

# Treating Anxiety with Mind Body Medicine:

Why your own brain is more powerful than Valium

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# The New Neuroscience

- fMRI
- You have way more control over your sensations (emotions, anxiety, pain, stomach) than you think you do.

# What is Mind Body Medicine?

- Harnessing the concept of **neuroplasticity**, MBM uses the conscious mind to influence some of the seemingly automatic responses in the body – such as heart palpitations, migraines, stomach problems, anxiety reactions, chronic pain to name a few.

# Mind Body Medicine: an emerging medical specialty

“...randomized, controlled trials have suggested improved health outcomes and quality of life in multiple physical and mental health conditions that are related to or exacerbated by stress, including chronic pain, anxiety, depression, cancer-related fatigue, tobacco addiction, inflammatory bowel disease, and cardiovascular disease... we believe the future is promising for mind-body medicine.”

-New England Journal of Medicine April 9, 2020 op-ed “New Era for Mind Body Medicine”

# Understand the Limitations of the Biomedical Model When Treating Anxiety

## Biomedical Model

vs

## Biopsychosocial Model

\*Assumes disease to be fully accounted for by measuring biologic variables

\*REDUCTIONIST

\*Does not have a biochemical explanation for anxiety

\*Acknowledges biology, but gives equal standing to social and psychologic variables when assessing health

\*HOLISTIC

\*Explains anxiety by incorporating biology, psychology and social situation

# American Psychiatric Association

**The causes of anxiety disorders are currently unknown** but likely involve a combination of factors including genetic, environmental, psychological and developmental.

<https://www.psychiatry.org/patients-families/anxiety-disorders/what-are-anxiety-disorders>

# Mayo Clinic

The causes of anxiety disorders aren't fully understood. Life experiences such as traumatic events appear to trigger anxiety disorders in people who are already prone to anxiety.

<https://www.mayoclinic.org/diseases-conditions/anxiety/symptoms-causes/syc-20350961>

# National Institute of Mental Health

Medication does not cure anxiety disorders but can help relieve symptoms.

NIMH <https://www.nimh.nih.gov/health/topics/anxiety-disorders/index.shtml>

# Healthline.com Article on Anxiety

If you wonder whether the (anxiety) symptoms you're experiencing are caused by a chemical imbalance, it's important to know that controversy surrounds this theory. In fact, the medical community has largely disproven it.

<https://www.healthline.com/health/chemical-imbalance-in-the-brain>

# A New Way to Think About Anxiety

- A protective signal from your own brain
- An activation of your fight-or-flight system
- A **message** from the brain to the body

# Education

- MBM is a form of Self Care, which means you have to know what you are doing. It helps to understand the latest neuroscience about how your brain and body interact.

1. Autonomic Nervous System
2. Predictive Coding
3. Neuroplasticity

# Autonomic Nervous System - Your “Autopilot”

- Bowel
- Bladder
- Heart rate
- Breathing
- Sweat glands
- Blood pressure
- Muscle tension

