What is a Normal Heart Rate?

Heart rate, also known as pulse, is the number of times a person's heart beats per minute. A normal heart rate depends on the individual, age, body size, heart conditions, whether the person is sitting or moving, medication use and even air temperature. Even emotions can have an impact on heart rate. For example, getting excited or scared can increase the heart rate. But most importantly, getting fitter lowers the heart rate, by making heart muscles work more efficiently.

"Your heart is a muscle and just like strengthening other muscles by doing activities, you can do the same thing with your heart," said Dr. Mary Ann Bauman, an internist at Integris Baptist Medical Center in Oklahoma City.

Knowledge about your heart rate can help you monitor your fitness level, and it may help you spot developing health problems if you are experiencing other symptoms.

"If you are an athlete and you're training, or if you are having symptoms such as dizziness, then knowing your heart rate is important," Bauman said. "But as a general rule, unless somebody is having problems, it's not very important to always know what your heart rate is."

How to measure heart rate

The easiest places to measure your heart rate are on the wrists or one side of the neck. For an accurate reading, put two fingers over one of these areas and count the number of beats in 60 seconds. You can also do this for 20 seconds and multiply by three, which may be easier, Bauman said. Using your thumb may be confusing because sometimes you can feel a pulse in the thumb, she said.

Resting heart rate

Your resting heart rate is your pulse when you are calmly sitting or lying. It's best to measure your resting heart rate it in the morning before you get out of bed, according to the <u>American Heart Association</u> (AHA). For adults 18 and older, a normal resting heart rate is between 60 and 100 beats per minute (bpm), depending on the person's physical condition and age. For children ages 6 to 15, the normal resting heart rate is between 70 and 100 bpm, according to the AHA.

But a heart rate lower than 60 doesn't necessarily mean you have a medical problem. Active people often have lower heart rates because their heart muscles don't need to work as hard to maintain a steady beat. Athletes and people who are very fit can have resting heat rate of 40 bpm.

A resting heart rate lower than 60 could also be the result of taking certain medications. "Many medications people take especially medication for blood pressure, such as the beta blockers, will lower your heart rate," Bauman said.

If coupled with symptoms, a low heart rate may signal a problem.

"A low heart rate in somebody who is having dizziness and lightheadedness may indicate that they have an abnormality that needs to be looked at," Bauman said.

Maximum and target heart rate

There is no definitive medical advice on when a resting heart rate is too high, but most medical experts agree that a consistent heart rate in the upper levels can put too much stress on the heart and other organs. If a person has a high heart rate at rest and is experiencing other symptoms, doctors may examine his or her heart function, Bauman said.

Knowing your heart rate during workout sessions can help know whether you are doing too much or not enough, the AHA says. When people exercise in their "target heart zone," they gain the most benefits and improve their heart's health. When your heart rate is in the target zone you know "you are pushing the muscle to get stronger," Bauman said.

A person's target heart rate zone is between 50 percent and 85 percent of his or her maximum heart rate, according to the AHA.

Most commonly, maximum heart rate is calculate by subtracting your age from 220:

• 220 - Age. For a 30-year-old person, for example: 220 - 30 = 190.

The target zone for a 30-year-old person would be between 50 and 85 percent of his or her maximum heart rate:

• 50 percent level: $190 \times 0.50 = 95 \text{ bpm}$

• 85 percent level: $190 \times 0.85 = 162 \text{ bpm}$

The formula for maximum heart rate works well for people under 40 but for older people it may overestimate their maximum heart rate, Bauman said. For older people, a better formula for the maximum heart rate is:

• 208 - (0.75 x Age)

You can either manually calculate your heart rate during exercise or use heart rate monitors that wrap around the chest, or are included in sports watches. [Related: The Best Heart Rate Monitor Watches for Exercise]

However, that's not to say that exercising without getting the heart rate up to the target zone has no benefit, Bauman said.

"So many people just aren't doing any exercise that I worry less about them reaching their target heart rate and more about them getting out and moving their body," Bauman said.

Lowering a rapid heart rate

Pulse rates can spike due to nervousness, stress, dehydration and overexertion. Sitting down and taking slow, deep breaths can generally lower your heart rate. Exercising and getting fitter will usually lower heart rate, too.

Arrhythmia, tachycardia and other conditions

A number of conditions can affect your heart rate. An arrhythmia causes the <u>heart</u> to beat too fast, too slow or with an irregular rhythm.

Tachycardia is generally considered to be a resting heart rate of over 100 beats per minute, according to the <u>National Institutes of Health</u>, and generally caused when electrical signals in the heart's upper chambers fire abnormally. If the heart rate is closer to 150 bpm or higher, it is a condition known as supraventricular tachycardia (SVT). In SVT, your heart's electrical system, which controls the heart rate, is out of whack. This generally requires medical attention.

Bradycardia is a condition where the heart rate is too low, typically less than 60 bpm. This can be the result of problems with the sinoatrial node, which acts as the pacemaker, or damage to the heart as a result of a heart attack or cardiovascular disease.

High blood pressure vs. high heart rate

Some people confuse high blood pressure with a high heart rate. Blood pressure is the measurement of the force of the blood against the walls of arteries, while pulse rate is the number of times your heart beats per minute.

There is no direct correlation between the two, and high blood pressure does not necessarily result in a high pulse rate, and vice versa. Heart rate goes up during strenuous activity, but a vigorous workout may only modestly increase blood pressure.