Introduction

This module is designed to explore knowledge and skills that will help you and your family develop a lifelong habit of physical fitness and wellness. Developing this lifelong habit poses as a real challenge for many families.

Nowadays, people are less physically active because of various reasons, one of which is the advancement of science and technology. Many people no longer participate in any fitness-relevant activities. While we are aware of the health benefits and importance derived from engaging in physical activities, we tend to take its significance for granted. Unfortunately, many young people do not engage in worthwhile physical activities anymore. This may be due to your youth, your inability to execute them well, or your current health status.

Being physically fit and healthy can help you get through with the stresses and demands of life. It improves your self-esteem, develops your confidence, and clarifies your self-concept which can only be realized as you get older.

Health-related fitness activities play a vital role in the holistic development of a person. The choice of fitness activities usually depend on an individual’s interests, age, and ability. Health-related activities ensure cardiovascular fitness and thus helps you in the process of aging.

Health–related fitness activities are provided for you to have a better grasp on the lessons at hand. You will have various options in selecting the most appropriate exercises or activities that will help you and your family to achieve a level of physical wellness. Expectations from these activities should be clear to you. Ask questions for better understanding.

You will be required to design a Health-related Fitness (HRF) plan that will cater to the needs of your family. An HRF plan is a set of fitness goals. These goals should consider your current as well as your desired fitness levels. Even implementing the designed HRF plan, you need to evaluate its success or failure. You may need to make certain revisions to encourage yourself and your family to continue the HRF activity for life. It is important to make the activities fun and enjoyable to make exercise a habit for life.
Objectives

At the end of this unit, you should be able to:

- recognize the physical activity habits of the family in terms of health-related fitness components;
- undertake fitness tests;
- assess the family’s strengths and weaknesses in the components of HRF;
- perform exercises to enhance cardiovascular and muscular fitness;
- demonstrate HRF for the family regularly to promote an active lifestyle;
- explain why the purpose is critical in ensuring the conduct of activities in the family; and
- design physical activities that promote cardiovascular and muscular fitness of family members.

Pre-Assessment

Find out how well you know and understand the importance of physical movements in your daily life. These activities will assess your knowledge and skills on Health-related Fitness.

A. Identify and classify the pictures shown on the following page based on the components of health-related fitness.

B. Explain briefly how these HRF activities can benefit your family in terms of physical wellness.
Learning Goals and Targets

Learning goals and targets are lessons you expect to learn from this learning material. Example: I will be able to identify the four components of HRF.

Provide below your expected personal learning goals and targets.

• __________________________________________
• __________________________________________
• __________________________________________

Part I: What to Know

In this stage, you will reflect on how well you understand the concept of health-related fitness and your expectations about the topic. You are encouraged to ask questions for further clarifications. The following activities will assess your knowledge about health-related fitness exercises. This will give you opportunities to identify and clarify misconceptions you may have about the lesson.

Activity 1: Where Am I?

Let’s play a brain teasing fun game called “Word Scramble.” Find words from the jumbled letters that refer to components associated with Health-related Fitness. The words are interconnected and placed either vertically, horizontally, or diagonally. Write these words in your activity notebook and try to define each.

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Components of Health-related Fitness

Fitness is defined as a condition in which an individual has enough energy to avoid fatigue and enjoy life. Look back and reflect on your day’s activities. Do you have lots of energy or do you get tired easily?

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

<table>
<thead>
<tr>
<th>Health Components</th>
<th>Skill Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular fitness</td>
<td>Agility</td>
</tr>
<tr>
<td>Muscular strength and endurance</td>
<td>Balance</td>
</tr>
<tr>
<td>Flexibility</td>
<td>Power</td>
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<tr>
<td>Body composition</td>
<td>Speed</td>
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<td></td>
<td>Coordination</td>
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<td></td>
<td>Reaction time</td>
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Health-related components focus on factors that promote optimum health and prevent the onset of disease and problems associated with an activity. The four components are described as follows:

1. **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 1 km run or some other type of continuous fitness activity (12-minute run, cycling, step-test, etc.) is used to assess cardiovascular fitness.

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

3. **Flexibility** is the ability to move a body part through a full range of motion (ROM) at a joint. The sit-and-reach is commonly used to determine flexibility.

