

Heart Rate Worksheet

Calculating Resting Heart Rate

Resting heart rate measurements provide some basic cardiovascular health status and program progress information. Resting heart rate is used to measure improvements in cardiovascular fitness. It usually decreases as cardiovascular fitness improves. A normal resting heart rate may vary from as low as 40 beats per minute (bpm) to as high as 100 (bpm). Women average approximately 75 bpm and men average approximately 60 bpm. The pulse indicates the heart beat and may be counted in beats per minute. The most common sites for taking the pulse are the radial artery (at the base of the thumb on the wrist) and the carotid artery (in the groove on the side of the neck). The resting pulse should be counted for 60 seconds first thing in the morning before any activity.

Day 1 _____BPM

Day 2 _____BPM

Day 3 _____BPM

Target Heart Rate

Heart rate is proportional to the intensity of exercise. Measuring heart rate allows the exerciser to determine if they are working too hard or not hard enough.

STEP 1: To determine your absolute maximum heart rate (MHR) For safety reasons you should never work at your maximum heart rate. This calculation will be used only as a point of reference for the next step.

220-your age (e.g.20) = 200 BPM

$$220 - \frac{\quad}{\text{AGE}} = \frac{\quad}{\text{MHR}} \text{ BPM}$$

STEP 2: Determine your training zone between 60% and 80% of your max (MHR)

This range is where most people should exercise. Lower heart rate zones are recommended for individuals who are beginning exercise programs, have health risks, or are pregnant. As your level improves you will be able to progress toward working at higher heart rates.

For example: $\frac{200}{\text{MHR}} \times 0.60 = 120 \text{ BPM}$
60%

$$\frac{\quad}{\text{MHR}} \times 0.60 = \frac{\quad}{\text{low end of zone}} \text{ BPM}$$

For example: $\frac{200}{\text{MHR}} \times 0.80 = 160 \text{ BPM}$
80%

$$\frac{\quad}{\text{MHR}} \times 0.80 = \frac{\quad}{\text{high end of zone}} \text{ BPM}$$

STEP 3: Determine your 10-second heart rate zone for exercise.

This heart rate zone is good to know because when exercising you can quickly evaluate your level by counting the beats for 10 seconds and return to exercise rather than evaluating for a whole minute.

$$\frac{\quad}{60} / 6 = \frac{\quad}{10 \text{ sec. pulse}}$$

60% Low end Training zone

$$\frac{\quad}{60} / 6 = \frac{\quad}{10 \text{ sec. pulse}}$$

80% High end Training zone