



FREE WELLNESS LECTURE
SEPT 24TH 7^{PM}

HOSTED BY PETER BRODHEAD, CN
**TOPIC: UNDERSTANDING
POST COVID SYNDROME**

Nutritional, Botanical, and Lifestyle strategies you can use to hasten your Post COVID Syndrome recovery.

PRESENTED BY BRIGHTER DAY NATURAL FOODS

Dive into the world of Health, Wellness, and Superfoods with Peter. Offering 40+ years of experience in educating the community, come join us in a free seminar covering post COVID syndrome.

 **THE SENTIENT BEAN**

13 E Park Ave, Savannah GA, 31401

Understanding Post Covid Syndrome Long Covid - A toolbox to support recovery

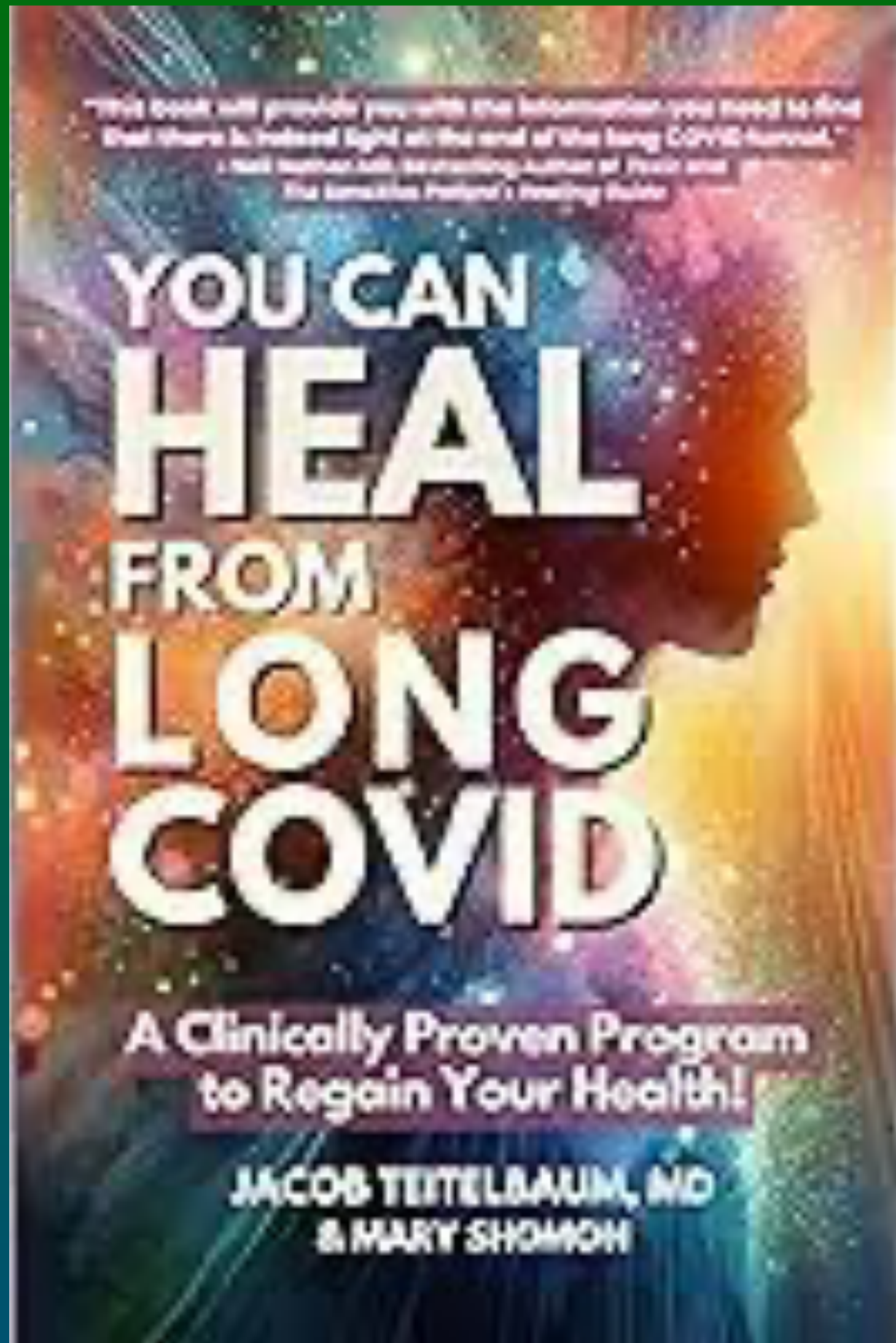
Peter Brodhead CN

Medical Disclaimer

The content of this talk and slides is for educational purposes only and does not constitute medical advice

It is not intended to be a substitute for professional medical advice, diagnosis, or treatment.

Always seek the advice of a physician or other qualified health provider with any questions you may have regarding a medical condition.



Jacob Teitelbaum, MD

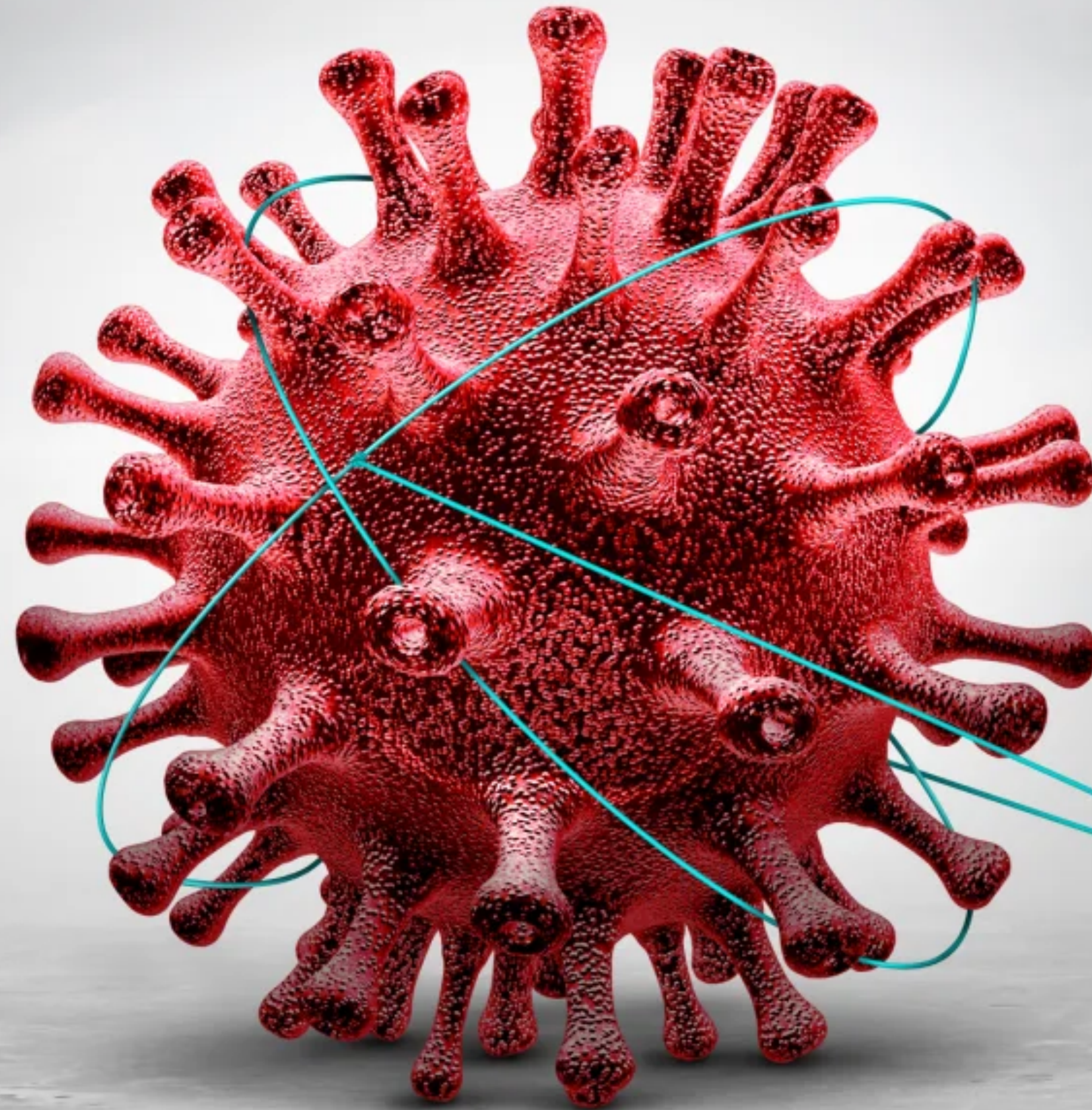
40 years of experience working with Chronic Fatigue Syndrome and fibromyalgia



I will refer to his observations and recommendations as “According to Dr T “ in this presentation

How common is long covid ?

Research shows around 10 - 15% of the population develops long Covid after their initial infection



Of individuals with long covid
79% report having some activity limitation
And 1 out of 4 report
that it significantly limits their activities

As of Spring of 2024, roughly 17 million people currently have long covid in the US



Defining Long Covid

Long lasting effects continue 4 or more weeks after the initial infection

More than 200 symptoms have been linked to it:

Endothelial damage of the blood vessel walls

Extreme fatigue, Brain Fog

**It can awaken old viruses
such as EBV, Herpes family viruses**

Lung disease, kidney disease,

Cough

Shortness of breath

Organ damage - Lungs, Heart, Brain

Stroke, blood clots

POTS -

Brain stem damage

Disruptions of the Vagus Nerve

Problems with taste and smell

Headache, Migraine

Auto-immune activation, allergies

**Digestive Problems -
loose stools, constipation, bloating**

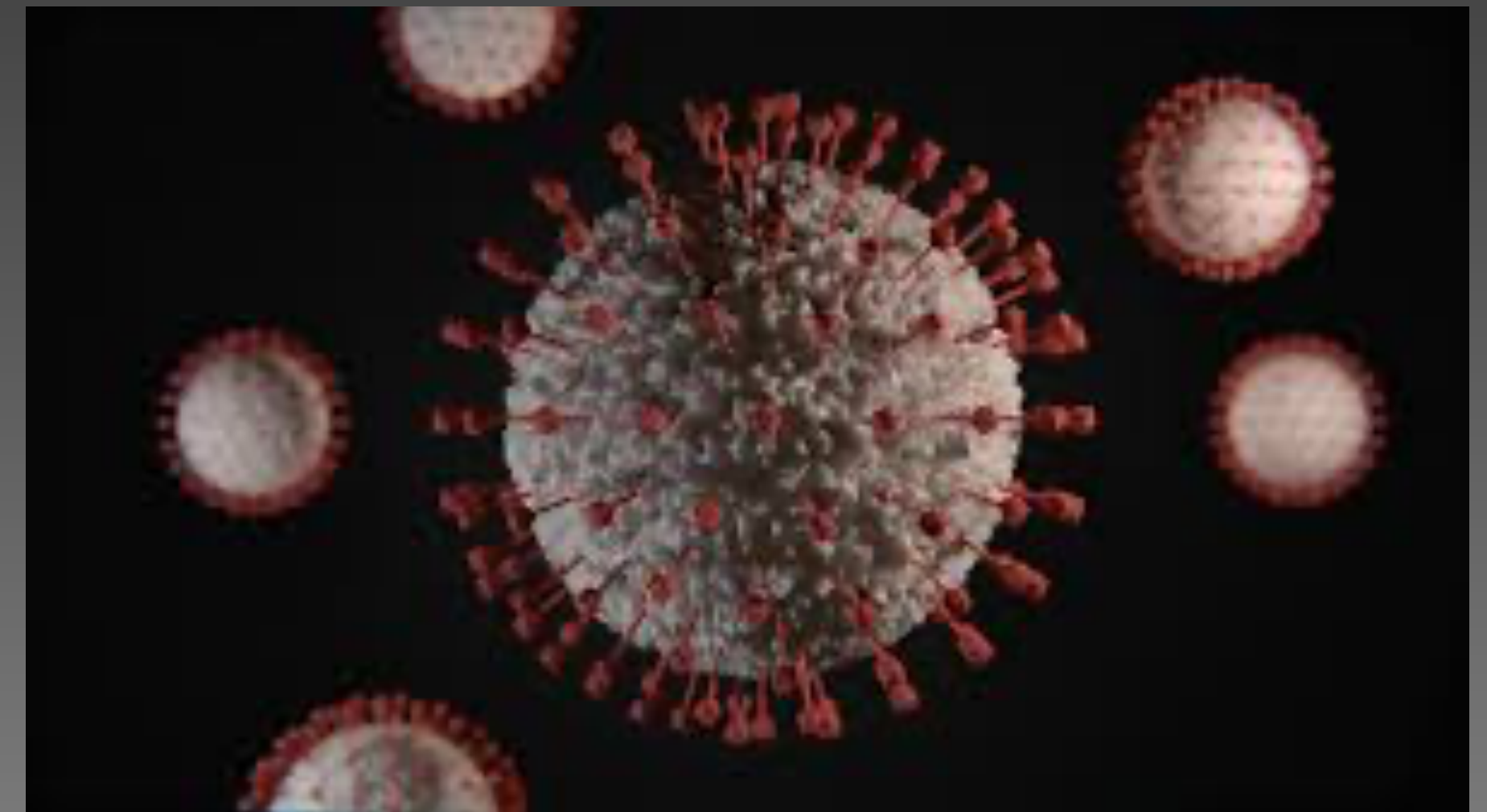
Sleep Disturbances

Some Common Post-Covid Symptoms:

Not limited to cough, fever, and shortness of breath

The other widely reported symptoms span neurological, gastrointestinal, cardiovascular, and other systems and include:

- *Fatigue (reported by 81.3% of respondents)
- *Chills /sweats (75.9%)
- *Body aches (73.9%)
- *Headache (72.2%)
- *Brain fog and concentration issues (68.6%)
- *Gastrointestinal issues (66.9%)
- *Trouble sleeping (66.1%)
- *Dizziness (60.6%)



**Long COVID: Unfortunately, defined as
Any persistent symptom**

Shock Lung

Brain Fog

Fatigue

Loss of Taste/Smell

Heart Damage

Autonomic Dysfunction

**Important to Identify and address each of these components.
Present after 15% of COVID cases**

Women and post -covid



A 2022 study published in Clinical Microbiology and Infection found that 82% of long COVID patients are women.

This is because most genes affecting immunity are on the X chromosome. Women have 2 of these chromosomes, while a man only has one.

What about kids?

- 1 million children aged 12 to 17 are also afflicted with Long COVID.
- In this age group, the most common issues are:
 - 1- Candida overgrowth
 - 2- POTS
 - 3- T3 thyroid resistance
 - 4- Viral (e.g.- EBV reactivation)
 - 5- Nutritional deficiencies/excess sugar
- Children sometimes get hit the hardest. But respond beautifully to treatment!

The Hypothalamus Gland



A almond sized organ in the middle of the forehead in the brain

The circuit breaker
Access to the pituitary gland

Your hypothalamus, a structure deep in your brain , that acts as your body's smart control coordinating center.

Its main function is to keep your body in a stable state called homeostasis. It directly influences your autonomic nervous system by managing hormones. It controls sleep, the hormone system, thyroid, adrenals, reproductive, Anti-diuretic hormone and blood pressure / pulse

POTS Postural Orthostatic Tachycardia Syndrome

The majority of post covid people get it

According to Dr T - The Hypothalamus goes out of whack

The autonomic nervous system - works between adrenaline and calming
In long Covid it gets stuck on the adrenaline side
Feels like racing and exhausted.
Heart pounding, Digestion funny



The big problem is when you stand up your blood goes to your legs and stays there
Your heart tries to make up for this by going faster but it can't keep up and the blood flow
can't get to your brain so you get foggy.

A drop in adrenal stress hormones and a deficiency of the antidiuretic hormone
can leave you both salt and water depleted.

POSTURAL ORTHOSTATIC TACHYCARDIA SYNDROME SYMPTOMS



Read the updated Postural Orthostatic Tachycardia Syndrome 3-1-24 handout from Dr Jacob Tietelbaum MD

How to make a diagnosis

There are 2 simple tests you can do at home
1. Read and do the questionnaire in the handout
2. Take the 10 minute pulse test

Minimize salt intake one day.

The following day, lie down on your back quietly for 10 min

Then check your pulse (and BP if able) once after 10 min while lying down quietly.

Then stand up and check your pulse (and BP if able) every 2 min. for 10 min while standing in place

If the pulse goes up 15 beats per minute this is suggestive of orthostatic intolerance
If it goes up 30 beats per minute, it confirms orthostatic intolerance

Self Help for POTS

Increase Salt and Water Intake

- Sometimes its even helpful to put sea salt crystals under the tongue occasionally

Wear Compression Socks - use medium-pressure (20 - 30 mm) compression socks
Preferably ones that go to the mid thigh - knee high socks will still help

Improve your Adrenal Function - this is critical to holding onto salt and water.

Licorice Root tea or capsules can also be supportive

Natural support using Adrenaplex can be beneficial for optimizing adrenal function

Change your diet - some people find that a gluten and dairy free diet can be helpful
Try it for 4 to 6 weeks to see if it helps.

