

The Missing Link: The Trauma-Biology Connection for Holistic Nutritionists

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Sound Familiar?

The Meticulous Client

They follow every protocol perfectly — elimination diet, targeted supplements, gut healing. Six months later: minimal change. Why?

The Lab-Normal Client

All labs look good. No clear pathology. Yet they remain exhausted, bloated, and foggy. Standard tools keep coming up empty.

The Cycling Client

They feel better for a few weeks, then crash. Better, then crash. No matter what you change in the protocol, the cycle continues.

*The missing link isn't in the protocol.
It's in the nervous system.*

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- Preventive & Addiction Medicine Physician
 - Master's degrees in biochemistry & public health
 - Bestselling author: The Biology of Trauma
 - Creator of the Biology of Trauma® framework
 - Trained in Somatic Work, Art Story, Parts
 - Personal journey through grief and autoimmunity led to this work



**The Adoptive Mom
Who Didn't Know
How To Help Her Son**

**The Physician Who
Didn't Recognize Her
Own Stored Trauma**

Trauma Is Not What Happened. Trauma Is What Happened Inside.

Trauma is a biological injury to the nervous system
- the very system whose job is to keep us alive

Stress Physiology vs. Trauma Physiology

STRESS

- Mobilization/Activation
- Temporary pause on digestion and repair
- Energy redirected to muscles and brain
- Returns to baseline when the stressor passes

TRAUMA

- Shutdown — the body collapses inward
- Digestion functionally shuts down — not just paused
- Intestinal permeability increases (leaky gut)
- Body has crossed the critical line of overwhelm
- Standard protocols fail because the system is in protection mode

Three States That Determine Outcomes

CALM ALIVE (Safety Mode)

Ventral vagal | Safe engagement

- Digestion is fully active
- Nutrient absorption is optimal
- Cellular repair is happening
- This is where healing occurs
- Supplements and protocols work

STRESS (Activation)

Sympathetic | Mobilized for action

- Digestion on strategic pause
- Energy goes to muscles/brain
- Short-term — body can recover
- Not ideal for absorbing protocols
- Can still respond to support

SHUTDOWN (Trauma State)

Dorsal vagal | Survival collapse

- Digestion dysfunctional
- Gut barrier becomes permeable
- Cellular energy drops dramatically
- Cannot absorb or implement protocols
- Nervous system must be addressed first

The Vagus Nerve: Bridge Between Brain and Gut

Neuroception

*— the nervous system is our
subconscious calculation.*

*It determines
the state of one's physiology.*

SAFE

Potential Danger

In Danger

Life Threat

5 Gut Dysfunction Patterns in Trauma Physiology

Decreased Digestive Capacity

Low stomach acid, reduced enzymes, reduced bile → SIBO, candida, undigested food

Dysbiosis & Overgrowth

Good bacteria can't thrive; inflammation-promoting organisms take over

Hidden Infections

Parasites and chronic infections flourish in a dysregulated gut environment

Barrier Dysfunction

Leaky gut → systemic inflammation → insulin resistance, brain inflammation, autoimmunity

Motility Disruption

Constipation or diarrhea (or both) → further overgrowth and toxin recirculation

The 5 D Patterns

Disconnection

Forgetting to eat
or numbing when
food.

The body has
learned to create
distance from
inner experience.

Disruption

Feeling stuck.

Forward progress
is so slow. Self-
sabotage

Chronic
constipation.

Depletion

Running on empty

Energy just isn't
there.

The 5 D Patterns

Dysregulation

One's default
reactions to
change:

-Under
Respond

-Over Respond

Disease

Autoimmunity,
IBS, metabolic
dysfunction,
brain
inflammation.

Biology that now
perpetuates
overwhelm

3 Biochemical Imbalances That Block Healing

Copper Excess

Anxiety, irritability, sleep issues, fatigue, ringing ears, sensitivities to cheap metals

Lowers dopamine while raising adrenaline

For Nutritionists:

Copper IUD, cookware, post-partum. Support: zinc, B6, P5P, antioxidants.

Pyroluria

Highly sensitive (HSP), drained in groups, low morning appetite, frequent sunburn, anxiety

Depletes zinc and B6. Disrupts serotonin, dopamine, GABA.

