

A woman with long brown hair, wearing black-rimmed glasses and a pink long-sleeved shirt, is shown from the chest up. She has her mouth wide open in a shout or scream, and her hands are raised with fingers spread. The background is a light pink color with the word "STRESS" written in a hand-drawn, sketchy font in various sizes and orientations. There are also black scribbles and arrows scattered around the text. The overall image conveys a sense of stress and emotional intensity.

Healthy Gut Healthy Bones

Stress and Your Bones

Mind/Body Connection

Group Coaching Session # 6 Stress Management

Checking In...

How have you been adjusting
to all the new habits?

- Diet
- Sleep
- Movement
- Supplements
- Absorbing the information



empowerment
gratitude forgive SHARE
relationships patience activity
attitude identify self-respect
control stress RELEASE
SUPPORT expression
relaxation lifestyle connect LET GO
confidence purpose FOCUS
nurture NETWORK therapy accept change
habits laughter resilience SLEEP FUTURE
solutions FRIENDS socialize TALK
trauma management
FEAR anger FATIGUE PAIN negative
despair worry AGING grief FAILURE
frustration hormones grief SADNESS
finance DEPRESSION

Stress

Private Session Check-in

Check List

- 2nd private 1:1 call meet to review your customized program
- Re-take questionnaires from Biocanic
- 90-120 Day Protocol Date?
- Complete another hair sample



Your Gut Healing Journey

Truly healing the gut requires a 3-Prong Approach:

Remove

- ✓ Inflammatory & Pathogenic Foods
- Stressors- foods, sensory input, and thoughts

IN PROGRESS - Heal The Gut Lining (Heal Leaky Gut!)

- Convey safety

IN PROGRESS - Eradicate Pathogens (Bacteria, Parasites, Yeast)

- Their stress too

Stress
Damages
Gut



7 Root Causes of Osteoporosis

Inflammation

Stress

Toxicity

Hormone imbalance

Mineral imbalance

Acidity

Lack of movement

Look under
the hood

*Root
Cause*



3 Areas of Stress and Osteoporosis

- Musculoskeletal
- Biochemical/Physiological
- Mental/Emotional



Posture



Inflammation



Bones and Stress

Chronic stress activates the HPA axis and sympathetic nervous system, suppresses the secretion of gonadal hormone and growth hormone, and increases inflammatory cytokines, eventually leading to bone loss by inhibiting bone formation and stimulating bone resorption.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7797546/>



Can stress cause bone loss?

Stress and Osteoporosis

- When we are stressed, our bodies release a “stress hormone” called cortisol, which causes havoc on our system.
- To help bring our bodies back in balance, our system releases calcium from our bones and teeth
- The calcium helps neutralize the ph balance of the cortisol, helping restore our bodies to neutral.
- Each time we do this we deplete calcium stores from our bones



Elevated cortisol levels interfere with osteoblast formation and **dramatically decreases bone building**—resulting in reduced bone density

Sources of Stress

Sensory input

Toxins

Dysbiosis- chicken

Negative Mindset

Worry

Fear

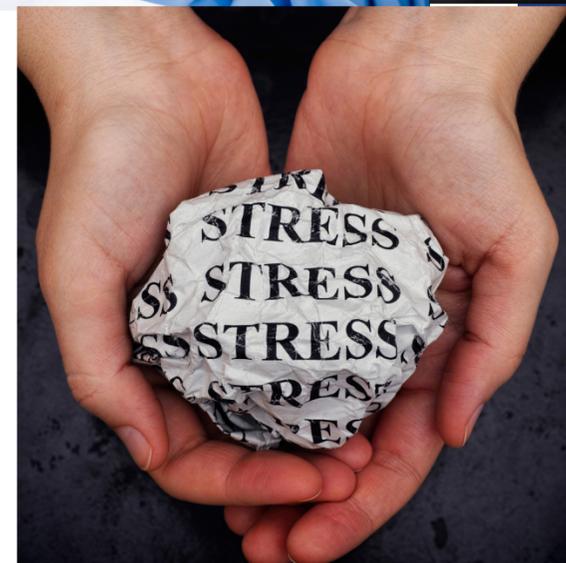
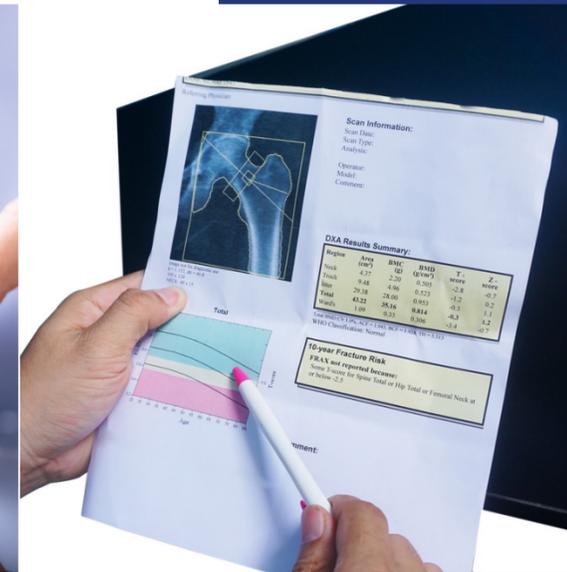
Money