There are a variety of prescription medicines that Dr T recommends when necessary

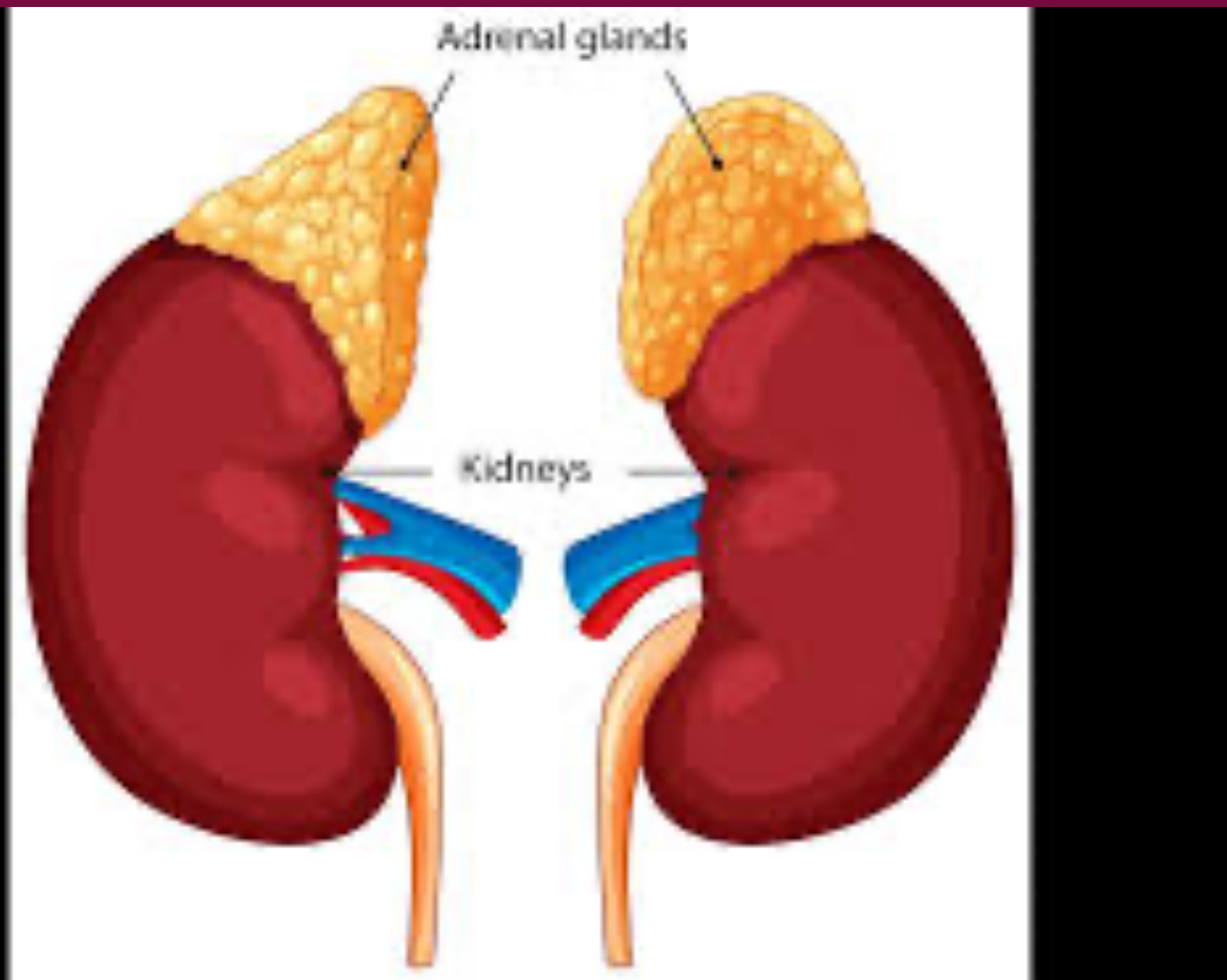
Hydrocortisone 4mg, Midodrine to increase sympathetic/adrenaline tone, desmopressin for water balance

Beta Blockers, Ivabradine, Pyridostigmine



The Adrenal Glands

Sit it on top of the kidneys



The adrenals handle the body's stress

The produce **adrenaline** which helps boost circulation by raising blood pressure and directing immediate energy to the muscles while helping your body hold onto salt and water.

Cortisol secreted by the adrenals increases blood sugar so your body can have ready fuel available as your body handles stress

Adrenal exhaustion affects upwards of 25% of adults

Some examples:

Do you get irritable when hungry ? Do you feel better after you eat ?

1/4 tsp of sugar under the tongue can stop a low blood sugar “hangry attack “ quickly Then follow up with a high protein snack

Do you feel lightheaded when you stand or have a drop in blood pressure ?

Are you chronically tired ?

Are you frequently thirsty, or your urine is dark ?

Do you get frequent sore throats and respiratory infections ?

Natural Adrenal Support

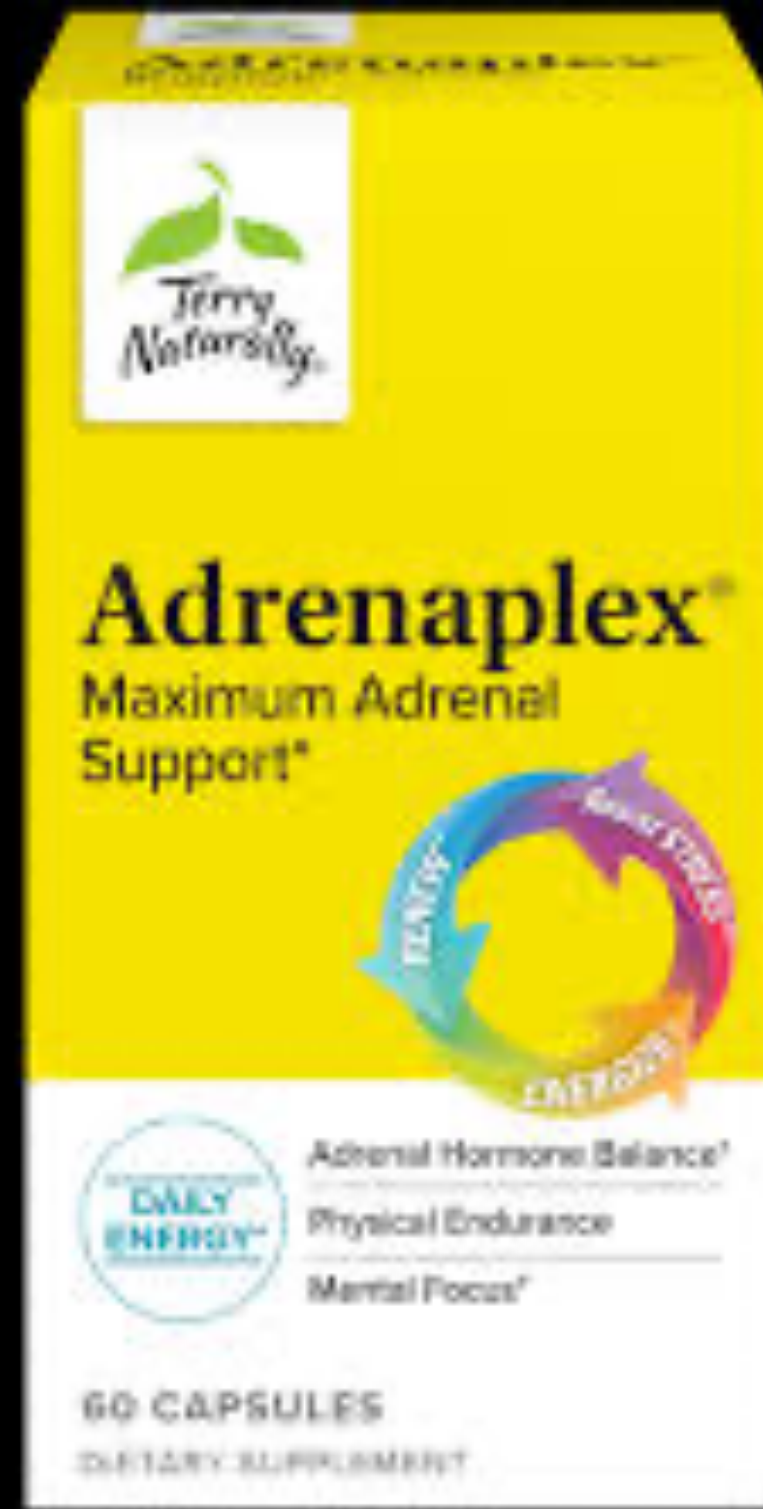
- The adrenal glands need the proper nutrients to function optimally:
 - Glandular adrenal extract containing supportive nutrients
 - DHEA and pregnenolone – these also support production of your stress fighting hormone called cortisol
 - Vitamin C and pantothenic acid (Vitamin B5) are critical to support of adrenal gland function
 - Licorice – supports cortisol and acts as an antiviral
 - Tyrosine – critical for making adrenaline
 - Boost the effect with Ashwagandha and Rhodiola



The adrenal glands has the highest concentration of vitamin C in the body!

Treating Adrenal Exhaustion

Support the adrenals nutritionally



Increase your salt and water intake

Cut down on your sugar intake

Eliminate Unnecessary Stress -
turn off the news if it makes you uncomfortable

Get more high quality sleep - if possible

Work with the vagal nerve and the parasympathetic system

Spend more time in nature



Adaptogens: Herbal Medicine for the Adrenals

Characteristics

- Have **no side effects** (non-toxic)
- **Restore the body** – bring up what is too low, bring down what is too high
- Help the body **adapt and resist** the negative effects of stress and illness

Benefits

- Fight fatigue
- Increase energy
- Help fight off illnesses
- Can be both calming and energizing *without* excessive stimulation

Ashwagandha/Rhodiola

- Reduce depression, anxiety, and stress
- Boost energy
- Improve fitness
- Reduce mental fatigue

Adaptagenic Herbal Formulas to support energy and stress

Adaptagenic Herbs are very supportive for all systems of the body
They can be used for extended periods of time to support stress, energy, recovery and immunity



Terry Naturally Adaptra caps
Ashwagandha and Rhodiola



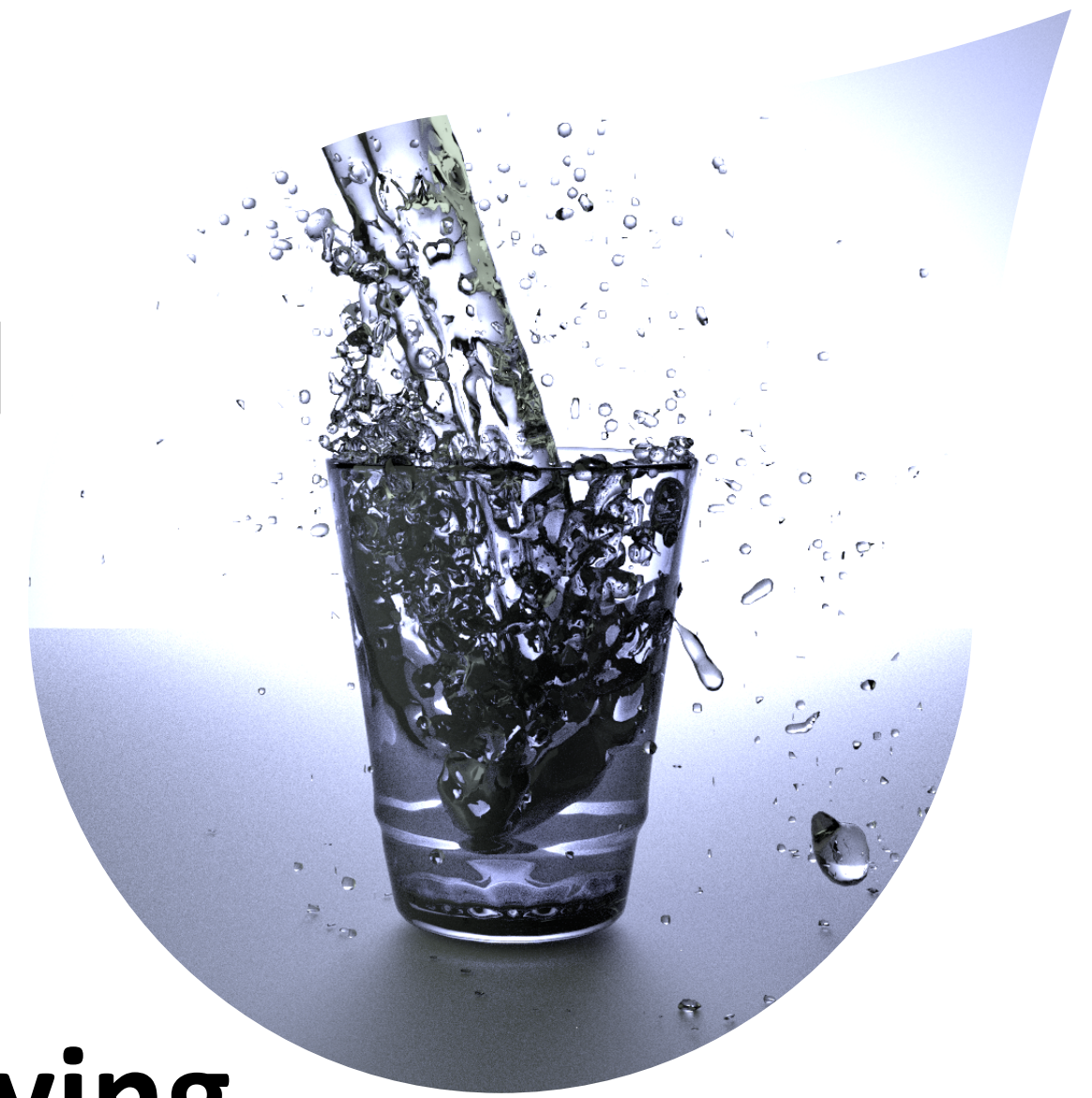
Herbalist Alchemist
Energy Adapt



Natura
Vital Adapt or Power Adapt
Available repackaged at
Brighter Day

Stay Hydrated!

- Try drinking 12 ounces of cold water next time you're tired
- Increase your salt intake, using a good quality sea salt. Salt restriction when adrenal fatigue is present is a good way to crash and burn
- The main benefit of salt restriction? Research shows it is **dying younger**. And the Social Security system thanks you...



High quality sea salts can contain over 70 minerals and trace elements.

Trace Mineral Research - ConcenTrace minerals are one of my favorite mineral supplements 70 trace minerals and electrolytes

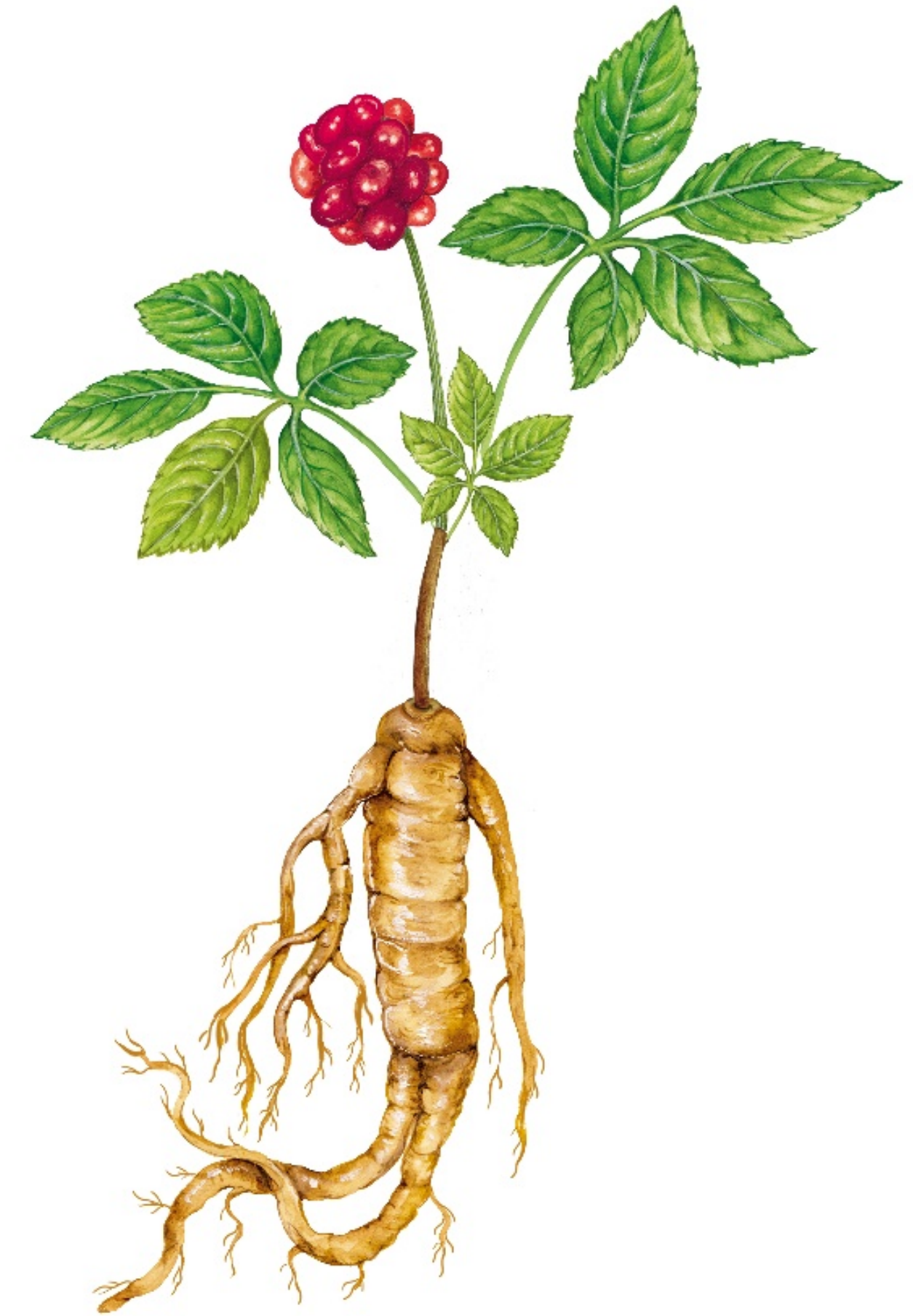
Magnesium

Recommended dosage: 200 mg (as magnesium bisglycinate chelate)

