Welcome 4-H Leaders!

Welcome to the “Body Works” project. There is lots of information, fun facts, and hands on activities that covers the basics of why we look and feel the way we do. This guide provides you with project meeting plans (Skill Builders) that include, a skills list, background information, activity suggestions, and ways to know if your members have learned the skills identified. In short, all the information and tools necessary to make this project a rewarding one for you and your members.

In this project, members will examine, by learning to do by doing, the things that make us look and feel our best. The Leader Guide is written with the expectation that the project leader(s) will have a working knowledge about the project topics and how they work. If not, you may need to do some pre-work / research on the activities, or recruit assistance for certain sections.

Be sure to try out activities, demonstrations or hands on work ahead of time to ensure you have an understanding of each Skill Builder - this also allows for any adjustments should an activity not work for you or if any equipment or supplies are unavailable.

The 3D’s of Learning - Each Skill Builder has three sections of learning called “Dream it!”, “Do it!” and “Dig it!”. Below is a description of each.

Dream it! Plan for Success - this gives members a chance to help plan their activities. A skills checklist, background information, important words, and activating questions are included in the Member Manual so they will be able to think about the topic and activity and decide how they will approach it. The Leader Guide contains in depth background information on the topics, material lists, suggestions, time requirements for activities, and activating, acquiring, and applying questions to engage member’s thinking through each step of the learning process.

Do it! Hands on learning - this is where members are engaged in the activity planned / discussed in the Dream it! Section. Here members are doing the activities and leaders are observing, recording, and providing feedback on how well they are doing. Allow as much individual practice as required; you are assessing the progress and understanding of individual members.

Dig it! What did you learn? - this simply means that members and leaders need to ‘dig into their learning’. For the learning cycle to be completed, both need to reflect on how things went and how well they did. For members, this involves self-assessment, giving feedback, creating meaning from their experiences, and thinking about what they would do differently next time. Once this is done they will be in a good position to apply what they have learned to the next experience.

The sequence of project meetings and specific skills building outcomes for members in this project are on the chart on the following page.
What Skills Will Members Learn?

Each section or Skill Builder (or Builder) in this project has activities that will help your project group learn to do by doing while learning new skills and having fun!

To complete this project, members must:
- Complete the activities in each Builder OR a similar activity that focuses on the same skills, as you and your members may plan other activities.
- Plan and complete the Showcase Challenge.
- Complete the Portfolio Page.
- Participate in your club’s Achievement (See the inside back cover for more information about 4-H Achievements).

<table>
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<tr>
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<th>Members will be able to...</th>
<th>Activities</th>
<th>Page</th>
</tr>
</thead>
</table>
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• Know about opportunities to be physically active in the community | • Goals  
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When you successfully complete your builders, you will showcase what you have learned.

Showcase / Portfolio | • Explain how you were successful in using the skills listed above | • Showcase Challenge  
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Showcase Challenge and My Portfolio Page

At the end of the members’ section are the “Showcase Challenge” and “My Portfolio Page”. The Showcase Challenge page gets members to think about their accomplishments and explain or demonstrate how they were successful. There are a number of suggestions along with planning information to help them decide how they will best “showcase” their learning to friends, family, community members and/or fellow 4-H members.

Record keeping is an important part of every 4-H project. “My Portfolio Page” is a graphic organizer used to keep track of members’ 4-H experiences. As each member learns skills, the evidence of learning (through participation and completion of the various activities) is recorded on the page. When the Portfolio Page has been completed and confirmed by the leader, then it becomes a record of the member’s completion of the project and participation in other 4-H activities beyond the project.

4-H leader assessment of members will happen throughout the project as you assess the progress and understanding of individual members. You need to observe the members doing the skill and record what you see and hear. Your feedback should be positive and descriptive (not just “well done”). Share that feedback with members frequently so they can put your suggestions into action. How you choose to observe and record is up to you. Some methods are to create checklists, videos and notes while encouraging discussions, peer observations and questions. Recognize that members may improve over the course of a builder and that records should be updated to reflect when they demonstrated their best learning. You are discussing how well members are meeting the skills checklists that are at the beginning of each of the project books, in each Builder and on the Portfolio Page.

Projects promote technical, communication, meeting management, and leadership skills, as well as community involvement and real-world experiences. In addition to the specific skills members are to learn in each builder, the following general learning goals for members are important: Following instructions - Working with others - Using supplies safely - Using the key words - Improving with practice - Respecting timelines.

4-H Project Series Skill Development Levels

Each project topic series contains three levels of skill development: explore, discover, and master.

Explore - each project series has is one project outlining the fundamentals. All members will be expected to complete the Explore level project before moving into the Discover level of projects. It introduces the basic skills and terms needed by members for subsequent projects in that series.

Discover - each project series has several project options and members are encouraged to take as many as they would like. At this level, members practice topic specific techniques and gain theme related skills through specialized builders.

Master - multiple project options encourage members to specialize in a topic. They may branch out and take advantage of community options such as cooking for a canteen or participating in a food drive. The Leader’s role is look for opportunities for their members to have more authentic experiences by: working with other mentors, partnering with outside agencies, participating in exchanges, entering competitions, etc. Projects at this level may include the “Partner-a-Project” whereby pre-approved courses will allow members to advance their skills, while applying their learning to the 4-H program.
4-H LEADER TIPS FOR SUCCESS!

♦ To complete, members **must** complete all the activities referred to on the “Project Completion Requirements” page **OR** alternate idea for an activity that would teach the same skill or an age appropriate variation. If activity substitutions are used, be sure to have the member make note in their manuals.

♦ Dependent on time available at each meeting, group size and abilities of group members, you may wish to break the Builders into more than one project meeting.

♦ The internet has lots of interesting websites and educational activities. You may choose to use a search engine to explore the options available. We do not endorse any website or the safety or functionality of any products they may sell. Information/products will be used at your own discretion.

♦ Safety is a number one priority. Care has been taken to create safe, age appropriate activities throughout this manual. As leaders, it is important for you to emphasize safety rules and manage or adapt activities in a manner that will safely match your members abilities. Ensure members have a good understanding of safe working and handling practices when using tools, that they use the appropriate safety equipment when necessary, and that appropriate supervision is provided. A quality experience needs to be a safe experience.

♦ The multiple intelligences theory teaches us that people learn in at least 8 different ways. All individuals will be stronger in some ways or “intelligences” and weaker in others. It follows that the more ways we teach, the more members we will reach. Throughout this project, you will find a mix of writing, reading, hands-on work, artwork, self-evaluation, group discussion and math calculations. Teaching projects using a broad blend will help increase the learning potential of all members.

♦ Projects are designed to teach many skills. However, the 4-H member is always more important than the subject matter. Stress cooperation in the activities where possible to develop teamwork and cooperation skills. These are valuable skills that will assist them in a number of settings. Ensure the work is completed in a manner that members feel good about themselves and their efforts. This can be done by assigning appropriate tasks or roles based on member’s individual abilities. Modelling and expecting supportive behaviour (i.e. no “put-downs”) amongst members, or by other adults, also contributes to a positive experience.

♦ There will be opportunity for experimentation and applying skills that members have learned throughout this project. Experimenting can be frustrating, but learning through trial and error is an important life skill. Explain to members that it is alright to either go onto the next builder or do the builder again if they need the practice. Help the members work through their challenges until they are satisfied with the quality of their designs. Creating inventive 4-H members will be very rewarding.

♦ Celebrating success is an important but sometimes overlooked part of our lives. We encourage you to use the final section to empower the members by celebrating all they have learned in a fun manner. Anything that you do to add to the spirit of fun and the sense of accomplishment of each member will likely be remembered as the highlight of their 4-H year.

*Have fun and thanks for your belief in young people!*
Skill Builder 1: Fitness Basics

Skills Checklist
- Understand the benefits of increasing physical activity
- Set a fitness goal
- Know about opportunities to be physically active in the community

Important Words
Help members define the following words and listen for them using these words in their discussion. To increase the members’ understanding try providing a synonym members know or provide examples. The more personalized the examples the better.

<table>
<thead>
<tr>
<th>Training</th>
<th>Activities that place stress on, or overloads the muscles of the body so that they are required to work harder than normal. To educate or discipline, undergo systematic exercise or preparation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Fitness</td>
<td>The ability to meet the demands of life safely and effectively, without exhaustion or undue stress</td>
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</table>

Thinking Ahead
- What will you discuss with your members? Gather observations and think of examples that will help support your discussion.

Preparing for Success
- Linking back to the Skills Checklist, help members identify how they will know they have been successful in learning from this builder. Discuss what success in these activities might look like, sound like, or feel like.

Dream It!

Activating Strategies
Get members thinking about physical fitness by having them brainstorm a list of words that they would associate with fitness or exercise. Have the members spend some time thinking about their reasons for being physically active. They can brainstorm as a group, or complete the activity individually.

Background for Leaders
Youth today are choosing to become physically active for a variety of reasons. Some may be interested in sports and are already active, while others may do it for the social interaction and fun. Whatever the reason, physical activity amongst youth should be strongly encouraged.

Individuals who are physically fit will gain many health benefits including:
- Increased cardiovascular fitness
- Decrease in the resting heart rate
- Increase in bone density
- Increase in muscle mass
- Decrease in total body fat
Physical fitness is the ability to meet the demands of life safely and effectively without exhaustion or undue stress. It’s an overall measure of physical attributes including cardiovascular endurance, muscular strength and endurance, body composition and flexibility. To improve that fitness or to become physically fit we must exercise our bodies and become more physically active each day.

In addition to the benefits previously listed, physical activity can benefit the mind. Exercise keeps the mind sharp and improves one’s ability to learn and think. It can prevent stress-related illnesses by releasing tension in the body.

Exercise also releases endorphins - a hormone produced by the pituitary gland and hypothalamus during strenuous exercise. They work as “natural pain relievers” and can create a feeling of well-being in the individual.

What’s Weight got to do with it?

Some youth may be interested in increasing their level of physical activity and exercise as a means of losing or gaining weight. In either case, it is important to remind members of the following.

- WEIGHT
  - The only thing that a scale can measure is gravity’s pull on your body
  - A scale cannot measure:
    - whether or not you are eating well
    - your fitness level
    - your self-esteem
    - how good a friend you are
    - your sense of humor
    - your insight and perception
    - how good a worker you are

90 Minutes per Day

Canada’s Physical Activity Guide to Healthy Active Living states that youth should be getting a minimum of 90 minutes of physical activity each day. This includes both moderate and vigorous activities. Examples of moderate activities include bicycling, mowing the lawn, and bowling. Vigorous activities include swimming, jogging, and playing basketball. Youth should be encouraged to slowly increase their time spent being physically active each day to reach the goal of a minimum 90 minutes.

Exercise and Training

To maintain or to improve physical fitness, we should exercise 3-6 days per week. This may seem like a lot, but when you think of all of the activities that we can do each day, you can understand how fitting exercise into your daily routine does not have to be difficult.
Maintaining Physical Fitness

It is important to keep in mind that levels of physical fitness are reversible. If exercise is stopped, one will gradually lose their previous level of fitness. Athletes should continue a maintenance program that will maintain their level of fitness in the off-season of their sport. Such a program will not improve the current level, but prevents regression. A typical maintenance program would take place two to three times a week.

Training

This type of exercise plan or schedule is sometimes referred to as training. It is often associated with preparation for sports, but by definition, training involves activities that place stress on, or overloads, a system so that its requirements are raised above a normal level. Overloading is required to produce any change in the level of fitness. Training is an integral part of any sport or physically activity whether they are recreational or competitive.

Those who are athletes should identify the types and levels of fitness that are most important to the athlete. They should also understand how each kind of fitness applies to their sport and develop basic fitness programs.

It is extremely important to note that, unless working with a professional, it is not recommended that youth participate in a training program that involved resistance exercises, other than those that use body weight. At this age, youth have not yet fully developed the neuro-muscular coordination that is required for that type of training. As these youth are growing, complex training programs are not conducive to proper muscle development, and may even do more harm than good. For this reason, the activities provided involve exercises that use the member’s own body weight to develop strength and endurance. Members will be given the opportunity to learn about resistance training equipment and sport specific training programs, but are not encouraged to attempt or participate in these activities. Throughout this manual we will refer to these types of activities as either physical activity or exercise.

What’s Involved in Physical Fitness?

The daily exercises that we choose should involve as many muscles as possible. In other words, exercises that use the whole body or the larger muscle groups such as the legs and/or back.

Regardless of what activity you choose, an exercise session should include the following:

* Warm-up (cardio respiratory) - to improve circulation, increase body temperature and heart rate, prepare the heart for vigorous exercise and help with mental focus. Ex) jogging, skipping

* Warm-up (flexibility) - to prepare the muscles and joints for the activity to come, reduce muscle tension, and prevent the chance of injury. Ex) static stretches, dynamic stretching

* Cardio respiratory work - to increase the heart rate, improve the efficiency of the lungs and burn calories & fat. Ex) basketball, hockey, dance, running

* Cardio respiratory cool down - to bring the heart rate down gradually (important to avoid dizziness or faintness). Ex) light jog, walking
* Muscular strength and endurance work - to increase physical health, improve muscle strength and endurance, and to increase muscle size and bone density. Ex) resistance training.
* Warm-down, relaxation and flexibility – to return the heart rate to its resting state, prevent soreness, stiffness and injury, relax the muscles following vigorous exercise and improve overall muscle flexibility. Ex) light jog, walk, easy lap around the ice, light stretching

**Stretching**

Stretching is an important component of fitness which reduces muscle soreness and prevents injury. Stretching also maintains flexibility, helping you to move easily and keep your muscles relaxed.

**Tips while stretching**

- Perform a complete warm-up prior to any stretching, moving all of your joints and muscles.
- Execute movements in a slow, controlled fashion. Bouncing or jerky movements may result in injury.
- Hold stretches for a minimum of 30 seconds, up to one minute.
- Do not stretch to the point of pain. Pain is a signal that your body is being stretched beyond reasonable limits.
- Keep your stretches under control and your body relaxed.
- Be sure to breathe while stretching.
- Perform each stretch 2 times (after warm up and during warm down).
- Symmetry is important, be sure to stretch both sides of the body equally.

Look back to the Explore Body Works project for a list of stretches that you can perform.

**FITT Formula**

When learning about and participating in any type of fitness training or exercise, it is important to think about the FITT Formula. This formula describes four factors that can affect the quality of a work out. These factors are

- **F** = frequency - the number of times an exercise is done (could be measured in sets, repetitions, days, etc.)
- **I** = intensity - the amount of energy or effort that is being put into the exercise (ex-amount of resistance or speed of exercise)
- **T** = time - the amount of time spent on the exercise (ex-number of minutes spent running)
- **T** = type - the part of the body that the exercise designed to train (ex-muscle strength, flexibility, cardiovascular endurance, muscle endurance)

**Pain in Exercise**

Pain provides valuable information about your body and how it is performing. It is important to understand what kind of pain should be listened to during exercise and what type is helpful or safe to work through. We can define the different types of pain you can experience:

- Fatigue and discomfort. This is an unpleasant feeling produced by effort, but not strong enough to be labelled “pain”. We learn to be “comfortable,” as these efforts are a regular and necessary part of most sports or exercise.
Positive training pain. This pain often occurs with endurance exercise, and includes muscle fatigue and changes in the lungs and heart that can range from unpleasant to what is typically thought of as pain. These are neither threatening nor a sign of injury. In short, positive training pain is a good sign of effort and improvement.

Negative Training pain is still not indicative of an injury, but it goes beyond positive signs of training benefit. An example may be extreme soreness that lasts for days. This may be a sign of overtraining.

