The Effect of Qigong-Chinese Breathing Exercise of the Forced Vital Capacity of Participants with Different Breathing Habits

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Oxygen is very important for maintaining an endurance exercise at high output. Similarly, breathing control is a very fundamental technique to master for vocalists and band personnel. The lungs bring oxygen into the body to provide energy and remove carbon dioxide. When the lungs are healthy, a large breathing reserve is kept. I hypothesized that musicians and athletes would have a higher forced vital capacity than the average person because their lifestyles are more dependent upon it, and that participants would not be affected equally by the given breathing exercise. To carry out my procedure, participants were tested for an initial forced vital capacity reading and then asked to perform Qigong breathing exercise for a week before being tested for a final reading. After analyzing the data, I discovered that, in general, musicians, namely the choir members, had a larger initial forced vital capacity than the athletes. The athletes, on the other hand, saw a much more positive increase in their forced vital capacity after a week of performing the breathing exercise. This data is interesting when considering that during a prolonged run, ventilatory muscles can become fatigued, reducing ones capacity to provide oxygen to the leg muscles, causing them to fatigue as well. The results of my experiment lead me to consider Qigong breathing exercises as a beneficial mechanism for possibly prolonging and enhancing the performance of athletes, because forced vital and breathing capacities seem to be related to muscle vitality.

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