4. **Body composition** is the ratio of body fat to lean body mass (including water, bones, muscles, and connective tissues). Having too
many fat tissues is a risk factor for cardiovascular diseases, diabetes, cancer, and arthritis.

In addition to improving quality of life, health-related fitness also
• increases muscle tone and strength;
• decreases susceptibility to injuries and illness;
• improves bone mineral density;
• reduces risk of osteoporosis;
• improves posture;
• increases efficiency of the respiratory and circulatory systems;
• decreases risk of cardiovascular disease and stroke;
• improves blood pressure;
• decreases risk of diabetes and some cancers;
• improves self-esteem and self-confidence;
• decreases body fat and improves metabolism; and
• increases energy level and academic achievement.

Answer the following questions in your worksheet:
1. In your own words, define fitness.
2. Describe the difference between health-related and skill-related fitness components.

Activity 2: Quest for Fitness

Reflect on your daily activities and write them on the table below. Focus your attention on activities that will help improve your HRF and maximize your body potential. After a few minutes, group yourselves into 5 or 8 and discuss your answers with the group. Present your output in class.

<table>
<thead>
<tr>
<th>My Daily Routine / Tasks</th>
<th>HRF Components</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
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<td>2.</td>
<td></td>
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<tr>
<td>3.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
</tr>
</tbody>
</table>
Activity 3: Picture Parade

Bring pictures showing people doing different activities. Display each picture. Describe the action shown and how the person doing it might be feeling. List the benefits associated with each activity.

Examples of pictures:
- A smiling child running (feeling free and happy)
- A group of people engaged in a game or sport (having fun)
- A figure skater, dancer, or gymnast performing (graceful, powerful)

After your picture parade, ask a classmate to report his/her list of benefits associated with each activity in class. Allow your classmate to explain his/her answer.

Variation: Create a collage or bulletin board display of cut-out pictures from newspapers or magazines that will illustrate the benefits of being active.
Activity 4: Family Connection

Identify the usual physical activities of your family members in terms of health-related fitness components. List the important information regarding the family members in the following table provided. These will be useful in designing your family HRF activity plan.

**Note:** Indicate only people in your actual household.

<table>
<thead>
<tr>
<th>Family Members</th>
<th>Age</th>
<th>Occupation/Work/Job</th>
<th>Activities involved in relation to the Occupation/Work/Job</th>
<th>HRF component involved</th>
<th>Household Chores</th>
<th>HRF component involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: Father</td>
<td>54</td>
<td>PUJ Diver</td>
<td>Drives and sits for 8 hours</td>
<td>Feeds the chicken, Repair damages in the house ...</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>48</td>
<td>Housewife</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sister</td>
<td>25</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Brother 1</td>
<td>22</td>
<td>Laborer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brother 2</td>
<td>18</td>
<td>Student</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Me</td>
<td>14</td>
<td>Student</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
These activities will give you a deeper understanding of the importance of exercise in building total fitness and family wellness. The activities will allow you to better understand HRF.

**Activity 1: Physical Fitness Tests**

1. Do the following to prepare for the tests.
   - Review the procedures in conducting the Physical Fitness Tests.
   - Wear the appropriate attire.
   - Do the warm-up exercises on your own or with your partner.
   - Re-orient yourself on the proper execution of the tests and recording of test results.
   - Go through the test without exerting maximum effort.
   - Observe safety.

2. Perform the tests with a partner.

3. Record your test results.

**Health-related Fitness Tests**

**A. Body Mass Index (BMI)**

The following formula is used to get the BMI:

\[
\text{BMI} = \frac{\text{WEIGHT [in Kilograms]}}{\text{HEIGHT [in Meters]}^2}
\]

Example:

\[
\frac{30}{(1.2)^2} = \frac{30}{1.44} = 20.83 \text{ (normal)}
\]

**Classification:**

- Below 18.5: Underweight
- 18.6 – 24.9: Normal
- 25 – 29.9: Overweight
- 30.0 – Above: Obese
A.1  **Weight** – the heaviness or lightness of a person

**Equipment:** weighing scale

**Procedure:**
*For the test taker:*
  a. Wear light clothing.
  b. On bare feet, stand erect and still while evenly distributing your weight on the center of the scale.

*For your partner:*
  a. Before you start weighing, adjust the scale to zero point.
  b. Record the score in kilograms.

**Scoring** – record body mass to the nearest 0.5 kilograms

A.2  **Height** – the distance between the floor to the top of the head when a person is in standing position.

