



Respiratory System

Huffing and Puffing

As our bodies age, our respiratory system may undergo changes that make our daily activities more challenging to do. For example, our lungs become: smaller and less elastic, muscles involved in breathing weaken and stiffen, and gas exchange efficiency is reduced (1). As a result, breathing takes more effort and is less efficient. An especially common respiratory disease among older adults is Chronic Obstructive Pulmonary Disease (COPD). The purpose of this simulation is to mimic the increased effort required to exhale for individuals with COPD. Your job is to try to move a piece of paper with your breath while wearing face masks.

Materials

- Two face masks
- A piece of scrap paper

Procedure

1. Complete the precursor simulations if you have not already done so.
2. Put on one face mask.
3. Hold the scrap paper in your hand, at an arm's length distance.
4. Try moving the paper with your breath, noticing how much force is needed.
5. Repeat steps 3 & 4.
6. Put on your second face mask.
7. Repeat steps 3 & 4.

Reflection Questions

1. What specific feelings did you have after experiencing age-related changes in respiration? What affected you the most?
2. What activities in your own life would become difficult if you had COPD? How would this affect your physical and mental health?
3. Reflect on your views on older adults. Have any of these views changed after your experience of COPD?