



April, 4th
9:30am

WVAND

THYROID, MINERALS & STRESS

Kelsey Sniegowski

Registered Dietitian

LEARNING OBJECTIVES

- | |
|--|
| • Better understanding of the thyroid hormones |
| • Why blood labs alone aren't enough |
| • Minerals that impact the thyroid |
| • Factors outside of nutrition that impact the thyroid |
| • What interventions can improve symptoms |

HI! NICE TO MEET YOU!

Kelsey Sniegowski
RD, LD

Kansas State University

Studied at KU

Functional Practitioner Training

Owned a Fitness Studio

Own a Virtual Practice for 5+ years

Dietitian for almost 10 years



WHAT ARE THE MAIN THYROID HORMONES?



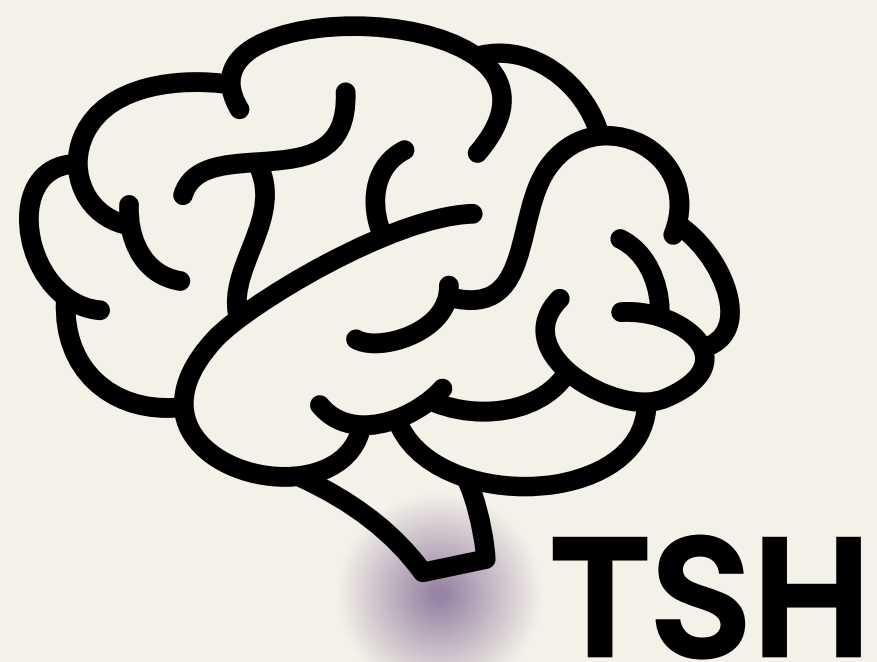
TSH



Free T4



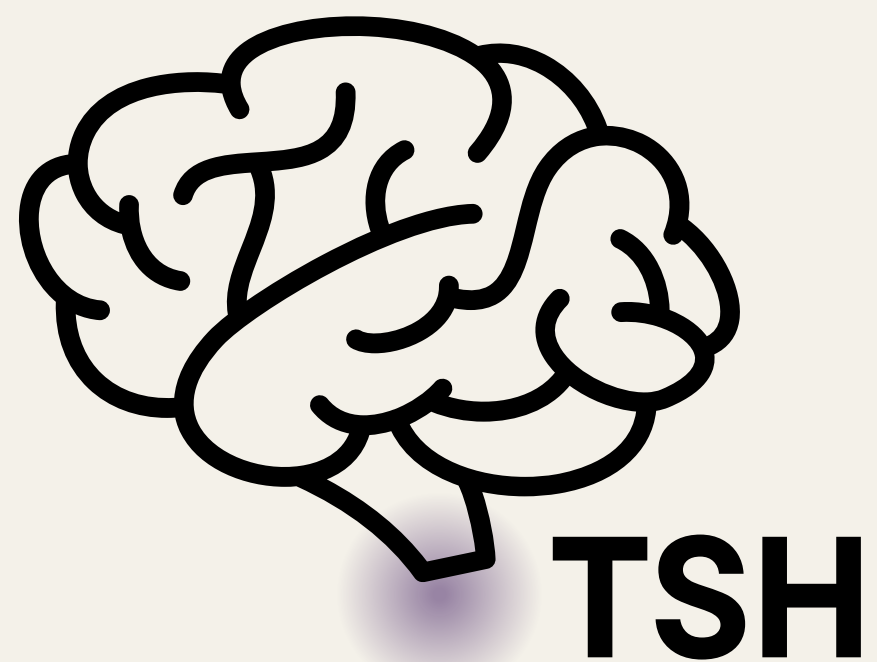
Free T3



There's often a gap between what blood labs show and what clients actually feel—their symptoms, struggles, and daily experiences don't always match the numbers