**Equipment:**
- an even and firm floor and flat wall
- L – square
- tape measure laid flat on a concrete wall with the zero point starting at the floor

**Procedure:**
*For the test taker:*
  a. Stand erect on bare feet with heels, buttocks, and shoulders pressed against the wall with the tape measure.

*For your partner:*
  a. Place the L-square against the wall with the base at the top of the head of the person being tested.
  b. Record the score in meters.

**Scoring** – record standing height
* 1 meter = 100 centimeters

B.  **Waist Circumference**

Waist circumference is a good predictor of visceral fat which contributes more risk of cardiovascular disease and diabetes than fat located in other areas of the body.

**Equipment:** tape measure
Procedure:
For the test taker:
   a. Wear light clothing before having your waist circumference taken.
   b. On bare waist, stand erect and wrap the tape measure around your waist.

For your partner:
   a. Record the score in centimeters.

<table>
<thead>
<tr>
<th>Standard</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk</td>
<td>Centimeter</td>
<td>Inches</td>
</tr>
<tr>
<td>Very High</td>
<td>&gt;120</td>
<td>&gt;47</td>
</tr>
<tr>
<td>High</td>
<td>100 – 120</td>
<td>39.5 – 47</td>
</tr>
<tr>
<td>Normal</td>
<td>102</td>
<td>40</td>
</tr>
<tr>
<td>Low</td>
<td>80 – 99</td>
<td>31.5 – 39</td>
</tr>
<tr>
<td>Very Low</td>
<td>&lt;80</td>
<td>&lt;31.5</td>
</tr>
</tbody>
</table>

Strength refers to the muscle’s ability to generate force against physical objects. In the fitness world, this typically refers to how much weight you can lift for different strength training exercises.

C. Ninety (90) Degree Push-up

Purpose: to measure strength of upper extremities

Equipment: exercise mat or any clean mat

Procedure:
For the test taker:
   a. Lie face down on the mat in standard push-up position: palms on the mat under the shoulders, fingers pointing forward, and legs straight, parallel, and slightly apart, with the toes supporting the feet.

For Boys: Straighten the arms, keeping the back and knees straight. Lower the arms until there is a 90-degree angle at the elbows (upper arms are parallel to the floor).
For Girls: 
With knees touching the mat, straighten the arms, keeping the back straight. Lower the arms until there is a 90-degree angle at the elbows (upper arms are parallel to the floor).

b. Perform as many repetitions as possible, maintaining a cadence of 20 push-ups per minute (2 seconds going down and 1 second going up).

For your partner:
   a. As the student assumes the push-up position, start counting as the student lowers his / her body on the ground until s/he reaches a 90-degree angle at the elbow.
   b. Make sure that the student performs the push-ups in the correct form.
   c. The test is terminated when the subject can no longer perform the push-ups in the correct form (three corrections are allowed), is in pain, voluntarily stops, or when cadence is broken.

Scoring – record the number of push-ups made
D. Curl-ups

**Purpose:** to measure strength of abdominal muscles

**Equipment:** exercise mat or any clean mat

**Procedure:**
For the test taker:

a. Lie on your back with the knees flexed and feet 12 inches from the buttocks.
b. The feet should not be held or rested against an object. The arms must be extended and resting on the thighs.
c. Complete a slow, controlled curl-up, sliding fingertips along the floor until they touch the second tapeline.
d. The curl-up should be performed at a rate of one every three seconds or 20 curl-ups per minute (2 seconds going up and 1 second going down).
e. Do not stop or rest while at the bottom position. Perform as many curl-ups as possible without stopping.

![Image of curl-up exercise]

For your partner:

a. One curl-up is counted each time the student’s shoulder blade touches the floor.
b. Make sure that the student performs the curl-ups in the correct form.
c. The test is terminated when the subject can no longer perform the curl-ups in the correct form (three corrections are allowed), is in pain, voluntarily stops, or when cadence is broken.

**Scoring** – record the number of curl-ups made

**Flexibility** refers to the ability of the joints to move through a full range of motion.
E. Sit and Reach is a test of flexibility for the lower extremities particularly the hamstring.