- A. IMHO, one of the most critical nutrient deficiencies
- B. Critical to over 400 biochemical reactions in the human body
- C. Those in the highest 25% of magnesium blood levels had a 40% lower risk of dying from any cause during a study (with a 40% decrease in heart attack and stroke deaths and a 50% decrease in cancer deaths).
- D. Helps energy, pain, asthma, heart disease, bone density, colon cancer risk, migraines, ADHD, Metabolic syndrome, and.....(the list goes on and on).
- E. Over 200 mg a day of supplements tends to cause diarrhea
- F. Add Malic acid to make it even more effective

Red Ginseng

- Increases energy
- Improves focus and attention
- Modulates
 - Blood pressure
 - Metabolism
 - Immune function
- Fights inflammation
- Increases resistance to cold and flu
- Increases sex drive and erectile function
- Prevents and alleviates side effects of cancer



This slide was taken directly from Dr. Jacob Tietelbaum MD - lecture Solving the Human Energy Crisis 9/6/25 SOHO Show Orlando FL

HRG 80 Red Ginseng

A special type of red ginseng
Hydroponically grown
Put through stressors that increase the ginsenoside levels
No pesticides
High in “rare (or noble) ginsenosides
Chewable Gamma Sorb form works far better



Dr T completed a study of 188 people with a greater than 50% drop in function, including persistent post-viral exhaustion



60% of people in his study improved with the HRG 80 Chewable Ginseng

The findings showed:

- * 67% average increase in energy
- * 44% increase in overall well-being
- * 48% improvement in mental clarity
- * 58% composite improvement
- * 46% improvement in sleep
- * 33% decrease in pain
- * 72% increase in stamina

The chewable form was as effective as 2 capsules
1/2 - 2 in the morning with an optional second dose at lunch

Reference:

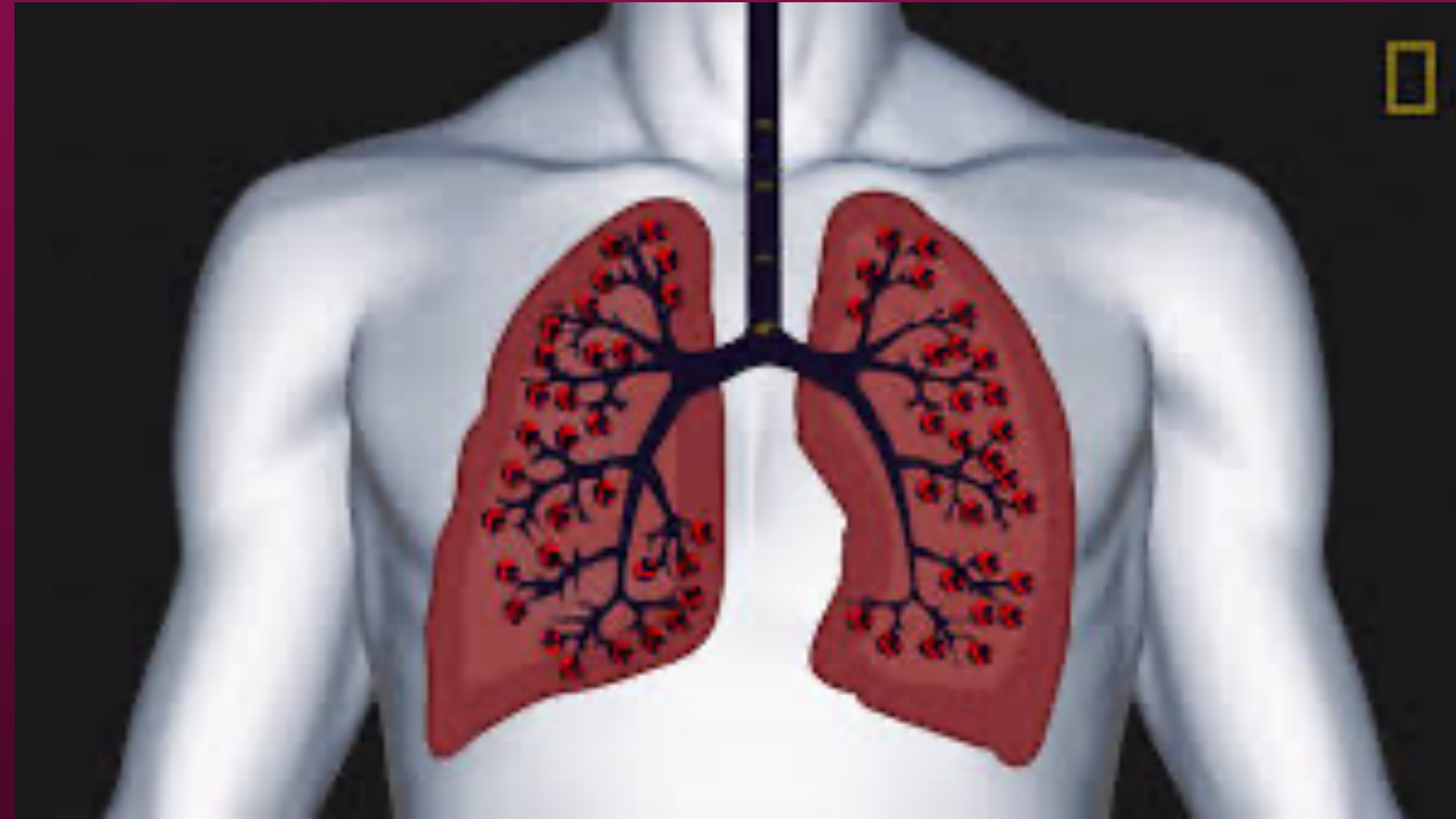
2021 Dec 29;15(1):43. doi: 10.3390/ph15010043.

An Open-Label, Pilot Trial of HRG80™

Red Ginseng in Chronic Fatigue Syndrome, Fibromyalgia, and Post-Viral Fatigue



Lung Issues



Post Viral Fatigue causes Shortness of breath

Lung Shock

It heals up over time - it may take up to 2 years

Usually its from ARDS - Acute respiratory distress syndrome

This is what happens to people who get pneumonias from COVID

Oxidative Injury – Heart, Lung, Brain- General Rx

- Sublingual Glutathione- For both acute and chronic injury
- Overall antioxidant support (good multi like Clinical Essentials)
- Shut down excess inflammation

A- Highly absorbed curcumin for COX

B- High quality Boswellia for LOX

C- Keep it simple- Give Curcumin/Boswellia/DLPA/Nattokinase: has both and a pain relief miracle!



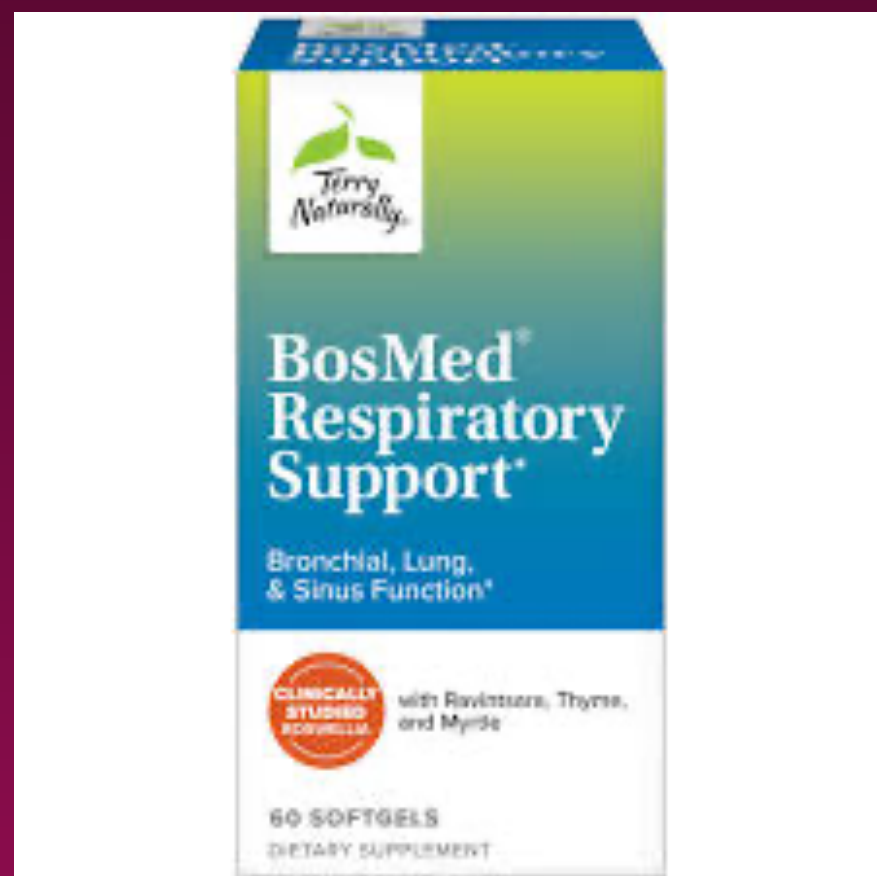
Dr. T's suggestions: Lung issues



Boswellia 500mg - 2 - 3x a day - good for the lungs and the GI tract

Reduced Glutathione - Terry Naturally Clinical Glutathione - 1 - 1-2x a day

CuraMend - for supporting inflammation - 1 to 1 - 2x a day



OR



Peter's Pulmonary Blend Tea

Available in the Bulk Herb Dept at Brighter Day



Mullein Leaf



Pleurisy Root



Lungwort



Elecampane

Pulse Oximeter

Dr Tietelbam likes the ZacUrate Brand



Check your oxygen saturation using the pulse oximeter when you are short of breath
If it is over 95%, especially if oxygen saturation increases with walking.
It is not likely to be coming from severe heart or lung damage
Most often it is coming from anxiety.

Chest Pain

Always consult with your physician about this



If you continue to have chest pain after a medical checkup

Try this to see if its muscle pain

When you are experiencing pain

Push on the painful area over the ribs with your fingertips.

Use about 5 to 10 pounds of pressure

If you can make the pain less or worse by doing this,

It is generally muscle pain.

In long Covid chest pain can often be caused by
Tightness of the muscles over the ribcage

Dr T's recommendation: Loss of taste and smell



Smell training

Smelling 4 different aromas
2 to 4x daily for up to 24 weeks

Essential Oils especially Lemon, Eucalyptus, Rose and Clove
are particularly effective

Long Covid Patients reported more than a 50% improvement
after 30 days of smelling

Zinc is an essential nutrient for taste and smell

PEA (Palmitoylethanolamide) Healthy Inflammation Response
600 - 2,400mg a day - split 2 doses -
it takes 3 months research shows it helps

Luteolin 70+ mg a day





Covid and the Brain



Microglial activation

(Which is part of the brains immune cells)

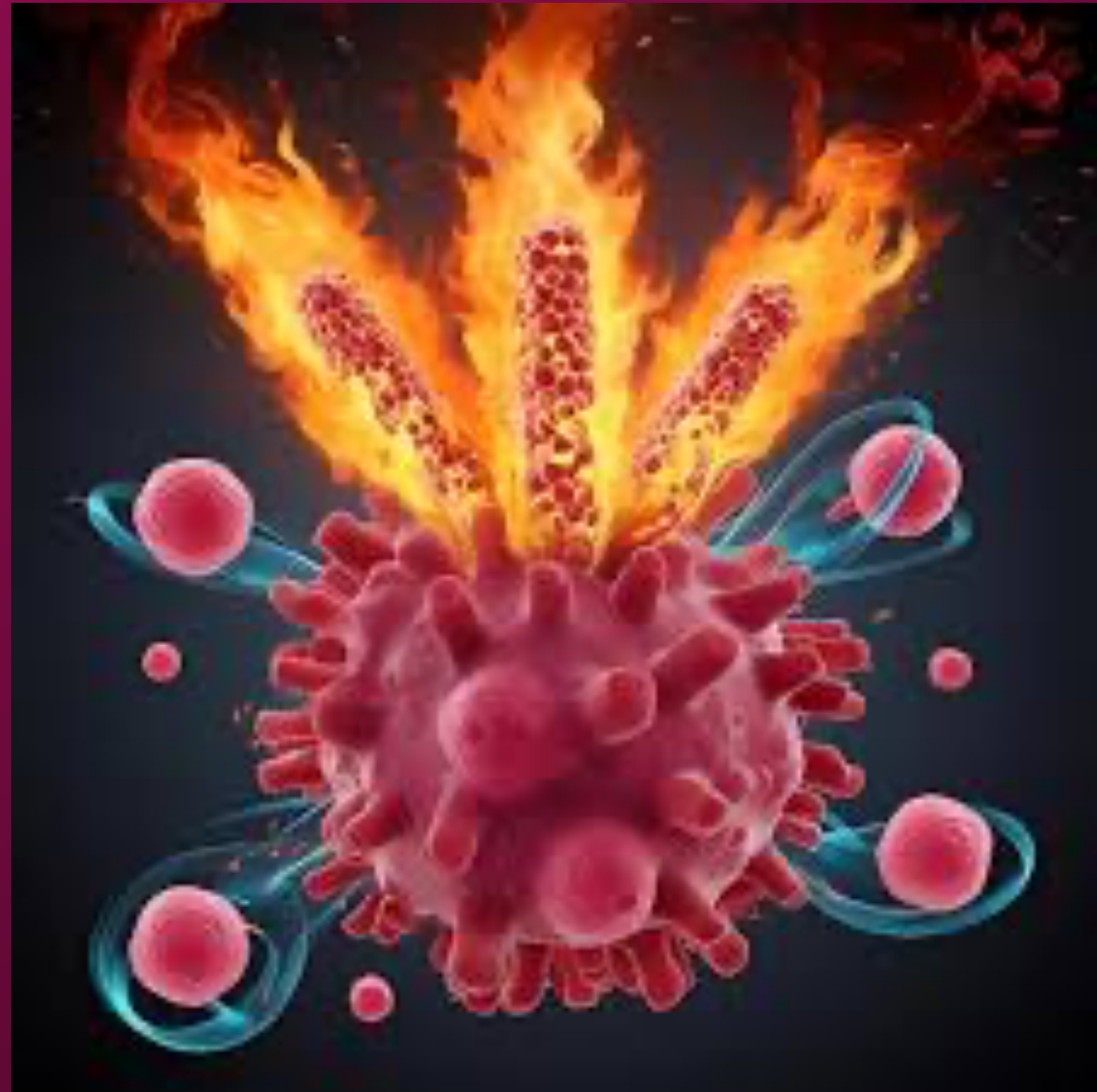
persistent free radical irritation, and alternations in temporal blood flow
(Contributing to the difficulty with word finding and substitution)

It represents the decreased blood flow in the brain from POTS - orthostatic intolerance.

Brain Fog does not likely represent long-term brain injury.

Most people will recover

Neural inflammation that can trigger MCAS - Mast Cell Activation Syndrome



Mast cells are our bodies first responders when contacting things in the outside world

If they meet something in the outside world, they can pour out over 200 chemicals. The most prominent of these is histamine.

