



Now what?!

Managing Stress in Wild Times

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Tranquility Natural Health

www.TranquilityNaturalHealth.com

Why This is Important

- Brain Health Affects Every Aspect of Your Life
 - Relationships with family and friends
 - Ability to function in any capacity, hobbies, every day tasks, etc.
 - Sleep
 - Mood
 - Work

Ideally...

- You are meant to have quick thinking well into old age.
- You are meant to have an easy, good night's sleep and wake rested, with enough energy to get through the day.
- You are meant to have a steady mood, and healthy relationships.
- There is no such thing as 'normal' age related mental or cognitive decline.
- Stress (especially chronic stress) really messes this up.

Currently....

Lots of people are feeling fatigued, forgetful, anxious, depressed, overwhelmed...

- Pandemic—working from home
 - Isolation
 - Ergonomics?
 - Interruptions/Lack of Boundaries
 - Home schooling
 - 3 more hours per week on average
- Political Issues and Protests and Economy
 - People are stressed out and on a hair trigger
- Wildfires
 - Toxic substance that triggers Fight/Flight
 - Physical toxin with health effects

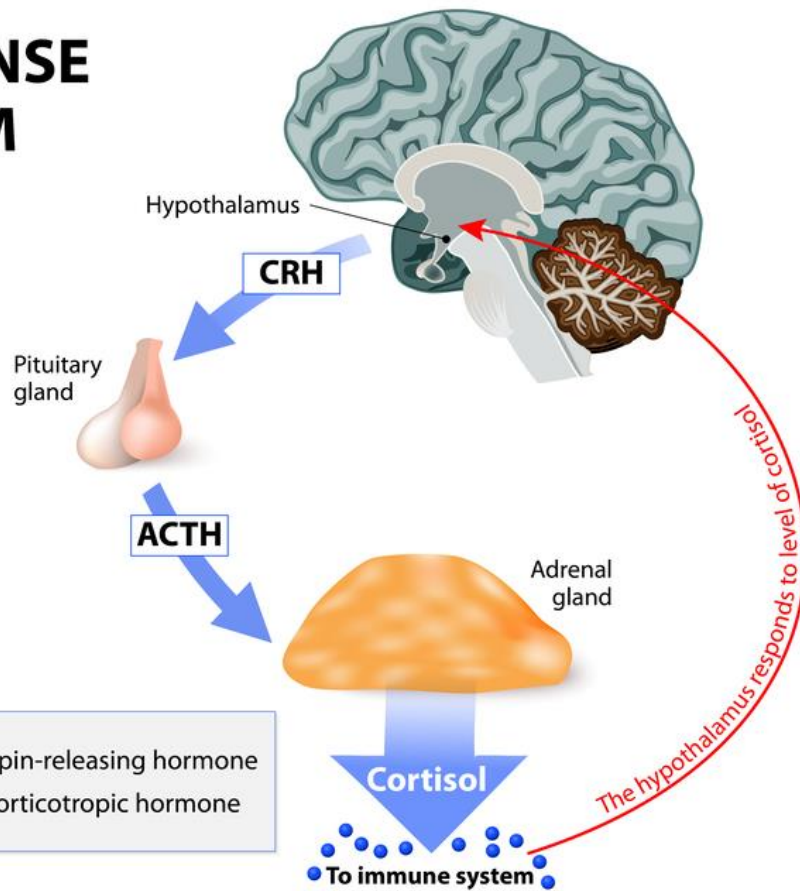
Is this new?

- Lots of times in human history that we've been in trouble, and there's been cataclysmic change, including to local environment, but maybe not at this level and usually not all at once.
- If you're under 70 yo or so and have lived most or all of your life in the US, this certainly feels incomparable.



