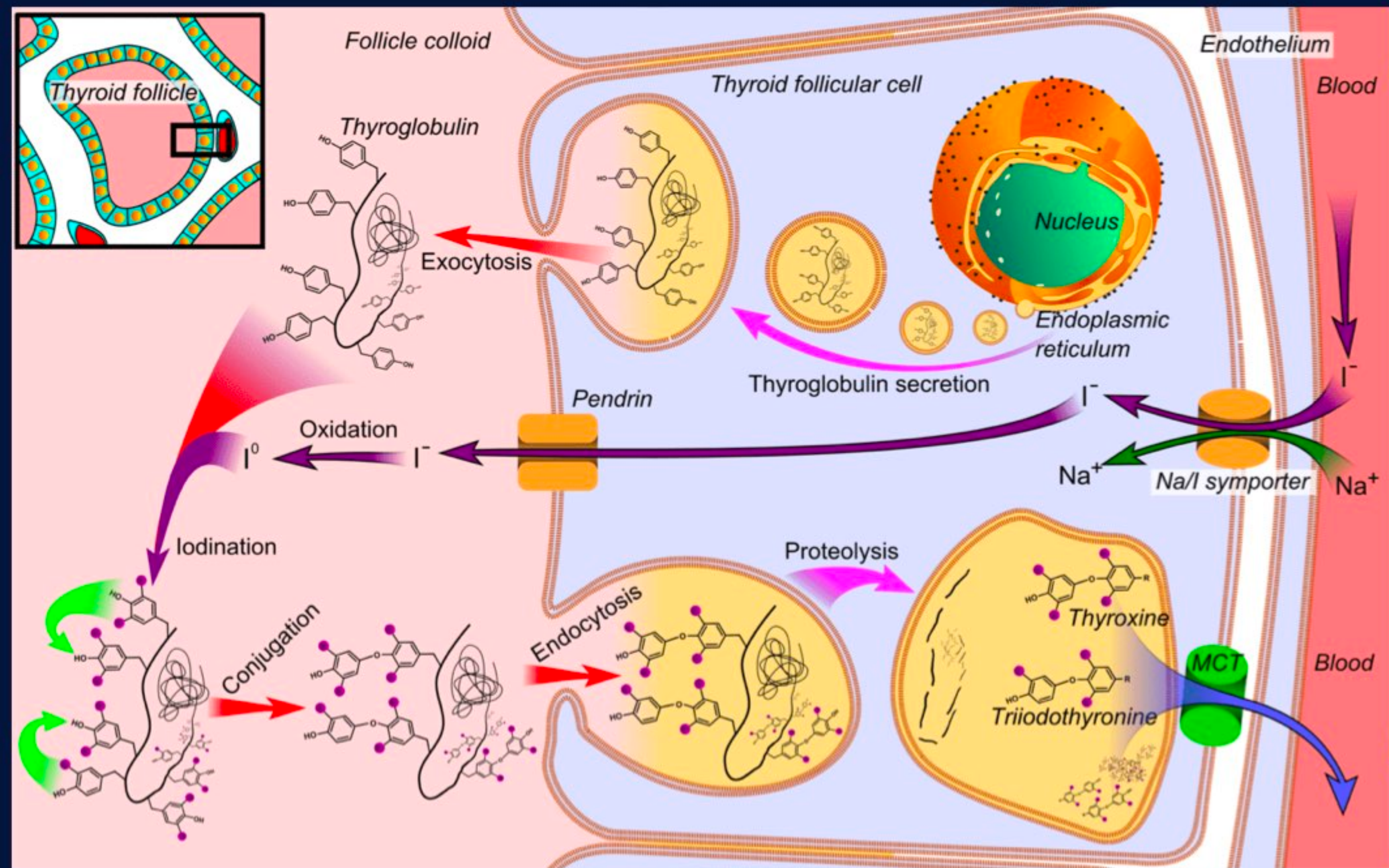
L-Thyroxine (T₄)

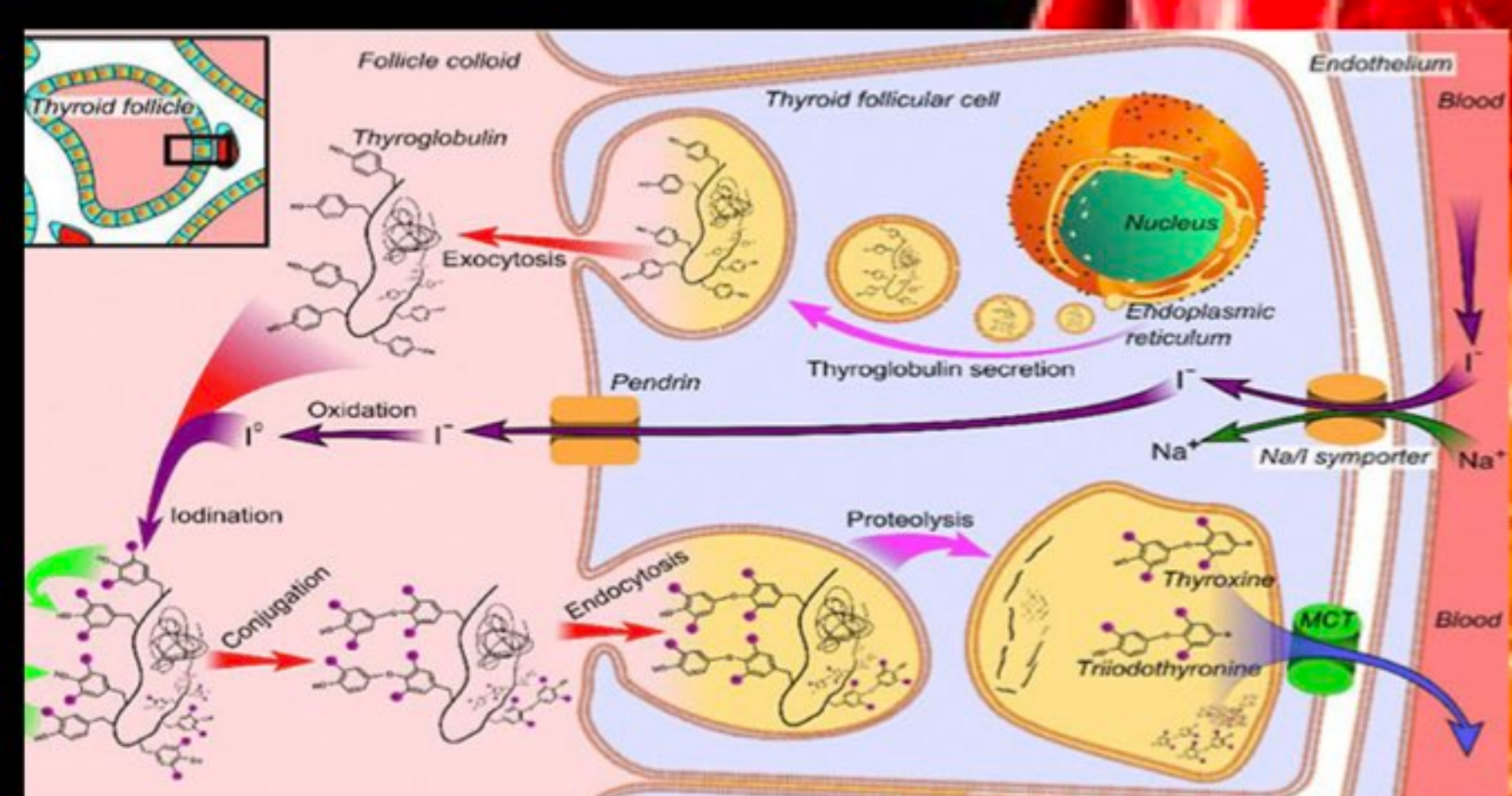


3,5,3'-Triiodo-L-thyronine (T₃)

T₃ (Tri-iodo-L-thyronine) is made up of tyrosine and 3 molecules of iodine

Thyroid Hormone Production





Thyroid Peroxidase is an enzyme required for thyroid hormone production. It is made in the thyroid gland.

Lymphocytes entering the thyroid gland prompt the production of antibodies.

27% with PCOS have either elevated TPO or Tg antibodies

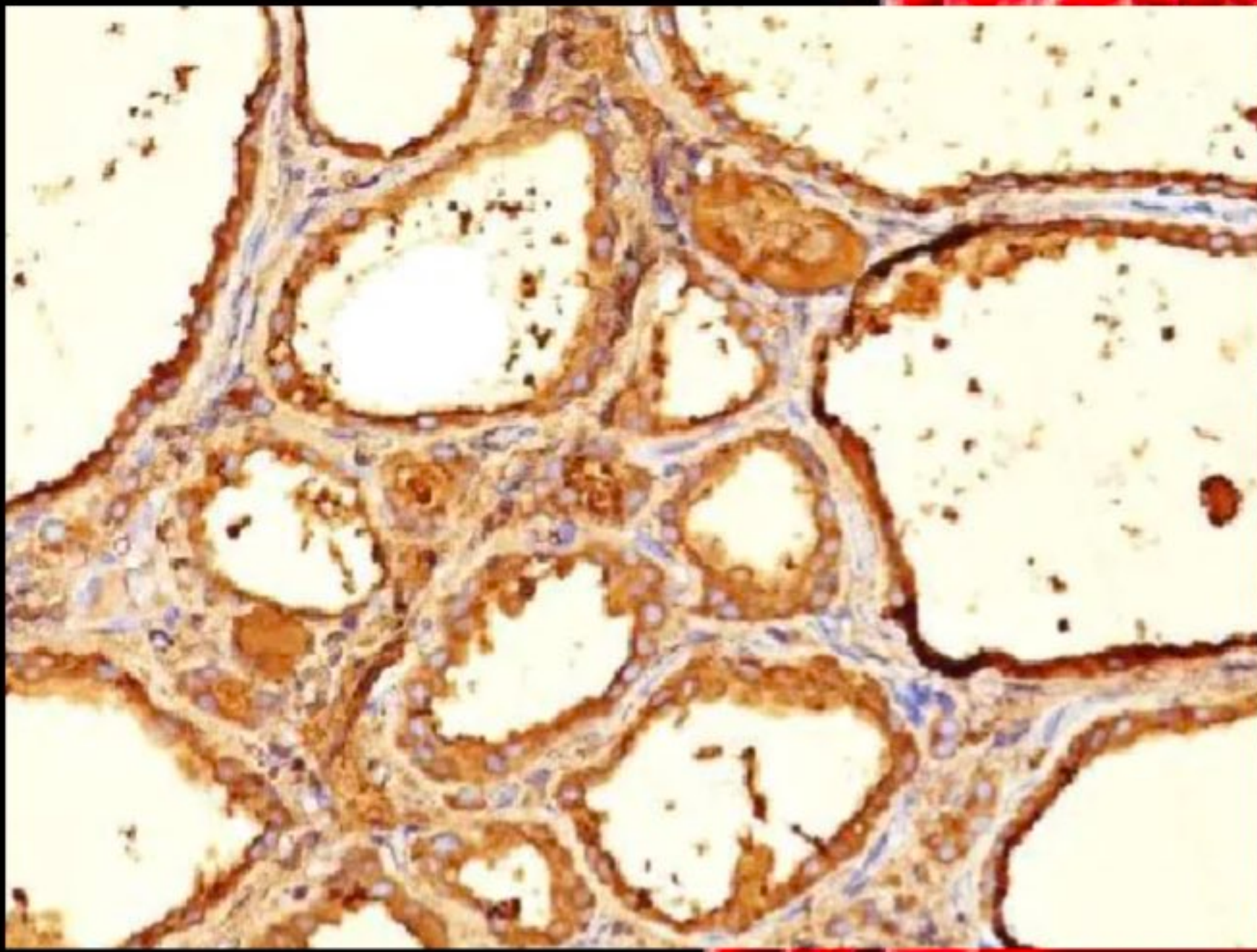
High: Shao Yin imbalance, Yang xu, Qi Stagnation, Blood xu.

