



DIGESTION AND STRESS MANAGEMENT

Serotonin is a neurotransmitter that our body produces and is essential to a healthy mind and to feelings of wellbeing. Yet 95% of this substance is located in the gut? Find out it's role in healthy digestion and how awareness and attitude influences our GI tract.

The Second Brain

Anyone who has ever felt butterflies in the stomach before giving a speech, a gut feeling that flutters in the face of fact or a bout of intestinal urgency before an examination has experienced the actions of the dual nervous systems, our brain and our gut. According to Dr. Michael D. Gershon, the author of *"The Second Brain"* and the chairman of the department of anatomy and cell biology at Columbia, the connection between the brain and the gut lies at the heart of many woes, physical and psychiatric. Ailments like anxiety, depression, irritable bowel syndrome, ulcers and Parkinson's disease manifest symptoms at the brain and the gut level.

Gershon, who coined the term "second brain" in 1996, is one of a number of researchers who are studying brain-gut connections in the relatively new field of **neurogastroenterology**. New understandings of the way the "second brain" works, and the interactions between the two, are helping to treat disorders like constipation, ulcers and Hirschprung's disease.

The role of the enteric nervous system is to manage every aspect of digestion, from the esophagus to the stomach, small intestine and colon. The second brain, or little brain, accomplishes all that with the same tools as the big brain, a sophisticated, nearly self-contained network of neural circuitry, neurotransmitters and proteins.

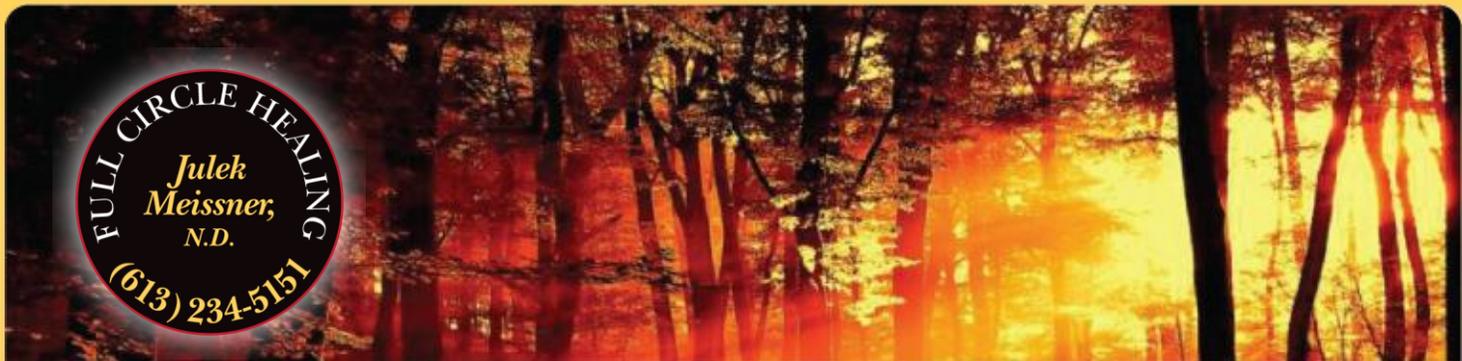
The enteric and central nervous systems use the same hardware, as it were, to run two very different programs. Serotonin, for instance, is crucial to feelings of well-being. But *95 % of the body's serotonin is housed in the gut*, where it acts as a neurotransmitter and a signaling mechanism. The gut has at least seven types of serotonin receptors. The receptors, in turn, communicate with nerve cells to start digestive enzymes flowing or to start things moving through the intestines.

Serotonin also acts as a go-between, keeping the brain in the skull up to date with what is happening in the brain below.

Keeping Stress Under Control to Aid Digestion:

A certain amount of stress is unavoidable. Deal with it, through:

Exercise
Yoga



Meditation

Eating habits