Negative warning pain is similar to negative training pain, with the added element of threat. It may be a new experience of pain and a sign of injury occurring. It typically occurs gradually, and allows us to evaluate potential training causes and respond appropriately.

Negative acute pain is an intense and specific pain that occurs suddenly, often a result of injury. It is often localized to a specific body part and is labelled as threatening.

Numbness is rare but of very serious concern. It is when we feel nothing when soreness, fatigue or pain should be felt. Instead, limbs are numb. This may be a sign of serious injury or pushing one's body past its physical limits.

Accepting the reality that pain is a part of exercise may be most helpful. You cannot perform at a high level and not experience pain. Prior to exercise, decide how much pain you are willing to experience to achieve your goals. You may be surprised to find your pain suffering will be lessened when you allow pain to be a part of sport.

Note that when participating in some of the activities in the builders, members should be aware of what type of pain they are experiencing, if any.

Calorie Balance

Calories are sometimes given a bad reputation. Some people talk about counting calories as a way to manage weight. But calories are important. They exist in all foods and are simply a measurement of the energy that is stored in the food that your body can use. Everyone has a recommended number of calories that they should consume each day. But in order to manage our body weight we need to use up those calories through daily physical activity. Healthy sustainable weight loss is approximately 2 lbs/week.

Dieting

Dieting brings temporary weight loss, but 1/3 to 2/3 of the weight is usually gained back in the first year. Almost all of the weight is gained back within five years and sometimes much more. The cycle of losing and gaining can be harmful to your health and it can lead to frustration, anger and an even poorer body image. Your goals should be to achieve better health and fitness, not simply weight loss.
Weight Loss

Encourage members to set fitness goals that focus on an improved level of fitness rather than weight loss or gain. Reality is that, when accompanied by a balanced diet, any increased level of physical activity will result in a change in body weight. This change will depend on the individual and the activities they choose to participate in. Some will lose body fat, while others will build muscle, resulting in a higher body weight. In any situation, body weight should only decrease at a rate of approximately 2 lbs per week. This is considered a healthy, sustainable rate of weight loss. Keep in mind that as youth, their body will continue to change and grow throughout puberty. Neither weight gain or loss should be priority at this age.

Gaining Weight

Other members may be interested in gaining muscle mass or “bulking up”. Youth should be cautious about setting this type of fitness goal. Building muscle is best done after the growth spurt. Four factors affect weight gain. They are, genetics, exercise, food intake, and rest and recovery.

Muscle tissues are built when blood is forced into muscles during resistance training (putting stress on the muscles). This activates “micro trauma”, or tiny tears in the muscles. When the body recovers from this exercise the body repairs the muscle tissues rebuilding them bigger and stronger than they were. Therefore rest and recovery time is essential after exercise.

Goals

Goals are statements of what an athlete or team wants to accomplish. They provide both a sense of purpose and a sense of direction to those who are training or in competition.

There are two main types of goals:

- **Outcome goals**, which are about what you achieve. For example, beating a personal time, scoring a specific number of goals or winning a medal.

- **Process goals**, which are about how you achieve your goal. For example, achieving fitness goals by attending all practices, training five time a week, going to weekly meetings, and monitoring fitness monthly. Developing team unity to improve the team’s standing in the league is another example of a process goal.

These two types of goals are related. Remember that both outcomes and process goals must be related to a time period, either the long or the short term.

**Long-term goals** are goals that will be reached by the end of a season, for example (or even later in some cases). **Short-term goals** are the small steps taken right away to reach the desired long-term goal.

Athletes who use goal setting effectively tend to:

- suffer less from anxiety and stress
- show higher levels of self-belief and self-confidence
- show greater control over the performance process
Setting goals are simple, accomplishing them can be difficult. Don’t ensure your own failure by setting an unachievable goal. Often we set goals where the outcome is beyond our control. Try setting goals which rely on your own individual performance, not the outcome of any one event. Some strategies for helping you accomplish your goals include:

- Setting daily or weekly goals
- Set performance related goals
- Write goals down and regularly monitor progress – goals are ineffective if forgotten. Write them down being as specific as possible.
- Use short-range goals to achieve long range plans.
- Set positive goals as opposed to negative goals – whenever possible, set goals in positive terms by focussing on behaviours that should be present rather than those that should be absent.
- Seek support of goals – Others in our lives can help ensure goals are achieved. Effort should be made in educating these individuals about the types of goals that you are setting for yourself and the importance of their support in encouraging progress towards the goals.
- Most importantly, reward yourself for your accomplishments

Goals

Learning Goals

Know the different types of goals.

Background Information

Long-term goals are goals that will be reached by the end of a season, for example (or even later in some cases). Short-term goals are the small steps taken right away to reach the desired long-term goal.

Age Considerations

All Ages

Time Required

10 minutes

Supplies

Members project manual and a pencil

Instructions

Have members come up with examples of long and short term goals.

Do It!

Ready, Set, GOAL!

Learning Goals

Know how to set a fitness goal
**Background Information**

In order to get the most out of this project, the member needs to identify why they chose to take it. They might be interested in sports, or they could just want to be more physically active. After some reflection and discussion, members need to select a fitness goal and understand the importance of setting this type of goal.

As with setting any goal, the purpose is to give members something to work towards. They are better able to stay motivated and work towards a final outcome if they have clearly identified where they want to end up. The types of goals can vary, but be sure to help members narrow down, or better define their goals to make them realistic.

**Age Considerations**

Ages 10 and up

**Time Required**

Approximately 15 minutes

**Supplies**

Members project manual and a pencil

**Safety Considerations**

Be sure that the members are setting realistic goals that they are physically able to achieve. For example, at this age building body mass is not an appropriate or realistic goal, as these members may be going through or have not yet reached puberty.

**Instructions**

Have the members answer the following questions:

- Why did you decide to take this project?
- What do you hope to learn about in this project?
- What activities did you hope to do in this project?

Have the members write a fitness goal by using the information they provided in the answers above. Their fitness goal will likely be centered around a level of physical activity or physical fitness that they want to achieve. They will most likely not completely accomplish their goal by taking this project, but they will gain the knowledge and skills that they will need to get them there. Remind members that a goal should be specific and realistic, something they think they can achieve within a certain amount of time, or by a specific date.

Example: I am going to start and maintain a weekly exercise plan for at least the next 6 months

If the members are having trouble thinking of a goal, tell them to consider starting by increasing their physical activity by at least 30 minutes a day - and make 10 minutes of that vigorous activity, as recommended by Canada’s Physical Activity Guide to Healthy Active Living.

Here are some additional questions that may help them create their goal.

- I would like to increase my level of fitness by....
Activities or exercises that I would like to try are…
I would like to experience these changes in my body…
I would like to start exercising so that I can…

Have members write down their goal in the spaces below.

<table>
<thead>
<tr>
<th>My goal is to</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>By (date)</td>
<td></td>
</tr>
<tr>
<td>By doing (activities)</td>
<td></td>
</tr>
<tr>
<td>For this long (duration)</td>
<td></td>
</tr>
<tr>
<td>With help from</td>
<td></td>
</tr>
<tr>
<td>I will know that I am working towards this goal when</td>
<td></td>
</tr>
</tbody>
</table>

Now re-write your goal into a sentence below.

Discussion
Have the members share their goals and give feedback on ways to improve them.

Fitness in Your Community

Learning Goals
- Understand the benefits of increasing physical activity
- Learn about opportunities to be physically active in their community

Background Information
In order for members to understand how and why they should increase their physical activity, they need to understand that others in their community are also physically active. They also need to know what resources are available to them.

Age Considerations
Ages 10 and up

Supplies
Access to a fitness facility, school, community gym or other indoor or outdoor fitness facilities in the community.

Safety Considerations
When visiting a fitness facility, be sure that members do not use the equipment without permission and supervision.
Instructions

Have members brainstorm what fitness facilities are in or near their community. This could include any indoor or outdoor facilities used for physical exercise. Examples include gyms, parks, playgrounds, pools, recreation centres, etc.

Then through a visit, phone call or internet research, find out the following:
- Purpose of the facility
- Equipment available
- Activities that can be done
- Supervision provided, if any
- Classes or lessons provided
- Cost for membership or use
- Hours open
- Other benefits
- Ease of access for you

Have members record their findings in any way they choose. Ex) photographs, drawings, story, poster, etc. Have each member identify their favorite facility and explain why they liked it.

Dig It!

Discuss

Have members discuss and answer the following questions from the Member Manual.
- What did you learn about your current level of physical activity in this builder?
- What types of changes will you need to make to your lifestyle and schedule to reach your fitness goal?
- Why is it important to know your current level of fitness?
- Why do you think many youth do not get 90 minutes of physical activity each day?
- How could you use the knowledge of fitness basics in your daily life?

What’s Next

In the next builder members will learn about the nutritional requirement associated with being physically active.
In the Member Manual

4-H Body Works Series
Discover Your Fitness

Introduction

Welcome to the "Body Works" project. Do you want to learn more about your personal fitness? Are you ready to take your physical fitness seriously? Then this is the project for you.

In this project, you will learn about physical fitness and how to improve your overall health. You will learn about the importance of exercise, nutrition, and mental health. You will also learn how to set goals and track your progress.

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- Project Summary
- Skill Builder 1: Fitness Basics
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- Skill Builder 3: Encouragement & Flexibility
- Skill Builder 4: Exercise Plan
- Skill Builder 5: Mental Training
- Showcase Challenge
- Portfolio Page

- Draft 2010 -

Lucky Says....

You likely already know that there are many reasons to be physically active. You may be interested in sports and are already active, or you might just like going for a walk or bike ride with a friend. Whatever the reason, physical activity is extremely important for your health.

Skills Checklist

- Understand the benefits of increasing physical activity
- Set a fitness goal
- Know about opportunities to be physically active in the community

Dream it!

Here's a list of reasons to be physically active. Can you think of any more?

- Builds strong bones
- Builds muscles and increases strength
- Decreases in total body fat
- Increases body awareness & coordination
- Improves self-esteem and body image

Watch for these important words throughout this builder:

Physical Fitness, Training

Important words

Canada's Physical Activity Guide to Healthy, Active Living states that youth should be getting a minimum of 60 minutes of physical activity each day.

Lucky Asks - What's Weight got to do with it?

You, or someone you know, may be interested in becoming more physically active as a way to lose or gain weight. But that shouldn't be the only reason. Here's something you should know about weight:

- WEIGHT
  - The only thing that a scale can measure is gravity's pull on your body
  - A scale cannot measure:
    - whether or not you are eating well
    - your fitness level
    - your self-esteem
    - how good a friend you are
    - your sense of humor
    - your insight and perception
    - how good a worker you are

If Barbie were human, she would measure 38B-18-24. No real woman could duplicate that shape unless she had a few ribs removed!
In the Member Manual

What’s Involved in Physical Fitness?

The daily exercises that we choose should involve as many muscles as possible. In other words, exercises that use the whole body or the larger muscle groups such as the legs and/or back.

Anytime you are physically active you should try to include:
- Warm-up (cardio respiratory), Ex: jogging, skipping
- Warm-up (flexibility), Ex: static stretches, dynamic stretching
- Cardio respiratory work, Ex: basketball, hockey, dance, running
- Cardio respiratory cool down, Ex: light jog, walking
- Muscular strength and endurance work, Ex: resistance training, sports listed above
- Warm-down, relaxation and flexibility, Ex: light jog, walk, easy lap around the ice, light stretching

GOALS!

1) Long-term goals are goals that will be reached by the end of a season, for example (or even later in some cases).
   Example:

2) Short-term goals are the small steps taken right away to reach the desired long-term goal.
   Example:

Do it!

READY, SET, GOAL!

Let’s create a fitness goal by using the information you provided in the examples above. Your fitness goals will likely be centered around a level of physical activity that you want to achieve. You will most likely not completely accomplish your goal by taking this project, but you will gain the knowledge and skills you will need to get there. Remember that a goal should be specific and realistic something you believe that you can achieve.

Example: I will start and maintain a 3 day/week workout schedule for at least the next 6 months.

Complete these statements to help get started.
- I decided to take this project because...
- By taking this project, I hope to learn...
- In this project I hope that we get to...
- These are the things I’m doing right now to be physically active...

Lucky Says

Remember – schedule your exercise into your day and try not to change your schedule. Make yourself a priority, everything else you would do will be better because of it.

Get FITT - The FITT Formula!

- Frequency - the number of times an exercise should be done
- Intensity - the amount of energy or effort that is being put into the exercise
- Time - the amount of time spent on each exercise
- Type - the part of the body that the exercise is designed to train

Now complete the chart below to figure out your fitness goal.

<table>
<thead>
<tr>
<th>My goal is to</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>By (date)</td>
<td></td>
</tr>
<tr>
<td>By doing (activities)</td>
<td></td>
</tr>
<tr>
<td>For this long (duration)</td>
<td></td>
</tr>
<tr>
<td>With help from</td>
<td></td>
</tr>
<tr>
<td>I will know that I am working towards this goal when</td>
<td></td>
</tr>
</tbody>
</table>

My Fitness Goal...

Fitness in Your Community

It’s time to find out where you can be active in your community!

We can get exercise or train nearly anywhere: at home, at the park, or even in their local fitness facility. Most communities have a gym or fitness facility. Visit or research the facilities in your community and do a little research. I’ll bet there are more places than you can think of.

Now do a little research. Go out into your community and find other places where you can exercise or be physically active. While you’re out, collect the following information.
- Purpose of the facility
- Equipment available
- Activities that can be done
- Supervision provided, if any
- Classes or lessons provided
- Cost for membership or use
- Hours open
- Other benefits
- Ease of access for you

Brainstorm!!!

Places where I can be physically active in my community...

Dig It!

Discuss

- What did you learn about your current level of physical activity in this class?
- What types of changes will you need to make to your lifestyle and schedule to reach your fitness goal?
- Why is it important to know your current level of fitness?
- Why do you think many youth do not get 90 minutes of physical activity each day?
- How could you use the knowledge of fitness basics in your daily life?

What’s Next

The next module is about nutritional requirements for physical activity. Get ready to eat well!
**Skill Builder 2: Nutrition**

**Skills Checklist**

- Understand the importance of proper nutrition for a physically active lifestyle
- Identify nutrient dense foods and their benefits in exercise
- Understand how to manage hydration during physical activity.

**Important Words**

Help members define the following words and listen for them using these words in their discussion. To increase the members’ understanding try providing a synonym members know or provide examples. The more personalized the examples the better.

<table>
<thead>
<tr>
<th>Dehydration</th>
<th>The loss of water (due to exercise, illness, environment, medications or fluid deprivation) and salts essential for normal body function. It is defined as 1% body weight loss resulting from fluid loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrolyte minerals</td>
<td>Sodium, potassium, calcium and magnesium, which help provide the electrical stimulus required to ‘fire’ the muscle fibre</td>
</tr>
<tr>
<td>Nutrient</td>
<td>A chemical compound (such as protein, fat, carbohydrate, vitamin or mineral) that is found in food. Nutrients are used by the body to function and maintain health</td>
</tr>
</tbody>
</table>

**Dream It!**

**Thinking Ahead**

- What will you discuss with your members? Gather observations and think of examples that will help support your discussion.

**Preparing for Success**

- Linking back to the Skills Checklist, help members identify how they will know they have been successful in learning from this builder. Discuss what success in these activities might look like, sound like, or feel like.

**Activating Strategies**

- To get members thinking about nutrition, have them review the 4 food groups and give examples of foods from each group. Ask members to recall the benefits of enjoying a healthy, balanced diet.