Hashimoto's, Grave's, Lupus, Sjogren's, PCOS

Ideal <30

TPOAB

Thyroid Peroxidase Antibodies



TgAb

Thyroglobulin Antibodies

Thyroglobulin is a protein made in the thyroid gland.

Provides the site for the formation of thyroxine T₄ and triiodothyronine T₃.

Requires the thyroid peroxidase TPO enzyme to perform its function

27% with PCOS have either elevated TPO or Tg antibodies

High: Shao Yin imbalance, Yang xu, Qi Stagnation, Blood xu.

Hashimoto's, Grave's, Lupus, Sjogren's, PCOS

Ideal <30



TRAb

TSH receptor antibodies

TSH receptor antibodies stimulate the production of thyroid hormone

High: Qi Stagnation, Blood Stasis, Heart Qi Stagnation, Heart Qi xu and Liver Yang rising

autoimmune hyperthyroidism – Graves' disease, dysbiosis, heavy metals, stress

Ideal <1.0



Related Blood Markers



Sodium

atomic number

11

atomic weight

22.98976928

symbol

Na

acid-base properties of higher-valence oxides

●

electron configuration

[Ne]3s¹

crystal structure

☐

physical state at 20 °C (68 °F)

—

name

sodium

☐ Alkali metals

— Solid

☐ Body-centred cubic

● Strongly basic



Sodium

- Most abundant electrolyte in the blood
- Levels are regulated by aldosterone
- Active transport of various compounds into cells
- Levels are regulated by Renin-angiotensin-aldosterone system
- Ideal 140-144



SHBG

Sex hormone-binding globulin

SHBG (sex hormone-binding globulin) is a protein made in the liver that tightly binds to oestrogen, testosterone and dihydrotestosterone and carries them in the blood

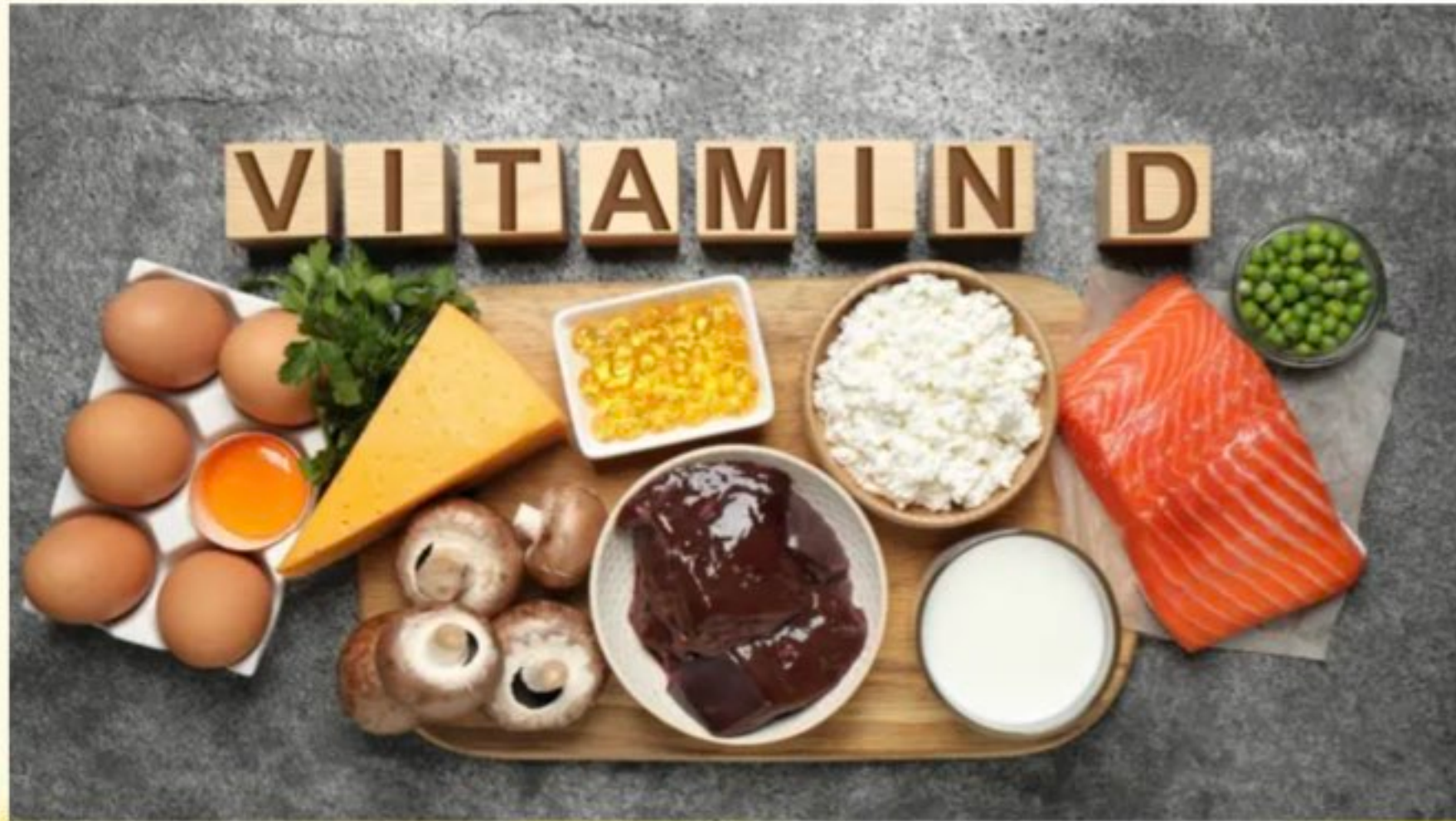
High = Blood Stasis, Qi Stagnation, Blood Heat
Elevated oestrogen, hyperthyroidism, hepatitis

Low = Yang xu, Liver Qi xu, Dampness
Elevated testosterone, insulin resistance, acne, hypothyroidism, adrenal fatigue, fluid retention

Ideal 40-120

SHBG

Sex Hormone Binding Globulin



Vitamin D

Has mostly hormone-like actions, even though it is called a vitamin.

Crucial to bone formation, alongside vitamin K2, magnesium and calcium.

Is formed in the skin from the conversion of cholesterol by UVB radiation.

Important role in immunity

High = Liver Qi Stagnation, Liver Heat
Hypercalcemia, calcification of soft tissue,
vitamin K deficiency

Low = Kidney Qi xu, Yang xu, Wei Qi xu
Osteoporosis, cancer, recurrent respiratory
infections, depression

Ideal >80

Magnesium

atomic number

12

atomic weight

[24.304, 24.307]

symbol

Mg

acid-base properties of higher-valence oxides

●

electron configuration

[Ne]3s²

crystal structure

⬡

physical state at 20 °C (68 °F)

—

name

magnesium

Alkaline-earth metals

Solid

Hexagonal

Strongly basic



>99% of magnesium is in bones and other tissues
<1% of magnesium is found in the blood

Closely linked with calcium, vitamin D and vitamin K.

Needed for over 300 enzyme reactions in the body.

Bone mineralisation, cardiac function, muscle contraction, energy production, blood pressure.

Moves and relaxes Liver Qi by nourishing Liver Yin.
Low magnesium = liver yin xu

Ideal >0.85 mmol/L

Magnesium



Cholesterol

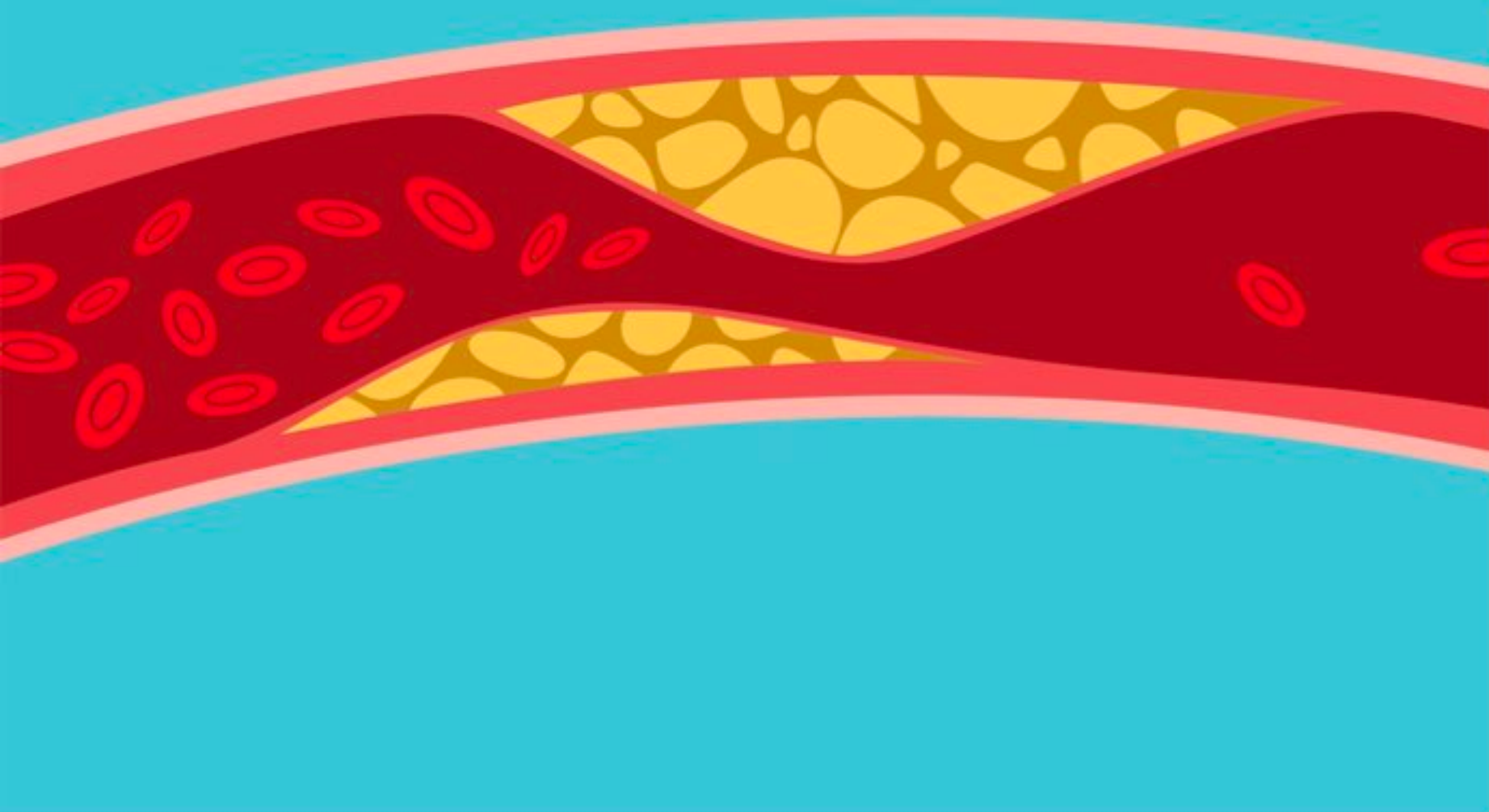
Plays 3 main roles in the body: cell membrane, precursor to hormone synthesis, precursor to bile acid production.

