

Every day I try to scan some of the lay literature for items of interest. This article about the <u>Vagus nerve</u>, really caught my attention.

Vegas is a name everyone knows. I wanted to spark your interest, but I am really talking about Vagus. The Vagus nerve starts out as one of the cranial nerves meaning it comes out of the skull. When I was in medical school I had to learn:

On Old Olympus' Tiny Top A Finn And German Viewed Some Hops

This helped me to remember the names of the cranial nerves:

- 1. Olfactory (smell)
- 2. Optic or ophthalmic (sight)
- 3. Oculomotor (moves eyeball)
- 4. Trochlear (same)
- 5. Trigeminal (sensation to most of the face)
- 6. Abducens (moves eyeball)
- 7. Facial (injury during plastic surgery causes sagging of the face)
- 8. Auditory (hearing and balance)
- 9. Glossopharyngeal (swallowing)
- 10. Vagus (the one we are discussing)
- 11. Accessory (muscles of the neck and shoulder)
- 12. Hypoglossal (wags the tongue—well developed in some humans)

So the Vagus comes out of the skull and just keeps going and going and going...

It passes through the neck to the chest and finally disburses branches in the abdomen. It goes to every internal organ between the skull and the hips. How important is that?! The Vagus has some sensory properties, motor (means it moves muscle) function, and a lot of what belongs to the autonomic nervous system. This is a portion of our anatomy that works below our conscious level. There are two parts of the autonomic nervous system—sympathetic (which is related to fight or flight) and parasympathetic (a calming system for the heart and lungs and the ability to keep underlying functions intact, such as digestion and kidney function.

I want to introduce the concept of structure. This begins with the feet on the floor to provide the foundation. The structure then continues with ankles, knees, and hips, which function as two flexible pillars. These should be even in length and move symmetrically so that the pelvis on top is level. Above this are back vertebrae stacked like blocks. They tend to be a little more rigid in the chest portion because of the ribs. Once you get to the cervical vertebrae (neck bones) there is not as much rigidity and so there is increased potential for injury because it supports the weight of the skull and brain. The craniocervical junction is where the neck bones meet the skull. This is a potential weak spot during high velocity trauma.

Now why am I mentioning this? Physiotherapy, deep massage, and chiropractic adjustments can adjust misalignments in the vertebral column. This, in return, can affect function of the vagus nerve. Peripheral stimulation can track back to the main vagus with a resultant reflex on another organ—such as slowing of the heart rate. Many stretching and yoga maneuvers can stimulate the vagus nerve.

A very good exercise is to rapidly breathe in through your nose as deep as you can, then hold this to a count of 10. Let your breath out through your mouth slowly to that same count of 10. This maneuver stimulates the vagus nerve. It can improve anxiety, stomach upset, racing heart, bowel and bladder disorders and can even put you to sleep at night. I suggest doing this with three cycles of breathing 2 to 3 times during the day. One time can certainly be at night when your head hits the pillow.

The article talks about neuronutrients. Start with a Paleo diet and work with your doctor to refine this for your own personal needs.

I hope you all are having a wonderful and safe summer. I enjoy passing on information to you. You can always contact me or Janice (620.343.7043) and we can set up a phone call if you have questions. The picture below is from my apartment showing this year's Manhattanhenge.

Look it up.

