



Lab A3-6 Target Heart Rate Zone Using the Heart Rate Reserve Method

Determining Your Target Heart Rate Zone

1. Determine your resting heart rate: After 10 minutes of complete rest, measure your pulse either at your wrist or at one of your carotid arteries.

Example: A 19-year-old female with a resting heart rate of 65 bpm

Resting heart rate (RHR): _____ bpm
(RHR)

65 bpm

2. Determine your maximum heart rate: If you cannot take a treadmill test to measure your maximum rate precisely, approximate it by subtracting your age from 220.

Maximum heart rate (MHR): $220 - \frac{\text{age}}{\text{(age)}} = \frac{\text{MHR}}{\text{(MHR)}} \text{ bpm}$

$220 - 19 = 201 \text{ bpm}$

3. Determine your heart rate reserve by subtracting your resting heart rate from your maximum heart rate.

Heart rate reserve (HRR): $\frac{\text{MHR}}{\text{(MHR)}} - \frac{\text{RHR}}{\text{(RHR)}} = \frac{\text{HRR}}{\text{(HRR)}} \text{ bpm}$

$201 - 65 = 136$

4. Determine your target heart rate. Training effects occur when heart rate is higher than resting heart rate by an amount that is 50–85% of HRR. Multiply your heart rate reserve by 50% and 85% and then add the result to your resting heart rate. (If you have a very low level of fitness, use 40% of heart rate reserve to calculate the lower end of your target heart rate range.)

$(0.50 \times 136) + 65 = 133 \text{ bpm}$

$(0.85 \times 136) + 65 = 181 \text{ bpm}$

Target heart rate zone =
133 to 181 bpm

50% training intensity = $(\frac{\text{HRR}}{\text{(HRR)}} \times 0.50) + \frac{\text{RHR}}{\text{(RHR)}} = \text{_____ bpm}$

85% training intensity = $(\frac{\text{HRR}}{\text{(HRR)}} \times 0.85) + \frac{\text{RHR}}{\text{(RHR)}} = \text{_____ bpm}$

Target heart rate zone = _____ to _____ bpm