# Autonomic Nervous System

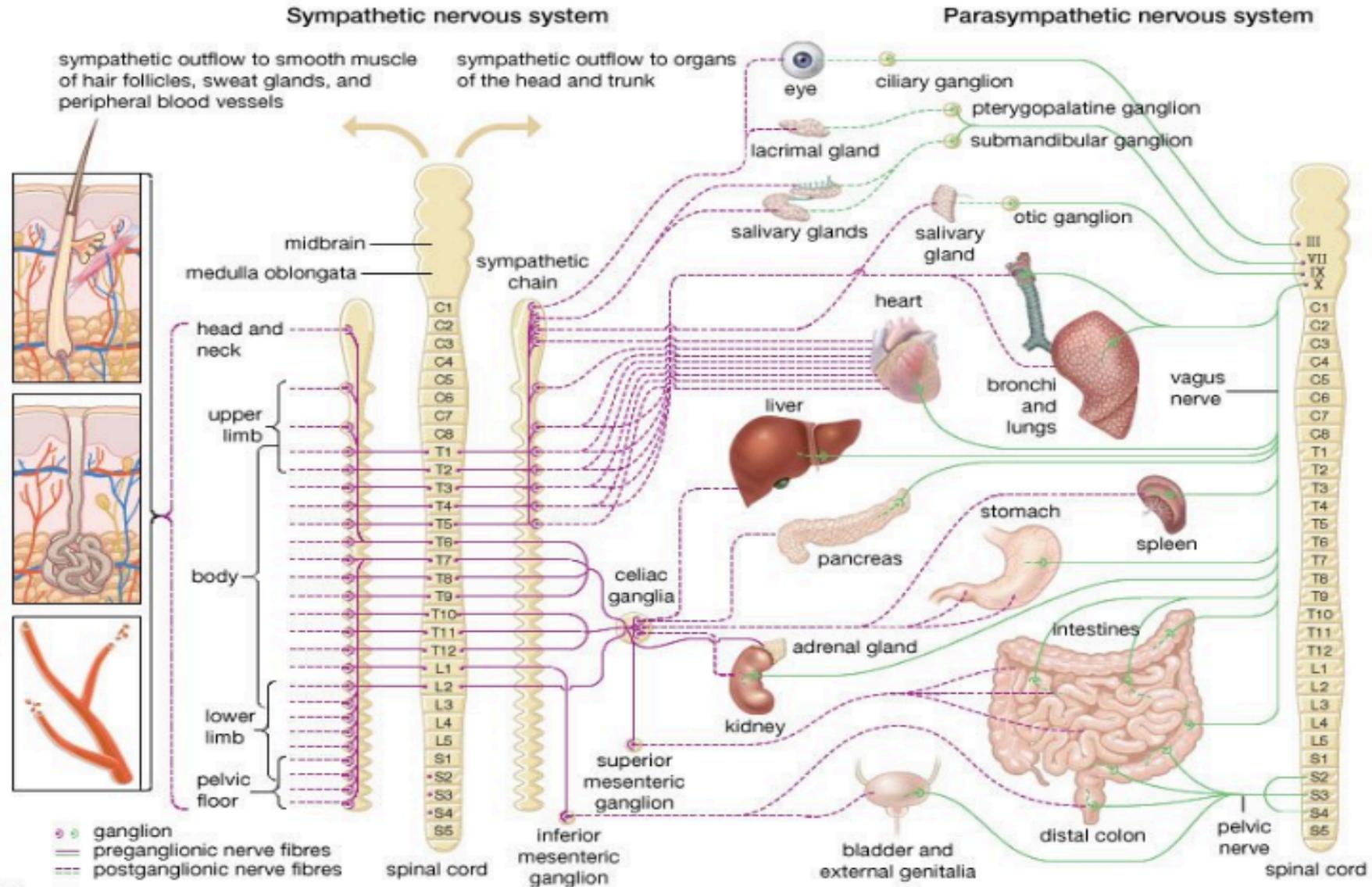
## Sympathetic Nervous System

- Stimulating
- Gets ready for action
- Fight or Flight

## Parasympathetic Nervous System

- Rest
- Restore
- Recuperate
- Digest food

# Autonomic Nervous System



# Predictive Coding

- Your brain assesses all the sensory input of any moment, and then runs the neural pathways it *thinks* it should run.
- By the time you are an adult, your brain has hundreds of thousands(?) of stored neural pathways.

For a detailed explanation of the neuroscience behind Predictive Coding, read [How Emotions Are Made](#) by Lisa Feldman Barrett PhD, a neuroscientist at Northeastern University. Or, watch her TED Talk.



**"The boss wants me to create a computer algorithm that can convert hindsight into foresight."**

# Predictive Coding

- Everything you feel, is because your brain *wants* you to feel it.
- Your brain really does “create” all of your sensations.
- Your brain creates your reality.

