

YOUR PULSE AND YOUR TARGET HEART RATE

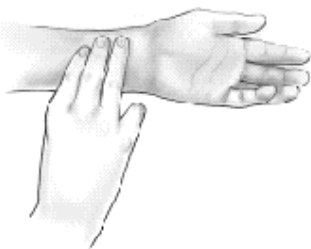
What is my pulse?

Your pulse is your heart rate, or the number of times your heart beats in one minute. Pulse rates vary from person to person. Your pulse is lower when you are at rest and higher when you exercise (because your body needs more oxygen-rich blood when you are active). Knowing how to take your pulse can help you gauge how hard you are exercising. But, your pulse is only one of many factors that determine how well your body can circulate blood and oxygen while you are exercising.

How do I take my pulse?

1. Place the tips of your index, second and third fingers on the palm side of your wrist, below the base of your thumb. Or, place the tips of your index and second fingers on your lower neck, on either side of your windpipe.
2. Press lightly with your fingers until you feel the blood pulsing beneath your fingers. You may need to move your fingers around slightly up or down until you feel the pulsing.
3. Use a watch or clock with a second hand or the timer on your phone to count the beats for 10 seconds.
4. Multiply the number of beats by 6 to get your pulse per minute.

Check your pulse: $\frac{\text{\# beats in 10 seconds}}{\text{\# beats in 10 seconds}} \times 6 = \text{your pulse}$



What is a normal resting pulse?

A normal resting pulse for adults is 60 to 100 beats per minute.

What is my estimated maximum heart rate?

Your estimated maximum (max) heart rate is the highest heart rate you can reach while exercising as hard as you can. Your max heart rate may be used to figure out your target heart rate.

A simple way to figure out your **predicted max heart rate** is to subtract your age from 220.*

$$220 - \text{Your age} = \text{Predicted max heart rate}$$

Example: a 40-year-old's predicted max heart rate is 180 beats/minute.

The best way to find your **actual max heart rate** is a medically supervised maximal graded exercise test.

Some medications and health conditions can affect your max heart rate. If you are taking medications or have a medical condition, such as heart disease, high blood pressure or diabetes, ask your doctor if these have an effect on your max or target rate. If so, ask your doctor what your heart rate goals should be while you are exercising.

What is a target heart range?

Your target heart range is the zone that you want to be in to stay safe and get the most benefit from your exercise. Your target heart range includes your lowest pulse goal to your highest pulse goal. This range can be estimated using your pulse rate.

Your target heart rate depends on your experience with exercise, age and medical history. The target heart range for many adults who exercise

on a regular basis is 60% to 85% of their known maximum heart rate. Your healthcare provider may recommend that you do not go higher than 50% of your maximum heart rate if you haven't exercised in a while or have certain medical conditions.

Find out your target heart range with Cleveland Clinic's online exercise calculator:

clevelandclinic.org/exercisecalculator

The chart below was created using the formula:

$$220 - \text{your age} = \text{Predicted maximum heart rate}$$

Compare your target heart range from the calculator with the chart. Talk to your healthcare provider if you have questions or concerns.

Estimated Target Heart Rate (HR) Zones by Age		
Age	Predicted Max HR	Estimated Target Zone (low end – high end) 60% – 85% of max HR
20	200	120 – 170
25	195	117 – 166
30	190	114 – 162
35	185	111 – 157
40	180	108 – 153
45	175	105 – 149
50	170	102 – 145
55	165	99 – 140
60	160	96 – 136
65	155	93 – 132
70	150	90 – 123

This information is not intended to replace the medical advice of your doctor or healthcare provider. Please consult your healthcare provider for advice about a specific medical condition.

High-intensity interval training (HIIT) can raise your heart rate to higher than 85% of your max heart rate. This type of exercise can be helpful, but **do not do HIIT without first talking to your healthcare provider.**

Always talk to your healthcare provider before you start an exercise program. They can help you choose a program and target heart rate zone that matches your needs, goals and overall health.

If you are just starting a program, take your time and slowly increase your fitness level before you exercise near the top end of your target heart rate zone. If an exercise feels too hard, slow down. You will lower your risk of getting hurt and enjoy the exercise more if you don't overdo it.

You can check to see if you are within your target zone while you're exercising. You can use an electronic device (heart rate monitor, smart watch, etc.) or check it yourself. Simply stop moving and take a 10-second pulse. If your pulse is lower than your zone, boost the intensity of your workout. If it is too high or you start to feel unwell, slow down.

There are other, more complicated ways to figure out your max heart rate. To learn more about these methods, you can refer to:

- journals.lww.com/acsm-msse/Fulltext/2017/08000/Sex_Specific_Maximum_Predicted_Heart_Rate_and_Its.23.aspx
- ncbi.nlm.nih.gov/pubmed/17468581
- ncbi.nlm.nih.gov/pubmed/20585008
- sciencedirect.com/science/article/pii/S0735109700010548?via%3Dihub



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