

Pulse Rate and its Importance

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The Pulse rate which you determine at the wrist is directly in communication with your heart rate, and to be more exact to the contractions of the left ventricle of the heart. In short, if the heart beats sixty times per minute, the pulse rate should be exactly the same. In the ECG picture the spike is referred to as R wave and the distance between two R's would be each pulse beat.

Our heart or pulse rate varies every minute of the day, depending on the demands we make on our bodies. At sleep when demands are minimal the pulse rate is at its lowest, and with exercise and other activities it becomes more rapid according to its demand.

When the left chamber (ventricle) of the heart contracts the arteries start bulging due to the increased volume of blood thrown into the vessel, in a rhythmic pattern. The rate at which the artery bulges can be measured by touching it with your fingers as on the wrist or neck.



You remember the days when your family physician calls on a home visit, with the stethoscope round his neck which gives him more confidence and would project him as a healing physician, and the first event that occurs would be to feel your pulse at the wrist with one hand, and count the rate on his wrist watch on his other hand, very impressive, indeed. In these modern days most doctors have no time to spend 60 seconds to read your pulse rate.

Normal Heart Rate (Pulse rate)

Teenagers and older years, a normal resting heart rate can be anything between 60 to 90 beats per minute. Healthier and fitter people indulging in exercise regimes, or on beta blockers, the pulse rate can be slower. Olympic athletes due to extensive training the pulse rate could be as slow as 40 beats per minute. Champion cyclist, Lance Armstrong has had a resting heart rate of about 32 beats per minute (bpm). Fellow cyclist Miguel Indurain once had a resting heart rate of 29 bpm.

According to the National Health Service, UK, the following are ideal normal pulse rates at rest, (beats per minute):

- Newborn baby - 120 to 160;

- Baby aged from 1 to 12 months - 80 to 140 Baby/toddler aged from 1 to 2 years - 80 to 130;
- Toddler/young child aged 2 to 6 years - 75 to 120
- Child aged 7 to 12 years - 75 to 110
- Adult aged 18+ years - 60 to 100
- Adult athlete - 40 to 60

Checking your own heart rate (radial artery)

Place two fingers (index and mid) on the thumb side of your wrist, two inches above the wrist crease line, you will sense your pulse beating there. Count them for one minute, whilst the arm is resting. That would be your pulse beat per minute (pbm).

Irregular Pulse

If you sense any irregularity in your pulse beat, could be early electrical damage to your heart muscle, especially in the conducting bundle areas causing a missed or a dropped beat, or may be that you were born with an irregular heartbeat. It would be necessary to see your doctor if the irregularity is of recent origin. This condition is more described later

Rapid Pulse

The pulse rate may be very rapid (tachycardia), over 100per minute whilst resting. Common conditions that cause this would be exercise, anxiety, and stress, over-active thyroid, weak heart, smoking, lung disease, and excessive alcohol intake regularly, very hot days, among other events.

Rapid long term pulse beat could lead to heart strain. Get yourself treated by checking with your doctor.

Slow Pulse

Athletes as mentioned above have a slow pulse beat. If you are inactive and a slow heart beat (bradycardia), may be due to drugs like beta-blockers, Calcium blocking drugs or may be a partial or complete heart block.

If you further have episodes of short breath, feel dizzy, and fainting attacks, see your doctor soon. Blocking of the conducting system is suspected in the heart causing the slow pulse (heart block).

Conclusions:

The importance of checking your pulse rate is discussed. Check your pulse frequently. Check for irregularities called increased pulse rate (Tachycardia), irregular pulse rates (Arrhythmias): occasional drop beats. In most people an occasional drop beat can be taken as normal, unless the numbers increase.

Checking your own blood pressure simultaneously is important.

Any abnormalities see your doctor for further management.

Hope this article was useful