- Slow to diagnose
- Medication doesn't always solve the problem
- It's only a snapshot in time
- Often why you hear “my labs were fine”, but they don't feel fine



HORMONAL HEALTH		
TSH	<i>0.8. - 1.0 uIU/mL</i>	2.07
Free t4	<i>1 - 1.3 ng/dL</i>	0.9
Free t3	<i>3 - 4 pg/mL</i>	2.3

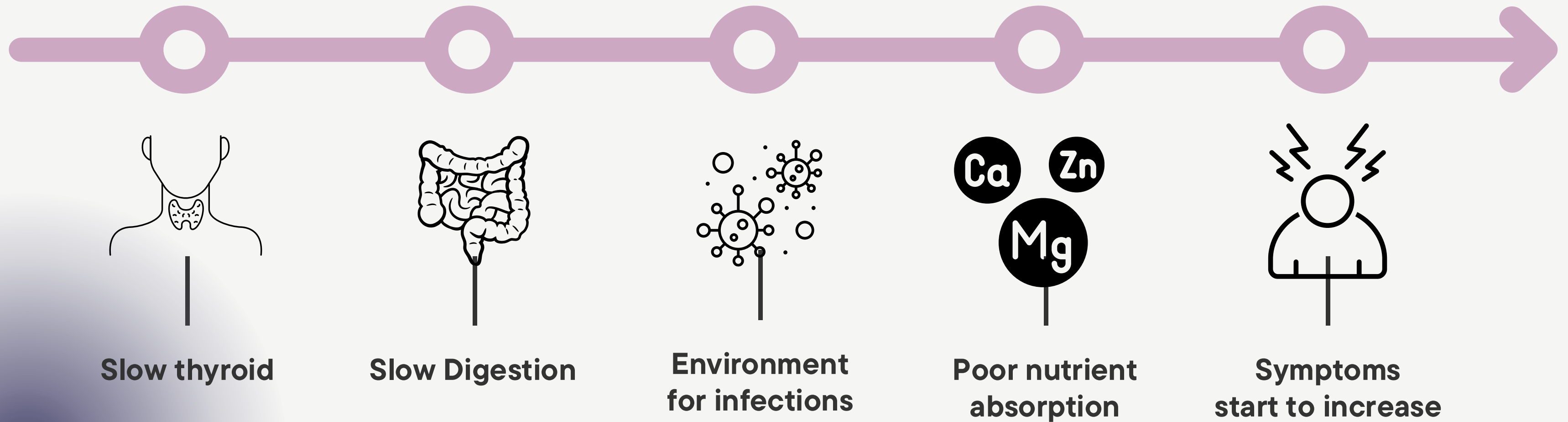
THE STRESS BUCKET

Thyroid health is rarely just one single issue. Imagine a bucket slowly filling up—that's how different factors add up and impact the thyroid over time.

STRESS BUCKET

- Minerals, vitamins
- Meals
- Gut infections
- Light exposure
- Sleep
- Pregnancy
- Postpartum
- Relationship issues
- Perceived stress

