

ACBT (Active Cycle of Breathing Techniques)

Information for patients



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ACBT is a breathing technique used to help clear sputum.

How does it work?

ACBT includes different types of breathing exercises: breathing control, deep breathing, and huffing, which are performed in a cycle to help clear sputum until your chest feels clear. ACBT is designed to shift secretions from the outer airways centrally where they can be coughed out with less effort and fatigue

How to set up for ACBT:

ACBT can be done in any position (sitting, side lying, supine, prone) Your physiotherapist will guide you.

The components of ACBT:

Breathing Control (BC):

This is relaxed normal breathing using the lower chest. This helps to relax the airways for the next stage of deep breathing called Thoracic expansion exercises

- Breathe in and out gently through your nose if you can. If you cannot, use your mouth instead with pursed lips.
- It is important to do Breathing Control in between the more active exercises of ACBT as it allows your airways to relax.

Thoracic expansion Exercises (TEE)

These are 3-4 deep, full breaths (ideally in through your nose) where your lungs are slowly filled to full expansion. If it is comfortable to do so, a short 3-4 second hold at the end of full expansion (before you breathe out) can give time for the

air to move throughout your lungs. These deeper breaths will help loosen and move the sputum because at the end of each breath in, the air filters through to the small airways, which can then get behind the sputum. When you breathe out, the exhaled air can 'push' the sputum upwards towards the larger airways (towards the mouth)

- Take the longest, slowest, deepest breath in possible, through your nose if you can. Try to keep your chest and shoulders relaxed.
- Breathe out gently and relaxed, like a sigh. You should do around 3-5 deep breaths.

Forced expiratory Technique (FET or 'Huffing')

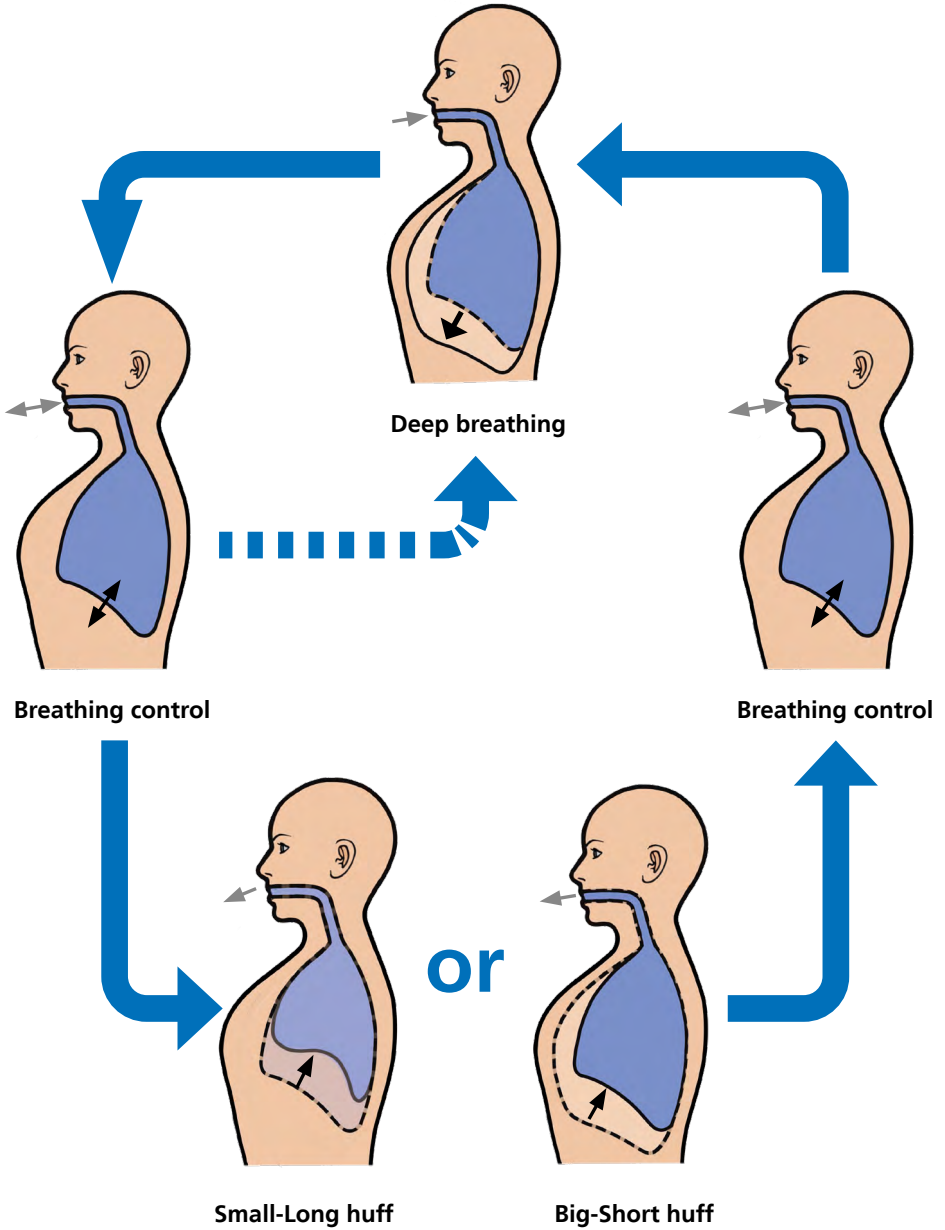
After loosening the secretions in the small airways, the Forced expiration Technique (Huff) will help move it further and eventually clear it from your lungs.

A huff is exhaling through an open mouth and throat instead of coughing. It helps move sputum up your airways so that you can clear it in a controlled way, it is less aggressive than a cough.

- Start with a breath in, then 'huff'/ squeeze air quickly from your lungs, out through your open mouth and throat, as if you were trying to mist up a mirror.
- Use your tummy muscles to help you squeeze the air out, but do not force it so much that you cause wheezing or tightness in your chest. Huffing should always be followed by breathing control.

- The size of the breath in before the huff and the length of the huff out will move sputum from different parts of the lungs, your physiotherapist will guide you on this (small-long huff or big -short huff).
- Your Forced expiratory technique needs to be checked regularly by your physiotherapist as it is easy to get into bad habits and perform this incorrectly which can waste a lot of energy. A huff that is too strong may create a wheeze or whistling noise, which might make it harder for sputum to move.

The Cycle



How to perform ACBT

Before starting ACBT prepare your airways with any inhalers/ nebulisers as prescribed

- Start with breathing control (BC) for 20-30 seconds- gentle relaxed breathing
- Move on to Deep breaths (TEE), perform 3-5 deep, slow breaths to loosen the Sputum
- Move back to breathing control (BC)- short period of relaxation
- Repeat 3-5 deep breaths (TEE) again
- Move on to huffing (FET), perform 1-2 huffs to bring up the sputum
- Cough if secretions are there to clear
- Rest for 20-30 seconds using breathing control (BC) before starting another cycle
- After completing your ACBT session take any inhalers/ nebulisers as prescribed

If you have any questions or concerns, please contact:

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Notes



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