

A New Path for PTSD Healing: Supporting Your Brain by Supporting Your Metabolism

Many people living with PTSD feel the effects throughout their entire body. Anxiety, low mood, poor sleep, fatigue, and changes in weight and blood sugar are extremely common. As a primary care physician, I see this pattern every day. New research, including a publication I co-authored with Robyn Engelhardt, Christopher Palmer, MD; Georgia Ede, MD; and others is helping us understand why these symptoms often cluster together.

Our review found that PTSD affects more than emotions and memories. It also affects metabolism, inflammation, and the way the brain produces energy. When these systems are disrupted, mental health symptoms often become harder to manage.

This is why researchers are exploring ketogenic therapy, which includes ketogenic nutrition and ketone supplementation, as a potential new tool to support PTSD healing.

What the Research Shows

Across sixteen studies published between 2020 and 2026, several important themes emerged.

PTSD disrupts metabolic health. Studies show changes in blood sugar regulation, insulin sensitivity, mitochondrial energy production, inflammation, oxidative stress, and stress hormone signaling. These biological changes can worsen anxiety, depression, sleep problems, and emotional reactivity.

Ketogenic therapy may help stabilize these systems. Early evidence suggests that ketogenic therapy can improve brain energy production, reduce inflammation, support calmer neurotransmitter signaling, and improve stress resilience. Preclinical studies show reductions in anxiety-like and depression-like behaviors. Human case reports and pilot trials show promising improvements in mood, sleep, and overall symptom burden.

What I See in Our Members Through R3

At the R3 Institute, we use a metabolic-health-focused approach to support emotional, physical, and spiritual well-being. The improvements we see mirror what the research suggests.

Members in our program consistently show measurable improvements in the PHQ-9 depression scale, the GAD-7 anxiety scale, the PSQI sleep quality index, and the R3 Well-Being Scale, which reflects overall emotional, physical, and spiritual wellness.

As metabolic health improves, members often describe feeling calmer and less overwhelmed, sleeping more deeply, waking more rested, having more stable energy, noticing fewer intrusive thoughts, and feeling more hopeful and connected. These changes

happen because metabolism and mental health are deeply linked. When your body's energy systems stabilize, your brain can function more clearly and more calmly.

What This Means for You

If you are living with PTSD, healing is absolutely possible. Metabolic support can be a powerful addition to therapy, medication, and other tools you may already be using. You do not need dramatic changes to begin feeling better. Small, sustainable steps toward improving metabolic health can make a meaningful difference.

At R3, we walk with you through that process, helping you strengthen your body, mind, and spirit together.

Please [click here](#) to view our publication to read more.

-Allison Hull, DO