



Wellbeing
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The Social Vagus

People in stressful situations bargain and negotiate. Then they get frustrated and angry. Then they shut down.

In November 2014, at the ICPA Freedom for Family Wellness Summit in Washington, D.C., I saw something that changed my life. Honestly, it actually saved my life. As a chiropractor I've always taught my patients there are two parts to your autonomic, or "automatic" nerve system. The one most people recognize is nicknamed the "fight or flight" system, and that system puts blood flow into your muscles and away from your organs.

The older part of our autonomic system, from an evolutionary perspective, exits outside, or para, to the sympathetic— hence the name parasympathetic nerve system. The parasympathetic struggles for a catchy nickname, because "rest and digest," or "feed and breed" both undersell how important this system is to our physiology.

Stress puts people into the sympathetic, fight-or-flight state. We weren't meant to live there, though—we either escape the tiger or vanquish it, and the moment is over. Except now we live with mental tigers—jobs we hate, relationships that are breaking down, a constant media barrage of terrorism and impending doom from disease. I've tried to get my patients to understand the importance of keeping out of the sympathetic state. I thought I was doing them a favor by emphasizing the "opposite," the parasympathetic system. But it turned out I was wrong.

I heard evidence at the Freedom for Family Wellness Summit that doctors in cardiac rehabilitation learned a secret to keeping their patients from being repeat customers after surgery. They knew that high-stress



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lifestyles caused the sympathetic system to antagonize the heart to beat faster and harder until that nerve signal eventually wore out.

In relaxing the body, however, they discovered that the underlying tone of the parasympathetic system also eventually wore out, and the tone responsible for keeping the vital organs functioning began to fade.

So here I was, thinking if the parasympathetic were dominant everything would be nice and easy in the body. I never considered the consequence of only firing on this set of cylinders: that the body would approach shutdown and death. Single-celled organisms actually used this as a survival mechanism. If they were threatened, they would feign death. The human parasympathetic adaptation to extreme stress is the same: We cry, then scream for attention, and if no one listens then we see if playing dead will get us what we want. Sometimes the playing goes a little too far, and we damage ourselves in the process.

What some neuroscientists are calling the "social

nerve system” is a development of polyvagal theory, developed by Stephen Porges, Ph.D. Porges describes the social nerve system as the part of our brain that uses voice, facial expressions, and eye contact to stimulate responses in another person. Infants were pretty much worthless at using existing systems to protect their small, fragile bodies, so Porges suggested that the brain adapted and developed ways to make other adults in the species care for and protect them via the social nerve system.

All three of these nerve systems—social, sympathetic, and parasympathetic—are used to cope with stress. If the social strategy doesn't work, say in a newborn infant, and he can't bargain with the parents to meet his needs, the baby goes into fight-or-flight mode and angry crying. If that is allowed to keep going and nothing changes, the baby then drops into the parasympathetic strategy and plays dead. The success of any of these strategies is cemented into our subconscious and becomes the predominant way we deal with stress as an adult. You can see people in these three stages everywhere around you. When you start to understand this, it's as if a veil has been lifted.

If you don't have social outlets for stress, such as a community of friends or family that you can regularly and honestly communicate with and get your needs from, then the body retains a fight-flight physiology. This isn't a sustainable state, and if you do not transition back out of it then your body and mind begin to shut down. The manner and degree to which we choose to interact with other people, then, dictates a very important part of our health.

Understanding the purpose of the third nerve system brings you to a realization that there is an important reason for spending a Sunday morning creating spiritual community, or for actually attending a yoga class in person, that has little to do with the activity itself. The reason is in the people around you. It allows your pattern of brain waves to enter into a calmer, larger field that offers protection. The more you practice, the more your neurons acquire this pattern—“Neurons that fire together, wire together.” Can you imagine the impact a group of people with a peaceful and blissful brain-wave pattern has on other people they meet in the community? The interaction between one another's social neurology can be a powerful agent for change.

- John Edwards, DC, *Pathways* #51

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