

Glossopharyngeal Breathing (GPB)

Glossopharyngeal breathing (GPB) is a 'trick' method of breathing to help you take bigger breaths than you can take usually. You take gulps of air into your lungs using your lips, tongue and throat. This gulping action looks like a frog gulping, and so GPB is often known as 'Frog Breathing'. You do not need any equipment to do GPB.

Because GPB helps fill your lungs more, it is also useful to prevent your chest wall and lungs from becoming stiff. A bigger breath using GPB can help make your voice stronger too. If you can only breathe with help from a ventilator, it can allow you to breathe for periods of time off the ventilator.

Why do I need to learn GPB?

People with neuromuscular disease and weak or paralysed breathing muscles can find it difficult to cough properly and clear their phlegm (sputum). If you can't clear your sputum it may make your breathing more difficult and can lead to a chest infection or pneumonia.

How can GPB help me to cough better?

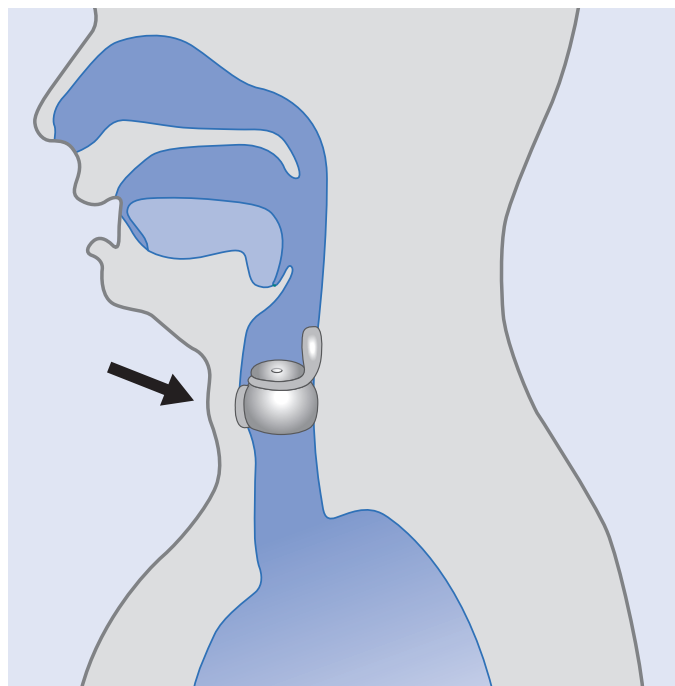
In order to cough well enough to clear phlegm from your lungs, you first need a large amount (volume) of air in your lungs to cough out. If your breathing muscles are weak you cannot take a deep enough breath to make a good, strong cough. When you do GPB you build a bigger breath, by taking gulps of air into your lungs. By holding each gulp of air in your lungs with your vocal cords (voice box) you can keep gulping until your chest is as full of air as possible. Then when you cough the air out your cough is much stronger.

The physiotherapist will teach you to take your own deep breath in, then to add enough gulps of air to produce an effective cough, or an assisted cough, to clear your phlegm more easily.

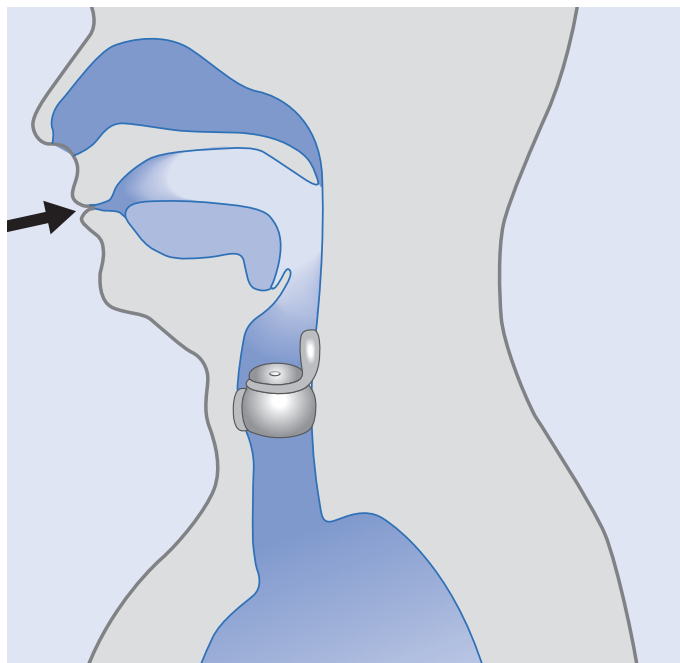
How do I do GPB?