Future

Health

Bones

Balance



Lifestyle

Most forms of arthritis are thought to be caused by a fault in the immune system that causes the body to attack its own tissues in the joints.

Joint Stress





Gut Brain Connection

At this point, we are more aware of the connection of our brain to our gut

- stress and depression can reshape the gut bacteria's composition through stress hormones, inflammation, and autonomic alterations
- The emptying of the stomach is delayed, which can lead to a stomachache, indigestion, heartburn, and nausea
- Our "happy" neurotransmitters serotonin and dopamine are created in the gut
- Gut microbes can increase bone mass and improve osteoporosis



**Stressed
out?**

What are the symptoms of chronic stress?

- Aches and pains.
(inflammation)
- Insomnia or sleepiness.
- A change in social behavior,
such as staying in often.
- Low energy.
- Unfocused or cloudy thinking.
- Change in appetite.
- Increased alcohol or drug use.
- Change in emotional
responses to others



Good Stress

Eustress

Moderate or normal psychological stress is interpreted as being beneficial for the experiencer.

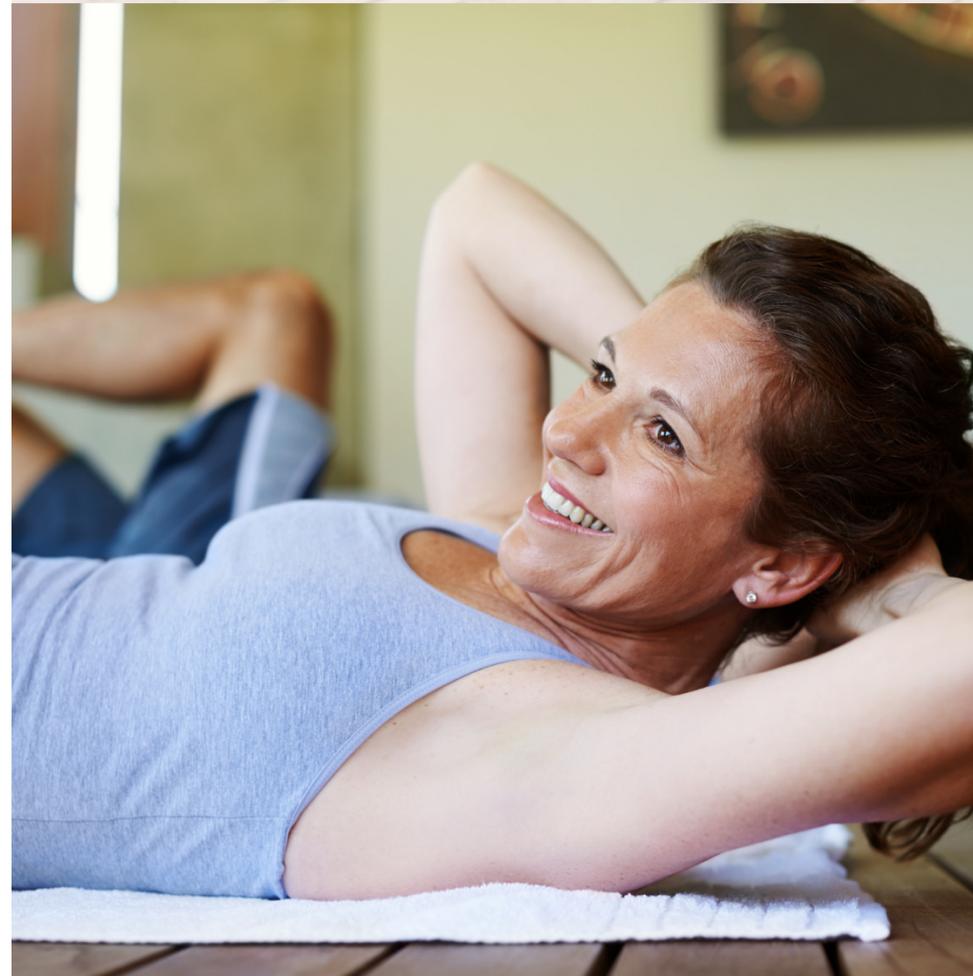
Good Stress For Your Spine

Muscles

- Spinal Balance
- Side Plank
- Core Work

Bones

- Twists
- Backbends

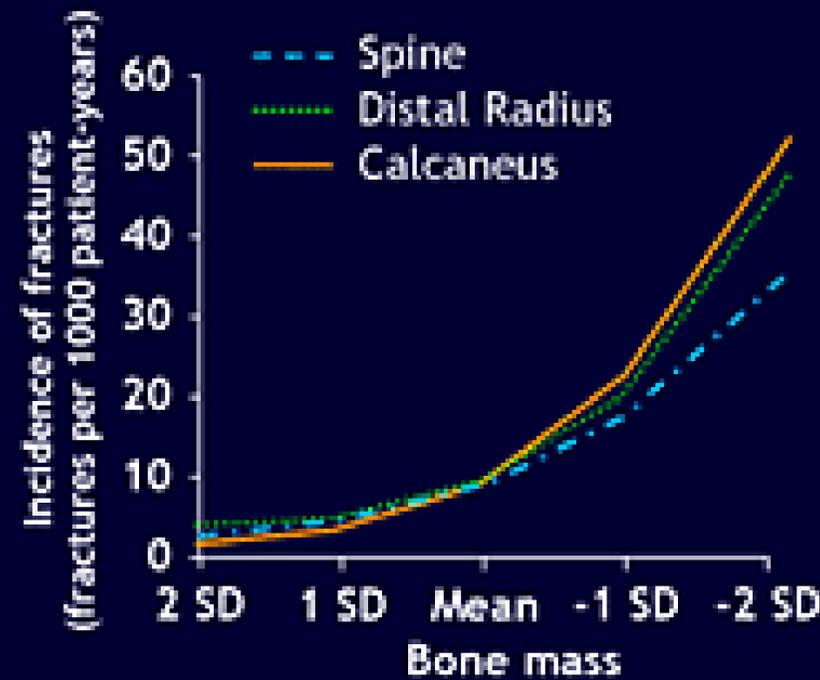


Wolff's Law

Wolff's Law is that natural healthy bones will adapt and change to adapt to the stress that it is subjected to.

Fracture Risk vs Bone Density

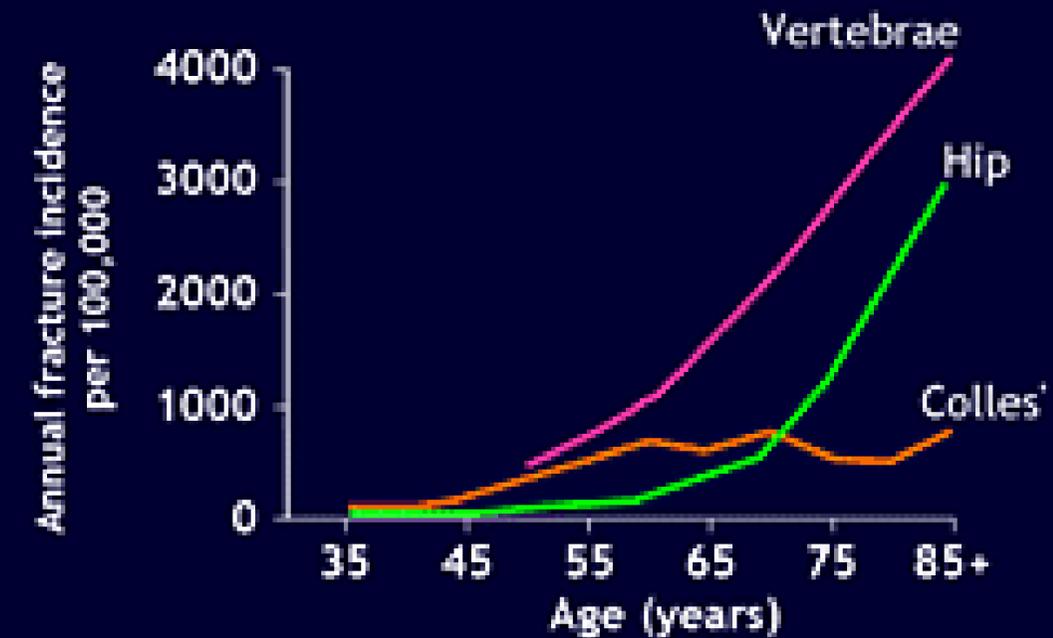
Exponential relationship between decreasing bone mass and increasing incidence of fractures



Wasnich RD et al. *J Nucl Med.* 1989;30:1168-1171.

