

# Physical Education and Health

## Learner's Material

### Physical Education Unit 1: Sports Officiating

This instructional material was collaboratively developed and reviewed by educators from public and private schools, colleges, and/or universities. We encourage teachers and other education stakeholders to email their feedback, comments, and recommendations to the Department of Education at [action@deped.gov.ph](mailto:action@deped.gov.ph).

**We value your feedback and recommendations.**

**Physical Education and Health – Grade 9**

**Learner's Material**

**First Edition, 2014**

**ISBN: 978-971-9601-69-2**

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Published by the Department of Education

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**Printed in the Philippines by Vibal Group, Inc**

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# PHYSICAL EDUCATION

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# SPORTS OFFICIATING

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## UNIT I

# SPORTS OFFICIATING

CONTENT STANDARD	PERFORMANCE STANDARD
<p>The learner . . .</p> <ul style="list-style-type: none"><li>demonstrates understanding of lifestyle and weight management to promote community fitness.</li></ul>	<p>The learner . . .</p> <ul style="list-style-type: none"><li>maintains an active lifestyle to influence the physical activity participation of the community</li><li>practices healthy eating habits that support an active lifestyle</li></ul>



## INTRODUCTION

The advancement brought about by science and technology has made life easier. Unfortunately, the luxury of just pushing a button or clicking a mouse is leading us to a sedentary lifestyle.

In order to meet the demands of daily routines and activities, it requires a fitter and healthier mind and body which can be achieved through active participation in physical activities like sports officiating.

This module dares to answer this pressing concern as it introduces you to the world of sports officiating; its basics which include both the personal and professional qualities that an officiating official should possess.

Real life experiences and challenges will be given relative to sports officiating to help you enhance your fitness, management skills, and positive behavior such as integrity, teamwork, discipline, sound judgment, and impartiality.

## LEARNING COMPETENCIES

The learner ...

- undertakes physical activity and physical fitness assessments.
- assesses eating habits based on the Philippine Food Pyramid/ My Food Plate.
- determines risk factor (obesity, physical inability, poor nutrition, smoking) for major non- communicable diseases lifestyle related (e.g. Diabetes, heart diseases, stroke, cancer).
- officiates practice and competitive games.
- distinguishes among facts, myths and misinformation associated with eating habits.
- monitors periodically one's progress towards the fitness goals.
- performs appropriate first aid for injuries and emergency situations in physical activity and sports settings ( e.g. Cramps, sprain, heat exhaustion)
- involves oneself in community services through sports officiating and physical activity programs.
- recognizes the needs of others in a real life and meaningful way.

## PRE-ASSESSMENT

### Part I. PAR-Q (Physical Activity Readiness Questionnaire)

Let's assess if you are ready for participating in physical activities by taking the Physical Activity Readiness Questionnaire (PAR-Q). Copy the template below and accomplish it in your activity notebook:

<b>Name:</b>		
<b>Questions</b>	<b>Yes</b>	<b>No</b>
<ul style="list-style-type: none"> <li>• Has your doctor ever said that you have a heart condition and that you should only do physical activity recommended by a doctor?</li> </ul>		
<ul style="list-style-type: none"> <li>• Do you feel pain in your chest when you do physical activity?</li> </ul>		

<ul style="list-style-type: none"><li>• In the past month, have you had chest pain when you were not doing physical activity?</li><li>• Do you lose your balance because of dizziness or have you ever lost consciousness?</li></ul>		
<ul style="list-style-type: none"><li>• Do you have a bone or joint problem (for example, back, knee, hip) that could be made worse by a change in your physical activity?</li><li>• Is your doctor currently prescribing drugs for your heart condition?</li></ul>		
<ul style="list-style-type: none"><li>• Do you know of any other reason why you should not do physical activity?</li></ul>		

**Let's see what the questionnaire revealed about your fitness:**

- If you answered YES to any of these questions, talk with your doctor before you start engaging in physical activity. Tell your doctor about the PAR-Q and which questions you answered yes.
- If you answered NO to all PAR-Q questions, you can take start participating in physical activity.

Source: Canadian Society for Exercise Physiology. (2002). Physical Activity Readiness Questionnaire - PAR-Q. Retrieved from: [www.csep.ca/forms](http://www.csep.ca/forms)

**Part II. Warm-Up Exercises**

You will be introduced with several warm-up exercises which you will be performing before conducting any other physical activity in the course of your lessons in sports officiating. But before proceeding to the activity, you should obtain first your PMHR (Personal Maximal Heart Rate) and THR (Target Heart Rate).

**Here's how to compute your THR (Target Heart Rate) at moderate and at vigorous intensity of physical activity:**

Moderate (40 - 55%):  $220 - \text{age} = \underline{\hspace{2cm}}$  Personal Maximum Heart Rate (PMHR)

$\text{MHR} \times 0.4 = \underline{\hspace{2cm}}$  bpm

$\text{MHR} \times 0.55 = \underline{\hspace{2cm}}$  bpm

Vigorous (60 - 85%):  $\text{MHR} \times 0.6 = \underline{\hspace{2cm}}$  bpm

$\text{MHR} \times 0.85 = \underline{\hspace{2cm}}$  bpm

You should always have a record of your heart rate before and after a physical activity to keep track of your fitness level. Remember, one of the most efficient ways to assess your fitness is through your heart rate.

Static Stretching Exercises	Dynamic Stretching Exercises
Neck Stretches	Jogging
Shoulder Curls	High Knees
Arm Stretches	Butt Kicks
Trunk Stretches	Side Shuffles
Toe Touch	Back Pedals
Lunges	Cariocas
Squats	Jumping Jacks

### Part III. Fitness Assessment

The following template is provided for you to accomplish by filling in the blanks. Identify the missing component of physical fitness, name of the fitness test in the first column and the respective scores generated by actually performing the indicated tests in the second column.



Copy the template and accomplish it in your activity notebook.

<b>Name:</b>		
<b>Age:</b>	<b>Sex:</b>	
<b>THR:</b> _____ <b>(Moderate Activity)</b>	<b>THR:</b> _____ <b>(Vigorous Activity)</b>	
<b>Weight:</b>	<b>Height:</b>	
<b>Classification:</b>		
<b>Physical Fitness Components and Tests</b>	<b>Score</b>	<b>Remarks (AB- Above Target/ BT-Below Target)</b>
1. _____ (Lower back and hamstring flexibility)	_____ inches	
2. _____ (Shoulder and upper back flexibility)	_____ inches	
3. _____ (Upper body strength)	_____	
4. _____ (Abdominal strength)	_____	
5. Shuttle Run _____	_____ seconds	
6. 50m Sprint _____	_____ seconds	
7. Body composition (weight/height <sup>2</sup> )	_____ (kg/m <sup>2</sup> )	
8. _____ 3-minute step test	_____ (bpm)	

Refer to the following tables of targets according to your age and gender for the interpretation of your scores:

**PERFORMANCE TARGETS FOR BOYS DepED Physical Fitness Test Manual**

AGE	Standing Long Jump (cm.)	Partial Curl-Ups	Chair Push-Ups	50 m. Sprint (sec.)	Shuttle Run (sec.)	Sit and Reach (cm.)	3 min. Step Test (Pulse Rate in 10 sec. X 6)
15	205	38	21	7.5	10.9	55	107
16	215	42	22	7.3	10.8	56	105
17	222	45	23	7.0	10.7	64	102
18	230	47	24	6.8	10.4	69	99
19	235	49	25	6.6	10.2	70	98
20	240	51	26	6.5	10.0	72	96
21	250	55	27	6.4	9.8	72	95

**PERFORMANCE TARGETS FOR GIRLS DepED Physical Fitness Test Manual**

AGE	Standing Long Jump (cm.)	Partial Curl-Ups	Chair Push-Ups	50 m. Sprint (sec.)	Shuttle Run (sec.)	Sit and Reach (cm.)	3 min. Step Test (Pulse Rate in 10 sec. X 6)
15	170	23	12	8.5	12.0	58	103
16	172	24	13	8.5	11.8	63	101
17	175	25	14	8.2	11.5	68	100
18	180	26	14	8.2	11.3	72	98
19	184	27	15	8.2	11.0	74	96
20	187	30	15	8.0	10.8	75	95
21	190	30	16	8.0	10.5	75	93

**Processing Questions:**

- What did the result of the Fitness Test reveal about your present fitness level?
- Which tests did you score satisfactorily? Poorly? What should you do about it?
- Which of the two levels of activity intensity did your heart rate fall during the conduct of the Fitness Test? (Moderate or Vigorous)
- How important is taking your THR when participating in a certain physical activity?

## INSTRUCTIONAL ACTIVITIES

### PART I: WHAT TO KNOW

Welcome to the first part of your lesson in Sports Officiating! In this phase, you will be provided with activities that will activate your prior knowledge as regards the lesson. From there, follow-up activities will be given to elicit your tentative understandings. As you go through the rest of the activities, misconceptions and alternative conceptions you have in mind will be clarified. Finally, your knowledge, considering its adequacy and relevance will be assessed at the end of this phase.

#### Activity 1: Fix Me I'm Broken (on first aid)

##### **Objectives:**

- Identify the common injuries that may happen during a sports officiating activity;
- Suggest possible ways to alleviate the suffering of an injured officiating official; and
- Simulate the application of appropriate first aid techniques to specific injuries that may occur in a sports officiating activity.

##### **Materials/Equipment Needed:**

- first aid kit (bandage, elastic bandage, dressing, antiseptics, etc.)
- splints
- stretcher/improvised stretcher
- activity notebook
- whistle
- Manila paper
- pentel pens/markers

**Procedure:**

- Do your preliminary activities.
  - ◇ Obtain heart rate at rest.
  - ◇ 10-15 minute warm-up exercises (static and dynamic stretching exercises).
  - ◇ Obtain heart rate after the warm-up activity.
- Group yourselves into 2. Assign a leader for each group. Find a partner within the group. Label yourself and your partner as A and B, A being the victim or injured official and B being the first aider.
- Assemble columns, 1 for the As and another for the Bs per group. Bring with you your first aid kits.
- As your teacher blows the whistle, all As shall pretend to be injured, it is your discretion as to what injury you would portray. The next whistle signals the Bs to employ appropriate first aid techniques to their partners who are pretending to be injured. The last whistle signals you to stop.
  - ◇ Example: sprain, strain, dislocation, and fracture
- Explain your work by pair.
- To unlock difficulties or misconceptions, you are encouraged to read the following readings on first aid:
- To prolong life

**Readings: BASIC FIRST AID**

***First aid*** is an immediate and temporary care given to a person who has been injured or suddenly taken ill. It includes self-help and home care if medical assistance is not available or delayed.

**Objectives of First Aid:**

- To alleviate suffering
- To prevent added/further injury or danger

### Common Injury Encountered by Officiating Officials and Athletes

#### SPRAINS

A sprain is caused by torn fibers in a ligament. Swelling and bruising are some signs and symptoms.

