

## Breathing exercises

Breathing exercises, known as *Pranayama* in Eastern traditions, are used for therapeutic purposes, including relaxation and improving well-being. According to the National Institutes of Health, deep breathing exercises are defined as an active process involving [conscious regulation of inhaling and exhaling](#). Components of breathing exercises may include:

- Changing the depth of breathing (e.g., deep, shallow)
- Changing the rate of breathing (e.g., quickly, slowly, over a certain duration of time)
- Changing the way air is inhaled or exhaled (e.g., mouth, nostrils)
- Controlling body parts (e.g., relaxing or contracting the stomach)

### What are the health benefits of breathing exercises?

Research has highlighted a number of health benefits associated with various breathing exercises, including:

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| ↓ symptoms of anxiety and mood disorders                    | ↑ exercise capacity in individuals with chronic obstructive pulmonary disease (COPD)        |
| ↓ blood pressure  | ↑ lung function and quality of life; ↓ hyperventilation symptoms in individuals with asthma |
| ↓ pain and duration of labor and delivery in pregnant women |   |
| ↑ stress tolerance  |   |
| ↑ sleep quality   |   |

### Breathing exercise apps

There are a number of breathing exercise apps that can help you learn breathing techniques and stay accountable to regular practice. Examples of highly rated breathing apps include:

- [Breath Ball](#) (App Store, Google Play)
- [Breathly](#) (App Store, Google Play)
- [Paced Breathing](#) (Google Play)
- [Relax: Stress & Anxiety Relief](#) (App Store, Google Play)
- [Universal Breathing: Pranayama](#) (App Store, Google Play)



## Types of breathing exercises

This table summarizes the key features of various breathing techniques and methods that combine several breathing exercises in succession.

Breathing exercise	Key features
<b>Alternate nostril breathing (Nadhi Suddhi)</b>	<ul style="list-style-type: none"> <li>• A yogic breathing exercise that involves alternating between breathing and exhaling through each nostril, with the support of the thumb and ring fingers of the right hand to close each nostril, one at a time</li> </ul>
<b>Diaphragmatic breathing (Belly breathing)</b>	<ul style="list-style-type: none"> <li>• Involves breathing so that your abdomen expands, in order to contract the diaphragm, a muscle found at the base of the lungs, helping to take deep, refreshing breaths</li> </ul>
<b>Papworth method</b>	<ul style="list-style-type: none"> <li>• A series of relaxation and breathing exercises designed to address dysfunctional breathing patterns</li> <li>• Combines breathing training, education about the physical stress response, relaxation training, integration of techniques into daily life, and daily home exercises</li> </ul>
<b>Pursed lip breathing</b>	<ul style="list-style-type: none"> <li>• Used to address shortness of breath; the technique is repeated until breathing returns to a normal pace</li> <li>• An inhale is taken through the nose for at least two seconds with the mouth closed</li> <li>• With lips still closed but pursed, similar to when whistling, the air is gently exhaled through the mouth for at least four seconds</li> </ul>
<b>Shining skull breathing (Kappalabhati)</b>	<ul style="list-style-type: none"> <li>• A type of rapid abdominal breathing that involves rounds of sudden, forceful exhaling through the nostrils, followed by relaxing the abdomen and allowing the air to naturally return to the lungs (without force)</li> <li>• Generally done at a rate of one breath per second, repeated several times per round, with rest periods of thirty seconds between rounds</li> </ul>
<b>Slow-paced breathing</b>	<ul style="list-style-type: none"> <li>• Involves intentionally slowing the breathing rate down with the help of a pacer (e.g., audio recording, breathing app)</li> <li>• The exhalation should last slightly longer than the inhalation, with six breath cycles per minute</li> </ul>
<b>Sudarshan Kriya yoga (SKY)</b>	<ul style="list-style-type: none"> <li>• A sequence of four specific breathing techniques, including Ujjayi (victorious breath), Bhastrika (bellows breath), “om” chanting, and Sudarshan Kriya (cyclical breathing)</li> <li>• Completed while sitting on a chair or cross-legged on the floor with different corresponding asanas (physical postures) for each component</li> </ul>
<b>Three-part breath (Dirga Swasam)</b>	<ul style="list-style-type: none"> <li>• A diaphragmatic breathing method that involves inhaling through the nose, expanding the abdomen, then the ribcage, then the collarbones</li> <li>• Exhaling is done by contracting the collarbones, followed by the rib cage and lastly the abdomen</li> </ul>

## References

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