Most of the brains histamine is located in the hypothalamus. Mast cells are also found in the pituitary and other glands

In some people the mast cells may be a major trigger for microglial cells pour out inflammatory factors

Dr T's program for mast cell activation



Quercetin - helps to stabilize the mast cells

He recommends starting with 500mg - 30min before meals

After a few days you can increase the dose to 500mg up to 1,000mg
2 to 4x a day

PEA - (Palmitoylethanolamide)

It directly settles down both mast cells and microglial activation

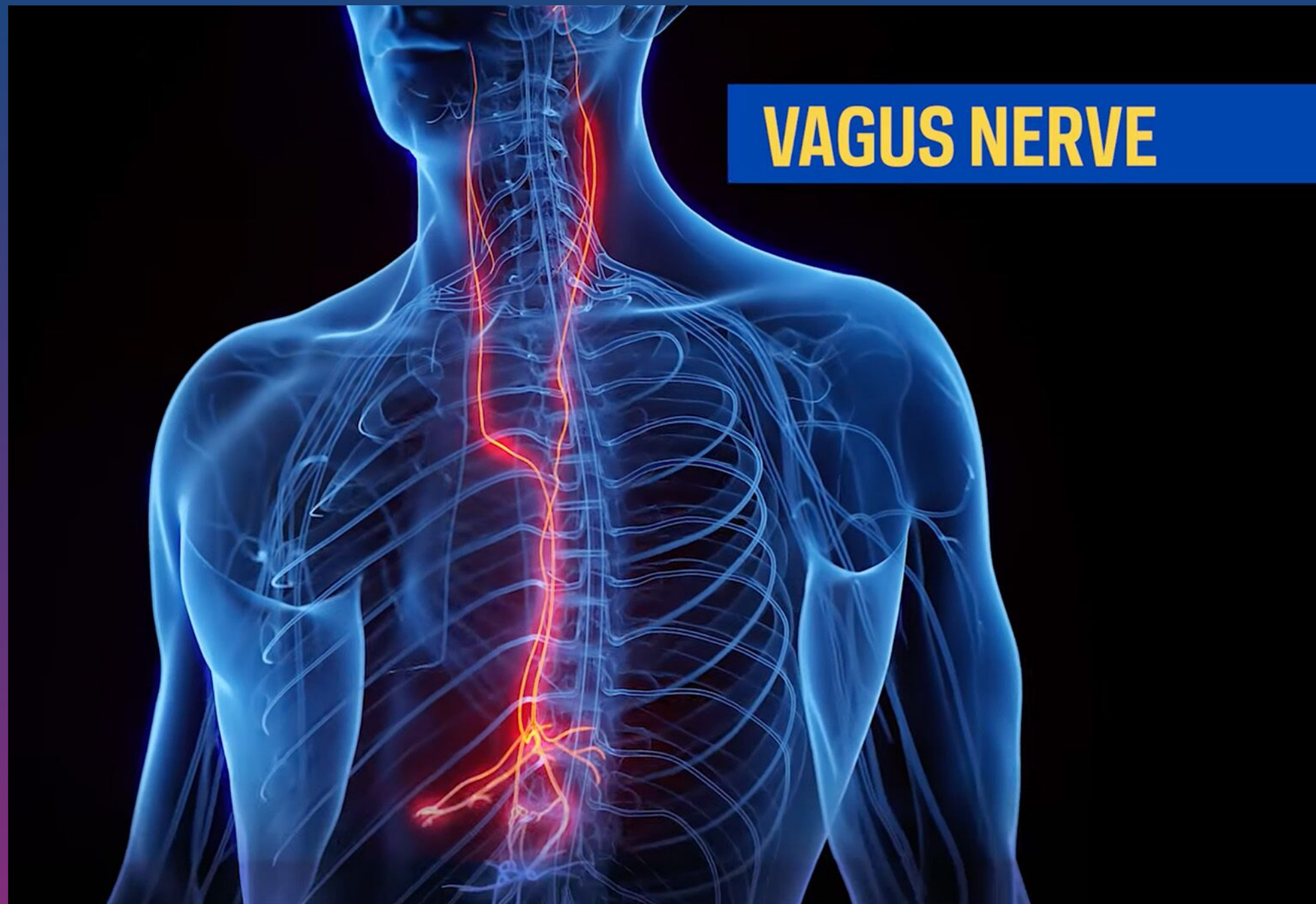
It takes 2 to 3 months to start working

But it can help the entire pain, fatigue, and sensitivity process

He recommends 2 per night



The Vagal Nerve and Covid



The Vagus Nerves are the major nerves of our Parasympathetic System

The right and left vagal nerves contain 75% Of the Parasympathetic Nervous systems fibers

The Vagus nerves control our heart rate, blood pressure Breathing, Immune system responses, mood, mucous secretion, skin and muscle sensations, speech, taste, urine output

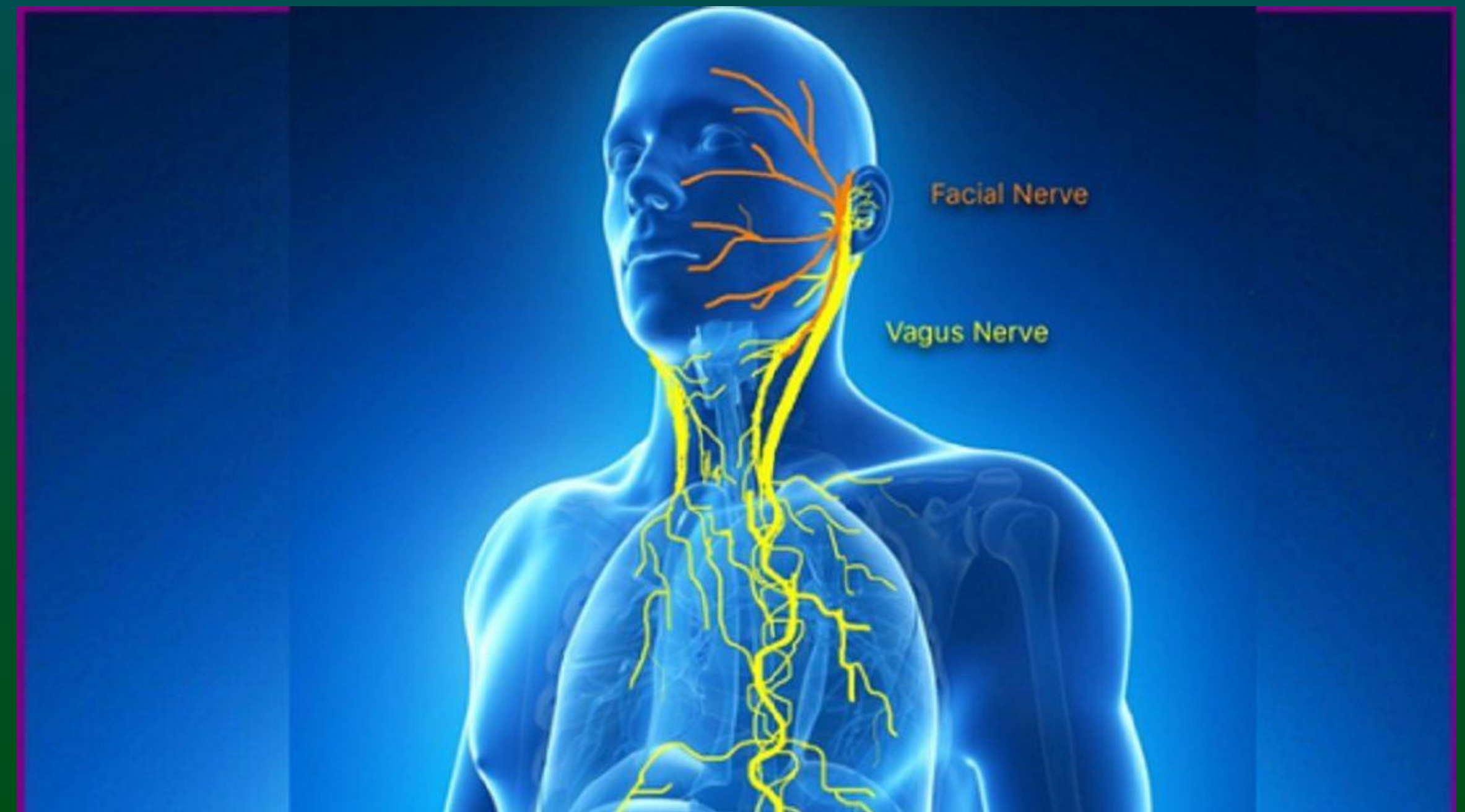
Vagal nerve inflammation is likely the most common cause of shortness of breath in long COVID

Vagal nerve inflammation can be associated with decreased movement of the diaphragm muscle that separates the lungs from the abdomen.

It can contribute to a sense of breathlessness

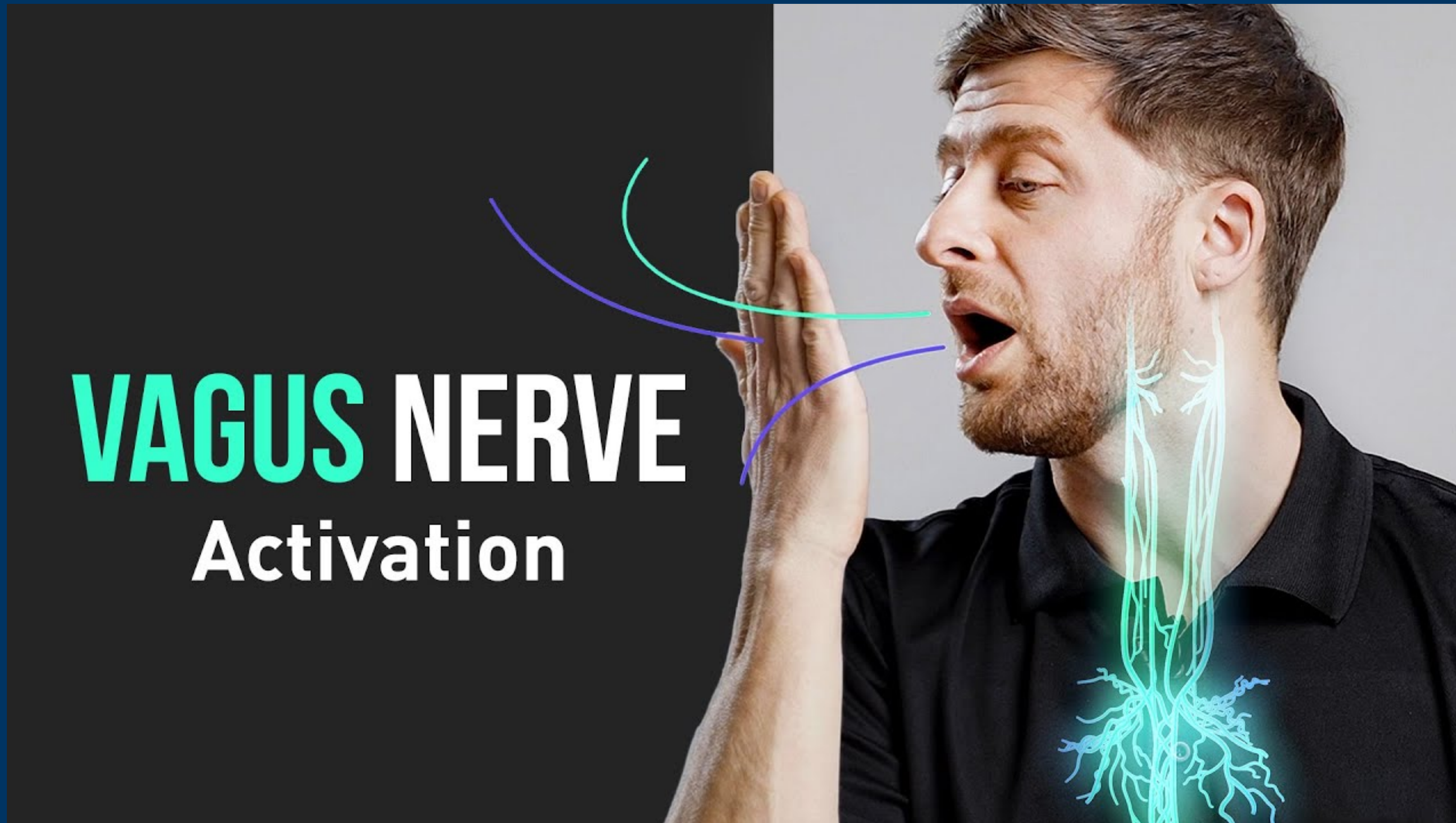
Vagal Nerve and activating the Parasympathetic Nervous System

- Understanding the Vagal Nerve and how to activate the parasympathetic nervous system. **Try gargling 3x to activate the Vagal nerve**
 - Breathing - nose breathing - practicing slow deep breathing and breathing rhythmically to lower cortisol levels - when your exhale is longer than your inhale this activates the parasympathetic system.
 - Right nostril breathing - sympathetic
 - Left nostril breathing - parasympathetic
 - Humming - deep low, vibrate the back of the throat
 - Ear massage
 - Being out in nature - “forest bathing”
 - Establishing a daily meditation practice
 - Turn off the news - www.reasonstobecheerful.world
- Socializing with friends and family
- laughter - comedy



Yoga Body - Breathing exercises for Vagus Nerve activation

Go to - You Tube



Exercise in the Sunshine

- Both exercise and sunshine improve mood and energy
- Sunshine is critical for vitamin D. It is estimated that the insane advice to avoid sunshine contributes to thousands of deaths each year, and the epidemic of autoimmune diseases
- The proper advice? **Avoid Sunburn, not sunshine!**



Headaches and Migraines



The frequency of migraine headaches can increase when you have long COVID

Dr T recommends a comprehensive multi vitamin powder with generous levels of magnesium (his uses the glycinate form)



Plus 200mg of Vitamin B-2 (Riboflavin) - 2x a day

+



He says this combination can reduce migraine frequency by over **70%** after 6 weeks

Heart Issues

Cardio Myopathy - post viral or vaccine induced

Increasing cardiac efficiency

CoQ10, Magnesium, B-Complex vitamins,
Ribose, Acety L-Carnitine

All of these increase cardiac efficiency



Dr T's suggested doses:

Take the following for 6 weeks to see the full effect :

Ribose powder - 5 grams 3x a day for 6 weeks then 2x a day
(*his favorite and first nutrient to use*)

CoQ10 chewable 100mg - GammaSorb 1 to 2 a day

B-Complex 50mg a day or use the Energy Revitalization Drink Mix

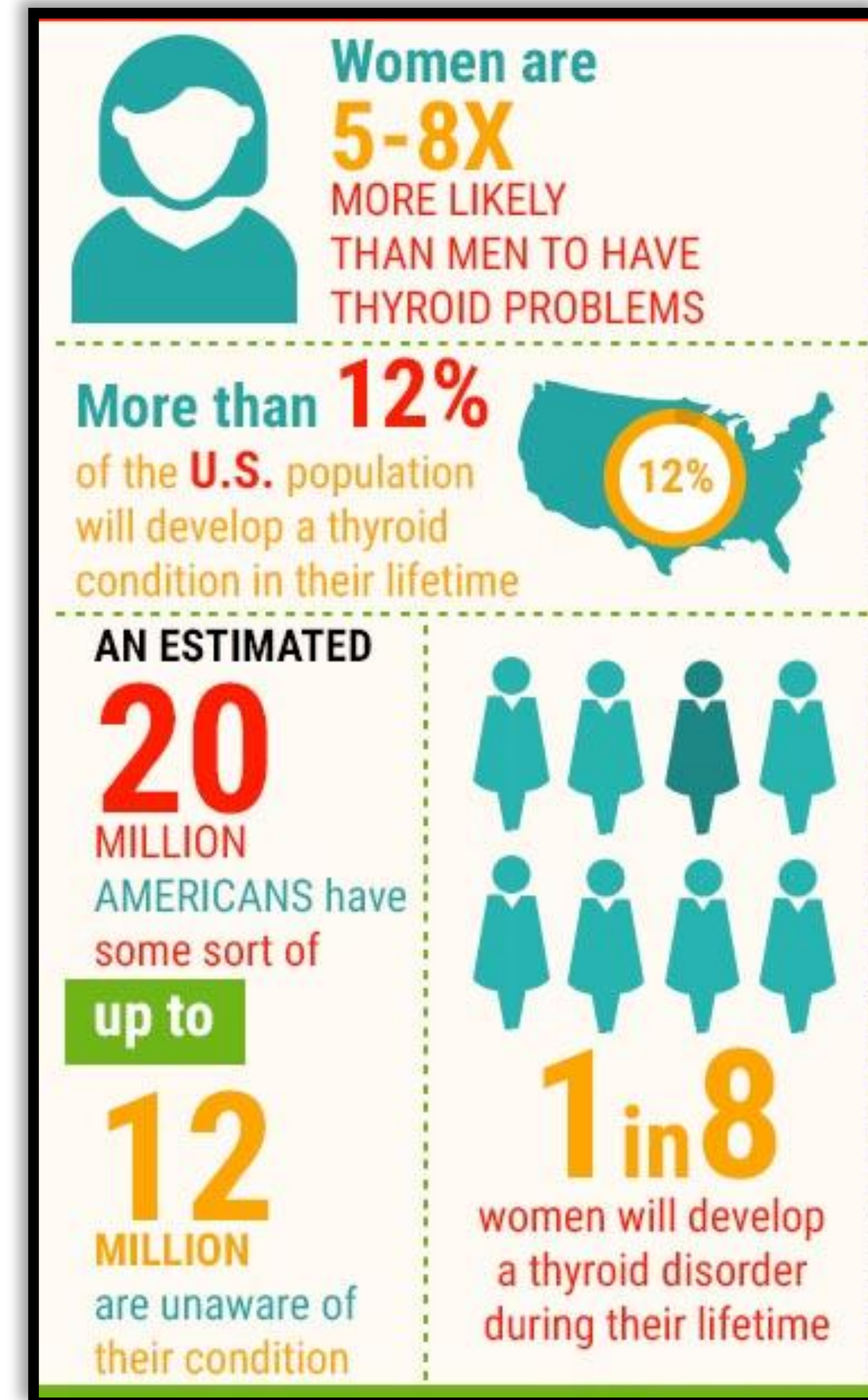
Magnesium Glycinate or Orotate form 400mg a day

Acetyl - L - Carnitine 500mg 3x a day

Hawthorne Phytosome 2 caps 3x a day

Low Thyroid Hormone

- Thyroid (the body's gas pedal)
- Symptoms of low thyroid include:
 - Fatigue
 - Weight gain
 - Joint/muscle pain (aches)
 - Cold intolerance
 - Thinning of lateral eyebrows
 - Poor memory and depression



Supplements to support thyroid:

Low Thyroid (Hypothyroid) : Fucus, Bladderwrack (seaweeds), selenium, iodine, guggul, ashwagandha.