**Background for Leaders**

In the Exploring Body Works manual, members learned about the four food groups, and the importance of enjoying a variety of foods each day. In this Skill Builder, members will learn about the essential nutrients found in food and how they affect performance for daily physical activity. These nutrients are carbohydrates, protein, fat, vitamins, minerals and water. Members will learn how to prepare energy rich, nutrient dense snacks, and discover the benefits of water and sports drinks.
Snacks

Snacks are an important part of a good nutrition plan, especially if you do sports or exercises after school. When you’re at school or work all day, you need snacks that won’t spoil in your backpack or bag.

Here are some ideas that don’t need refrigeration:

- Granola and cereal bars. Check the nutrient information panel on the box for the sugar and fibre content in the bars. Choose bars with lower amounts of sugar, and more fibre.
- Dry cereal or dry cereal mixed with dried fruit and nuts.
- Unsalted nuts (almonds, peanuts).
- Energy bars. Choose a store bought bar or try making your own. Use the internet to search for “homemade energy bars” and you’ll find hundreds of interesting recipes.
- Fresh or dried fruit. Just make sure to pack fresh fruit so it doesn’t get squished in your bag.
- Juice boxes. These are a nice break from drinking water. Look for 100% juice rather than fruit drinks or fruit beverages. Fruit juice will give you some vitamins and minerals along with energy and fluid. Fruit drinks and beverages are just sugar, water and flavourings.
- Dried fruit and nut mixes. Make your own blend of dried fruits and nuts, or try one of the many mixes in the bulk food section of the grocery store or at the bulk food stores.
- Whole grain crackers and nut butter (peanut, almond or hazelnut spread like Nutella™).

If you’re able to, keep a stash of snacks (juice boxes, granola bars, dried fruit, nuts etc) in your locker, at your desk, or in the car. This way you’ll always have a healthy snack option.

Recovery

To get the most from exercise, you need to make sure you’re taking steps to allow your body to recover from all that work. Good recovery means replenishing the glycogen stores in muscles, repairing muscle damage, replacing fluids lost by sweating and getting enough rest. If you exercise twice or more a day, or play sports multiple times in a day, you need to pay particular attention to topping up your glycogen and fluid levels. There’s less time to recover and, if you don’t make a conscious effort to eat and drink enough, you may not be able to train or compete as effectively next time.

Replenishing glycogen stores:

- **What you need:** Carbohydrate
- **When you need it:** within 15-30 minutes after exercise and every 2 hours for the next 4-6 hours.
- **How much:** 1 to 1.5 grams carbohydrate per kilogram body weight. Ex) Find the carbohydrate content of your favourite foods by checking the nutrition panel on the labels.

Here are some ideas to get you started.

- 1 cup (250 mL) Chocolate Milk 27 g & 1 package Instant Oatmeal 20 g
- 1 cup (250 mL) White Milk 13 g & 1 large Banana 27 g
- ¾ cup (175 mL) Fruit Yogurt 30 g & 4 Tbsp (60 mL) Raisins 29 g
- 1 Bagel 38 g 4 Tbsp (60 mL) & Craisins™ 25 g
- 2 slices Bread 36 g 1 cup (250 mL) Apple Juice 30 g
- 2 frozen waffles 26 g & 1 cup Kraft Dinner™ 49 g
- 6 Graham Crackers 33 g & 6 inch Sub Sandwich 50 g
- 1 Oatmeal to Go™ bar 33 g & 1 cup (250 mL) Gatorade™ 14 g
Example:

**Youth #1** - Weight 50kg (121lb)

50 X 1.0-1.5g = 50-75 grams carbohydrate needed for recovery

Suggestions:
- 1 cup chocolate milk and a toasted bagel 65 g carbohydrate
- Banana and 6 graham crackers 60 g carbohydrate
- 2 cups Gatorade™ and a sub sandwich 78 g carbohydrate

**Nutrients for the Body**

Taken from
Eat to Compete – Finding the Energy
Karen Armstrong RD

**Carbohydrates**

We know that energy comes from the food that we eat, particularly the carbohydrates in food. Carbohydrates are sugars that the body can break down and store for energy. Your muscles can store a limited amount of carbohydrate, in the form of glycogen, to use for energy during exercise. This energy source is good for 90 minutes or less. Once the muscle glycogen is gone, you have to replace it by eating carbohydrate. If you don’t, your muscles are running on empty and you’ll have trouble getting through your training session, game or activity.

Carbohydrate is easy to find. It can be found in grain products, fruits, vegetables and milk. It’s also in white and brown sugar, syrup, candy and pop. However, sugars, candy and pop don’t give you vitamins, minerals and fibre, all of which are important for physical activity. It is wise to choose whole grains, fruits, vegetables and milk as your carbohydrate sources.

Pasta is often a staple in active households. It’s a great source of carbohydrate, easy and quick to prepare, really versatile and comes in some pretty interesting shapes. Most stores now carry whole grain and multigrain pasta. These high fibre pastas are a great way to add a bit more fibre to a meal without really noticing.

Pastas that have even more fibre and additional protein can be made from spelt, buckwheat or kamut. These are ancient grains that are becoming more popular for use in breads, cereals and pastas. You’ll find these pastas, along with spelt and kamut flour, in specialty shops and bulk food stores. All of these grains can be grown in Manitoba.

**Protein**

Protein is an essential nutrient for growth, and to maintain and repair muscles. Our main sources of protein are found in the Meats & Alternates food group. This group includes animal sources such as poultry, eggs, fish, and red meats, as well as vegetable sources like nuts, tofu, lentils and beans. You’ll also find foods containing protein in the Milk & Alternates group (milk, cheese, yogurt).

If you’re not getting the minimum number of servings from the Meats & Alternates, and the Milk & Alternates groups, you’re not getting enough protein, or iron, calcium, and zinc. This is often the case for teenage girls, and women. If you boost your servings into the recommended range, you’ll probably notice a difference in your ability to train and compete, and recover from exercise. The improvement has more to do with simply eating better, rather than specifically eating more protein.
If you’re getting the recommended servings from all food groups, chances are pretty good that you’re already meeting your body’s protein needs. In this situation, adding more protein isn’t necessarily better. Adding extra protein adds extra calories and if you aren’t burning these extra calories, they’ll be stored as fat and your weight will creep up. If you’re adding extra protein to build muscle, keep in mind there’s a limit to the conversion of protein to muscle. Once you’ve reached the limit, adding more protein does not equal more muscle.

If you are a vegetarian or choose to avoid animal products, you need to find another source of protein. Plant proteins aren’t as well digested or complete as animal proteins, so choose a variety of different types of proteins foods every day. Take a look at the following table for the protein content of various plant foods.

<table>
<thead>
<tr>
<th>Food</th>
<th>Protein (grams)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tofu, regular, firm or extra firm - 3/4 c or 175 mL</td>
<td>21</td>
</tr>
<tr>
<td>Pumpkin seeds (hulled) - 1/4 c or 60 mL</td>
<td>19</td>
</tr>
<tr>
<td>Weiner, meatless - 1 (70g)</td>
<td>14</td>
</tr>
<tr>
<td>Lentils and beans, cooked or canned (drained) - 3/4 c or 175 mL</td>
<td>9-13</td>
</tr>
<tr>
<td>Peanut or nut butter - 2 tbsp or 30 mL</td>
<td>5-8</td>
</tr>
<tr>
<td>Fortified soy beverage - 1 c or 250 mL</td>
<td>7</td>
</tr>
<tr>
<td>Mixed nuts (shelled) - 1/4 c or 60 mL</td>
<td>6</td>
</tr>
<tr>
<td>Multi-grain, whole grain bread - 1 slice (35 g)</td>
<td>4</td>
</tr>
<tr>
<td>Whole wheat pasta - 1/2 c or 125 mL (cooked)</td>
<td>4</td>
</tr>
<tr>
<td>Rice, brown - 1/2 c or 125 mL (cooked)</td>
<td>3</td>
</tr>
</tbody>
</table>

Keep in mind that the Recommended Dietary Allowances are as follows.
- Males ages 9-13 - 35 grams/day
- Males ages 14-18 - 52 grams/day
- Females ages 9-13 - 34 grams/day
- Females ages 14-18 - 46 grams/day

**Protein foods versus protein powder**

Protein powder is a protein supplement in the powder form that is often used by body builders to make sure that they can get the high level of protein needed to build their bodies through lifting weights and exercise. It aids in the building of lean muscle mass. They are commonly sold at health food stores and in some fitness facilities and can be added to drink, or come in the form of pre-made shakes. Protein powders can be expensive, and youth do not require this type of supplement. If they are consuming the recommended number of servings from the four food groups, they should be consuming enough protein.
Fats

Fats are complex molecules composed of fatty acids and glycerol. The body needs fats for growth & energy. Fats are the most energy efficient form of food. Each gram of fat provides 9 calories (more than 2X as much as carbohydrates and protein). Because fats are such an efficient form of energy, the body deposits excess fat. Fats also carry fat soluble vitamins (such as Vitamins A & D) throughout the body. 30% of the daily diet should be comprised of fats. Sources of fat can come from red meats, milk, cheese or nuts.

Vitamins

Vitamins are a group of organic substances essential for normal metabolism, growth and development, and regulation of cell function. They can be either fat soluble or water soluble. The fat-soluble vitamins - A, D, E, and K - dissolve in fat and can be stored in your body. The water soluble vitamins - D and the B-complex vitamins (such as vitamins B6, B12, niacin, riboflavin, and folate) - need to dissolve in water before your body can absorb them. They pass through your body and therefore you need a fresh supply of these vitamins every day.

- Vitamin B12 - Vitamin B12 is found naturally only in animal products. It helps to make red blood cells, and is important for nerve cell function. Both of which are important in exercise. If you don’t eat eggs or dairy products, include foods fortified with vitamin B12 like soy beverages and meat substitutes (veggie dogs, veggie burgers).
- Calcium and Vitamin D - Calcium and vitamin D are important for healthy bones, muscles and nerves. Dairy products, fortified soy beverages and some fortified orange juices provide both. Almonds, figs, beans, tofu set with calcium, broccoli and kale also provide calcium.

-Source: Canadian Nutrient File, version 2007b, Health Canada

Minerals

Minerals are inorganic, meaning that they are not made by plants or animals, but rather come from the soil and water. Just like vitamins, minerals help your body grow, develop, and stay healthy. The body uses minerals to perform many different functions - from building strong bones to transmitting nerve impulses. Some minerals are even used to make hormones or maintain a normal heartbeat. Your body needs larger amounts of some minerals than others, such as calcium to grow and stay healthy. Other minerals like chromium, copper, iodine, iron, selenium and zinc are called trace minerals because you only need a very small amount of them each day.

Iron

One of these minerals that should be included in your diet is iron. You need iron to make hemoglobin, which is the part of the red blood cells that picks up oxygen from your lungs and carries it through the bloodstream to every cell in your body. When your iron stores get low you make less hemoglobin. This means your cells won’t be getting as much oxygen as they need. When this happens, you start feeling tired and weak. You can’t exercise the way you’d like and your performance doesn’t improve, or starts to get worse. Anyone with poor eating habits is at risk for low iron stores, iron deficiency, and anemia. Youth, girls, and women, vegetarians and athletes all have a higher risk. Ask your doctor about checking your iron stores if you’re feeling tired all of the time.
How much iron do you need?

Look at the chart below to determine the recommended daily amount of iron for your sex and age group.

<table>
<thead>
<tr>
<th>AGE</th>
<th>MALES</th>
<th>FEMALES</th>
</tr>
</thead>
<tbody>
<tr>
<td>9-13 years</td>
<td>8 mg</td>
<td>8 mg</td>
</tr>
<tr>
<td>14-18 years</td>
<td>11 mg</td>
<td>15 mg</td>
</tr>
<tr>
<td>19-50 years</td>
<td>8 mg</td>
<td>18 mg</td>
</tr>
</tbody>
</table>

Look at a nutrition label of an iron rich food product and determine how much iron you would gain by eating this food.

Choosing foods that contain iron is the best way to ensure that you’re getting a steady supply of this vital nutrient. Iron in food comes in two forms - heme iron which is easily absorbed by your body, and nonheme iron which needs some help to be absorbed.

Heme iron is found in animal foods. Non heme iron comes from plant sources. Combine nonheme foods with heme foods, or with foods high in Vitamin C so the iron can be better absorbed.

Some foods rich in heme iron:
- Red meats (beef, pork, bison, elk)
- Dark poultry meat (thighs, drumsticks)

Some foods rich in nonheme iron:
- Dark green leafy vegetables
- Beans (eg - baked beans, kidney beans, black beans)
- Lentils
- Firm tofu
- Nuts and seeds (eg - almonds, pumpkin seeds)
- Iron enriched breads, cereals and pastas
- Dried fruits (eg - apricots, raisins, prunes)

Some foods rich in Vitamin C:
- Oranges and grapefruit
- Mangos
- Kiwis
- Red Peppers

Vegetarians need almost twice the iron of non-vegetarians because iron from plant foods is poorly absorbed. Training, or intense exercise can increase your need for iron too. Vegetarians need to ensure that they eat enough iron rich foods every day. Iron-rich food options include beans, lentils, seeds, soy, and whole grain or fortified cereals, breads and pastas. And include a source of vitamin C like citrus fruits and juices, strawberries, bell peppers, and broccoli to help your body absorb the iron from plant foods.

Should you take an iron supplement?
- Taking iron supplements without having your blood checked first is not a good idea. Too much iron from supplements can be toxic. Do not take an iron supplement unless your doctor tells you to. They will give you instructions on how much and how often to take it.
Hydration and Water

Water – regulates body temperature, carries oxygen and nutrients to cells, lubricates joints and protects the spinal cord. It flushes out waste products through kidneys and liver and serves as the medium for all reactions in the body. Water cushions organs and tissues, promotes digestion, helps prevent constipation and transports minerals throughout cells of the body.

Drinking water contains several electrolytes (substances in solution that conduct an electric current), including calcium, chloride, fluoride, magnesium, potassium, and sodium. Even though it contains no calories, water is the medium for most chemical reactions in the body, especially those metabolic reactions involved in energy production. The body uses water as a coolant, helping to regulate body temperature during exercise, when fever is present and in hot environments. Water also serves as a cushioning component between joints, in the spinal cord and in the brain.

During physical activity the body loses water as sweat and as vapor in exhaled breath. When losses are significant, dehydration becomes a threat. The first symptom of dehydration is fatigue; a water loss of even 1 to 2 percent of body weight can reduce a person’s capacity to do muscular work. When water loss reaches about 7 percent of body weight, a person is likely to collapse. To prevent dehydration and the fatigue that accompanies it, drink plenty of liquids before, during, and after exercise.

Hydration

Staying hydrated means providing the body with enough water to maintain normal body function. Remaining well hydrated is very important especially during the hot summer months and for anyone participating in physical activity. Urine colour is a good indicator of hydration. Very pale yellow indicates being within 1% of optimal hydration.

Hydration needs of physically active youth

Unfortunately, thirst is not an accurate gauge of hydration. In fact, when thirst becomes apparent, mild dehydration is present. The optimal fluid for hydration depends on a number of variables including: exercise intensity, exercise duration, ambient temperature, existing hydration levels, fitness, individual characteristics (ie – body weight, size, sex)

“Voluntary dehydration” happens when an insufficient amount of fluid is consumed even when sufficient fluids are offered and available. Physically active youth should be encouraged and reminded to drink fluids throughout the day, throughout exercise sessions, and drink fluid to replace sweat loss after exercise. Daily fluid recommendations are 5 to 8 cups for 7 to 18 year olds. This does not include the additional needs associated with exercise.