When elevated, is considered to be a significant marker for risk of cardiovascular disease ** (controversial due to numerous confounding factors)

High = Spleen Yang xu, Kidney Yang xu, Phlegm, Dampness, Qi Stagnation, Food Stagnation, Inflammation, vitamin D deficiency, adrenal exhaustion, reproductive hormone deficiency, obesity

Low = Dryness, Yin xu, Liver Yin xu, Liver Qi xu, Impaired Liver function, heavy metal toxicity, pesticide exposure

Ideal = 4.5-6.0 mmol/L



Triglycerides

Triglycerides - overflow of energy consumption, especially fructose.

Rises especially in response to insulin. Key predictor and key abnormality in NAFLD. Big risk of CVD and all cause mortality. The main lipid marker that increases in a fed state

High = Damp, Damp Heat
Uncontrolled blood glucose, hypothyroidism, high GI diet, alcohol intake, carnitine deficiency

Low = Yin xu, Dryness, Blood dryness
Gut dysbiosis, intestinal inflammation

Ideal <1.0 mmol/L



Glucose

Provides fuel for the cells, body's primary and preferred fuel source.

Should be tested in a fasted state

Absorbed from dietary intake, can also be made via gluconeogenesis using fat or protein as fuel source.

High = Spleen Qi xu, Impaired Spleen T&T, Qi Stagnation, Dampness, Heat and/or Phlegm

Low = Liver Yang Deficiency, Liver Qi Deficiency, Kidney Yang Deficiency, Jing Deficiency or Spleen Qi Deficiency

Ideal 4.3-4.9 mmol/L



Insulin

Produced in pancreatic beta cells

Should be tested after 12 hours of fasting

Insulin transports glucose into cells by making cell membrane permeable to glucose.

Directs liver to store excess glucose as glycogen

Promotes synthesis of fat.

High: Dampness, Phlegm, Heat or Qi Stagnation
Insulin resistance, fructose intolerance, obesity,
Cushing's disease, corticosteroid use

Low (with high glucose): Spleen Yang xu.
Beta cell failure due to diabetes.

Low (with normal glucose): Healthy functioning
Spleen and Liver Qi

Ideal <4mIU/L



Chinese Medicine Theory



Chinese Medicine and the Thyroid

All Primary Channels and many complement channels cross the thyroid and can have an influence

Endocrine organ with wide ranging symptoms affecting many organ and channel systems:

- Blood xu, Blood heat, Blood stasis
- Yin xu, phlegm, dampness
- Qi xu, Qi stagnation
- Lingering pathogens

Chinese Medicine and the Thyroid

Stress affects the body

- We can hold emotions in latency to a point and then pathology can reach the thyroid
 - GB21 - neck pain, headaches, carrying the “weight of the world”
 - St5 - tooth grinding, TMJ
 - Kd27, Ren17, Ren22 - emotional stuckiness, things to “get off our chest” “speaking up”

Chinese Medicine and the Thyroid

Depletion of Vital Resources

- Disease in the thyroid often reflects a state of depleted resources
- Pathology - emotional, lingering entity of some sort, happenings of life, stress, taxation
- Body has been unable to hold pathology in latency using Marrow, Blood or Jin Fluids. Now it's up to Ye fluids to try to keep pathology from going deeper (where Qi and ultimately Yang are at risk).
- Reflective of pathology being held in divergent channels (4th confluence)
- Building and supporting Ye fluids will help to shift latent pathology up and out

Chinese Medicine and the Thyroid

Heart is in charge

- Many links between Heart and thyroid
- Palpitations common pattern with hyper and hypo thyroid

Chinese Medicine and the Thyroid

4th Divergent Confluence: Small Intestine/Heart

- Ye Thick Fluid mobilised and eventually depleted leading to Wind / Heat
- Body has been unable to hold pathology in latency using Marrow, Blood or Jin Fluids. Now it's up to Ye fluids to try to keep pathology from going deeper.
- Zeng Ye Tang (Increase Fluids Decoction)
 - Xuan shen
 - Mai men dong
 - Sheng di
- Sheng Mai San
 - Ren Shen
 - Mai men dong
 - Wu wei zi



Hypothyroidism



Symptoms of Hypothyroid

- Fatigue
- Feels cold
- Constipation
- Dry skin
- Weight gain
- Puffy face
- Fluid retention
- Hoarse voice
- Muscle weakness
- Heavy menstrual bleeding
- Pain/stiffness/swelling in joints
- Thinning hair, esp outer eyebrow
- Brittle nails
- Depression
- Slow HR
- Impaired memory
- Heart palpitations
- **Maybe none of these symptoms**

Treatment of Hypothyroid

Gui Pi Tang +

Ren Shen

Huang Qi

Bai Zhu

Zhi gan cao

Dang gui

Long yan rou

Suan zao ren

Fu ling

Yuan zhi

Mu Xiang

Sheng jiang

Da zao

Tu si zi

Rou gui

Shu di

Bai he

Chinese Medicine and the Thyroid

2nd Trajectory of Chong Mai

- KD 22 - KD 27, Ren 22, Ren 23, ST 1
- “Great Luo of Shaoyin”
- Connects Kidney and Heart
- Heart Blood Stasis
- Chest pain & tightness
- Blood deficiency, pale face
- Running piglet qi
- Absence of joy or resistance to allowing the unfolding of life.
- resistance to carrying out the destiny by the Heart
- Representative Treatment: SP 4, KD 24, LR 14, PC 6

Chinese Medicine and the Thyroid

4th Divergent Confluence: Small Intestine/Heart

- Ye Thick Fluid mobilised and eventually depleted leading to Wind / Heat
- Body has been unable to hold pathology in latency using Marrow, Blood or Jin Fluids. Now it's up to Ye fluids to try to keep pathology from going deeper.
- Zeng Ye Tang (Increase Fluids Decoction)
 - Xuan shen
 - Mai men dong
 - Sheng di
- Sheng Mai San
 - Ren Shen
 - Mai men dong
 - Wu wei zi

Chinese Medicine and the Thyroid

4th Divergent Confluence: Small Intestine/Heart

Small Intestine

- SI10, HT1
- GB22
- REN17
- REN4
- ST12
- SI18
- BL1

Heart

- HT1
- GB22
- REN 17
- REN22
- REN23
- BL1
- REN4



Hyperthyroidism



Symptoms of Hyperthyroid

- Feels hot
- Weight loss
- Hair loss
- Large appetite
- Diarrhea
- Sweating
- Insomnia
- Bulging/sore eyes
- Fast HR
- Heart palpitations
- **Maybe none of these symptoms**

Thyroid Treatment Strategies

Xia Ku Cao: Biological Effects

- anti-inflammatory
- anti-tumor
- antibacterial
- antiviral
- immune regulation
- antihypertensive
- hypoglycemic
- lipid-lowering
- antioxidant
- free radical scavenging
- liver protection
- sedative
- hypnotic

Thyroid Treatment Strategies

Xia Ku Cao: Chinese Medicine

- Clear Heat, Drain Fire
 - Liver, Gall Bladder
 - Bitter, pungent
 - Cold
 - Clears liver fire, brightens eyes
 - Clears heat, dissipates nodules
- Indicated for:**
- Redness, swelling, pain of the eyes
 - Neck lumps, swollen glands, breast inflammation

Thyroid Treatment Strategies

Tian Wang Bu Xin Dan: Chinese Medicine

- “Emperor of Heaven’s Special Pill to Tonify the Heart”
 - Heart Blood and Kidney/Liver Yin xu
 - Heart Kidney not communicating
- Red tongue + scant coat
- Thin, rapid pulse

Thyroid Treatment Strategies

Tian Wang Bu Xin Dan: Chinese Medicine

- Sheng di 120
- Ren Shen 15
- Tian men dong 30
- Mai dong 30
- Dang gui 30
- Dan Shen 15
- Xuan shen 15
- Yuan zhi 15
- Wu wei zi 30
- Bai zi ren 30
- Suan zao ren 30
- Fu ling 15
- Jie Geng 15
- (Zhu sha 15)
- Clear heat
- Nourish yin/
blood
- Calm Shen
- Clear damp/
phlegm

Thyroid Treatment Strategies

Chai Hu Jia Long Gu Mu Li Tang: Chinese Medicine

- Chai hu
- Gui zhi
- Da huang
- Mu li
- Dai zhe shi
- Huang Qin
- Long gu
- Zhi ban xia
- Fu ling
- Ren Shen
- Sheng jiang
- Da zao



Thyroid Nodules



Thyroid Nodules

Nodules result from the buildup of waste tissue in the thyroid gland over time.

3 times more common in women than in men.

Approx 1 in 20 nodules has the potential to become

cancerous. Majority are benign.

Problematic nodules are:

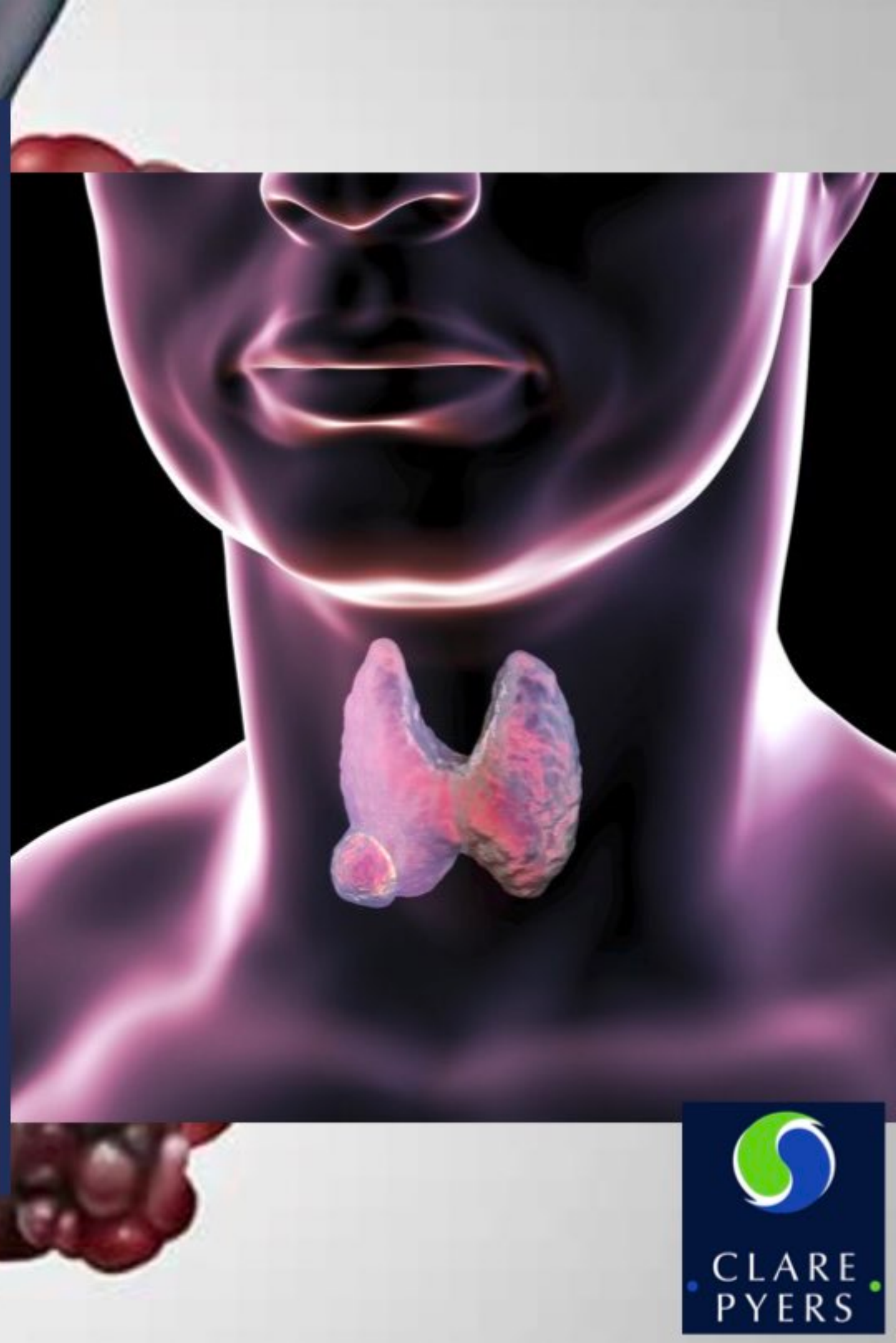
- >1cm
- Calcified
- Quick growing
- Lots of blood vessels

Thyroid Nodules

Branch patterns

- Qi stagnation
- Blood stasis
- Phlegm
- Cold

Always need to identify underlying disharmony and support that in your root treatments.