#### FIRST AID

- Remove any clothing or jewelry around the joint.
- Apply cold compress at once.
- Elevate the affected joint.
- The victim's physician may recommend an over the counter anti-inflammatory medication (aspirin, ibuprofen) appropriate for the victim's general health.

Source: Philippine National Red Cross Safety Services. (1999). Philippine Red Cross Standard First Aid.

#### HEAT EXHAUSTION

Heat exhaustion is a response to heat characterized by fatigue, weakness and collapse due to inadequate intake of water to compensate for loss of fluids during sweating.

#### FIRST AID

- Have the victim lie down with his/her feet elevated.
- Keep the victim cool.
- Give him/her electrolyte beverages to sip or make a salted drink.
- Monitor the victim for signs of shock.
- If the victim starts having seizures, protect him/her from injury and give first aid for convulsions.
- If the victim loses consciousness, give first aid for unconsciousness.

**Other serious injuries that require immediate care or first aid include:**

#### Sprains vs. Strains

A sprain is a stretch or tear of a ligament, the band of connective tissues that joins the end of one bone with another. Sprains are caused by trauma such as a fall or a blow to the body that knocks a joint out of position and, in the worst case, ruptures the supporting ligaments.

Sprains can range from first degree (minor) to third degree (the worst). Areas of the body most vulnerable to sprains are ankles, knees, and wrists. Signs of a

sprain include varying degrees of tenderness or pain, bruising, inflammation, swelling, inability to move a limb or joint or joint looseness, laxity or instability.

A strain is a twist, pull or tear of a muscle or tendon - a cord of tissue connecting muscle to bone. It is an acute, non-contact injury that results from overstretching or over-contraction. Symptoms of a strain include pain, muscle spasm and loss of strength. While it's hard to tell the difference between mild and moderate strains, severe strains not treated professionally can cause damage and loss of function.

### **Knee Injuries**

Because of its complex structure and weight-bearing capacity, the knee is the most commonly injured joint. Each year, more than 5.5 million people visit orthopedic surgeons for knee problems.

Knee injuries can range from mild to severe. Less severe would be tendinitis, patella femoral compression syndrome, iliotibial band syndrome and bursitis, to name a few. More severe injuries include bone bruises or damage to the cartilage or ligaments. Major injuries are common to the Anterior cruciate ligament (ACL), Meniscus injuries, Posterior cruciate ligament (PCL), Medial collateral ligament (MCL) and the Lateral collateral ligament (LCL).

Knee injuries can result from a blow or twist to the knee, from improper landing after a jump or from running too hard, too much or without proper warm up.

Other common sports injuries suffered by athletes are shin splints, Achilles tendon injuries, patella dislocation and hamstring, quadriceps and calf injuries.

### **Fractures**

A fracture is a break in the bone that can occur from either a quick, one-time injury to the bone (acute fracture) or from repeated stress to the bone over time (stress fracture).

The most common symptom of a stress fracture is pain at the site that worsens with weight bearing activities. Tenderness and swelling often accompany the pain. This is very important for the coaches to recognize and refer the athlete to the trainers or the team physicians.

### **Dislocations**

When the two bones that come together to form a joint become separated, the joint is described as being dislocated. Contact sports such as football, basketball and lacrosse, as well as high impact sports that can result in excessive stretching

or falling, cause the majority of dislocations. A dislocated joint is an emergency situation that requires medical treatments.

### **Home treatment**

#### **For sprains and strains**

Minor sprains and strains can be treated at home using the following measures. Start treatment as soon as possible to reduce swelling and speed up recovery. The less swelling, the more blood can get to the injured part to start the repair process.

- Apply the R.I.C.E. method.
- Do not apply heat during the first two days as this will only increase swelling.
- Use paracetamol for the first day of the injury, to reduce pain without increasing bleeding. Thereafter, ibuprofen (or other non-steroidal anti-inflammatories) or aspirin is a good choice. Don't give aspirin to a child younger than 16 years.
- Apply Arnica oil to reduce swelling.
- Remove rings immediately if the injury is to the hand or fingers.
- After 48 hours, start moving the limb gently, but only enough not to cause pain.
- Gradually increase the range of movement – let pain be your guide.

Strains usually heal in about a week. Sprains may take up to three weeks to heal.

#### **For fractures**

- Apply the R.I.C.E method.
- Keep the limb in the position you found it and place soft padding around the broken bones. Splint the injury with something rigid, such as rolled up newspaper or magazines, to prevent the bones from shifting. Don't move the broken bones. Splints must be long enough to extend beyond joints above and below the fracture.
- If there is an open fracture, cover it with a clean gauze pad. Apply pressure to control bleeding. Don't try to push the bone back into the wound and don't attempt to clean it.

- Get medical attention immediately. Fractures of the femur and pelvis may cause severe internal bleeding.
- Don't give the person anything to eat or drink in case surgery is needed.

**See a doctor if:**

- You suspect a fracture or dislocation or if you are unsure of the severity of a sprain or strain.
- You cannot straighten the affected joint or bear weight on it, or if a joint feels unstable.
- The skin over the injury area is broken.
- The limb below the injury feels numb or tingling, or is white, pale or blue in colour, or feels colder compared to the other healthy limb.
- The ligaments of the knee are injured.
- You injure an area that has been injured several times before.
- Pain is severe or lasts longer than 24 hours, or if swelling doesn't subside within 48 hours.
- A sprain or strain doesn't improve after five to seven days.
- Signs of infection develop.

**Prevention**

- Many exercise-induced injuries can be prevented. Don't be a "weekend warrior". Get yourself into shape gradually with a graded exercise programme. Listen to your body. Warm up properly and cool off after exercising. Use proper equipment and the correct technique.
- Use common sense to prevent injury in everyday life. Don't carry heavy objects. Watch where you step. Keep your home safe.
- To prevent falls, older adults should keep their muscles strong by exercising or doing tai chi.

**R.I.C.E method**

- Rest the injured part, especially for the first 24 to 48 hours after the injury – this is the most critical time of treatment. Avoid any activity that causes pain or makes it worse. Use crutches if the leg, foot or ankle is injured. Support an injured wrist, arm or shoulder with a sling. Tape an injured toe or finger to its healthy neighbor.



- Ice is an excellent anti-inflammatory and reduces swelling and pain. Apply an ice pack or cold compress for 10 to 15 minutes as soon as possible after an injury. Repeat each hour for the first 3 or 4 hours, then 4 times a day for the next 2 to 3 days. Protect your skin with a thin cloth. If ice packs are not available, a packet of frozen vegetables in a cloth will do.
- Compression also reduces swelling. Use elastic bandages for at least 2 days. Check that the bandage is snug, but not too tight. Take the bandage off at night.
- Elevation drains fluids from injured tissues. Elevate the injured area whenever you are sitting or lying down. Try to keep the injured area at or above the level of the heart.

Sources:

<http://www.webmd.com/first-aid/ankle-sprain-treatment>

[http://hssportsblog.projo.com/2006/10/sprains\\_strains\\_and\\_dislocation.html](http://hssportsblog.projo.com/2006/10/sprains_strains_and_dislocation.html)

<http://www.health24.com/Fitness/Sports-injuries/Sprains-strains-fractures-and-dislocations-20120721>

**Processing Activity:**

- Divide class into 4. Assign a leader to lead your group in answering the following questions:
  - ◇ Injuries may happen anytime, anywhere. List at least 3 factors that can cause injuries.
  - ◇ Explain why they can lead to injuries.
  - ◇ How important is knowledge and skills in applying appropriate first aid techniques to an injured officiating official or athlete?
- Print your shared ideas and let your leader or reporter present your work to the class.

## Activity 2:

### Trim Down a Bit, Be Safe and Be Fit (on weight management)

#### **Objectives:**

- Determine ways on how to maintain, lose or gain weight;
- Make comparisons of energy needs and energy used and suggest ways on how to obtain or lose energy;
- Design own weight management plan; and
- Discuss the importance of having a healthy weight in relation to sports officiating;

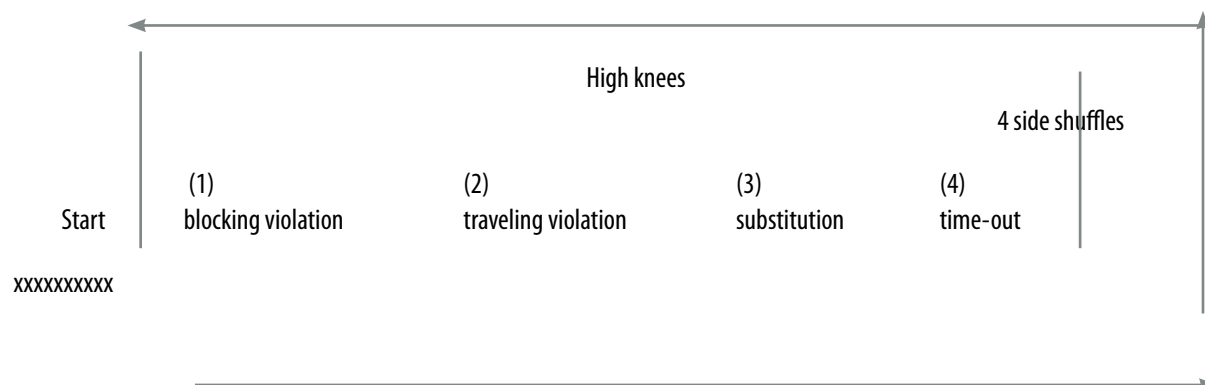
#### **Materials/Equipment Needed:**

- Activity notebook
- Calculator
- Bond paper
- Whistle

#### **Procedure:**

- Do your preliminary activities:
  - ◇ Obtain heart rate at rest.
  - ◇ 10-15 minute warm-up exercises (static and dynamic stretching exercises).
  - ◇ Obtain heart rate after the warm-up activity.
- Group yourselves according to BMI classification:
  - Group 1        -        Underweight
  - Group 2        -        Normal
  - Group 3        -        Overweight/Obese
- You are going to have a game. It's called modified obstacle relay. You will be provided with an obstacle course with specific stations indicating the task to accomplish. All are related to sports officiating (e. g. basketball). Blow your whistle first before executing the needed signal or skill.
- Refer to the illustration regarding the challenges you have to pass through in the obstacle course as your guide.
- The first team to finish wins. Are you ready? Let's do this!

**Diagram illustrating the sequence of obstacles (skills/signals) to perform and pass through in the obstacle relay:**



**Processing Activity:**

Assemble in columns per group and discuss among group members the following questions:

- What went well? What went wrong?
- How does body weight influence one's physical activity like in the one you just did?
- What suggestions can you give to perform better next time, and in other physical activities at hand?

**Readings:**

**Nutrition and Weight**

When you consume basically the same number of calories as you expend, your body weight remains relatively stable. If you want to gain weight, you must manipulate this balance between calories consumed and calories expended.