Fracture Risk With Aging

Incidence rates for 3 common osteoporotic fractures*



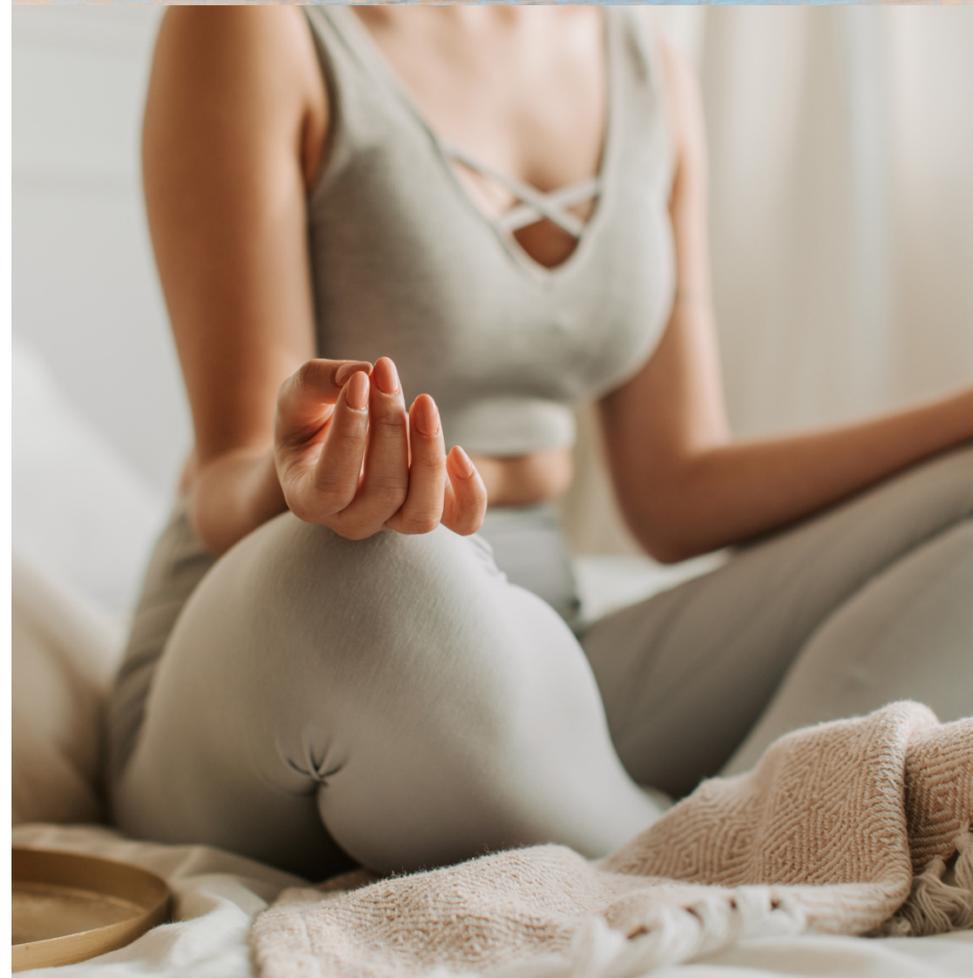
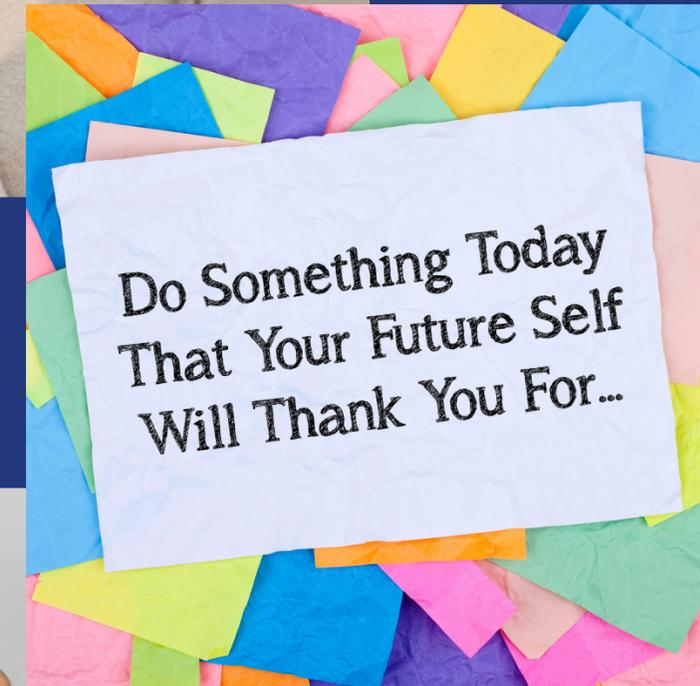
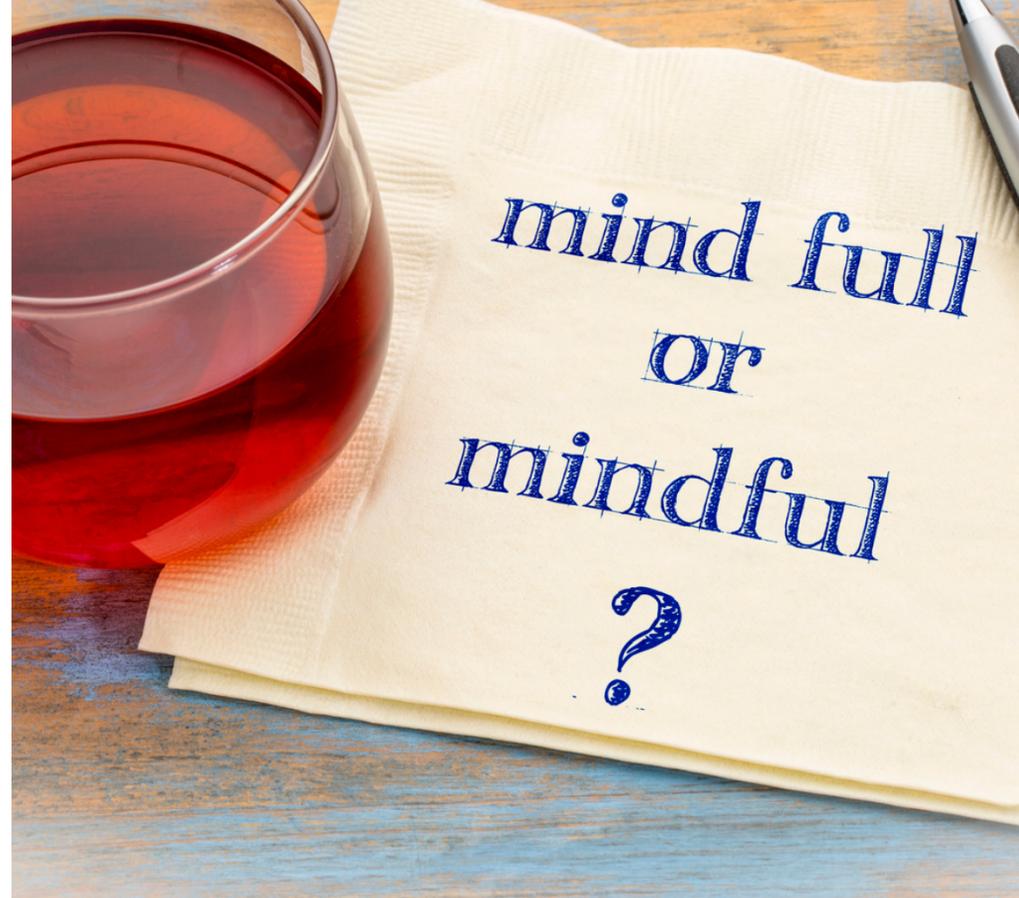
*white women.

Riggs BL et al. *N Engl J Med.* 1986;314:1676-1686.

Appropriate Spinal Stress

Good Stress Relief For Your Mind

- Meditation
- Mantra- "man" = mind, "tra" = tool
- Prayer
- Mindfulness
- Visualization





Stop the patterns of negative thoughts

Healthy Habits to rebalance your biochemistry

- Diet
- Rest
- Movement
- Sleep
- Supplements
- Remove triggers
- Happy thoughts
- Don't play the game of life



Brave





Action Items & Questions

Action Items:

1

Practice Stress Management tools: make big shifts to "stop" doing things that make you unhappy and lead to "dis"ease

2

Set up the next call

3

Complete questionnaire

Stay the course