Youth athletes should have an established drinking schedule that is used for exercise sessions. The following is a suggested guide. Keep in mind, however, that the drinking schedule should be tailored to individual needs, which are affected by environmental conditions, exercise intensity, and fitness level of the athlete. In general, 11 to 18 year olds should drink 2 to 2 ½ cups 2 hours before exercise, 1 to 1 ½ cups 15 minutes before exercise, and ½ cup every 15 minutes during exercise.

Sports Drinks - They certainly are popular these days. But what are the benefits of a sports drink? Well, for muscles to contract and do work or exercise continually they need three things:

1. Water
2. Electrolyte – A substance in solution that can conduct an electric current.
Electrolytes in the human body include calcium, chloride, fluoride, magnesium, potassium and sodium. They help provide the electrical stimulus required to ‘fire’ the muscle fibres.

3. Glycogen - a high grade fuel made from carbohydrates which can actually be stored in the muscles.

A sports drink can provide all three of these, but there are many sports drinks on the market. Therefore, it is important to know what they are, and how they work.

Fluid/electrolyte replacement drinks aim to provide fluid and electrolytes in an 'isotonic' form, ie. the same concentration (or 'saltiness') as blood plasma. Research has shown that the water in isotonic drinks is absorbed from the stomach more rapidly than pure water alone. The added electrolyte minerals help to make the drink isotonic and to replace minerals lost through sweating. Fluid replacement drinks are especially useful in hot conditions where heavy sweating occurs or where the event is over an hour long.

Some fluid replacement drinks also provide small amounts of carbohydrate, but this is often in order to help make the drink isotonic rather than to supply large amounts for muscle glycogen replenishment.

Ready-mixed drinks can be very expensive - therefore drinks in powdered form that can be mixed on your own may be a more economical choice. This also allows you to fine tune for taste preferences.

You can also make your own fluid/electrolyte replacement drink by taking a litre of pure orange juice and adding a litre of water and half a teaspoon of table salt.

These sports drinks should not be confused with energy drinks such as Red Bull® or Rockstar®. These types of drinks contain high levels of caffeine and are intended to increase mental alertness. They should not be used in place of water or sports drinks to rehydrate or recover from physical activity.

**Dream It!**

**Activating Strategies**

**Nutrient Match-up**

Review Canada’s Guide to Healthy Eating and discuss the major nutrients. Have the members create match definition for each one.

**Nutrient Rich Foods**

Discuss the major nutrients and have members list examples of food that are rich in the following:

- Carbohydrates
- Protein
- Fats
- Vitamins (D)
- Minerals (iron)
- Water
Do It!

Have the members select 2 of the following activities.

**Water vs. Sports Drinks**

**Learning Goals**
Understand how to manage hydration during physical activity

**Background Information**
Refer to Background for Leaders

**Age Considerations**
Ages 10 and up

**Time Required**
Approximately 45 minutes

**Supplies**
Paper and pens or computer

**Safety Considerations**
None

**Instructions**
Now that members have now learned about the advantages of both water and sports drinks, in keeping hydrated. Have members create a persuasive speech, supporting the use of either water or sports drinks before, during and after physical activity.

**Discussion**
Have members present their speeches to each other. This can be held debate-style if members are knowledgeable about debate procedures. Be sure that they include information on how much to consume, when to consume it, and the cost of each drink.

**Snack Attack!**

**Learning Goals**
Identify nutrient dense foods and their benefits in exercise

**Background Information**
Refer to Background for Leaders

**Age Considerations**
Ages 10 and up
**Time Required**
Approximately 30-45 minutes

**Supplies**
Variety of snack foods, food preparation tools

**Safety Considerations**
Be aware of any food allergies that may be present amongst the members, and supervise members when cutting or using knives.

**Instructions**
Now that members understand the importance of snacking in a physically active lifestyle, have them prepare a healthy snack that includes the nutrient dense foods that are discussed in this builder. Members can either write down the plan or actually create and enjoy the snack at the meeting. Challenge members by having them create a snack appropriate for a vegetarian diet.

**Discussion**
While planning or preparing the snack, have members discuss why they chose the snack foods that they did.

**Message on a Bottle!**

**Learning Goals**
Understand how to manage hydration during physical activity.

**Background Information**
Re-useable water bottles are certainly popular today, for a variety of reasons. They’re good for the environment as they reduce the number of plastic bottles being thrown into landfills, they’re trendy, they’re convenient, and they encourage us to drink water daily as they’re easy to pack into our bags. By carrying a water bottle with us, we are reminded to continue drinking water throughout the day so that we remain hydrated and are ready for physical activity.

**Age Considerations**
Ages 10 and up

**Time Required**
Approximately 30 minutes

**Supplies**
Re-useable water bottle, paint and painting supplies, printable labels, other craft supplies

**Safety Considerations**
Be sure that the paint, glue or other materials used to decorate the water bottles are not close to the opening of the bottle where the mouth would come in contact with them.
Instructions

Have members get creative with reusable water bottles by customizing one! They can buy a new one, or use one they already own. Members might choose to put their name, or team name on using paint, stickers, or clear labels that can be run through the printer. They might even want to incorporate designs, or inspirational phrases to encourage them during their work-outs.

Sports Drink Taste Test

Learning Goals

Understand the role of water and sports drinks in managing hydration.

Background Information

Refer to Background for Leaders

Age Considerations

Ages 10 and up

Time Required

30 minutes

Supplies

Drinking water, powdered sports drink, orange juice, salt, drinking glasses. If a powdered sports drink mix is not available, compare them to powdered juice or iced tea mixes for discussion purposes.

Safety Considerations

Sports drinks are intended to be used to rehydrate the body during and after periods of exercise. Ensure that members are only tasting the drinks and not consuming large volumes.

Instructions

Have members set up a sports drink taste test to determine what their preferences are. They can try a pre-mixed version, such as Powerade™ or Gatorade™, a powder mix, and the homemade orange juice version. Have members rate them by flavor, ease of use, and price. Have members prepare 3 different drinks for taste testing:

1) Store-bought, ready-mixed sports drinks such as Powerade™ or Gatorade™
2) Powdered sports drink mix (found in most grocery stores)
3) Homemade sports drink
   1 litre pure orange juice
   1 litre water
   1/2 tsp. table salt

Members will taste each drink and rate them according to; taste, ease of preparation, cost, and portability.

Discussion

Have members complete the chart in their manual and hold a discussion, comparing the sports drinks.
**Dig It!**

Have members answer the following questions:

- **Why would you want to pack nutrient-dense foods in a snack to be eaten before exercising? To ensure that you have the right type and amount of energy to help your body move and stay healthy.**

- **Why would someone choose to drink a sports drink instead of water between games at a tournament? As a way to rehydrate and replenish the glycogen stores in the muscles. Although water would also rehydrate the body.**

- When would it be important to eat a nutrient-dense snack for your exercise schedule? Why? **Before exercising, during a break between games and after exercising.**

**What's Next**

In the next builder, you will discuss and explore different types of endurance and flexibility.
In the Member Manual

Do It!

Nutrient Rich Foods

Now that you know what the major nutrients are in the diet, list examples of food that are rich in the following:

- Carbohydrates
- Protein
- Fats
- Vitamins (D)
- Minerals (iron)
- Water

Ed. Milk contains calcium (mineral), vitamin D (vitamin), and protein. Think of examples for each of the nutrients that were discussed.

Water vs. Sports Drinks

Sports drinks are very popular these days. You have probably consumed one of these drinks, or even have a favorite brand or flavor. Sports drinks are to be used to help us recover and rehydrate after physical exercise.

Have a discussion with your leader about sports drinks. You can talk about what they should be used for, how they help the body, how much they cost, and where you can find them.

Many of us choose to drink water rather than sports drinks, as it can also rehydrate the body.

Have a discussion about water.

If you were to choose between water and sports drinks, which would you pick? Now let’s defend that choice. Take a few minutes to review the points you brainstormed in your group and write a short persuasive speech defending either water or sports drinks. Your purpose is to try to convince others that your choice of rehydrating drink is the best.

Snack Attack

When we are physically active we need to make sure that our body has enough fuel, or energy to make it through the activity. This often means that we need to snack on nutrient dense foods.

Using the nutrient dense foods that you brainstormed, and information from your leaders, create a plan for a snack that you could eat before practice, between games, or before or after a competition. Be sure to think about how much energy you will need to make it through your activity and how you can safely pack and transport this snack during the day. If you have time, you can even make and enjoy the snack with your group.

Message on a Bottle

Reusable water bottles are certainly popular today, for a variety of reasons. They’re good for the environment as they reduce the number of plastic bottles being thrown into landfills, they’re trendy, they’re convenient, and they encourage us to drink water daily as they’re easy to pack into our bags.

So let’s get creative with reusable water bottles by customizing one! You can buy a new one, or even better, use one that you already own. You might choose to put your name, or team name on it using paint, stickers, or clear labels that can be run through the printer. You might even want to create your own designs, or inspirational phrases to encourage you during your exercise or work-out.

Sports Drink Taste Test

Let’s do a sports drink taste test. You may already have your favorites, but there are many things to consider when choosing a drink that works best for you.

Your leader can assist you in setting up the taste test for three different drinks.

<table>
<thead>
<tr>
<th>Type of Sports Drink</th>
<th>Flavor</th>
<th>Ease of Preparation</th>
<th>Ease of Transportation &amp; Storage</th>
<th>Cost</th>
<th>Other Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-mixed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Powder mix</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homemade</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Be sure that everyone gets to sample them and record your results in the chart below. You can rank the drinks on whatever scale you choose.

Why would you want to pack nutrient dense foods in a snack to be eaten before exercising?

Dig It!

Why would someone choose to drink a sports drink instead of water between games at a tournament?

When would it be important to eat a nutrient dense snack for your exercise schedule?

What’s Next?

In the next builder, you will discuss and explore different types of endurance and flexibility.
Skill Builder 3: Endurance & Flexibility

Skills Checklist

- Explain the difference between cardiovascular and muscular endurance
- Understand the role of endurance and flexibility in lifelong fitness
- Identify the major muscle groups and what they’re responsible for

Important Words

Help members define the following words and listen for them using these words in their discussion. To increase the member’s understanding try providing a synonym members know or provide examples. The more personalized the examples the better.

<table>
<thead>
<tr>
<th>Cardiovascular Endurance</th>
<th>the ability of the heart to pump oxygen in the blood through the blood vessels to working muscles. Cardiovascular activity is any activity done over a long period of time, which elevates the heart rate.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muscular Endurance</td>
<td>the amount of weight a person can lift repeatedly for an extended period of time. Resistance training is how we improve our muscular endurance.</td>
</tr>
<tr>
<td>Repetitions</td>
<td>The number of times you perform an exercise without rest</td>
</tr>
<tr>
<td>Sets</td>
<td>A set is composed of the number of reps you do before resting</td>
</tr>
<tr>
<td>Resistance</td>
<td>The amount of weight that you use when performing an exercise</td>
</tr>
</tbody>
</table>

Thinking Ahead

- What will you discuss with members? Gather observations and think of examples that will help support your discussion.

Preparing for Success

- Linking back to the Skills Checklist, help members identify how they will know they have been successful in learning from this builder. Discuss what success in these activities might look like, sound like, and feel like.

Activating Strategies

- Get members thinking about endurance and flexibility by having them brainstorm activities or sports that require both of these. They can brainstorm individually and then share and collaborate with the group.

Dream It!

Background for Leaders

Endurance

Endurance is one of the major components of physical fitness. In fact, there are two types of endurance; cardiovascular and muscular. Both types of endurance are equally as important, but must be trained in very different ways.
The benefits of training or improving your endurance are endless. Some of the most important benefits are:

- lower blood pressure
- increase in HDL cholesterol
- decrease in total cholesterol
- decrease in body fat due to utilizing fat as energy
- increase heart function and its ability to pump more blood
- decrease stress reactions and anxiety
- increase oxygen output to the body
- decrease resting heart rate
- increase aerobic work capacity

Cardiovascular Endurance

The purpose of cardiovascular endurance training is to improve the strength and efficiency of the heart and lungs. Training this type of endurance improves the ability of the heart and lungs to deliver oxygen to working muscles and remove muscular waste products (CO₂).

Cardiovascular activity is any activity done over a long period of time, which elevates the heart rate to approximately 150 beats per minute, or above – the exact rate will vary by age. It includes large muscle activities for a minimum of 20 minutes. These activities are continuous exercises such as biking, walking, swimming, running, aerobics and fitness classes that use of the upper and lower extremities on both the left and right sides. It is recommended that we perform cardiovascular activity 3-5 times per week.

Because many of these continuous activities can be repetitive, it is important to pick something you enjoy, as you are far more likely to stick with it. And try different types of activities to keep things exciting.

Keep in mind that the lower the intensity of the activity, the longer you will have to do it to gain the same benefits. Ex) If you go for a leisurely walk you may require 2 hours of walking compared with 1 hour of brisk walking or ½ hour of power walking.

Cross-Training – means using a variety of the above means of cardiovascular training to provide variety for mind and body. Cross-training helps prevent injuries by using a variety of muscle group for each workout. It also reduces boredom and helps prevent your body from reaching a plateau or standstill.

Muscular Endurance

Muscular endurance is the ability of working muscles to use the oxygen brought by the blood. It is the ability to resist muscular fatigue, and continue in physical activity. Good muscular endurance allows for more time spent exercising and less ‘rest time’ required for recovery. Muscular endurance can also be described as the amount of weight a person can lift repeatedly for an extended period of time.

Resistance training is how we improve our muscular endurance. Resistance refers to the amount of weight that you use to perform an exercise. Most often when people think about resistance training, they think of weights such as dumbbells, barbells, metal plates, pulley, cables or machines. All of these are weights with gravity providing the actual resistance.
Be sure not to confuse resistance training with weight lifting. In weightlifting, the goal is to move weight. Therefore, the technique is designed to accomplish that goal. During resistance training, the goal is to move muscle, not weight. Therefore, you would use a completely different technique. One would direct their focus on the body and position through the exercise and on the muscles being contracted, rather than the weight, bar or machine. In this Builder the members will be trying resistance training to build muscular endurance, using their own body weight.

Muscular endurance is achieved by completing high repetitions (reps) of an exercise with low to moderate resistance. For example, 12-20 wall push-ups. This exercise would be repeated 1-3 more times (sets).

The benefits of training or increasing muscular endurance include increased stamina, increased metabolism and fewer injuries. In addition, teaching the body to hold proper positioning and posture in the presence of an outside force is the key to preparing the body functionally for everyday activities and life in general.

So how do you know what level of resistance is appropriate for you? Well, choose a weight that will exhaust your muscles by the last 2-3 reps of your set. For youth, their own body weight is often used as a type of resistance. Once this amount of weight is no longer challenging, usually every 3-4 workouts or so, increase the resistance to a level where your muscles are again burning by the last few reps again. For youth, this can be done by modifying the way the exercise is performed.

