

Controlling Hyperventilation *(page 1 of 5)*

Treatment of hyperventilation

There are different methods of treating hyperventilation.

1. Recognising how you are over breathing and changing to a more controlled method of breathing.
2. Considering lifestyle factors such as diet, sleep, hygiene and relaxation.

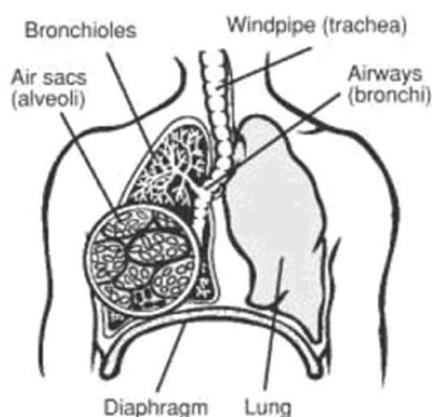
Each of these methods will be discussed in more detail further on in this leaflet.

Before you are able to change your breathing to a more normal pattern it is important to understand what good breathing is and to recognise how you breathe at the moment.

What is a normal breathing pattern?

At rest, a normal breathing rate is approximately between 12-16 breaths per minute. The air enters and leaves the nose in a gentle and

controlled manner. The main muscle used for breathing is the diaphragm. Here is a diagram showing the lungs, diaphragm and windpipe.

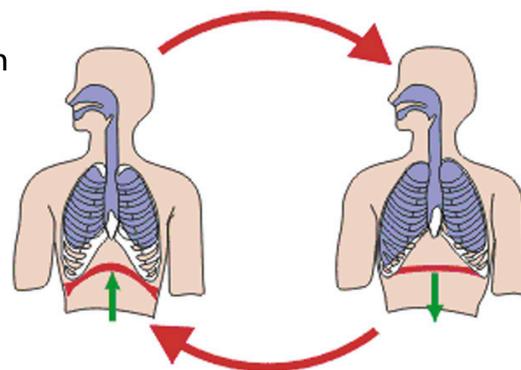


for breathing is the diaphragm. Here is a diagram showing the lungs, diaphragm and windpipe. When you breath in (inspiration), the diaphragm contracts and flattens, creating space for the air to flow through the airways and into the lungs. The air enters the air sacs where the oxygen is transported to the body through the blood vessels.

When you breath out the diaphragm

relaxes and pushes the air out of the chest.

During inspiration the diaphragm contracts and flattens and the stomach is pushed forward and out. During exhalation the diaphragm relaxes and the stomach returns to its resting position. Throughout the whole of this cycle the top part of the lungs remains still.



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How do people with hyperventilation breathe?

Unfortunately people with hyperventilation often breathe incorrectly. Instead of using their diaphragm to create space for the air to flow into the lungs they use their accessory muscles to help in breathing in. The accessory muscles are not designed to assist with breathing except in a temporary situation, such as during strenuous exercise. The accessory muscles are placed high up on the chest wall and shoulders. When these muscles are overused the position of the back, neck and shoulders are altered and tension around the shoulders and neck often results.

People who breathe incorrectly can be seen to move their upper chest wall rather than stomach area. Additionally, they tend to breathe faster with shallow breaths and occasional deeper breaths. Sometimes people disguise larger breaths by frequent coughing, yawning and sighing. These habits are sub-conscious; often close friends are able to identify this most accurately.

How do I breathe?

Lie in a comfortable position with pillows under your head and knees. Place your hands on the top of your tummy and on your chest wall.



Watch and feel which of your hands moves most as you breathe in and out. This will help you understand which part of your lungs you use the most.

It may also be worthwhile discussing with close friends and family to see if you have habits such as frequently yawning, coughing and sighing.

During your appointment your physiotherapist will help you to identify your normal breathing pattern and alter it. Use this leaflet together with the advice they will have provided.

Breathing control

The best way of helping yourself to breathe correctly is to sit in a comfortable armchair or lie on the bed and ensure that you are as relaxed as possible. Release any tension in your neck and shoulders before starting this breathing.

Place your hands on your stomach and chest wall as shown in the diagram above. Focus your thoughts on breathing the air towards your stomach, filling your lungs from the bottom upwards. You should feel your stomach rise under your hand. Ensure that your breath size and rate does not increase as you practise this. You may find that it takes a few minutes before you are able to achieve this style of breathing. If you are still struggling to achieve it try to practice when lying rather than sitting.

When you have successfully completed this, make sure that your breaths do not suddenly increase in size, for example through sighing, yawning and coughing. During breathing control you may find that you feel hungry for air. This sensation is perfectly normal and is a result of the levels of carbon dioxide increasing to a more normal level within your lungs and

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bloodstream. As you continue to practise this breathing style you will find this sensation will diminish as your brain becomes used to a new higher level of carbon dioxide.

