|  |  |  |
| --- | --- | --- |
|  |  | |
|  | * **Conclusion:** * The ten Light Weight subjects showed similar results with each other. The product was advertised to increase the tidal volume of its users. This product held up to its advertisement as 8 out of 10 individuals experienced a significant increase in their tidal volume. Of the eight subjects, all eight showed a significant pulse decrease in beats per minute. Also, of those eight who experienced and increase in their tidal volume, all eight experienced a decrease in their respiratory rate. My hypothesis held up in these aspects. However, in dealing with the thirty-minute volume results, I was shocked to discover that none of these eight subjects had taken in a significantly greater amount of air. These eight subjects were achieving the same amount of airflow in both weeks even though their tidal volumes were significantly higher. This shows that with the use of the "Breathe Right", those eight subjects who were able to experience a greater tidal volume were able to achieve the same amount of air volume in fewer breaths. * The two who did not receive an increase of their tidal volume both stated during the testing that they did not feel a difference with or with out the strip. They both seemed to be on the lighter side of category. They both were of adolescent years and both were at a stage of rapid growth and development. Although most of these subjects were of adolescent years, an obvious distinction in size can be noticed. The size theory states well and is supported by the data obtained by the Heavyweight group. Of the ten who had used the nasal strip during relaxation, amazingly, all ten had experienced a significant increase in their tidal volume. The Breath Right Company advertisement was now obviously determined correct. Immediately, as the nasal strip was administered, the ten heavyweight subjects said they could feel an obvious difference. These positive results in the tidal volume increase enabled me to see more clearly the relationship between tidal volume and the other variables. Of the ten who had experienced a significant increase in their tidal volume, all ten showed a significantly lowered pulse rate on average. On some days the subject wearing the strip experienced a higher rate than some other day in which he was not wearing the strip. The significance test was based on the subject�s weekly output and all of the subjects had experienced a significantly lower pulse rate. The subject�s respiratory rate correlated with their pulse rates as stated in text. Of the ten who had experienced an increase in their tidal volume, all ten had experienced a significantly lower respiratory rate. The averages the subjects gave out did not differ greatly from another. This factor contributed to the relatively small standard deviation obtained from the data. Since all of the data in a specific set were relatively close to each other, a difference of, for instance, 0.8 breathes a minute, would result in a positive significance test. I found that the respiratory rates of the subjects were more significant in their testing than the pulse rate. Although the pulse rate showed significant differences every time, the respiratory rates were often significant at .001 and below levels. It is here in which the user of the strip will feel the satisfaction of a more relaxing resting period. The nasal strip increased the airflow into the body which enables the body to take slower and deeper breaths. This will ultimately relax the body. * The correlation between pulse rate, tidal volume, and respiratory rate is obvious. In all the eighteen subjects who experienced an increase in tidal volume, all of them experienced a decrease in pulse rate and respiratory rate. The respiratory minute volume was explored out of curiosity for me. This variable along with the other variables was clearly defined. Except for Heavyweight #6 who experienced significantly less air over the thirty minutes, all the other seventeen subjects showed no significant change in air volume during the whole period. I discovered from this variable that human breathing patterns are not constant. It was the extensive range between the daily averages which made deeming an overall difference significant so difficult. Even though Heavyweight #6 experienced less airflow in his body, he ultimately was the most enthusiastic about the product. He was amazed on how refreshed he felt after each of his resting periods. It was his data which could confuse an observer. You have to remember that although you may test significant, there is still that small probability that the variable had nothing to do with the change. In Statistics in is called a "Type-One Error". That is why in the graph titles for this variable I included the word estimate. It is nearly impossible to pinpoint the exact 30-minute volume with out monitoring ever breath. This would be extensive to calculate and not to mention tedious. Monitoring a sample randomly is the best way to achieve an accurate estimate. By monitoring the human breathing for over five months now, I know that each breath is not a good predictor of the next. This creates a slight margin of error because chance always plays apart in Statistics. Although technically the results are legit because it was a random sample, I feel, as the experimenter, the results in this category should be viewed with caution. * Overall the "Breath Right Relaxation Strip" held up superb to its claim. It claimed to give its users an" increase in their airflow (tidal volume) in order to obtain a more efficient rest". The nasal strip did just that at a 90% level (18 out of 20). Of those 18, all experience changes in their body functions as result which enabled them to achieve a more efficient rest. Statistics are great but personal statements can be the priceless because of the legitimacy involved with them. From what I�m aware of, 6 out of 20 of my subjects now regularly use nasal strips to achieve a best night rest. * **Recommendations:** * I felt as if a larger ample size would have been good to get more accurate data. It is a statistical law that larger sample sizes are better. Also, if there is a digital tidal volume machine, it could help you extensively. I did come upon a cylinder that measures breath to the milliliter, but a digital devise would have been easier and much more accurate. I would like to greatly add the notion to work with a partner and not alone like I did. There is so much statistics involved with this project and although not hard, it took me a great deal of time. I would have loved somebody to divide up the work with me. | |
|  | |