



Hypnosis & Pain

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Stay Calm By Breathing As Nature Intended - Ron Eslinger's Theory For Healing, Relaxing And Energizing

The Eslinger Theory states a natural breath is a 1:1:1 ratio. 1: We breathe in, 1: We breathe out, 1: No in or out breath, the CO₂ resets to stimulate the next inhalation, and the results are Inhale, Exhale, and Relax (Notice that your breath at the end of exhalation becomes neutral, no breath in and no breath out). It is during this phase that CO₂ is building up to stimulate the next inhalation.

Note: This sequence changes when we are stressed. If we breathe too fast and too shallow, we do not maintain enough CO₂ to stimulate the next breath.

The Natural Breath. We are born with a relaxing, calm breath that only changes during stress. Relaxation is not holding the breath but returning to an anatomical belly or diaphragmatic breath, which is natural. When we are calm and not thinking about breathing, we breathe as we did as babies. I know this because my first job as a nurse was as the first male pediatric nurse in the U.S. Army from 1969-1973.

Decades ago, I learned that the relaxing breath is breathing in for 3- counts, holding for 3-counts, and breathing out for 6-counts, which I taught my students and clients, until recently. I now teach a new breathing technique or theory that came to me in the middle of the night with the thought, "I am doing it wrong."

Anatomy and The Diaphragmatic Breath. The natural breathing cycle is an abdominal/diaphragmatic breath. If we exaggerate the breath, we drop the diaphragm, which increases its tug on the Vagus Nerve and increases the amount of endorphin, melatonin, and serotonin

released by the brain. The difference between a natural breath and the abdominal diaphragmatic vagal relaxing breath is the exaggerated downward expansion of the diaphragm. The two lower lobes of the lungs have more alveoli (air sacs) and blood vessels, so when expanded, more alveoli are exposed, increasing the amount of oxygenated blood to the body's cells.

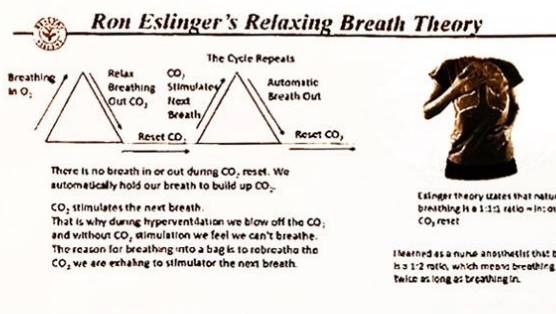
If you place your hand on your abdomen and breathe naturally, you should notice your hand moving forward as your belly expands. When you push the stomach out, the dome-shaped diaphragm flattens downward, increasing the thorax space and creating a vacuum, sucking air into the lungs and giving the two lower lobes more room to expand. The increased lung expansion allows more oxygen to enter the two lower lobes of the lungs, which have a more significant number of air sacs (Alveoli) and blood vessels for transporting oxygen (O₂). Alveoli collect the oxygen and transfer it into the vascular system, which then carries oxygen to the heart, which pumps the oxygenated blood throughout the body's cells. The cells burn the O₂, creating the waste gas CO₂. The CO₂ is exhaled by the lungs, except for the CO₂ needed to stimulate the next

breath. If we breathe too fast and/or too shallow, we blow off the CO₂ required to stimulate the next breath.

Simply put, the abdominal or natural breath automatically distributes air to all five lobes of the lungs. The downward movement of the diaphragm makes it possible for the expansion of the two lower lobes supporting more oxygen entering the two lower lobes, which contain more blood vessels and air sacs (Alveoli) to transport O₂ to the cells and the production of CO₂, which stimulates the next breath.

Oxygen is relaxing and healing and allows a decrease in stress resulting in comfort and calmness.

The Vagus Nerve. It is essential to understand that the Vagus nerve extends through and is connected to the diaphragm but does not innervate it. Therefore, two things happen every time we take an exaggerated or deep belly breath. (1) We increase the stretch of the dome of the diaphragm downward, which increases the tug on the Vagus nerve. That tug activates the release of the anti-stress and pain-killing hormones, endorphin, serotonin, and melatonin from the brain. (2) As mentioned earlier,



increasing the chest space allows the lower lobes to expand and collect more oxygen.

The Phrenic Nerve. The Phrenic Nerve activates every breath. Unlike the Vagus nerve that passes through the diaphragm, the Phrenic Nerve has two branches that innervate the diaphragm on the left and right side. Each branch also has two branches, the motor branch that innervates the top of the diaphragm's left and right sides and is responsible for breathing. The sensory branches pass through the diaphragm and innervate the bottom right and left sides.

Breath Holding. The motor branches activate the diaphragm muscle to stimulate breathing like a nerve stimulates the muscles in a finger to move. The sensory branches send signals back to the brain that the motor nerve is stimulating the diaphragm, and there is movement. However, when we hold our breath, the sensory Phrenic branches signal the brain that the diaphragm isn't working, activating the beginning of a stress response. The CO₂ is building up, working harder and harder to stimulate inspiration. The motor branch responds to the CO₂ demand to breathe, and the sensory branches keep ringing the alarm that there is an irregularity in diaphragm movement, which means that with the build-up of CO₂, the hypothalamus, pituitary, and adrenal glands are primed for fight or flight.

In reality, holding your breath and counting as described in the following breathing techniques does not cause a dangerous situation. However, stress is produced, which causes the opposite reactions expected by taking control of our breathing rather than breathing as nature intended.

Breathing Techniques. I learned as a nurse anesthetist that each breath is a 1:2 ratio, 1-in, and 2-out or in 4-counts and out 8-counts. A number is added for stress reduction to represent holding the breath.

4-7-8 breathing for anxiety. The 4-7-8 breathing technique, also known as

"relaxing breath," involves breathing in for 4 seconds, holding the breath for 7 seconds, and exhaling for 8 seconds. This breathing pattern aims to reduce anxiety or help people get to sleep.

4-4-4-4 Box Breathing, also known as four-square breathing, involves exhaling to a count of four, holding your lungs empty for a four-count, inhaling at the same pace, and holding air in your lungs for a count of four before exhaling and beginning the pattern anew. Also known as the **Navy Seals breath** and is endorsed by the American Association of Nurse Anesthesiologists (AANA) as a stress-reducing breath.

Summary. A natural belly breath is breathing in and out at a ratio of 1:2, where breathing out is twice as long as breathing in. The exhalation is in two parts, with the first half breathing out, and during the second half, there is no air movement. The lungs do not move until the CO₂ reaches a breath-stimulating level.

Many things can interfere with the regular breathing pattern described, including holding the breath between inhaling and exhaling, as taught in many stress management classes. Stress, worry, fear, exercise, and pain can also disrupt our natural relaxing belly breath. All these can cause faster breathing to supply the O₂ needed for the cells to function. If we breathe too fast or too shallow and do not allow time for the CO₂ to build up, we can lose respiratory drive, which many experiences as panic attacks. When exercising, we breathe deeper and faster and automatically hold our breath to regulate respiratory movement. However, stress hormones such as adrenalin and cortisol take over during stress, anxiety, and fight or flight mode. The natural 1:1:1 ratio becomes a 1:1 ratio, not giving time for CO₂ to reset and stimulate the next breath. In this situation, breathing deep and slow or breathing into a paper bag can increase CO₂ and reset a regular breathing rhythm. ▼