

NEUROTRANSMITTERS AND YOUR HEALTH

What are Neurotransmitters?

Neurotransmitters are amino acid-based molecules that act as communicating molecules between major systems of the body. They act as messengers between the following systems:

1. Immune system
2. Endocrine system
3. Gastrointestinal system
4. Nervous system

What are some symptoms of Neurotransmitter Imbalance?

Anxiety	PMS
Depression	Infertility
Insomnia	Migraine
Addiction	Headaches
Cravings	Lack of Interest/ Apathy
Mood swings	Concentration Difficulty
Fatigue/ Exhaustion	Memory Decrease
Digestive Problems	Changes in cognitive ability
Immune Problems	Weight Problems
Hormone Imbalances	Appetite
Decreased Sex drive	Attention Difficulties/ADD

What Causes Neurotransmitters to be out of Balance?

Parent depleted	Disease
Genetic tendency	Nicotine
Trauma	Sugar
Acute stress	Drugs
Chronic stress	Medications
Alcohol	Environmental Toxins
Caffeine	Digestive Problems
Surgery	Vegetarian Diet/Low Protein Die
Infection	

Neurotransmitters Effect on the Nervous System

The Autonomic Nervous System controls all activities of the body that happen automatically without us thinking about it such as breathing, digestion, heartbeat and circulation, and immune function, etc....

There are 2 parts to the Autonomic Nervous System:

1. Sympathetic Nervous System

This controls the stress response of our body...also known as "Fight or flight". It helps us:

- Focus
- Concentrate
- Engage
- Take Action
- Socialize

Excitatory Neurotransmitters regulate the Sympathetic system.

- PEA Phenylalanine
- Dopamine
- Glutamate
- Norepinephrine
- Epinephrine

2. Parasympathetic Nervous System

This controls the relaxation response of our body. It helps us to:

- Relax
- Restore
- Regenerate

Inhibitory Neurotransmitters regulate the Parasympathetic system.

- Serotonin
- Gaba
- Taurine
- Glycine

Targeted Amino Acid Therapy:

Targeted amino acid therapy is the use of amino acid, vitamin, mineral and herbal formulas to restore Neurotransmitter Balance. Specific formulations are given to the patient to provide the building blocks necessary to rebuild the neurotransmitters that they are depleted in.

Each patient is given individual formulas to treat their condition. The treatment is designed to be curative and restorative. It can take anywhere from 2 months to 2 years depending on the person and the current level of stress and medication that they are taking. After the Neurotransmitter levels are restored to normal, the levels can be maintained with the proper lifestyle and diet. Some people choose to stay on a maintenance level of supplements to support a stressful lifestyle.

Phases of Treatment:

1. Phase One (1 month)

Amino acid blends to support Inhibitory Neurotransmitter balance.

2. Phase Two (2nd Month)

Amino acid blends are added to the Phase One protocol to support the Excitatory Neurotransmitter balance.

3. Phase Three (Month 3-8)

Amino acid blends are added to phase one and two therapies to support adrenal function.

4. Maintenance Therapy (After retest and therapy complete)

Some patients choose to stay on a low level of amino acids after they are done with therapy to maintain support and balance.

**Treatment phase time may vary according to patient and situation*

Treatment Expectations:

- 1. Initial Improvement** - Patient will begin to feel better in days to weeks since the body now has something it didn't have before. If you miss doses during this initial time, you will feel it. (1-3 months)
- 2. Neurotransmitter Pool Being Established** - During this phase the patient is building up a pool of NT in the blood, missing doses is less noticeable. (2-5 months)
- 3. Neurotransmitter Saturation** - At this point the Neurotransmitter Receptors are starting to get saturated. The patient will exhibit a reversal of symptoms or some type of evidence that it is time to cut down the dose or retest. (4-8 months)