A physiotherapist with specialist skills in managing respiratory or neurological problems will help you to learn GPB. It can be quite tiring to learn, so the physiotherapist might see you for short periods of time quite often. Once you can do GPB it is not tiring.

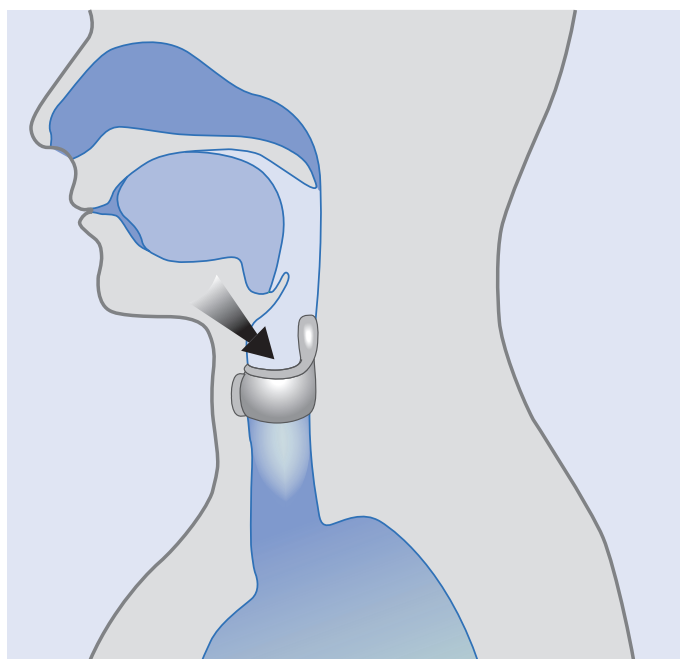
To learn how to do an effective gulp it is best to think of it in 3 stages.



Stage 1: Make extra space in your throat, by lowering your jaw and keeping your tongue flat. At the same time you should be able to feel your throat cartilages moving down. It may be helpful to look in a mirror to make sure that your tongue is flat. It is very important to get this movement right before going on to stage 2. ►



Stage 2: Once your throat is open (as described in stage 1) close your lips gently, so that you trap the air in your large throat cavity. Don't let your tongue or throat cartilages move up.



Stage 3: Keep your lips shut and let the cartilages and tongue go 'up', back to their normal position.

At first you will need to do these movements slowly, as you learn how to do them. Once you are able to do these stages you can gradually speed up the gulps. During stage 3 you will then be forcing each throatful of air through the vocal cords and into the lungs. The vocal cords then close and hold the air in the lungs while you take the next gulp until your lungs are 'full'.

It is important to realise that GPB is not swallowing air into the stomach. If you do stage 1 correctly the gulps of air will go into your lungs.

You may find it helpful to watch someone else doing GPB, but if this is not possible ask your physiotherapist to lend you a DVD which shows you how to do the technique and how to make further progress. The DVD "Glossopharyngeal ('Frog') Breathing - what, when and how?" is available from the ACPRC by emailing secretary@acprc.org

How will I know if the technique is working?

Your cough will be stronger and you should be able to clear phlegm into your mouth. Your physiotherapist can measure your breathing capacity using a spirometer to see if this improves. Measurements of the strength of your cough, called Cough Peak Flow, may be tested to see if this has improved.

What do I do if this technique does not seem to be working any more?

Contact your physiotherapist who will be able to suggest alternative methods. Don't wait to sort this out until you have a chest infection. If you notice your cough is not as effective as normal contact your physiotherapist as soon as possible. ►

Useful contacts

Association of Chartered Physiotherapists in
Respiratory Care
www.acprc.org.uk

British Thoracic Society
www.brit-thoracic.org.uk

British Lung Foundation
www.lunguk.org

Chartered Society of Physiotherapy
www.csp.org.uk

Asthma UK
www.asthma.org.uk