**Purpose:** to reach forward as far as possible without bending the hamstring

**Equipment:** tape measure

**Procedure:**
For the test taker:
a. Sit on the floor with back flat on the wall and feet approximately 12 inches apart.
b. Without bending your back, knees, and elbows, place one hand on top of the other and position the hands on the floor.
c. After the tester has positioned the zero point of the tape measure, start the test by slowly reaching the farthest point possible without bending the knees.

![Image 1](image1)

![Image 2](image2)

![Image 3](image3)

For your partner:
a. As the student assumes position (b) in the procedure, position the zero point of the tape measure at the tip of the finger farthest from the body.
b. Make sure that the knees are not bent as the test taker reaches the farthest that he/she could.
c. Measure the farthest distance reached.
d. Record the score in centimeters.

**Scoring** - record sit and reach to the nearest 0.1 centimeter
F. Zipper Test is a test of upper arm and shoulder girdle flexibility intended to parallel the strength/ endurance assessment of the region.

**Purpose:** to touch the fingertips together behind the back by reaching over the shoulder and under the elbow

**Equipment:** ruler

**Procedure:**

*For the test taker:*

a. Stand erect.
b. To test the right shoulder, raise your right arm, bend your elbow, and reach down across your back as far as possible.
c. At the same time, extend your left arm down and behind your back, bend your elbow up across your back, and try to cross your fingers over those of your right hand.
d. Reach with the right hand over the right shoulder and down the back as if to pull a zipper or scratch between the shoulder blades.
e. To test the left shoulder, repeat steps a to d with the left hand over the left shoulder.

*For your partner:*

a. Observe whether the fingers touched or overlapped each other.
b. Measure the distance in which the fingers overlapped.
c. Record the score in centimeters using the following standard.

**Scoring** – record zipper test to the nearest 0.1 centimeter

<table>
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<tr>
<th>Standard</th>
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<tr>
<td>0 – did not touch fingers</td>
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<tr>
<td>1 – touched only tip of fingers</td>
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<td>2 – fingers overlapped by 1 to 2 cm</td>
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<td>3 – fingers overlapped by 3 to 4 cm</td>
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<td>4 – fingers overlapped by 5 to 7 cm</td>
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<tr>
<td>5 – fingers overlapped by 8 cm or more</td>
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**Cardiovascular Endurance** is the ability of the heart, lungs, and blood vessels to deliver oxygen to working muscles and tissues, as well as the ability of those muscles and tissues to utilize the oxygen. Endurance may also refer to the ability of the muscle to do repeated work without fatigue.

G. 3-Minute Step Test

**Purpose:** to measure cardiovascular endurance

**Equipment:**
- step with a height of 12 inches
- stopwatch

**Procedure:**
For the test taker:
- Position in front of the step.
- At the signal “Go,” step up and down for 3 minutes at a rate of 24 steps per minute. One step consists of 4 beats – that is, “up with the left foot, up with the right foot, down with the left foot, down with the right foot.”
- Immediately after the exercise, stand and relax. Don’t talk.
- Locate your pulse. (The first beat is zero.)
- Count the pulse for 10 seconds. Multiply by 6.

For your partner:
- As the student assumes the position in front of the step, signal “Ready” and “Go.” Start the stopwatch for the 3-minute step test.
- After the test, let the student count his / her pulse for 10 seconds and multiply it by 6.

**Scoring** – record the 60-second heart rate for the activity
# PERFORMANCE TARGETS FOR BOYS

<table>
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<th>AGE</th>
<th>STRENGTH</th>
<th>FLEXIBILITY</th>
<th>ENDURANCE</th>
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<tbody>
<tr>
<td></td>
<td>Partial Curl-ups</td>
<td>90 Degree Push-ups</td>
<td>Sit and Reach (cm)</td>
</tr>
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<td>9</td>
<td>23</td>
<td>15</td>
<td>37</td>
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# PERFORMANCE TARGETS FOR GIRLS

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<th>FLEXIBILITY</th>
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<td>Partial Curl-ups</td>
<td>90 Degree Push-ups</td>
<td>Sit and Reach (cm)</td>
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<td>75</td>
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<td>30</td>
<td>16</td>
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Pictures: Sherwin S. Simangan, Justin Roi V. Dulin, Kim Cepeda, Zhanne Kisner Collado
Activity 2: Tough Nut to Crack

Your teacher will provide you with sports equipment available in your school. Select the sports equipment that you like. Think about how you'll use it. Play for 10 to 15 minutes with your friends. Jot down notes on the different movements to be executed during the game. Relate these movements to health-related fitness. Write your observations on your activity sheet / notebook.