For Nutritionists:

Normal pyrroles < 10. Support: zinc (100mg+), B6/P5P, antioxidants.

Undermethylation

OCD, perfectionism, high achievement, competitive, depression, high histamine

Affects detoxification, energy, mood, and gene expression and low neurotransmitters.

For Nutritionists:

Blood histamine > 70 suggests undermethylation. Support: SAME

How Stored Trauma Creates Disease

Three biological mechanisms drive the body from nervous system dysregulation to chronic disease.

01 Metabolic Dysfunction

Mitochondria shift from efficient energy production to a survival backup system. Less energy, more oxidative stress. Cellular capacity decreases — even small stressors overwhelm the system. This is why clients "crash" repeatedly.

02 Immune Dysfunction

Chronic danger state creates a pro-inflammatory environment. Mast cells become hypersensitive — overreacting to food, emotions, and environment. Galectin-3 shifts from tissue repair to promoting disease. Autoimmunity, food sensitivities, and long-haul syndromes emerge.

03 Epigenetic Changes

Oxidative stress damages DNA and alters gene expression. DNA repair pathways go offline while in survival mode. Years in trauma physiology cause aging at the cellular level. These changes drive conditions like PTSD, certain cancers, and accelerated aging.

The body's survival patterns are not the problem. They are the body's solution to a problem.

Disease is the body's message that it has been in survival for too long.

The Essential Sequence: Why Order Matters

1 SAFETY

The nervous system must sense safety before it can receive anything.

- Neuroception is scanning 24/7 — not the thinking brain
- No supplement can override a nervous system in danger mode
- Safety is established through body-based signals, not information
- Simple somatic practices create the felt sense of safety

2 SUPPORT

Once safety is present, the body can absorb biological support.

- Address underlying biochemical imbalances
- Repair gut dysfunction (now the gut can actually heal)
- Target mitochondrial support, nutrient deficiencies, toxins
- Supplements work now — the system is open to receiving them

3 EXPANSION

From a supported foundation, real and lasting change becomes possible.

- Process past experiences
- Introduce more demanding nutritional and lifestyle changes
- Work on higher-level goals: performance, relationships, purpose
- The client can now integrate without crashing

The Biology of Trauma Framework for Your Practice

R — RECOGNIZE

Where are the 5 D patterns showing up?

- Look for patterns across multiple areas
- Disconnection
- Disruption
- Depletion
- Dysregulation
- Disease

R — REASONS

What is keeping the system stuck?

- Mind level: beliefs and parts
- Body level: somatic patterns
- Biology level
- Nutrient deficiencies
- Toxin burden and oxidative stress
- Mitochondrial compromise
- Immune dysregulation

R — REPAIR

Which tools, in which order?

- Somatic tools
- Parts tools
- Biology tools
- Follow the essential sequence
- One repair creates capacity for the next

It's never just one thing holding a client back.

***Multiple levels, multiple blocks —
all reinforcing each other.***

Shift How You Assess

- **Ask: Which of the 5 D patterns does this client show?**
- **Watch for cycling (push - collapse)**
- **Assess for biochemical imbalances if stuck**
- **Track nervous system state — not just symptoms**
- **Ask: Is this client's body in a state where it can receive?**

- **Lead with a 2-minute body-based practice**
- **Simplify protocols for dysregulated clients**
- **Prioritize zinc and B6 testing**
- **Assess nervous system state first**
- **Build momentum with small wins —
success rebuilds capacity and trust**

Your nervous system is part of the protocol.

Your regulation creates the environment where your client's system come home to safety.

When We Add Nervous System Work

30%

Decrease in
Depression &
Anxiety

30%

Decrease in
Fatigue & Insomnia

27%

Decrease in
GI Symptoms

26%

Decrease in
Daily Pain

Outcomes from the 21-Day Somatic Program (ongoing study)

Your clients are not resisting your protocols.

*Their nervous systems are protecting
them from what they haven't yet
survived.*

FREE RESOURCE

Nutritionist Guide to Attachment Trauma & the Body

A 16-page ebook

biologyoftrauma.com/book

Let's Connect!

FREE RESOURCE



**A Nutritionist's Guide
To Trauma
& The Body**



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