Thyroid Nodules

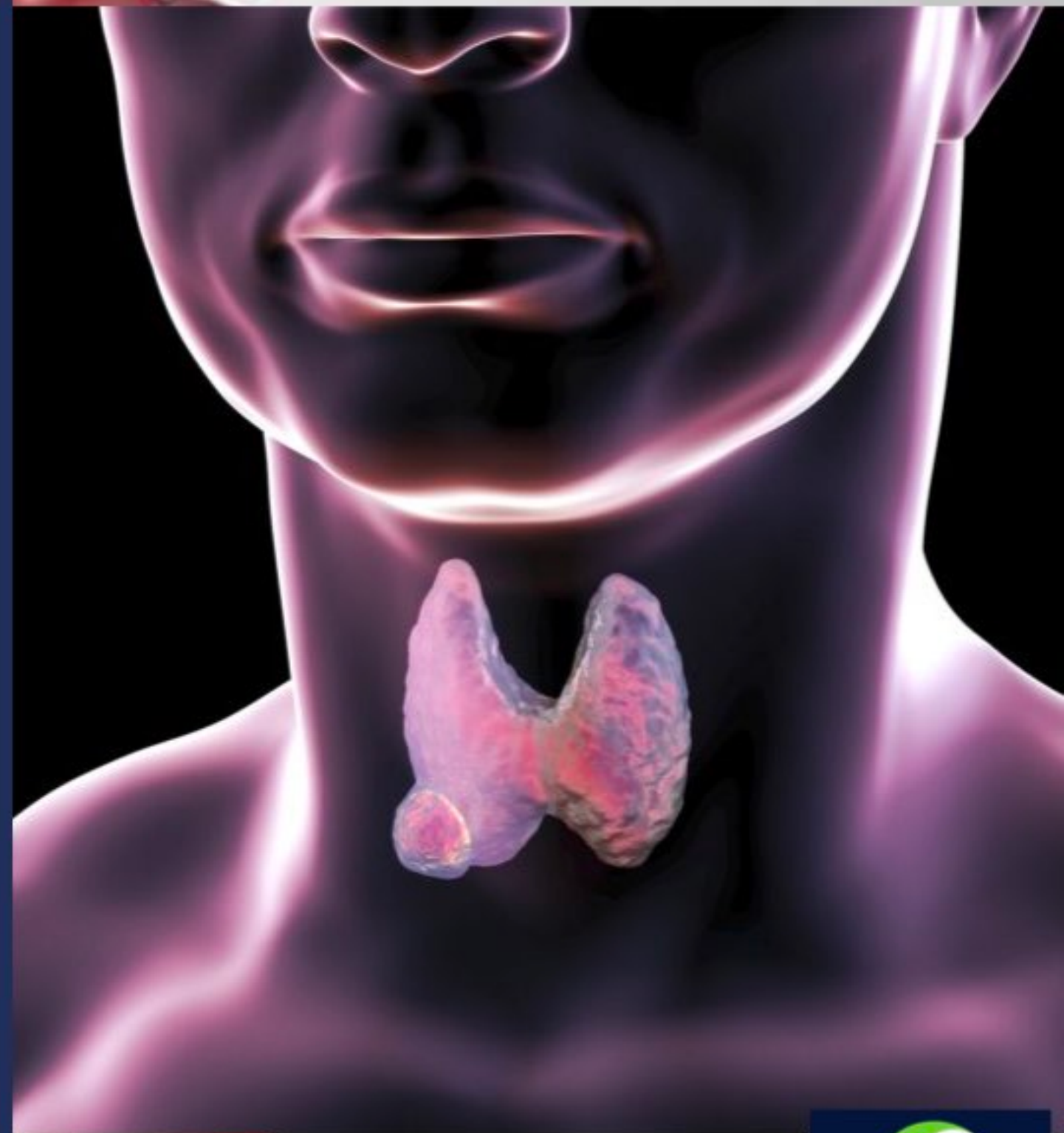
Ban Xia hou po tang

Hai zao yu hu tang

Er chen tang

Xue fu Zhu yu tang

Xing Qi Hua Ying Tang



Thyroid Nodules

Xing Qi Hua Ying Tang

Huang Qi (30g)

Bai Shao (15g)

Chai hu (9g)

Zhi shi (15g)

Chuan xiong (10g)

Chen Pi (10g)

Wide wood incense (9g)

Qing pi (9g)

Xia ku cao (15g)

Zhe bei mu (12g)

Gua lou (15g)

Duan mu li (30g)

Zhi gan cao (6g)