Below are some terms that are commonly used in resistance training.
- Repetitions (reps) – the number of times you perform an exercise without rest
- Sets – a set is comprised of the number of reps you do before you take a rest. You may choose to do more than one set
- Rest Interval – The time you take between each set to allow your muscles to recover
- Resistance – refers to the amount of weight that you use to perform an exercise
- Delayed onset muscle soreness (DOMS) – soreness you experience the next few days after a hard workout. A proper cool-down and stretch can help to avoid or diminish DOMS
- Progressive Overload – improvements in strength and endurance will only occur when the muscles are worked above their normal capacities. One should be careful to increase weight and intensity gradually as the body adapts to the new stress. Improvements occur when the muscles are progressively overloaded and then allowed to recover and build to a slightly greater strength than before.
- Principle of Symmetry – It is important to balance development of the body when doing resistance training. To promote the principle of symmetry, always work opposing muscle groups. This will decrease your risk of joint instability and injury

**Muscles**

There are more than 600 muscles in your body. Of these muscles, there are three different types: smooth muscle, cardiac muscle and skeletal muscle.

Smooth muscles are usually in sheets, or layers, with one layer of muscle behind the other. They are called involuntary muscles because your brain and body tell them what to do without you even thinking about it. This means that you can’t use a smooth muscle to flex a muscle in your arm or jump in the air. The smooth muscles work all over your body helping with digestion, and keeping your eyes focused.
The Cardiac muscle is the muscle that makes up the heart. These thick muscles contract to pump blood out and then relax to let blood back in after it has circulated throughout the body.

Skeletal muscles are the ones that work to move your body parts. They are sometimes called striated muscles and are voluntary, meaning that you control what they do. These muscles are attached to bones by cords of tough tissue called tendons. Skeletal muscles give your body the power it needs to lift, and push things.

**Major Muscles**

Below is a list of the major skeletal muscles found in the body.

1) The **posture stabilizing muscles**, or the core muscles are responsible for posture and absorb impacts to the body. These include the back and abdominals muscles.

2) The **chest muscles as a group** are responsible/used for shoulder and arm movements, and include the pectoral muscles.

3) The **arm muscles** are responsible for a number of movements and the major muscles include the biceps for flexing the arm and triceps for extending it at the elbow.

4) The major **leg muscles** are responsible for flexing and extending the leg at the hip, knee and ankle. These muscles include the quadriceps (quads), hamstrings and calves.

**Core Strength/Stability**

One area often forgotten in strength training includes the muscles responsible for posture. These are the core muscles which stabilize the trunk, or torso. The major muscles of the core are found in the area of the belly and the mid and lower back. Development of this area is important as it can affect the lower and upper extremities as well as full body movement.

Always be aware of the impact that posture and core strength has on all movement. An injury may not reside solely at the location of the pain. The root cause of the pain may reside elsewhere in the body. For example, poor posture or a weak core may result in one side of the body carrying the bulk of its weight. The foot on that side may suffer pain, however the body alignment will need to be corrected in order to fully heal the injury.

**Flexibility**

Flexibility is defined as the range of possible movements of a muscle or group of muscles. This range of movement impacts on the range of movements of a joint or series of joints (e.g. spine). Good flexibility decreases the likelihood of injuries.

Flexibility is joint specific. A person may be very flexible in one set of joints (hips), but not as flexible in another (shoulders). But flexibility is trainable, which means that an inflexible person can improve their flexibility with training. Flexibility training is reversible when not kept up, so it is important to stretch your muscles every day.
Flexibility is limited by the soft tissues (muscle connective tissues, tendons and ligaments) of the body. The range of stretch of these soft tissues must be increased to improve flexibility. Static stretching, placing oneself in a position of stretch (a position where there is tension, but not pain) and holding this position for 15-30 seconds is recommended. Once flexibility has been increased through static stretching, dynamic stretching may be used. Dynamic stretching uses speed of movement, momentum and active muscular effort to bring about a stretch. Unlike static stretching, the end position is not held. Arm circles, exaggerating a kicking action and walking lunges are all examples of dynamic stretches. Although, for this project, it is recommended that members only use static stretches.

Examples of stretches can be found in the Explore level and include stretches for the quad, hamstring, glute, biceps, triceps, back and pectorals. Below are some example stretches to look up and try.

- Neck tilt
- Tricep stretch
- Toes touches
- Side stretch
- Trunk rotation
- Trunk twists
- Arm circles
- Forward lunge
- Sideways lunges
- Hamstring stretch
- Achilles tendon stretch
- Ankle stretch
- Ankle stretch
- Ankle stretch

Dream It!

Muscle Match

1. Have the members match the terms to the correct definitions in the manual. Be sure to review and hold a discussion about each of the terms.
2. Discuss the differences between cardiovascular and muscular endurance. Have each member provide an example of an activity that uses each one.
3. Ask members to think about a sport that they do, or their favourite activity. Ask them to identify which muscles they think they use for these sports or activities. Members can then identify these muscles on the diagram in their manual.
4. Have members do a 2-3 minutes warm-up (jogging, jumping jacks, etc.) and then review and perform each stretch from the list provided above.

Do It!

Moving Muscles
Learning Goals
Identify major muscle groups and what they’re responsible for.

Background information
Refer to Major Muscles section in Background for Leaders

Age Considerations
10 and up

Time Required
Approximately 20 minutes

Supplies
- Open space where members can move around freely.
- Pencil and paper

Safety Considerations
None

Instructions
Have members follow the instructions below and after each step, have them write down which muscles they think they are using. They do not have to correctly name the muscle, but simply identify the location of the muscle on the body.

1. With one foot off the ground, point and then flex the foot. Muscles used - calves and front of lower leg
2. Raise one foot off the floor bring the heel towards the rear, bending the knee. Muscles used—hamstrings and quads
3. Swing one leg back and forth at the hip. Muscles used -quads, hamstring, & glutes (rear)
4. Bend body forward and back at the waist. Muscles used—core/back muscles
5. With palm facing up, swing arm forward and back beside the body. Muscles used –shoulder and arm muscles
6. With palm facing up, raise and lower the arm, bending at the elbow. Muscles used—biceps/triceps

Discussion
Have members think of a favourite sport or activity and then mimic the movements required for that specific activity (ex - soccer, kicking a ball or baseball, throwing a ball).

Ask members to identify which muscles they think they are using, and how they might exercise those muscles.
Cardiovascular Endurance

Learning Goals

Explain the difference between cardiovascular and muscular endurance

Background Information

Talk Test

The talk test is one way to determine if activity is at a safe but appropriate level for building endurance. While working out the athlete should be developing a sweat but still be able to talk in short phrases. While doing one of their endurance activities, ask each member questions to see if they are able to talk while doing the exercise. If members are able to give 3 word responses, the endurance activity is of an appropriate level for them. If they can do more, the difficulty of the exercise should be increased, and if they cannot make at least 3 words, the difficulty level should be lowered. Once the activity is complete, explain to the members why you asked them questions, and what the result was.

Age Considerations

Ages 10 and up

Time Required

20 to 30 minutes

Supplies

Skipping rope, treadmill, stationary bikes, steps or bench, and any other apparatus used for cardiovascular endurance training

Safety Considerations

Be sure to monitor each member to ensure that they are not over exerting themselves, or working at a level that is beyond their ability. The purpose of this activity is to understand the purpose of cardiovascular endurance training, and test their current level of endurance.

Instructions

Have members try out 2-3 endurance activities. This could include; skipping, jogging, running, walking, climbing stairs, cycling, etc. The goal is not to exhaust the member, but rather to have members try activities and understand the on-going, repetitive nature of an endurance activity versus anaerobic activities. Have members do each activity for 5 - 10 minutes with a 10 minutes break in between to discuss the pros and cons of each.

Discussion

After each activity, ask the members the following questions.

• What did you like about this activity?
• What did you not like about this activity?
• What make this a cardiovascular activity?
Muscular Endurance

Learning Goals
Explain the difference between cardiovascular and muscular endurance

Background Information
Refer to Background for Leaders. All muscular endurance exercises should last for at least a minute.

Age Considerations
Ages 10 and up

Time Required
Maximum of 30 minutes

Supplies
Open space with carpet or exercise mats, flat wall, exercise ball

Safety Considerations
Be sure to monitor each member to ensure that they are not over exerting themselves, or working at a level that is beyond their ability. Assign a spotter at all times.

Instructions
Have members try each of the exercises below. They can try them as a group, or as part of a circuit.

Floor Bridge
This exercise works the full body and can be modified as a side bridge, or front bridge.

Front bridge       Side bridge

Wall Sit
This exercise works the leg, core, arm and shoulder muscles.
Wall push-ups/Push-ups

This exercise uses the arm and chest muscles. It can be modified as a floor push up.

Prone Cobra

This exercise works the back muscles.

Balance on an exercise ball (on knees)

This exercise uses the core muscles to balance or stabilize the body.

Lateral Arm movements

This exercise uses the shoulder muscles.
Discussion

Have members identify the reps, sets and resistance used (if applicable)
- Were they using the Principle of Symmetry? - *Exercising both sides equally*
- How will they prevent DOMS? - *Stretch muscles after exercise*
- How would they know if this was the right level of intensity for them? - *The exercise would exhaust the muscles by the last 2 or 3 reps, or last few seconds.*

Flexibility Focus

Background Information

You know why it is important to stretch your muscles each day. But flexibility is important for all sports and serves as a way to protect our bodies from injury.

Time Required / Supplies

Dependant on activities chosen.

Instructions

1. Have members discuss different types of flexibility training that are used from athletes and non-athletes alike.
2. Have members list 4 or 5 sports of activities. Have members think about what type of flexibility (muscle and joint) is required for each one.
3. Yoga and Pilates are two very popular programs that many people use to train their strength, balance and flexibility. Take some time to do one or more of the following activities as related to Yoga, Pilates, or another flexibility training program:
   - Try a video/DVD program
   - Research the history of these programs
   - Meet with an instructor
   - Try a class
   - Interview someone who uses these programs

Dig It!

Hold a discussion on the benefits doing endurance and flexibility exercises at home or outdoors, versus at a fitness facility.

Have members answer the following questions from the Member Manual.
- What are 2 ways that you can include flexibility into your daily schedule?
- What did you learn about yourself when you took the talk test during cardiovascular activity? How will you use this knowledge in other activities?
- Why do you think endurance and flexibility are important for life-long fitness?
- For what activities in your life is it important to have good muscular endurance?

Have members include a picture of themselves practicing cardiovascular or muscle endurance exercises.

What’s Next

In the next builder, members will create a fitness plan.
**Skill Builder 3: Endurance & Flexibility**

**Lucky Says...**
Endurance is one of the major components of physical fitness. There are two types of endurance: cardiovascular and muscular. Both types of endurance are equally important, but must be trained in very different ways.

Flexibility is defined as the range of possible movements of a muscle or group of muscles. This range of movement impacts on the range of movements of a joint or series of joints. Good flexibility decreases the likelihood of injuries.

**SKILLS CHECKLIST**
- Explain the difference between cardiovascular endurance and muscular endurance.
- Understand the role of endurance and flexibility in lifelong fitness.
- Identify the major muscle groups and what they're responsible for.

**Dream It!**
Endurance is an important part of physical activity. But did you know that there are two types of endurance?

<table>
<thead>
<tr>
<th>Cardiovascular Endurance</th>
<th>Muscular Endurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training this type of endurance improves the strength and efficiency of the heart and lungs. It improves the ability of the heart and lungs to deliver oxygen to working muscles and remove muscular waste products.</td>
<td>This is the ability of working muscles to use the oxygen brought by the blood. Good muscular endurance means that your body is able to resist muscular fatigue, and continue in physical activity. It can also be described as the amount of weight a person can lift, repeatedly, for an extended period of time.</td>
</tr>
</tbody>
</table>

Now that you know the difference between the two types of endurance, answer the following questions:
- What are some activities that train your cardiovascular endurance?
- Do you do any of these activities now?
- What are some activities that train your muscular endurance?
- Are there any of these activities that you would like to try?

**Take a Stretch Break!**
Take 5 or 10 minutes to work on your flexibility and stretch your muscles. As a group, try to recall the stretches that you learned in Exploring Body Work. Your leader can provide you with some hints, and you can work as a group to think of different stretches. Have each person in your group take turns leading stretches.
- Why is it important to stretch each day?

---

**Muscle Match**
Label the major muscles in the diagram. You may already know some of them, or you may need to do some research. Colour in the 4 major muscle groups, making each group a different colour. These major muscle groups are:
- i) Posture stabilizing muscles
- ii) Chest muscles
- iii) Arm muscles
- iv) Leg Muscles

**Do It!**

**Moving Muscles**
Have you ever really thought about what makes your arm move up and down? Or what muscles are being used when you kick a ball? Let’s learn about what part of your body your muscles can move.

Follow your leader’s instructions, and after each action, decide which muscles you are using. Then discuss what sports or activities require these movements.

What could you do to strengthen these muscles to improve your performance?

**Cardiovascular Endurance**
It’s time to get moving! Select 2 or 3 endurance activities that you can easily do during your meeting. This could include skipping, jogging, running, walking, cycling, etc. Any activity that is ongoing with no breaks. Try each activity for 3-10 minutes, with a 10 minutes break in between each activity.

During each activity, your leader will give you a Talk Test, to determine if your level of intensity is suitable for you. Include your results in the space below.

<table>
<thead>
<tr>
<th>Cardiovascular Activities</th>
<th>My level of intensity (circle one)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Should decrease</td>
</tr>
<tr>
<td>1)</td>
<td></td>
</tr>
<tr>
<td>2)</td>
<td></td>
</tr>
<tr>
<td>3)</td>
<td></td>
</tr>
</tbody>
</table>

**Muscular Endurance**
Let’s try some muscular endurance activities. Select 4-5 activities from the list provided on the next page. Be sure that you are able to complete them with the equipment you have.
In the Member Manual

Muscular Endurance Activities:
1. Floor Bridge
2. Wall Sit
3. Push-ups
4. Wall Push-ups
5. Prone Cobra
6. Balance on an exercise ball (knees)
7. Lateral arm movements

<table>
<thead>
<tr>
<th>Muscular Endurance Activities Tried</th>
<th>Muscles used</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td></td>
</tr>
<tr>
<td>2)</td>
<td></td>
</tr>
<tr>
<td>3)</td>
<td></td>
</tr>
<tr>
<td>4)</td>
<td></td>
</tr>
<tr>
<td>5)</td>
<td></td>
</tr>
</tbody>
</table>

Did you do any exercises that included reps and sets? What were they?

Flexibility Focus

You know why it is important to stretch your muscles each day. But flexibility is important for all sports and serves as a way to protect our bodies from injury.

Discuss different types of flexibility training that are used from athletes and non-athletes alike. Think of 4 or 5 sports or activities and list them below. Think about what type of flexibility (muscle and joint) is required for each one:

1.  
2.  
3.  
4.  
5.  

Yoga and Pilates are two very popular programs that many people use to train their strength, balance, and flexibility. Take some time to do one or more of the following activities as related to Yoga, Pilates, or another flexibility training program:

- Try a video/DVD program
- Research the history of these programs
- Meet with an instructor
- Try a class
- Interview someone who uses these programs

In this picture I am:

I want you to notice:

What’s next?

In the next builder you will create an exercise plan to help you complete your fitness goals.
Skill Builder 4: Exercise Plan

Skills Checklist
- Create an exercise plan
- Understand the importance of keeping a record of progress
- Know about career opportunities in fitness and exercise

Important Words
Help members define the following words and listen for them using these words in their discussion. To increase the member’s understanding, try providing a synonym members know or provide examples. The more personalized the examples the better.

| Cross-training | Training muscles in different ways to improve overall performance |

Thinking Ahead
- What will you discuss with members? Gather observations and think of examples that will help support your discussion.

Preparing for Success
- Linking back to the Skills Checklist, help members identify how they will know they have been successful in learning from this builder. Discuss what success in these activities might look like, sound like, or feel like.

