

POSSIBLE CAUSES OF ANXIETY

It's often impossible to determine whether poor neurotransmitter balance is a result of life experience or genetics. Both can occur in anyone living with anxiety, and in some cases a combination of both may be responsible for anxiety. However, there are some very tangible reasons why people suffer from anxiety.

Nutrient Deficiency is one such cause. When stressed, our bodies use up and excrete greater amounts of crucial vitamins and minerals.

Magnesium blocks stress-promoting neurotransmitters from over-firing, thus being 'Nature's tranquilizer.'

The adrenal glands, which buffer stress, contain some of the highest concentrations of **vitamin C** in the body and can shrink when vitamin C levels diminish. This can become a vicious cycle with anxiety, if these nutrient depletions are not addressed.

Chromium deficiency can produce nervousness, shakiness and other general symptoms of anxiety. Chromium deficiency is common among alcoholics and people who consume large amounts of refined sugars. Brewer's yeast is a rich source of this essential trace element.

Calcium keeps our brain function healthy, and a calcium deficiency can lead to anxiety and moodiness. The electrical pulses within the nervous system depend on calcium to perform properly. With a calcium deficiency, the chances of irregular moods and anxiety attacks increase significantly. Calcium deficiency can masquerade as anxiety or exacerbate symptoms in those who already have anxiety. Depression and anxious thoughts can result from calcium deficiency, as well as other symptoms associated with anxiety, like shaking and heart palpitations.

A deficiency in **iron** can lead to anemia, and anemia can lead to anxiety.

Vitamin B1 (Niacin) is important for blood sugar control and this has a major impact on anxiety.

Vitamin B12 plays a role in the development of anemia, nerve disorders, and cognitive deficits. It is one of the B vitamins that affects the brain and nerves the most. Deficiency can lead to mood problems, including depression and anxiety. It can affect nerve tissue and affect memory. Even if they don't reach the point of deficiency, they may have an effect on mental health. (Calmclinic.com)

Potassium helps with just about every bodily function. An imbalance of potassium can cause many different side effects, one being anxiety. Sodium and potassium are linked within the body. So if sodium levels are high, your potassium levels are low.

Selenium has been shown to elevate mood and decrease anxiety.

Vitamin B3 (Niacinamide) helps oxygenate the brain, and levels of 1500mg/day of niacinamide have been given for anxiety. It's made from the amino acid tryptophan and it has some benzodiazepine-like properties. And while niacin causes flushing of the skin, Niacinamide does not.

Tryptophan is the amino acid precursor to serotonin, which is low in people with depression, insomnia, anxiety and OCD. It helps stabilize blood glucose. A sharp drop in blood glucose causes depression and anxiety. This drop can also cause a hot flush; studies have found tryptophan helps with these. Serotonin is the precursor to melatonin our sleep hormone, and supplementing with tryptophan also helps with insomnia. Taking 250mg/day at night away from food high in protein is a good place to start. Tryptophan needs an insulin spike to push it into the brain, so it should be taken with about 1/4 glass of fruit juice. It also needs vitamin B6 and folic acid to convert it into serotonin, so if the tryptophan doesn't come mixed with B6 and folic acid, one should take 25mg B6 and 300mcg folic acid with it. The dose should be slowly increased in 250mg increments until one finds the optimum dose. Another dose with juice can be taken if one wakes during the night. It is safe to go up to 6000mg/day, but if on an antidepressant, one should consult with their health care practitioner first.

A lack of **Vitamin D3** causes anxiety and depression, plus a host of other problems. Research suggests that over 50% of people living 35 degrees above or below the equator are deficient. Blood levels should be 70-100ng/ml or 175-250nmol/L and not the 30ng/ml or 75nmol/L most labs and doctors regard as adequate. The minimum daily dose should be 5000iu's per day, although the research indicates it should be 10,000iu's per day.

