

ECMS PHYSICAL EDUCATION DEPARTMENT - HOW TO CALCULATE TARGET HEART RATE ZONE

PURPOSE

It is very important throughout life to maintain a strong and healthy heart and lungs (**aerobic capacity**). The best way to do this is to participate in 30-45 minutes of moderate to vigorous exercise per day. To make sure you are getting the most out of your workouts, you should exercise within what is called your "**Training Heart Rate Zone**". This worksheet will teach you how to calculate for that zone/range, which is 60-80% of your maximum heart rate. (**60% = low intensity, 70% = moderate intensity,, 80% = high intensity**)



KEY TERMS/VOCABULARY

Maximal HR (MHR) - is found by subtracting 220 - your age. [220 - age = MHR]

Resting HR (RHR) - the rate your heart beats when at rest for at least 30 minutes

Target HR (THR) - is the number of times you want your heart to beat during low to high Intensity exercise to achieve or maximal **aerobic capacity** and good health.

Target Heart Rate Zone - The numerical range within which you want your heart to beat during exercise. In class this range/ zone is 60-80% of your Maximal HR. (MHR)

HOW TO LOCATE YOUR PULSE

Every time your heart beats it sends a wave of pressure along your arteries. This wave is called your **PULSE** and it can be felt in several areas throughout your body. The 2 most common places to find your pulse are your **carotid artery** (*front of neck*) and **radial artery** (*wrist*). You can find your pulse by placing 2 fingers (using your finger pads) on either the carotid or radial arteries. (*You should never use your thumb. Your thumb has it's own pulse*)

Carotid Artery- located on the front side of your neck on either side of the (Adams Apple) the lump in the center of your neck/front of your throat.

Radial Artery- located on the underside of your wrist on the thumb side, it is the spot where your arm changes into your hand. (*see picture down to the right on this worksheet*)

CALCULATING YOUR TARGET HEART RATE ZONE – for low to high intensity exercise

STEP 1- Find your **Resting Heart Rate (RHR)** by counting your pulse for 60 seconds

My RHR is ____ bpm

STEP 2- Find your **Maximal Heart Rate (MHR)** by subtracting 220 - your age

$$220 - \frac{\text{my age}}{\text{my age}} = \frac{\text{my MHR}}{\text{my MHR}}$$

STEP 3- Find "N" by subtracting your **MHR (maximal HR) - RHR (resting HR)**

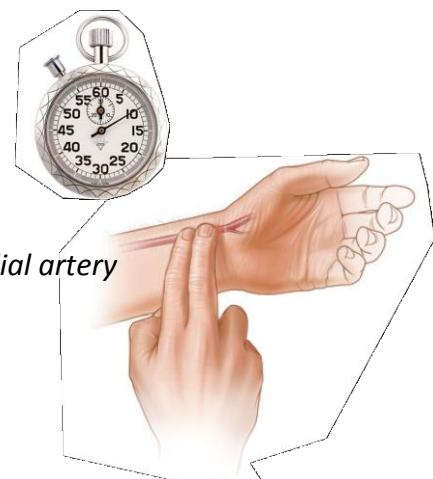
$$\frac{\text{MHR}}{\text{MHR}} - \frac{\text{RHR}}{\text{RHR}} = \frac{\text{N}}{\text{N}}$$

STEP 4- Find the **LOWER END** of your **Training Heart Rate ZONE (THR)**

$$\frac{\text{N}}{\text{N}} \times .6 = \text{ } + \frac{\text{RHR}}{\text{RHR}} = \text{lower THR}$$

STEP 5- Find the **UPPER END** of your **Training Heart Rate ZONE (THR)**

$$\frac{\text{N}}{\text{N}} \times .8 = \text{ } + \frac{\text{RHR}}{\text{RHR}} = \text{upper THR}$$



My Target Heart Rate Zone is _____ to _____ beats per minute (BPM)
lower THR higher THR