Observe the following:

1. What are the different movements you executed? (e.g., running, swinging the bat, throwing the ball, etc.)
2. Identify the parts of the body involved and not involved while using the sports equipment.
3. While performing the sports, what specific skills or movements do you think will help you build the four (4) components of HRF?
4. Reflect how this sports activity can help enhance your health-related fitness and achieve a balance and total fitness.
5. Among these activities, what would suit the needs of your family in terms of HRF?

Alternative Activity: Target Zone

In your activity notebook, copy the table as shown, and identify the activity represented by each sports material. Reflect on the health benefits derived from engaging in these activities. Select the best and most appropriate activity for your family as you design your HRF plan.
**Activity 3: Listen to Your Heart**

1. Look for a partner (a friend, a relative, a neighbor) for this activity.
2. Review your knowledge on how to check the pulse rate before and after a physical activity.
3. Execute the exercises or activities for each component of the HRF. Choose from the suggested exercises.
4. Observe carefully what exercises are mild or easy, average, and intense or difficult.
5. Chart your pulse rate before and after the activity.

<table>
<thead>
<tr>
<th>Pulse Rate</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exercise A</td>
<td>Example: mild</td>
<td></td>
</tr>
<tr>
<td>Exercise B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

After performing the exercises, assess the physical activity or exercises given to you. Answer the following questions on your activity sheet.

a. Do you think that these exercises or physical activities are appropriate for your family?

b. If you are to design a fitness plan for your family members, what are the things to consider?

c. What are the possible activities you can give? Cite examples.

d. Are these activities suited for each family member?

**Flexibility Exercises**

**Stretch No. 1: Shoulder and Chest**

This can be performed kneeling or standing. Clasp your hands behind your back and straighten your arms. Raise your hands as high as possible and bend your body or trunk forward from the waist and hold the position for ten seconds.

**Stretch No. 2: Arm Across Chest**

Place one of your arms straight across your chest. Place your other hand on your elbow and pull your arm towards chest and hold. Repeat with your other arm.
Stretch No. 3: Triceps Stretch

Place one hand behind your back with elbow in up. Place your other hand on the elbow and gently pull towards your head. Hold and repeat with your other arm.

Stretch No. 4: Gluteus Stretch

Sitting on the floor with your right leg bent, place your right foot over your left leg. Place your left arm over your right leg so your elbow can be used to push your right knee. Hold and repeat in the other side.

Stretch No. 5: Adductor Stretch

Stand with your feet as wide apart as is comfortable. Shift weight to one side as your knee bends. Reach towards your extended foot and hold. Repeat for the other side.

Stretch No. 6: Single Leg Hamstring

Place your leg out straight and bend the other so your foot is flat into your thigh. Bend forward from your waist keeping your back flat. Do the same with the other leg.

Stretch No. 7: Standing Quadriceps

Standing on one leg grab the bottom of your other leg (just above ankle). Pull your heel into your buttocks and push your hips out. Your thigh should be perpendicular to the ground. Hold and repeat with the other leg.
Stretch No. 8: Standing Calf

Place your feet in front of each other about 18 inches apart. Keep your back leg straight and your heel on the floor. Push against a wall to increase the stretch. Hold and repeat with your other leg.

Strength Exercises

Strength Training: Lower Body Exercises

- Squat
- Strength training lunge
- Calf raise
- Leg curl
- Leg extension
- Crunch
Cardiovascular Endurance Exercises

These exercises consist of jogging, cycling, stair climbing, and running.

Activity 4: Because I Care

Review and assess your output in the “Family Connection” activity. Focus on the strengths and weaknesses of each family member with regards to the health-related fitness. Give special attention to the aging family members and those with physical disabilities. Copy the following table and do your own assessment:
### Family Health Assessment

<table>
<thead>
<tr>
<th>Family Members</th>
<th>Age</th>
<th>Body Composition (BMI)</th>
<th>Medical history</th>
<th>HRF components</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Weaknesses</td>
</tr>
<tr>
<td>Father</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sister</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brother 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brother 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Me</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Activity 5: Work It Out

Propose exercises for flexibility, strength, and cardiovascular endurance (at least 5 exercises for each component). Your output will be presented to your teacher. Provide your own music.