Hai Zao Yu Hu Tang

Hai zao

Kun bu

Zhe bei mu

Zhi ban xia

Chen Pi

Lian ciao

Dang gui

Chuan xiong

Du hu

Gan Cao

Thyroid Nodules

Xue fu Zhu yu tang

Tao Ren

Hong Hua

Chuan xiong

Chi Shao

Dang gui

Sheng di

Niu xi

Chai hu

Jie Geng

Zhi Ke

Gan Cao

Ban Xia xie xin tang

Ban Xia

Hou po

Fu ling

Sheng jiang

Zi su ye

Er chen tang

Ban Xia

Ju hong/chen pi

Fu ling

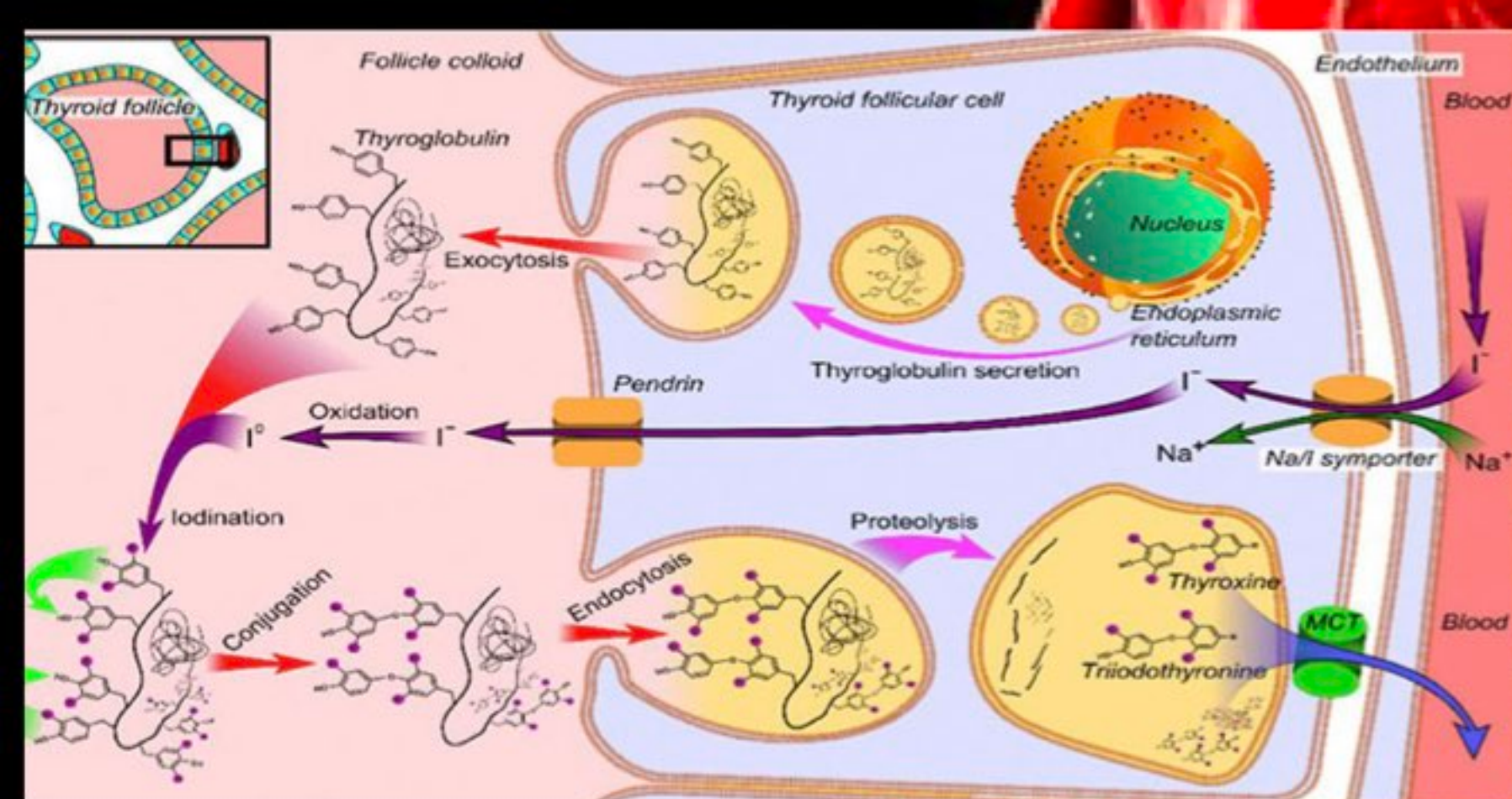
Zhi gan cao





Autoimmune Thyroid Conditions





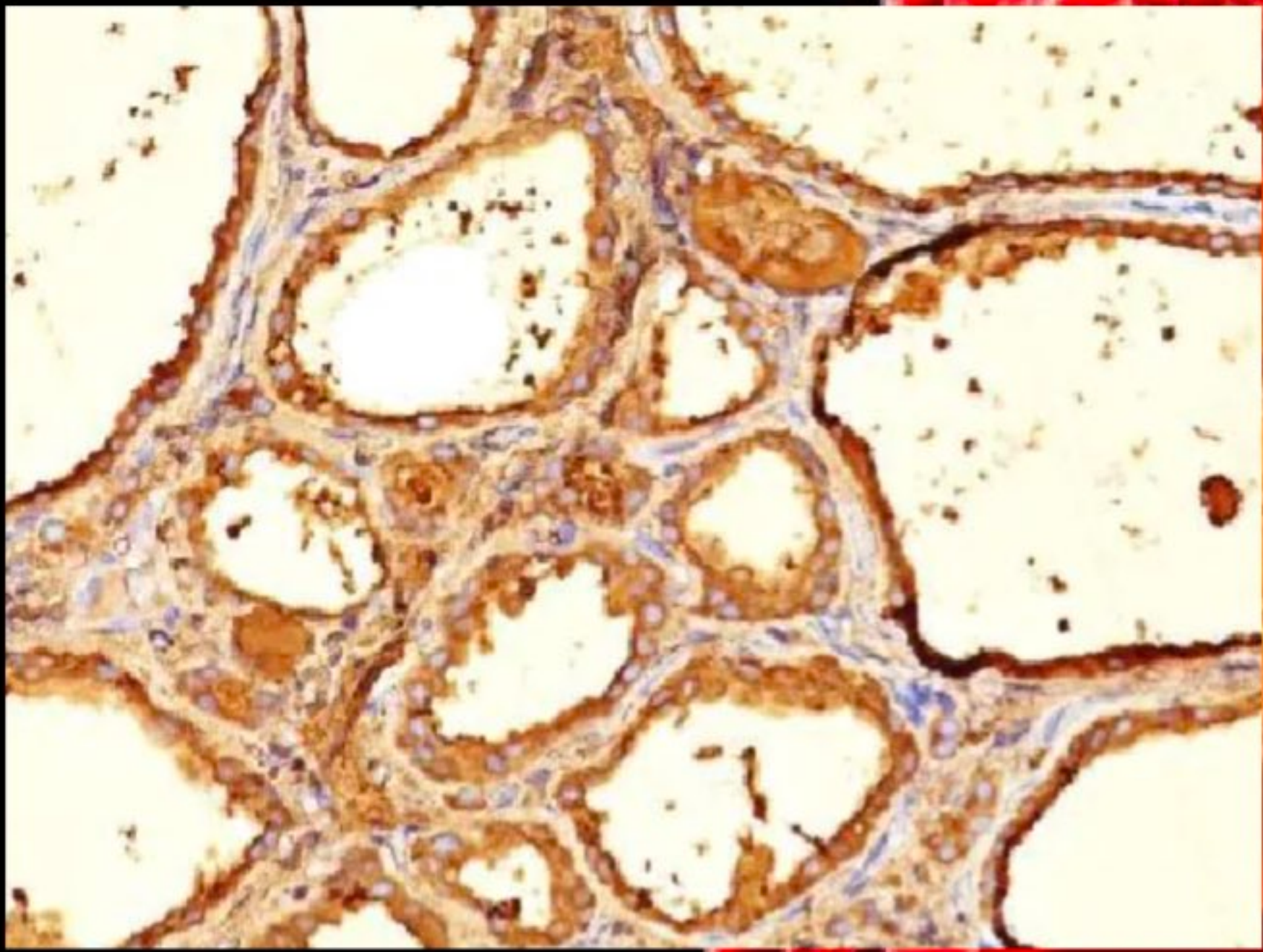
TPOAB

Thyroid Peroxidase Antibodies

Thyroid Peroxidase is an enzyme required for thyroid hormone production. It is made in the thyroid gland.

High: Shao Yin imbalance, Yang xu, Qi Stagnation, Blood xu.
Hashimoto's, Grave's, Lupus, Sjogren's, PCOS

Ideal <30



TgAb

Thyroglobulin Antibodies

Thyroglobulin is a protein made in the thyroid gland.

Provides the site for the formation of thyroxine T₄ and triiodothyronine T₃.

High: Shao Yin imbalance, Yang xu, Qi Stagnation, Blood xu.

Hashimoto's, Grave's, Lupus, Sjogren's, PCOS

Ideal <30



TRAb

TSH receptor antibodies

TSH receptor antibodies stimulate the production of thyroid hormone

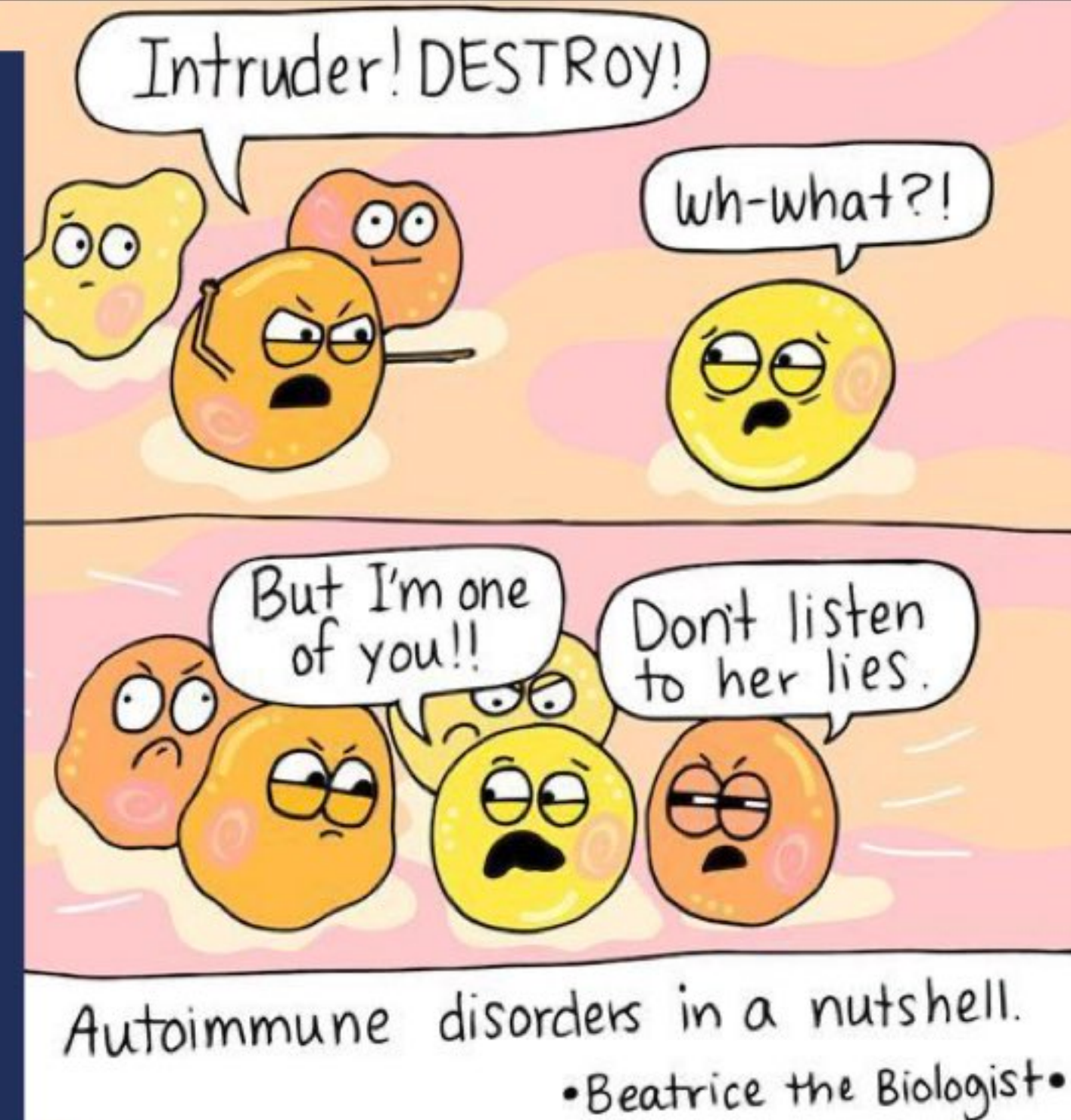
High: Qi Stagnation, Blood Stasis, Heart Qi Stagnation, Heart Qi xu and Liver Yang rising

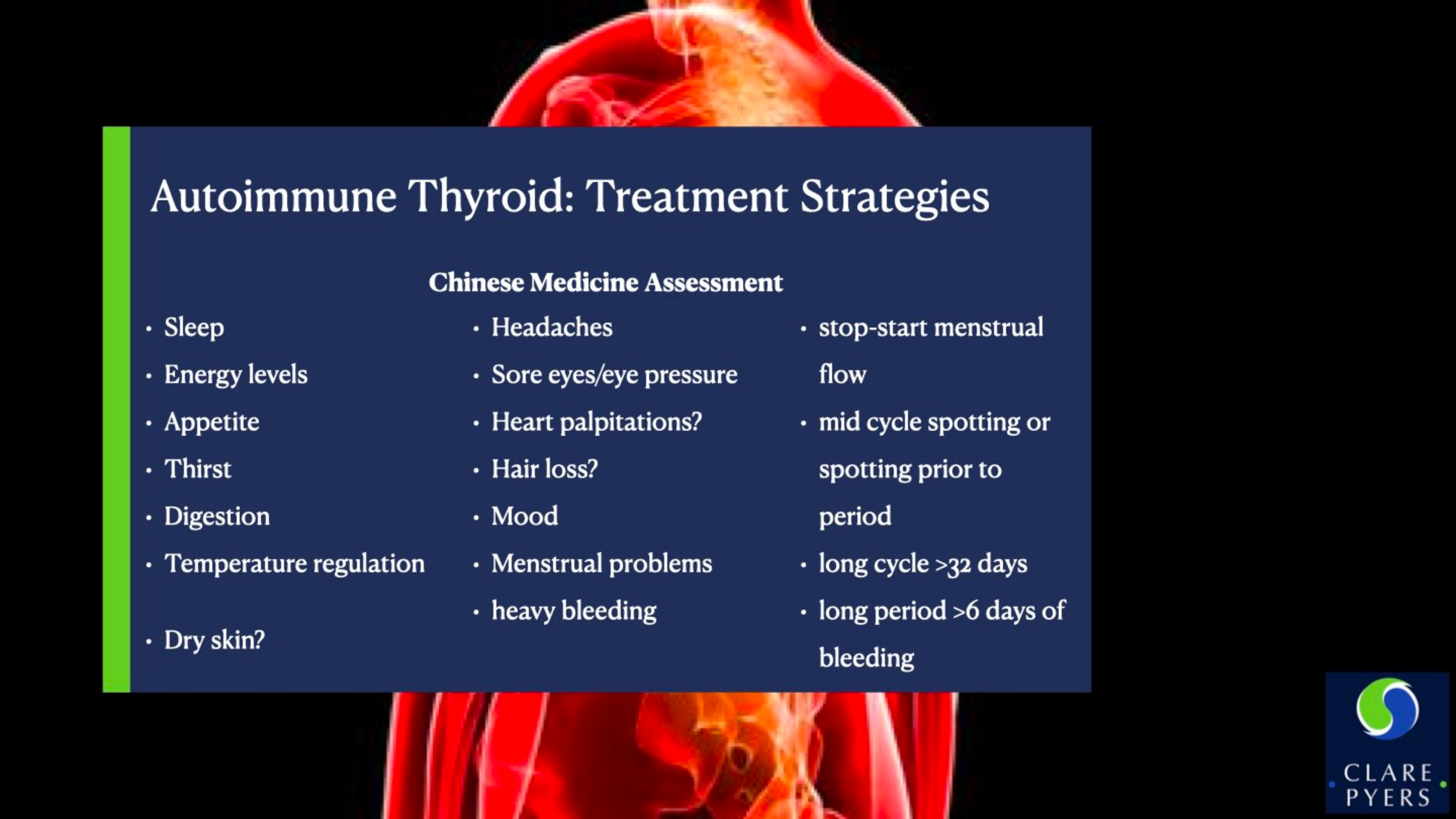
autoimmune hyperthyroidism – Graves' disease, dysbiosis, heavy metals, stress