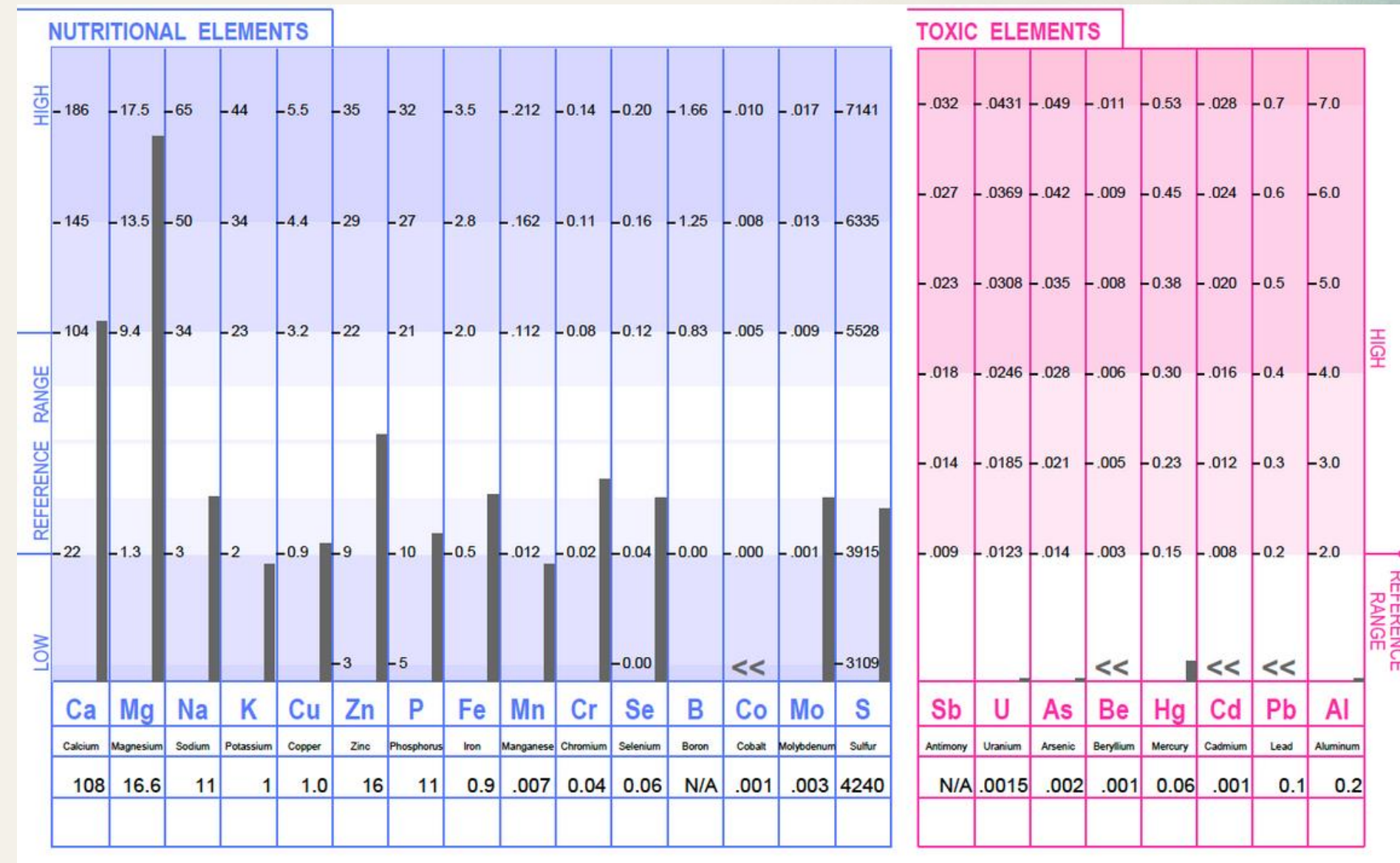
thyroid



HTMA TEST

The Hair Tissue Mineral Analysis (HTMA) is a functional lab test that measures the levels of minerals and toxic metals in hair.

Since hair acts as a soft tissue storage site, it provides a long-term view of the body's mineral status and metabolic activity over the *past 3-4 months*.

