

# Media Twists Findings of Study Linking High Serotonin to Dementia

Analysis by [Dr. Joseph Mercola](#)

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## STORY AT-A-GLANCE

- › Serotonin, often misconstrued as the "happy hormone," acts as an antimetabolite, hindering energy production in your mitochondria, which can result in fatigue, slowed metabolism and weight gain
- › Mainstream media, influenced by pharmaceutical interests, distorts research findings to perpetuate the narrative of serotonin as the "happy hormone." This is exemplified by recent misreporting on dementia research
- › Contrary to media portrayal, recent research links high serotonin levels, not low, to dementia
- › Other adverse effects of serotonin include fibrosis, impaired thyroid function, metabolic dysregulation, oxidative stress and psychological impacts such as insomnia and depression
- › For optimal health, you want to keep your serotonin level low. One way to do that is by increasing GABA, which is available as a supplement, as GABA increases the degradation rate of serotonin. Dietary strategies are also reviewed

**Serotonin, routinely misrepresented as the "happy hormone," is actually an antimetabolite, meaning it suppresses your body's ability to create energy in the electron transport chain of your mitochondria. As a result, high serotonin can lead to fatigue, a slower metabolism and weight gain.**

The drug industry has a strong incentive to suppress bad press about serotonin, however, as most antidepressants on the market today capitalize on the idea that low serotonin in your brain is responsible for depression.

## **Media Misrepresents Study Findings Linking High Serotonin to Dementia**

That may well be why the mainstream media – bought and paid for by the pharmaceutical industry – so blatantly misreported research<sup>1,2</sup> linking high serotonin to dementia. Bioenergetic researcher Georgi Dinkov writes:<sup>3</sup>

*“STUDY: high serotonin linked to dementia; MEDIA: low serotonin linked to dementia.<sup>4,5</sup> Once again, a level of misreporting that I am much more inclined to ascribe to malice than incompetence simply because most of the popular press outlets covering a specific scientific study get the study authors to proof-read the press article before publishing.*

*So, for patently false press articles like that to appear is most likely due to an attempt to preserve the status of serotonin as the ‘happy hormone,’ as well as to delay/prevent the avalanche of lawsuit for iatrogenic dementia from all people taking SSRI and other serotonergic drugs.*

*In summary, the actual study found that low levels of the serotonin transporter (SERT) – the sodium-dependent protein responsible for uptake and deactivation of serotonin – were associated with cognitive impairment (which usually develops into full-blown dementia/Alzheimer with age).*

*In other words, higher extracellular serotonin levels were associated with dementia. The press articles state the exact opposite – that lower levels of the ‘happiness’ hormone serotonin were associated with dementia ...*

*[The] study also suggests the prevention of dementia/Alzheimer may be as simple as eating some extra salt (providing the required sodium co-factor of*

*SERT), or using a serotonin antagonist.*

*Air ionizers, which also tend to decrease extracellular serotonin may be helpful too and can provide benefit 24×7 without any conscious effort on behalf of the person/people using them.”*

In simpler terms, the study discovered that having low levels of SERT is linked to problems with memory and thinking skills, which can eventually lead to dementia or Alzheimer's disease.

Here's why: SERT is like a "clean-up crew" in the brain. It helps remove excess serotonin, which is a chemical messenger in the brain. When there's not enough SERT around to do its job, serotonin levels outside of brain cells can rise too high. This excess serotonin floating around can cause trouble and contribute to problems with memory and thinking.

So, when the study talks about "low SERT" being associated with cognitive problems, it really means that having less of this clean-up crew leads to higher levels of serotonin outside brain cells. And higher levels of serotonin outside brain cells are linked to dementia.

But some news articles got it all mixed up and said the opposite – that lower levels of “serotonin” were tied to dementia. That's not right. They're confusing “serotonin” with SERT. Low SERT leads to having too much serotonin hanging around where it shouldn't be, and that's what's deteriorating brain health.

## **Other Adverse Effects of Serotonin**

High serotonin can also cause other adverse health effects. As mentioned, it acts as an antimetabolite, so it impairs your mitochondrial energy production, and this can contribute to and worsen just about any health condition you can think of. For example, elevated serotonin can contribute to:

- Fibrosis, including cardiac and pulmonary fibrosis
- Impaired thyroid function

- Reduced metabolism due to excessive glycolysis and high lactic acid production
- Reductive and then secondary oxidative stress
- Bizarre, recurring nightmares and post-traumatic stress disorder (PTSD)

## **Balancing Act: Serotonin's Role in Cellular Repair and Stress Response**

Serotonin also inhibits enzymes such as pyruvate dehydrogenase, cytochrome c oxidase (Complex IV) and Complex 2 of the electron transport chain, which includes succinate dehydrogenase, a key player in both the Krebs cycle and the electron transport chain. Succinate dehydrogenase is also essential for maintaining cellular homeostasis and overall metabolic function. This inhibition can be seen as part of the body's response to stress or injury.

During times of distress (such as injury or stress), levels of pyruvate dehydrogenase, cytochrome c oxidase and Complex 2 typically increase to facilitate repair processes. However, while these enzyme activations are beneficial for short-term repair processes, prolonged activation can be detrimental.

Serotonin's inhibition of these enzymes may serve as a regulatory mechanism to prevent excessive energy production and cellular activity during acute phases of stress or injury. Put another way, serotonin helps ensure that cellular resources are used efficiently during times of stress without causing long-term harm to your body.