Remember the following when performing your exercises:
- Chosen exercises are aligned with your HRF goal. Timing and coordination blend well with the music; there is unified effort of the group members (if done in groups); and exercises are excellently executed.

### Part III - What to Reflect and Understand

At this stage, you are given opportunities to reinforce and deepen your understanding on the importance of HRF activities and exercises. You will also be provided with activities that will assess the mastery of your understanding.

Activities 2 to 4 are provided for you to have a deeper understanding on the importance of exercises in building total fitness and family wellness. The activities will also allow you to develop, reflect on, rethink, validate, and revise your understanding of fitness exercises.

### Activity 1: Health and Fitness Updates

Read the following article and make a reaction paper. Your thoughts and opinion about this article will help you reflect on your understanding of fitness exercise. Write your reaction paper on your worksheet.

(For additional reading materials browse on this address: http://www.webmd.com/fitness-exercise/features/exercise-and-music)
**Active Video Games Help Some Kids Get Active**

By Jennifer Warner

*WebMD Health News Reviewed by Louise Chang, MD.*

Oct. 1, 2012 -- One type of TV time may actually play a valuable role in the battle against childhood obesity.

A new study suggests active video games may help children, especially girls, raise physical activity levels.

The results show most teens that play active video games play at moderate or vigorous intensity levels that would help them meet the recommended 60 minutes of physical activity on most days.

Researchers say so-called exergames may also help at-risk young people get moving.

“Because exergames can be played in a variety of settings, including unsafe neighborhoods, they can increase opportunities for youth to engage in [physical activity] and decrease sedentary behavior,” researcher Erin O’Loughlin of the University of Montreal, Canada, and colleagues write in Pediatrics.

Exergames are screen-based active video games in which individual players or groups interact in a physically active way. They include rhythmic dancing games, virtual bicycles, balance board simulators, and virtual sport simulators.

They require a screen, like a TV or computer, and a gaming console, such as the Nintendo Wii. The video games track the players’ movements onscreen as they attempt to reach a goal.

**Active Video Games Count as Exercise**

In the study, researchers surveyed more than 1,200 10th- and 11th-grade students in the Montreal area about their use of active video games.

The results show nearly one-quarter of the children said they played active video games. Gamers played an average of two days per week for about 50 minutes each session.

Nearly three-fourths (73%) said they played at a moderate or vigorous level of physical intensity that would count toward meeting the recommended physical activity guidelines.
Researchers also found that exercise video games like "Wii Fit" and "Dance Dance Revolution," which require high amounts of energy, were among the most popular active video games.

**New Role for Active Video Games**

Researchers say the results suggest that active video games may have a unique role in the battle against rising childhood obesity rates.

The study shows that boys are more likely to play non-active video games, and girls were more likely to play active video games.

Researchers also found that most children who played active video games played at home, but many also played at friends’ homes.

“It is possible that some girls may be uncomfortable exercising at school or in community settings because they feel scrutinized or judged and therefore prefer exercising at home alone or with friends,” the researchers write.

“Lack of school-based exergaming may represent a ‘missed opportunity’ to introduce young people to another form of [physical activity],” they write. “The feasibility of exergaming in community centers or at school needs to be tested, and research on the sustainability of exergaming is warranted.

**Activity 2: Health Perks**

You need to understand the health benefits derived from physical activity before you can successfully design and implement an HRF (Health-related Fitness) plan.

Make a report or a powerpoint presentation on the health benefits derived from involving oneself in the HRF activity. Tackle the 4 components: strength, flexibility, endurance, and body composition. Refer to the following sample:
Body Composition
- ideal body type prevents joint problems and diabetes
- certain amount of fat is needed by the body to function well

Strength
- strengthens immunity
- protection against injury

Endurance
- improved heart-lung functioning
- increases oxygen supply

Flexibility
- improves posture
- decreases risk of injury
After the presentation, make a generalization on the importance of engaging in exercises and the drawbacks or disadvantages of lack of exercise.

**Reflection / Realization:**

Complete the following sentences in your notebook.

1. Cardio-respiratory endurance can help me ______.
2. ______ can help me achieve an ideal BMI.
3. Bending and stretching allow me ______.
4. ________ strengthen my body.
5. Therefore I have learned that ______.