Fight or Flight
(And Freeze or Faun)
Sympathetic NS

STRESS RESPONSE SYSTEM



CRH - Corticotropin-releasing hormone
ACTH - Adrenocorticotropic hormone

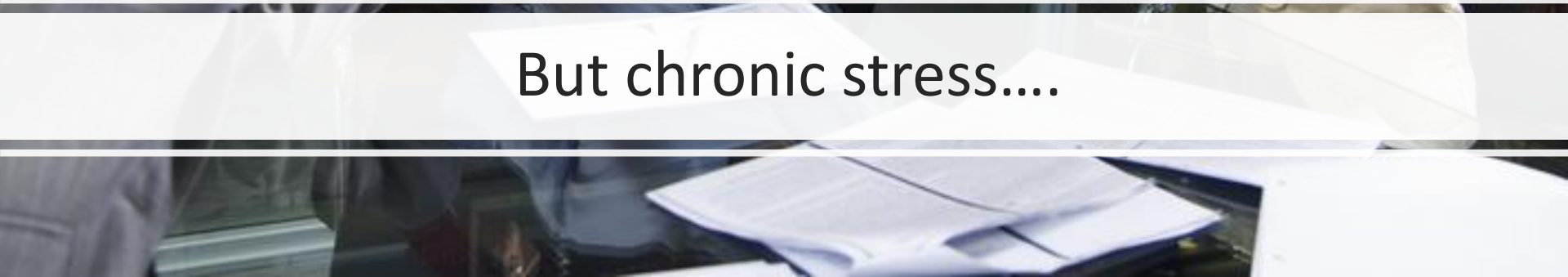
HPA Axis

This is a normal response

- Cortisol gets a bad rap as a 'stress hormone' but it is part of your circadian rhythm
- It also acts as an anti-inflammatory in the short term, but can lead to inflammation and tissue breakdown long term
- Along with other hormones, prepares you to fight or flee, and override things that may detract you (like pain) and improves stamina
- A little bit of stress can be a benefit, like going into trial or debate or contentious setting
 - Can give you an 'edge' that if you hit it right can boost performance



But chronic stress....



Stress

- Any stress leads to a cascade of stress hormones so any stress is a chemical stress, whether it's physical, emotional or environmental/chemical
- Stress from any source puts a physical load on the body, leading to aches and pains or illness.

Physical Stress

- **Sitting**
 - Blood stasis
 - Low back and neck pain
 - Poor concentration
 - Inflammation (chemical stress)
- **Eating on the go**
 - Low stomach acid
 - Starvation Mode
 - Hangry
 - Poor concentration
 - Inflammation (chemical stress)

Fight or Flight v. Rest and Digest

- Parasympathetic NS/Rest and Digest
 - When you are in Fight or Flight, stomach acid drops and blood goes from the GI to the muscles
 - Who needs to waste time absorbing nutrients and digesting food if you're about to die anyway?!
 - Fight or Flight leads to constant high alert
 - Hypervigilance leads to anxiety, depression, burn out, constant fatigue, poor sleep ('wired and tired') grumpiness/short temper, etc.
 - There is no switch to go back to Rest and Digest
 - You would burn through the stress chemicals and survive (or not) get to safety, and return to Rest and Digest once out of danger, but with current situation(s), there is no 'safety'
 - But there are a lot of techniques to help get through Fight or Flight and return to Rest and Digest

Stress

- Chronic stress can change the neural networks in the brain, and actually shrink the brain
- Many of the same symptoms
 - Sleep disturbance
 - Mood disturbance
 - Forgetfulness
 - Headaches, body pains
 - <https://www.youtube.com/watch?v=WuyPuH9ojCE>
 - Disruption of the HPA axis can lead to other endocrine problems, such as hormonal dysregulation

Chronic Pain

- Chronic pain is a chronic stress
 - With similar changes to the brain
- Higher levels of inflammation
- Constant distraction
 - When trying to filter out stimuli, the brain always has to multitask to dampen the pain signal to be able to focus on the task at hand
- Many of the same symptoms
 - Fatigue
 - Forgetfulness
 - Mood changes
 - Etc.

Anxiety/Depression

- Trauma and/or chronic stress
- Social Isolation (cause and effect)
- TBI can lead to Anxiety/Depression
- Inflammation found to be a cause of depression
- Gut dysbiosis associated with anxiety and depression
- Genetic factors
 - Some really strong genetic factors
 - Epigenetic changes, from previous generations' trauma/experience
 - SNPs like MTHFR and COMT and other spontaneous mutations



(Not So Healthy)
Coping Mechanisms

Nutrition

- High Inflammatory Foods
 - Highly refined, ‘junk food’ and some ‘comfort food’
 - The brain works better on ketones vs. glucose
- B vitamins are essential (see next slide)
- Fatty acids are essential (AKA Healthy Fats)
- ‘Leaky gut’ leads to a ‘leaky brain’
- Reducing overall inflammation is important
 - Avoiding food that cause inflammation
 - Celiac disease, rare but not that rare

