

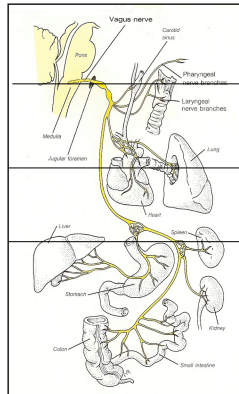
# Regulating Your Polyvagal System

The vagus nerve innervates the internal organs that give rise to your emotions. First to develop, the **dorsal vagus** innervates (1) your gut brain, (2) your lungs and heart, and (3) your throat. Second to develop the **ventral vagus** — called the social engagement system — innervates (4) your ears, eyes, and facial expressions.

When there is early trauma, the older dorsal vagus (1,2,3), in charge of the protective strategies of immobilization, freeze, collapse, and ultimately dissociation, dominates. As a result the newer ventral vagus (4) in charge of social engagement fails to adequately develop. This forces children, and the adult they become, to rely on freeze and withdrawal over social engagement to manage states of nervous system arousal.

## The Polyvagal System

80% of the signals traveling along the vagus nerve are afferent—they travel from the body up to the brain



### 4 Ears, Eyes, Facial Expressions

### 3 Throat

Larynx, pharynx, jaw, tongue

### 2 Lungs | Heart

### 1 Enteric Nervous System or Gut Brain

Stomach, liver, kidney, spleen, pancreas, small intestine, large intestine

## SELF-TOUCH FOR POLYVAGAL AND SOCIAL ENGAGEMENT REGULATION



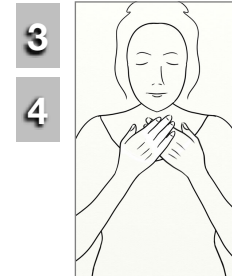
### Enteric Nervous System

1. Settle comfortably in a favorite chair. Make sure your back is well supported and that you feel your seat solidly under you.
2. Place your hands and attention on your belly, feeling it rise as you inhale and fall as you exhale. Close your eyes and stay a while with the gentle rise and fall movement. No need to force it. Even the smallest of movement is calming.
3. Now find your navel. Rest your finger tips over it. Breathe. Gently massage clockwise around your navel. As you do, remember to stay connected to your breath. You will probably need to remind yourself to breathe many times over.
4. Now, expand your belly massage to any area that calls for attention. Periodically, check to see what is happening in the rest of your body.



### Heart | Lungs

1. Bring your hands up to your heart. See if you can feel the rhythm of your heartbeat. You can usually feel your heartbeat more clearly at the bottom of the exhale. If you can't, imagine it.
  2. Keeping your hands over your heart, connect with your breath. The rhythm of your breath is slower than your heartbeat. Let your focus alternate between the rhythm of your breath and heart.
  3. Bring up a pleasant memory or image. As you do, visualize each heartbeat pumping positive feelings throughout your body.
- Calming your heart:* The term *vagal tone* refers to the regulation of your heartbeat. As your heartbeat regulates, you will feel calmer and find connecting to others easier.



### Throat | Tongue | Eyes

1. Gently wrap your hands around the base of your throat or over it. This area is the seat of your voice: how you express yourself.
2. Become aware of your tongue, from its tip all the way back to its root in your throat. Move it around slowly. Remember to breathe.
3. Now, bring your attention to your shoulders, your jaw, your eyes, the position of your head. Breathe and let go...even just a little is good.
4. Keeping your mouth closed, make a gentle humming sound on the exhale. Feel the vibration of the sound with your hands. Notice it spread as you repeat it.
5. With your fingers, you can touch the larynx and pharynx, gently pressing into them while you continue to hum, inhale, and exhale.