Ideal <1.0

Autoimmune Thyroid: Treatment Strategies

- told they need to be on medication for the rest of their life
- some of them this is the case
- biggest barrier is patient compliance - required long term
- diet is number one priority, giving the right advice is crucial to clinical success
- ensuring iodine status is optimal
- support Kidneys and Heart
- support middle heater/digestion to optimise protein metabolism

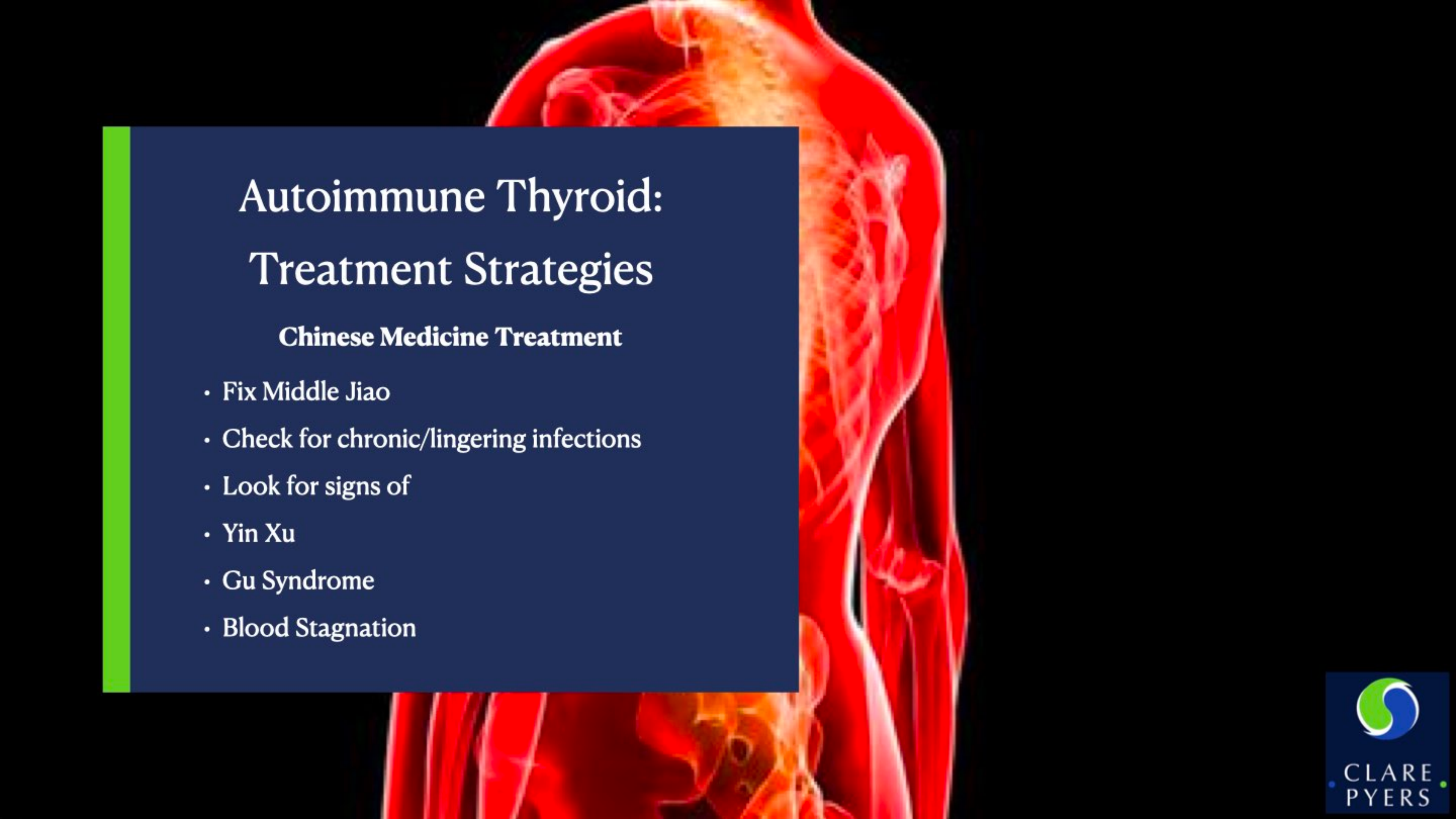




Autoimmune Thyroid: Treatment Strategies

Chinese Medicine Assessment

- Sleep
- Energy levels
- Appetite
- Thirst
- Digestion
- Temperature regulation
- Dry skin?
- Headaches
- Sore eyes/eye pressure
- Heart palpitations?
- Hair loss?
- Mood
- Menstrual problems
- heavy bleeding
- stop-start menstrual flow
- mid cycle spotting or spotting prior to period
- long cycle >32 days
- long period >6 days of bleeding



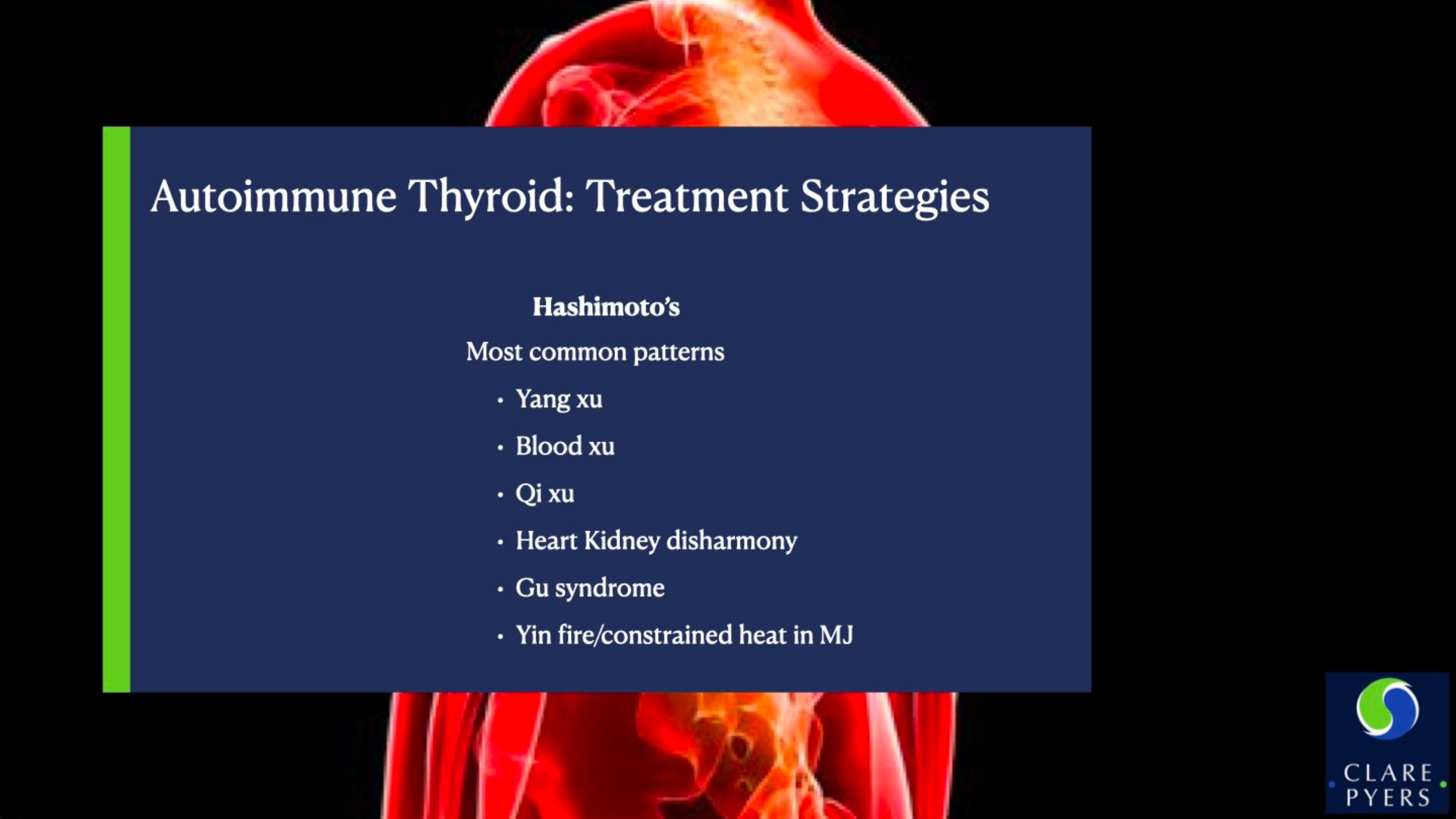
Autoimmune Thyroid: Treatment Strategies

Chinese Medicine Treatment

- Fix Middle Jiao
- Check for chronic/lingering infections
- Look for signs of
- Yin Xu
- Gu Syndrome
- Blood Stagnation



CLARE
PYERS



Autoimmune Thyroid: Treatment Strategies

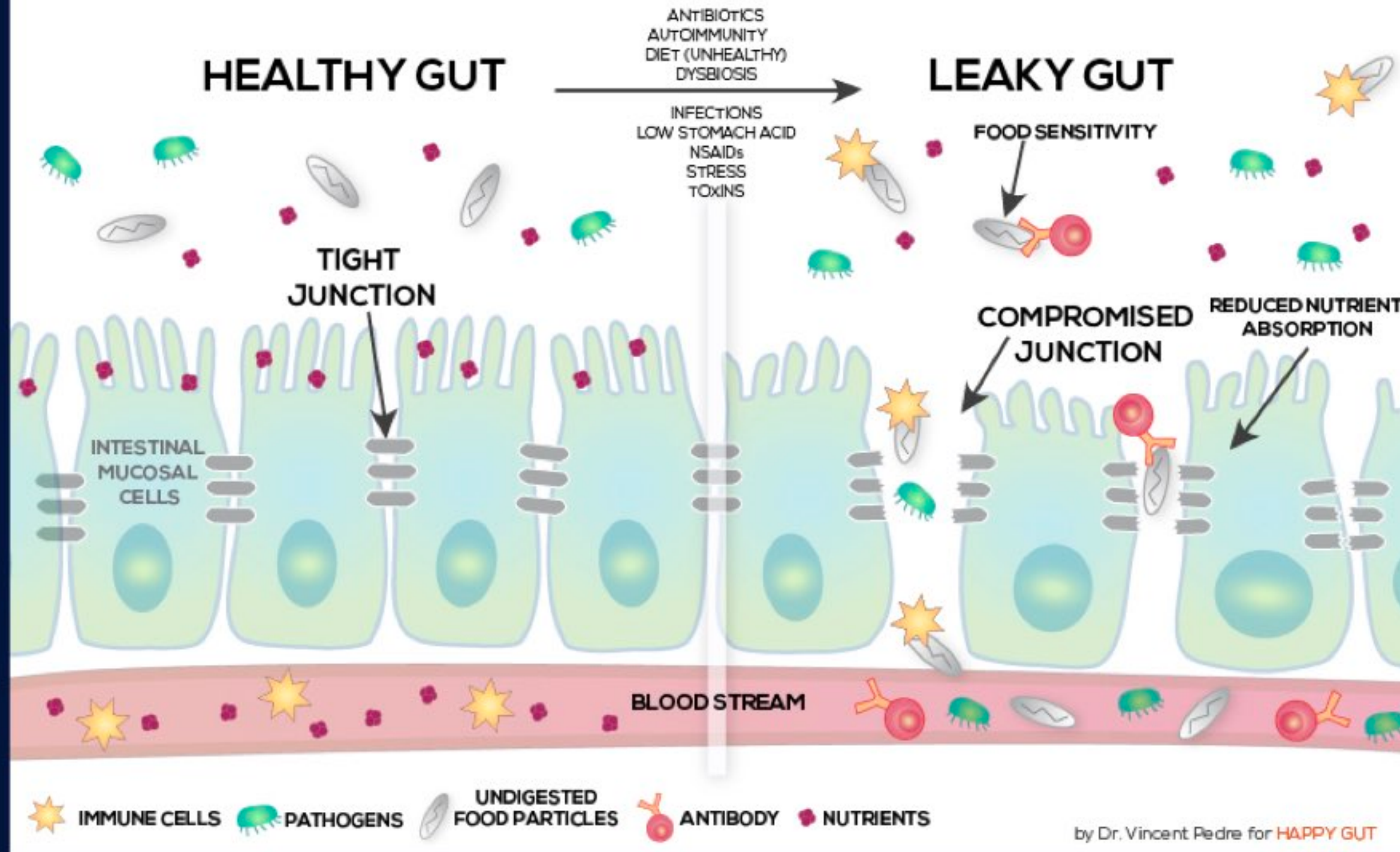
Hashimoto's

Most common patterns

- Yang xu
- Blood xu
- Qi xu
- Heart Kidney disharmony
- Gu syndrome
- Yin fire/constrained heat in MJ

