Self-Help Video #2:

Integration of Progressive Relaxation and Deep Breathing

<https://youtu.be/XwYZo2xjjsY>

At the 4th week of fetus gestation, the vagus nerve begins its journey from the cranial ganglia. It entrains itself in a wave of rhythmic electrical discharges, synchronizing various rhythms in a cohesive whole, where one function influences another function. It is expressed from the primal (reptile) hindbrain through the neck and throat area and projects towards the forebrain and facial area. The central nervous system is converted from a simple neural plate to a brain and spinal cord.

The somatic body continues to develop from the head downwards, with functions connecting head to tail and creating limbs with flexor and extensor muscles showing movements via tension and contraction of the rhythmic electrical discharges. The vagus nerve continues to develop in functions throughout the first year of birthed life.

[www.youtube.com/watch?v=a-NCs1lOU5w](https://www.youtube.com/watch?v=a-NCs1lOU5w&t=0s)

[www.youtube.com/watch?v=gp67EQhNfj8](https://www.youtube.com/watch?v=gp67EQhNfj8&t=0s)

[www.kenhub.com/](http://www.kenhub.com/)

The rhythmic electrical discharge wave is network-based. In the beginning, “wave synchronicity” can be initiated from any part of the network. This is vital for the developing fetus to “correct” irregularities (ie. Mother’s trauma experiences). But if the wave function is not “re-set”, then the muscles remain paralyzed by blockage of the wave movement, and this can cause the maturing organism to have deficiency of development.

In the mature organism, the respiratory system becomes the primary initiator of the “re-set”. But one factor seems to remain throughout our human existence: it usually takes 20 minutes of an application of an intervention before the wave function “re-sets” itself from a dis-rhythm. Thus, we select a minimum of 20 minutes to practice a therapy intervention.

Now we do the integration of deep breathing with progressive relaxation. As the embryo “developmental wave” began at the head and progressed to the feet, we are going to modify “progressive relaxation” to this energetic head-to-tail movement direction and focus upon major muscle groups. You can integrate other muscle work so long as you fit them into the “top-down” energetic flow. We are going to use one specific breath pattern: the 4-8 pattern wherein you breathe in on a count of 4 and exhale on a count of 8.

Perform this technique lying on your back. Begin with the facial muscle group. Tense all your facial muscles, including jaw, cheeks, forehead— as you breathe in for count of 4. Then immediately release all the tension as you begin the exhale. DO NOT gradually release tension as you exhale. Relax all facial muscles on the first exhale count of 1. Then complete the 8 count exhale.

Next is the shoulders, upper back, and upper chest area. Pull your shoulders up as high as possible, towards your ears, tensing all these muscles, and inhale for count of 4. Immediately relax all muscles on the first exhale count, allowing the shoulders to drop low. Then complete the 8 count exhale. Do not tense the facial muscles as you work the shoulders! Once you have “relaxed” a muscle group, keep this area in a relaxed state. It is important for the effectiveness of the future techniques that you develop a “whole body” mindful awareness of tension and can maintain a relaxed state in all muscles simultaneously.

Next is the upper arms, forearms, and hands. Bend your elbows and tense biceps of the upper arms; clench fists and tighten the forearms. As you are doing this, inhale for a count of 4. Immediately relax the arm muscles and let the arms drop to your sides like a “rag doll” with no muscles. Complete the 8 count exhale.

Next is the pelvic area, which includes buttocks as well as internal muscles of sphincter (anus muscle) and kegel (pelvic floor) muscles. Tighten your buttocks and kegel muscles and inhale for a count of 4. Relax all pelvic muscles immediately, and exhale for a count of 8. As this area relaxes, you may experience some trembling.

[www.mayoclinic.org/healthy-lifestyle/womens-health/in-depth/kegel-exercises/art-20045283](http://www.mayoclinic.org/healthy-lifestyle/womens-health/in-depth/kegel-exercises/art-20045283)

[www.mayoclinic.org/healthy-lifestyle/mens-health/in-depth/kegel-exercises-for-men/art-20045074](http://www.mayoclinic.org/healthy-lifestyle/mens-health/in-depth/kegel-exercises-for-men/art-20045074)

Tighten both thigh muscles of your legs as you inhale for count of 4. Keep the pelvic area relaxed as you do this muscle group. Do not tighten the lower legs or feet. Relax the thighs and exhale for count of 8. As this area relaxes, you may experience some trembling.

Last are the feet and toes. "Point the toes” like you are standing on “tippy-toe” or bend the feet toward your body as though you are trying to touch your head with your toes. Do this tensing as you inhale for count of 4. Relax all muscles and exhale for count of 8.

[www.frontiersin.org/articles/10.3389/fncel.2013.00036/full](http://www.frontiersin.org/articles/10.3389/fncel.2013.00036/full)

[www.britannica.com/science/vagus-nerve](http://www.britannica.com/science/vagus-nerve)

<https://embryology.med.unsw.edu.au/embryology/index.php/Main_Page>

<https://embryology.med.unsw.edu.au/embryology/index.php/Timeline_human_development>