**Gaining Weight**

Some people have difficulty in gaining weight. This can be a result of a higher-than-normal basal metabolic rate or higher physical activity level. When weight gain is a goal, the focus is on gaining muscle and not fat weight. To do this in a healthy way, you should consume more frequent meals with healthy snacks.

For example, in addition to three main meals, consume three snacks per day. Consuming about 300 to 500 calories per day more would result in about a 1 pound (0.45 kg) per week weight gain. Healthy snacks include yogurt, peanut butter and jelly sandwiches, cereal with milk, fruit smoothies, and turkey sandwiches. It is also important to continue to exercise to ensure that the weight gain is mostly muscle. In particular, resistance training will be an important factor for building muscle. Although it will take some time, the slower the weight gain, the more likely it will be to be muscle gain not fat or water gain.

### **Losing weight**

Weight loss is a more common goal than weight gain. Losing weight involves a negative energy balance. This can be achieved by increasing exercise and decreasing caloric intake.

### **Determining Calorie Needs**

#### **What is Calorie?**

A calorie is defined as the heat required to raise the temperature of 1 gram of water 1 degree Celsius. Because this is a relatively small amount, scientists use a larger unit, Calories (uppercase C), also called a kilocalorie (abbreviated kcal.) The Calorie or kilocalorie, is 1,000 calories.

Total energy expenditure (TEE) is the total number of calories your body needs on a daily basis and is determined by the following:

- Your basal metabolic rate (BMR)
- The thermic effect of food (also known as dietary-induced thermogenesis)
- The thermic effect of your physical activity

### **Basal Metabolic Rate (BMR)**

Basal Metabolic Rate is defined as the energy required to maintain your body at rest (e. g. breathing, circulation). To precisely determine your BMR, you would need to fast from 8 to 12 hours and then undergo a laboratory test in which you sit quietly for about 30 minutes while the air you exhale is analyzed. This determines how many calories you are burning at rest. Basal metabolic rate is 60% to 75% of the total energy expenditure. Typically, the larger and more muscular the person is, the higher the BMR is.

### **The Thermic Effect of Food**

The thermic effect of food is the energy required to digest and absorb food. The thermic effect is measured in a similar way as BMR, although the measurement time is usually about four hours after you consumed a meal. The thermic effect of food is 10% to 15% of your total energy expenditure.

### **The Thermic Effect of Physical Activity**

The thermic effect of activity is the amount of energy required for physical activity. It can be measured in a laboratory when you are exercising on a stationary bike or treadmill. The thermic effect of activity is the most variable of the three major components of total energy expenditure because it can be as low as 15% for sedentary people and as high as 80% for athletes who train six to eight hours per day.

One other component of total energy expenditure that plays a role is non-exercise activity thermogenesis (NEAT), which is energy expended in unplanned physical activity. This can include taking the stairs instead of the elevator, sitting on a balance ball at your desk, parking farther from your destination in a parking lot, fidgeting, and other calorie-burning activities.

*Reference: Complete Guide to FITNESS and HEALTH, Barbara Bushman, Ph. D., American College of Sports Medicine, 2011, pp. 69-70, 76*

### **Maximizing Food Consumption**

Consuming an appropriate number of calories and foods from various categories results in optimal nutrition. The table below shows an age-specific daily calorie and serving size recommendation for grains, fruits, vegetables, and milk and dairy items for boys and girls. Note that the calorie recommendations in said table are on an inactive child; about 200 calories would need to be added for a moderately active child and 200 to 400 calories per day for a very physically active child.

**Table 9. Daily Estimated Calories and Recommended Servings for Adolescents**

<b>Foods</b>	<b>9-13 Years</b>	<b>14-18 Years</b>
Calories	1800 kcal for males; 1600 kcal for females	2200 kcal for males; 1800 kcal for females
Fat	25% - 35% kcal	25% - 35% kcal
Milk/Dairy	3 cups	3 cups
Lean Meat/Beans	5 oz	6 oz for males;
Fruits	1.5 cups	5 oz for females
Vegetables	2.5 cups for males;	2 cups for males;
Grains	2 cups for females	2.5 cups for females
	6 oz for males;	3 cups for males;
	5 oz for females	2.5 cups for females
		7 oz for males;
		6 oz for females

*Reference: Complete Guide to FITNESS and HEALTH, Barbara Bushman, Ph. D., American College of Sports Medicine, 2011, pp. 190*

### **Managing Your Weight**

Establishing or maintaining a healthy body weight requires an understanding of how the body uses food to provide energy. In addition, when weight loss is desired, a plan of action is needed for long-term success.

### **Energy Balance**

Understanding the concept of energy balance (EB) is critical if you want to understand how body weight is regulated in human beings. EB in its simplest form simply compares the amount of energy consumed as food with the amount of energy expended through the combination of resting metabolism, activities of daily living, and voluntary physical exercise. The three possible states of EB are positive, negative, and neutral. Positive EB occurs when you consume more energy (calories) than you expend, resulting in weight gain. Negative EB occurs when you expend more calories than you consume, resulting in weight loss. Neutral EB occurs when the amount of calories you consume equals the amount that you expend.

### Estimating Calorie Needs

Probably the first question that comes to mind when contemplating your own body weight is How many calories do I need? There are sophisticated laboratory techniques to estimate this, but these tests are not practical for most people. Table 4 of this module includes one simple method of estimating needed calories based on body weight and activity level. An alternative method devised by the U. S. Department of Agriculture (USDA) estimates energy needs based on sex, age and activity level. Refer to the table below:

**Table 8. Estimated Calorie Needs Based on Sex, Age and Activity Level of Adolescents**

MALES				FEMALES			
Age	Activity Level**			Age	Activity Level**		
	Sedentary	Moderately Active	Active		Sedentary	Moderately Active	Active
12	1800	2200	2400	12	1600	2000	2200
13	2000	2200	2600	13	1600	2000	2200
14	2000	2400	2800	14	1800	2000	2400
15	2200	2600	3000	15	1800	2000	2400
16	2400	2800	3200	16	1800	2000	2400
17	2400	2800	3200	17	1800	2000	2400
18	2400	2800	3200	18	1800	2000	2400
19-20	2600	2800	3000	19-20	2000	2000	2400
21-25	2400	2800	3000	21-25	2000	2000	2400

Calorie levels are based on the Estimated Energy Requirements (EER) and activity levels from the Institute of Medicine and Dietary Reference Intakes Macronutrients Report, 2002

*\*\*Sedentary = less than 30 minutes a day of moderate physical activity in addition to daily activities; Moderately Active = at least 30 minutes up to 60 minutes a day of moderate physical activity in addition to daily activities; Active = 60 minutes a day of moderately physical activity in addition to daily activities*

*Reprinted from U. S. Department of Agriculture*

Reference: Complete Guide to FITNESS and HEALTH, Barbara Bushman, Ph. D., American College of Sports Medicine, 2011, pp. 268-272

**Processing Activity:**

- Consider your age. Officiating is a tough job. It is an activity for physically active people. How much calorie do you need to keep yourself active while planning to lose, gain or maintain weight? What are the foods you should take in and at what amount should you take them in?
- Reflect carefully on the readings you have just had and write your answers in your activity notebook.

**PART II: WHAT TO PROCESS**

Welcome to the What to Process part of your lesson! You will be given activities to display and enhance your skills in sports officiating at the same time formulate your understandings as regards the benefits of such activities to your fitness and well-being. As you go on and overcome the challenges provided for you, you will learn that together, sports officiating activities will be more fun and exciting, without knowing that you are at the same time improving your fitness and your sense of community.

**Activity 3: Human Basketball****Objectives:**

- Play the “human basketball” game;
- Implement the rules of the “human basketball” game through officiating;
- Exhibit timely and precise judgment, command and fitness during the conduct of the “human basketball” game; and
- Relate the importance of the role of an officiating official to the success of a game.

**Materials/Equipment Needed:**

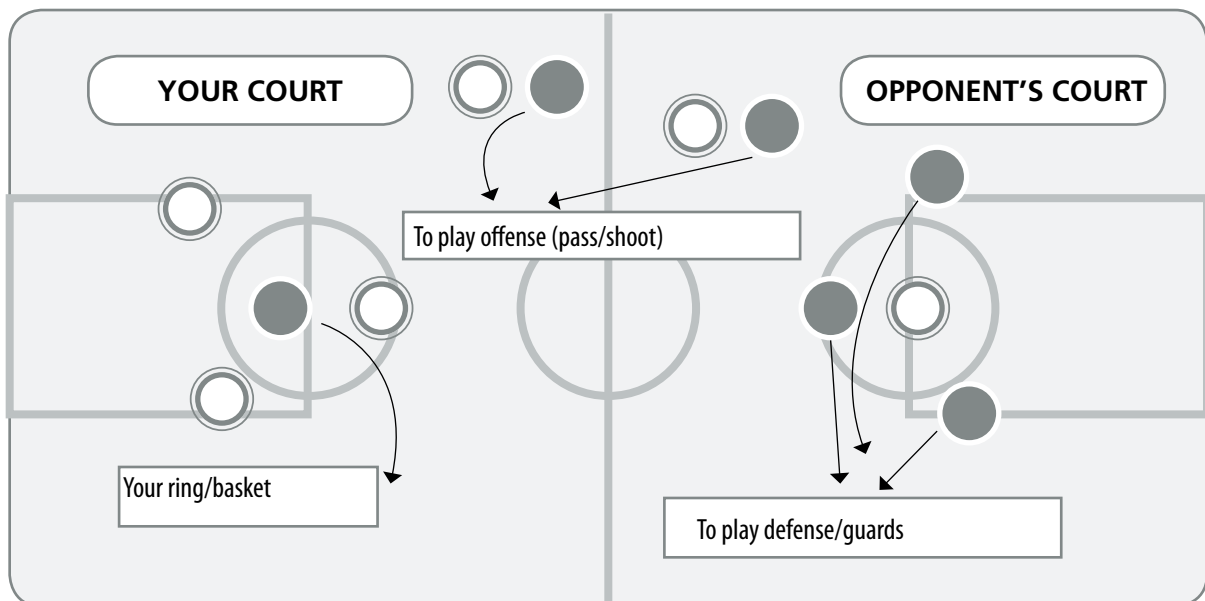
- Activity notebook
- Calculator
- Playing area (probably a basketball court if there’s any)
- Basketball ball



- Score board and chalk/marker
- Whistle
- Manila paper
- Marker or pentel pens
- Coloring materials

**Procedure:**

- Do your preliminary activities.
  - ◇ Obtain heart rate at rest.
  - ◇ 10-15 minute warm-up exercises (static and dynamic stretching exercises).
  - ◇ Obtain heart rate after the warm-up activity.
- Divide your class into 4 groups. Assign team captain.
- You will be playing a game. It is dubbed as “human basketball.” It is different from the regular basketball that you know. Supposing there are 8 players in your team playing on court. Others who will not play will stay at the area designated to your group (bench, in this case) while waiting for substitution. Four members will be playing, 1 will serve as the basket for your opponents to shoot the ball, the final 3 will serve as guards to stay around the human basket with which your team will shoot and earn points. To move the ball from 1 player to another, pass it. Your team is allowed, in a team to dribble the ball 3 times only.
- **Refer to the following diagram:**