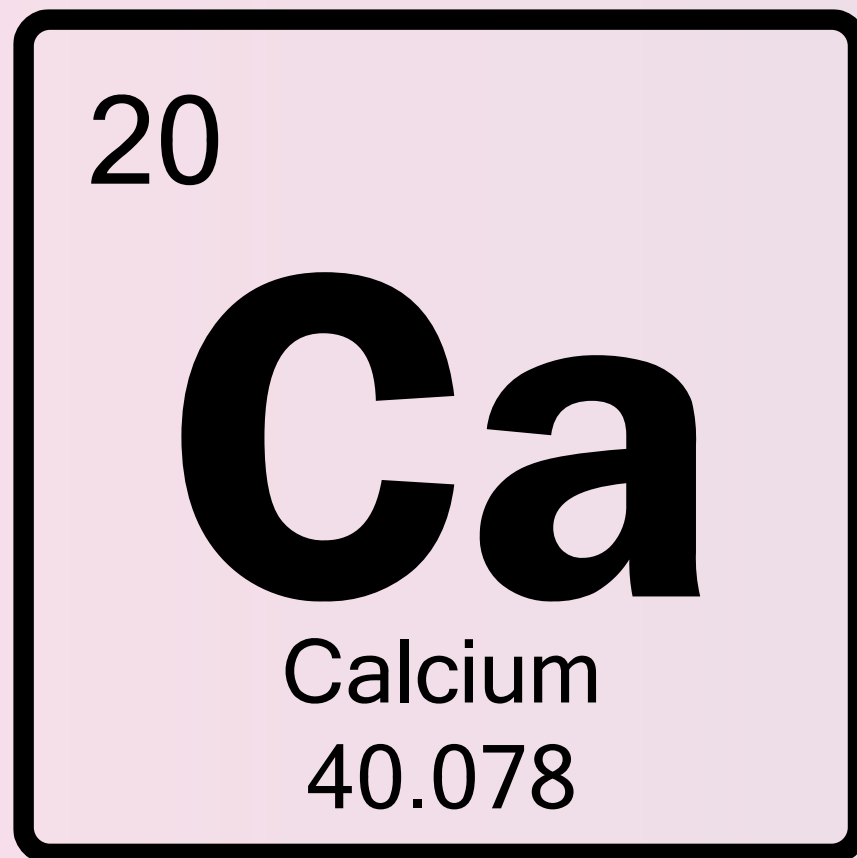


HTMA TEST

**Minerals are essential for nearly every function in the body, including:
energy production hormone balance, nervous system regulation.**

HTMA assesses key minerals like calcium, magnesium, sodium, and potassium, as well as heavy metals like lead, mercury, and arsenic. Since minerals interact with each other in complex ways, imbalances can indicate stress, adrenal function, metabolic rate, and detox capacity.

Because minerals are essential for nearly every function in the body, this gives insight into energy production, hormone balance and nervous system regulation.



CALCIUM

High levels of calcium (supplements) can interfere with iodine which is a main component of the thyroid hormone

High levels of calcium can decrease what gets inside the cell and what is usable (so think blood sugar)

Calcium also plays a role in the nervous system. Are you constantly in fight or flight?