It is worthwhile practising this way of breathing for a few minutes, at least 6 - 8 times a day. Although this may sound difficult to incorporate in your routine, try fitting it in with your normal activities. For example, after eating lunch sit down in a quiet area, or during advert breaks whilst watching TV. Additionally it is important, as soon as your symptoms start you concentrate on your breathing pattern and try out the exercises you have been practising. This should help with some of your symptoms.

As your technique of breathing control improves and you feel confident you can add in a pause at the end of each breath. Hold your breath for a couple of seconds, before breathing in again ensuring your pattern of breathing remains smooth and calm.

Breathing and exercise

As your technique of breathing control improves while lying down or sitting, this can be maintained while standing. Check your pattern of breathing while you are walking. Try to maintain nose breathing with slow regular diaphragmatic breaths. If you find this difficult you may benefit from counting your steps as you breathe in and out. For example, breathing in for 2 steps and out for 3 steps. You may want to try a different ratio of steps to breaths in and out. Check and discover what works for you. Additionally you may want to keep a hand on your tummy to encourage you to breathe diaphragmatically.



If you exercise strenuously it is normal that your upper chest and accessory muscles are used whilst breathing in. However you should always use your diaphragm first before the upper chest is used.

Modification of lifestyle

It is important to slow down and set more realistic goals to save some energy. Have short breaks between activities in order to let go of unnecessary tension. Allow time to breathe slowly and gently.

Try to recognise the situations that bring on over breathing e.g. stressful meetings or phone calls. If you can, spend a few minutes calming your breathing down before the stressful situation. Concentrate on keeping a steady rhythm until the situation is over. Also use this opportunity to consider stress factors in your life and decide whether it is possible to change or avoid these triggers.

Breathing and speech

Often people who hyperventilate do not breathe sufficiently whilst speaking. As a result their sentences become very long, with small snatched breaths from the top of their lungs.

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Check your style of breathing whilst you are speaking. Try to maintain a smooth, slow speech pattern. Breathe at regular stages. Practise reading aloud, using punctuation to help control your breathing.

If you struggle with this way of breathing whilst you are talking your physiotherapist can help you and give you speech sheets with which you can practise.

Does my diet affect my breathing?

People who complain of symptoms of hyperventilation often report 'skipping meals', in particular, breakfast and lunch. Missing meals can cause blood sugar levels to fall, which may be associated with more rapid breathing and could therefore contribute to symptoms of hyperventilation.

Try to:

- Maintain an ideal body weight for your height. Seek further advice from your GP if you are unsure what this should be.
- Eat three balanced meals a day and have plenty of variety in your diet.
- Avoid consuming excessive amounts of foods and drinks that are high in sugar.
- Drink alcohol only within safe limits.
- Reduce your consumption of caffeine, for example coffee, tea and cola, as these may aggravate your symptoms.

Breathing and eating

Sometimes people who hyperventilate eat very quickly without breathing properly. Again check your breathing style whilst you eat. Ensure that you are breathing quietly through your nose and using your diaphragm. Your food should be chewed slowly and quietly. It is useful to allow yourself to sit comfortably during and after eating. After eating, blood is sent to the digestive organs to assist with absorption of the food. Consequently, if you are active during and after eating, you cannot digest your food properly.

Sleeping

Some people find that their sleep is disturbed because of their breathing problems. If you can control your breathing during the day, this can be carried over into the night and you should sleep better.

Using a relaxing routine before getting to bed may help, for example having a warm bath and reading. Sometimes using relaxation methods may help you to get to sleep or return to sleep once awoken.

Relaxation

Sit or lie down comfortably in a quiet place. Make sure you are not too hot or too cold or likely to be disturbed. There are a variety of different techniques you can use.

Visualisation

Close your eyes and think of a pleasant situation in which you feel calm. For some people this will be a beach, desert island or a meadow. Try to visualise the colours and sounds that might occur in this place. Feel the weight of your legs and arms sinking into the sand or ground. Hear the sounds of the sea splashing in and out or the birds singing in the trees. Feel the gentle heat of the sun on your face.

When you feel ready, slowly come out from the scene and open your eyes.



Body awareness

Lie on the bed. Become aware of each of your limbs in turn. Feel the weight of your leg from foot up to your hip sinking into the mattress. Transfer this feeling up each leg in turn and then spread this feeling of heaviness into your back and then through to your arms. Take the time to consider whether one of your legs is warmer or heavier than the other one. Continue to spread this feeling up towards your head and allow your head to rest back onto the pillow.

There is also another method called the Laura Mitchell Technique that helps you to lengthen and then relax your muscles. Your physiotherapist can provide you with an additional sheet to explain this technique to you if you wish.

Other forms of relaxation include:

- Exercise
- Massage
- Music
- Hobbies

Write a breathing diary

You might find it helpful to keep a diary of the times and places when you have experienced symptoms. Include the way that you have coped with the situation. This will help to show you improvements you have made.



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