Gas Exchange During Respiration

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**Research**

“The air that we inhale is passed into the lungs. The oxygen from the air is passed to the blood. This oxygen-rich blood is then pumped further towards other organs and tissues. On the other hand, the carbon dioxide in the tissues is diffused into the blood making it poorly oxygenated blood. This blood gets transferred to the lungs and gas exchange again makes carbon dioxide leave the body by exhaling.” (Gas Exchange During Respiration, 2019)

**System Check**

The oxygen inhaled from the atmosphere and diffused in the blood interacts with different functions of the body. Consider the function of cellular respiration. In this process, energy is obtained when oxygen reacts with glucose (Fennessy & Cronk, 2016). The products of this reaction are water, carbon dioxide, and ATP. Adenosine triphosphate (ATP) is considered to be the driving source of cells in living organisms (Shepherd et.al, 2016). ATP helps in muscles movement, nerve signals propagation, and chemical synthesis. All this is possible due to the oxygen that is provided to the blood via exchange in the lungs.

**Importance**

The importance of cellular respiration can be understood by the fact that it produces energy. This energy is consumed in different functions. Muscle movement is assisted by this energy. Importance of muscle movement is undeniable. At the individual level, the importance of muscle movement is significant. Suppose, if the muscle movement is hindered of an individual. The hinderance would render the individual incapable of doing everyday tasks. At the global level, an epidemic of muscle movement would be a catastrophic proposition. One can embark on a career of a kinesiologist. This field studies the movement of muscles in living organisms. Certainly, one can contribute positively towards society by this.

**Self Reflection**

 In order to fully understand a topic, one should be looking to get help from as many sources as possible. The book itself is compiled comprehensively. It provides in-depth knowledge regarding the human body and its functions. Youtube has once again proven to be a great additional learning resource.

**References**

Fennessy, M. S., & Cronk, J. K. (2016). Primary Production and Respiration: Ecological processes in Wetlands. *The Wetland Book: I: Structure and Function, Management and Methods*, 1-8.

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Shepherd, J. R., Joyner, M. J., Dinenno, F. A., Curry, T. B., & Ranadive, S. M. (2016). Prolonged adenosine triphosphate infusion and exercise hyperemia in humans. *Journal of Applied Physiology*, *121*(3), 629-635.