# Neuroplasticity

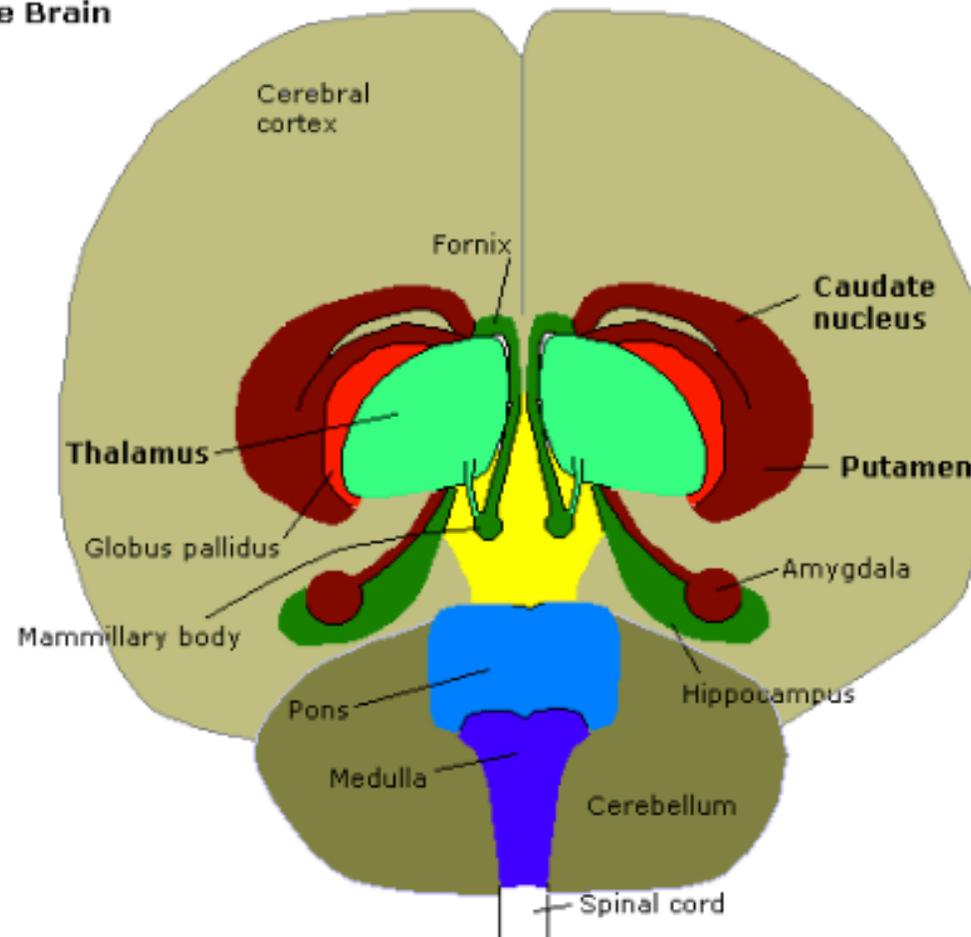
- The brain's ability to modify, change and adapt both in structure and function in response to experience.
- There is a LOT of scientific evidence that brain chemistry, brain circuitry and even brain VOLUME changes with mindfulness practices.

# Neuroplasticity



“Taxi Drivers' Brains Grow to Navigate London's Streets:  
memorizing 25,000 city streets balloons the hippocampus...”  
-Scientific American article by Ferris Jabr Dec 8, 2011

The Brain



1. Our **Autonomic Nervous System** is running us at all times.
2. Our brain uses **predictive coding** to run the neural pathways that it believes are most advantageous in any situation.
3. Using **neuroplasticity**, we can change the neural pathways that our brain is running, even though it seems like they are on “autopilot” or beyond our control.