Rules of the Game	
Number of players per team	8
Objective of the game	To shoot the ball to your basket, guarded by 3 defensive players from the opposing team
Game duration	5 minutes
Scoring system	1 point per shot
Violations	dribbling the ball more than 3 times per team, stepping on the line, ball out of bounds (lose ball), and misconduct
Substitution	Unlimited (on ball possession)
Time-outs	15 seconds (on ball possession)
Starting the game	Toss coin

**Officiating Officials:**

Referee	2 (to whistle when a score is made, substitution, time-out, or when a violation is committed and ball possession is reversed)
Scorer	1 (to record scores of each team)
Linesmen	4 (to watch line assignment and raise flag once a violation is committed)
Time Keeper	1 (To track the time per game and time-outs)

**Schedule of games and officiating:**

A (Group I)	Game 1	Winner 1	Champion	Schedule of Games and Officiating				
				Game #	Grp. 1	Grp. 2	Grp. 3	Grp. 4
B (Group II)		Game 3		Game 1	Play	Play	Officiate	Observe
				Game 2	Officiate	Observe	Play	Play
C (Group III)	Game 2	Winner 1		Game 3	Observe	Play (Winner 1)	Play (Winner 2)	Officiate
D (Group IV)								

**Processing Activity:**

- Gather in discussion formation by group.
- Share your ideas on the following questions:
  - a. How did you feel about the game?
  - b. What observations have you noticed while games were going on?
  - c. If there were no rules of the game, what do you think might have happened? Why?
  - d. Were the roles of the officiating officials necessary in the smooth conduct of the games? Justify your answer.
  - e. What qualities should an officiating official possess? Why do you say so?

**Readings:**

**Qualities of an Officiating Official:**

The role of an official is very crucial in a sporting endeavor. He defines the success or failure of a certain physical activity. It is therefore necessary for an aspiring officiating official to possess a number of qualities for him to meet the goal of having a satisfying, complain-free, impartial, and successful game. The following are some of the qualities to be considered:

- Physical Qualities
- Emotional Qualities
- Mental Qualities
- Social Qualities

**Physical Qualities**

These qualities refer to the physical attributes of an officiating official. Since an officiating official needs to catch up with every detail of what the athletes or players do on court, he needs to have a high level of fitness to be able to perform his job. To determine his level of fitness he or she has to consider the following:

**Physical Fitness**

As has been defined in preceding modules in Physical Education, physical fitness is the capacity of an individual to perform his or her daily tasks without undue fatigue and still has extra energy for recreation and emergencies. Physical fitness is not achieved overnight. One must work on with elevating his own level of

fitness if he or she has to perform better in his chosen field of endeavor. Several ways to determine one's fitness which are basis in improving it include:

- ◇ Body Mass Index
- ◇ PMHR and THR (Personal Maximal Heart Rate and Training Heart Rate)
- ◇ Fitness or Exercise Program
- ◇ Nutrition and weight management

### **Emotional Qualities**

These qualities refer to the emotional readiness of an officiating official to perform his or her role in a game. He or she might have mastered all the rules and possesses a high level of fitness but if the emotional attributes don't warrant him or her to perform the duties and responsibilities of an officiating official, failure is expected. Emotional attributes that an officiating official should possess include confidence. It is having belief in oneself. Confidence can be situation-specific, but practicing it through actual game immersions and observations of game officiating activities can help improve it.

### **Mental Qualities**

Just as physical and emotional qualities are essential, mental characteristics are also equally necessary. Mental toughness is the term used to refer to all of the qualities pertaining to one's mental preparations in officiating a game. To be mentally tough requires one to stay focused, regulate one's performance, ability to handle pressure, awareness and control of thoughts and feelings and one's command and control of the environment. This can be achieved by having a thorough knowledge on the rules of the game, alertness, vigilance which result to timely, decisive, honest, and impartial judgment. Decisiveness results to integrity of the result of the game leading to a satisfying result and acceptance of success and failure for both competing teams or players.

### **Social Qualities**

Social qualities refer to the ability to deal with others at any given situation. Complaints are inevitable in a game. It is the ability of an officiating official to settle disputes without sacrificing the integrity of a game and the officiating team. To develop such qualities requires practice just as the emotional qualities do. Surrounding oneself with people who make wise decisions especially in officiating endeavors might help one improve his or her decision-making skills.

Source: <http://www.lancssundayleague.co.uk/downloads/FA%20Referees%20Fitness%20Guide.pdf>

**Processing Activity:**

- With same groups, you will be distributed with pieces of manila paper and markers.
- Considering the previous readings on the qualities of an officiating official, draw on the manila paper the picture of your ideal officiating official.
- Ready? Set. Go! (2 minutes)
- This time, let's find out what characterizes your ideal officiating official.
- (individual or group presentation)

**Activity 4: Synchronized Hand Signals**

**Objectives:**

- Demonstrate correct hand signals of referees in basketball, volleyball, and football with mastery;
- Exhibit quick/sharp judgment calls while officiating a game; and
- Realize the value of high level fitness in sports officiating.

**Materials/Equipment Needed:**

- Activity notebook
- Whistle
- Calculator
- Playing area (probably a basketball court if there's any)
- Visual materials (hand signals of referees in basketball, volleyball, and football)
- Flashcards indicating the term for the hand signals in each of the 3 sport
- Score board and chalk/marker
- Markers or pentel pens

**Procedure:**

- Do your preliminary activities:
  - ◇ Obtain heart rate at rest.
  - ◇ 10-15 minute warm-up exercises (static and dynamic stretching exercises).
  - ◇ Obtain heart rate after the warm-up activity.

- Group class into 3. Select a leader per group. Leaders will draw lots to designate which sport will be assigned to them.

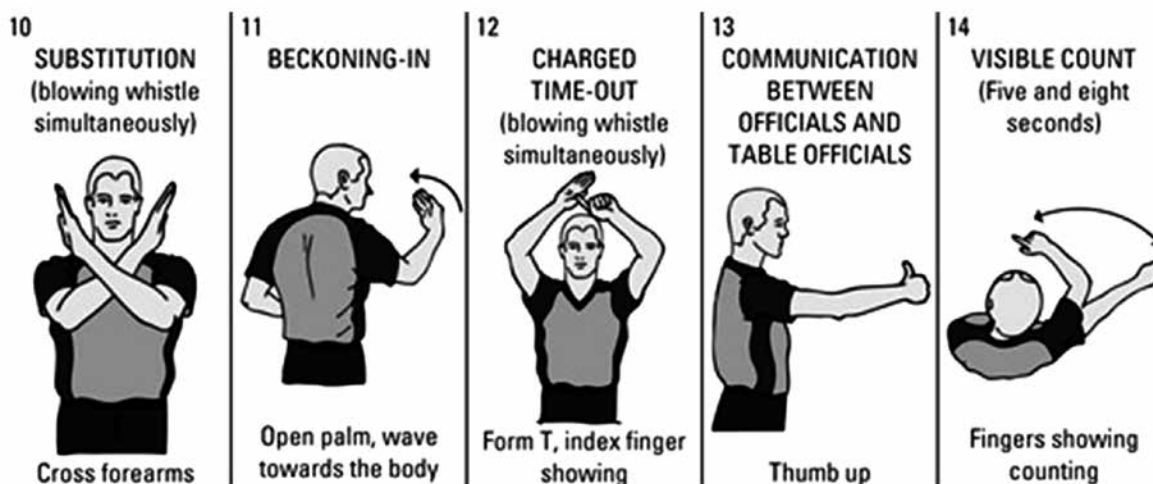
Example Sports Assignment per Group:

- Group 1 Basketball
  - Group 2 Volleyball
  - Group 3 Football
- You will be provided with illustrations of hand signals of referees of your respective sport assignment for you to master within 10 minutes.
  - After 10 minutes, Group 1's mastery will be assessed first, followed by Groups 2 and 3.
  - In group formation, you will be shown a sequence of 10 flashcards indicating the hand signal to be executed in synchrony by your group. Upon whistle is given, execute with your groupmates the given hand signal then freeze for 2 to 3 seconds. 2 points will be given to a correctly, timely performed hand signal.
  - The group with most points, wins the game.

### Referees' Hand Signals:

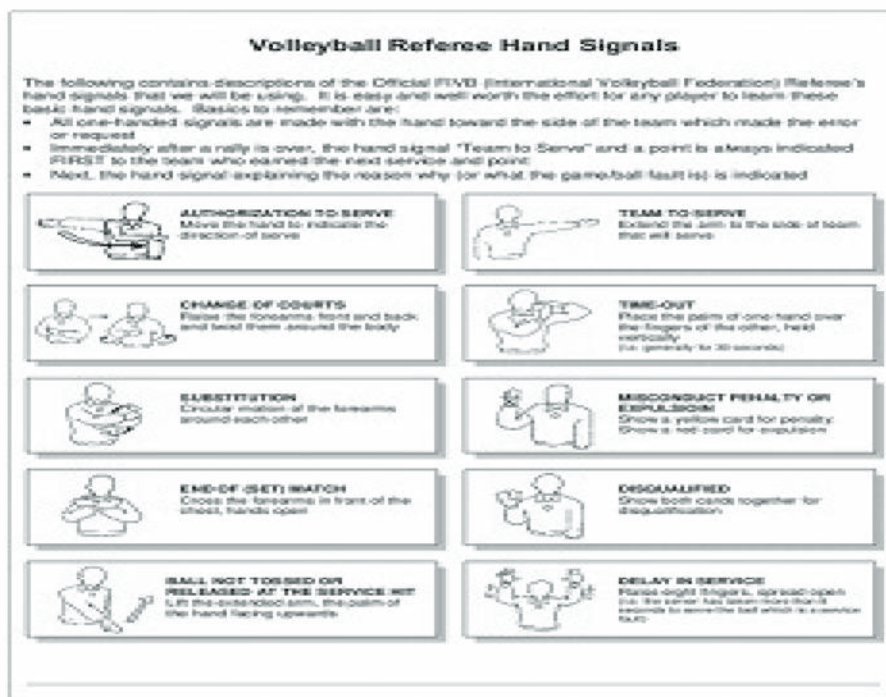
#### A. Basketball:

Source: basketball hand signals-www.nba.com

















## B. Volleyball:

Source: [www.picstopin.com](http://www.picstopin.com)



## C. Soccer

### Soccer Referee Hand Signals

						
<b>Caution or Expulsion</b> Referee holds Yellow card Or Red card above head	<b>Play On / Advantage</b> Referee indicates with his hands That the Advantage Rule Applies and play should continue	<b>Direct Free Kick</b> Referee points in The direction of kick	<b>Indirect Free Kick</b> Referee raises his hand Until ball is kicked And Touched by another player	<b>Goal Kick</b> Referee points to a corner Of goal area from Which kick is to be taken	<b>Corner Kick</b> Referee points towards corner Of the field from which Kick is to be taken	<b>Goal Kick</b> Assistant Referee Points his flag at goal area From which kick Is to be taken
						
<b>Penalty Kick</b> Referee points To penalty mark From which kick Is to be taken	<b>Substitution</b> Assistant Referee Signals to the referee By holding his flag Overhead with both hands	<b>Throw-In</b> Assistant Referee Holds The flag out To his side, Pointing in the direction The throw is To be taken	<b>Corner Kick</b> Assistant Referee Points his flag At corner area From which kick Is to be taken	<b>Offside</b> Assistant Referee Points his flag straight up Above his head To signal offside Violation to the referee	<b>Offside</b> Assistant Referee Points his flag straight up Above his head To signal offside Violation to the referee	<b>Offside</b> Assistant Referee Points his flag straight up Above his head To signal offside Violation to the referee
						<b>After Assistant Referee Signals offside, He then shows location of infraction By holding his flag out In front of him -- flag held high Indicates infraction occurred At far side of the field, Middle = center of field, Low = side of field nearest to him</b>

**Processing Questions:**

- What went well? What went wrong?
- Why is there a need to give precise and immediate calls when officiating a game?
- What limits an officiating official from giving precise and immediate calls?
- How can one improve his or her officiating skills in terms of precision and immediacy?