Activating Strategies
- Ask members if they have ever had an exercise plan or workout routine or schedule. Was it for a sport? Was it on their own? Did they make it, or did someone make it for them? What did it look like?

Background for Leaders

Fitness or workout plans and routines come in all shapes and sizes. An athlete who is training for a sport may have a year-long plan that includes work-out programs that are incorporated into weekly or monthly schedules. While individuals who are simply working towards a daily physical activity goal may have a basic daily routine on a weekly schedule (once a day, or 5 times a week).

Whatever the schedule or plan, workouts can be made more effective if planned and put in writing. Remember that workouts can be simple or complex, but should always contain the basic components (refer to Builder 1).

As previously discussed, it is important to keep variety in your workouts to ensure that all muscle groups and joints are being exercised, and to prevent boredom or lack of motivation. Instead of running or jogging all of the time, try skipping, cycling or even high-paced dance! Others include fitness classes or sports activities. It is important to choose activities that keep you motivated to ensure that fitness will be a lifelong choice.
When creating a workout plan from scratch, keep the following in mind:

- Youth should strive for 90 minutes of physical activity each day.
- Both cardiovascular endurance and muscular endurance activities should be included.
- Flexibility should be trained everyday through stretching.
- Warm-ups are very important. They allow muscles and joints a chance to warm up and prepare for the exercise.
- Warm-downs are another important part of the work-out. They allow the heart rate to return to a normal state. It is at this point that the muscles are the most pliable and stretching will have the most benefit.

**Exercise Charts and Workout Plans**

A simple way to create a workout plan is to create a weekly schedule that includes cardiovascular endurance, muscular endurance, and flexibility exercises. It should also include a day of rest, particularly if someone is not currently active at this level. It is typically recommended to include exercises 3-6 days a week. Although, keep in mind that it is recommended that youth be physically active for 90 minutes a day.

Some, muscle groups should not be heavily exercised 2 days in a row, as these muscles need time to rest and repair. Cardiovascular endurance should be exercised frequently and may be used on the same day as muscular strength activities. Flexibility exercises should be incorporated into every workout.

**Safety Tips**

Review the information from Skill Builder one regarding workout safety before beginning the fitness routine.

In order to stay motivated and keep on track with your program, it is important to set goals and keep track of your progress. Writing down what you accomplished each day will help you understand if your plan is working, or if changes need to be made. You will want to mark down the date, time, type of exercise, sets, reps, resistance, etc.

If you are having trouble sticking to your plan, writing down your progress will help you understand what needs to be changed. Maybe your plan is too boring and needs more variety, or maybe you need to spread out your exercise into two or three different times throughout the day to fit it into your schedule. Be sure to include your fitness goal at the top of your plan. This can help motivate you to keep on track. Or set a weekly or even daily fitness goal. Ex) Today I will add 2 more drills to my basketball practice.

**Fitness & Workout Trends**

- **Bootcamps** - Bootcamps are a very popular form of workout that can be done both indoors and outdoors. They provide a total body workout that’s fun and challenging. Both cardiovascular and resistance training are included in a boot-camp style workout, with an element of flexibility.
- **Personal Trainers** - Personal trainers provide direction, expertise and motivation for those looking for a specific and focused workout. Their knowledge and skill can be utilized in the gym or other fitness setting and comes at a price to the consumer. Trainers can educate, build confidence and provide a role model for their clients.
• **Classes** - Group fitness classes come in all forms. From basic aerobics to yoga and pilates, to aqua-cizing and dance. These classes provide a fun, social atmosphere and are lead by trained instructors. Classes may be offered through a fitness facility or privately through the instructor. Others are offered through community recreation programs.

• **Circuit training** - This is a time-efficient workout that is available at gyms or other fitness facilities. Or can be done at home. It is typically a set of aerobic and strength exercises carried out at stations for a set period of time. Each station would be about 1-2 minutes long before moving on to the next station. The exercises work the entire body.

• **Technology based fitness** - Technology has changed and certainly added to our daily fitness opportunities. Everything from iPods to the Nintendo Wii have changed the way we get physically active. Fitness applications can be purchased for your iPod or mobile devices that include pedometer functions and sensors that can be placed in a running shoe to track progress and provide real-time voice feedback. The Nintendo Wii Fit and other video games provide challenging activities that can be done in the home to improve strength, endurance and flexibility. These games are popping up in schools and recreation centres across the province, providing opportunities for all generations to stay active. Cardio cinema is another fitness trend that is being offered in some larger fitness facilities. This allows individuals to use cardio equipment while viewing feature length movies on a large screen.

• **Cross-training** - This is popular with many athletes. It is also known as conditioning, training the muscles in different ways to improve overall performance. Often, one particular exercise works a certain muscle group, but not others. But, by choosing different exercises or sports activities that use the same muscles in a different way, this can be eliminated. Ex) a hockey player may choose to play baseball in the summer, or train for a triathalon or race.

### Dream It!

**Safety Review**

Return to Builder 1 to review safety precautions with members. Ask members to recall these safety elements along with other important components of a workout ie) FITT formula, flexibility, warm-up, warm-down, etc.

Ask members to brainstorm activities that they would like to include in their work-out plans. This could include sports, games, classes (such as dance), bike rides with friends, walking to school, and any other activity that keeps members physically active.

**Fitness Trends**

Have members discuss current fitness trends they are aware of. This is good brainstorming for some activities they might want to include in their exercise plan.

### Do It!

**Work it Out!**

**Learning Goals**

- Understand how to create an exercise plan
- Learn the importance of keeping record of progress
Background Information

Each of the members’ exercise plans will look different, dependant upon their personal interests. Encourage the members to start off with the basics and fill in the details once they have an outline. Members should be encouraged to use a variety of activities in their plans.

Age Considerations

Ages 10 and up

Time Required

20-30 minutes

Supplies

Exercise plan template

Safety Considerations

Ensure that members are creating realistic plans that are balanced and include rest periods

Instructions

Have members create an exercise plan using the template provided. Be sure that they describe the types of activities that they would like to do and the amount of time spend doing the activity or exercise.

For those that want to be more detailed, or want to train for a specific sport or activity, have them include exercises with the reps, sets, and time and explain which muscles are being used.

Discussion

Have members share their program with others in order to receive feedback.

Keeping on Track

Learning Goals

Learn the importance of keeping record of progress

Background Information

Refer to Background for Leaders

Time Required

20 minutes

Supplies

Paper, pencil, computer and word processing program
Safety Considerations
None

Instructions
Have each member create a progress chart for their fitness plans. As their activities will vary, have them discuss how they will keep track of progress. This could be a handmade or computer generated chart that uses checkmarks, stickers, or whatever else might keep you motivated. A weekly, or daily goal might also be motivating.

Discussion
Ask members the following questions:
- Why is it important to keep track of your activities at the gym?
- Why would record keeping help you with muscular endurance training?
- Why would record keeping help you with endurance training?

Fitness as a Living

Learning Goals
Learning about career opportunities in the fitness/exercise field

Background Information
Today there are many employment opportunities within the fitness field. Everything from sales, to fitness instruction to clothing design. The options are endless. This activity will encourage members to think about these opportunities and how one might become involved in them.

Time Required
30-40 minutes

Supplies
The internet, sports magazines

Instructions
Have members choose three from the list of careers, or think of their own, and do a brief profile on each. Include information on what the job entails, what type of training is required, what type of clients you would work with, what type of salary to expect, etc. Members may choose to interview someone who is in the field, and report on their findings.

List of Occupations
Personal Trainer  Coach
Athletic therapist  Sports writer
Clothing designer  Sports equipment sales
Physical education teacher
Discussion

Have each member present their findings. Then have them identify their ideal career in fitness and exercise and why they chose this career.

Dig It!

Have members collect their findings, fitness programs and progress charts in an easy to use package that is portable and can be taken to a fitness facility or used at home. Members can be creative with these and personalize them, or use motivational quotes to encourage ongoing physical activity.

What’s Next

The next and final builder focuses on improving member mental strategies for completing fitness goals/plans.
Fitness Trends

There are many fitness trends out there today, and you, or someone you know might be involved in these activities. Some of these trends are listed below. Ask your leader about these trends and include any other information you know. Are they offered in your community? Do you know someone who is involved?

Personal Trainers  Circus Training  Cross-training

Bootcamps  Classes  Technology-based fitness

Do It!

Work it Out!

Now that you've thought about your activities, use the chart to create a work out plan that suits your interests, abilities and your daily schedule.

First, describe each activity using the chart below:

<table>
<thead>
<tr>
<th>Activity Name:</th>
<th>Duration (time):</th>
<th>Location:</th>
<th>Muscle groups used:</th>
<th>Warm up activities:</th>
<th>Cardio endurance activities:</th>
<th>Muscular endurance activities (include sets and reps):</th>
<th>Warm down activities:</th>
<th>Flexibility exercises:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Now, insert this information into a weekly chart like the one below.

<table>
<thead>
<tr>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
</tr>
</thead>
</table>

Activity 1
Activity 2

Keeping On Track

Discuss with your leader why it is important to keep track of your exercise. You may not have realized that knowing what you have accomplished will motivate you to do more!

You can keep track of things like:
- What activity you did
- How long you did it
- How many days a week you exercised
- How many repetitions or sets you did
- How your body felt before and after

Keeping a record of your exercise helps you to see changes in your fitness, even though you may not feel these changes.

This progress chart could be handmade or computer generated and may use checkmarks, stickers, or whatever else might keep you motivated. A weekly, or daily goal might also be motivating.

Fitness as a Living

Today there are many employment opportunities within the fitness field. Everything from sales, to fitness instruction to clothing design. The options are endless. Maybe you've already thought about a job or career in fitness. This activity will help you understand more about what jobs are out there.

Your task is to choose three from the list of careers below, or think of your own, and do a brief profile on each. Include information on what the job entails, what type of training is required, what type of clients you would work with, what type of salary you can expect, etc. You may also choose to interview someone who is in the field, and then report on your findings.

List of Occupations
- Personal Trainer
- Coach
- Athletic therapist
- Sports writer
- Clothing designer
- Sports equipment sales
- Physical education teacher

Lucky's Links

Sport Manitoba is a non-profit organization and the lead planning, programming and funding agency for the development of amateur sport in Manitoba. Sport Manitoba partners with over 100 organizations to deliver sport in our province and is responsible for programs including the Power Smart Manitoba Games, Coaching Manitoba, Team Manitoba, KidSport and the Manitoba Sports Hall of Fame and Museum. For more information on Sport Manitoba visit www.sportmanitoba.ca

Dig It!

Let's make it official! You've got a personalized fitness plan and you're proud of it. Now get creative and include your fitness plan, progress charts, fitness goal and any other motivational quotes or pictures in an easy to use package that is portable and can be taken to a fitness facility or used at home. Use a duo tang, binder, clip board or whatever suits your style to keep your information safe and easy to use.

What's Next?

The next builder is about mental training. You'll learn how what you think can affect how your body performs.
Skill Builder 5: Mental Training

Skills Checklist

- Understand the role of mental training in fitness and sports
- Perform mental training exercises

Important Words

Help members define the following words and listen for them using these words in their discussion. To increase the member’s understanding try providing a synonym members know or provide examples. The more personalized the examples the better.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Concentration</strong></td>
<td>Is the ability to pay attention to relevant stimuli or internal or external performance cues</td>
</tr>
<tr>
<td><strong>Attentional Control</strong></td>
<td>The ability to concentrate, focus and re-focus</td>
</tr>
<tr>
<td><strong>Shuttling</strong></td>
<td>Learning to shuttle between internal and external focus</td>
</tr>
</tbody>
</table>

Thinking Ahead

- What will you discuss with members? Gather observations and think of examples that will help support your discussion.

Preparing for Success

- Linking back to the Skills Checklist, help members identify how they will know they have been successful in learning from this builder. Discuss what success in these activities might look like, sound like, or feel like.

Activating Strategies

- Have members discuss what types of energizing activities, or mental training exercises they use for their sports teams or other athletic activities. What “pumps them up”? Have them share this with the group.

Dream It!

Background for Leaders

Source: Competition introduction Part B – Reference material Version 1.1, 2007, (c) Coaching Association of Canada

So you have trained your body, but have you been training your mind? You can train your mind by using aspects of sports psychology. Sport psychology offers athletes at all levels of sport participation an opportunity to add mental skills to their physical ones. Athletes can learn to set effective goals, improve concentration and focus, learn how to deal with their emotions and much more. Such skills are also known as mental preparation and when used they can increase the likelihood that your performance will improve.
Mental preparation is about training the mind to work with the body, not against it, in sport situations.

Mental skills are applicable in both sport and everyday life. To perform reliably in sport and life, athletes need to be able to identify their strengths and weaknesses both physically and mentally. This will help them to develop strategies to build on these strengths and improve their weaknesses.

Mental-training strategies are different for everyone because each person is unique and thinks and reacts in their own way. Developing mental skills is a life-long process that requires individual self-awareness, self-responsibility, and self-direction.

As a result, when working with individual athletes, most sport psychologists tend to begin by working with an athlete on his or her self-awareness. In other words, to chart out how to get to where you want to go, you first need to know where you are now.

Some of the things that athletes have to deal with are: attentional control, emotions and anxiety, and lack of motivation. Some tools that members can learn in this builder are: concentration, focus, shuttling, visualization, imagery, positive thinking, self-talk, relaxation and goal setting.

Members will have the chance to try mental preparation exercises for each of these tools:

**Concentration** is the ability to pay attention to relevant stimuli or internal or external performance cues.

**Refocus** is the ability to concentrate on the present while performing as opposed to the future or the past. Refocus is the ability to focus on a task again following a break in concentration.

**Attentional control** is the ability to actively direct one’s attention to relevant cues in the environment, to maintain that attention for the necessary period of time, and to be fully aware of the situation. The ability to concentrate on a task for its duration is very hard to do and that requires regular practice to be able to do so. Athletes develop attentional control by learning to select and concentrate on task-relevant cues and factors and to dismiss any irrelevant stimuli. Concentration in sport may be thought of as a relaxed state of being alert allowing rapid changes in focus as the flow of the game or competitive situation changes. Attentional control is the ability to concentrate, focus and refocus.

**Internal attentional focus** is directed inward, toward perceiving and interpreting cues that the person feels or thinks.

**External attentional focus** is directed outward, toward perceiving and interpreting cues in the surrounding environment that the performer can usually see or hear.

**Emotions & Performance**

Emotions or feelings are an important part of team and individual athletic performance. They can provide the athlete with the energy that triggers the joy and ecstasy of performance, or they can shift drastically toward despair and hopelessness when things go wrong or expectations are not met. Intense emotions require a stimulus (or trigger); once the trigger is removed, the athlete can usually return to a more normal emotional state. Athletes need to understand the causes and consequences of their emotions and moods, and they need to know how to control them effectively.
The ideal emotional state (IES) is the condition in which the athlete experiences appropriate feelings and maintains them at optimum level. Eight emotions have been identified as important in sport; anxiety, anger, shame, guilt, hope, relief, happiness and pride. We will focus on the first.

What is Anxiety?

Anxiety can be a positive emotion when it reflects the excitement or eagerness to perform well because the athlete feels well prepared. But anxiety can be a negative emotion if it reflects feelings of apprehension; such feelings usually occur because the athlete does not feel well prepared.

- Anxiety can be functional – it can improve performance by facilitating appropriate thoughts or actions
- Anxiety can be dysfunctional – it can detract from performance by causing inappropriate thoughts, feelings, and behaviours.

Anxiety states are normal, and every athlete experiences both positive and negative anxiety during competition or performance.

