PERFORMANCE 101: How Judge Exercise Intensity and Fitness with Heart Rate

Low Resting Heart Rate and Faster Exercise Recovery Heart Rate are easy to measure signs of fitness

Heart rate

Heart rate is a quantitative measure of heart's work. At rest a healthy heart of an average individual beats approximately 70-100 beats per minute. A conditioned heart beats much less at rest, only 40 to 50 beats per minute or even less and less at workloads compared to someone who is unconditioned. Heart rate variability is a quality measure of heart's work. The lower the resting heart rate the higher the heart rate variability, and thus the better the quality of heart's functions. You can see yourself improving from exercise if your heart rate is lower at the same workloads that you were previously doing - it is a sign that you heart is more efficient. Another good sign of heart efficiency is if your recovery heart rate is quicker after exercise.

Fast Recovery Heart Rate is a good thing
Heart rate should be able to drop 12 beats within first minute of exercise recovery

Recovery Heart Rate

Your Recovery Heart Rate, the speed at which your heart rate returns to normal after exercise, can indicate how fit you are as well as a physical cardiac condition and the risk of certain diseases.

MORE DETAILS: According to the a study in the New England Journal of Medicine people whose heart rate recovery time is long are at a higher risk of death than people with shorter recovery times regardless of physical condition or other risk factors. The first minute of recovery is the most crucial. After exercise, your heart rate experiences an abrupt drop during the first minute. In this study a heart rate decrease of 12 beats or less in the first minute as abnormal. The study also reported that people with an abnormal decline in heart rate had a greater chance of mortality in the subsequent six years due to heart problems. Some suggest possible abnormality if less than or equal to 18 beats. Additionally the National Emergency Medicine Association suggests measuring heart rate recovery rates is one way to tell whether an exercise program is effective. People in better cardiovascular condition tend to have lower heart rates during peak exercise, and return to their resting heart rate more quickly after physical activity. Subtract your 2-minute heart rate from the heart rate you took immediately after vigorous exercise. The faster your heart rate recovers (or slows down) after 2 minutes the fitter and healthier your heart. See if your 2 Minute Exercise Recovery is:

- Less than 22: Your biological age is slightly older than your calendar age.
- 22-52: Your biological age is about the same as your calendar age.
- 53-58: Your biological age is slightly younger than your calendar age.
- 59-65: Your biological age is moderately younger than your calendar age.
- 66 or more: Your biological age is a lot younger than your calendar age.