**III. WHAT TO REFLECT and UNDERSTAND**

In this part of your lesson, you will go deeper and further. You will be given opportunities to reflect and understand the relevance of officiating to your fitness and well-being. Activities will be provided for you to integrate weight management, healthy lifestyle and officiating and its fitness benefits which will in turn be beneficial for you and your community.

**ACTIVITY 5: Fuel Up**

In the previous stages, you have found out the nutritional requirements of an official and its influence to one's performance. In this activity, you will consider yourself an official and prepare a balanced meal for you.

**Objective:**

- Prepare a balanced meal for a sports official based on his/her nutritional requirements.

**You will need:**

- Paper plate or improvised paper plate
- Cut out picture of food and drinks
- Paste/glue
- Scissors
- Pencil and Coloring materials



**Here's how:**

1. Choose a sport that you want to officiate.
2. Review the nutritional requirements and the fitness components needed by the official in the chosen sport.
3. Consider yourself an official of the chosen sport, paste/draw on your paper plate the food and drinks you plan to take regularly.
4. Make your work presentable and be guided with the following criteria:

**Suggested Rubric**

<b>CATEGORY</b>	<b>Advance- 4</b>	<b>Proficient- 3</b>	<b>Approaching Pro- ficiency-2</b>	<b>Developing-1</b>
<b>Creativity</b>	Several of the graphics or objects used reflect an exceptional degree of student creativity in their creation and/or display	One or two of the graphics or objects reflect student creativity in their creation and/or display.	One or two graphics or objects are made or customized by the student, but the ideas are typical rather than creative	The student does not make or customize any of the items
<b>Time and Effort</b>	Class time is used wisely. Much time and effort go into the planning and design.	Class time is used wisely. Student can have put in more time and effort at home.	Class time is not always used wisely, but student does some additional work at home.	Class time is not used wisely and the student put in no additional effort.
<b>Accuracy and ability to defend work</b>	The student gives a reasonable explanation of how every item is accurate to the basis. For most items, the relationship is clear without explanation.	The student gives a reasonable explanation of how most items are related to the basis. For many of the items, the relationship is clear without explanation.	The student gives a fairly reasonable explanation of how most items related to the basis.	The student's explanations are weak and illustrate difficulty in understanding how to relate items to basis.

5. Present it to class, support it with a brief explanation and be ready to answer the questions of your classmates and teacher.

**Processing Questions:**

1. How did you feel about the activity?
2. What were your considerations in identifying food to eat?
3. How is it different from your daily menu?
4. How does nutrition affect one's officiating performance?
5. Is it really necessary that an official is of normal nutritional status? Why and why not?

Remember...

**Good nutritional status is needed for an official to do his/her duties and responsibilities effectively and efficiently.**

**Activity 6: Officiating is a Good Thing!**

In this part, your creativity to illustrate ideas in a creative and comprehensible way will be challenged.

**Objective:**

- Present in a creative way the importance of officiating in improving and sustaining one's fitness

**You will need:**

For Graphic Organizer:

- Copy of the reading on the rewards and satisfaction of officiating
- Pencil
- Coloring materials
- Pentel pen
- Other art materials

For Powerpoint/Multimedia Presentation:

- Copy of the reading on the rewards and satisfaction of officiating
- Computer/Laptops
- Audio-Visual Set

**Here's how:**

1. Read the articles on the rewards and satisfaction of officiating.

### **Rewards and Satisfaction**

By: Jenni Malsam, Iowa HS Athletic Assn. and Iowa Girls HS Athletic Union (30 yrs);  
Former HS Soccer-Basketball-Volleyball Official.

The NFHS Interscholastic Soccer Referee who continues to officiate over a long period of time does so for a variety of reasons. Many feel the motivation to continue their involvement, but not all try to identify the reasons they continue to officiate.

If you were asked why you continue to referee, what would you answer? Perhaps: for the fun, for the excitement, for the opportunity to continue in soccer, or perhaps for another other reason that makes sense to you? These may be among the more common reasons given. However, if you take the time to think about and analyze all of the possible reasons, you could probably identify a great number of additional rewards, satisfactions and benefits that you really derive from your activity as an Interscholastic Soccer Referee.

In this short discussion, we'll try to identify what your high school soccer refereeing means in terms of some of the possible rewards, satisfactions and benefits that you can realize through your participation.

#### **What are the rewards and satisfactions?**

I believe that there are three major types of rewards and satisfactions you realize that result from participation as an Interscholastic Soccer Referee: physical fitness, mental fitness and attitude, and social networking and people skills.

#### **Physical Fitness**

This includes such things as improved: general health, weight control, stamina, reflexes, higher energy levels, posture, and stature.

Comment: While not every referee realizes these at the same levels, yet you should be able to feel that you have seen some of each improve in yourself. The key behavior that generates these physical fitness benefits is to adopt a regular

program of personal fitness conditioning that every successful Interscholastic Soccer Referee learns to develop and follow throughout his or her officiating career. Physical fitness is critical to successful officiating performance. The personal benefits are a by-product, and are probably more beneficial than most officials realize.

### **Mental Fitness**

The obvious benefits include: positive disposition, better mental reflexes, decisiveness, alertness, prolonging a youthful bearing, a steadier temperament, perseverance, and increased determination.

Comment: Think back on your career to date. Can you recognize an improvement in any of these qualities in your own experience? This fund of mental fitness is generated in several ways. The study of, and constant practice of, rules applications, interpretations and decisions while officiating strengthens such qualities as alertness, sharpness and decisiveness. The practice of continually making decisions, both discretionary and factual, help sharpen your mental reflexes, decisiveness, determination, and alertness. The continual exposure to the challenge of competition and managing the high school soccer game participants strengthens such qualities as positive disposition, decisiveness, prolonging youthful bearing, perseverance, and determination.

### **Mental Attitude**

This important attribute includes: the satisfaction of meeting constant, game-by-game challenges, a heightened sense of accomplishment as each successfully controlled game is experienced, the feeling of making a contribution to the game, the sense of providing an important service to others, honing your people- and game-management skills, acknowledgement of a job well done by others and in yourself, and the ability to develop the sense of dedication it takes for you to attain competency.

Comment: Many of these personal qualities are acquired and strengthened throughout your refereeing experience. The self-satisfaction of meeting the considerable challenge of competent refereeing, the well-deserved sense of accomplishment after each contest, and the satisfaction of serving the sport and making a positive contribution to each contest are continually experienced in your activities. Perhaps a most important factor, and one sometimes overlooked, is the benefits you acquire through being able to transfer into your daily lives and activities such qualities as management skills, dedication to a task, and the self-assurance in your performance.

### **Social Rewards and Satisfactions of Networking**

In short, networking is the virtual web of people contacts that we make, enjoy, and benefit from throughout our Interscholastic Referee careers.

Comment: Through networking we establish lifelong professional contacts and friendships. These enhance and help us enjoy our soccer activities, and allow us to get to know interesting sports figures. All of these result in our personal professional development. These benefits are among the most rewarding that we receive because of our involvement. Many of us refer to interscholastic soccer refereeing as an avocation, simply because it is not a full-time job, but rather an activity we pursue as our time, and the game assignments that are available, permit. However, we realize that it is a challenging profession, and as such helps us to develop all of the professional attributes required for successful performance of any career pursuit. The professional development opportunities and the sharing with others in our chosen profession yield benefits important to our daily life experiences. Consider what we experience through networking with all of the people we come into contact with.

First, we establish many life-long professional contacts, friendships, and acquaintances with many talented and competent individuals, whether it be Referee colleagues, school administrators, educators, sports administrators, and sports figures. We tend to meet and mix with these people not only through the games we referee, but also through local group meetings, training sessions, attending special soccer-related events, and through personal contact with such specialists as Assessors, Mentors, Assigners, and Instructors. Also, the fun of associating with other Referees who regard their own soccer refereeing as an opportunity to excel often result in our own desire to improve being motivated.

By pursuing personal development activities to strengthen our soccer refereeing skills, we meet and are exposed to a variety of knowledgeable people who share their perceptions of the game and participants. Along the way our own understanding and enjoyment of high school soccer grows and enhances the career experience significantly.

### **Social Rewards and Satisfactions – People Skills**

Comment: These include: communication skills, a sense of humor, increased sensibilities, improved sociability, refined demeanor, and positive self-esteem. Your ability to interact successfully with other people is significantly improved. Continual interaction during games with countless numbers of individuals, all with different personality and behavior traits, while under a variety of circum-

stances both positive and challenging, help you to develop a uniquely successful ability with people, perhaps more than in many other professions.

**Summary:** There are many specific rewards that you realize as a result of your participation in high school soccer refereeing. While every high school soccer referee may not necessarily experience every one of those mentioned in this article, you have probably benefited from most of those covered here. The fuller you participate, and the more you take a professional attitude towards learning and practicing the elements of being a successful Interscholastic Referee, the more and longer you will enjoy these “dividends” of your avocation.