Each athlete should aim to identify and understand the specific causes of their anxiety and the resulting consequences for performance. Athletes should also learn coping mechanisms that will help them manage their anxiety and therefore improve their performance.

Several skills can help athletes control their anxiety, including breathing control exercises, mind-to-body relaxation exercises, visualization strategies, positive self-talk, and thought-stopping techniques.

Stress

Stress is a substantial imbalance between physical and/or psychological demand and ability to respond under conditions where failure to meet that demand has important consequences. An athlete experiencing stress is therefore (1) recognizing a challenge and (2) perceiving that he or she may not meet the challenge.

**Myth #1 Stress is bad**

Stress can also lead to anxiety: being excited, being worried. But anxiety can be positive (excitement that contributes positively to performance) or negative (worry that detracts from performance). When athletes become overly anxious and their anxiety level exceeds their coping abilities, performance in competition may suffer. However, stress may also be positive, and stimulate athletes to excel or surpass previous performances.

Common causes of negative anxiety

- Tiredness/loss of sleep
- Changes in environmental conditions
- Physical tension/tightness
- Fear of disappointing others
- Fear of injury
- Fear of not being skilled enough or fit enough to meet the challenge
- Other aspects of life that cannot be successfully “parked”
The easiest way to reduce performance anxiety is to accept your nerves. Nerves, when not resisted, tend to dissolve. Most performance anxiety is a natural response to the stress of your event – your body is asking you to be alert and activated. If you accept this reaction without resistance, your body knows you have ‘heard’ it and will naturally subside.

Confidence

Confidence is a very misunderstood subject in sports psychology. Confidence is belief in yourself that you can be successful at a task. You might not always win, but you believe that you can, and this gives you mental toughness and keeps you aggressive. You do not choose confidence. It means that athletes don’t feel confident because they decide to feel it. Confidence is something that you build. While you cannot choose confidence, you can easily build it if you know how to use sport psychology techniques the correct way.

A confident individual in sport has strong positive thoughts about his performance. Confidence allows you to perform your skills with a “carefree” attitude, not thinking about the actions, but just doing. Nothing brings on confidence more than success. Achieving success is a crucial component in achieving confidence.

Having the right mental attitude can also help you build confidence. The way we think has a great influence on our level of confidence. It is important to monitor the type of self-talk that occurs within your mind. Anytime you think of something, say something to yourself, you are engaging in self-talk. It is important that you keep a positive focus when engaging in this type of talk as it will influence your confidence.

- Try repeating positive words to yourself over and over, try to say things like “keep it up,” “I can do this,” and “I’m confident”
- Saying words to yourself that remind you of what you need to do as you execute a skill
- Use self-talk that reassures yourself that you are ready for competition
- Use words that remind you of aspects of skills you are trying to learn
- Use self-talk to help you achieve the proper mood for your performance.

Concentration and Attention

Perhaps the most important mental skill is the ability to focus and concentrate. Making matters worse, concentration can be affected by several other mental and physical factors. The two most common ones seen in sport are anxiety and self-confidence, two interrelated factors. When people are nervous or lack self-confidence, their ability to focus and concentrate is lowered. You can learn how to “focus” by identifying what it is you need to be focused on doing in your sport. A common problem people have is a misperception that one has to be focused and concentrate for the complete amount of time that they are playing the sport. The reality is that most sports have times when it is perfectly find to allow one’s attention to drift away. The challenge is to know how to re-focus on the task after allowing your attention to wander. One of the first steps towards improving your ability to focus and concentrate can be simply to learn how to relax. Athletes can also use visualization, positive self-talk, and thought-stopping to improve focus.
Visualization

Visualization and imagery are often used interchangeably. However, there are subtle differences. **Visualization** generally involves seeing the actual skilled performance or routine. **Imagery** is more creative and often combines an image such as a graceful swan or a powerful animal or machine with powerful words that in themselves create images.

Imagery is simply the process of creating an image in the mind. Research supports the use of mental imagery in attempt to improve performance. Proper imagery should involve all the senses and be realistic. Try to imagine scenes in real time, as if they are actually happening. It is important to imagine yourself executing a successful performance. Try to imagine yourself doing the activity viewed from inside yourself as if you were watching a movie. Imagery can be used prior to, during and after competition.

**Dream It!**

**Mental Rating**

To get members started, they need to be aware of their strengths and areas needing improvement. Have members answer the following questions.

- What are your physical weapons or strengths (in exercise or sport)?
- In what areas of exercise or sport do you struggle?

Now have members spend some time thinking about their mental game.

- How confident am I?
- How well do you set goals that motivate me to keep training, exercising or practicing?

Now complete the following exercise. Rate each mental skill or characteristic on the scale of 1-5.

1 = poor at that skill
3 = ok at that skill
5 = awesome, that is my mental weapon

<table>
<thead>
<tr>
<th>Mental Skill/Characteristic</th>
<th>Current Level of Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidence in my abilities</td>
<td></td>
</tr>
<tr>
<td>Motivation to practice/train</td>
<td></td>
</tr>
<tr>
<td>Desire; give full effort in competition</td>
<td></td>
</tr>
<tr>
<td>Focus during competition</td>
<td></td>
</tr>
<tr>
<td>Ability to refocus after mistakes</td>
<td></td>
</tr>
<tr>
<td>Set goals that drive my training and performances</td>
<td></td>
</tr>
<tr>
<td>Positive during competition</td>
<td></td>
</tr>
<tr>
<td>Manage stress well during competition</td>
<td></td>
</tr>
<tr>
<td>Control emotions during competition</td>
<td></td>
</tr>
<tr>
<td>Ability to relax when nervous</td>
<td></td>
</tr>
<tr>
<td>Exhibit positive body language/posture during competition</td>
<td></td>
</tr>
<tr>
<td>Prepared for competition</td>
<td></td>
</tr>
<tr>
<td>Practice with intensity</td>
<td></td>
</tr>
</tbody>
</table>
You may need to assist members with understanding what level they are at. Upon completion, have members circle the areas with the lowest numbers. These are the areas in which they can work to improve their mental skills.

They can then select their activities in the DO IT! Section based on their findings.

**Do it!**

Have members select at least 3 mental training activities based on their findings in the Dream It! Section.

**Concentration**

**Learning Goals**

Learn new mental training skills

**Background Information**

Found in Leader’s Background information

**Age Considerations**

10 and up

**Time Required**

Approximately 10 minutes

**Supplies**

Household object or piece of sports equipment (ie-ball, puck)

**Instructions**

Choose a concentration word. For example, if you are in a ball-oriented sport, choose the word ball. If you are not in a ball-oriented sport, choose a short, soft, non-distracting word that will help you focus on an object or picture as you concentrate on it, for example, one, run, goal, lane, or arm. Look at the object, and say your concentration word – repeating a word helps keep the mind from wandering.

Look at the object of concentration. Now begin to examine every detail of the object you are concentrating on. For example, look at the ball’s outline, at its surface. Is it rough or smooth? Does it have seams, dimples, printing on it? Are there scratches or scuff marks? Look at its colours and the way the light and shadows fall on its surface. Don’t try to stop yourself from blinking. Relax.

Feel the object. For instance, pick up a ball; feel its texture; turn it around, and look at it from
various angles. Imagine the object. With a ball, for example, put it down, and focus your mind and eyes on it. See the ball as fully as you can so that its smallest detail will stand out in your mind. Know the ball. Don’t try to overpower the object of your concentration. As you relax and keep your eye on the object, you’ll find it will seem to come to you. You must maintain something of a passive attitude in this process, allowing the object of your concentration to enter your mind fully and not simply be something external that you are studying. When you concentrate, you will find that this seemingly mysterious process happens quite naturally.

Get the feeling. When your concentration breaks – as it must – say it yourself, “I have been concentrating on [the name of the object]. This is what it feels like to be concentrating. I am relaxed, I feel good, and my attention is totally focused on [the name of the object]. This is concentration.” Look back at the object. Say the concentration word again. Now say the concentration word to yourself. Look at the object. Concentrate.

- Source: This material is based on Tutko (1976)

Discussion

Have the members answer the following questions
- How did it feel concentrating on an object?
- What were you thinking about when concentrating on it?
- What did your body do?
- How did you feel after you broke your concentration?
- What objects could you practice focusing on to improve your performance in sports and exercise?

Get in the Focus

Learning Goals

Learn new mental training skills

Background Information

Found in Leader’s Background information

Age Considerations

10 and up

Time Required

Approximately 10 minutes

Supplies

Tennis ball
Instructions

Baseball Exercise

Phase 1 – The performer has a tennis ball and stands in front of a group; he or she is instructed to throw the ball to the person with one hand in the air. This person has been designated by the leader or the members of the group, but the performer does not know who he or she is. On the leader’s command, all group members but one throws both hands in the air. The performer must throw the ball to the individual with only one hand in the air.

Phase 2 – Repeat the exercise – this time one person puts both hands in the air, but with thumbs tucked in. All other group members also have both arms in the air, their hands are open and facing the performer, and they sway their arms slowly backward, forward, and side to side. The person instructed to keep their thumbs tucked into hands also sways his or her arms slowly. The performer is instructed to throw the ball to the odd person out, but no cue is given about the nature of the difference.

Give each member a chance to be the performer.

Discussion

Have members answer the following questions

- How did it feel to be the person throwing the ball instead of a group member? Did you feel different? How would you describe how you felt?
- Was the activity harder or easier than you thought?
- What things made it difficult to find the person you were supposed to throw to?
- How do you think you could become faster as finding that person?

Shuttling (Internal-External Concentration)

Learning Goals

Learn new mental training skills

Background Information

Found in Leader’s Background information

Age Considerations

10 and up

Time Required

Approximately 10 minutes

Supplies

None
Instructions

- Members are instructed to choose a partner.
- The person who goes first must close his or her eyes; tune in to some sensation, feeling, or thought; and say something like “Now I am aware of a pain in my leg,” “Now I am aware of my breathing,” or “Now I am feeling silly.”
- The person then opens his or her eyes and says “Now I am aware of...”, adding something that is happening outside himself or herself. For instance, he or she says “Now I am aware of sunlight” or “Now I am aware of your eyes.”
- Repeat the process – first an inside statement, then an outside one – for a few minutes without a break. If the person gets stuck, the partner should help out by asking “Now I am aware of...?”
- The partner does the concentration exercise.
- Later, the exercise is repeated with the eyes open all the time.

Discussion

Have members answer these questions

- When you had your eyes closed, were you concentrating on internal or external cues?
- What about when your eyes were open?
- Which type of concentration was the most difficult? Why?
- What types of sports or activities require both internal and external concentration?

The ability to shuttle between internal and external focus is necessary in games such as football, where a quarterback must focus on a set of broad external cues (e.g. the game unfolding in front of him or her), shift to a narrow external cue (e.g. the receiver’s running pattern), and shift to an internal focus (e.g. in deciding how and when to throw the ball.)

Managing Distracters

Learning Goals

Learn new mental training skills

Background Information

Found in Leader’s Background information

Age Considerations

10 and up

Time Required

Approximately 10 minutes

Supplies

Analog watch or clock
Instructions

- Focus on the second hand of a watch or clock as it makes one complete revolution. Blink your eyes or snap your fingers every five seconds.
- After one complete revolution of the second hand, concentrate on the sweep hand as it makes another complete revolution. This time, blink your eyes or snap your fingers every ten seconds.
- After this second complete revolution of the sweep hand, concentrate on the second hand as it makes a third complete revolution. This time, alternate blinking your eyes and snapping your fingers at five-second intervals.
- Practicing this exercise a few times a day gradually improves the ability to concentrate. To make this exercise more difficult, have others make distracting noises or actions such as talking, asking the member questions, or moving about the room.

Discussion

Athletes rarely have the luxury of entirely controlling all elements of their environment. There are always distracters of one type or another. Some distractions occur naturally, while others are deliberate, e.g. on the part of opposition or spectators. Recognizing and managing distracters is a key to performing successfully.

Have the members answer the following questions

- Describe how difficult or easy it was to snap or clap at the right time when there were no distractions.
- Describe how that changed when others began making noises or distractions.
- How did you remain focused on the clock or watch with all of the distractions?
- What activities or sports do you participate in that involve distractions? What are they? How to you block out those distractions and focus on what is important?

Visualization This!

Learning Goals

Learn new mental training skills

Background Information

Found in Leader’s Background information

Age Considerations

10 and up

Time Required

Approximately 10 minutes

Supplies

None
Instructions

- Sit back, get into a comfortable position, and close your eyes
- Think of a particular skill in your sport or activity
- Imagine yourself performing that skill
- Focus externally on developing a clear and detailed image of yourself performing the skill
- Focus on the sounds you might hear as you perform the skill
- Focus internally on the sensations or feelings as you perform the skill
- Finally, once you have a clear image of yourself performing and feeling the skill, choose an external cue to focus on that is associated with the outcome of the skill. For example, choose the back of the rim of a basketball net, the bottom right or left corner of the soccer net, the bull’s eye on a target, or a catcher’s mitt. As you perform the skill in your mind’s eye, shift your focus to this external cue as you perform the skill.

Discussion

Have the members answer the following questions.

- What was the skill that you chose?
- What were the details that you thought about when you created an image of yourself?
- What was the external cue that you chose? Why did you choose it?
- How long did it take to shift your focus between your image and the external cue?

Anxiety Buster

Learning Goals

Learn new mental training skills

Background Information

Breathing Control - In addition to heart rate, breathing rate and depth are indicators of anxiety. Managing breathing rate and depth is a prerequisite of relaxation. Relaxation is in turn a prerequisite of visualization.

Age Considerations

10 and up

Time Required

Approximately 10 minutes

Supplies

- Clock/watch
- Paper and pencil
Instructions

Before You Begin: Pulse Rate
Record your radial (wrist) pulse rate for 15 seconds. Do this twice, and take the average value. Then multiply by 4 to obtain your heat rate in beats per minute. This is your heart rate; it will be affected by your arousal or anxiety level, as well as by coffee consumption, recent meals, etc.

*Through the following series of exercises, we will attempt to lower your heart rate significantly.*

Controlled Breathing – Kinaesthetic Controlled Breathing:
The technique for this type of controlled breathing is as follows:
- Close your eyes
- Feel your stomach move out; keep your chest and shoulders steady
- Slowly inhale, feeling the air in your chest increase and your shoulders rise
- Hold your breath
- Slowly exhale, feeling a release in tension as your shoulders and chest drop and your stomach relaxes

Now shift to listening to your breathing

Controlled Breathing – Audio-controlled Breathing
The technique for this kind of controlled breathing is as follows:
- Close your eyes
- Hear yourself slowly inhale and exhale air as you breathe.
- Slowly inhale
- Hear the air pass through your mouth and nose
- Feel the build-up of tension in your chest
- Slowly release the air
- Hear the sounds of air passing through your nose and mouth

Discussion/Debrief

Note that you are also focusing on certain cues (kinaesthetic and auditory). In other words, focus and relaxation are skills that are mutually dependent.

Have the members answer the following questions.
- Did your heart rate decrease, or slow down?
- Why do you think this is?
- Why do you think it is important to be able to control your breathing?
- Which was more difficult for you to you, kinaesthetic or audio-controlled breathing?

The Relaxation Response

Learning Goals
Learn new mental training skills
Background Information

Athletes often need to relax quickly and bring their body and mind under control rapidly to perform well. Mind-to-body control is often used simultaneously with the concept of a rapid relaxation response.

