

Amino Acid Therapy to Restore Neurotransmitter Function

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Neurotransmitters are chemicals manufactured by our bodies that allow our nervous system to function properly. When the body requires a specific function to be carried out, the nerve endings release a specific chemical into the junction box which is called a synapse. This allows the transmission of the desired functional impulse to be carried down the nerve in order to carry out a function required. These chemicals are stored in nerve endings and released when required into the synapse where they transmit the impulse to the next outgoing or efferent nerve from the synapse. These chemicals are then recycled back into the reservoir to be released again on the next impulse. Different neurotransmitters perform different functions in the body. There are 183 currently known neurotransmitters.

The master neurotransmitters are serotonin, and the catecholamine group which consists of dopamine, norepinephrine, and epinephrine. All of the other neurotransmitters in the body start from the top with the serotonin and the catecholamines. For simplicity in this discussion I will be talking about serotonin and dopamine.

When the serotonin or the dopamine is released into the synapse, and while it is in the synapse, it is subject to being degraded and removed by two enzyme systems that are present in the synapse. One is COMT and the other is MAO. These enzymes reduce the amount of serotonin and dopamine that are present in the system. The serotonin and dopamine that are recycled back into the nerve ending or reservoir is safe and is not subject to degradation at that time.

Various diseases have been shown to be associated with low functional levels of neurotransmitters in the body. The list below indicates various categories of diseases and symptom complexes that have been shown to be repaired or relieved or disappear when the neurotransmitter levels are restored to proper therapeutic levels for that specific patient.

LOW NEUROTRANSMITTERS IN THE BODY CAUSE OR CONTRIBUTE TO

OBESITY

DECREASED LIFE EXPECTANCY
DIABETES AND ITS COMPLICATIONS
HEART DISEASE AND ITS COMPLICATIONS
STROKE INCIDENCE
SLEEP APNEA
KNEE PROBLEMS
BACK PROBLEMS
INCREASED REHABILITATION TIME
INCREASED RATE OF INJURIES
INCREASED GALL STONES
FEMALE FERTILITY PROBLEMS
GYNECOLOGICAL IRREGULARITIES
GOUTY ARTHRITIS
HYPERTENSION
HIATAL HERNIA
HIGH CHOLESTEROL
INCREASED LUNG INFECTIONS
INCREASE IN GASTRIC ULCERS
CHRONIC PAIN
FIBROMYALGIA
MYOCLONUS

INCREASED CANCER RISK

COLON
UTERINE
BREAST

OTHER DISEASES

PARKINSON'S DISEASE
BULIMIA
ANOREXIA
DEPRESSION
ANXIETY
PANIC ATTACKS
MIGRAINE HEADACHES
TENSION HEADACHES
PREMENSTRUAL SYNDROME (PMS)
MENOPAUSAL SYMPTOMS
OBSESSIVE COMPULSIVE DISORDER (OCD)
IMPULSIVITY
OBSESSIONALITY
INSOMNIA
AGGRESSION
INAPPROPRIATE AGGRESSION
INAPPROPRIATE ANGER
PSYCHOTIC ILLNESS
FIBROMYALGIA
CHRONIC FATIGUE SYNDROME
ADRENAL FATIGUE / BURNOUT
HYPERACTIVITY
ADHD/ADD
HORMONE DYSFUNCTION
DEMENTIA
ALZHEIMER'S DISEASE
TRAUMATIC BRAIN INJURY
PHOBIAS
CHRONIC PAIN
NIGHT CRAMPS
RESTLESS LEG SYNDROME
IRRITABLE BOWEL SYNDROME
CHRONIC DISEASE
ULCERATIVE COLITIS
COGNITIVE DETERIORATION
ORGAN SYSTEM DYSFUNCTION
MANAGEMENT OF CHRONIC STRESS
CORTISOL DYSFUNCTION

We do not know for sure what is a low level or high level of the neurotransmitters in the body. What we do know, is that where disease states exist, if we increase the available serotonin and dopamine, in these patients, we can make the disease symptoms go away and we restore proper function.

The pharmaceutical industry and standard medical science have recognized a deficiency status associated with these neurotransmitters and specifically have created a category of drugs called selective serotonin reuptake inhibitors (Prozac, Paxil, Effexor, and Cymbalta) and selective dopamine reuptake inhibitors (Ritalin) designed to prevent the re-uptake of the serotonin and the dopamine into the nerve ending, thereby keeping it in this synapse. This results in a decline in the amount of serotonin and dopamine in the body as these chemicals are subject to enzyme destruction while they remain in the synapse.

Reduced levels of dopamine and serotonin are unable to be restored by giving people serotonin or dopamine because these large molecules will not cross the protective blood brain barrier in the body.

It is necessary to increase the amount of serotonin and dopamine in order to eliminate the various symptoms associated with certain diseases that are listed in the chart. What has been learned is that using specific amino acids and balancing the use of these amino acids will enable us to balance the levels of serotonin and dopamine in the body. It is necessary to have these neurotransmitter levels balanced, and restored to the functional level. When they are unbalanced, the disease states take place. Using the amino acids enables us to bring in these back into physiological balance, removing the disease state.

By using the amino acids in the fashion that we use them, we are able to take the body from automatic control of the neurotransmitters, to manual control and this enables us to restore the proper balance, overcoming the body deficiency.

Several theories have been advanced as to the need for increasing neurotransmitters. Toxic levels in our bodies of various chemicals, heavy metals, solvents, pesticides, and herbicides create damage in the body and this damage also affects nerve fibers. If the nerve is damaged, it will not put out the same output or charge that is needed for correct function. If we increase the amount of neurotransmitters that are available to push through the nerves, we can restore normal function to the nerve, overcoming the damage in restoring normal function.

The amino acids that we use our combinations of five hydroxy tryptophan, tyrosine, and Macuna puriens which is L-dopa. We add to this lysine, L cysteine, folate, and various vitamins all intended to provide the balance for restoring the master neurotransmitters in the body.

Once the serotonin and the dopamine are restored to therapeutic phase 3-level, the rest of the neurotransmitters start the fall in place, and the various disease states disappear.

We follow a tried and tested protocol that involves several progressive levels of increasing amino acid dosages. The various pills have different combinations of the same substances enabling us to titrate the most effective dose for each individual patient. The treatment is very individual and specific for you the patient.

Although some people get marvelous results with level 1, or level 2, or level 3, others need to go higher and have modification of their dosages. We use a urine test at that time to check their levels of urinary neurotransmitters and adjust dosages accordingly. The urinary neurotransmitters that are produced and excreted in the urine correlate very well with the body levels that restore the proper function.

In many people when you hit target level it is as if a light switch goes on in your body, and there is an amazing relief of symptoms.

Once you are started on the supplements, it takes three to five days of being consistent with the dosage, taking the pills on time, for the change to occur in a patient. Once five days have gone by and the changes have not occurred, staying at that dosage longer will not effect more improvement. That is why it is necessary for us to see our patients regularly and make adjustments to the dosages each week until we reach that target dosage for each patient. It is also necessary for the patient to take the supplements on a daily basis and not miss doses. If you miss a dose, your levels of neurotransmitters fall below the desired levels again, and the beneficial effects of taking the supplements are lost for that time period. It takes three to five days, again, to reach maximum benefit. With the drop in a dose, you put yourself back three to five days, again, in reaching the ideal level of your neurotransmitters.