

Including Effective and Exciting Cardio in your Exercise Routine



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Objectives



- Identify the health benefits of cardiovascular exercise
- Differentiate between moderate and vigorous intensity exercise
- Evaluate rate of perceived exertion
- Calculate target heart rate
- Devise a plan to create and maintain a new habit
- Utilize technology to support cardiovascular exercise efforts



Disclaimer



Recommendations and discussion today are for informational purposes only.

Always consult your physician before beginning any new exercise program.



Health Benefits of Cardiovascular Exercise



Medical Benefits

- Decreased incidence of cardiovascular disease
- Decreased cardiovascular disease mortality
- Reduced blood pressure
- Decreased incidence of hypertension
- Weight loss
- Prevention of weight regain after weight loss
- Reduced or slowed weight gain over time
- Decreased incidence of type 2 diabetes
- Decreased risk of adverse lipid profile

You will notice...

- Keep excess pounds at bay
- Increase your stamina, fitness, and strength
- Improved immunity
- Reduced health risks
- Improved management of chronic conditions
- Stronger heart
- Lower cholesterol
- Improved sleep
- Improved mood
- Greater independence and cognitive function through life span
- Live longer

How Much Cardio Should I do?



At least 30 minutes of **moderate**-intensity aerobic activity
at least 5 days per week for a total of **150 minutes**

OR

At least 25 minutes of **vigorous**-intensity aerobic activity
at least 3 days per week for a total of **75 minutes**

OR

or a combination of moderate- and vigorous-intensity aerobic activity

AND

Strength Training: Moderate- to high-intensity muscle strengthening activity
at least 2 days per week

Examples of Moderate Intensity Exercises



- Moderate walking pace of 3-4.9 mph
- Hiking
- Bicycling 5-9 mph
- Tennis- Doubles
- Aerobic Dancing
- Water Aerobics
- Yoga
- Golf
- Badminton
- Horseback Riding
- Raking the Lawn
- Moderate Housework

Examples of Vigorous Intensity Exercises



- Racewalking or jogging faster than 5 mph
- Backpacking
- Roller skating
- Walking briskly up a hill
- Bicycling more than 10 mph
- Karate
- Jumping Jacks
- Rowing Machine
- Tennis- Singles
- Swimming- steady laps
- Snow Shoveling
- Most Competitive Sports

Borg Scale: Rate of Perceived Exertion



Rating	Perceived Exertion
6	No exertion
7	Extremely light
8	
9	Very light
10	
11	Light
12	
13	Somewhat hard
14	
15	Hard
16	
17	Very hard
18	
19	Extremely hard
20	Maximal exertion

○ Your report of how hard your body is working.

○ Example:

- Perceived exertion of "somewhat hard" = Rating of 13

○ Moderate Activities = 11-14

○ Vigorous Activities = 15 or greater

Karvonen Formula: Calculating target Heart Rate



1. $220 - \text{your age} = \text{_____}$ estimated maximum Heart Rate (max HR)
2. $\text{_____ (max HR)} - \text{_____ resting heart rate (resting HR)} = \text{_____ HR Reserve (HRR)}$
3. $\text{_____ (HRR)} \times \% = \text{_____}$ low percent of HRR
4. $\text{_____ (HRR)} \times \% = \text{_____}$ high percent of HRR
5. $\text{_____ (low percent of HRR)} + \text{_____ (resting HR)} = \text{_____ target HR low end}$
6. $\text{_____ (high percent of HRR)} + \text{_____ (resting HR)} = \text{_____ target HR high end}$

Moderate exercise intensity: 50 to 70 percent of your maximum heart rate.

Vigorous exercise intensity: 70 to 85 percent of your maximum heart rate.

Karvonen Formula: Example Calculation



Age= 50

Resting HR= 68

Moderate Exercise Intensity (50-70%)

1. $220 - 50$ (age) = **170** estimated maximum Heart Rate (max HR)
2. **170** (max HR) - **68** (resting HR) = **102** (HRR)
3. **102** (HRR) \times 50% = **51** (low percent of HRR)
4. **102** (HRR) \times 70% = **71** (high percent of HRR)
5. **51** (low percent of HRR) + **68** (resting HR) = 119 (target HR low end)
6. **71** (high percent of HRR) + **68** (resting HR) = 139 (target HR high end)

RESULT: Target HR range for MODERATE exercise intensity= 119-139 beats per minute

How to support building a new habit



1. Start small
2. Make it personal to you
3. Reward your efforts
4. Allow room for failure
5. Be patient. Stick to a pace that suits you.



Strategies for Maintaining Change



- Pencil in time for yourself
- Focus on one change at a time (exercise, diet, mindfulness)
- Have realistic expectations
- Everyone has a bad day
- Variety is the spice of life- and fitness

Technology for Tracking and Motivating



- Step Count or Push Tracker
- Technology
 - Apple health
 - Fitbit
 - Permobile
 - My Fitness Pal
 - Nike+
- Goal setting: short vs. long term goals



Any questions or comments?

Thank you!!

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