Overactive Thyroid (Hyperthyrod): Vitamin D, L-carnitine, bugleweed, motherwort, lemon balm, lithium



Treat the Root Causes of Pain

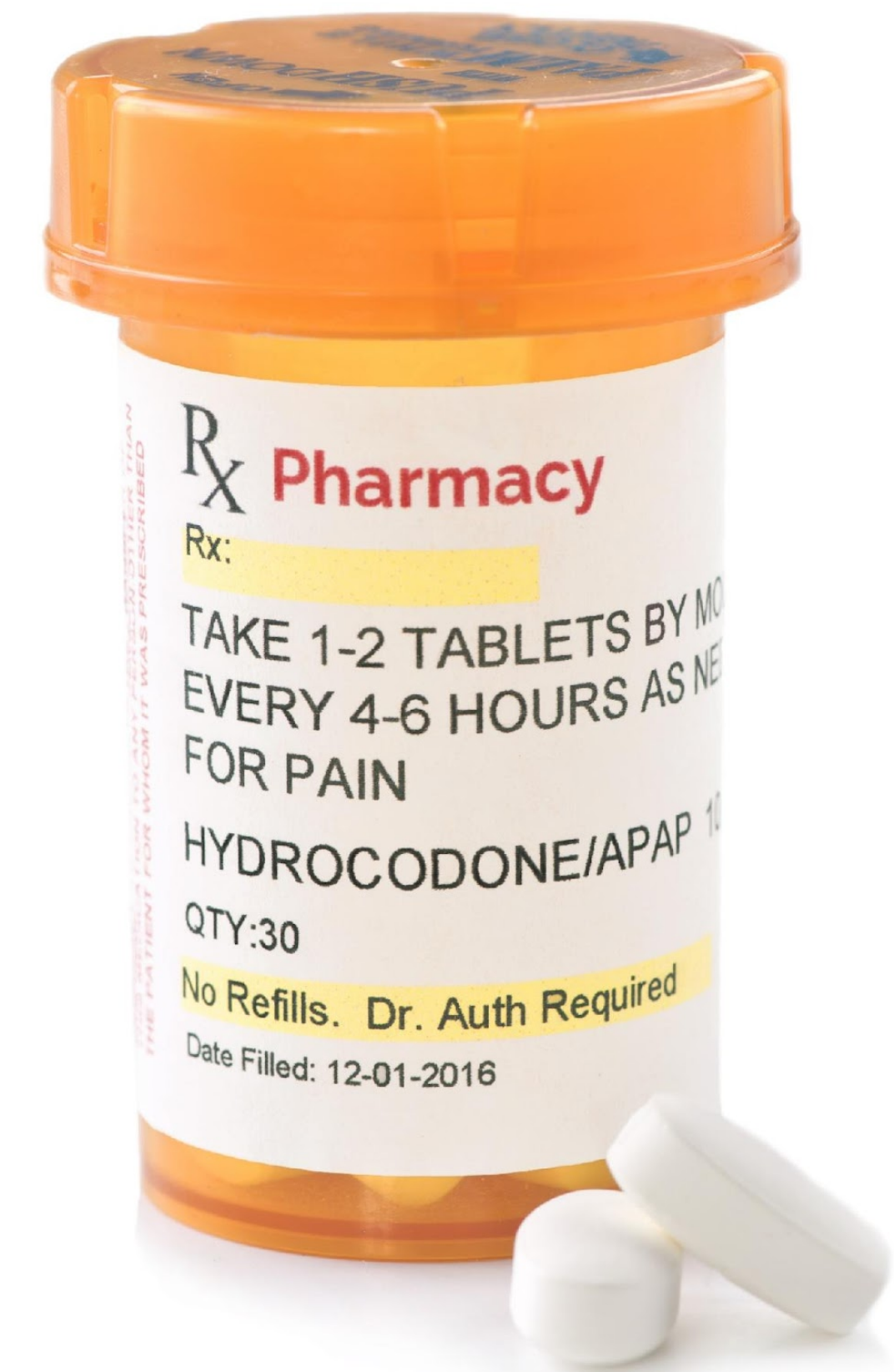
Pain is Not the Enemy



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Conventional Pain Relievers Can Kill You

- Analgesics (pain relievers) are the most prescribed class of drug in the US
- 15,000 overdose deaths year from prescribed narcotics
- 30,000 – 50,000 avoidable US deaths year from arthritis medications (like ibuprofen)
- 4,500 – 16,500 bleeding ulcer deaths
- 40% increased risk of heart attack and stroke



Pain is more Toxic than Pain Medication



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Key Components of Pain

- Inadequate energy in muscles and nerves
- Inflammation
- Nerve pain from other causes
- Central sensitization or “Brain Pain”
- Neurotransmitters – e.g. NMDA
- All of these can be successfully addressed – naturally!

The Four Pillars of Pain

**Low Energy
Causes
Muscle
Shortening**

**SAD Diet
Causes
Inflammatio
n**

**Low Energy
Triggers
Nerve Pain**

**Microglial
Activation
Due to
Chronic
Pain Leads
to Brain
Pain**

Most Pain is Treatable!

Guiding Principles:

1. Give the body what it needs for healing and tissue repair
2. Treat or eliminate what is causing stress and pain including
 - Infections
 - Toxins
 - Mechanical stress
 - Excessive physiological, situation and physical stress
 - Abnormal tissue compression (e.g. cancer)
 - The chronic pain itself (Central Sensitization)

SHINE Treatment Protocol

- **Sleep**

- Natural Sleep Formula: 125-250 mg of a combination of mandarin, ravintsara, and lavender oils about an hour before bedtime

- **Hormonal deficiencies-despite normal labs**

- Treat the Person, Not the Test!

- **Infection/Inflammation/Impingement**

- Fungal infection: probiotic bacteria; Bee Propolis, Berberine

- Natural anti-inflammatory herbs

- **Nutritional deficiencies**

- Overall micronutrient support with a powerful nutrient drink

FatigueDoc@gmail.com

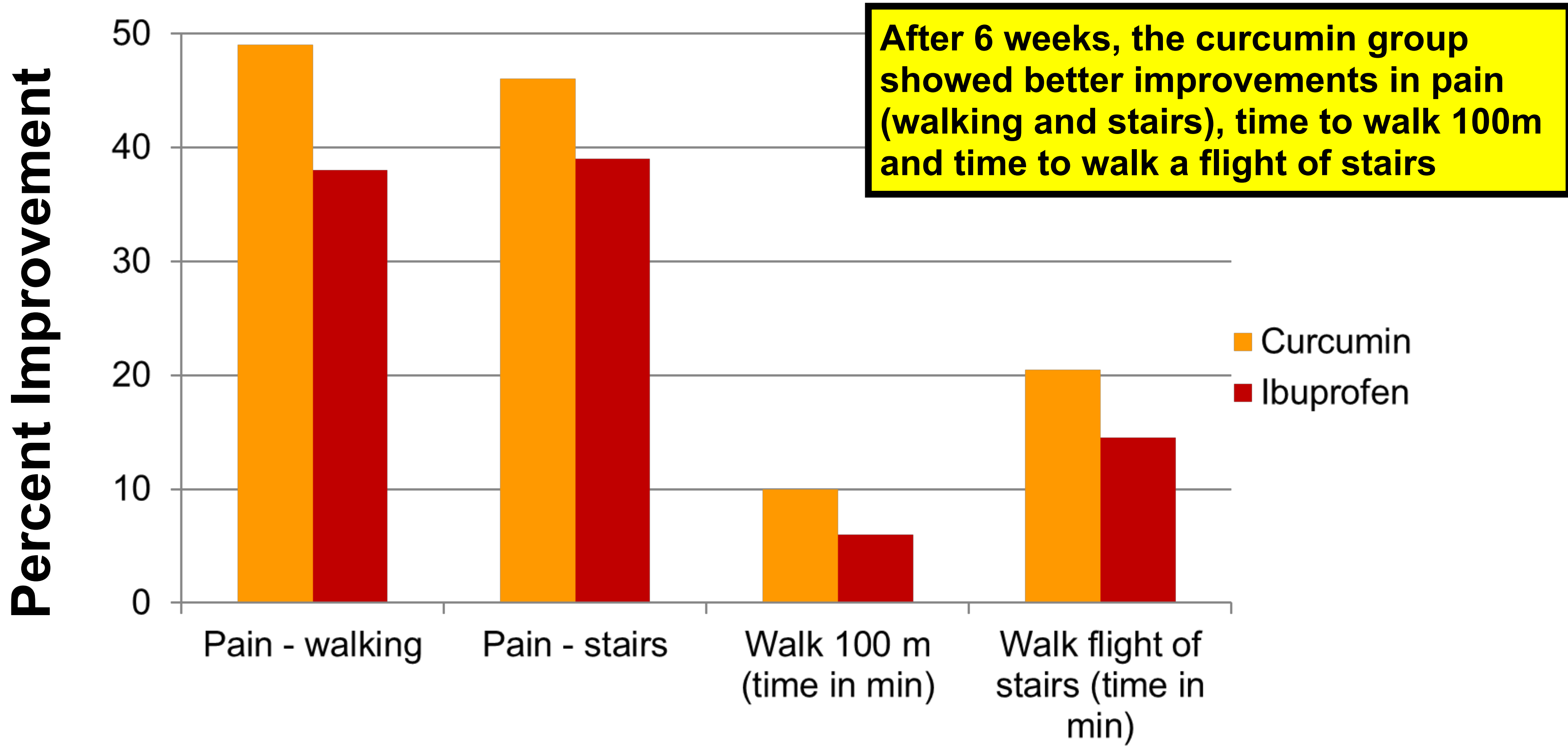
- **Exercise Deficiency**—associated with increased arthritis pain

Two Favorites for Inflammation

- **Curcumin** comes from the spice turmeric and is one of nature's best pain relievers
- **Boswellia** has been used in Ayurveda for thousands of years to address issues like pain and joint dysfunction
- When combined, curcumin and boswellia, are able to modulate almost every inflammatory pathway in the body
 - Including COX-1, COX-2, and 5-LOX



Curcumin Works As Effectively As NSAIDs For Pain Relief



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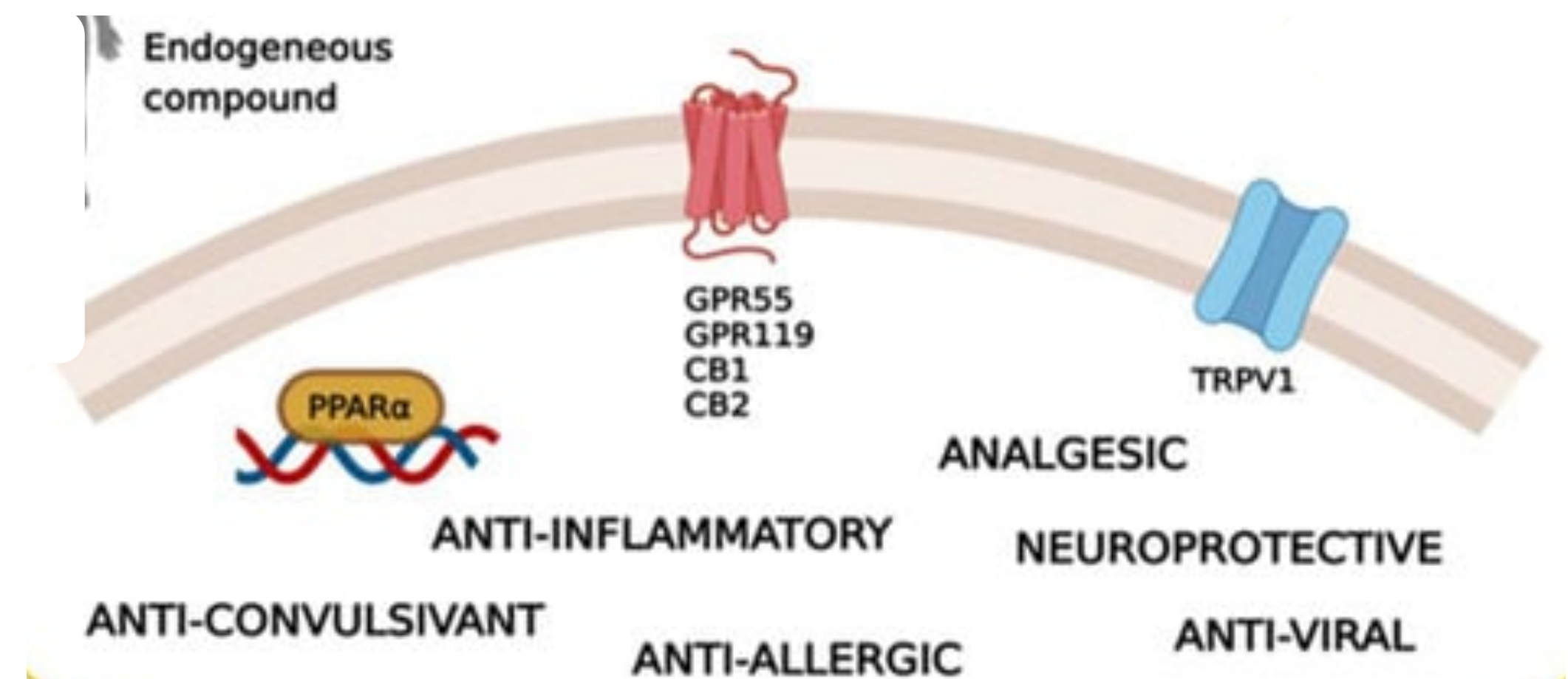
PEA -Palmitoylethanolamide

Terry Naturally uses a high absorption form
GAMMASORB with Serrapeptase enzyme
To boost effectiveness



What is PEA?

- Palmitoylethanolamide (NOT green pea or pea protein)
- Naturally synthesized in the body – found in all tissues including the brain
 - In foods, found in egg yolks and peanuts
- In the scientific literature, PEA is a “Super-Hero” molecule
- PEA-Made by the body in response to
 - Chronic pain
 - Sensitivities (e.g.- MCAS)
 - Brain cell damage
 - Chronic Inflammation or infection
- The SUPERHERO Molecule



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Think of PEA for...

1- Any Chronic Pain: Pain has 3 key components

A- Inflammation- add to Curcumin/Boswellia/DLPA/Nattokinase

B- Muscle/low energy- Add to multivitamin powder drink mix

C- Microglial Activation/brain pain- Main cause of resistant chronic pain; **PEA to the RESCUE**

2- Sensitive to Everything? MCAS?

A- PEA directly addresses this by suppressing hypothalamic histamine. Remarkable!

3- ANY Neurological injury. Actually helps REGROW brain cells!!!

A- Post stroke; MS; Neuropathy, etc etc

4- CFS, Fibromyalgia, Lyme and Long COVID

5- Even athletes who want a faster recovery

Many, Many Uses for PEA

Pain

Exercise recovery

Irritable bowel

TMJ

Allergies

Cold and flu

Cognition

Insomnia

Chronic inflammation (-itis)

Depression

Anxiety

Multiple sclerosis

Arthritis

Autism

ADHD

Obsessive compulsive
disorder

Macular degeneration

Migraines

PMS

Urinary tract infections

Atherosclerosis

Stroke

Obesity

Neuropathy

Ulcerative colitis

Carpal tunnel

Asthma

Fatty liver

Dementia

Heart disease

Metabolic syndrome

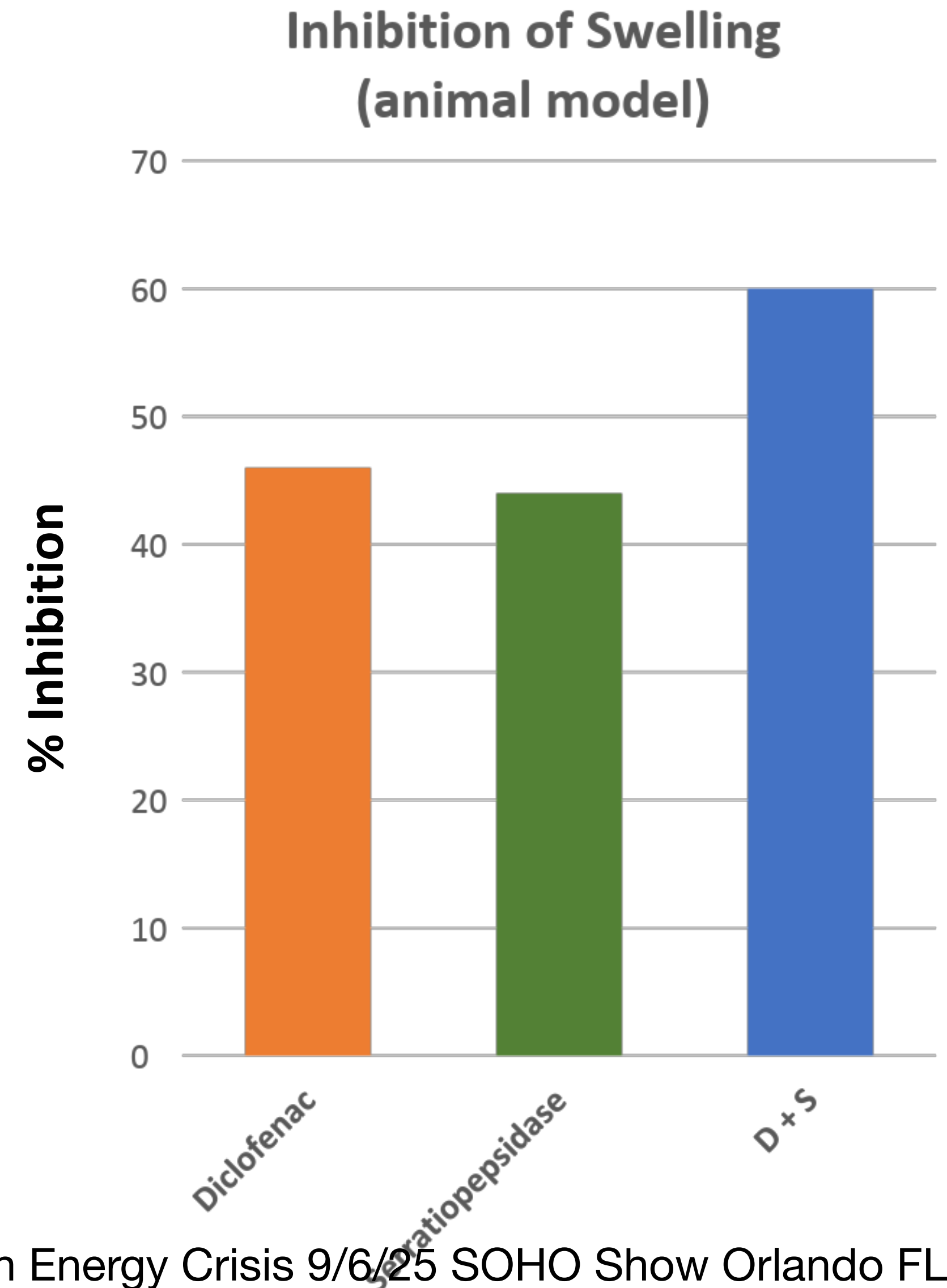
Long COVID

Takes 10-12 weeks to kick in

- Warn people that though it is a miracle, it takes 3 months to work. They should get 3 bottles to see what it will do
- Can take along with any other pain medicine
- It is a key “Missing Link” in eliminating pain
- Have them get 3 bottles to start!