However, when vital enzymes involved in cellular metabolism are persistently suppressed, it prompts your body to conserve energy by scaling back on non-critical physiological functions, such as metabolism and mood-related processes. The end result is weight gain and depression. This adaptive response can also lead to fibrosis, as redirecting resources away from repair mechanisms ultimately results in the transformation of internal organs into fibrotic tissue.

## **Elevated Serotonin Has Devastating Psychological Effects**

Contrary to popular belief, elevated serotonin can also have devastating psychological effects, including insomnia and depression. As explained by [Dinkov in a previous interview](#):

*“Every single antiserotonin drug ever tested has demonstrated both antidepressant and pro-somnic, basically anti-insomnic, effects in animal studies and some human studies as well. So, serotonin is known to actually cause insomnia. How?*

*If serotonin is a precursor to melatonin, how can it actually cause problems with the sleep? It's because serotonin is the most potent activator in the body of the release of cortisol through ACTH [adrenocorticotrophic hormone].*

*In fact, the first antidepressant drug, Prozac, is a partial serotonin antagonist. It specifically blocks the serotonin receptor responsible for the release of cortisol – serotonin receptor 2C5-HT2C.*

*Prozac is a potent inhibitor of that receptor while maintaining the rest of its serotonergic effects. So, it's the perfect coverup. You can claim that serotonin is great for your depression, while in reality you're giving a drug that's blocking the effects of serotonin and lowering cortisol, but that's unknown to most people, even doctors that I've discussed it with ...*

*Serotonin is not a happiness hormone. Multiple studies, even a court case recently agreed that serotonin destroys empathy, love and wisdom. Those are specific quotes from the court study. Another animal study found that crabs exposed to very low levels of SSRIs because of sewage being dumped into the ocean ... turn extremely violent, homicidal and cannibalistic ...*

*[Serotonin] is also a metabolic inhibitor ... The primary role of serotonin is metabolic, and the evolutionary role of serotonin is probably for numbing pain when you're under stress. It turns off your pain reaction, even your grief reaction, but at the expense of turning off all the other emotions as well.*

*Multiple studies have demonstrated that serotonin is basically a lobotomizing chemical when it comes to emotions. Sure, it'll numb your depression, but it will also numb everything else too."*

## **How to Address Elevated Serotonin**

Considering these adverse effects, including the finding that high extracellular serotonin can contribute to dementia, you'd be wise to keep your serotonin level as low as possible. One way to do that is by increasing **GABA**, which is available as a supplement. GABA increases the degradation rate of serotonin, so you cannot have high levels of both.

**“People with high GABA/low serotonin are typically calm and gregarious, whereas GABA deficiency and elevated serotonin is associated with anxiety, fear, depression, short temper, phobias, impulsiveness and disorganization.”**

People who have high GABA levels usually have low serotonin, and vice-versa. People with high GABA/low serotonin are typically calm and gregarious, whereas GABA deficiency and elevated serotonin is associated with anxiety, fear, depression, short temper, phobias, impulsiveness and disorganization.

Another important strategy is to address your gut health. When complex carbs that aren't digested in your stomach travel down to your intestine, they end up feeding gram-negative bacteria that produce endotoxin, also known as LPS (lipopolysaccharide).

Endotoxin catalyzes a series of metabolic reactions that converts tryptophan in your gut to serotonin. So, to inhibit serotonin production in your gut (which is where most of the serotonin in your body is produced), you want to prevent endotoxin production, which means you need to balance your gut microbiome. Here are a few strategies to do that:

**Pre- and probiotics** – Eat prebiotic foods such as onions, garlic, leeks, asparagus and bananas, and probiotic fermented foods like yogurt, kefir, kimchi and sauerkraut. Alternatively, take a probiotic supplement. Beneficial bacteria such as Bifidobacteria and Lactobacillus, and beneficial yeast like Saccharomyces boulardii, can all help rein in the endotoxin production through competitive inhibition.

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**Limit sugar and refined carbohydrates** – High intake of sugar and refined carbohydrates can feed harmful bacteria in the gut and promote inflammation, potentially increasing endotoxin production.

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**Avoid resistant starches** – Other carbs to avoid would be resistant starches from legumes, beans, lentils, most grains, green bananas, sushi rice and pasta. Oatmeal can also cause trouble for many. You'll know it's incompatible with you if you get gas and/or constipation, or if it slows your digestion. Oatmeal is also high in linoleic acid (LA), which is why I avoid it.

If you have small intestinal bacterial overgrowth (SIBO), you may also need to avoid starches like rice and cooked potatoes, as you have inhibited ability to break down the starch into glucose. As a result, these kinds of starches may impede your recovery.

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**Eat plenty of antioxidant-rich whole foods** – Foods rich in antioxidants, such as berries, leafy greens, and other colorful fruits and vegetables, can help reduce oxidative stress and inflammation in the gut, thereby supporting gut health and reducing endotoxin production.

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**Choose healthy fats** such as those found in avocados, coconut oil, organic grass fed butter and ghee to help reduce gut inflammation.

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**Optimize your omega-3 level** – Consuming omega-3 fats from sources like fatty fish (salmon, mackerel, sardines) may help reduce gut inflammation and promote a healthy gut microbiome.

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## Sources and References

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- <sup>1</sup> [Journal of Alzheimer's Disease September 2023; 96\(1\): 215-227](#)
- <sup>2</sup> [IosPress.com, Journal of Alzheimer's Disease October 2023; 96\(1\): 215-227](#)
- <sup>3</sup> [Haidut.me February 20, 2024 \(Archived\)](#)
- <sup>4</sup> [UPI.com December 11, 2023](#)
- <sup>5</sup> [Neuroscience News December 7, 2023](#)