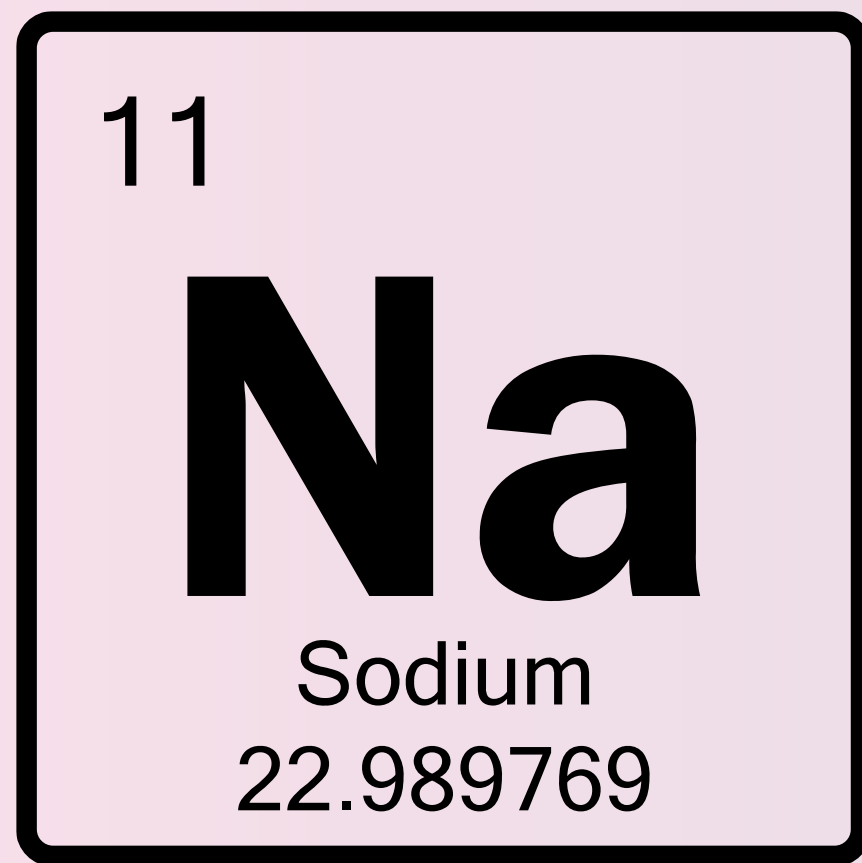


MAGNESIUM

The magic mineral right? It can feel that way. Magnesium helps reduce stress, support digestion, convert thyroid hormone

Careful with supplements because if other minerals are low like sodium, it can cause more anxiety and stress.

It can also cause an imbalance in calcium.



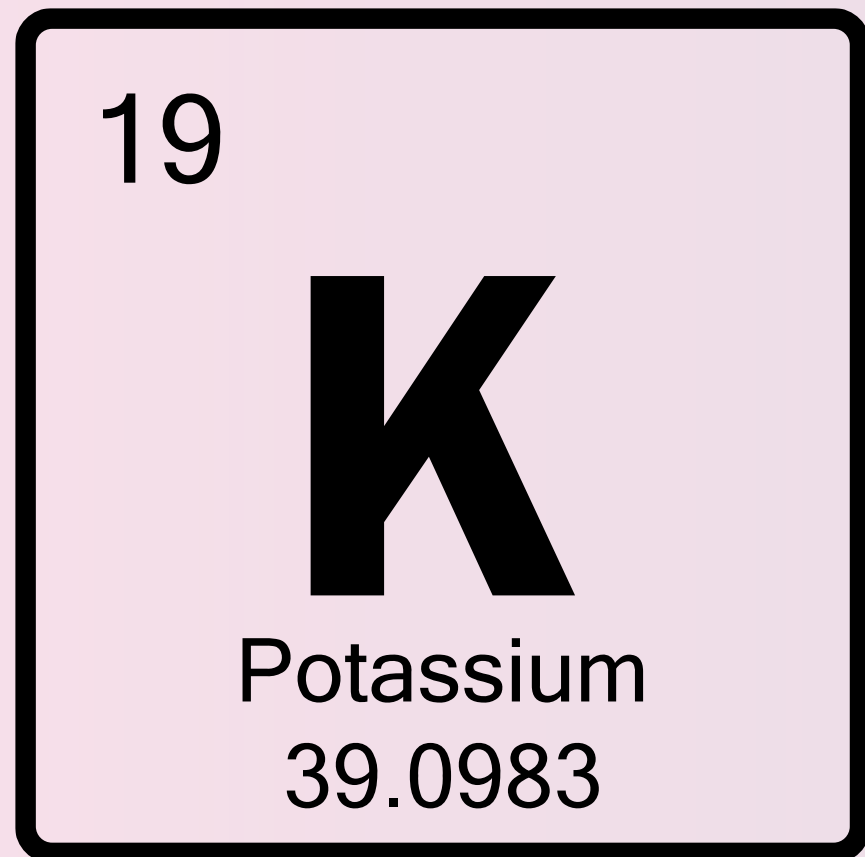
SODIUM

A mineral that is often feared due to high blood pressure, but needs more credit

Need it for proper hydration

Cell signaling and plays a role in getting thyroid hormone inside the cell

Supports stomach acid and digestion



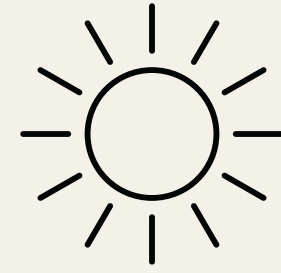
POTASSIUM

Often the lowest mineral I see and what needs to be addressed first

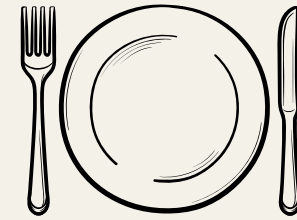
Often from someone on a low carb diet (avoiding foods that are higher in potassium), which can actually increase insulin resistance

