

Target Heart Rate Zones

The saying "work smarter, not harder" holds true in exercise, specifically when you're talking about your heart rate and Target Heart Rate. The benefit of working in your Target Heart Rate (THR) is that you can exercise more efficiently and be more goal oriented. In addition, the intensity of training necessary to improve or maintain cardiorespiratory fitness is in the range of 50 to 85 percent of maximal aerobic capacity, or VO2 max. This corresponds to a range of 65% to 90% of your maximal heart rate (MHR). Your MHR is the highest heart rate you achieve in an all-out push effort to the point of exhaustion. For many individuals, pushing to this level may not be desirable or safe.

A simple way to calculate your MHR is 220 minus your age.

Now that you have your MHR, your particular health goals will determine at which percentage of this number you should be exercising. Here is a breakdown of 5 Heart Rate Training Zones that have been set for particular goals.

Zones

Moderate Activity – 50%-60% of MHR

Goal – Great for beginners, those in extremely poor condition and those primarily interested in exercising for weight loss because the body burns a higher blend of fat calories than carbohydrate calories for its fuel.

Weight Management – 60%-70% of MHR

Goal –Weight management & strengthening your heart, giving it the opportunity to work at its optimum level. Also known as the "aerobic fitness threshold" because from this point forward, your body begins to reap the positive effects of aerobic exercise.

Aerobic -70% -80% of MHR

Goal – Benefits not only your heart but also your respitory system. Increases your endurance and enhances your aerobic power, which is the ability to transport oxygen to, and carbon dioxide away from the sport-specific muscles. Increases your MET (Metabolic Equivalent) output.

Anaerobic Threshold – 80%-90% of MHR

Goal – High performance training benefits. Increase your body's ability to metabolize lactic acid, allowing you to train harder before crossing over into the pain of lactate accumulation and oxygen debt.

Red-Line – 90%-100% of MHR

Goal – Only extremely fit athletes work in this zone on a limited frequency and duration. Operating in oxygen debt to train metabolic pathways of fast twitch muscle fibers, not endurance pathways or enzymes.

So, for a 44 year old that wants to increase his MET output for his yearly treadmill stress test, he would calculate his MHR at 176 beats per minute (220 – 44). Then take 70% - 80% of 176 to derive at 123 – 140 beats per minute. Remember, this is referred to as a "zone" so anywhere within these perimeters will be optimal and beneficial for this person's particular goals.

Sources: Sally Edwards, The Heart Rate Monitor Book, (Fleet Press, 1994), pp. 56-64 Edmund R. Burke, PhD, Precision Heart Rate Training, (Human Kinetics Publishers, Inc. 1998), p. 33.