Serratiopeptidase

- Proteolytic enzyme from silkworms
- Used in Japan for anti-inflammatory effects since the 1950s
- Benefits include
 - Reduces inflammation and swelling
 - Thins mucosal secretions (mucolytic)
 - Breaks down blood clots (fibrinolytic)
 - Promotes wound healing by thinning fluids in inflamed areas, facilitating drainage



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Why add Serratiopeptidase (SP)

A great partner for the PEA Superhero.

PEA puts out the fire.

SP lets in the rest of the healing team

- Dissolves Biofilms
- Dissolves fibrin (chronic clotting and inflammation)

Ask your physician about



A prescription drug that is taken at very low doses 3 mg - it normally must be compounded by a compounding pharmacy

Dr T uses it to re-boot the brain

It takes about 2 months to start working

Near Infra Red Light



Daytime melatonin is produced deep in our tissues from exposure to Orange morning light - best before 9am for 20 min. This establishes our circadian rhythm for the day
It also increases our own anti-oxidant production

Circadian Rhythm

Roger Seheult MD



Bright blue light of the midday sun
Helps with testosterone production
Noon light sets up melatonin cycle for the night

Orange light at sunset also helps our Anti-oxidant production and set the Evening melatonin production for sleep and restoration

Start your day with Coffee on the deck outside in the morning light to set The circadian rhythm for the day - 20min



Keep light as low as possible at night

Blue Light Blocking Glasses for Night Time

Sleep is Important

During sleep, the body takes care of

- muscle repair
- protein synthesis
- tissue growth
- hormone release

Too little sleep can have significant negative health effects:

- In a study with healthy volunteers, immune cell production dropped by 70% when sleep was restricted to four hours **for just one night!**
- Children with short sleep durations are almost 90% more likely to develop diabetes
- Sleeping five or fewer hours a night increases risk of death from any cause by roughly 15%

This slide was taken directly from Dr. Jacob Tietelbaum MD - lecture Solving the Human Energy Crisis 9/6/25 SOHO Show Orlando FL

Common reasons for poor sleep

- Stress
- Anxiety
- Pain
- Sleep apnea
- Bladder/Prostate issues
- Restless legs

Optimizing Sleep

What can happen when you don't get enough sleep:

Blood pressure goes up

Cognitive function - synaptic plasticity - **the brain is electric and needs to be recharged like a battery**

For proper memory you need 7 to 8 hours of sleep -

REM sleep consolidates memory from the day before

Poor concentration and attention

Accessing your vocabulary

Weight gain and carbohydrate cravings and sugar cravings

You have to sleep well to lose weight

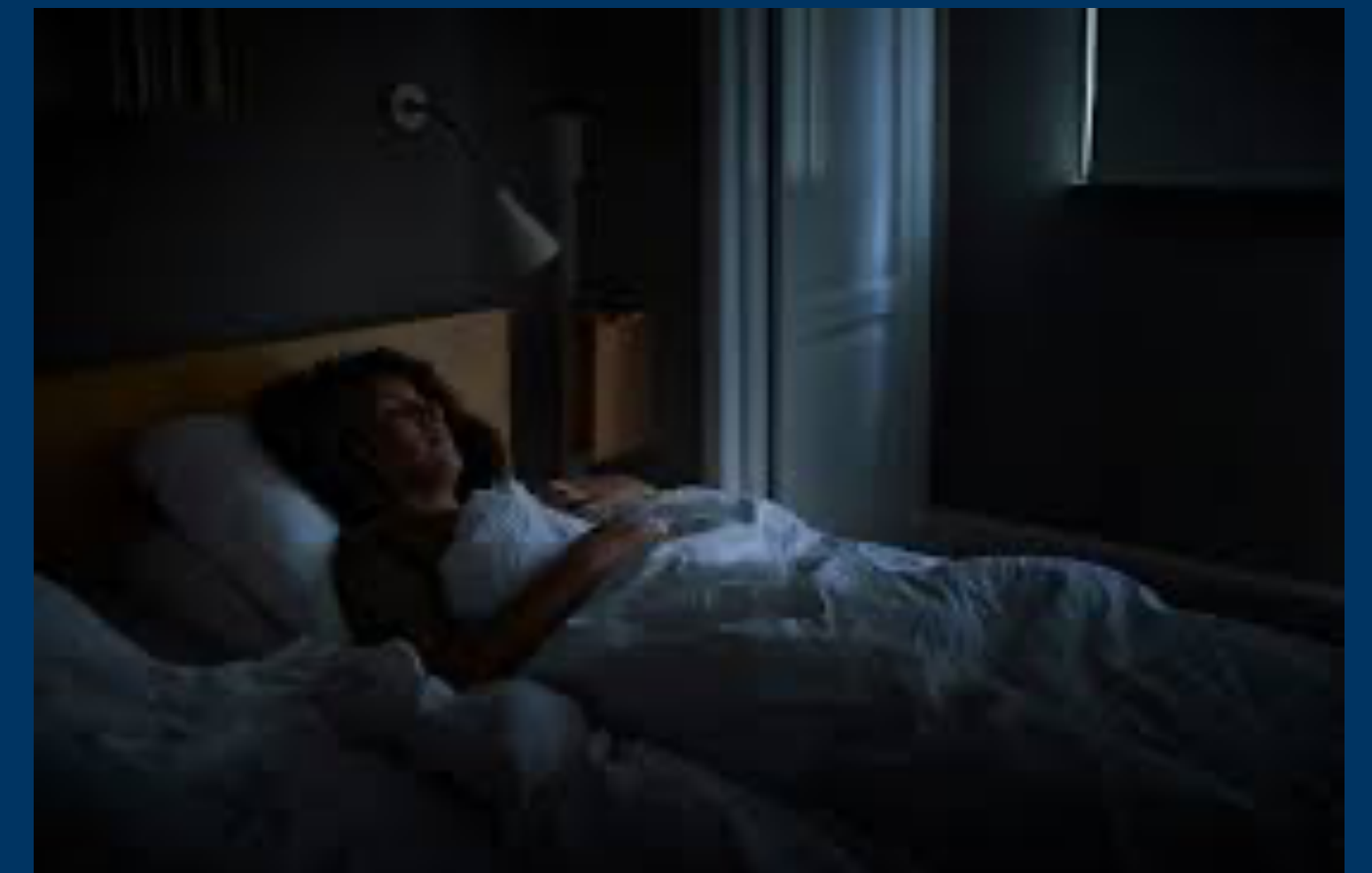




Sleep Hygiene



1. Keep the bedroom temperature around 68 degree's if possible
2. Keep the bedroom completely dark
3. Bedroom clocks should be red light not white or blue
4. Don't consume caffeine after 1pm especially coffee caffeine has a 1/2 life of 6 to 8 hours.
5. Use blue like blockers at night - set your computer and cell phone to night mode
6. Make your heaviest meal at lunch - do not eat 3 hours before sleep
7. A white noise machine can help - you can download an app for your phone
8. Read calming books or listen to calming music before bed.



Sleep medications can be dangerous

- 1 in 3 older adults take prescription medications to sleep
- But these drugs are dangerous – side effects include dizziness, headache, gastrointestinal issues, prolonged drowsiness, memory problems, and increased risk of suicide
- And they don't work that well – research shows people using Ambien and Lunesta only fall asleep about 20 minutes faster than people taking a placebo
- Over the counter drugs containing diphenhydramine [Tylenol PM is one brand name] or other antihistamines?
 - cause daytime drowsiness, dry mouth, and increase your risk of dementia by up to 50%

Melatonin: Sleep (and more)

- Example: recent clinical trial on melatonin use in menopausal women: 45% improvement in sleep quality and 57% reduction in menopause symptoms [4 week study, 3 mg]
- Other benefits:
 - Treatment of viral infections: influenza, common cold, COVID
 - Type 2 diabetes
 - ADHD
 - Fatty liver
 - Cancer
- Higher doses are being found to be safe and beneficial
- Use a sustained-release as otherwise people will wake up in the middle of the night

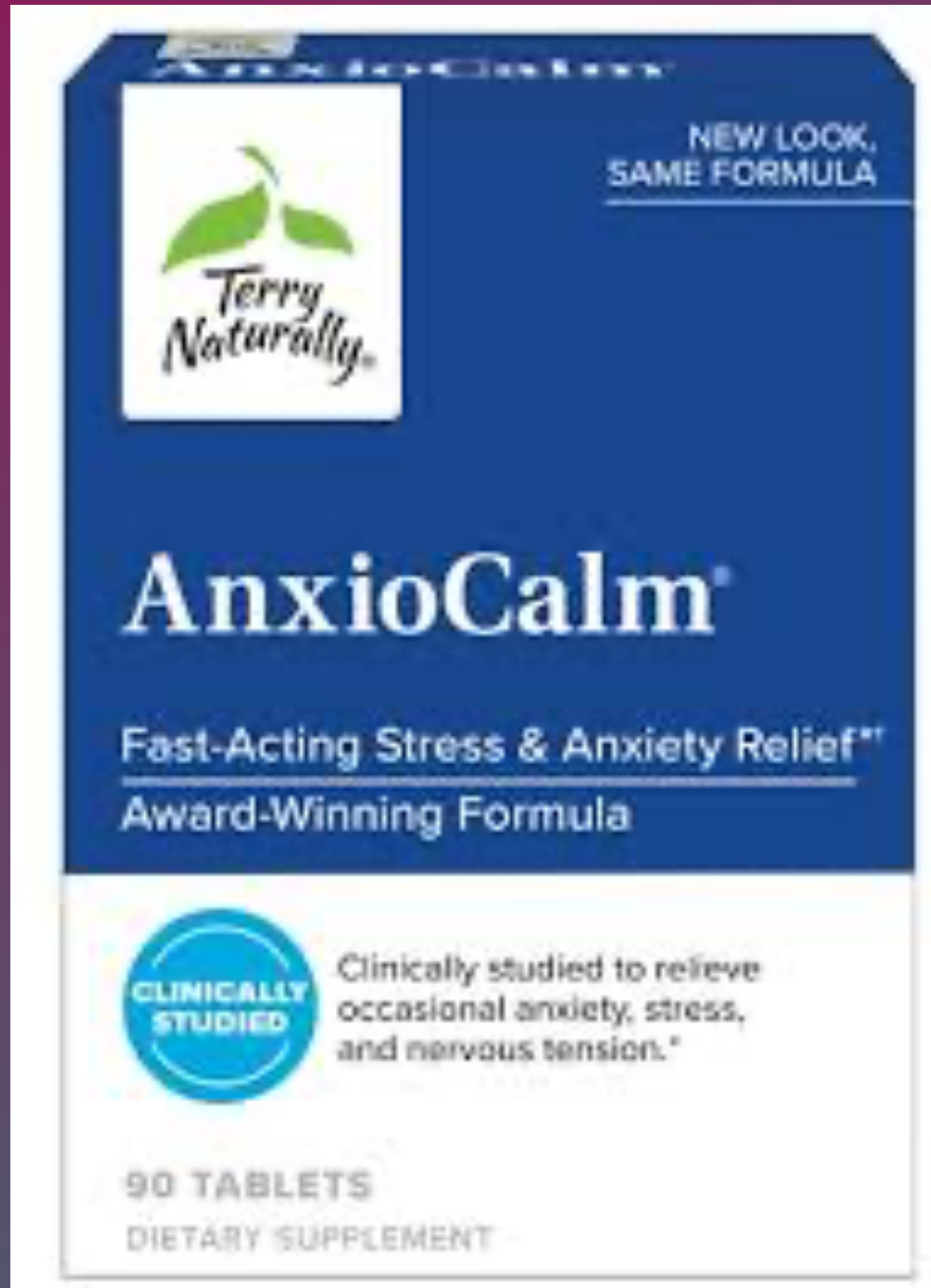
Other solutions for interrupted sleep

- Trouble falling and staying asleep? Herbal mixes can be very helpful
 - Essential oils including;
 - Mandarin (*Citrus reticulata*) Zest Oil
 - Ravintsara (*Cinnamomum camphora*)
 - Lavender (*Lavandula angustifolia*)
- Pain
 - Curcumin/boswellia/DLPA/vitamin B6/melatonin
 - Topical comfrey
- Restless legs- Optimize iron, magnesium and thyroid
- Bladder/Prostate
 - *Angelica archangelica*

When Anxiety Interferes with Sleep

- Anxiety keeping you awake?
 - *Echinacea angustifolia*: 20 to 40 mg an hour before bedtime
 - Quick results
 - Safe for kids and adults



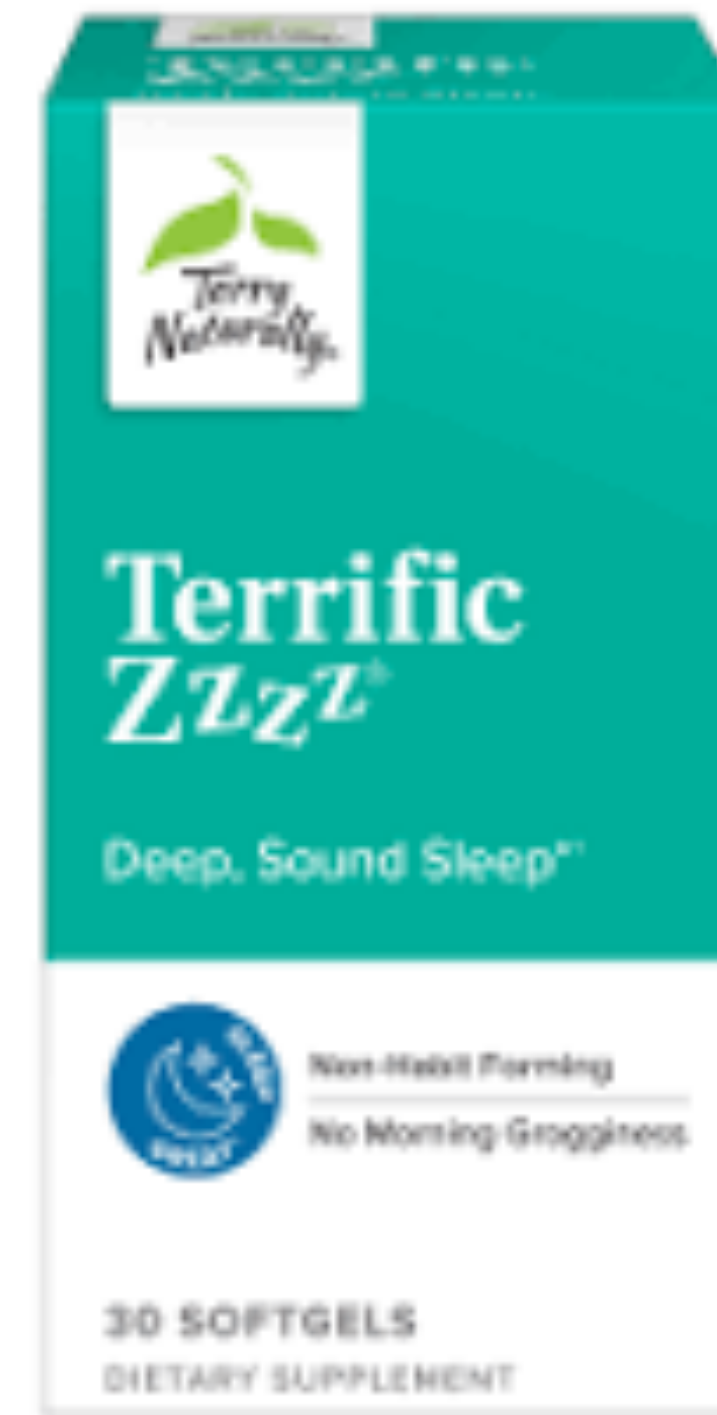


1 tablet 2x a day taken over several weeks worked as well as valium in research

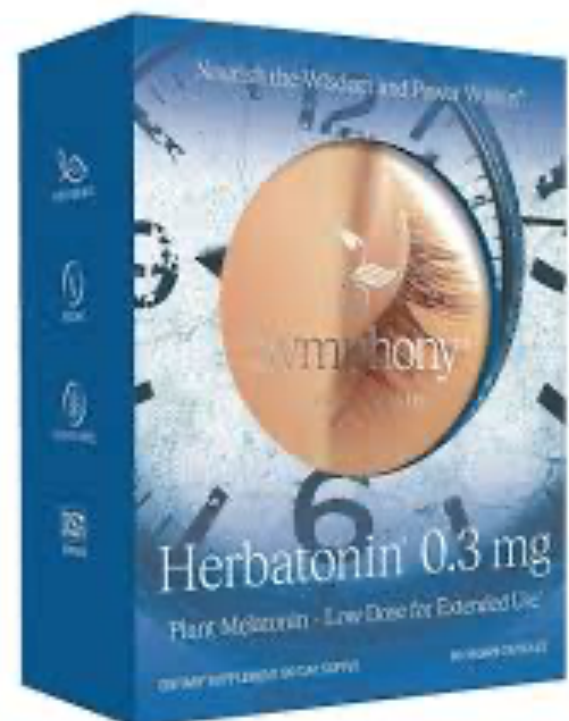
Terry
Naturally.