Alcohol

- Moderate drinking does NOT kill brain cells
 - But chronic overuse can damage dendrites
- However, alcohol is a sugar, (and a toxic solvent)
- Really can adversely affect sleep.
 - May help initiate sleep, but often poor sleep quality or waking frequently
- Moderate drinking associated with decreased risk of some diseases, (heart disease especially)
 - 1/day for women, 2/day for men
- Alcoholism or excessive drinking can often lead to a lack of essential nutrients (esp. ones used to mitigate stress!)
 - B vitamins can lead to permanent nerve damage
 - Need B12, B6 and especially B2/Thiamin

Other Substances

- Heavy Metals
 - Lead, cadmium, arsenic, aluminum, mercury, et. al.
- Solvents
- Mold
- EMF?
- Drugs
 - Illicit, MDMA, etc.
 - Opioids and psychoactive meds like antidepressants or anxiolytics (Xanax)
 - Allergy meds
 - More
 - http://www.agingbraincare.org/uploads/products/ACB_scale_legal_size.pdf



Rule Out Organic Causes

Hypothyroidism

- Many similar symptoms
 - Fatigue
 - Forgetfulness
 - Mood changes
- Can lead to brain inflammation and leaky brain
- More common in women, but can affect anybody
- Easily treatable

Other Diseases

- Any chronic illness is a chronic stressor
 - Autoimmune/Inflammatory
 - Anything that causes chronic pain
- Cancer
 - ‘Chemo brain’
 - Toxic substances

**STRESS
RELIEF**

Next Exit 

On the bright side...

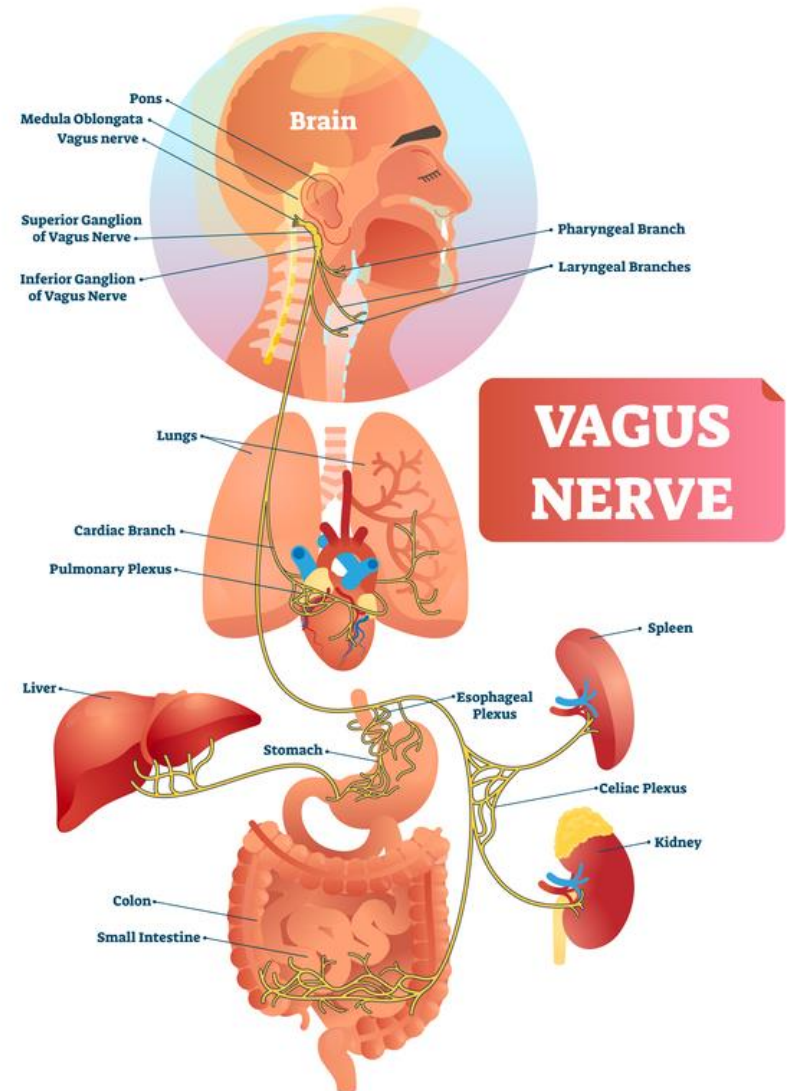
- All of these insults can be helped
 - We are built for survival. The fight/flight mechanism is one way we are wired to survive but we (our bodies and brains) are resilient.

