

**Assessment For Learning
Voices of Experience
Handout Five
Breathing for Better Health Exemplar**

Breathing For Better Lung Health

ScienceDaily (Apr. 17, 2007) — While working to find novel ways to treat the life-threatening disease of cystic fibrosis, researchers at the University of North Carolina have discovered that the **rhythmic motion of the lungs during normal breathing is a critical regulator of the clearance of bacteria and other noxious materials**. Their research, funded by the Cystic Fibrosis Foundation and the National Institute of Health, is published in the latest issue of *The Journal of Physiology*.

! This is important to get rid of the bacteria to be healthy.

Their findings have important implications in the understanding and treatment of **cystic fibrosis (CF), the most common fatal genetic disease in the United States** (30,000 sufferers) and the UK (7,500 sufferers). As a result of CF, the body produces abnormally thick, sticky mucus that clogs the lungs, leading to difficulty in breathing and chronic, life-threatening lung infections.

? Is this (CF) contagious.

Dr. Brian Button and colleagues at the University of North Carolina's Cystic Fibrosis Research and Treatment Center found that the **rhythmic motion of the lung during normal breathing is important in establishing the rate of mucus clearance** and can help the lung in responding to changes in lung environment, such as during a lung infection.

T-C In grade 6 class we were learning about the body and our teacher told us taking deep breaths once in a while is good.

More importantly, in CF, they found that **rhythmic motion of the lung can result in re-hydration of the airways** and acceleration of mucus clearance, thus promoting lung health in CF patients. The researchers speculate that this may explain the preservation of mucus clearance in young CF patients prior to the onset of chronic infections.

TW When my mom got naman i g + asma she didn't have normal breathing like that.

The UNC researchers also suggest that these studies provide an understanding of the mechanism underlying the observed beneficial effects of physical and deep-breathing exercise in CF patients. "We believe that knowledge gained in these studies will be useful in developing novel therapeutic regimes **to increase mucus clearance in the lungs of CF patients**", said Dr. Button.

! breathing normally is good for CF patients because it clears the mucus which is good.

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