

## Heart Rates

**Q:** What is heart rate?

**A:** Heart rate is the number of heart beats per minute; the times per minute that the heart contracts.

**Q:** What is resting heart rate?

**A:** Resting heart rate (Resting HR) is the number of beats in one minute when you are at complete rest. Your resting heart rate indicates your basic fitness level. The more well-conditioned your body, the less effort and fewer beats per minute it takes your heart to pump blood to your body at rest.

**Q:** What is maximum heart rate?

**A:** Maximum Heart Rate (Max HR) is the highest number of times your heart can contract in one minute. Max HR is the most useful tool to be used in determining training intensities, because it can be individually measured or predicted.

**Q:** How to determine maximum heart rate?

**A:** You can define your maximum heart rate by:

- 1) having it measured in an exercise test
- 2) using age-predicted maximum heart rate formulas.

2) Predicted Maximum HR

There is a mathematical formula that allows you to predict your Max HR with some accuracy. It is called the "age-adjusted formula". The age-adjusted Max HR formula can come in very handy when you're not prepared to pay for the physician-supervised stress test.

$$220 - \text{your age} = \text{age-adjusted Max HR}$$

If you are a 30-year-old woman, your age-adjusted maximum heart rate is  $226 - 30$  years = 196 bpm (beats per minute).

The generally accepted error in age-predicted formulas is  $\pm 10-15$  beats per minute, which is due to different inherited characteristics and exercise training.

You should remember that there may be some discrepancy when using the age-adjusted formula, especially for people who have been fit for many years or older people. The formula will give you a ballpark estimate to work from, but if you want to exercise/train at your most effective levels, your Max HR should be measured.

**Q:** What is the target zone?

**A:** A target zone is a heart rate range that guides your workout by keeping your intensity level between an upper and lower heart rate limit. There are various target zones that are suggested for an individual to follow that correspond with a specific exercise goal.

<b>Ideal For</b>	<b>Benefit Desired</b>	<b>Intensity Level (% Maximum heart rate)</b>
<b>Light Exercise</b>	<b>Maintain Healthy Heart/Get Fit</b>	<b>50% - 60%</b>
<b>Weight Management</b>	<b>Lose Weight/ Burn Fat</b>	<b>60% - 70%</b>
<b>Aerobic Base Building</b>	<b>Increase Stamina Aerobic Endurance</b>	<b>70% - 80%</b>
<b>Optimal Conditioning</b>	<b>Maintain Excellent Fitness Condition</b>	<b>80% - 90%</b>
<b>Elite Athlete</b>	<b>Maintain Superb Athletic Condition</b>	<b>90% - 100%</b>

**Target heart rate:** between 60% - 70%

Find your pulse:

**Spot #1 RADIAL PULSE**

Using your pointer finger and your middle finger, press on the back of your wrist (so that your finger nails are pointing to the floor), just below the thumb. There is a groove below the bone, underneath of the thumb. Wait a couple of seconds, and do not press too hard. We do not want to stop blood flow!

**Spot #2 CAROTID PULSE**

Place your thumb onto your chin. Swing the same two fingers onto the side of your neck. On each side of your Adam's Apple, there is a groove. Feel for your pulse. Again, do not press too hard or you will stop the blood flow. Do not press both sides at the same time or you will stop blood flow.

Find your Max Heart Rate:

Example:

Age: \_\_\_\_\_

Age: 28

$$\begin{array}{r} 220 \\ - \quad \quad \quad \\ \hline \end{array}$$

$$\begin{array}{r} 220 \\ - \underline{28} \\ \hline 192 \end{array}$$

(max heart rate)

Find your Target Heart Rate

Example:

Max HR: \_\_\_\_\_

Max HR: 192

$$\begin{array}{r} \underline{\times .6} \\ \hline \end{array}$$

$$\begin{array}{r} 192 \\ \underline{\times .6} \\ \hline 115.2 \end{array}$$

$$\begin{array}{r} \underline{\times .8} \\ \hline \end{array}$$

$$\begin{array}{r} 192 \\ \underline{\times .8} \\ \hline 153.8 \end{array}$$

Range: \_\_\_\_\_ bpm

Range: 115 to 153 bpm