**Serotonin**

Serotonin (5-hydroxytryptamine, 5-HT) is a tryptophan derived biogenic amine that acts as a neurotransmitter in the central and peripheral nervous systems in the body. It controls many brain functions, regulates blood pressure and smooth muscle contraction. It has been strongly implicated in several pathological conditions such as hypertension, migraine, depression, schizophrenia, anxiety, anorexia nervosa, dementia, and carcinoid syndrome. In addition, it has been associated with sleep disruption, aggression, temperature regulation, sexual behavior, and pain sensation. It has also been linked to Alzheimer’s disease and vascular dementia along with other neurotransmitters such as dopamine. Most of total body serotonin is found in the gastrointestinal (GI) tract, where it modulates the functions of the bowel by controlling smooth muscle contraction. Any irregularities in the serotonergic system may thus contribute to various clinical conditions such as bowel motility disorders, cardiac abnormalities, and negative effects on the mood and memory regulation.

When serotonin is low, supplementation with cofactors to promote biosynthesis (e.g. vitamin B6), precursors (tryptophan/5-HTP), L-theanine, and probiotics may be helpful. Additionally, lifestyle modifications, such as regular exposure to bright light, healthy diet, enough exercise, and positive self-talk are all effective strategies that result in increased serotonin levels. The urine level of Serotonin is 61-103.2 µg/g creatinine.

Symptoms of low serotonin levels:

– Depression / Low mood

– Anxiety

– Sleep difficulties

– Uncontrolled appetite / Carbohydrate cravings

– Headaches

– Hot flashes

– Constipation

You can learn the amount of Serotonin with the Zivak Neurotransmitter kit, by LC-MS/MS analysis.

* ***Hypertension***
* ***Migraine***
* ***Depression***
* ***Schizophrenia***
* ***Anxiety***
* ***Anorexia nervosa***
* ***Dementia***
* ***Carcinoid Syndrome***

For detailed information [www.zivak.com](http://www.zivak.com)

