

Antidepressants (SSRI) Trigger Hyponatremia, Which Causes Severe Anxiety

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STORY AT-A-GLANCE

- › Antidepressants like SSRIs are strongly linked to hyponatremia, a dangerous drop in blood sodium that disrupts nerve and muscle function
- › The risk is highest in the first two weeks of treatment, when sodium levels plummet to life-threatening lows that trigger confusion, seizures, or fainting
- › Older adults, especially women over 80, are among the most vulnerable, with nearly 1 in 15 experiencing profound sodium loss after starting these drugs
- › Symptoms of drug-induced low sodium often mimic worsening anxiety or depression, leading to misdiagnosis and unnecessary increases in medication
- › Natural strategies like optimizing nutrition, restoring key vitamins and minerals, daily movement, sunlight exposure, and restful sleep offer safer ways to support mood and energy without creating sodium imbalances

Hyponatremia, or low sodium in the blood, is one of the most common electrolyte disorders seen in clinical settings, and its effects are anything but minor. Sodium keeps your nerves firing and your muscles working. When levels dip, even slightly, you feel drained, confused, or shaky. Push it further and symptoms like nausea, seizures, or fainting start to appear. In severe cases, sodium imbalance drives long hospital stays, lasting cognitive decline, and death.

Antidepressants such as selective serotonin reuptake inhibitors (SSRIs) are routinely prescribed for mood disorders, but what often gets overlooked is how they disrupt sodium balance in your body. This translates into real-world risks like falls, broken bones, and worsening mental health. Older adults, especially women, are hit the hardest, with even short-term use setting off dramatic shifts in sodium control.

The severity of harm varies depending on the drug, the dose, and how long it's used, yet the outcome is always unpredictable — and sometimes catastrophic. Research makes it clear that these medications disrupt sodium balance in dangerous ways, and a major study to track this problem shows exactly how quickly and severely those drops in sodium occur.

Large Study Links Antidepressant Use to Severe Sodium Imbalances

A study published in the European Journal of Endocrinology investigated the connection between antidepressant use and a severe drop in blood [sodium levels](#).¹ Researchers examined data from 234,217 adults who had just started taking SSRIs or venlafaxine, brand name Effexor, to see how often sodium levels fell dangerously low.

- **Thousands developed dangerously low sodium** — Among the participants, 3,999 went on to develop hyponatremia, defined in this study as blood sodium levels dropping below 125 mmol/L. For perspective, normal sodium sits between 135 and 145 mmol/L, so a fall to 125 is not just a small shift — it represents a level at which seizures, confusion, and hospitalization are likely. That's why this condition is classified as “profound.”
- **Risk spikes quickly after starting medication** — The data showed that the highest danger occurred in the first 14 days of treatment. In fact, people who had just begun antidepressants were more than 10 times more likely to develop profound hyponatremia compared to baseline.

- **Older adults and women were hit hardest** — Elderly women stood out as the most vulnerable group, with nearly 1 in 15 women over 80 years old developing profound hyponatremia after starting treatment. This shows how important age and sex are when predicting side effects — factors that often get overlooked in quick prescribing decisions.
- **The problem is too much water retention** — SSRIs and venlafaxine disrupt sodium levels through a condition called syndrome of inappropriate antidiuresis (SIADH). In plain terms, these drugs cause your body to release excess antidiuretic hormone, which signals your kidneys to hold onto water.

When your body retains too much water, the sodium in your blood becomes diluted — much like watering down soup — causing the sodium concentration to fall below the level your nerves and muscles need to function properly. The study tracked hospital admissions related to this known mechanism.

Antidepressant-Induced Low Sodium Triggers Anxiety

Bioenergetic researcher Georgi Dinkov points out a troubling reality: **antidepressants** that are supposed to calm anxiety actually cause it by lowering sodium levels in your blood.² This condition produces the same agitation, panic, and fear that define **anxiety disorders** — essentially fueling the very illness these drugs are prescribed to treat.

- **A cycle that feeds itself** — When sodium levels crash, patients often feel more restless, fearful, or paranoid. Instead of realizing this is a drug reaction, doctors frequently mislabel it as “worsening anxiety,” leading to higher doses or additional prescriptions. In this way, the treatment creates the very problem it claims to fix.
- **A danger long known, but ignored** — According to Dinkov, the risks of SSRI-induced hyponatremia have been documented for decades. Yet, warnings remain hidden in fine print, dismissed as rare side effects rather than recognized as central dangers. This silence, he argues, amounts to deliberate negligence: the system profits when patients stay stuck in a **loop of drugs** and worsening symptoms.