# Anxiety

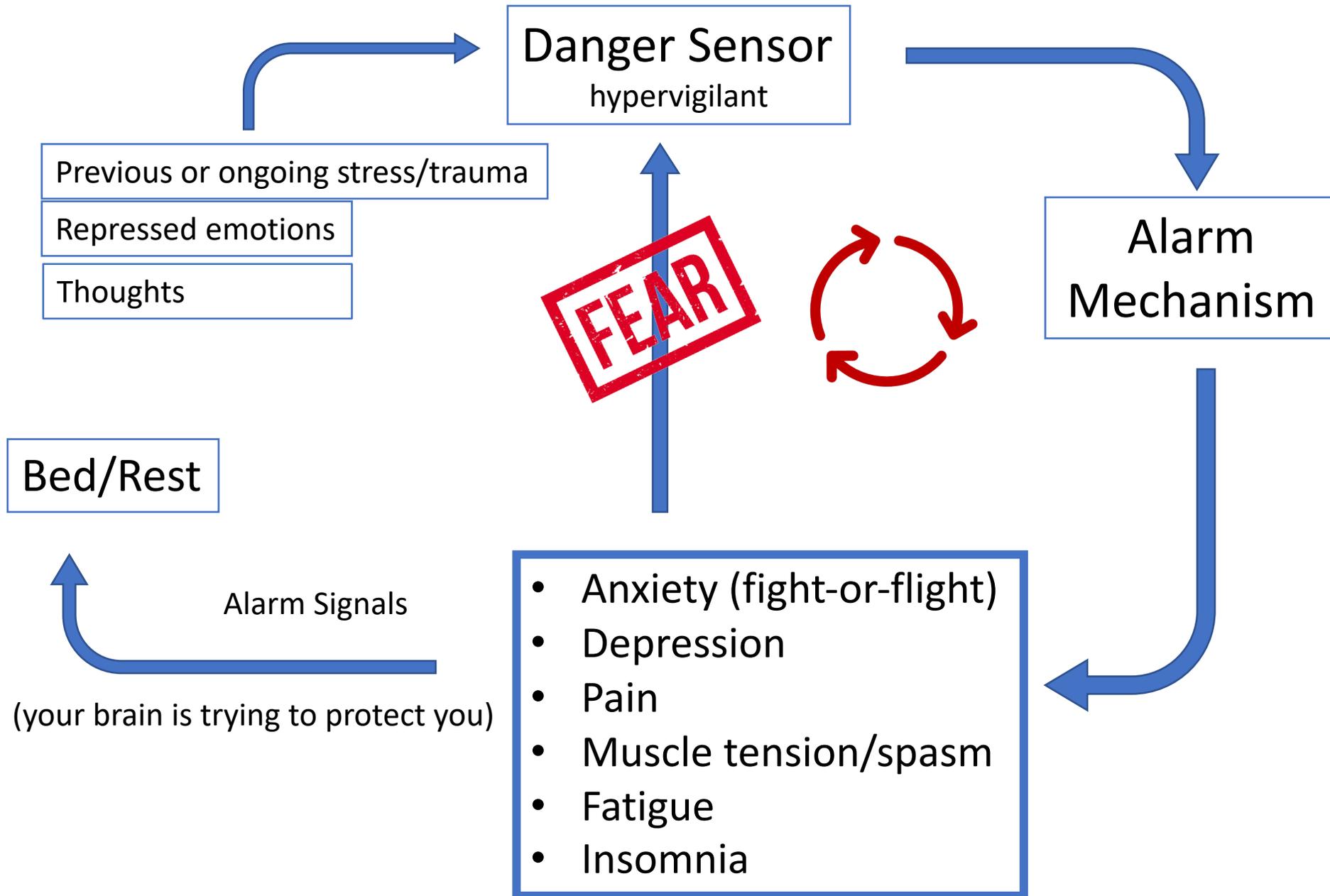
- a protective mechanism
- an activation of our fight-or-flight response
- often a reactivation of hypervigilant neural pathways that were laid down (wired together) by the brain long ago – perhaps during a time in life when it was useful to be a bit more hypervigilant.

