While participants are hiking, they are getting lots of health benefits. The information in this packet details those benefits, from the muscles hiking develops to the way it makes people feel.

This packet supplements what you will be doing during hiking. You do have to get participants to recognize that this activity is great for their physical and emotional health, but you can do that in the way that best works for your group and you. These materials offer lots of different ideas for incorporating the health components into your already fabulously planned session.

Read the Facilitator’s Guide in order to understand Frost Valley’s physical activity initiative, to effectively use the materials in your session, and for ways to encourage physical activity among your participants in and beyond Frost Valley.

This chart, also featured in the Facilitator’s Guide, highlights each of the sections in this module. This can guide you in selecting what to focus on during the session.

<table>
<thead>
<tr>
<th>Description</th>
<th>Gives a profile of hiking’s health benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Activity</td>
<td>Explains how hiking is aerobic and strength- and bone-building</td>
</tr>
<tr>
<td>Where It Fits within the Recommended Amount of Physical Activity</td>
<td>Points out where hiking fits within the suggested recommended 60 minutes of daily exercise</td>
</tr>
<tr>
<td>Parts of Body Used</td>
<td>Names parts of the body that hiking uses</td>
</tr>
<tr>
<td>Muscles Affected</td>
<td>Names the specific muscles that hiking builds</td>
</tr>
<tr>
<td>Health Benefits</td>
<td>Lists hiking’s overall health benefits</td>
</tr>
<tr>
<td>How It Makes You Feel</td>
<td>Explains hiking’s positive emotional benefits</td>
</tr>
</tbody>
</table>
| Suggestions for Ways to Incorporate | • **Day 1**: Offers suggestions for introducing hiking’s health benefits during the first day of the session  
             |       • **Following Sessions**: Gives lots of ideas for reinforcing participants’ knowledge of hiking’s health benefits during the remaining sessions |
| Some Fun Ideas               | Offers ideas for games and other activities that build participant awareness of hiking’s health benefits |
| Interesting Facts           | Generates interest in hiking |
| Evaluation                   | Presents a modifiable questionnaire about participants’ views on hiking and about whether they will continue beyond Frost Valley |
DESCRIPTION

While participants are hiking, they are getting lots of health benefits. The information in this packet details those benefits; from the muscles hiking develops to the way it makes people feel.

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TYPE OF ACTIVITY: Aerobic/muscle and bone-building

Hiking is an aerobic activity of vigorous intensity. Going up and down hills increases that intensity…and is great for the heart. You use your leg muscles over a sustained period of time, and thus significantly strengthen them. Hiking is also a weight-bearing exercise (when the feet and legs support the body’s weight), which helps to build stronger bones.

WHERE IT FITS WITHIN THE RECOMMENDED AMOUNT OF PHYSICAL ACTIVITY

Hiking can fulfill some or all of the recommended 60 minutes of daily physical activity, most of which should be aerobic. It can make up a portion of the recommended bone building and muscle strengthening activity: at least 3 days a week should include these types of activities.
### HOW IT MAKES YOU FEEL

- Reduces stress, making you feel calm and peaceful
- Makes you joyful, especially because you are in nature

### SUGGESTIONS FOR WAYS TO INCORPORATE

**DAY 1**

1. Before describing the hiking session and what participants will do, ask them whether they have hiked before. Several participants will say "yes." Have a few talk briefly about their hiking experiences. You can prompt them with questions such as:

   - How would you describe a hike? (NOTE: Participants will have different ideas of what a hike is. Urban hiking counts! Cities provide opportunities for treks, meaning hiking is not just about a wilderness experience. For the purpose of this session, knowing what the participants perceive as hiking will guide your explanation of camp hiking.)
   - Where have you hiked?
   - What did you see on your hike?
   - What did you like about hiking? What didn’t you like?
   - How did you your body feel during and after the hike?