Hydration, stomach acid production and getting hormones & energy inside the cell

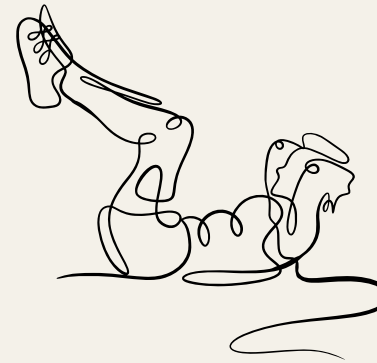
WHAT DEPLETES MINERALS?



Circadian Rhythm & Light Exposure



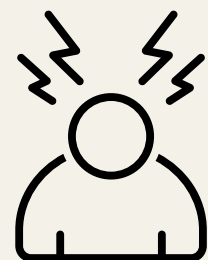
Meal timing, cooking and food quality



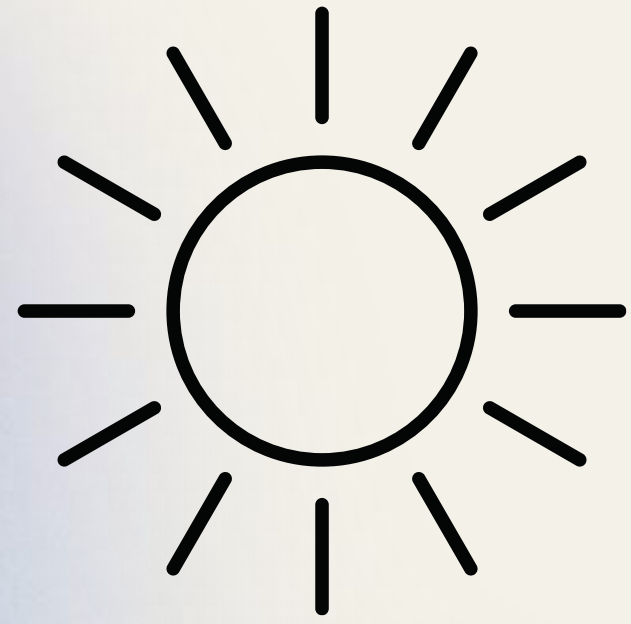
Exercise duration, exercise type and sitting for long hours



The wrong supplements

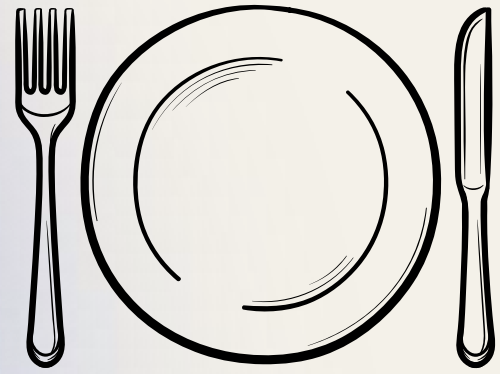


Rushing, stress and perceived stress



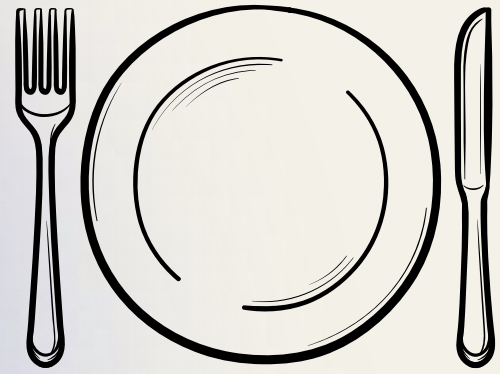
Circadian Rhythm & Light Exposure

- Seeing screens first thing in the morning
- Being inside
- Computer work
- Scroll while bored
- Blue light exposure
- Bedtime TV and scroll