To understand how prior life experiences can cause anxiety pathways to re-emerge later in life, read [When The Body Says No](#) by Gabor Mate, or watch him on YouTube.

# ANXIETY

- Not really a psychologic problem, but rather a **physiologic** response to stress.
- Anxiety is **always** IN THE BODY!

Read [The Body Keeps the Score](#) by Bessel vanderKolk, MD for better understanding.



# Things You Can Do Now

1. Commit to engaging with the idea that you can take control over your own nervous system.
2. Education (keeping your head in the game).
3. Try expressive writing (instructions available on the Neural Pain Pathways handout on our website).
4. Start doing an “active mini-meditation” – for just one second – multiple times per day: drop your shoulders.
5. Consider a few sessions of acupuncture or Reiki in our office as a teaching tool for your brain.
6. Call our office and get your name on the list to participate in our next Mind Body Skills Group.

# Tools to Balance the Autonomic Nervous System and Rewire the Brain

- Self awareness
- Mindfulness
- Meditation
- Checking in with emotions in the body
- Expressive writing and other writing exercises
- Guided imagery
- Mindfulness groups
- Mind Body skills groups

# Tools to Balance the Autonomic Nervous System and Rewire the Brain

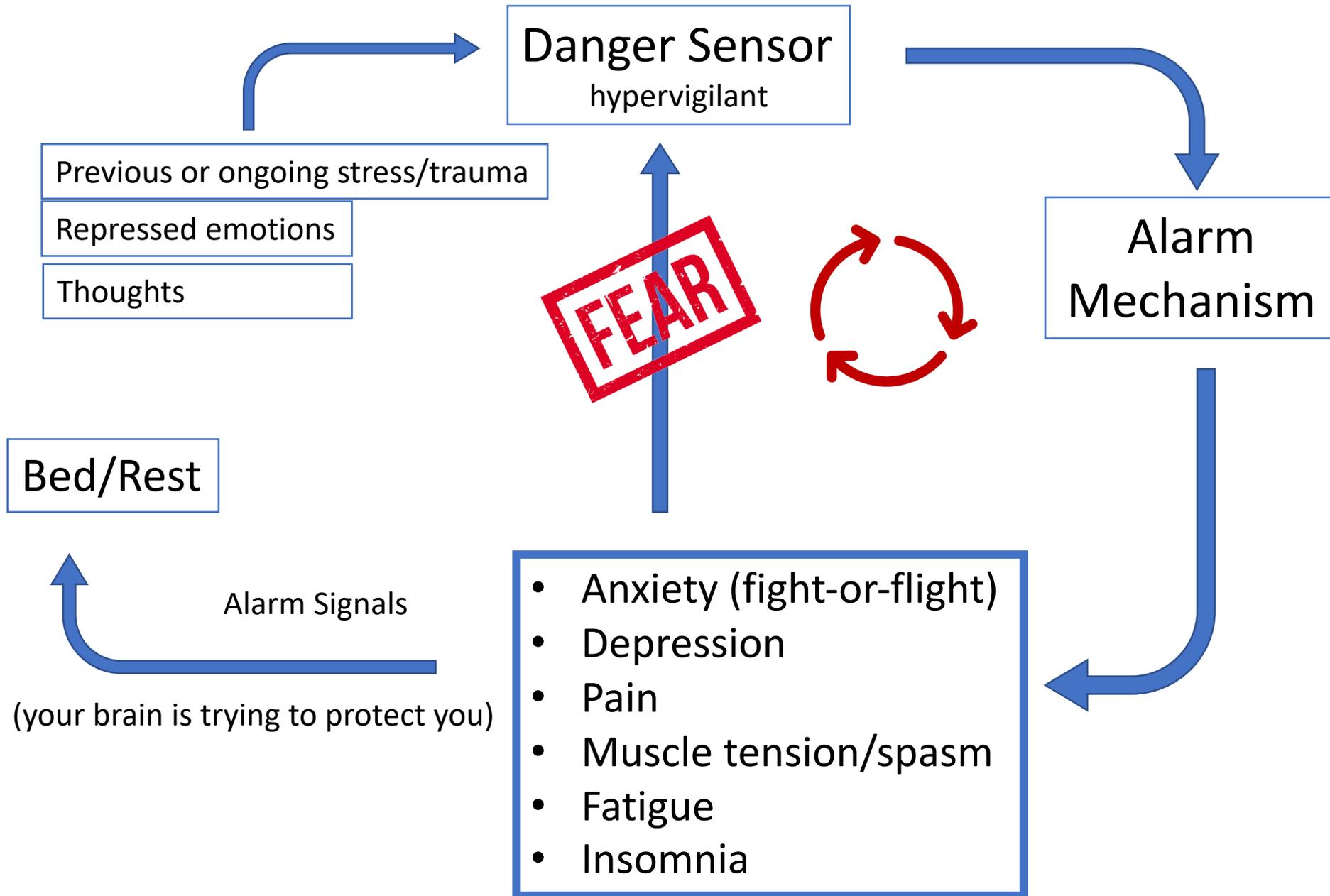
- Breathing techniques
- Body awareness exercises
- Soft belly breathing and other meditation techniques to elicit “The Relaxation Response”
- Guided imagery
- Yoga or Tai-chi
- Acupuncture
- Reiki