Higher potency sustained release melatonin to keep you asleep



Essential Oil formula for quality sleep



Symphony

Or a plant derived low potency
300 mcg - 1/3 of 1 mg
Melatonin

Nutritional - Botanical Support for Sleep

Sustained Release Melatonin - can support keeping in the deeper states of sleep so you can go between deep sleep - REM sleep and back to deep sleep easily

Glycine - an amino acid that tastes like sugar
It turns off a busy mind - it combines well with herbal tea
Because it tastes sweet - 1/2 to 1 teaspoon
Great also for a busy mind wake up - you can take it in the middle of the night to get back to sleep



Magnesium - great support for relaxing the body and muscles
The malate form works best for muscles - 200mg 1 hour before bed

CBD - full spectrum can be supportive - especially when pain is an issue with sleep quality
Plus CBD brand is one of my favorites



Valerian - small doses work best - some people have an opposite effect
Kava - relaxes the body - helps you fall asleep faster
Passion flower - turns the mind off - great with Glycine
Chamomile - helps you fall asleep faster - great when the body is in pain

My personal favorite



Covid and the Gut



A reservoir of covid in the gut

Shifts the microbiome

Increased zonulin that creates more gaps in the gut lining

Allowing the virus to go into the gut.

The microbiome instructs the immune system on what to do

If you have an imbalance in your microbiome

You can have an imbalance in your immunity

Probiotics and the Biome - Gut Health



The Gut Brain Connection

You have 100 trillion bacteria in the gut

The majority of your Serotonin is made in the gut

“Psycho-biotics”

Massive Research is constantly discovering more about the biome

There is a biome in the brain

Lactobacillus Helveticus and Bifidobacterium Longum
Have been found to allay anxiety and insomnia

Fermented foods, fibers, and polyphenols feed your gut bacteria

Read my Handout - Let's Get Cultured to learn all about diet and gut health

Gut Health - Fermented Foods and Fiber

Healthy Biome - culturing the GI tract

- Fiber is the food that feeds your beneficial gut bacteria
- Lactobaccillus - upper GI and Bifido species , colon.
- Make your own Ghee - Butyrates - Parmesan and Swiss
- Fermented foods to include in the diet - Kefir, Yogurt, Sauerkraut, Kim Chi, Miso, Tempeh, Kombucha
- Resistant starches - Swiss Mueseli (raw oats), Hummus and cold bean salads, bananas eaten on the green side, potato starch, “al dente” pasta - feeds Bifido
- Avoid GMO foods - Roundup - **Glyphosate kills your biome** - Non organic Oats, Wheat, and Beans are sprayed with Glyphosate before harvest - high residues



Include Fermented Foods in your diet every day

Sauerkraut - learn to make your own -
or buy only refrigerated varieties



Fermented Soy products

Miso Paste
Tempeh
Tamari
Natto

Dairy Based also look for Goat and Sheep
Kefir (Yogurt on steroids !)

Yogurt
Traditional aged cheeses with probiotics
Parmesan - Reggiano
Gouda - the longer it is aged the more probiotics are produced
Aged Cheddar - raw milk cave aged is best - raw English Cheddars
Stilton
Emmental Swiss



Kim Chi - Sunja's for example

Kombucha



Authentic German Sourdough bread



Organic Apple Cider Vinegar

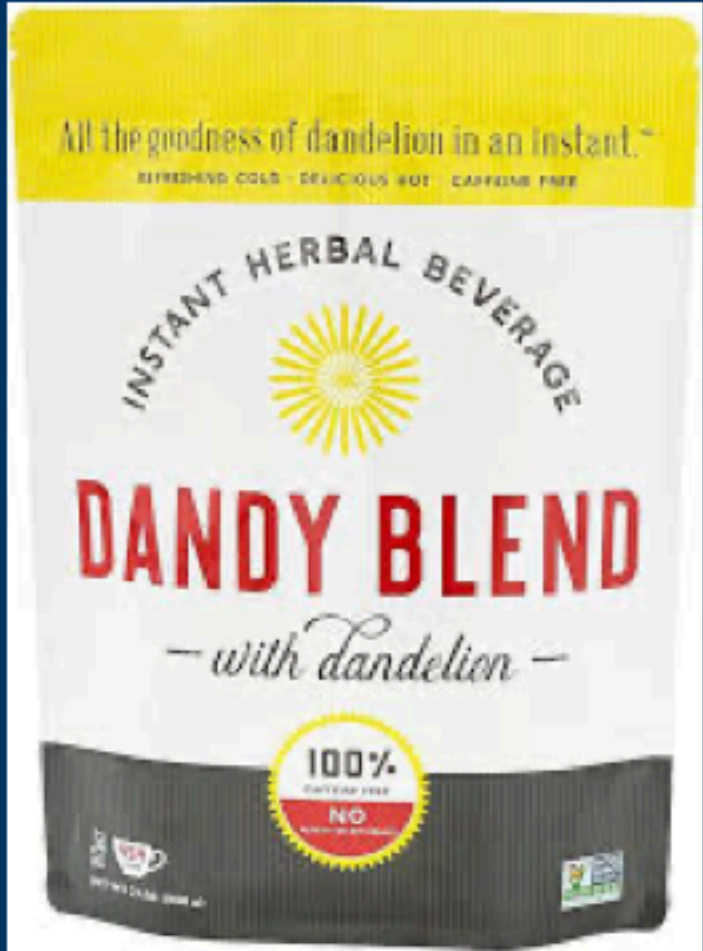


Inulin, FOS, Resistant Starches



Jerusalem artichokes, Burdock Root and Dandelion root are high in Inulin

Resistant Starch - stimulates the production of Butyrate in the colon



Goal: We want to produce a lot of Butyrate



An anti-inflammatory compound that supports the Gut immune response, supports the gut lining

How to make Ghee

Use unsalted grass fed or organic butter

Put butter in a saucepan and put on the stove

Put it on a low heat setting

When it melts - skim off the white solids

Keep skimming until the butter is clear yellow

Pour off carefully into another container

Water will remain on the very bottom

Of what you pour off - be careful not

to have that with your GHEE

GHEE is very stable and does not

always need to be refrigerated

Ghee

Virtually free of lactose

Rich in Vitamin A

Great for high heat cooking

**Contains 9 grams of saturated fat
and 4 grams of monosaturated fat
Per tablespoon**

**Ghee is high in C-15 a saturated fat
That may promote longevity**

Probiotic bacteria feed on fiber and polyphenols

The greater the variety of fibers and polyphenols in the diet
The greater the diversity of beneficial bacteria in the gut.

Let's get cultured - Understanding our biome

The value of cultured and fermented foods and fibers in our diet.

by Peter Brodhead CN
updated November 26, 2021

[Best Fermented and cultured foods to include in our diet:](#)

Vegetables: Learn how to ferment your own vegetables

Go to You Tube : Look up - The Art of Fermentation and Fermenting Vegetables with Sandor Katz Sandor.Katz is author of the book Wild Fermentation and the Art of Fermentation

Make your own cultured vegetables

Sauerkraut - traditionally made with cabbage as the main ingredient - if purchased from a store only buy refrigerated sauerkraut it contains the live bacteria (probiotics) - off the shelf has no live bacteria

Kim Chi - Korean Sauerkraut - usually made with cabbage or nappa it also comes in varieties made from Daikon radish and small cucumbers - usually spicier and if purchased from a Korean market it has fish sauce in it

Fermented soy products:

Miso paste - again only purchase from the refrigerator - when using miso as a soup stock - add it only after the water temperature is well below boiling - so you don't kill the culture

Tempeh - is a fully cultured soy product originally from Indonesia - the proteins in Tempeh are far more digestible than from Tofu - there are many great ways to cook with Tempeh.

Tamari - is the traditional soy sauce and is made from the liquid that forms when miso is being made - it is the most preferable form of soy sauce to use as a condiment

Natto - is cultured from soy and popular in Japan - it has a very intense smell and flavor and strange texture - okra like stringy - the "lindberger cheese of soy"

Kombucha - made from adding a Scobie to Black Tea or Green Tea with sugar - the Scobie is a mixture of beneficial yeasts and bacteria that converts the tea and sugar into a very healthy probiotic beverage. Contains *Saccromyces Boulardi* a beneficial yeast

Dairy based:

Yogurt - always look at the label for active cultures

Kefir - "yogurt on steroids" as I call it - has a larger variety of probiotic bacteria and beneficial yeasts usually 12 or more strains and is a great support for the digestive system

Traditional aged cheeses with probiotics - cheeses that are made using the facto-fermentation process and raw milk that have lactic acid producing bacteria. **Gouda** the longer it ages, the more probiotics are produced - it has been found to help aid the digestive system and Finnish studies have shown that it boosts immune system

Flax seed meal is a phenomenal fiber for the gut - it is loaded with polyphenols and Lignans - Lignans bind to the estrogen binding receptors and block them
Many cancers use estrogen as a driver besides Breast,
Uterine and Ovarian Cancer
Prostate cancer, Lung cancer and Brain Cancers are also driven by Estrogen.

Many probiotics are being discovered that you can only get through the diet
FP - Faecallbacterium prausnitzil is one of the major players in immunity
It makes up 5 - 15% of the total gut microbiome.
It is anti-inflammatory and can moderate the immune cells
By acting on T cells and cytokines (IL-8, IL-10, IL-12) and producing
Anti-inflammatory molecules.

Dr Ohira's Probiotics

A unique 3 year fermentation process at ambient temperatures

13 strains of probiotic bacteria

The bacteria are fed 14 organically grown foods

Prunes, Goji Berries, Fig, Blueberries, Yuzu fruit,
Japanese Mugwort, Komatsuna Shitake, Red bayberries,
Maitake, Hijiki, Wakame, Kombu, Agaracus

500 Postbiotic Metabolites



Mediterranean diet

Nutrient Dense - Colorful Foods

The more variety of colors the better

Each color signifies different carotenes, flavonoids and polyphenols they all have anti-inflammatory effect

Lowering inflammation is the key to brain and body health, longevity and disease prevention.

Inflammation is the driver of brain decline and chronic disease.

This diet helps with glucose “blood sugar” control.



Small Fish, loads of colorful vegetables, berries, whole fruits (no fruit juice except pomegranate).
Gluten free whole grains in smaller quantities. Avoid hybridized wheat. Ancient varieties are better
- Kamut, Spelt, Einkorn. If you eat pasta try gluten free or **Italian grown wheat**,
Lots of fermented foods. Avoid Oats that are not organic -

Eat Organic whenever possible - the EWG - Environmental Working Group has a list of the “Dirty Dozen” and the “Clean 15” - worst and best vegetable and fruits to eat that are non-organic www.EWG.org



Polyphenol Rich Foods

Food is information

Are specific food for your biome
 Anti-inflammatory
 Anti-oxidant
 Cell Protective

Cloves are the #1 richest polyphenol food, Coffee, Tea - Green and Oolong, Cacao - Chocolate, Walnuts, Peppermint and Spearmint, Flax Seed Meal, Rosemary, Sage, Oregano, Olive Oil, Black Elderberry, Blueberry, Black Currant, Capers, Black Olive, Hazel Nut, Pecans, Plums, Basil, Curry Powder, Roasted Soynuts, Strawberry, Raspberry, Ginger, Prune, Shallots, Apple Cider Vinegar, Pomegranate Juice, Cinnamon, Black Bean, Walnut, Organic Oats, Pear, Carrot, Broccoli, Asparagus, Purple Sweet Potato, Blue Potato and many more.....

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Table 1 Polyphenol and antioxidant content in the 100 richest foods (mg per 100 g or mg per 100 ml)

From: Identification of the 100 richest dietary sources of polyphenols: an application of the Phenol-Explorer database

Food	Food group	Polyphenols ^a		Polyphenols AE ^a		Antioxidants ^b	
		Content	Rank	Content	Rank	Content	Rank
Cloves	Seasonings	15188	1	15188	1	16047	1
Peppermint, dried	Seasonings	11960	2	7920	2	980	26
Star anise	Seasonings	5460	3	5460	3	1810	16
Cocoa powder	Cocoa products	3448	4	3294	4	1104	24
Mexican oregano, dried	Seasonings	2319	5	2137	5	—	—
Celery seed	Seasonings	2094	6	1007	10	—	—
Black chokeberry	Fruits	1756	7	1432	7	1752	17
Dark chocolate	Cocoa products	1664	8	1618	6	1860	13



Chai Tea is a great example of a polyphenol rich beverage
 Dark Chocolate 72% with Coffee !!!



Exercise - PEM (Post-Exertional Malaise)



A worsening of the symptoms of post-COVID, in which the body perceives an extreme lack of energy After physical or cognitive exertion that can emerge 24 - 72 hours after the activity

It leaves the person feeling worse or even bedbound for the next day or two after the exertion

Dr T's Energy Revitalization Drink Mix

His foundation formula for fatigue

High in all the
B - Vitamins for energy

30 Vitamins and Minerals

Easy to mix - just take
in the morning





Fatigued to Fantastic!™

Energy Revitalization*

DRINK MIX



Mental & Physical Resilience*

Nutrient Essentials for Energy & Overall Health*

NET WT 7.6 oz (216 g)

DIETARY SUPPLEMENT | 1 Month Supply

Recommendations: 1 scoop daily. Mix with 8-16 oz. of water, your favorite beverage, smoothie, or yogurt. Best if consumed within 30 minutes of preparation. If pregnant or nursing, consult a healthcare practitioner before use.

SUPPLEMENT FACTS

Serving Size: 1 Scoop (7.2 grams) Servings Per Container: 30

Amount Per 1 Scoop (7.2 grams):		%DV	Amount Per 1 Scoop (7.2 grams):		%DV
Calories	15		Magnesium (TRAACS™ magnesium bisglycinate chelate buffered (magnesium bisglycinate chelate and magnesium oxide))	200 mg	48%
Total Carbohydrate	2 g	< 1%†	Zinc (from TRAACS™ zinc bisglycinate chelate)	15 mg	136%
Vitamin A (as retinyl palmitate)	1,500 mcg (5,000 IU)	167%	Selenium (from selenium yeast)(<i>Saccharomyces cerevisiae</i>)	55 mcg	100%
Vitamin C (from calcium ascorbate)	250 mg	278%	Copper (from TRAACS™ copper glycinate chelate)	0.5 mg	56%
Vitamin D3 (as cholecalciferol)	25 mcg (1,000 IU)	125%	Manganese (from TRAACS™ manganese bisglycinate chelate)	2 mg	87%
Vitamin E (as d-alpha and mixed tocopherols)	50 mg (75 IU)	333%	Chromium (from TRAACS™ chromium nicotinate glycinate chelate)	200 mcg	571%
Thiamin (Vitamin B1) (from thiamin HCl)	50 mg	4,167%	Molybdenum (from TRAACS™ molybdenum glycinate chelate)	125 mcg	278%
Riboflavin (Vitamin B2)	75 mg	5,769%	L-Taurine	500 mg	**
Niacin (Vitamin B3) (as niacin and from niacinamide)	50 mg	313%	L-Glycine	390 mg	**
Vitamin B6 (from pyridoxal-5-phosphate)	25 mg	1,471%	L-Tyrosine	377 mg	**
Folate (from calcium-L-5-methyltetrahydrofolate)	340 mcg DFE	85%	Betaine Anhydrous	350 mg	**
Vitamin B12 (as methylcobalamin)	500 mcg	20,833%	N-Acetyl-L-Cysteine	250 mg	**
Biotin (as d-biotin)	200 mcg	667%	L-Serine	240 mg	**
Pantothenic acid (from d-calcium pantothenate)	100 mg	2,000%	Boron (from calcium fructoborate)	2 mg	**
Choline (from choline bitartrate)	100 mg	18%	Vitamin K2 [as menaquinone-7 (MK-7 as MenaQ7®)]	100 mcg	**
Calcium (from dicalcium phosphate, calcium fructoborate, d-calcium pantothenate, and calcium ascorbate)	75 mg	6%			
Iodine (from potassium iodide)	200 mcg	133%			

** Daily Value (DV) not established.

† Percent Daily Values (DV) are based on a 2,000 calorie diet.

