Components of Health-Related Fitness

**Fitness** is defined as a condition in which an individual has enough energy to avoid fatigue and enjoy life. Analyze your day. Do you have lots of energy, or do you get tired easily?

**Physical fitness** is divided into four health- and six skill-related components. **Skill-related fitness** enhances one’s performance in athletic or sports events. **Health-related fitness** is the ability to become and stay physically healthy.

<table>
<thead>
<tr>
<th>Health Components</th>
<th>Skill Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiorespiratory fitness</td>
<td>Agility</td>
</tr>
<tr>
<td>Muscular strength and endurance</td>
<td>Balance</td>
</tr>
<tr>
<td>Flexibility</td>
<td>Power</td>
</tr>
<tr>
<td>Body composition</td>
<td>Speed</td>
</tr>
<tr>
<td></td>
<td>Coordination</td>
</tr>
<tr>
<td></td>
<td>Reaction time</td>
</tr>
</tbody>
</table>

Health-related components focus on factors that promote optimum health and prevent the onset of disease and problems associated with inactivity.

**Four Components of Health-Related Fitness**

**Cardiovascular fitness** is the ability of the heart (cardio) and circulatory system (vascular) to supply oxygen to muscles for an extended period of time. Cardiovascular is also called cardiorespiratory (lungs) fitness. Usually the mile run or some other type of continuous fitness activity (12 minute run, cycling, step-test, etc.) is used to assess cardiovascular fitness.

**Muscular strength and endurance** is the muscle’s ability to produce effort or perform work.

- **Muscular endurance** refers to the ability of the muscle to work over an extended period of time without fatigue. Performing push-ups and sit-ups or crunches for one minute is commonly used in fitness testing of muscular endurance.

- **Muscular strength** refers to the maximum amount of force a muscle can exert against an opposing force. Fitness testing usually consists of a one-time maximum lift using weights (bench press, leg press, etc.).
Flexibility is the ability to move a body part through a full range of motion at a joint (ROM). The sit-and-reach is commonly used to determine flexibility.

Body composition is the ratio of body fat to lean body mass (including water, bone, muscle, and connective tissue). Having too much fat tissue is a risk factor for cardiovascular diseases, diabetes, cancer, and arthritis.

Components of Health-Related Fitness Activity

The purpose of this activity is to gain understanding about what happens to your heart rate when you perform cardiovascular, muscular endurance, muscular strength, and flexibility exercises. Use your heart rate monitor, and record your heart rate before the activity, two to three times during the activity (record the average), and immediately after the activity. Between each exercise, walk slowly and allow your heart to go below 125 if possible. If your heart rate is over 125 at the end of an exercise, record how long it takes to get below 125. If after three minutes your heart rate has not returned to below 125, go ahead with the next activity.
<table>
<thead>
<tr>
<th>Activity</th>
<th>Time or Amount</th>
<th>Component of Health-Related Fitness</th>
<th>Heart Rate Before</th>
<th>Heart Rate During</th>
<th>Heart Rate After</th>
<th>Time to Get Heart Rate Below 120 BPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warm-up</td>
<td>5 minutes</td>
<td>Flexibility</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Step Test</td>
<td>3 minutes</td>
<td>Cardiovascular</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Push-ups</td>
<td>1 minute</td>
<td>Muscular Endurance</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Sit-ups</td>
<td>1 minute</td>
<td>Muscular Endurance</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Maximum Leg Press</td>
<td>weight lifted</td>
<td>Muscular Strength</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Sit and Reach</td>
<td>3 times</td>
<td>Flexibility</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Passive Stretch</td>
<td>5 minutes</td>
<td>Flexibility</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

In what activities did your heart rate reach above 150? Why do you think that occurred?

__________________________________________________________________________________
__________________________________________________________________________________
A heart rate of 135–150 is considered good for weight management (average for youth). This zone helps individuals lose weight because the body uses fat more efficiently.

In what activities did your heart rate stay between 135 and 150? Why do you think that occurred?

__________________________________________________________________________________
__________________________________________________________________________________

In what activities did your heart rate remain below 120? Why do you think that occurred?

__________________________________________________________________________________

List any conclusions you can make up to this point about the components of fitness and heart rate.

Cardiovascular Fitness

__________________________________________________________________________________

Muscular Endurance

__________________________________________________________________________________

Muscular Strength

__________________________________________________________________________________

Flexibility

__________________________________________________________________________________

Body Composition

__________________________________________________________________________________

**Evaluation**

1. In your own words, define *fitness*.

__________________________________________________________________________________
__________________________________________________________________________________

2. Describe the difference between health-related and skill-related fitness components.

__________________________________________________________________________________
__________________________________________________________________________________