<table>
<thead>
<tr>
<th>PARTS OF BODY USED</th>
<th>MUSCLES AFFECTED (See Terms to Know in Facilitator’s Guide)</th>
<th>HEALTH BENEFITS</th>
</tr>
</thead>
</table>
| • Upper legs (front and back)  
• Hips  
• Shoulders & neck  
• Lower back  
• Ankles and knees | • Glutes (*Gluteals*)  
• Core muscles  
• Quads (*Quadriceps*)  
• Hamstrings  
• Heart | • Better bone health  
• Helps you maintain a healthy weight  
• Strengthens heart and lungs  
• Helps you sleep better  
• Reduces risk for some major diseases (like heart disease and diabetes)  
• Improves fitness level  
• Boosts balance and agility as you navigate the uneven outdoor terrain |

**FROST VALLEY YMCA • PHYSICAL ACTIVITY CURRICULUM: HIKING • PAGE 3**
• How did you feel in general while hiking (calm, tired, thoughtful, etc.)?
• What part or parts of your body do you think got a really good workout?

2. Ask participants to explain why hiking is probably a really good physical activity. They can do one or all of the following to get a feeling of how hiking works their bodies:

• Participants can do a “pretend” practice hike to think about and name the parts of their bodies that are moving and the muscles that are getting a good workout (they don’t have to know the exact names but should be able to at least point to the parts that hiking engages.
• Add some weight to participants’ backpacks and have participants see what it feels like to walk with the extra pounds. Where do they feel the weight the most? What does it feel like to walk with extra weight?
• Add an incline (perhaps a wooden ramp or a piece of exercise equipment). Have participants walk up the incline with the extra weight. Ask them what they are feeling.

3. Provide more background on the parts of the body that are most affected and the muscles being worked (use a chart to show the parts and muscles). Explain how a bit more weight and some hills can boost the workout from the hike. Be sure to address the mental impact of hiking: how calm and stress-free people feel, the wonders of being outdoors, etc. That experience is as important as the physical aspect of hiking.

FOLLOWING SESSIONS

1. If possible, give participants the opportunity to build their hiking endurance each day and to log their experience and progress each day on a chart at “base camp.” Participants are likely to carry water bottles, and though they are not big items, they will have some impact on the hiking. Participants can be made aware of that: How does carrying a water bottle affect the hike? Does it make it harder or easier? Does where a bottle is located on your body change the way you hike?

2. Participants can log their progress on a chart at “base camp.” Examples of hiking activities for the remaining days:

• **Day 2** Take participants on a longer hike (a mile or two).
• **Day 3** Take participants on a hilly hike, perhaps with less mileage but definitely with an incline that makes them work a bit harder.
• **Day 4** Take participants on a longer, hillier hike, perhaps with some obstacles to test their agility, flexibility, and coordination.
• **Day 5 (optional)**: Give participants a lightly weighted backpack. Note that there are recommendations for backpacks:
The American Occupational Therapy Association, Inc. recommends: A child’s backpack should weigh no more than about 10% of his or her body weight. This means a student weighing 100 pounds shouldn’t wear a loaded school backpack heavier than about 10 pounds. Factor in a participant’s fitness level, strength, and conditioning. Teens are growing rapidly, and their spines are changing. Heavy backpacks can put stress on the lower back, especially during this growth period. Carrying a backpack in school is very different from carrying a backpack on a long hike — build endurance first. Backpacks should be the correct size for each child, with straps snug against their bodies.

**OR:** Ask participants to hike with a stick or a hiking pole, which many hikers say has additional health benefits, including:

- Builds upper-body strength as you engage muscles not normally used in hiking (biceps, side muscles, pecs, and triceps) and thus provides a full-body workout
- Puts less stress on joints
- Improves balance and stability

**SOME FUN IDEAS**

1. Based on the average step rate per mile (for 30 minutes of continuous activity) a general hike covers about 2.5 miles (2,000 steps equals one mile). Give participants pedometers so they can count their steps while hiking, maybe setting the goal of increasing steps by a certain number each day. They can log this information daily to see the progress they have made during the week.