Zinc is the second most abundant trace mineral in the body. It is a constituent of insulin, making it extremely important for blood glucose control. It is also found in many enzymes, including superoxide dismutase, a powerful antioxidant and liver protector. It is vital for a healthy immune system and is required for protein synthesis and collagen formation. An imbalance between zinc and copper can cause many issues, as well. Puberty in girls is especially difficult, as rising estrogen levels cause copper to rise, depressing zinc levels. If estrogen levels increase at any point due to the use of contraceptives, HRT, or after the birth of a child, a hysterectomy, menopause, or environmental exposures to copper, anxiety, depression, irritability and psychosis can occur. PMS is often caused by excessive copper levels and depressed zinc levels, due to the unbalanced ratio between progesterone and estrogen. 15mg/day should be taken and, if a deficiency is suspected 100mg/day should be taken to increase levels until symptoms pass.

Stress-regulating neurotransmitters such as Serotonin rely on Amino Acids. Events leading up to anxiety can heighten serotonin excretion leading to depletion. Without replenishing the precursor nutrients for the neurotransmitters that are being used in excess, the disorder will continue and perhaps even get worse.

Melatonin is a hormone that regulates natural sleep/wake cycles. It appears to improve sleep quality in people with reduced rapid-eye movement (REM) sleep. It also appears to reduce the time it takes to fall asleep and the number of sleep interruptions in elderly people with sleep-wake cycle disturbances and dementia. Some people say it also makes them sleep better. .25mg - 10mg/night can be taken.

Thyroid hormone appears to regulate the amount of serotonin, norepinephrine, and GABA produced and distributed to the brain, so problems with your thyroid may also increase your risk for developing anxiety.

Although a non-essential amino acid, **L-tyrosine** is one of the most important. It is the precursor to the stress hormones adrenaline and noradrenaline, the two thyroid hormones T3 (triiodothyronine) and T4 (thyroxine), plus melanin, the pigment found in hair and skin. It's involved in regulating and reducing pain, and increasing pleasure. Tyrosine is essential for any stressful situation, cold, fatigue, emotional trauma, prolonged work and sleep deprivation. It improves memory, cognition and physical performance. Levels drop when stressed. 250mg/day should be taken in the morning. The co-factors needed for conversion are vitamins B3, B6 and folic acid. 25mg B3, B6 and 300mcg folic acid should be taken, as well. The dose should be gradually increased until the optimum is found. It is safe to go up to 6000mg/day, but it's easy to exceed what is needed and then symptoms return, so dosages should be increased very slowly.

L-glycine is a calming amino acid. It helps with seizures, relaxes muscles, improves glycogen storage and, with the proper amount, increases energy. It is a precursor to glutathione, after vitamin D the most important cellular antioxidant. 500mg/day, together with 25mg vitamin B6 can be taken, and it's safe to go up to 6000mg/day.

Taurine is a very calming amino acid, particularly for the heart. There is more taurine in the heart than all other amino acids combined. In people who suffer from panic attacks, anxiety and chronic fatigue, the heart rate variability is erratic, and taurine helps to calm this. 500mg/day should be taken, increasing until the optimum is found. 25mg of the co-factor vitamin B6 should be taken with it. It is safe to go up to 6000mg/day.

Coenzyme-A is manufactured in the cells of the liver and other body organs from components transported by the blood. The highest concentrations of coenzyme-A are found in the liver, heart, kidneys, brain, adrenal glands, and skeletal muscles. However, literally every organ of the body has coenzyme-A in its tissues because every part of the body has a use for it. It plays an important role in the body's reaction to stress.

Anxiety is further aggravated by the presence of **xenoestrogens**, estrogen-like compounds that exist in the environment. They can be in the form of chemicals in household products, like shampoos and lotions. Harmful ingredients in these products include parabens, like methyl, ethyl and propylparaben.

People are also exposed to hormones through food. Hormones are injected into chicken and cows that are raised to be a part of the human food supply, and people prone to anxiety may be incredibly sensitive to these hormones.

The use of recreational drugs, like marijuana can also cause anxiety attacks.

Medications taken for other issues may have the undesired side effect of anxiety.

Taking tricyclic antidepressants such as nortryptaline, imipramine hydrochloride (Janimine, Tofranil) or imipramine pamoate (Tofranil-PM) in the presence of low serum levels of iron may increase the risk of developing anxiety later on.