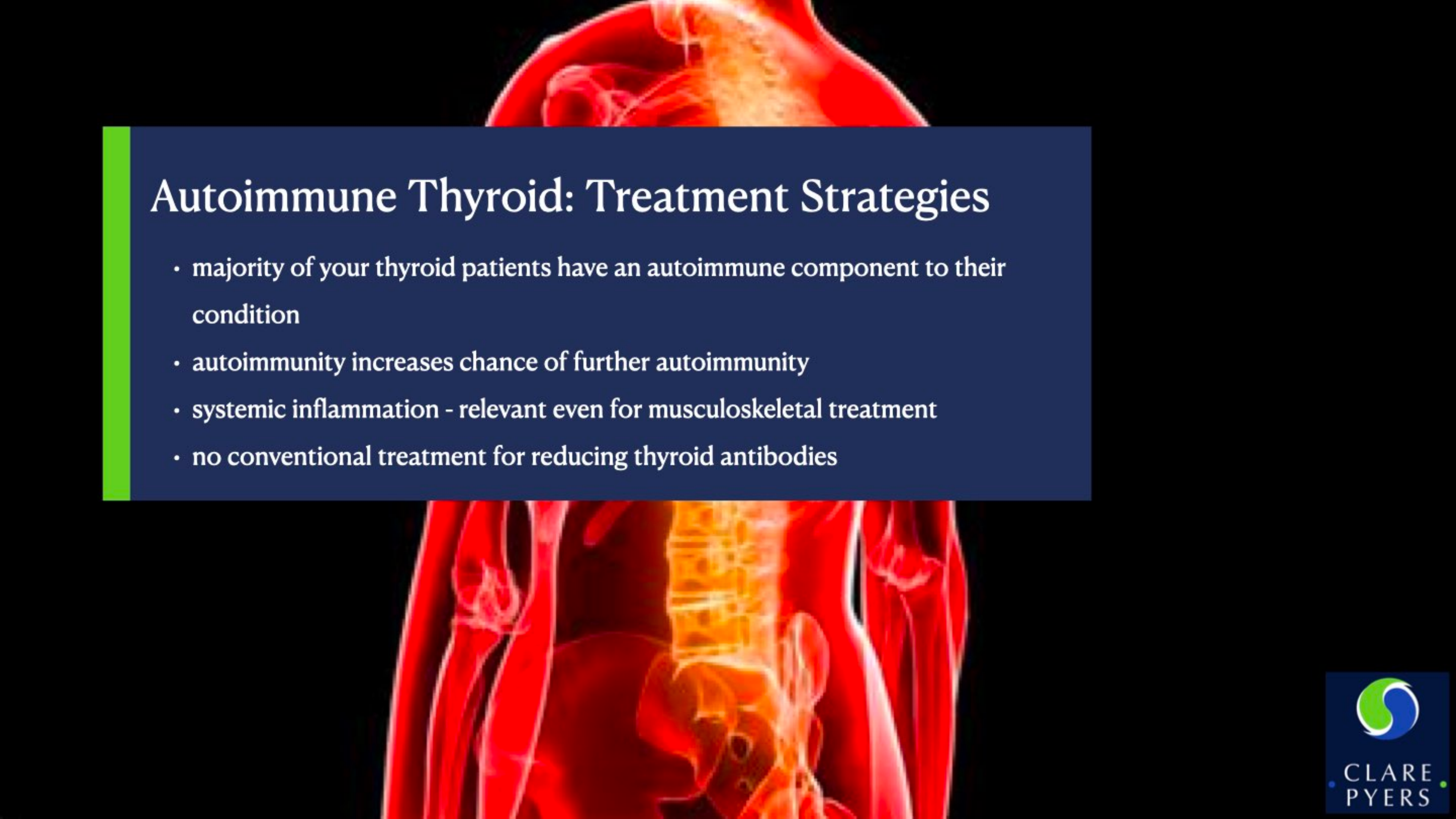
HEALTHY GUT VERSUS LEAKY GUT

A healthy gut works like a cheese cloth, allowing only nutrients through, but keeping larger food particles and pathogenic bacteria, yeast and parasites out. In a leaky gut, the tight junctions are loosened so undigested food particles and pathogens can get through and activate the immune system, causing inflammation and food sensitivities.



What is
happening with
leaky gut?

Reflect on the
role of Small
Intestine
“separating
turbid and clear”



Autoimmune Thyroid: Treatment Strategies

- majority of your thyroid patients have an autoimmune component to their condition
- autoimmunity increases chance of further autoimmunity
- systemic inflammation - relevant even for musculoskeletal treatment
- no conventional treatment for reducing thyroid antibodies



Vitamins and Supplements



Important Nutrients for Thyroid Health: Iron

- Fatigue
- Feeling cold
- Shortness of breath
- Heart palpitations
- Elevated HR
- Dizziness
- Brittle nails
- Pale skin
- Desire to eat strange things, chew on ice



Important Nutrients for Thyroid Health: Vitamin A

- Reduces TSH, increases T₄-T₃ conversion,
- Aromatase inhibitor - metabolism of testosterone into estrogen, increases estrogen production and oestrogen metabolism.
- Deficiency can lead to fibroids and endometriosis
- Increases fertile mucous in women.
- Helps with skin healing, helps with gut integrity

Important Nutrients for Thyroid Health: Vitamin D

- Bone pain
- Muscle weakness
- Ricketts
- Fatigue
- Poor immunity
- Slow wound healing
- Depression
- Hair loss
- Autoimmune disease

Zinc

atomic number

30

atomic weight

65.38

symbol

Zn

acid-base properties of higher-valence oxides



electron configuration

[Ar]3d¹⁰4s²

crystal structure



name

zinc

physical state at 20 °C (68 °F)



 Transition metals	 Solid
 Hexagonal	 Equal relative strength



Zinc



Zinc is required for proper function of the senses, and a deficiency can impair the senses of taste, smell, sight and hearing.

Zinc is needed for sperm and egg development

High = Qi Stagnation, Phlegm, Dampness
Copper deficiency, low HDL, high LDL, cardiac arrhythmias.

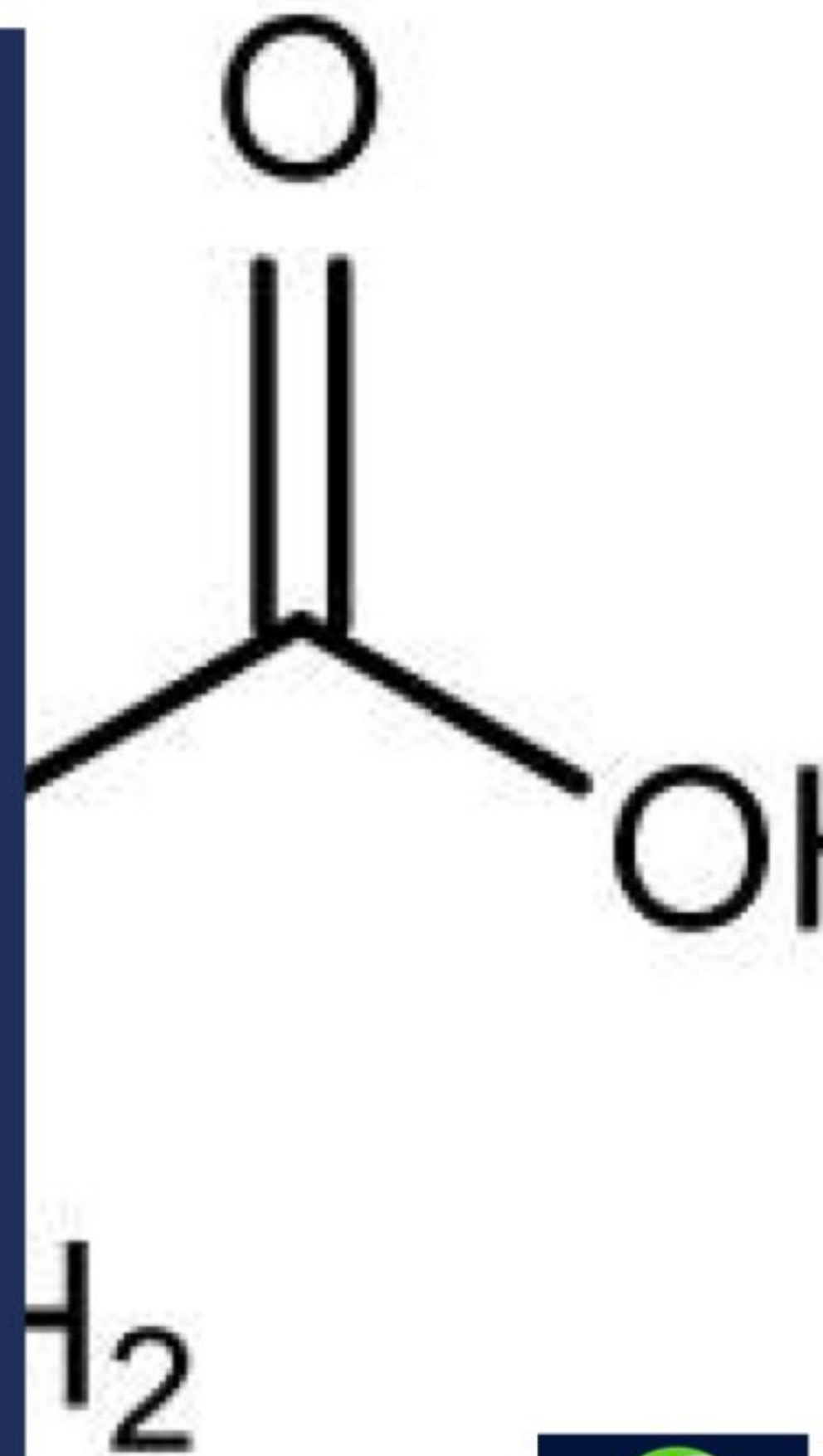
Low = Yin xu, Blood xu, Kidney Qi xu
Infertility, low melanin, sunburn easily, failure to thrive in babies, low appetite

Ideal 15-19 mmol/L

Important Nutrients for Thyroid Health: Tyrosine

Tyrosine – forms part of thyroid hormone (non-essential amino acid)

Phenylalanine is precursor: egg whites, sesame seeds, sunflower seeds, beef, pork, turkey, lamb, chicken, pacific cod, dairy products, soy.