Age Considerations

10 and up

Time Required

Approximately 10 minutes

Supplies

None

Instructions

- Select a quiet environment
- Get into a comfortable position, and close your eyes. Try lying down on the floor.
- Low lighting or a dark area may help you as you perfect this technique
- Concentrate fully on taking two or three deep breaths (don’t hyperventilate; breathe under control)
- Become aware of your breathing. While breathing out, repeat a word or phrase, like a mantra, e.g. “slow, easy, calm, relaxed.” Breathe in...out, and repeat; continue for 10 to 20 minutes
- Adopt a passive attitude; allow any distractions that enter the mind to pass through. Let thoughts that arise slip through your mind like the credits at the end of a movie. They are there, but you pay little attention to them as they scroll by.
- Allow relaxation to occur at its own pace. Over time, the relaxation response will occur more quickly

Progressive Relaxation

Learning Goals

Learn new mental training exercises

Background for Leaders

Body-to-mind control is often referred to as progressive relaxation. This involves tightening and then relaxing different muscle groups.

Age Considerations

10 and up

Supplies

None
Safety Considerations

**Important** – it is strongly suggested that you modify the contraction-relaxation phase of the exercise for the individuals who are hypertensive. Ensure that anyone with such conditions gently flexes and relaxes their muscles.

**Instructions**

- Select a quiet room with dim lighting, and make sure there will be no distractions or interruptions.
- Check to see that members are warmly dressed and that their clothing is dry and comfortable.
- Spread members around the room so that there is at least one metre between them.
- Explain the principle behind relaxing:
  - Relaxation is important
  - Relaxation will help you rest and sleep
  - When you contract a muscle and then relax it, the muscle returns to a more relaxed state than it was in before the contraction took place.
  - Body-to-mind relaxation requires progressively contracting and relaxing your muscles to produce whole-body relaxation
- Start in the anatomical position. Lie on your back with your arms at your side. Check these features:
  - The middle of your head is touching the mat and you are looking straight up
  - Your shoulders are pressing equally on the mat
  - Your buttocks are pressing equally on the mat
  - Your calves are pressing equally on the mat
  - Your heels are pressing equally on the mat
  - You should be lying straight on the mat.
  - Your spine should be straight, your thighs and calves are close together and touching lightly and your arms are extended by your side with your palms facing slightly up.
- Check for the last time that you are straight and relaxed and that the pressure of your body parts on the mat is equal on both sides of your body. You will find this easier if you lightly close your eyes. Now walk among the members to see that their position is correct. It is preferable that members not use head pillows or wear shoes.
- We are now going to do a series of exercises. Each exercise will involve a very hard contract-hold-release sequence. The hold is for a period of 4-5 seconds. Then slowly relax the body part/muscle you contracted. When you do the exercises, contract only the muscles involved in that exercise. It is good practice to do a preliminary practice exercise involving shoulders (tension is often present in this part of the body). “contract! Shrug your shoulder, and progressively tighten the muscles, nothing else; three-four-five, relax slowly to your side. Feel your shoulders relax; they may tingle a little; they may feel heavy, and they may feel warm.” It may be necessary to remind members to contract only the muscle or body part mentioned in the instructions.
- The exercise routine progresses from the toes to the top of your head. After the first two exercises, introduce concentrating on breathing control. By the time the exercises are finished, the focus should be on breathing control and the total heaviness of the body.
What negative thoughts run through your mind before a performance in which you are anxious you might not do well? What words might you use to stop these thoughts? Write down positive thoughts to replace the negative thoughts.

<table>
<thead>
<tr>
<th>What negative thoughts run through your mind before a performance in which you are anxious you might not do well?</th>
<th>What words might you use to stop these thoughts?</th>
<th>Write down positive thoughts to replace the negative thoughts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>List them below</td>
<td>List them below</td>
<td>List them below</td>
</tr>
</tbody>
</table>
5. Record your responses in the following charts.

**Discussion**

Ask the members to identify why they think it is important to do this exercise. When might they need to use this skill?

**Learning to Visualize**

**Learning Goals**

Learn new mental training skills

**Background Information**

Found in Leader’s Background information

**Age Considerations**

10 and up

**Time Required**

Approximately 10 minutes

**Supplies**

None

**Instructions**

Stage 1: Find a comfortable position, take two or three deep breaths, and say Relax as you breathe out. Once you feel relaxed, go to Stage 2.

Stage 2: Visualization exercise for all the senses.

Now that you are feeling relaxed, imagine a place you might go when you want to get away from it all; a place that was/is special to you; a place with which you associate good feelings; a place in which you feel peaceful and safe

- Imagine the scene in your mind; add as much detail in your mind as you can.
- focus on the sounds you might hear in the situation you “see” in your mind.
- Focus on the sensations you would experience in your body (e.g. touch).
- Focus on the smells associated with the image in your mind

<table>
<thead>
<tr>
<th>What negative thoughts run through your mind when you are experiencing difficulties during sport performance?</th>
<th>What words might you use to stop these thoughts?</th>
<th>Write down positive thoughts to replace the negative thoughts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>List them below</td>
<td>List them below</td>
<td>List them below</td>
</tr>
</tbody>
</table>
After you finish, take a few moments to write down the things you found easiest to see, feel, smell, hear, etc., and those that were hardest. These will be the important visualization cues that you can use as you build your images in practice or in skill rehearsal.

Discussion
Note that members are also training focus skills, e.g. focusing on feelings, sounds, etc. In fact, creative imagery and visualization both double as a focusing skill.

**Dig It!**
Have members create their own mental training activity. This could be something that they share with their sports team, or something that they use to achieve their fitness goal.

Concentration, focus, shuttling, relaxation, anxiety control and visualization are all appropriate topics to create the activity around.

Members might choose to use props to make the activity more effective, or they may also choose to create one that requires no supplies and can be done in a small space, such as a team bus or change room.

**What’s Next**
Congratulate the members as they have completed the final builder. Next, they will showcase what they have learned in the Showcase Challenge.
In the Member Manual

Skill Builder 5: Mental Training

Lucky Says....

So you have trained your body, but have you been training your mind? You can train your mind by using sports psychology. Sport psychology offers athletes at all levels of sport participation an opportunity to add mental skills to their physical ones.

SKILLS CHECKLIST
- Understand the role of mental training in fitness and sports
- Perform mental training exercises

Important words
Watch for these important words throughout this builder: Concentration, Attentional Control, Shuttling

Dream It!

You can learn to set effective goals, improve concentration and focus, learn how to deal with their emotions and much more with mental training. These skills are also known as mental preparation and when you use them, they can often improve your performance.

Mental preparation is about training the mind to work with the body, not against it, in sport situations.

Mental Rating (part 1)

To get started, you need to know your strengths and areas that need improvement. To do so, answer the questions below.

How confident are you?

What is your physical weapon or chunk of your arsenal you can use to help you?

Do you set goals that motivate you to reach them?

What are your physical weapons or chunks of your arsenal you can use to help you?

In what areas of exercise or sport do you struggle?

How well do you perform in exercises or portions of personalized development?

Mental Rating (part 2)

Rate each mental skill or characteristic on the scale of 1-5.

- 1 = poor at that skill
- 3 = ok at that skill
- 5 = awesome, that is my mental weapon

<table>
<thead>
<tr>
<th>Mental Skill/Characteristic</th>
<th>Current Level of Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidence in my abilities</td>
<td></td>
</tr>
<tr>
<td>Motivation to practice/train</td>
<td></td>
</tr>
<tr>
<td>Desire: give full effort in competition/performance</td>
<td></td>
</tr>
<tr>
<td>Focus during competition/performance</td>
<td></td>
</tr>
<tr>
<td>Ability to refocus after mistakes</td>
<td></td>
</tr>
<tr>
<td>Set goals that drive my training and performances</td>
<td></td>
</tr>
<tr>
<td>Positive during competition/performance</td>
<td></td>
</tr>
<tr>
<td>Manage stress well during competition/performance</td>
<td></td>
</tr>
<tr>
<td>Control emotions during competition/performance</td>
<td></td>
</tr>
<tr>
<td>Ability to relax when nervous</td>
<td></td>
</tr>
<tr>
<td>Exhibit positive body language/posture during competition/performance</td>
<td></td>
</tr>
<tr>
<td>Prepared for competition/performance</td>
<td></td>
</tr>
<tr>
<td>Practice with intensity</td>
<td></td>
</tr>
<tr>
<td>Use mental imagery effectively</td>
<td></td>
</tr>
<tr>
<td>Use routines effectively during competition/performance</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
</tr>
</tbody>
</table>

Now, circle the lines with the lowest numbers. These are the areas in which you can work to improve your mental skills.

Do It!

Select at least 3 of the mental training activities listed on the next page. You may want to choose them based on the results of the activity in the Dream It section, or the areas in which you can improve your mental skills.
In the Member Manual

Your leader will guide you through these leader lead activities.
- Concentration Station
- Get it in Focus
- Shutting
- Managing Distracters
- Visualize This!
- Anxiety Buster
- Relaxation Response
- Progressive Relaxation
- Recognizing, Stopping, and Replacing Thoughts
- Learning to Visualize

Dig It!

It's time to create your own mental training activity. This could be something that you share with your project group, 4-H club, sports team, or something that you use on your own to achieve your fitness goal.

Concentration, focus, shuttling, relaxation, anxiety control and visualization are all appropriate topics to create the activity around.

You might choose to use props to make the activity more effective, or you may also choose to create one that requires no supplies and can be done in a small space, such as a team bus or change room.

Write or attach your training activity instructions below.

What's Next

Congratulations, you have completed the builders for this project. Next you will showcase your new knowledge and skill in the Showcase Challenge.
Showcase Challenge
Bringing it all together!

Now that you have finished this project, it is time to think about how you will share your experiences and knowledge with others. You may put your new skills to work by helping at a community event or at your club Achievement or teaching others about your topic. The goal of the Showcase Challenge is to help highlight your new skills and help you understand how you can use them. It can be an opportunity to receive feedback from others on your project. So go back through your manual and find some highlights of your learning (what you are proud of!) and think about how you will "showcase" it.

Here are some Showcase Challenge Suggestions:

- Demonstrate something you made or learned about
- Make a poster or display
- Make a pamphlet
- Give a speech
- Use your new skills to help with the Club Achievement plan
- Write a report
- Or come up with your own idea. It is up to you and your leader!

My Showcase Challenge Plan

My showcase idea: ____________________________

What materials and resources do I need? ____________________________

Who do I need to help me? ____________________________

When do I need to have things done by? ____________________________

Do It!

Insert or attach your finished product or a photo of you sharing your skills in your Showcase Challenge.

Dig It!

Now that you have showcased your project skills:
- How did your Showcase Challenge go?
- What would you do differently next time?
- How will you use your new skills in the future? (in different situations?)

In the Member Manual

Have members use their Member Manual to help them in organizing what they have learned. The form of the showcase can vary according to the wishes of the leaders and member's ability. Information could be presented in many forms, some of which are: posters, pamphlets, written reports, speeches, computer presentations, displays, etc. Suggestions are listed on the Showcase Challenge page at the back of the Member Manual. The best results are almost always obtained when members are allowed to present their information in the style of their choice.
## In the Member Manual

### My 4-H Portfolio Page

**Name:** [Name]

**Date:** [Date]

**Club:** [Club]

**Hours Spent on 4-H:** [Hours]

**Year in 4-H:** [Year]

**Project and Other 4-H Activities:**

---

### Discovering Your Fitness Project Skills Chart

To be completed by the leader and the member based on observations and conversations throughout the project.

<table>
<thead>
<tr>
<th>Skill Builder</th>
<th>Members will be able to…</th>
<th>We know this because…</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Understand the benefits of increasing physical activity</td>
<td>Identity activities completed and record observations and information from discussions about activities.</td>
</tr>
<tr>
<td></td>
<td>Set a fitness goal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Know about opportunities to be physically active in the community</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Understand the importance of proper nutrition for a physically active lifestyle</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Identify nutrient dense foods and their benefits in training and exercise</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Understand how to manage hydration in during physical activity.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Explain the difference between cardiovascular and muscular endurance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Understand the role of endurance and flexibility in lifelong fitness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Identify the major muscle groups and what they’re responsible for</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Create an exercise plan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Understand the importance of record keeping</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Know about career opportunities in fitness and exercise</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Understand the role of mental training in fitness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Perform mental training exercises</td>
<td></td>
</tr>
<tr>
<td><strong>Showcase Challenge</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Explain success in using the skills listed above</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Additional Comments/Activities:**

---

**Leader Point of Praise!**

I am most impressed by…

I acknowledge that the member has completed the 4-H project requirements.

**Leader’s Signature:** [Signature]
In the Member Manual

Above and Beyond!
In addition to project skills, 4-H also increases skills in meeting management, communications, leadership, community involvement, through participation in club, area, or provincial 4-H events or activities. List below any activities you participated in this year in 4-H.
(Some examples include Executive Positions Held, Workshops, Communication, Community Service, Rally, Bonspiels, Conferences, Judging, Camps, Trips, Awards, Representation to Area or Provincial Councils, etc)

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

**Feel Free to add additional pages that include awards, certificates, new clippings, photos or other items that describe your 4-H involvement.

Member Point of Pride!

What I learned...

What I need to improve on...

What I want others to notice...

Member’s Signature: ____________________________

Point of Praise! Another’s perspective on your achievements in 4-H.

(community professionals, MAFRI staff, 4-H club head leaders, 4-H Ambassadors, friends of 4-H)

I am most impressed by...

I believe that you have learned...

In the future I encourage you to...

Signature: ____________________________
4-H Achievement

4-H Achievement is... a 4-H club celebration when members have completed their projects. Achievements are planned by the club to give recognition to members and leaders for their accomplishments in their 4-H projects and club activities.

A 4-H Achievement can take many different formats: from choosing a theme, to member project displays, to members using their new skills for the event (entertainment, food, decorating, photographer, etc.), to members presenting their project to the whole group, the options are endless and open to the creativity of the members and leaders in each club!

Clubs may also plan their Achievement to promote 4-H to the community or to recognize sponsors and others who have helped the club.

Members and leaders - be sure to check your project books for the project completion requirements, so you will be ready for your club's Achievement celebration!

If you have any questions, comments or suggestions for this or other 4-H projects contact:

Manitoba 4-H Projects
Manitoba Agriculture Food and Rural Initiatives
1129 Queens Avenue
Brandon, MB R7A 1L9

Email: 4h@gov.mb.ca

Phone: 204-726-6613
Fax: 204-726-6260

For more information about 4-H and the many 4-H opportunities available please visit

http://www.gov.mb.ca/agriculture/4-h/
What is 4-H?
4-H is an international youth organization involving more than 7 million members in 80 countries around the world.

In Canada, 4-H began in 1913 in Roland, Manitoba as a community-based organization dedicated to growth and development of rural youth. Today’s 4-H program reaches both farm and non-farm youth across Canada. The motto of “Learn to Do by Doing” is embodied in the program, as 4-H focuses on skill development as well as personal development of life skills such as communications, leadership and citizenship.

4-H Motto
“Learn To Do by Doing”

4-H Pledge
I pledge,
My HEAD to clearer thinking,
My HEART to greater loyalty,
My HANDS to greater service,
My HEALTH to better living,
For my club, my community, and my country.

4-H Quality Equation Principles

Quality People
- Promote responsibility, respect, trust, honesty, fairness, sportsmanship, citizenship, teamwork and caring.

Quality Experiences
- Provide members with personal development and skill development experiences.

Quality Projects
- Promote and value quality effort.
- Promote high quality, safe food production within industry standards.

Manitoba 4-H project material is developed by
Manitoba Agriculture, Food and Rural Initiatives (MAFRI)