Can you predict your heart rate when exercising? [1]

Dear Alice,

Is there an equation that would relate the relationship between exercise and heart rate. I understand the maximum and minimum heart rate equations for exercising. I would like to know if someone who is at their max. heart rate would be able to predict their heart rate if they increased their intensity. I am looking for something relating work intensity to heart rate.

Thank you very much for your time.

Joseph

Answer

Dear Joseph,

Heart rate is affected by age, gender, exercise habits, heredity, cardiovascular fitness level, body conditions (such as hydration), blood volume, and environment (such as humidity and temperature). As an athlete increases his or her exercise intensity, heart rate increases. Due to all of these variables, it is impossible to predict how increased intensity translates into a specific rate of elevation in your heartbeat. For example, as a person improves his or her fitness level, his or her resting heart rate decreases. As a result, it may take a greater effort to elicit a specific heart rate. Think of it this way ? an out-of-shape person huffs and puffs climbing up a flight of stairs. A fit person can bound up those stairs with ease because his or her heart is already well conditioned. So, s/he may need to climb up ten flights to significantly raise his or her heart rate. This adaptation occurs over time and is constantly changing. Response to exercise also varies greatly from person to person.

A good way to become more aware of your conditioning and reaction to exercise is to monitor changes in your heart rate as a result of exercise. Perhaps buying a heart rate monitor at a local sporting goods store (or via the Internet) will allow you to better keep track of your heart rate's ups and downs. To further understand your heart rate, pay attention to your breathing, sweating, and performance during exercise. For more information about exercising within your target heart rate range, see Minimum and maximum heart rate for aerobic exercise [2].

Alice!