

Brain Gut connection

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Five years ago, I wrote an article in Speaking Tree on how three minds of body – brain, heart and gut work together to produce a healthy body and happiness. This was probably the first such article, which showed how the interaction between these three entities takes place. New scientific evidence supports this conjecture and shows how the brain-gut connection takes place.

Scientific evidence suggests that a big part of our emotions is probably influenced by the chemicals and nerves in the gut. For example, [95% of body's Serotonin is found in the gut](#). Serotonin is an important neurotransmitter that is a well-known contributor towards feelings of well being. Sometimes it is also called a “happiness hormone”. Similarly, researches have found that a bacteria-free gut in early childhood leads to adults with less anxiety and general cheerfulness. Interestingly the effect of early childhood gut bacteria has the maximum impact on the developing brain and peters off by the age of 2-3 years just when the brain expansion also starts slowing down.

The brain-gut information channel is primarily the vagus nerve. [Vagus nerve](#) is one of the longest nerves inside the body whose central purpose is to communicate with internal organs like gut and heart and to relay their information and status to the brain. It starts from the head and after going through all the organs ends near anus. The other brain-gut communication channel is via the blood flow.

Similarly, [another recent study has shown that Parkinson's disease \(PD\) starts in the gut and not in the brain!](#) Alpha-Synuclein molecules, which are normally found in gut, heart and brain, play an important part in neuron communication. The inflammation of the gut somehow triggers them to form a fibrous mesh-like structure there and this information is transferred to the brain both by vagus nerve and through the blood stream. This information then triggers the creation of Alpha-Synuclein fibrous mesh in the brain, causing the death of neurons and hence PD.

Apparently, the ancients knew something about the gut-brain connection. Hence, the colon cleaning process of Ayurveda (including enema etc.) or “gut wrenching” [exercises of Nauli in Hath Yoga](#) help in cleaning the gut thereby increasing the feeling of wellness. Similarly, the yogic exercise of *Mayur Asana*, where the body is balanced on the navel and this pressure on it stimulates the vagus nerve, helps improve the brain-gut connection.

In Patanjali Yoga, gut occupies the center of body-universe! It says that by *Sanyam* on navel (*Nabhi*, gut etc.), a yogi gains the knowledge of the constituents of the body!

There are also many instances of people experiencing extrasensory perception (ESP) or clairvoyance after colon cleansing has taken place. One of the reasons for this could be that a clean gut frees its neurons to help the brain increase its processing power. This extra neural power may help the brain process more information and help it in *Samadhi* or *Sanyam*. In nature every process has multiple uses. Though the gut neurons are used most of the time for gut activity, they also interact with the brain via the vagus nerve.

Similarly it has been shown that clean gut helps in getting deep sleep. Deep sleep is extremely important for well-being of humans. It detoxifies the brain by removing the toxins and extraneous memory from it. Mahatma Gandhi understood the power of clean colon and thus before sleeping he used to take enema.

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