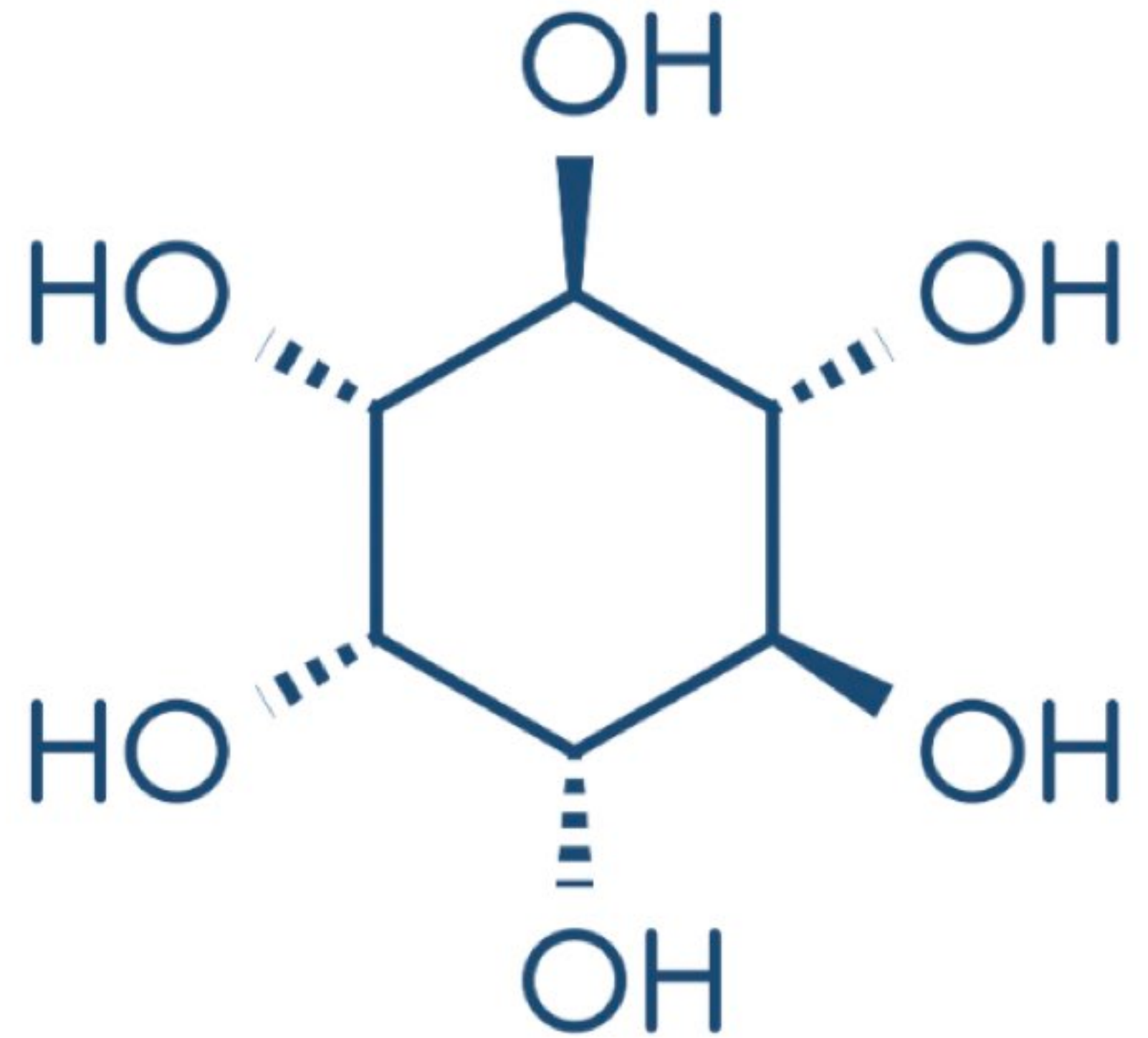
Important Nutrients for Thyroid Health: Iodine

- Heaviest element needed to sustain life in humans
- Concentrates in thyroid tissue, breast tissue, salivary glands, eyes, cervix, gastric mucosa (antioxidant properties)
- Deficiency is common, and a cause of a range of conditions
- Low iodine diet can lead to hyponatremia (low sodium, Kidney Yang Xu, adrenal fatigue)
- Excess iodine can cause problems too



Important Nutrients for Thyroid Health: Inositol

- Metabolism disorders
- PCOS
- Insulin resistance
- Diabetes
- Nodules
- Panic attacks
- High TSH



inositol



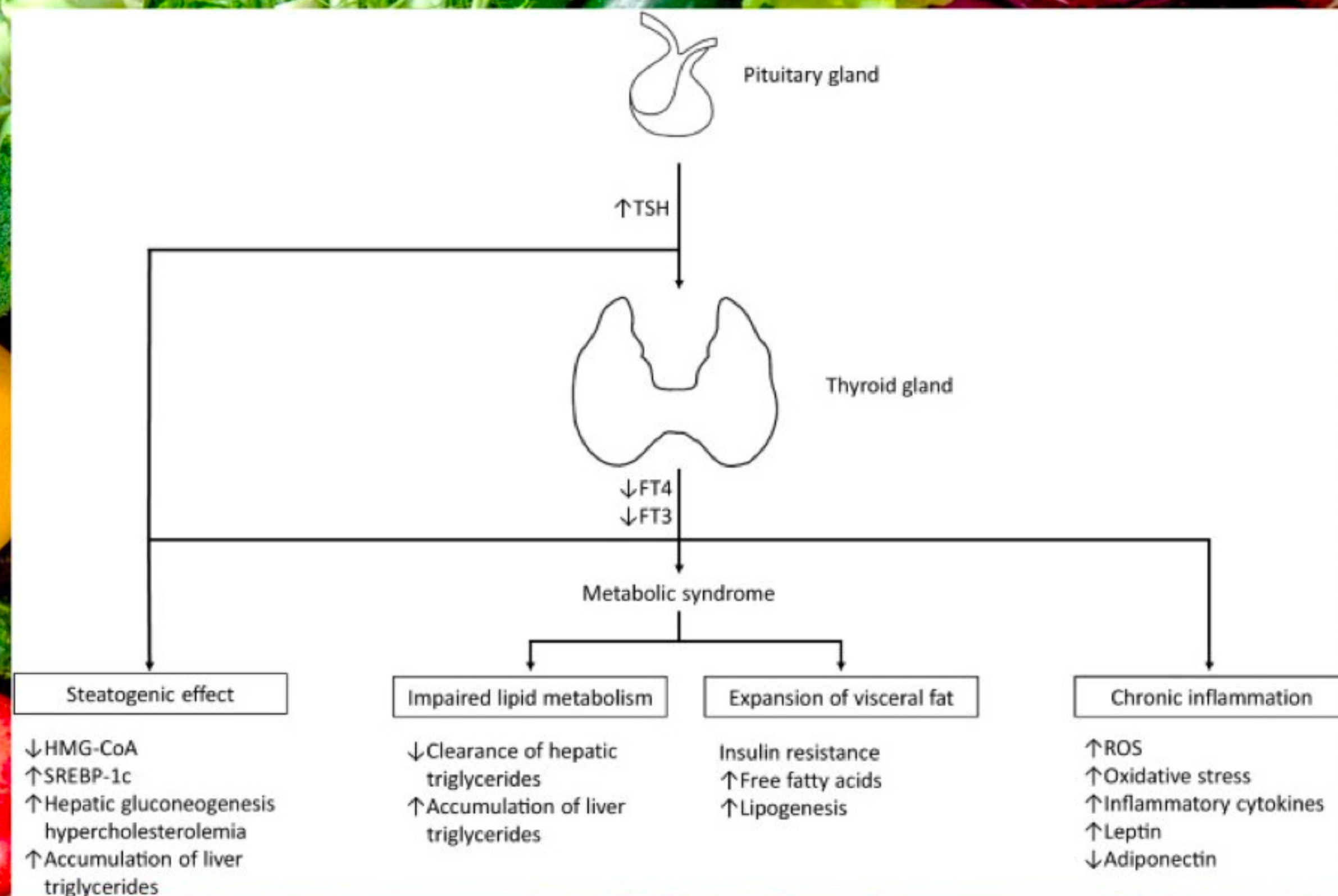
Diet and Thyroid



Diet and Thyroid

- Fasting

- Affects thyroid function via the hypothalamus
- has been shown to reduce T₃ and T₄ levels by suppression of TRH (thyrotropin-releasing-hormone) neurons



Diet and Thyroid

- High fat diet can lower T₄ production
- Carbohydrates are needed to support T₄ and T₃ conversion and cellular uptake
- Low carb diets don't support thyroid function - especially in women.
- "Regular" diet of fat controlled, high carbohydrate and adequate protein
- Selenium: brazil nuts
- Vitamin E: hazelnuts, sunflower seeds
- Supplements containing magnesium, potassium, calcium
- Hyperthyroid: potassium from bananas, coconut water, apricot, potatoes.
- Hypothyroid: tyrosine foods avocado, almonds, bananas, pumpkin seeds, sesame seeds
- Spices to shift stagnation



Diet and Thyroid

Nourish thin and thick fluids, including stomach yin, lung yin, and re-balance the hormonal complement.

- Congee
- Millet porridge
- Oats
- Wet-cooked breakfasts





Thyroid Comorbidities



Thyroid Comorbidities

- Thyroid hormone is an important mediator of gene transcription
- Thyroid function and thyroid hormone levels play a crucial role in the health of the brain, retina, inner ear, skeletal muscle, lung, liver, heart and kidney.
- T₃ receptors in these tissues play a crucial role in gene transcription and DNA mutations can be magnified if thyroid hormone status is not optimal.
- This action of T₃ on gene regulation is also mediated by retinoic acid X receptor - so if your vitamin A status isn't good, you could be in trouble EVEN IF your thyroid hormone levels are ok.
- What does this mean from a Chinese med point of view? We need adequate levels of Blood (Sp, Lr, Ht) and Qi (Lu, Ki, Sp) along with a nourishing diet containing vitamin A to maintain Jing expression.



Thyroid Comorbidities

- Thyroid problems more common in women
 - Women have problems with their Blood
- Thyroid problems lead to increased risk of
 - Alzheimer's disease
 - Endometrial cancer
 - Infertility
 - Breast cancer
 - Uterine fibroids
 - Diabetes

Understanding
Thyroid disorders
is the key to
helping many of
your patients



Learn and grow with me



2023 Courses:

2 day Treating Thyroid Masterclass. Live: May 13&14 2023
OR purchase Recording from 2022.

3hr Interpreting Pathology Tests - Global Branches
(recording). [Purchase here](#)

3 hour Yin and Yang of Supplements seminar - Global
Branches (recording). [Purchase here.](#)

3 Day Interpreting Blood Test Masterclass - Live: March 31-
April 2nd 2023. [Purchase here.](#)

<https://clarepyers.mn.co>

<https://www.facebook.com/groups/597472967121203>