2. Form a group of 3-5 members.
3. Decide within your group on how to present the benefits of officiating to fitness either through graphic organizer or any multimedia presentation.
4. Be guided with the following questions in making your creative presentation:
  - a. What are the fitness components being developed in officiating?
  - b. Identify sport-situation where that component is needed.
  - c. What are the other benefits of officiating?
5. Be guided with the following criteria:

### **Suggested Rubric**

<b>CATEGORY</b>	<b>Advance- 4</b>	<b>Proficient- 3</b>	<b>Approaching Proficiency-2</b>	<b>Developing-1</b>
Content – Accuracy	All content throughout the presentation is accurate. There are no factual errors.	Most of the content is accurate but there is one piece of information that might be inaccurate.	The content is generally accurate, but one piece of information is clearly flawed or inaccurate.	Content is typically confusing or contains more than one factual error.
Originality	Presentation shows considerable originality and inventiveness. The content and ideas are presented in a unique and interesting way.	Presentation shows some originality and inventiveness. The content and ideas are presented in an interesting way.	Presentation shows an attempt at originality and inventiveness on 1-2 cards.	Presentation is a re-hash of other people's ideas and/or graphics and shows very little attempt at original thought.
Cooperation	Group delegates tasks and shares responsibility effectively all of the time.	Group delegates tasks and shares responsibility effectively most of the time.	Group delegates tasks and shares responsibility effectively some of the time.	Group often is not effective in delegating tasks and/or sharing responsibility.

6. Present it to class, support it with a brief explanation and be ready to answer the questions of your classmates and teacher.

**Remember...**

**Officiating is an enjoyable way of improving one's fitness.  
It takes a healthy and fit official to smoothly and fairly run a sports  
competition.**

**ACTIVITY 7 Ethics and Legality...**

In this activity, you will be given the chance to empathize and share your perspective on matters relating to officiating.

**Objective:**

- Share perspective on issues relating to code of conduct and ethical standards of sports official.

**You will need:**

Pen and paper

**Here's how:**

1. Read and understand the case on referees' corruption.

## Details of soccer referees' corruption case revealed

(Xinhua)

Updated: 2011-03-30 22:52

BEIJING - China disclosed on Wednesday the public details of the corruption cases of three Chinese soccer referees, including Lu Jun, who has been referred to in the past as China's best soccer referee.

The three soccer referees Lu Jun, Huang Junjie and Zhou Weixin were arrested on charges of taking bribes last year. It was learned that prior to a match between the Shanghai International and Shanghai Shenhua teams on November 9, 2003, Zhang Jianqiang, a former official of the China Football Association (CFA) asked Lu Jun to call the game in Shanghai Shenhua's favor, promising that commissions would be paid to him and other referees if Shanghai Shenhua won the game.

Shanghai International and Shanghai Shenhua were both favorites for 2003's domestic league championship games. The two teams had top ranking in the league table before that match.

The match was broadcast on live television, which made difficult for referees to favor one side over another. Lu Jun later confessed that he tried to give "emotional care" to Shenhua players by treating them less strictly.

Shanghai Shenhua successfully overtook Shanghai International in the league table after a 4 to 1 victory in that match. Shanghai Shenhua went on to win that year's domestic league championship.

"Shanghai Shenhua later brought commissions worth 700,000 yuan (\$106,774) to my office. Lu and I each got 350,000 yuan (\$53,387)," Zhang Jianqiang confessed. Zhang was arrested for alleged match-fixing and bribery in March 2010.

Lu refereed more than 200 matches in the domestic league over the course of his career. He was also the first Chinese to referee at the World Cup.

Details of Huang Junjie and Zhou Weixin's corruption cases were also revealed on Wednesday. Both were found to have made unfair calls that affected match outcomes after being promised commissions.

"Our investigation found that it was a common practice for football clubs to give bribes to referees," said Cui Weidong, an official in charge of the case. "Football clubs gave bribes to referees through a variety of means. On most occasions, they gave cash directly and the amounts varied according to the importance of the game," Cui added.



China has been cracking down on match-fixing scandals and gambling since November 2009, when a new initiative was made to bear down on these illegal activities.

Nan Yong and Yang Yimin, both former vice chairmen of the CFA, were arrested for alleged match-fixing and bribery last March. Xie Yalong, another former vice president of the CFA was arrested for bribery last October. Soccer insiders have stated that an anti-corruption supervision mechanism should be put into place to guard against match-fixing scandals and gambling.

[www.chingdaily.com.cn/sports/2011-03/content-12252463.htm](http://www.chingdaily.com.cn/sports/2011-03/content-12252463.htm)

2. Review the ethical and legal standards of officiating.

### Readings: Ethics and Guidelines

Source: Bill Koch; BC Athletics Official Ethics and Guidelines for Conduct, 2011

When we register as officials, and volunteer to work at events, we agree to uphold these values, and follow the related guidelines listed in each section.

#### A. Be a Benefit and Cause No Harm

A primary value of officiating is to provide a benefit to those with whom one interacts in the competition area (athletes, coaches, spectators, volunteers, and other officials). A related value is to do no harm.

*Officials will....*

1. Conduct the event according to the rules with the welfare of the athlete in mind.
2. Strive to benefit each athlete in events he/she officiates. This includes helping very young athletes to understand relevant rules (e.g., correct starting stance in sprints), helping with equipment (e.g., starting blocks, throwing implements) and helping athletes at all ages achieve their best possible results.
3. Warn and strive to educate athletes in a polite manner if he/she witnesses athletes engaged in illegal or dangerous activity (e.g., unsafe throwing style or illegal starting position) during warm-ups for an event.
4. Extend the benefit of their experience to the less experienced officials and volunteers whenever the opportunity arises. This includes gently advising them about rules or about ways to perform their duties more efficiently and accurately.

5. Without hindering their own duties or the welfare of athletes, help spectators enjoy the event through suggestion of the best and safest observation areas, explain rules when asked, and otherwise act to enhance the entertainment value of the event.

*Officials will not.....*

1. Intentionally disadvantage an athlete because of previous bad experiences with the athlete, his/her coach or parent.
2. Disqualify an athlete from an event without serious consideration of alternatives (e.g., warnings).
3. Needlessly distract, or otherwise interfere with athletes during their competition.
4. Unduly restrict the activities of coaches or spectators unless such activities constitute a rule's violation or would harm the welfare of athletes.

**B. Be Accurate and Responsible**

These values mean that officials should strive for accuracy and consistency in their officiating actions, as well being dependable and trustworthy in their work as officials. The latter implies that officials should accept the responsibility for their errors that may affect competitions, and work to increase or sustain others' (athletes, coaches, spectators, other officials) trust.

*Officials will....*

1. Arrive in good time for the competition and report immediately to the official in charge.
2. Be fully prepared to do the job assigned to them.
3. Be ready at appropriate start times for individual events they are to officiate.
4. Draw all the necessary equipment for the running of the event and ensure that it is returned upon completion of the competition.
5. Maintain up to date knowledge of measurement (e.g., timing systems) devices and procedures necessary in their specialty.
6. Correct their errors (e.g., measurement errors, mistaken calls) promptly and consult appropriately with other officials or supervising officials in the event of errors.
7. Educate themselves on a regular basis about rule changes that may affect their specialty (e.g., false start rules).

*Officials will not.....*

1. Purposely evade responsibility for officiating errors.
2. Alter competition records to reflect inaccurate results.
3. Negligently destroy or lose competition equipment.
4. Needlessly delay competitions.

**C. Be supportive of other participants and loyal to our Sport Organizations.**

Officials should exhibit loyalty and politeness towards BC Athletics, Athletics Canada, and other organizations to which the official belongs or is representing in the context of a competition. They should extend such loyalty and politeness to individuals involved in athletics at all levels.

*Officials will.....*

1. Speak to and about athletes, other officials, volunteers, coaches and representatives of sport organizations with customary politeness.

*Officials will not.....*

2. Publically disparage athletic organizations (e.g., clubs, schools, BC Athletics, Athletics Canada) or other participants.

**D. Act with Integrity**

Integrity refers to firm adherence to an ethical code as well as to the absence of impairment or disability. This implies that officials will (a) not allow their judgment to be adversely influenced by personal loyalties or personal gain, (b) will adhere whenever possible to the specifics of this ethical code, and (c) will avoid officiating when their mental or physical competence may be impaired (e.g., through physical illness, emotional distress, or some other personal limitation).

*Officials will....*

1. Recognize when he/she has a conflict of interest in an event he/she is officiating and will take reasonable steps to eliminate such conflicts (e.g., have a different official start a race in which his/her own family member or athlete is performing).
2. Will recognize when his/her personal weaknesses (e.g., personal or family stress, proneness to irritability) may interfere with officiating and will take steps to prevent such interference.

*Officials will not.....*

1. Act to the advantage of athletes or clubs to which he/she has a personal connection.
2. Purposefully act against any of the values listed in this code of conduct.
3. Knowingly officiate in an event when he/she is intoxicated on any substance.

**E. Act with Fairness**

Fairness refers to performing one's duties in an unbiased manner. This implies that officials will act in a manner that does not create advantage or disadvantage to any athlete or club.

*Officials will....*

1. Perform evaluations for other officials, when requested, in an objective way and without friendships or personal differences in mind.
2. Provide the same quality of advice or benefit of the doubt when dealing with athletes, independent of any friendships or other personal relationships.
3. Bear in mind their own possible biases when a potential conflict of interest presents itself (e.g., one's own athlete is competing in an event one is officiating).
4. When feasible, turn over their duties to another similarly qualified official when a conflict of interest presents itself and the stakes appear high.

*Officials will not.....*

1. Knowingly, and with available alternatives, make critical decisions in an event in which they have a personal stake (e.g., an athlete for whom the official is a coach or family member). This recognizes that at times there will be no other alternative – i.e., only one chief judge or starter available for an event in which one's own athlete is competing.

**F. Show Respect for Participants' Rights and Dignity**

Officials have the duty to respect individual athletes or other parties at competitions, independent of cultural, ethnic, gender, age, or other characteristics of the individual that may set the other person apart from the official's own background and sense of familiarity. Although this is usually meant to prevent discrimination on the basis of gender, ethnicity, or disability (all areas of human diversity that are associated with human rights legislation), it also applies to areas of diversity such as age or experience in the athletic event or officiating task. Thus, it applies

to treating very young (and thus immature) athletes and less experienced (and thus less competent) officials or volunteers in a dignified and respectful manner.

*Officials will....*

1. Respect the dignity of athletes, other officials and volunteers, coaches, and spectators.
2. Work in a spirit of cooperation with other officials and not interfere in any way with their responsibilities.
3. Criticize in a constructive manner, and at an appropriate time, directly to the official concerned.
4. Understand that some athletes, officials, or volunteers, by reason of their youth, possible disabilities, or inexperience may require enhanced instruction or guidance, within the limits of the no assistance in the competition area rule.
5. In such cases of youth, inexperience, or disability, provide instruction in a polite and considerate manner.
6. Treat athletes with equal respect and dignity independent of their ethnicity, gender, age, religion, nationality, or other personal characteristics unrelated to the athletic event.
7. Uphold the BC Athletics Harassment Policy.

