

Breathing



Benefits of a good breathing pattern

A normal breathing pattern is smooth and rhythmical, at a rate of 8 to 12 breaths per minute at rest. Breathing should be in and out through the nose with a gentle rise and fall of the abdomen, whilst the chest remains relatively still. It is an important way of activating, or increasing activity in, the parasympathetic nervous system, also known as the “rest and digest” system. This system balances the sympathetic nervous system, also known as the “fight or flight” system. This style of breathing is often practised in meditation, yoga or relaxation.

Diaphragmatic Breathing is useful - why?

- It helps to train relaxation and calming skills
- It helps you move from being passive to a place of activity; you are “doing something” about your symptoms
- It is a simple way to calm high-arousal states caused by pain or other symptoms
- It can be done anywhere
- Apart from an investment in time, it is free
- It can be used to manage other life stresses
- It can be a positive distraction
- It can be a helpful way to interrupt negative thought patterns
- It is a non-pharmacologic intervention that is important for health and mental health
- It has no side effects



What is over breathing?

A respiratory rate of more than 14 breaths per minute at rest.

A change in breathing pattern can be triggered by stress, pain, emotions e.g. fright, fear, sadness, anger

How does a poor breathing pattern affect us? It can ...

- Increase the release of stress hormones
- Increase heart rate
- Increase muscle contractions and the build-up of lactic acid
- Increase nerve excitability and therefore pain
- Decrease blood to the brain and tissues
- Change your thoughts to be more focussed/vigilant
- Disturb sleep

How can this make us feel? It can contribute to...

Feeling breathless and panicky

Tightness in your chest

“Brain fog” or headaches

Numbness or tingling in your hands or feet

Feeling hot and sweaty

An upset gut

Muscle tension or feeling stiff

Tiredness

Diaphragmatic Breathing

The diaphragm is a muscle, which separates the lungs from the abdomen. As you breathe *in* the diaphragm contracts and moves downwards drawing air into your lungs. This causes your tummy to *expand and rise*.


As you breathe *out* the diaphragm moves upwards, expelling the air from your lungs.

With diaphragmatic breathing, the breath is slow, 8-12 breaths per minute, filling the lower part of your lungs with air. Relaxing your shoulders assists in breathing with the diaphragm.

Diaphragmatic Breathing practise

Try the following, twice a day:

1. Lie comfortably with your knees bent, or sit relaxed, in a chair. It will help if the room is quiet and there are no distractions.
2. Place your hands on your tummy or one hand on your tummy and one on your chest.
3. Relax your jaw, tongue and shoulders.
4. Breathe in & out through your mouth for two or three breaths.
5. Close your mouth and focus on nose breathing.

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6. Breathe at your own natural rate drawing the air low, to your abdomen i.e. use your diaphragm.
 7. Place a book on your belly if that helps.
 8. Let the air out naturally, don't force it.
 9. Continue for 5 -10 minutes, taking breaks if necessary.
 10. Breathing out can take slightly longer than breathing in. You might find that there is a natural pause after breathing out.



Additional information

If this style of breathing is new to you, you may experience “air hunger” such as.

- ❖ Yawning
- ❖ Sighing
- ❖ Throat clearing
- ❖ Feeling that you need more air/a bigger breath

This is normal, it is your body noticing the change in pattern. Try to suppress these feelings with a swallow or by pursing your lips when you breathe out, or take a short break.

If this is still difficult...

Try lying as the picture below with your hands behind your head.

You can breathe as fast as is necessary, slower is usually harder. The key is to use your diaphragm.



Next steps

Once you can breathe comfortably using your diaphragm continually for three to five minutes lying down, you can try slowing your breathing rate down to the ideal rate of 8-12 breaths per minute.

Then, once you can breathe comfortably with your diaphragm for five minutes lying down you can try breathing with your diaphragm in sitting and/or standing.



Resources

[Self Help - Physiotherapy for breathing pattern disorders \(physiotherapyforbpd.org.uk\)](https://physiotherapyforbpd.org.uk)

[Diaphragmatic Breathing Exercises - Physiopedia \(physio-pedia.com\)](https://physio-pedia.com)

Pain clinic 01225 824331

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If you would like this leaflet in email form, large print, braille or another language, please contact the Patient Support and Complaints team on 01225 825656.

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