Nutritional tools to support fatigue and enhance mitochondrial function



D-Ribose

Dr T recommends - 5 grams - 3x a day for 3 weeks
Then drop to 2x a day for Chronic Fatigue Patients
and Cardiac patients

Plays a key role in the synthesis of ATP with the mitochondria

It bolsters energy levels of cardiac tissue in cases of heart disease
As well as ameliorating the effects of chronic fatigue syndrome

It helps muscles regenerate lost energy,
and boosts the body's overall energy supply

CoQ 10

Supports Mitochondrial function for all systems of the body



High absorption “Gamma Sorb”
In a chewable tablet

It may increase absorption up to 8X

So that 100mg will be the equivalent to 800mg

HRG 80 Red Ginseng

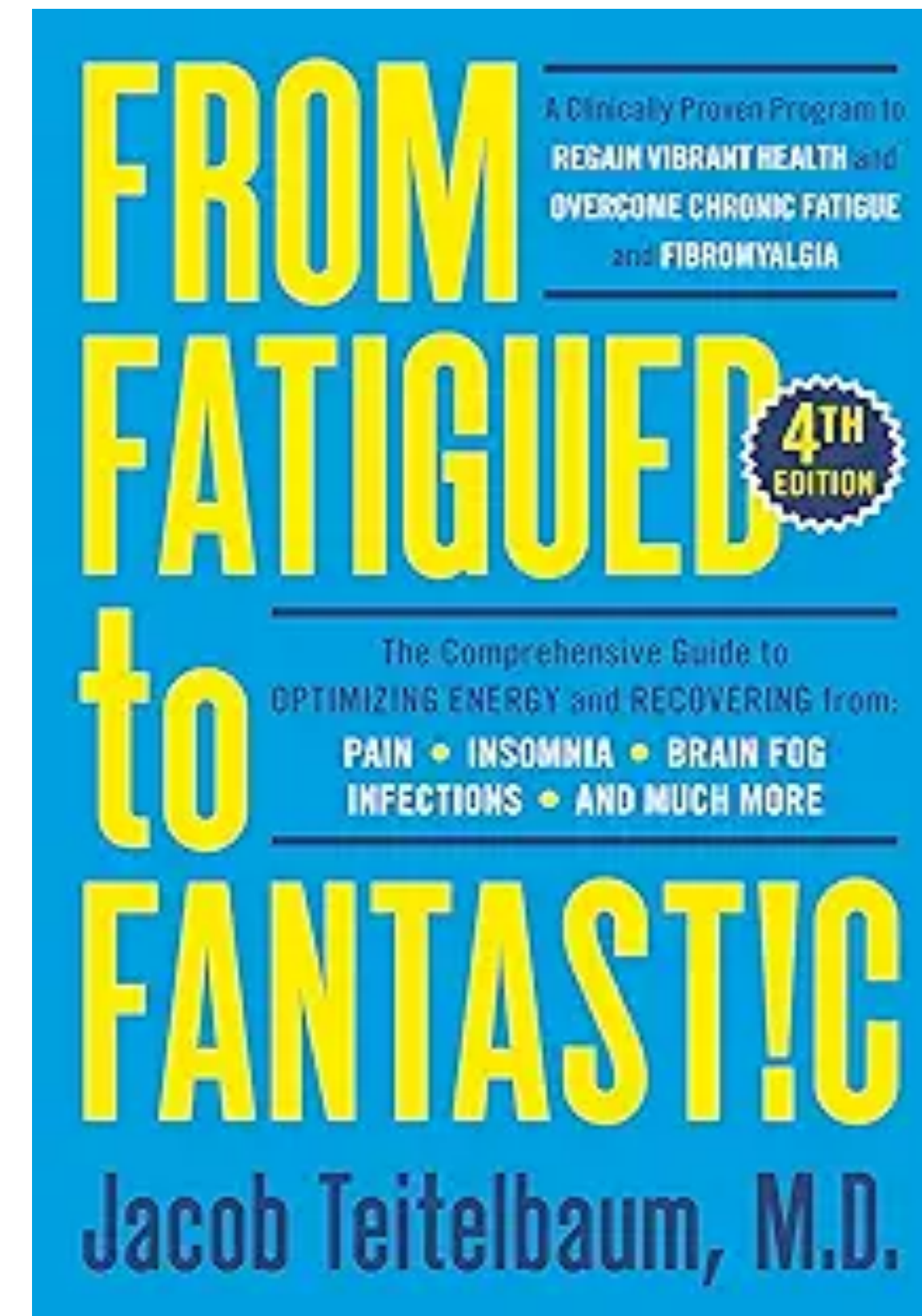
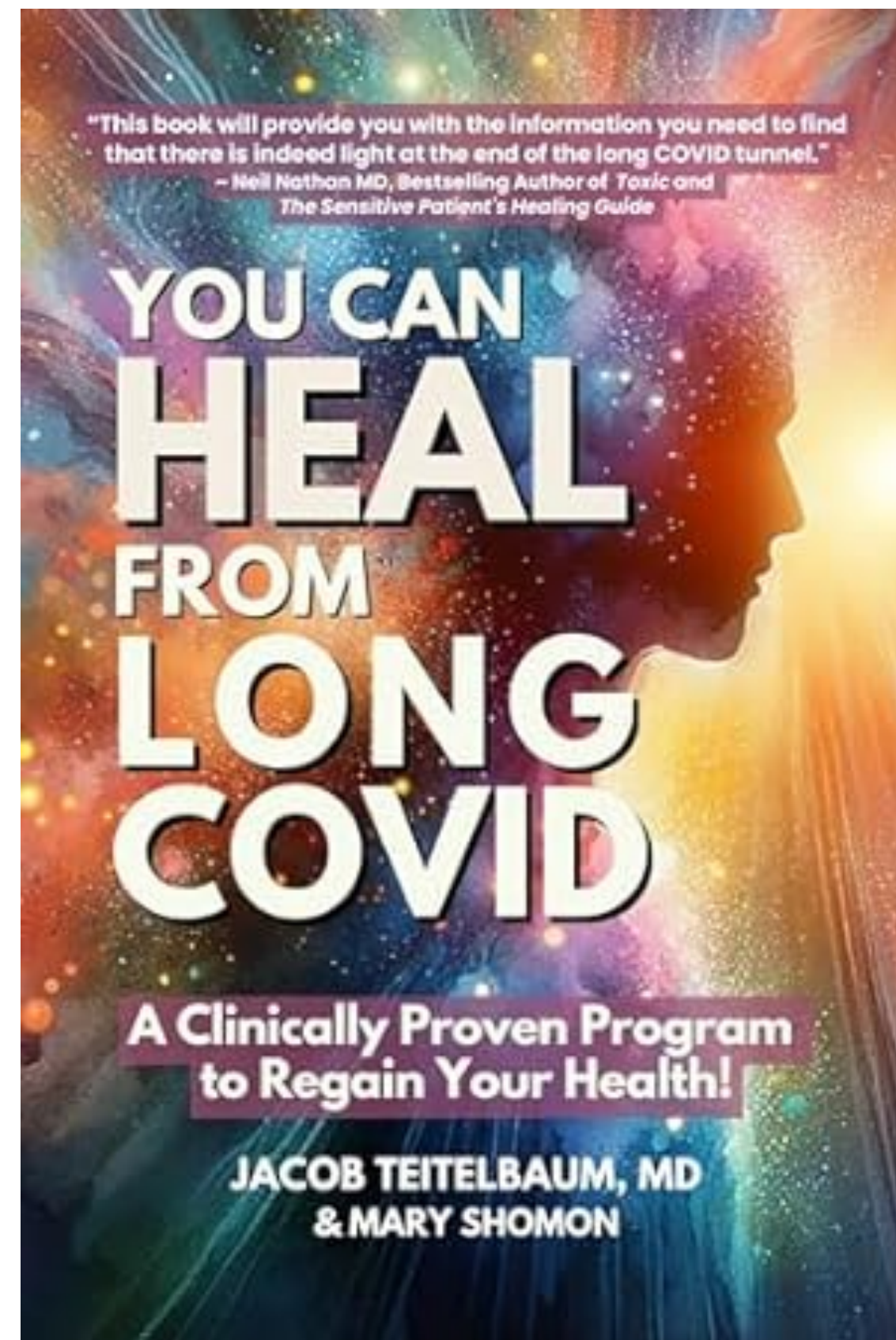
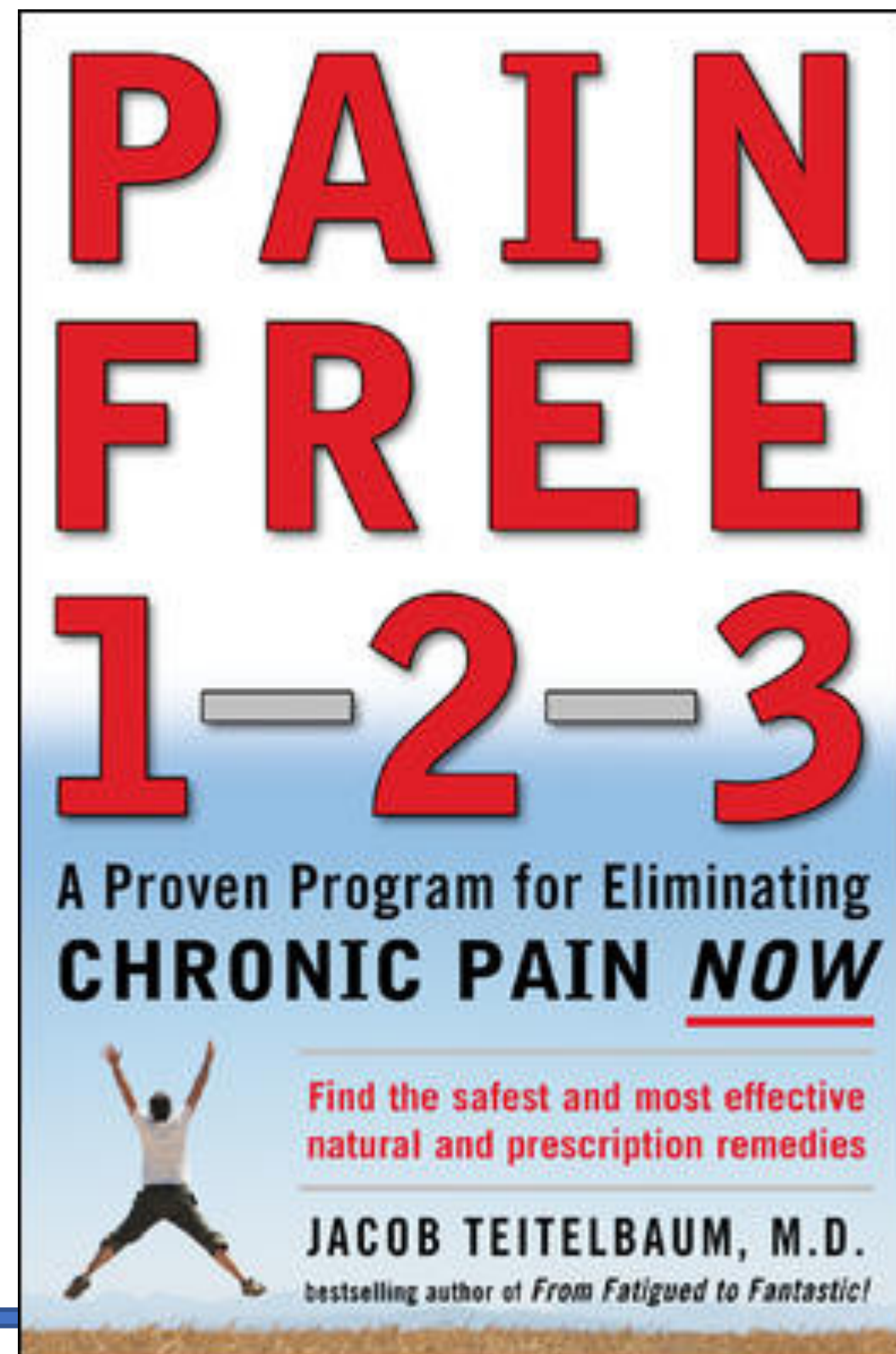
A special type of red ginseng
Hydroponically grown
Put through stressors that increase the ginsenoside levels
No pesticides
High in “rare (or noble) ginsenosides
Chewable Gamma Sorb form works far better



Dr T completed a study of 188 people with a greater than 50% drop in function, including persistent post-viral exhaustion

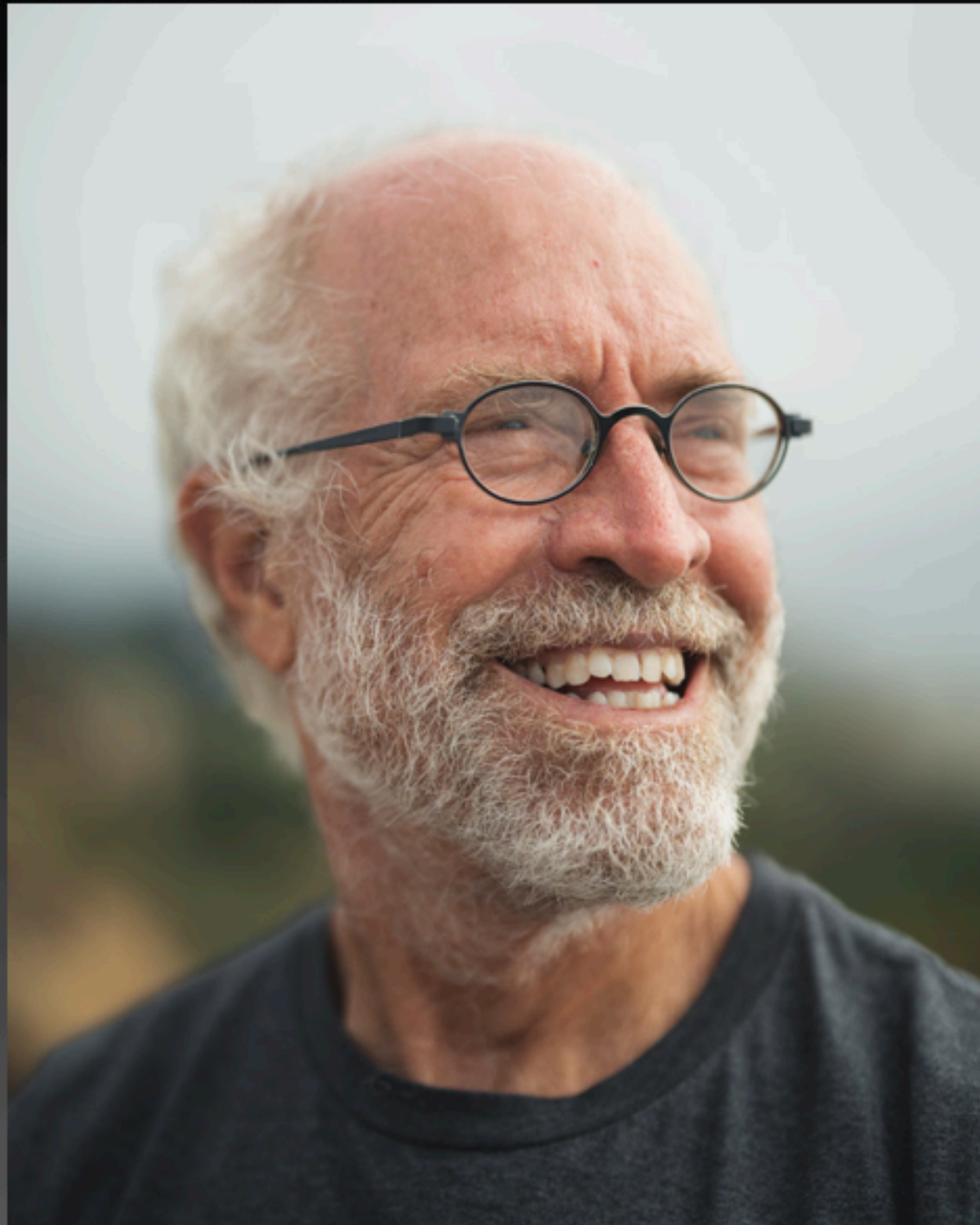


Further Reading



Cures A-Z
Find it in the
App Store!





Contact info:
Peter Brodhead CN, ETMS,

Text message: 912-704-3738

questionspeterbrodhead@gmail.com

Dr Tietelbaum's website **www.Vitality101.com**

- Free e-mail newsletter
- Q&A
- Free Energy Analysis Program
- And much, much, much more!
- Email me at FatigueDoc@gmail.com for free treatment tools &/or the study references discussed

Thank you!