*Officials will not.....*

1. Harass others (officials, athletes, coaches, etc.). Harassment involves engaging in any improper behaviour toward another person that one knows or ought to know would be unwelcome. Harassing behaviours can include written or verbal abuse or threats, unwelcome jokes, remarks or taunts.
2. Use the occasion of a rules infraction as an opportunity to publically embarrass or chastise an athlete.
3. Use the occasion of an officiating error as an opportunity to publically embarrass or chastise an official.

#### **G. Exhibit Professionalism**

Professionalism means exhibiting a courteous, conscientious, and generally business-like manner in the workplace (including volunteer workplace). Applied to athletics officials, it means that officials, as part of their volunteer duties, will conform to reasonable technical standards of their area of practice (e.g., starter, track umpire, throws judge) as well as to any ethical standards that govern them.

*Officials will....*

1. Conform to reasonable technical standards of their area of practice (e.g., starter, track umpire, throws judge) as well as to any ethical standards that govern them.
2. Be conscientious and business-like (as opposed to cavalier) in carrying out their duties.
3. Conduct the event that they are officiating in an efficient and non-abrasive manner.
4. Be courteous (not irritable, not dismissive or insulting) to athletes, coaches, spectators, as well as other officials and volunteers.
5. Wear the accepted uniform as outlined by the National Officials Committee or by the organizing committee for the individual competition.
6. Treat complaints, questions, concerns, or appeals raised by others (e.g., athletes, coaches, spectators, other officials) with consideration and politeness.
7. Act in a manner that will bring credit to the Athletics community and themselves, both within and outside the competition area and/or arena.

*Officials will not.....*

1. Use profane, insulting, harassing or otherwise offensive language in the conduct of their duties.
2. Dismiss appeals, questions, or complaints from athletes, coaches or spectators in a dismissive or cavalier manner.
3. Target any other official, athlete, volunteer, coach, or spectator as an object of ridicule, harassment, or malicious gossip.

**H. Model Appropriate Health Habits**

This value presumes that athleticism is part of a generally healthy lifestyle, and that BC Athletics and Athletics Canada encourage not only athletic competition, but enhanced health in their members and in the general public.

*Officials will....*

1. Exhibit a polite and relaxed manner when conducting their duties.
2. When stressed or distracted by personal issues, seek help from other officials to ensure the event proceeds smoothly and their own distress does not disrupt the athletic event.
3. Seek appropriate professional help if their personal or emotional difficulties begin to routinely interfere with their officiating performance.

*Officials will not.....*

1. Allow their own emotional distress (e.g., irritability, feelings of time pressure, personal problems outside the athletic arena) to impact on their officiating behavior.
2. Use tobacco products within the competition arena and/or competition area.
3. Enter the competition area and/or arena under the influence of alcohol or other mind-altering drugs.

#### **I. Adhere to Legal Standards**

This means obeying the law (e.g., criminal code of Canada, human rights codes, and IAAF or other rules of competition).

*Officials will....*

1. Willingly and promptly consent to a criminal records search as required by the sports organization.
2. Report criminal acts to a legal authority

*Officials will not.....*

1. Provide underage athletes with alcohol
2. Provide an athlete with illegal substances.
3. Advocate or condone the use of drugs or other banned performance enhancing substances, classes, or methods.

#### **J. Protect Vulnerable Persons**

In our society, we now recognize that some individuals (e.g., persons with disabilities) are more vulnerable to poor treatment because of their relative youth, mental or physical disability, or other characteristics that place them at a disadvantage. This code of conduct recognizes that such individuals may require special attention.

*Officials will....*

1. Use methods that maximize the understanding of rules and competition procedures of persons of diminished capacity. This may include repetition of instructions at the beginning of an event, including the guardian or coach of a vulnerable athlete in the instructions, within the limits of competition rules.
2. Be particularly cautious in establishing the understanding of rules and procedures with persons of diminished capacity.

*Officials will not.....*

1. Discriminate against vulnerable persons (e.g., Special Olympics athletes) either verbally or through their actions in a competition area.
2. Disparage or patronize vulnerable persons in any way.

Answer the processing questions:

- What ethical and standards were violated by the referees?
- What do you think were the reasons of the referees for doing the action?
- If you were the referee, what would you do?
- How do you feel for the losing team?
- How do you feel for the winning team?
- How do you feel for the referees?
- In what other real-life situation can the values in officiating be applied?

**ACTIVITY 8: Sum It Up!**

In this activity, you will generalize all your learnings in the previous activities.

**Objective:**

- Give a summary on the benefits of officiating to fitness and vice versa

**You will need:**

- Pen and paper

**Here's how:**

1. Review all the readings you had in the previous lessons.
2. Cite a generalization by filling in the blank to complete the sentences:
  - a. Through officiating, \_\_\_\_\_  
but official must \_\_\_\_\_  
\_\_\_\_\_ in order to have a healthy and quality life.
  - b. A fit official \_\_\_\_\_  
\_\_\_\_\_.



### ACTIVITY 9: If I were a...

In this activity, you will give your personal point of view on what you value most.

#### Objective:

- Explain the things that you value most in a sports official

#### You will need:

- Pen and paper

#### Here's how:

1. Listed are the characteristics and values of an official. Review them properly.

SUPPORTIVE		RESPECTFUL		PROFESSIONAL
	ACCURATE		RESPONSIBLE	
INTEGRITY		HONESTY		LEGAL
	FAIRNESS			LOYALTY
		HEALTHY	LIFESTYLE	

2. Answer the following questions:
  - If you were an official, which of the values and characteristics should you possess for the rest of your life? Why?
  - Which of the values and characteristics is the most important for an official to possess? Why?

**Remember...**

**A healthy official lives a healthy lifestyle.**

#### IV. WHAT TO TRANSFER

In this phase, you will be challenged to apply things you learned about the lesson into another context. Your understanding of the lesson will be measured by your ability to provide tangible results or evidence of your learning.

## ACTIVITY 10: Officiate It!

In this activity, you will extend your fitness development to your immediate community. You will be provided with an opportunity to maximize the knowledge and skills together with the understandings you have acquired in influencing your community with the value of officiating in improving fitness and wellness.

### Objectives:

- Officiate a community game
- Influence the community's awareness of the value officiating in improving one's fitness

### You will need:

- Equipment needed of the chosen sport
- Officiating equipment of the chosen sport

### Here's how:

1. You will now extend your fitness commitment to the community as one class. But don't worry because your teacher will assist you in realizing your goals in this activity.
2. Your class is provided with a GRASPS template to guide you with your final performance. GRASPS stands for Goal, Role, Audience, Situation, Product and Standard. Read it carefully.

Goal:	To officiate a sport competition in your school or in a community.
Role:	Official/Member of the Management Team
Audience:	School/Community
Situation:	A group of students will play a certain sport and they need officials to manage the game.
Product:	A smoothly and fairly managed/officiated game.
Standard:	Your work will be rated according to the following criteria: time-management, quality of work, focus on the task, attitudes, monitors group effectiveness, working with others and contributions.

3. Plan carefully with your class. Assign each classmate with a task and discuss how to do it.
4. Present your plan and program of activities to your teacher.

**Suggested Rubric**

<b>CATEGORY</b>	<b>Advance-4</b>	<b>Proficient-3</b>	<b>Approaching Proficiency-2</b>	<b>Developing-1</b>
Time-management	Routinely uses time well throughout the project to ensure things get done on time.	Usually uses time well throughout the project, but may have procrastinated on one thing.	Tends to procrastinate, but always gets things done by the deadlines.	Rarely gets things done by the deadlines and group has to adjust deadlines or work responsibilities because of this person's inadequate time management.
Quality of Work	Provides work of the highest quality.	Provides high quality work.	Provides work that occasionally needs to be checked/redone by other group members to ensure quality.	Provides work that usually needs to be checked/redone by others to ensure quality.
Focus on the task	Consistently stays focused on the task and what needs to be done. Very self-directed.	Focuses on the task and what needs to be done most of the time. Other group members can count on this person.	Focuses on the task and what needs to be done some of the time. Other group members must sometimes nag, prod, and remind to keep this person on-task.	Rarely focuses on the task and what needs to be done. Lets others do the work.
Attitude	Never is publicly critical of the project or the work of others. Always has a positive attitude about the task(s).	Rarely is publicly critical of the project or the work of others. Often has a positive attitude about the task(s).	Occasionally is publicly critical of the project or the work of other members of the group. Usually has a positive attitude about the task(s).	Often is publicly critical of the project or the work of other members of the group. Often has a negative attitude about the task(s).
Monitors Group Effectiveness	Routinely monitors the effectiveness of the group, and makes suggestions to make it more effective.	Routinely monitors the effectiveness of the group and works to make the group more effective.	Occasionally monitors the effectiveness of the group and works to make the group more effective.	Rarely monitors the effectiveness of the group and does not work to make it more effective.
Working with Others	Almost always listens to, shares with, and supports the efforts of others. Tries to keep people working well together.	Usually listens to, shares, with, and supports the efforts of others. Does not cause "waves" in the group.	Often listens to, shares with, and supports the efforts of others, but sometimes is not a good team member.	Rarely listens to, shares with, and supports the efforts of others. Often is not a good team player.
Contributions	Routinely provides useful ideas to the community.	Usually provides useful ideas to the community.	Sometimes provides useful ideas to the community.	Rarely provides useful ideas to the community.

**Processing Questions:**

1. How does your knowledge and skills in officiating help improve fitness level of members of the community?
2. How do values in officiating help in the successful conduct of sports activities in the community?
3. How does participation in officiating related activities help achieve fitness of the community?

**SUMMARY/SYNTHESIS/FEEDBACK**

Sports is a very wide field, composed of several dynamic people and events interacting with one another. It is a popular activity of most people for its characteristics of being fun, exciting and challenging to its participants. But our idea of sports participation is mostly limited on the players' role in the sports fields perhaps, it is the one being highlighted during competitions. But there is more to sports than just being a player, and that is officiating.

Officiating is an important part of any sports activity whether it is competitive or recreational. It helps in making the activity more challenging and fun. Good officiating results to good game and good game provides better entertainment.

Sports' officiating is not just the "judge role in the court." More importantly, it benefits us by improving our fitness. Participation in physical activities such as officiating coupled with healthy lifestyle will surely lead us to attaining and sustaining a quality and a healthy life.

