Active Cycle Breathing (ACBT)

Active cycle breathing (ACBT) is a series of breathing techniques for cystic fibrosis (CF) patients. These techniques help clear secretions (mucus) and improve aeration to the alveoli (tiny air sacs that make up the lungs).

This technique combines breathing exercises with the huff cough. This technique has three parts in a set cycle:

1. **Relaxation and Breathing Control:** Normal breathing relaxing one's upper chest and shoulders using the diaphragm muscle.

2. **Thoracic Expansion Exercises:** Deep breathing on inspiration and quiet relaxed breathing on expiration to help to loosen the secretions.

3. **Forced Exhalation Technique (FET):** A couple of huffs from a medium-sized breath. The force of the huff cough will depend upon where the mucus is felt in the lungs to mobilize the secretions. This cycle is repeated until the huff becomes dry or is non-productive or 20 minutes.

Active cycle breathing can be done sitting upright or in the postural drainage positions.

Talk with your doctor before starting active cycle breathing.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 8/2026 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing HF#8290.