# Tools to Balance the Autonomic Nervous System and Rewire the Brain

- Exercises to “sit with” and “accept” the symptoms of anxiety (to get out of the fear-anxiety-fear-anxiety cycle)
- Identify current relationships or issues that are keeping your brain hypervigilant
- Work with a therapist:
  - Cognitive Behavioral Therapy (CBT)
  - Acceptance and Commitment Therapy (ACT)
  - Intensive Short Term Dynamic Psychotherapy (ISTDP)
  - Trauma therapy such as Somatic Experiencing

# Tools to Balance the Autonomic Nervous System and Rewire the Brain

- Practice forgiveness
- Practice self-compassion



Thank you!

Questions?

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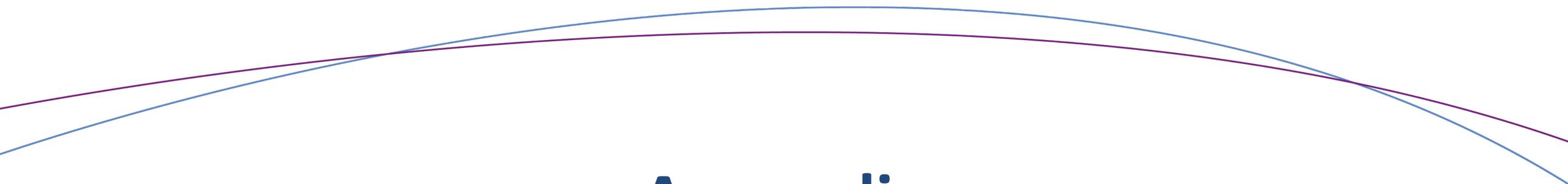
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# Appendix

# Message from Dr. Fanestil

## A new way of thinking about anxiety:

I want to emphasize that this is a very common problem. This is not a psychiatric disease. This is a normal brain responding in a very common way to experiences it has had. **It's very important to understand that you are not broken and you do not have a "disorder" that has to be "fixed"**. You have some brain circuits that developed outside of your conscious awareness, and you are working on them.