Lifestyle Support

- Breathing
- Exercise/Play
- Meditation (caution with PTSD)
- Diet
- Specialized Nutrition
- Sleep!
- Friends/Family/Pets
- Journaling
- Massage
- Acupuncture
- Chiropractic

Vagus Nerve

- Communicates between tissues and the brain (bidirectional)
- Important to regain Rest & Digest
- Can be stimulated into relaxed state by conscious breathing, laughing, singing, exercise, massage



Exercise

- Generates more serotonin and endorphins
- 'Use up' or 'Burn through' those Fight or Flight hormones by simulating a Fight or Flee scenario.
- For those who have a stressor, hormones stay on board for 4-6 hours *(unless another stressor happens during that time)
- For those with chronic stress, or who have been predisposed (epigenetically), may take 48-72 hours for those hormones to process through the system

Exercise

- Pick something fun that you enjoy
- Weights are great for building aerobic endurance (so if you hate running, or aerobic exercise, or if you hate the cold and don't want to go to the gym...)
- Meditative exercises count (Tai Chi or Qi Gong) and may be more appropriate for some than traditional meditation techniques



Meditation

Prayer & Art

- Traditional 'clear your mind' type meditation (like TM), not right for some people, including those with PTSD.
- Moving meditations work well for many
- Learning to be present, (*Chop Wood, Carry Water* by Rex Weyler & Rick Fields is one of my favorites, but there are newer books you might find more relatable. Authors include Jon Kabat-Zinn and Thich Nhat Hanh).
- Just put one foot in front of another.



Nutrition

- Eat a varied diet with anti-inflammatory foods
 - Lots of vegetables, fruits, seeds and nuts
- Low glycemic index foods
- Be aware of Food Hygiene
 - Get into Rest & Digest mode
 - Don't eat at your computer!
 - Prepare your body to digest, prayer, gratitude, etc.
- The Mediterranean Diet is the most studied
 - Balanced protein, fats with lots of vegetables
- Healthy fats
 - Olive oil, avocado, grass fed butter/ghee, coconut, nuts and seeds
- Supplements
 - Fish Oil (high quality) and Curcumin (May cause blood thinning, and interfere with Coumadin or Warfarin especially. Consult your doctor).

Specialized Nutrition

- Every body is different, and what food is right for others may not be right for you
- There are many herbal solutions that work really well for supporting adrenal function and helping to lower out-of-control cortisol.
 - ‘Adaptogens’ and ‘Nervines,’ including ashwagandha, rhodiola, holy basil, ginseng, skullcap, and more.

Sleep

- If you're not doing it, you need to find out why
 - Apnea, Hot flashes, Adrenals...
- Start with basic Sleep Hygiene
 - Stop screen time 1-2 hours before bed (yes, your phone, too)
 - All lights out to sleep
 - Cool room (65 degrees or cooler)
 - No caffeine after 2pm
 - Warm bath or shower before bed
 - Avoid alcohol or large meals before bed
 - Exercise, but do it earlier in the day
 - Get up and read or do something else if really can't sleep

Address Pain

- Any chronic pain can be worse when stressed, and pain in general is a distraction.
- Set up better work ergonomics
 - <https://www.youtube.com/watch?v=4mqFted7IA8>
- Chiropractic care, massage therapy or acupuncture can all help get you out of pain and help you stay pain free.

If Something Doesn't Feel Right...

- Remember---There is no such thing as *normal* age-related memory or cognitive decline, but it's totally normal if you feel completely stressed out right now.
- If something doesn't feel right, see your doctor
 - Check thyroid, blood sugar, inflammation levels
 - Check allergies or for celiac disease
 - Discuss the benefits of herbs and/or meds
 - Review genetics, nutrition, lifestyle
 - You may need someone who has experience in environmental medicine if you've had exposures to heavy metals, pesticides, etc.

Next Step

- If you have any of these symptoms and are concerned about your brain and stress levels
- Or you have chronic pain or stress, or anxiety or depression, and want to avoid long term effects

In appreciation for attending this talk today, I'd like to offer you either a free initial chiropractic examination or a free brief naturopathic consultation (15min) to see how naturopathic care may help you, if you make an appointment today.

Thank You for your time today
Please contact us with any questions!

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