- **Sodium is your brain's power source** — Think of sodium as the electrical charge that keeps your brain's circuits running smoothly. When that charge falls, the system falters — like a phone trying to operate at 5% battery. The result? Mood swings, irrational fears, and panic attacks that are indistinguishable from a severe anxiety disorder.
- **Why recognizing the pattern matters** — If your anxiety spikes shortly after starting one of these drugs, don't assume it's "your condition getting worse." It's likely your brain running out of its electrical fuel. Knowing this gives you the power to ask the right questions, demand sodium checks, and avoid being trapped in the cycle of drugs for symptoms the drugs themselves created.

Meta-Analysis Confirms Class-Wide Sodium Risks Across Antidepressants

Research published in BMC Pharmacology and Toxicology brought together findings from 38 separate studies, covering more than 3.9 million people worldwide.³ This type of review, called a meta-analysis, is powerful because it combines data across many studies to reveal patterns that smaller trials might miss. The goal was to measure how strongly antidepressants as a drug class are linked to low sodium levels.

- **About 6% of antidepressant users developed hyponatremia** — Across all studies, around 6% of people who used antidepressants developed clinically significant hyponatremia. That means about six out of every 100 people prescribed these medications ended up with dangerously low sodium levels. At a global scale involving tens of millions of users, the result translates into millions of people being affected.
- **Certain drugs were more dangerous than others** — The review ranked specific drugs according to their risk. Fluoxetine (Prozac) and venlafaxine (Effexor) were the most dangerous, producing higher rates of hyponatremia than other

antidepressants. By comparison, sertraline (Zoloft) and duloxetine (Cymbalta) carried lower, though still significant, risks.

A separate nationwide analysis of 17,439 patients revealed that sodium problems are not just “rare events.”⁴ About 1 in 10 users developed hyponatremia within three years, with duloxetine standing out as the highest-risk drug in this study. By contrast, bupropion (Wellbutrin XL) and paroxetine (Paxil) had the lowest risk.

- **Older adults remain the most vulnerable group** — Age was again a decisive factor in this analysis. Elderly populations, especially those over 65, faced the steepest risk of sodium depletion. This means that anyone caring for an aging parent or grandparent taking antidepressants needs to be vigilant for symptoms like dizziness, confusion, or sudden changes in mood — signs that are often mistakenly dismissed as “just getting older.”

Sertraline Linked to Dangerous Drop in Sodium Levels

A report in Cureus shared the story of a 68-year-old woman who collapsed at her assisted living home about a month after beginning the antidepressant sertraline.⁵ Tests showed her blood sodium was only 104 mmol/L, far below the healthy range. At that level, your brain and body often shut down, leading to seizures, coma, or death. Her first warning signs were dizziness, nausea, and fainting.

- **The drug caused her body to hold onto too much water** — Doctors found that sertraline triggered SIADH. Her urine tests showed she was losing sodium through urine while her body was still holding onto water — exactly the wrong combination.
- **Intensive care was needed to bring her back to safety** — To fix the problem, she was admitted to the intensive care unit and given a strong salt solution through an IV, while her fluid intake was limited to just 1 liter a day. Her sodium was raised slowly so her brain wouldn't swell from sudden changes. Doctors stopped the sertraline permanently, and her sodium levels returned to normal over several days.

- **Low sodium raises your risk of falls and broken bones** — The woman's collapse wasn't just bad luck. Severe hyponatremia makes bones weaker and increases the chance of falls. This creates a cycle of injuries, hospital stays, and declining health. In older adults, even a small imbalance in sodium often sets off serious complications.

Anxiety Itself Didn't Drop Sodium — the Drugs Did

A population study in Medicine examined anxious adults in Israel to see if low sodium was tied to anxiety itself or to starting an SSRI drug.⁶ Researchers compared 3,520 people with diagnosed anxiety who later received an SSRI to 6,985 matched adults without anxiety or SSRI use, and they also rechecked labs after SSRI start to see what changed.

- **Before any SSRI, anxious people had normal sodium like everyone else** — Mean sodium was essentially the same before treatment in both groups, and true hyponatremia was actually a bit less common in the anxiety group than controls (2.2% versus 3.3%). That means anxiety alone was not the driver of low sodium in this dataset; the baseline labs didn't point to overhydration from nervous drinking either.
- **After starting an SSRI, sodium dipped and low-sodium cases rose** — Once treatment began, average sodium fell slightly, and the share with hyponatremia went up by about 50%, from 2.6% to 3.9%. The shift happened after the drug, not before it — so if you felt worse or dizzier following a new SSRI, sodium loss is a concrete thing to check.
- **Borderline low sodium also became more common on SSRI therapy** — “Borderline” low sodium (just under normal but not severely low) increased from 35.3% to 40.7% after SSRI initiation, signaling a wider move toward lower sodium even if not everyone crossed the line into full hyponatremia.

