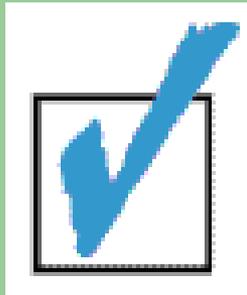


# All About Heart Rate

*Going for the 3 Increases: Increase in Health, Increase in Happiness & Increase in Energy*

Strategies for  
Success in Health  
Management

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# Three Kinds of Heart Rates

## Resting Heart Rate-Taken in Morning

- Rate heart is pumping when you have been sitting quietly for a while or when you are sleeping
- Indicates cardiovascular fitness level
- Normal resting heart rate is 15-20 beats per min slower than "usual" heart rate
- Person in good aerobic condition usually has a lower resting heart rate



# Three Kinds of Heart Rates

## Working Heart Rate

- While exercising you want to elevate your heart rate to produce "training effect" but not so high as to be dangerous
- Monitor your heart rate while exercising
- Gradually increase working heart rate into range maintained for 20-30 minutes required to assure a training effect and an adequate workout



## Three Kinds of Heart Rates

- Find your working heart rate range on the HR Chart
- Adjust workout to stay in middle of range during aerobic portion of workout
- More conditioned heart becomes more challenging it is to elevate heart rate. If heart rate is too high, lower the level of the next aerobic workout by exercising less vigorously. If your heart rate is too low, exercise more vigorously.



# Three Kinds of Heart Rates

## Recovery Heart Rate

- Is taken for 15 seconds during cool down, 5 to 6 minutes after workout
- Multiply this number by 4 to determine the number of beats per minute
- Recovering to 120 beats per minute or lower is important.



## Three Kinds of Heart Rates

- If your recovery heart rate is above 120 beats per minute, then during the next session lower workout level
- Always work out at a level that is enjoyable & comfortable for you



# Know your Heart Rate

- First: Check your pulse on wrist or on neck
- Second: Count each beat during a fifteen second period
- Third: Multiply by four to get your heart rate



# Online Heart Rate Calculator

- [http://exercise.about.com/library/blank\\_THR.htm?once=true&](http://exercise.about.com/library/blank_THR.htm?once=true&)
- <http://my.webmd.com/hearttrate>
- <http://www.healthchecksystems.com/heart.htm>



# Heart Rate Chart

<b>Age</b>	<b>Resting HR</b>	<b>Begin Workout</b>	<b>In Shape Workout</b>	<b>Maximum HR</b>
<b>20</b>	<b>63</b>	<b>123</b>	<b>154</b>	<b>205</b>
<b>25</b>	<b>63</b>	<b>120</b>	<b>150</b>	<b>200</b>
<b>30</b>	<b>65</b>	<b>117</b>	<b>146</b>	<b>195</b>
<b>35</b>	<b>65</b>	<b>114</b>	<b>143</b>	<b>190</b>
<b>40</b>	<b>65</b>	<b>111</b>	<b>139</b>	<b>185</b>
<b>45</b>	<b>65</b>	<b>108</b>	<b>135</b>	<b>180</b>
<b>50</b>	<b>65</b>	<b>105</b>	<b>131</b>	<b>175</b>



# Exercise Workout Heart rate

- Workout HR should never exceed maximum heart rate
- Keep it between 70 & 85% of maximum
- Best to check resting heart rate before you get out of bed in morning
- To see if your heart is at target rate check when it feels like it has increased
- If your feel heart pounding you're overdoing it & ease off
- As you become more fit resting rate will decrease and workout rate increase



# Heart Rate Zones

- Low intensity 50%-60% Good for beginners, builds cardio foundation
- Weight control 60%-70% Easy, burns lots of fat
- Aerobic 70%-80% Improves cardio strength, burns highest total fat
- Anaerobic 80%-90% Improves endurance, work harder for longer
- Maximal 90%-100% athletic performance



# Heart Rate Zones

**Zone 1 - Low Intensity zone: 50% - 60%**  
of max

- Fun, comfortable pace
- cardiovascular benefits
- Some fat burning.
- Good for beginners or people who haven't exercised in a while



# Heart Rate Zones

## **Zone 2-Weight Control :60%-70%of max**

- 65% of calories burned are fat
- More intensity in this zone strengthens your heart and works with Zone 1 in building a good solid cardiovascular base
- At least one day per week you should work out in this zone to recover from a relatively hard workout in the aerobic zone (next) or higher



# Heart Rate Zones

## **Zone 3 - Aerobic: 70% - 80% of max**

- Progressively intense, yet not exhausting
- Look for improved breathing & blood circulation
- Zone for fat burning, muscle strengthening, confidence-building, & general fitness
- 45% of calories burned in this zone are from fat. More fat is actually burned in this zone because the total number of calories is greater, so this is the best zone for weight loss



# Heart Rate Zones

- Zone 4 - Anaerobic: 80% - 90% of max**
  - Improves endurance and general fitness level.
  - Pushes anaerobic threshold (fat-burning zone) higher, allowing for a more efficient use of fat as an energy source at higher intensities
  - Do workouts in this zone in short spurts on only 2 - 3 days per week



# Heart Rate Zones

**Zone 5 - Maximal zone: 90% - 100% of max**

- Also known as "redline training"
- Improves competitive athletic performance
- In this zone, you're at high risk for injury,
- Stay away unless a competitive athlete



# Heart rate and exercise

- Direct correlation between your effort and your heart rate
- As you run (bike, swim, etc) harder, your heart rate will increase in an almost direct proportion to your exertion intensity
- As you slow down, your heart rate will drop



# Why Monitor Heart Rate While Exercising

## Safety

- The heart rate is a gauge by which to assess the intensity of your workout to make sure you're not overexerting or overextending yourself
- Example, if your heart rate is above your working heart rate range, it's telling you to slow down a little and use fewer arm movements



# Why Monitor Heart Rate While Exercising

## Effectiveness

- If your heart rate indicates you're not working hard enough, then you can work out a little more vigorously to maximize the effectiveness of your workout
- To maximize your aerobic workout, you need to stay in your working heart rate range for at least 20 to 30 minutes continuously



# Why Monitor Heart Rate While Exercising

## Incentive

- Week to week as you participate in an aerobic activity, you'll discover you will be able to exercise at higher level of intensity, but at same or lower heart rate
- This is the way heart tells you it is becoming stronger & more efficient.
- Seeing positive results will motivate you to strive for even better results



# Online Resources on Heart Rate

- American Heart Association:  
[http://www.americanheart.org/Health/Lifestyle/Physical\\_Activity/PAfact.html](http://www.americanheart.org/Health/Lifestyle/Physical_Activity/PAfact.html)
- American Dietetic Association:  
<http://www.eatright.org/feature/0201.html>
- American Academy of Family Physicians:  
<http://familydoctor.org/handouts/288.html>