Use the following as your guide for the oral presentation: (Criteria)

1. Presentation of the HRF health benefits should be addressed clearly.
2. Visual and audio presentation should be well-organized and well-explained.
3. Effective communication skills should be evident.

Well learners, that wasn’t tough, right? This is going to be easy once you have answered all the questions. Try the next Activity. It deals with the lifestyle check of your family in terms of the HRF issues. This will help you understand and evaluate the extent of your family’s involvement with fitness.

**Activity 3: Together in Fitness**

Make a scrapbook with your family’s pictures showing the progress or regress of the family’s state of health. Include in the scrapbook pictures of your family’s past HRF (i.e., sports, exercises, and recreational) activities. The scrapbook should tell a story about family wellness. This activity will help you assess and understand the state of your family’s health.
Plan physical activities for your family which can be considered as your lifetime engagement to achieve family wellness.

**Activity 1: Goal Setting**

By this time, it is affirmed that Health-related Fitness plays a very important role in family wellness. Design an HRF plan for your family.

1. Review and assess the output in “Because I Care” by identifying exercises or physical activities needed by your family members to achieve family wellness and to enjoy lifelong good health. Focus on the HRF activities and exercises. You may choose exercises from the suggested exercises in “Listen to your Heart”.

   It’s time for you to work on your HRF plan. Setting your goals is crucial in developing your HRF plan. Look into the needs of your family by referring to your outputs in the previous activities as basis for your plan.

**Activity 2: Hit the Target**

Your HRF Plan must be simple, enjoyable and suited to the needs your family to attain maximum level of physical wellness.

Use the chart found on the next page to plan your activities. Make sure to include activities for the whole family. Your log should show complete thought and effort and be as detailed as possible. The following is an example of a fitness plan for your basis.
Suggested activities may include joining community fun runs, ballroom dancing, assigning household chores, and others.

Supplementary Activity: **Family Day**

Submit a narrative report about the actual implementation of the HRF Plan you designed. Provide proof to support the narrative report like pictures, video, signatures, or through other media technologies. It is expected that implementation will take a while, so you will be given enough time to submit your narrative report and evidences before the end of the first quarter period.

Assess the HRF plan for the family using the following criteria:

- Appropriateness of the HRF activities for the family
- Relevance to the needs of the family members
- Completeness of the plan
Summary

By this time you are expected to understand the essentials of health-related fitness and its relation to family wellness. This module discussed the importance of HRF and provided you with different activities to assess yourself and your family in terms of health-related fitness. These activities served as your guide in designing an appropriate HRF plan for your family that you will hopefully sustain for life. This module is focused on a wide range of activities that will help you develop appropriate skills, enable you to understand fitness concepts and their application, as well as foster confidence and appreciation of physical activity as a means to wellness.

Part I gave you a brief recall on the HRF components. It also provided activities to help you strengthen your knowledge on the lesson at hand. A brief assessment of your family’s daily physical activity habits was also asked to serve as basis in planning the appropriate activities and exercises that will suit each family member.

Part II enabled you to perform and demonstrate the HRF test. The result of the fitness test served as basis for self-assessment. A table was provided for you to list and assess your family health status that is crucial in designing your family HRF plan.

Part III provided you with different activities and discussion that helped you reflect and think deeply on the essentials of health-related fitness. It also talked about the health benefits of engaging in physical activities and exercises. The activities, exercises and sports introduced in Part III were carefully selected for you to choose and decide the appropriate HRF activities for you and your family.

Part IV is the final phase of Unit 1. You designed an appropriate HRF plan for your family that will sustain a lifelong active lifestyle. Taking into consideration what you have learned from this unit and from the activities provided in Parts I to III, you are now equipped to propose an HRF plan.
**Glossary**

**Collage** – form of art in which various materials such as photographs and pieces of paper or fabric are arranged and stuck to a backing

**Fitness** – the condition of being physically fit and healthy especially as a result of exercise and proper nutrition

**HRF (Health-related Fitness)** – ability to become and stay physically healthy

**Perks** – benefits; privileges; bonuses

**Regress** – returning to a former state; get worse or fall back to a previous condition

**SRF (Skill-related Fitness)** – focuses on the performance in a sport

**Wellness** – the quality or state of being healthy in body and mind especially as the result of deliberate effort

**Sources**

http://www.state.nj.us/education/frameworks/chpe/chapter8f.pdf 11-28-2012