2. Students can set different walking paces and calculate how long it will take to walk a specified distance (e.g., one mile) at each pace.

3. Have participants talk about how they feel during the hike — physically and mentally — and how that changes each day. Why does hiking make them feel this way? What other activities give them a similar feeling?

4. Have participants name other activities they might be doing during the week at camp (canoeing, rowing, cross-country skiing, swimming, dancing, playing tag, jumping rope, basketball, volleyball, soccer, etc.). Then have them calculate how much activity they have done along with the hiking. Are they doing the recommended 60 minutes a day? How much of what they are doing is aerobic, muscle-building, and/or bone-building? Is it a balanced mix?

5. Tell participants that there are lots of other aerobic and muscle- and bone-building activities they can do — some at camp, others at home. Ask them to name some activities by category, starting with the ones they are doing in camp. Have them compare each activity with the others in terms of their impact on the body: What is similar, and what is different? Which ones do they like the best? Which will they do more often?

6. Encourage participants to try a new activity at camp and to compare it with hiking.
HIKING: Interesting facts

In 2013, 5-year-old Christian Thomas became the youngest hiker ever to complete a thru hike (hiking a long distance trail from end-to-end) on the Appalachian Trail, which is 2,181 miles long.\textsuperscript{ii}

In 2011, Jennifer Pharr Davis set the world record for the fastest thru hike of the Appalachian Trail, which she hiked in 46 days, 11 hours, and 20 minutes. In doing so, she became the first female to ever hold the record.\textsuperscript{iii}

According to the Guinness Book of World Records, the longest hiking trail in the world is the Pacific Crest Trail on the West Coast of the United States. It is about 2,650 miles long.\textsuperscript{iv}

About 1,800–2,000 people attempt to thru hike the Appalachian Trail every year, according to the Appalachian Trail Conservancy. Only 1 in 4 who attempt a thru hike successfully completes the journey, taking an average of six months.\textsuperscript{v}

In the U.S., hiking annually ranks 5\textsuperscript{th} out of the five most popular activities by participation rate: Among Americans ages 6 and up, 34.5 million hike. With an average of 18 outings per hike, there are 603 million total outings per year.\textsuperscript{vi}
**EVALUATION**

1. How FUN would you say hiking is? Choose the number that shows what you think.
   
   3 = A lot of fun   2 = Pretty fun   1 = A little fun   0 = No fun

2. How HEALTHY would you say hiking is? Choose the number that shows what you think.
   
   3 = Very healthy   2 = Pretty healthy   1 = A little healthy   0 = Not healthy

3. Which parts of your body would you say got the best workout from hiking?
   
   - [ ] Legs
   - [ ] Hips
   - [ ] Shoulders and neck
   - [ ] Lower back
   - [ ] Heart
   - [ ] Lungs
   - [ ] Whole body

4. How often might you participate in hiking again at Frost Valley? Choose the number that shows what you think.
   
   3 = Very often   2 = Pretty often   1 = Rarely   0 = Never

5. How often might you participate in hiking again after leaving Frost Valley? Choose the number that shows what you think.
   
   3 = Often (everyday)   2 = Sometimes (once a week)   1 = Not very often (once a month)   0 = Hardly ever (once a year)
ENDNOTES


2Heathcott, Cole. “Meet Buddy Backpacker, The 5 Year Old Thru-Hiker” [Internet - WWW, URL]


4Kuta, Sarah. “Appalachian Trail world record holder to speak in Boulder” [Internet - WWW, URL]

5Valera, Stephanie. “Teen’s Solo Hike to Break Appalachian Trail Record” [Internet - WWW, URL]

6Outdoor Foundation, “2013 Outdoor Recreation Participation” [Internet - WWW, URL]