I think we do ourselves a grave disservice when we call anxiety a "disorder". It is a physiologic condition (not a psychiatric "illness") characterized by increased adrenaline, cortisol, histamine and other inflammatory chemicals. You may be having these symptoms more frequently than you would like, but this is not a disorder or a disease. Diabetes and appendicitis are disorders/diseases and can be treated medically, but anxiety is a condition that has been shared by almost everyone on the planet, so let's not call it a disorder. Now that you understand how your own brain (autonomic nervous system) is causing your symptoms, you can take some steps to change the patterns your brain is running.

## Things To Do:

1. Commit to engaging with the idea that you can take control over your own nervous system. Mind Body Medicine is a form of self-care, and requires you to do some work. Your symptoms are in no way your fault. Instead, they emanate from neural circuits in the brain that began outside of your conscious awareness. Even so, there are ways to rewire these neural circuits so that you can feel better. Medications and procedures might temporarily blunt symptoms, but only YOU can change the neural pathways that your brain is running, so start educating yourself.
2. Education, education, education. View videos, and read books. Learn as much as you can about new neuroscience in order to understand how your subconscious brain (your Autonomic Nervous System) is running alarm signals, and how to start believing that you can get control over it.
3. Try expressive writing. Try it for 2-3 days and see if you notice less tension in your system or any other benefits. After that, you can decide if it is something you want to continue regularly, not at all, or just on certain days. It's okay to discontinue if you do not perceive any benefit.
4. We might talk more about the power of mindfulness and meditation in the future. There is A LOT of scientific evidence that brain chemistry, brain circuitry and even brain VOLUME changes with mindfulness practices. For now, I recommend that you start doing an "active mini-meditation" - for just 1 second - multiple times per day: drop your shoulders. If you want to turn it into a three second "active mini-meditation": drop your shoulders and then take one slow deep breath in and out through the nose.

## Additional Education Resources:

1. Watch this TED Talk by Johann Hari.

<https://www.youtube.com/watch?v=MB5IX-np5fE&t=873s>

From his TED Talk: “If you’re depressed, if you’re anxious, you’re not weak, you’re not crazy, you’re not in the main a machine with broken parts. You’re a human being with unmet needs.”

2. Watch this TEDx Talk by Tim Box about anxiety. <https://www.youtube.com/watch?v=ZidGozDhOjg>

3. Watch this TED Talk by Kelly McGonagle about stress. <https://www.youtube.com/watch?v=RcGyVTAoXEU&t=360s>

4. Become familiar with the ideas of Gabor Mate. Watch these video clips:

<https://www.youtube.com/watch?v=l3bynimi8HQ>

<https://www.youtube.com/watch?v=pUGGNPAK6uw&t=338s>

5. Listen to this podcast interview with David Hanscom, MD regarding anger.

<https://vidalspeaks.com/podcasts/emotional-healing/dr-david-hanscom-anger-and-forgiveness-episode-84/>

6. Watch this TED Talk by Phil Borges, director of the movie "Crazywise".

[https://www.youtube.com/watch?v=9\\_KSYu1Tqx8](https://www.youtube.com/watch?v=9_KSYu1Tqx8)

7. Books that can help you change your approach to anxiety:

- a. **Lost Connections** by Johann Hari. I recommend this as a *must-read* to EVERYONE with anxiety or depression.
- b. **Hope and Help for Your Nerves** by Claire Weekes, MD. Dr. Weekes was on the international lecture circuit for years after writing this book. It was first published in 1969, but I feel like many of her ideas got "lost" when western medicine made the mistake of "medicalizing" anxiety and depression. Although anxiety and depression can be severe, they are usually not "medical" problems.
- c. **Unlearn Your Anxiety and Depression** by Howard Schubiner, MD. This book contains a great explanation of the "new neuroscience" of anxiety, and then a workbook with writing exercises. Has helped many of my patients.
- d. **The Way to Love** by Anthony de Mello. This is a great book if you have trouble "letting go" of anger or other emotions once they are triggered.
- e. **Forgive for Good** by Fred Luskin. This is a good read if you have identified anger or resentment as an issue.