

Understanding Neurotransmitters

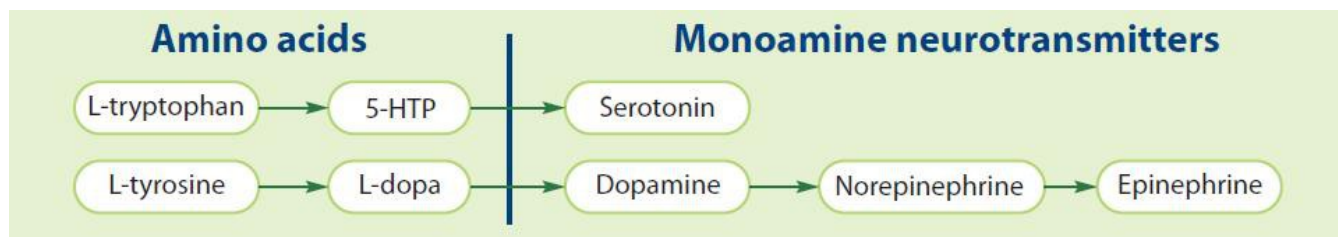
In a large government [study](#), fully 50% of Americans over age of 14 suffer from depression, anxiety, or other mood problems. These numbers are starting to become higher than just circumstantial reasons for causing depression alone.

Many medical doctors and psychiatrists are now acknowledging this fact that the brain's own antidepressant chemistry is out of balance and that pharmaceutical drugs, although they provide quick relief for this problem, can often be ineffective or harmful, especially over the long-term.

So, how is this problem corrected without all the drugs?

Let's first take a look at neurotransmitters.

Neurotransmitters are made from specific amino acids. You need certain nutrients, called cofactors, in order to convert these amino acids into neurotransmitters.



There are two main types of neurotransmitters: Inhibitory and Excitatory neurotransmitters.

The main inhibitory neurotransmitter is serotonin. The main excitatory neurotransmitters are known as catecholamines, which is dopamine, norepinephrine, and epinephrine.

These two systems control a large portion of the functions in the body, mainly serotonin and catecholamines.

Serotonin and norepinephrine control hormone production, regulate sleep, mood, and body temperature. Dopamine mainly controls focus, concentration, memory, and fine motor skills. Later in the course, you will learn why this is important, because your specific symptoms will guide you to the right neurotransmitters that you are lacking.

There are also other neurotransmitter systems such as endorphins and the GABA-glutamate system. Interestingly, GABA has been found through recent clinical studies to be partially controlled by the serotonin-catecholamine system. These are partially controlled by the serotonin-catecholamine system, which is why most people can fix mood problems by focusing on fine tuning serotonin and dopamine first.

GABA is associated with anxiety. Most of the medications that treat anxiety, like Klonopin, Valium, or Xanax work on the GABA receptors. They are very quick acting in the short-term, but if you have ever taken them long-term and tried to get off them, you know how bad the withdrawal symptoms can be.

What does this mean for you? You will begin to discover what “type” of depression you have, and then

the first line of attack is to start working on the serotonin and catecholamine neurotransmitter levels. For most people, this will bring anxiety and panic attacks to rest.

I have found through people going through this program and coaching and in all the emails I've received that a lot of people have very different results when taking GABA. Some people find amazing relief, others feel nothing.

The best amino acids to begin focusing on for GABA or glutamate for most people is to start with 5-HTP or L-Tryptophan and L-Tyrosine so that we influence the primary serotonin-catecholamine system.

This gets to the root cause of the problem and provides a long-term solution, which if you bought this program, is exactly what you are after.

In the few people that still have some problems with anxiety, staying calm, and stress than you can begin experimenting with GABA.

Nutritional therapy can often raise the levels of targeted neurotransmitters. This can produce changes in some people in as little as a few days.

Unlike strong drugs like prozac or wellbutrin, side effects are rare and withdrawal effects non-existent.

What happens if can't feel much from taking the Amino Acids?

An often overlooked root problem: hormonal problems.

Every person I've worked with that hasn't found proper relief through diet and supplements alone usually has a thyroid, adrenal, or other hormonal problem. If not, they have gut issues, a parasite, or something else equally as affective on their digestive system.

Hormones are another class of chemical messengers. Usually, if you balance the important serotonin-catecholamine system first, things such as mood swings are often resolved. This indicates that neurotransmitter function also affects hormonal responses.

However, if you still have certain problems such as craving salty foods, constant feeling of burnout, exercise never energizes you, etc., that is when you start to look at adrenal fatigue.

