

## Anxiety and Depression-Brain On Fire?

Ronald Grisanti D.C., D.A.B.C.O., DACBN, MS, CFMP

**Depression, Anxiety and other mental disorders have reached epidemic proportions.**

In the U.S., the national rate of anxiety in 2019 tripled from 8.1% to 25.5%, and depression almost quadrupled from 6.5% to 24.3%.

What is going on?

The present paradigm of treating these type of mental disorders lies in balancing the neurotransmitters through pharmaceutical agents like SSRIs (Zoloft, Lexapro, Prozac, etc.) and Benzodiazepines (Ativan, Xanax, Valium and Klonopin.

Unfortunately, it may just be possible that the neurotransmitter paradigm simply is antiquated and does not address the underlying root cause (s) of these mental disorders.

After reading and researching and doing a deep dive into the possible root causes of these mental disorders I found something amazing and life-changing!

What I discovered was while nutrient deficiencies do a play a role, the major eye-opener was the fact that depression, anxiety and other mental disorders are **largely inflammatory in nature.**

In the brain of people suffering with depression, anxiety and many other mental health challenges, the immune system is activated with evidence for **elevated levels of inflammatory cytokines such as interleukin 6 and tumor necrosis factor alpha.**

Just like rheumatoid arthritis and crohn's disease represent inflammation in the joints and gut, respectively, psychiatric disorders are linked to **inflammation in the brain.**

If we hope to gain any control over these mental issues we must address **quenching the brain's inflammation.**

Now here is what I found quite shocking.

Benzodiazepines and SSRIs have another mechanism of function most people are not aware of.

Guess what it is?

They both have **anti-inflammatory properties.**

Yes that is correct.

Is it possible that these psychiatric medications have little to do with balancing neurotransmitters and more to do with **reducing the inflammation in the brain?**

The medical literature tends to support this theory.

Now to control this inflammation one need not **look any further than the gut.**

Once the gut inflammation takes hold, cytokines circulate throughout the body, including into the brain.

The secret to reducing gastrointestinal inflammation is to identify **food irritants, bacterial pathogens and improve optimal microbial flora.** Some studies have found that the **probiotic, Lactobacillus (L.) rhamnosus** has some promise in reducing anxiety and improving microbial flora.

Overall, a picture of the gut microbiome playing a facilitating role between stress response, inflammation, and depression, and anxiety is emerging and should be considered with anyone suffering with anxiety, depression and for that case, any mental disorder.

As a final observation, there holds some promise that the natural product, [KappArest](#) from Biotics Research has been found to down-regulate interleukin 6 and tumor necrosis factor alpha reducing inflammation.

This new and emerging treatment for anxiety, depression and other psychiatric disorders is complex but promising!

Although a 180 degree approach to the neurotransmitter deficiency theory, it is worth considering and even embracing.

## References

- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4361085/>
- <https://pubmed.ncbi.nlm.nih.gov/20227485/>
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5997866/>
- <https://pubmed.ncbi.nlm.nih.gov/22814704/>
- <https://pubmed.ncbi.nlm.nih.gov/31163212/>
- <https://www.sciencedirect.com/science/article/abs/pii/S0889159112000025>
- <https://europepmc.org/article/med/28342944>
- <https://journals.sagepub.com/doi/full/10.1177/0269881117711708>
- <https://pubmed.ncbi.nlm.nih.gov/11080527/>
- <https://pubmed.ncbi.nlm.nih.gov/11394936/>
- [benzodiazepine anti-inflammatory](#)
- [Gut Brain Connection](#)
- <https://pubmed.ncbi.nlm.nih.gov/31144383/>
- [Gut Bacteria Anxiety](#)
- [Lactobacillus \(L.\) rhamnosus](#)
- <https://www.sciencedaily.com/releases/2019/05/190520190110.htm>
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5641835/>
- <https://onlinelibrary.wiley.com/doi/abs/10.1002/jnr.24476>
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3052397/>

The information on this website is not intended to replace a one-on-one relationship with a qualified health care professional and is not intended as medical advice. It is intended as a sharing of knowledge and information from the research and experience of Dr. Grisanti and his functional medicine community. Dr. Grisanti encourages you to make your own health care decisions based upon your research and in partnership with a qualified health care professional. Visit [www.FunctionalMedicineUniversity.com](http://www.FunctionalMedicineUniversity.com) for more information on our training in functional medicine. Look for practitioners who have successfully completed the Functional Medicine University's Certification Program (CFMP) [www.functionalmedicinedoctors.com](http://www.functionalmedicinedoctors.com). This content may be copied in full, with copyright, contact, creation and information intact, without specific permission, when used only in a not-for-profit format. If any other use is desired, permission in writing from Dr. Grisanti is required