



Blitz Stress in minutes with Belly Breathing

Diaphragmatic or belly breathing is a highly effective mind-body practice that can be used to treat stress related conditions. This simple skill focuses on the contraction of our main breathing muscle- the diaphragm, expansion of the belly, and deepened cycles of inhalation and exhalation,

Breathing **too deep** and hard can expel excessive carbon dioxide and limit our ability to oxygenate blood (hypocapnia). Breathing gently through the nose harnesses a higher concentration of nitric oxide, which enhances oxygen uptake in the blood. Nasal breathing also activates the diaphragm and the parasympathetic (rest & digest) component of the nervous system. Slower and lighter breathing can quickly take us from a state of tension into relaxation.

Controlled breathing practices are a core component of ancient religions, martial arts and exercise modalities such as **yoga (pranayama) and tai chi**. A strong body of research suggests that slow, controlled breathing practice can significantly improve emotional balance by reducing **anxiety, depression and stress**. Simple breathing exercises have demonstrated remarkable effects in situations such as work induced emotional exhaustion, **preterm labour anxiety, and depression** in patients with chronic low back pain.

Just a single breathing practice can bring the nervous system into a state of calm, reduce blood pressure and increase **Heart Rate Variability (HRV)**, which is a measure of time between each heartbeat. A higher variation between heartbeats reflects a healthier, more relaxed nervous system. This variability allows us to switch gears more rapidly, and be more resilient and flexible in the face of life's challenges.

Evidence from brain imaging studies has shown that long and regular breathing alongside meditation significantly **deactivates the limbic system**. The limbic system is one of the most primitive parts of the brain, primarily responsible for activating the fight or flight response.

Breathing causes fluctuations in our blood pressure, which increases during Inhalation and decreases during exhalation. **Slow breathing** is associated with reduced blood pressure, improved circulation, cognitive performance, sustained attention, breathing efficiency and parasympathetic dominance (a calmer nervous system).

Breathing pattern

A pattern of 5-6 breaths per minute has been shown to reduce feelings of anxiety and significantly increase feelings of relaxation. This includes an inhale/exhale ratio of **5 seconds in/5 seconds out**. A Diaphragmatic breathing rate of **6-10 breaths per min** is considered to be an optimal range.

Box Breathing

Box breathing or square breathing is a popular technique used in highly demanding situations and professions. It provides a useful anchor for meditation practice and calming the stress response. It may also be helpful if you suffer **from chronic obstructive pulmonary disease** such as emphysema and bronchitis.

Ensure you're sat comfortably, preferably upright with feet flat on the floor in a quiet environment that allows you to focus on your breathing. When you feel ready, follow these 4 simple steps:

- 1- Slowly inhale through your nose for a count of 4 while focusing on the air filling your lungs and then expanding your tummy. Try not to breath up into your chest, instead focus on pushing your ribs out laterally and expanding the stomach.
- 2- Hold this breath for a slow count of 4.
- 3- Then slowly exhale through your mouth, allowing the body to naturally relax as the air leaves your lungs.
- 4- At the end of the exhale, pause for a count of 4 before repeating the process again. Imagine smelling flowers as you inhale and blowing out a small candle as you exhale.

Perform at least 4 rounds of this each time, and use it whenever you need to reduce feelings of stress and induce a state of calm. The simple act of **closing your eyes** whilst focusing on the breath can quickly modify the electrical activity of the brain, which induces greater **alpha wave** activity. This is associated with a more relaxed state, and **a reduction in anxiety, stress and pain**.