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| **MATERIALS**  1. 30 + *Breathe Right Nasal Strips* (more than 30 needed in case of error of application)  2. 10 lightly massed subjects (85 � 130 lbs.)  3. 10 moderately massed subjects (131 � 176 lbs.)  4. 10 heavily massed subjects (177 + lbs.)  5. Spirometer for measuring lung capacity  6. Electronic Sphygmomanometer for measuring blood pressure  7. Heart Rate Monitor (built into the Sphygmomanometer)  8. Body Mass Scale  9. Tread Mill to conduct tests on  10. Data Journal to write down all results  11. Texas Instruments 83+ calculator.  12. Chair to have subjects sit in while measuring blood pressure, pulse rate, and lung capacity.  **PROCEDURE**  1. Randomly select ten subjects to be used for the experiment for each weight class.  2. Using the body mass scale, weigh each subject before test is performed to ensure which weight class they will be fit into.  3. Test the subjects blood pressure using the electronic sphygmomanometer by inserting your left arm into the cuff approximately 1 inch above the elbow (should be able to stick two fingers between your arm and the cuff). Individual must be sitting down with the arm at heart�s level but relaxed. With the power turned on, press the constant air release side of the auto deflation valve. Squeeze the rubber bulb rapidly to inflate the cuff to 30 to 40 mmHg above your systolic pressure or until you hear the beeping signal (buzzer beeps when cuff pressure is over 190 mmHg). Cuff pressure will automatically begin to decrease. As cuff pressure decreases, the heart monitor will begin to beep in synchronization to your heart. This continues for approximately 1 minute and at the end your blood pressure reading and pulse rate flash alternately every two to three seconds. Record the data at the end of this into the journal.  4. Then, test the subject�s lung capacity by setting the needle at the red circle indicating zero and taking a deep breath and blow into the end of the orange tube connected to the spirometer for as long as you can until there is no air left in your lungs. Record the results into the data journal.  5. For this test, 5 randomly selected subjects from each weight class will first be tested without the breathe right strip, and the other five will be tested with the breath right strip to cancel out any bias that would occur.  6. Each subject will run on the treadmill at the speed of 7.5 for a quarter of a mile, or one lap.  7. Right after run is completed, test the subjects blood pressure, pulse rate, and lung capacity as described above. Record results into journal.  8. After every 1-minute, run same tests until completely recovered to normal blood pressure, pulse rate, and lung capacity.  9. When the tests are completed by the 15 people who did not have the breathe right strip on, they will then be tested with the strip on their nose\* (this means all blood pressure, lung capacity and pulse rate measurements will be conducted again).  10. The test will be reversed for the people who will be wearing the breathe right strip for their first run. They will do the experiment with the breathe right strip on at the beginning, and then run the second trial without the strip on.  11. After all tests are completed, make a graph for each measurement of lung capacity and pulse rate with and without the strip on for each individual to conclude if the breathe right strip really worked or not.  \* = To put Breathe Right Strip on = 1. Wash and dry your nose thoroughly. 2. Place strip on the middle of your nose for best results. 3. Gently rub the strip onto the nose so that it doesn�t fall off or feel loose.    [[Home](http://docs.google.com/home.html)][[Introduction](http://docs.google.com/introduction.html)][[Hypothesis](http://docs.google.com/hypothesis.html)][[Procedure](http://docs.google.com/procedure.html)][[Data](http://docs.google.com/data.html)][[Conclusions](http://docs.google.com/conclusions.html)][[Bilio/Links](http://docs.google.com/biblio.html)]  [[2001 Projects](http://docs.google.com/index.html)][[2000 Projects](http://docs.google.com/AP2000/index.html)][[1999 Projects](http://docs.google.com/AP99/index.html)][[1998 Projects](http://docs.google.com/AP98/index.html)] |