**SUMMATIVE ASSESSMENT**

**Directions: Choose the letter of the best answer.**

1. What system in sports is used to maintain order and fairness in implementing rules?  
A. Sports Officiating    C. Sports Science  
B. Sports Psychology    D. Sports Youth
2. In games which require the official to run continuously, what fitness component should the official possess?  
A. Balance                  C. Power  
B. Endurance                D. Strength

3. For sports officials to have lean muscles, what type of food should they eat?  
A. Carbohydrates      C. Iron  
B. Fats      D. Protein
4. Hydration is important in officiating especially in running continuously for long minutes. Sports officials do not have the luxury of a time out. If they want to hydrate their body, what's the best drink to take?  
A. Energy Drinks      C. Sports Drink  
B. Softdrinks      D. Water
5. What lifestyle-related disease will an official have if he/she continues to smoke and eat without cholesterol-rich foods?  
A. Cancer      C. Heart Disease  
B. Diabetes      D. Stroke
6. Sports officials mostly use their arms for signalling. What fitness component will be developed with this regular movement?  
A. Cardio Vascular Endurance      C. Flexibility  
B. Muscular Endurance      D. Muscular Strength
7. Aside from improper eating habits, what habit also causes diabetes?  
A. Genetics      C. Environment  
B. Jogging      D. Sedentary Lifestyle
8. Officiating has a high physical demand, especially in sports like basketball, soccer and combative sports. What should the referee do PRIOR to doing his/her officiating task?  
A. Warm up      C. Static Stretching  
B. Dynamic Stretching      D. Instantly proceed with officiating
9. In what way will our knowledge and skills in sports officiating skills help our community?  
A. Save money during sports competition  
B. Train youth in sports related activities like as athletes and sports official.  
C. Reduces the case of delinquent youth in the communities.  
D. All of the above
10. What is the BEST value that a sports official must possess?  
A. Fairness      C. Unjust  
B. Punctuality      D. All of the above

## GLOSSARY OF TERMS

**BPM-** Beats Per Minute

**Circuit Training-** an exercise system where a series of exercises are done continuously to station by station until all the exercise are executed by the participant.

**Eating Habits-** individual or group practice of consuming sustenance.

**Hand Signals-** gestures used by sports officials to communicate to the players and audiences specifically game related events, like fouls, points and the like.

**Health Related Fitness-** component of physical fitness that is a necessity for daily living.

**Healthy Lifestyle-** Healthy habits, attitudes, tastes, moral standards, economic level, etc., that together constitute the mode of a healthy living condition of an individual or community.

**Sports officiating-** a system of managing a sports, specifically on implementing the game rules and keeping order in the duration of the game.

**Team Sports-** a sport activity played by 3 or more players per team.

## WEB-BASED SOURCES

### **Images:**

- [www.volleywood.net](http://www.volleywood.net)
- [www.oneresult.com](http://www.oneresult.com)
- [www.interaksyon.com](http://www.interaksyon.com)
- [www.espn.go.com](http://www.espn.go.com)
- [www.get2theleague.com](http://www.get2theleague.com)
- [www.qpec.com.au](http://www.qpec.com.au)
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- [www.pinterest.com](http://www.pinterest.com)
- [www.dev.vga.com](http://www.dev.vga.com)
- <http://acdeputysal.weebly.com/uploads>
- [www.bbl.org.uk/index.php?id=56](http://www.bbl.org.uk/index.php?id=56)

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- Galvez Tan, Jaime Z.,et al ,(2009),The Health Curriculum in Philippine Basic Education, Vol. 2, KenzarGraphics,Quezon City.
- Mc Tighe, Jay, Wiggins, Grant (2004), Understanding by Design (Professional Development Workbook), ASCD, Alexandria, Virginia. USA
- <http://www.lancssundayleague.co.uk/downloads/FA%20Referees%20Fitness%20Guide.pdf>

## APPENDIX

### Readings: PHYSICAL FITNESS TEST

**BODY COMPOSITION** – is the body's relative amount of fat to fat-free mass.

A. Body Mass Index (BMI)

CLASSIFICATION:

BELOW 18.5	Underweight
18.5 – 24.9	Normal
25 – 29.9	Overweight
30.0 – ABOVE	Obese

**A.1 Weight** – the heaviness or lightness of a person.

**Equipment:** Weighing Scale

For you as the test taker:	For your partner:
a. Wear light clothing.	a. Before the start of weighing, adjust the scale to zero point.
b. On bare feet, stand erect and still with weight evenly distributed on the center of the scale.	b. Record the score in kilograms.

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

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

**Equipment:**

1. An even and firm floor and flat wall
2. L – square
3. Tape measure laid flat to a concrete wall. The zero point starts at the bottom of the floor.

<b>For you as the test taker:</b>	<b>For your partner:</b>
a. Stand erect on bare feet with heels, buttocks and shoulders pressed against the wall with tape measure.	a. Place the L-square against the wall with the base at the top of the head of the person being tested.
	b. Record the score in meters.

**Scoring** – record standing height.

\* 1 meter = 100 centimeters

**B. Waist Circumference**

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

**Materials/Equipment:****Tape Measure**

<b>For you as the test taker:</b>	<b>For your partner:</b>
a. Wear light clothing before taking waist circumference.	Record the score in centimeters.
b. On bare waist, stand erect and wrap tape measure around waist.	

**Standard**

	<b>Men</b>		<b>Women</b>	
Risk	Centimeter	Inches	Centimeter	Inches
Very High	>120	>47	>110	>43.5
High	100 – 120	39.5 – 47	90 – 109	35.5 – 43
Normal	102	40	88	34.6
Low	80 – 99	31.5 – 39	70 – 89	28.3 – 35
Very Low	<80	<31.5	<70	<28.5

Source: TFSS Fitness Manual



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

1. 90 – Degree Push-up

**Purpose** – to measure strength of upper extremities

**Materials/Equipment:**

Exercise mats or any clean mats

For you as the test taker:	For your partner:
<p>a. Lie down on the mat; face down in standard push-up position: palms on the mat under the shoulders, fingers pointing forward, and legs straight, parallel, and slightly apart, with the toes supporting the feet.</p> <p><b>FOR BOYS:</b> Straighten the arms, keeping the back and knees straight, then lower the arms until there is a 90-degree angle at the elbows (upper arms are parallel to the floor).</p> <p><b>FOR GIRLS:</b> With knees in contact with the floor, straighten the arms, keeping the back straight, then lower the arms until there is a 90-degree angle at the elbows (upper arms are parallel to the floor).</p> <p>Perform as many repetitions as possible, maintaining a cadence of 20 push-ups per minute (2 seconds going down and 1 second going up).</p>	<p>a. As the student assumes the position of push-up, start counting as the student lowers his body on the ground until he reaches 90-degree angle at the elbow.</p> <p>b. Make sure that the student performs the push-ups in the correct form.</p> <p>c. The test is terminated when the subject can no longer perform the push-ups in the correct form (three corrections are allowed), is in pain, voluntarily stops, or when cadence is broken.</p>

**Scoring** – record the number of push-ups made.

## 2. Curl-ups

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

**Materials/Equipment:**

Exercise mats or any clean mats

For you as the test taker:	For your partner:
<ul style="list-style-type: none"> <li>a. Lie on your back with the knees flexed and the feet 12 inches from the buttocks.</li> <li>b. Feet cannot be held or rested against an object. The arms are extended and are resting on the thighs</li> <li>c. Complete a slow, controlled curl-up, sliding fingertips along the floor until they touch the second tapeline.</li> <li>d. The curl-up should be performed at a rate of one every 3 seconds or 20 curl-ups per minute (2 seconds going up and 1 second going down).</li> <li>e. There should be no rest at the bottom position, and perform as many curl-ups as possible without stopping.</li> </ul>	<ul style="list-style-type: none"> <li>a. One curl-up is counted each time the student's shoulder blade touches the floor.</li> <li>b. Make sure that the student performs the curl-ups in the correct form.</li> <li>c. The test is terminated when the subject can no longer perform the curl-ups in the correct form (three corrections are allowed), is in pain, voluntarily stops or when cadence is broken.</li> </ul>

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

**FLEXIBILITY** – refers to the ability of the joints to move through a full range of motion.

1. **Sit and Reach** – a test of flexibility for the lower extremities particularly the hamstring.

**Purpose** – reach as far as possible without bending the hamstring

**Materials/Equipment:**

**Tape Measure**

For you as the test taker:	For your partner:
<p>a. Sit on the floor with back flat on the wall with feet approximately 12 inches apart.</p> <p>b. Without bending your back, knees, and elbows, place one hand on top of the other and position the hands on the floor.</p> <p>c. After the tester has positioned the zero point of the tape measure, start the test by slowly reaching the farthest point possible without bending the knees.</p>	<p>a. As the student assumes position (b) procedure, position the zero point of the tape measure at the tip of the finger farthest from the body.</p> <p>b. See to it that the knees are not bent as the test taker reaches the farthest that he/she could.</p> <p>c. Measure the farthest distance reached.</p> <p>d. record the score in centimeter.</p>



**Scoring-** record *sit and reach* to the nearest 0.1 centimeter.

**2. Zipper Test** –a test of upper arm and shoulder girdle flexibility intended to parallel the strength / endurance assessment of the region.

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

**Materials/Equipment:****Ruler**

<b>For you as the test taker:</b>	<b>For your partner:</b>
<ul style="list-style-type: none"> <li>a. Stand erect.</li> <li>b. To test the right shoulder, raise your right arm, bend your elbow, and reach down across your back as far as possible.</li> <li>c. At the same time, extend your left arm down and behind your back, bend your elbow up across your back, and try to cross your fingers over those of your right hand.</li> <li>d. Reach with the right hand over the right shoulder and down the back as if to pull a zipper or scratch between the shoulder blades.</li> <li>e. To test the left shoulder, repeat procedures a – d with the left hand over the left shoulder.</li> </ul>	<ul style="list-style-type: none"> <li>a. Observe whether the fingers touched or overlapped each other.</li> <li>b. Measure the distance in which the fingers overlapped.</li> <li>c. Record the score in centimeters.</li> </ul>

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

**Scoring**

- 0 – did not touch fingers
- 1 – just touched fingers
- 2 – fingers overlapped by 1-2 cms.
- 3 – fingers overlapped by 3-4 cms.
- 4 – fingers overlapped by 5-7 cms.
- 5 – fingers overlapped by 8 cms. or more

**CARDIOVASCULAR ENDURANCE** – is the ability of the heart, lungs and blood vessels to deliver oxygen to working muscles and tissues, as well as the ability of those muscles and tissues to utilize that oxygen. Endurance may also refer to the ability of the muscle to do repeated work without fatigue.

**1. 3–Minute Step Test**

**Purpose-** to measure cardiovascular endurance

**Materials/Equipment :**

1. Step with a height of 12 inches
2. Stopwatch

For you as the test taker:	For your partner:
<p>a. Position in front of the step.</p> <p>b. At the signal go, step up and down on a bench for 3 minutes at a rate of 24 steps per minute. One step consists of 4 beats, – that is, “up with the left foot, up with the right foot, down with the left foot, down with the right foot.”</p> <p>c. Immediately after the exercise, stand and relax. Don’t talk.</p> <p>d. Right after the activity, locate your pulse. (the first beat is zero.)</p> <p>e. Count the pulse for 10 seconds. Multiply by 6.</p>	<p>a. As the student assumes the position in front of the step, signal, “Ready” and “Go”, start the stopwatch for the 3-minute step test.</p> <p>b. After the test, let the student count his pulse for 10 seconds and multiply it by 6.</p>

**Scoring** – record the 60-second heart rate for the activity.