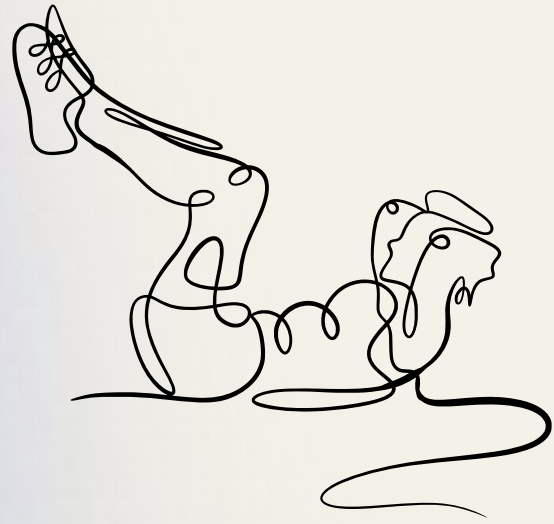
Meal timing, cooking and food quality

- Skipping meals
- Not eating full meals (bars, smoothies, snack packs)
- Eating a little at breakfast, salad for lunch and then big dinner at night
- Food isn't as nutrient rich



Skipping meals/Intermittent fasting

- Stressful for menstruating women
- Can decrease stomach acid and digestive enzymes
- Risk for more nutrient deficiency
- Risk for blood sugar problems (due to stress more than anything else)



Exercise duration, exercise type and sitting for long hours

- Intense cardio
- No weight training or strength training
- Working out multiple times a day (i.e. fitness instructors)
- Desk job or sedentary lifestyle



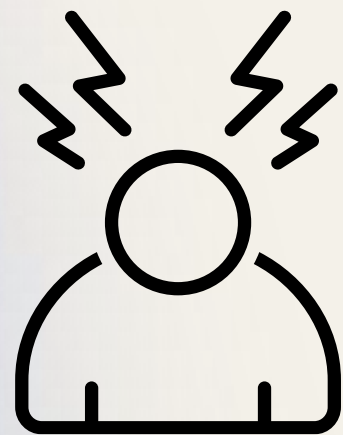
The wrong supplements

- Vitamin D
- Zinc
- Iron
- Poor quality supplements



Vitamin D

- Several types of vitamin D
- It acts more like a hormone
- It works with Magnesium
- It interferes with Vitamin A



Rushing, stress and perceived stress

- Never ending to-do list
- Going from one thing to the next
- Poor Sleep
- Stress and stress resilience
- The future

Where do we
go from
here? ✦

Small daily habits

Food things:

1. Continue to incorporate **3 balanced meals a day** that include protein, carbs and healthy fats for each meal
 1. Cont 25-30 grams of protein per meal
 2. Cont smoothie in the morning, meal bowls for lunch and high protein dinner
2. Start adding more POTASSIUM foods to your meals (food lists below)
 1. **I will work on a more detailed meal plan since I know you like to have a detailed plan to make it easier!**

Supplements:

1. Start your day with a mineral mocktail before breakfast or coffee/caffeine. I like [Rayvi](#) minerals or [Cure Hydration](#)
2. Start digestive bitters before meals. 1-3 DROPS. Can take with water. I will send you an email from FULLSCRIPT that has this recommendation.
3. Cont other current supplements

Other:

While it sounds like your sleeping habits are in check, here are few recommendations to continue to support your circadian rhythm. More info will be posted to your portal this weekend.

Where do we
go from
here?

