

If you want to increase your cardiorespiratory fitness, you should develop workouts that are intense enough to tax your cardiorespiratory system, but not so difficult as to discourage you or increase your chances of injury. Your heart rate provides a good indication of how intense your cardiorespiratory workout is. Your heart rate will go up as the intensity goes up. You can determine your heart rate during exercise through a heart rate monitor or by taking your pulse. To take your pulse during exercise, slow your workout but try to keep moving. Your heart rate will decrease rapidly after stopping exercise, so you need to take your pulse within 15 seconds of slowing down. Take your pulse for 10 seconds and multiply it by 6 to get your heart rate.

You can use heart rate to determine a preferred range of intensity for your workout. This range is called the target heart range and as you work out you can try to keep your heart rate within this range by increasing or decreasing intensity as needed. To calculate your target heart rate, you first need to determine your maximum heart rate, or HRmax. To find your HRmax subtract your age in years from 220. Once you have your HRmax you can figure out your target heart rate range through a set of simple calculations. If your fitness level is low, you want to aim to get your heart beating at 64-75% of your HRmax during your workout. You can see the calculations on the screen. For example, if your HRmax is 201, you would calculate the lower end of your target heart rate range by multiplying 201 by 0.64. You would calculate the upper end of your target heart rate range by multiplying 201 by 0.75. If you're very deconditioned or brand new to exercise you may even want to start at a lower intensity than this.

If your fitness level is moderate, aim for the vigorous exercise intensity of 76 to 95 percent of your HRmax. You can see the calculations on the screen. If your HRmax is 199, you would calculate the lower end of your target heart rate range by multiplying 199 by 0.76. You would calculate the upper end of your target heart rate range by multiplying 199 by 0.95. You can also calculate your 10 second pulse count so that when you're exercising you know right away if you're falling in your target heart rate zone.

To calculate your 10 second count simply divide the low end and the high end of your target heart rate by 6. So, for a target heart rate range of 151 to 189 you would calculate your 10 second count by dividing 151 by 6 for the low end of your 10 second count and dividing 189 by 6 for the high end of your 10 second count. You can also look up an estimate of your target heart rate range and 10 second count based on your age using the table that appears in your textbook.

For those who know their resting heart rate, a second method to determine target heart rate is measuring your heart rate reserve, or HRR. This is the difference between your maximum and resting heart rates. Once you have your HRR multiply it by 0.5 and then add

your resting heart rate to that number. This gives you the low end of your target heart rate. To find the high end of your target heart rate multiply your HRR by 0.8 and then add your resting heart rate to that number.