- **Anxiety’s “water-drinking” myth didn’t hold up here** — The study did not find evidence that anxious adults were overhydrated at baseline; indirect hydration markers were similar to controls, and sodium looked stable before medication start. This shifts attention from the anxiety water-drinking myth — the idea that people with anxiety naturally drink too much water — to medication effects as the actionable point.

Drug-Free Steps to Rebuild Your Mood and Energy Naturally

Antidepressants don’t solve the underlying reasons you feel low. They mask symptoms while creating new problems, like disrupting your body’s **sodium balance**. A better approach is to nourish your body so it generates steady energy, supports brain health, and helps you feel calm without side effects. Here are practical, drug-free strategies I recommend.

1. **Fuel your brain with the right foods** — Your mind depends on a steady supply of energy. If your cells aren’t producing enough, fatigue and low mood take over. Give your body easy-to-use carbs such as fruit and white rice. Most people do well with around 250 grams per day, and if you’re athletic, you’ll likely need more.

Cut out seed oils and packaged foods high in **linoleic acid** (LA), which damage your mitochondria — the engines inside your cells. Instead, cook with stable saturated fats like butter from grass fed cows, ghee, or beef tallow. When your cells are properly fueled, your mood and focus naturally improve.

2. **Replenish nutrients tied to emotional balance** — Low levels of certain vitamins and minerals are often overlooked drivers of depression. **Magnesium**, for example, helps your nervous system relax and is commonly depleted in stressed individuals.

B vitamins are also important: lack of niacin (B3) is linked to paranoia and agitation, while too little thiamine (B1) contributes to irritability and poor sleep. Load your plate with nutrient-dense foods like grass fed eggs and leafy greens. If diet alone

isn't enough, which is often the case for magnesium, **targeted supplements** help restore these reserves.

- 3. Make movement a daily habit** — **Physical activity** is one of the most reliable ways to lift mood naturally. Even light activity such as walking, stretching, or cycling at an easy pace increases circulation, balances hormones, and stimulates feel-good brain chemicals. You don't have to do long gym sessions — short bursts of enjoyable movement done consistently will lead to results.
- 4. Let the sun reset your mind and body** — Exposure to natural **sunlight** does more than generate vitamin D — it also boosts endorphins and charges your cellular energy. Aim for outdoor time daily, especially in the morning to set your internal clock.

Blood levels of **vitamin D** between 60 and 80 ng/mL are ideal for mood stability, so test to see where you stand. If you've eaten a diet heavy in seed oils, your skin is more prone to burning; stick with gentler light in the early morning or late afternoon until you've eliminated these oils for several months.

- 5. Restore balance through sleep and relaxation** — Sleep is your body's repair window, and without it, emotional health unravels. Step outside shortly after waking to anchor your circadian rhythm, then create an evening ritual that signals bedtime: dim lights, avoid screens, and make your room completely dark.

During the day, manage stress through practices like slow breathing, meditation, or **Emotional Freedom Techniques** (EFT). These tools train your body to stay calm so stress hormones don't dominate your brain.

If you're feeling desperate or have any thoughts of suicide and reside in the U.S., please call the National Suicide Prevention Lifeline by dialing 988, call 911, or go to your nearest hospital emergency department.

U.K. and Irish helpline numbers can be found on [TherapyRoute.com](https://www.therapyroute.com). For other countries, do an online search for "suicide hotline" and the name of your country. You cannot make long-term plans for lifestyle changes when you're in the middle of a crisis.

FAQs About Antidepressants and Low Sodium

Q: What is hyponatremia and why does it matter?

A: Hyponatremia means your blood sodium is too low. Sodium is like the battery charge for your nerves and muscles — without enough, your body and brain can't function properly. Symptoms range from fatigue and confusion to seizures, falls, and even death in severe cases.

Q: How do antidepressants cause low sodium?

A: Drugs like SSRIs and venlafaxine trigger your body to release too much antidiuretic hormone. This tells your kidneys to hold on to water, which dilutes sodium levels in your blood — like watering down soup. The drop happens fast, especially in the first two weeks of treatment.

Q: Who is most at risk for antidepressant-induced hyponatremia?

A: Older adults — particularly women — are the most vulnerable. In one large study, nearly 1 in 15 women over 80 developed dangerous sodium drops after starting antidepressants.⁷ But anyone on these drugs, even younger adults, can be affected.

Q: Why do doctors often miss the warning signs?

A: Low sodium looks a lot like worsening anxiety or depression: agitation, paranoia, mood swings, and confusion. Because of this overlap, patients are often given more medication instead of being checked for sodium imbalance — creating a harmful cycle.

Q: What are safer, drug-free ways to protect mood and energy?

A: Instead of masking symptoms with pills, support your brain by fueling your body properly, restoring key nutrients like magnesium and B vitamins, moving daily, getting sunlight, and prioritizing restful sleep. These steps target root causes of low energy and anxiety without creating new risks.

Sources and References

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