Low hanging fruit



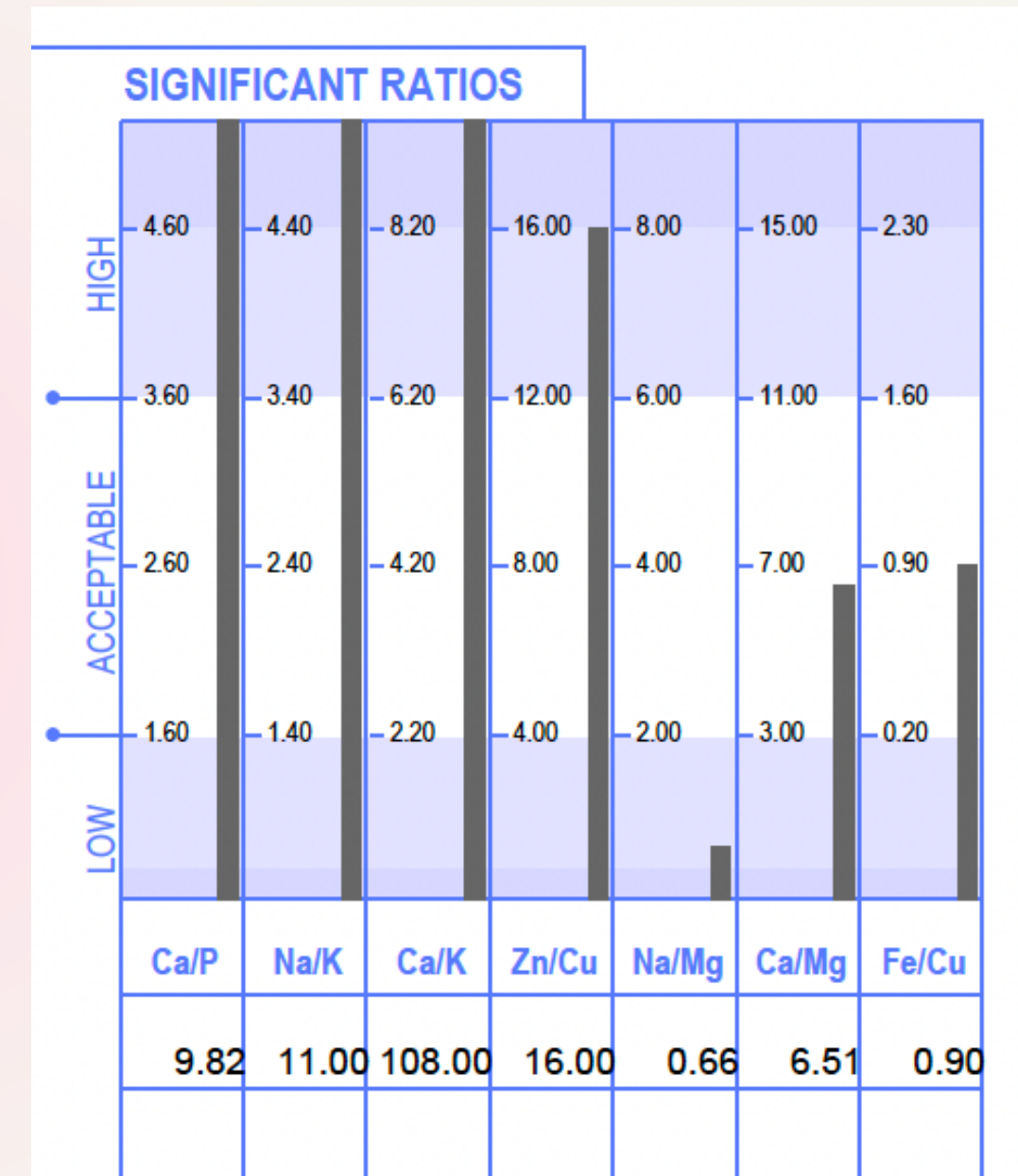
Where do we
go from
here? ♦

*Dig deeper into underlying conditions,
infections or nutrient deficiencies*

H. pylori			
	Result		Normal
<i>Helicobacter pylori</i>	2.6e3	High	<1.0e3
Virulence Factor, babA	Negative		Negative
Virulence Factor, cagA	Negative		Negative
Virulence Factor, dupA	Negative		Negative
Virulence Factor, iceA	Negative		Negative
Virulence Factor, oipA	Negative		Negative
Virulence Factor, vacA	Negative		Negative
Virulence Factor, virB	Negative		Negative
Virulence Factor, virD	Negative		Negative

Where do we go from here?

.Dig deeper into underlying conditions, infections or nutrient deficiencies



Where do we
go from
here?

Create a strategic plan with a root cause focus

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THANK YOU FOR
LISTENING!

Kelsey Sniegowski RD, LD

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QUESTIONS?