

Rockport Walking Lab Directions

- 1) Use a one-mile flat course or treadmill that can give you one mile covered
- 2) Walk as briskly as you can
- 3) Immediately after you finish one mile take a 15-second pulse (multiply by 4 to get beats per minute)
- 4) Calculate your Estimated VO_2 max

$$VO_2 \text{ max} = 132.853 - 0.0769(\text{your weight in lbs}) - 0.3877(\text{age in years}) + 6.315(\text{gender}) - 3.2649(\text{time in minutes to walk mile}) - 0.1565(\text{heart rate in beats per minute})$$

(Remember to convert seconds to minute so the time reads like this example: 8.35 min)

To convert seconds to minutes simply divide seconds by 60: Example: 10 min and 20 seconds equals 10 min and (20/60 = .33 min); which equals 10.33 min to put into the equation

For gender substitute 1 for males and 0 for females

Note: An example calculation of VO_2 max is on the web!

Remember, No LATE labs Accepted! 10 pts

Title your lab: Rockport Prediction of VO_2 Max (by YOUR name)

Introduction (3 pts)

Discuss how cardiorespiratory fitness is associated to health benefits and disease prevention. This should be about 8 to 10 sentences written in paragraph format. Use the WEB, books, journals or any other source you wish. Remember to **double space** your work. Be Specific! Please CITE ALL REFERENCES AT END OF LAB. See below how to cite the references.

Methods (1 pts)

Discuss steps 1 to 4 above in **paragraph** form, describing what you did. (**Complete Sentences**)

Results (2 pts)

COMPLETE SENTENCES (in **PARAGRAPH** form), give the following for items a-e.

- a) Your weight in lbs {example: My weight is 150 lbs.}
- b) Your age in years
- c) Gender (1 or 0)
- d) Time in minutes to walk mile
- e) Heart rate immediately after completing one mile (in beats per minute)
- f) Show the complete equation calculations above (you may do this neatly by hand or via your computer)
- g) Write out what your estimated VO_2 max is: The units will be in ml/kg/min
- h) Go to our Exercise Physiology WEB site and classify your Aerobic Fitness Level

Discussion (3 pts)

Discuss **thoroughly** how someone can improve his/her **cardiovascular endurance**. This should be about 9 to 14 sentences--use the WEB, books, journals and other references you wish--this is a problem solving discussion. Discuss what training strategies (HIIT Training, lactate threshold training, endurance training methods, and any new techniques you can find) will work and give **EXAMPLES**.

EXAMPLES FOR CITING REFERENCES FROM A JOURNAL, BOOK OR WEB. (1 pt)
(For Full Credit on this lab, you must cite **AT LEAST 4** references in your paper)

Smith, H.J., Cotton, J.R., Hughes, S.C. and Rogers, P.J. (2011). Mood and cognitive performance effects of 'energy' drink constituents: caffeine, glucose and carbonation. *Nutritional Neuroscience*. Vol. 7, pp. 127-139. (NOTE: THIS IS HOW YOU CITE A JOURNAL ARTICLE)

Ivy, J. & Portman, R. (2014). *Nutrient timing: The future of sports nutrition*. California: Basic Health Publications, Inc. (NOTE: THIS IS HOW YOU CITE A BOOK)

American Dietetics Association Evidence Analysis Library. Glycemic Index Foods. www.adaevidencelibrary.com

Accessed September 13, 2014. (NOTE: THIS IS HOW YOU CITE A WEB Reference)