## Gut Instincts

New Edge Science – Christopher Bergland *Pathways #43*, page 42



## **Talking Points**

- Do you ever experience situations that give you butterflies and make you feel sick to your stomach? Scientists have recently discovered how the vagus nerve conveys these threatening "gut feelings" to the brain.
- Christopher Bergland describes the vagus nerve as "the 'wandering nerve,' because it has multiple branches that diverge from two thick stems rooted in the cerebellum and brainstem that meander down to your abdomen, touching your heart and most major organs along the way." (42)
- The vagus nerve is constantly sending signals up from your body's organs to your brain. Eighty to ninety percent of the nerve fibers in the vagus nerve are dedicated to sending emotional intuitions. The same pathway is used to transfer information from your brain to your body's organs giving you the inner calming "rest and digest" feeling of safety or "fight-flight" in dangerous situations.
- How do you think the mind and body would respond to an interference in the vagas nerve? (prolonged anxiety and fear)
- Bergland says that "using positive self-talk and taking deep breaths is a quick and easy way to engage the vagus nerve and the parasympathetic nervous system to calm yourself from both the top down and the bottom up." (43)
- The vagus nerve study has also found the powerful psychological influence the nerve plays.
  Stimulation of the vagus nerve can help facilitate learning as well as speed up recovery from PTSD. Vagus nerve stimulation is currently used to treat epilepsy and depression.
- Science is showing how our "gut instincts" shouldn't be ignored. There is a definite connection from the gut to the brain.

## Resources

Full references for each article are available at http://pathwaystofamilywellness.org/references.html

The study mentioned in the article, "Gut Vagal Afferents Differentially Modulate Innate Anxiety and Learned Fear" <u>http://www.jneurosci.org/content/34/21/7067</u>

"How the 'gut feeling' shapes fear" http://www.sciencedaily.com/releases/2014/05/140522104848.htm

McDonnell references Michael Gershon's *The Second Brain*. Listen to this great 2011 interview with Michael Gershon - <u>http://itsrainmakingtime.com/dr-michael-gershon-gut-brain/</u> (Stream or download)

Adam Hadhazy, "Think Twice: How the Gut's 'Second Brain' Influences Mood and Well-Being." *Scientific American*, Feb 12, 2010. Web. <u>http://www.scientificamerican.com/article/gut-second-brain/</u>