As you can see, *the good news is* that by aiming for the *most likely* root cause first and measure **results** you will begin to learn more about your body and get closer and closer to the root cause of why you are suffering from depression and one step closer to being in balance and finding relief and the freedom you want.

If you want long-term stability and health and not just another band-aid solution, this is good news. This was my exact experience.

What Else Affects Neurotransmitters?

Neurotransmitter function can be negatively impacted by low-protein, low-calorie, or high carb diets, excessive stress, dark weather, lack of exercise, or imbalances in adrenal, thyroid, or sex hormone

levels. These will also be addressed later in the course.

As I mentioned earlier, certain nutrients are involved in converting these amino acids into neurotransmitters. Certain B Vitamins are necessary for the conversion of tryptophan to serotonin, for example. If you follow the basic supplement guide outlined, you should have all the building blocks necessary to produce the good chemicals that keep us feeling great.

What's The Really Great News About All This?

I am very stable and happy these days and haven't had a relapse in years. Guess what? **I don't take any of the amino acids anymore.**

That's right. I don't even take the amino acid supplements anymore at all.

This is a long-term solution because once you restore your balance and get back on track, diet alone is enough to keep you depression free! There is no dependency on these amino acids.

However, this also means that it might take a bit longer than it would to find relief by simply popping a powerful pharmaceutical drug. However, I'd urge you to commit to this process so that you can find true relief for the rest of your life rather than have to deal with side effects and symptoms all the time.

Once neurotransmitter depletion has happened to you, it can be hard to restore your brain back through diet and changing your lifestyle. Amino acids are typically taken with other vitamins and minerals because they all work together to help the brain function.

For the next few minutes, I'm going to discuss the neurotransmitters individually. Continue watching if you want to know the specific differences, or you can skip ahead to the next video if you'd like to get started on your personal journey to recovery.

Serotonin should be a familiar name to you if you are depressed, especially if you have any experience with Paxil, Prozac, Zoloft, Celexa, or Lexapro. It helps regulate appetite, sleep, memory, learning, temperature, behavior, muscle contraction, cardiovascular function and even hormone balance.

Funny thing about serotonin is that most of it is produced in the gut. This is why having gut problems can really mess you up, or having depression can produce a messed up gut!

Tryptophan and 5-HTP increase your serotonin levels.

Gaba is an inhibitory neurotransmitter. It helps with anxiety, staying calm, and sleep. Benzodiazepines, barbiturates, and many of the sleep medications out there like ambien and lunesta work by increasing the amount of GABA released.

GABA can be influenced by the serotonin-catecholamine system or by taking supplements like GABA, l-theanine, 5-htp, and glutamine.

The main excitatory neurotransmitters in the body are dopamine, norepinephrine, epinephrine and glutamate.

Dopamine is involved in pleasure, arousal with learning, and reward system. It helps with focus,

concentration, memory, and motivation. Every study conducted based on rewards looks at dopamine. Dopamine has been shown to be a major factor in diseases like Parkinson's disease, schizophrenia, ADD, restless leg syndrome, and a few others.

Drugs like cocaine, methamphetamine, adderall, work directly on the dopamine system.

Tyrosine or l-phenylalanine can increase your norepinephrine and dopamine.

Norepinephrine is made from dopamine. It affects blood pressure, heart rate, alertness, arousal, decision making, attention, focus, "fight-or-flight" response, and is targeted by several ADHD medications like Ritalin and Adderall. Certain antidepressants like Wellbutrin, Effexor, or Cymbalta act on norepinephrine to help with depression.

Tyrosine or l-phenylalanine increases your norepinephrine as well.

Epinephrine, or adrenaline, is released for the "fight-or-flight" response and stress. It also affects things like breathing and heart rate. If you don't have enough of this, this can be the reason why you seek out crazy experiences and enjoy stress or intense activities.

Glutamate is actually the most abundant excitatory neurotransmitter in the brain. It is involved in learning, memory, and imbalances are involved in seizures, Alzheimer's, and sometimes autism.

A worthy mention is **Endorphins**. They are our natural painkillers. Being low in endorphins can mean you are always sensitive to life's pain. Drugs such as morphine or heroin act on endorphins. Things like meditation and running increase the levels of endorphins in the body.

DPA or DLPA increase endorphins. L-phenylalanine can increase endorphins indirectly.

Now that you have more of an understanding of the basic roles of neurotransmitters, it is time to figure out if you are low in any of them and then create a plan of action to restore your self back into balance.