Home-Based Cardiac Exercise

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Objectives

• Discuss the American College Sports Medicine (ACSM) exercise guidelines
• Learn how to create a safe exercise routine at home
• **Aerobic training**- 150 minutes/wk of moderate intensity activity
  75 minutes/wk of vigorous activity
  OR a combination of both

• **Resistance training**- 2-3 days/wk using all major muscle groups

• **Flexibility**- ≥ 2-3 days/wk
  (daily and before and after exercising most effective)

**ACSM’s Exercise Guidelines**
During the past month, other than your regular job, did you participate in any other physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?
North Carolina - 2019
Percent of adults who engage in no leisure-time physical activity †
View by: Gender

Footnotes
† Respondents were classified as participating in no leisure-time physical activity if they responded “no” to the following question: "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?" Adults aged ≥ 18 years. Respondents with missing data were excluded.

Data Source: Behavioral Risk Factor Surveillance System (BRFSS)
Percent of adults who achieve at least 150 minutes a week of moderate-intensity aerobic physical activity or 75 minutes a week of vigorous-intensity aerobic physical activity and engage in muscle-strengthening activities on 2 or more days a week †

View by: Gender

Footnotes
† Respondents were classified as active if they reported at least 150 minutes per week of moderate-intensity activity, or at least 75 minutes per week of vigorous-intensity activity, or a combination of moderate-intensity and vigorous-intensity activity (multiplied by two) totaling at least 150 minutes per week. Muscle-strengthening includes activities such as yoga, sit-ups or push-ups and those using weight machines, free weights, or elastic bands. Adults aged ≥ 18 years. Respondents whose physical activity level could not be categorized due to missing physical activity data were excluded.

Data Source: Behavioral Risk Factor Surveillance System (BRFSS)
• Comfortable exercise clothes/shoes
• Water
• Safe exercise space
• Chair
• Dumbbells/Resistance tubing/ Soup Cans/ Water bottles
Components of an Exercise Session

- **Warm-Up**
  - ≥ 5-10 min. of light-to-moderate intensity cardiorespiratory and muscular endurance activities

- **Aerobic Conditioning**
  - ≥ 30 min. of moderate intensity and exercise ≥ 5 days/wk.

- **Muscular Fitness**
  - ≥ 2 days/wk using all major muscle groups
  - 2-4 sets of 10-15 reps

- **Neuromuscular Training**
  - ≥ 2 days/wk

- **Cool-Down/Stretching**
  - Daily hold stretches ≥ 15 sec.
  - Repeat 2-4x

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# Rating of Perceived Exertion (RPE) Scale

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>HOW DO YOU FEEL?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I am resting</td>
</tr>
<tr>
<td>2</td>
<td>I am hardly working</td>
</tr>
<tr>
<td>3</td>
<td>Light effort, can talk easily</td>
</tr>
<tr>
<td>4</td>
<td>Starting to feel a little tired</td>
</tr>
<tr>
<td>5</td>
<td>Increased effort, slightly breathless</td>
</tr>
<tr>
<td>6</td>
<td>Moderately tired</td>
</tr>
<tr>
<td>7</td>
<td>Working hard</td>
</tr>
<tr>
<td>8</td>
<td>Very strenuous, I can’t talk easily</td>
</tr>
<tr>
<td>9</td>
<td>Extremely tired, I need to stop soon!</td>
</tr>
<tr>
<td>10</td>
<td>Maximal effort- I have to stop NOW!</td>
</tr>
</tbody>
</table>

### Intensity!

- **Warm-Up/ Cool-Down**
- **Moderate Intensity Exercise**
- **Vigorous Intensity Exercise**
Target Heart Rate Range (THRR)

• Moderate Intensity Exercise: 40-60%
• Vigorous Intensity Exercise: 60-85%
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Allows body to gradually increase:

- Heart rate
- Blood pressure
- Joint range of motion
- Mental preparation
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  - Repeat 2-4x

Activity requiring continuous motion of large muscles, allowing oxygen-rich blood to be pumped to working muscles.
Gym vs. Home

AEROBIC
Stair Master
Gym VS. Home

AEROBIC
Elliptical/ Nustep
### Components of an Exercise Session

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<td>Daily hold stretches ≥ 15 sec.  Repeat 2-4x</td>
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Muscular Fitness

Goal: Make activities of daily living less stressful physiologically and manage, attenuate, and prevent chronic disease.

6 Major Muscle Groups:
1) Chest
2) Shoulders
3) Upper and Lower Back
4) Abdomen
5) Hips
6) Legs

RESISTANCE TRAINING
Chest
RESISTANCE TRAINING
Shoulders
Gym VS. Home

RESISTANCE TRAINING
Upper/Lower Back
RESISTANCE TRAINING
Abdomen
RESISTANCE TRAINING
Hips

Gym VS. Home
RESISTANCE TRAINING
Legs

Gym VS. Home
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  - Repeat 2-4x

Conditioning Phase

“Functional Training”

- Involves motor skills including:
  - Balance
  - Coordination
  - Gait
  - Agility
  - Proprioceptive training

Neuromuscular Training

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Neuromuscular Training
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Cool-Down/Stretching
- Daily hold stretches ≥ 15 sec.
  - Repeat 2-4x

Conditioning Phase

**Goal:** Improve range of motion.

Most effective when muscles are warm.

Allows body to gradually decrease:

- Heart rate
- Blood pressure

**Flexibility/ Cool-Down**

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Cool-Down/Stretching
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- Repeat 2-4x

Conditioning Phase

Thank you!

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