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| **INTRODUCTION:**  The experiments we are about to conduct are a series of tests based on the *Breathe Right Nasal Strips*. This product, as many of people have probably seen, is marketed to enhance a person�s respiratory capability by decreasing nasal airway resistance. As advertised by *Breathe Right,* the strip is drug-free, non-prescription, and is to be worn on the nose to gently open the nasal passages and to make breathing easier. Also, each Breathe Right nasal strip is made of two, flat parallel bands of plastic embedded in a special adhesive pad. And when worn the right way the bands try to straighten, gently lifting the sides of the nose and widening the space in the nasal valve. If this is true then as a person wears one of these strips their many respiratory variables will have a tendency to fluctuate, especially when put through various amounts of aerobic activity. After exercise, a subject�s ability to recover to their normal relaxed state would be faster if wearing a nasal strip.  For our tests we will look at three main variables that help prove the advertisements correct. Tidal Volume is defined as the amount of air inspired and expired in one breath. We will use a Spirometer, which is an instrument that measures the amount of air a person can maximally inspire and expire. We will record the subject�s tidal volume at a relaxed state, then set the person into aerobic activity; we will again record the tidal volume directly after exercise and every third minute after that until it reaches normal again.  Another variable was blood pressure, or the amount of pressure the blood exerts on the artery walls when contracted, also known as systolic pressure. And the pressure exerted on artery walls when the heart relaxes between beats; also known as the diastolic (a healthy reading is anything below 140/90). The first number of the reading is the systolic and the second number is the diastolic.  We will test it before and after exercise and every third minute until it comes back to the initial pressure. The last variable we will test for is pulse rate/heart rate. We will test their pulse before and after aerobic activity and every third minute until back to normal. The average pulse rates for humans� range from between 50 � 85 a minute. The normal rate for the average man is about 72 beats per minute, while the normal rate for the average woman is slightly higher at about 76 � 80 beats per minute.  All our tests are parallel to each other as far as each person will be tested with and without the nasal strips as to include a control.  It is known that through extensive periods of aerobic activity or exercise a person�s heart rate is increased due to lack of oxygen being supplied to the cells. The strips will help the subject breathe easier through their physical exertions. Also, a subject�s blood pressure will increase as well with the physical activity. We expect the tidal volume of a subject at the time of relaxation to be more than that after the exercise. With all this in mind, we hope to prove that with the involvement of the *Breathe Right* nasal strips, all these variables will go down, but in the case of the tidal volume, it will go up.  Also for our test, we will have an adequate sample size of about 30 people. These subjects will be of various masses; our first ten subjects will be within 85-130 lbs. The second group will be within the 131-176-weight class. And the third weight group will be of people weighing within 177 and up. The use of different masses will help determine if the strips really work, because the larger the person the more air the subject will need to have inspired and expired. This will help us in making the data more reliable and more statistically significant because if n is greater than 30, then the normal distribution applies to the data.  ([NEXT](http://docs.google.com/intro2.html))  [[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)] |