**Unit 4 Chapter 12 Physical Activity and Fitness**

**Physical Activity-** any form of movement that causes your body to use energy.

-Benefits just about every system in your body and also benefits mental/emotional and social health.

- Includes walking to school, cleaning your room, or playing sports with your friends.

**Physical Fitness-** the ability to carry out daily tasks easily, and have enough reserve energy to respond to unexpected demands. Try for at least 60 minutes of physical activity every day.

**Exercise-** purposeful physical activity that is planned, structured, and repetitive, and improves or maintains physical fitness

**Mental and Emotional Benefits**

**Stress Relief-** produces chemicals called endorphins. Results in a feeling of well-being, aids relaxation, and relieves physical pain. Stretching eases muscle tension.

**Mood Enhancement-** natural mood lifter, it promotes the production of other brain chemicals that combat anxiety and and depression.

**Better Sleep-** moderate activity at least three hours before bed helps you relax and sleep better.

**Improved Self-esteem-** physical fitness can translate to more self-confidence. Give you a sense of accomplishment and help you look and feel your best.

**Social Benefits**

Can form friendships through school activities, hiking, group fitness like playing sports.

Increased self-esteem can help in your social life as well.

**Risks of Being Inactive**

**Sedentary-** involving little physical activity. Sedentary teens spend their time watching tv, playing video games, or surfing the internet**.**

**Health problems from being sedentary include:**

* Unhealthful weight gain and obesity
* Cardiovascular disease, such as heart attack and stroke
* Type 2 diabetes
* Certain types of cancer
* Asthma and other breathing problems
* Osteoporosis
* Osteoarthritis
* Psychological problems like stress, anxiety, and depression, and premature death

**Improving Your Fitness**

**Cardiorespiratory endurance-** is the ability of your heart, lungs, and blood vessels to send fuel and oxygen to your tissues during long periods of moderate to vigorous activities.

**Muscular strength-** is the amount of force your muscles can exert.

**Muscular Endurance-** is the abilty of your muscles to perform physical tasks over a period of time without tiring

**Flexibility-** is the ability to move your body parts through their full range of motion

**Body Composition-** ratio of fat to lean tissue in your body is also an element of fitness.

**Getting Fit**

**Aerobic exercise-** includes all rhythmic activities that use large muscle groups for an extended period of time. Raises heart rate and increases body’s use of oxygen.

**Anaerobic exercise-** involves intense, short bursts of activity in which the muscles work so hard that they produce energy without using oxygen.

**Improving Cardiorespiratory Endurance**

-Aerobic exercise is important for building cardiorespiratory endurance. Aerobic activities

-increase your heart rate and pump more blood throughout your body. Over time your heart and lungs adapt to the demands made by aerobic exercise

**Improving Muscular Strength and Endurance**

**Isometric exercises-**

**Isotonic Exercises-**

**Isokinetic Exercises-**

**Planning a Personal Activity Program**

**Personal Needs:**

**Cost-**

**Where you live-**

**Your schedule-**

**Your fitness level-**

**Overall health-**

**Personal safety-**

**Types of Activities**

**Moderate-Intensity :**

**Aerobic activities:**

**Strength Training:**

**Flexibility Exercises:**

**Principles of Building Fitness**

**Specificity-** means choosing the right types of activities to improve a given element of fitness. EX strength training activities build muscular strength

**Overload-** means exercising at a level that is beyond your regular daily activities

**Progression-** means gradually increasing the demands on your body.

**Regularity-** means working out on a regular basis. You need at least three balanced workouts a week to maintain fitness level.

**Stages of a Workout**

**Warm up-** is gentle cardiovascular activity that prepares the muscles for work.

**Work out-** is the part of an exercise session when you are exercising at your highest peak Use F.I.T.T.

**F: Frequency of workout:**

**I: Intensity of workouts:**

**T: Type of activity:**

**T: Time (duration) of workouts:**

**Cool Down-** is a low-level activity that prepares your body to return to a resting state.

**Tracking your Progress**

-Using a fitness journal can help you track your progress, list activities, note how long you worked out, how often, and at what level. Stick with plan for 12 weeks.

**Resting Heart rate-** the number of times your heart beats per minute when you are not active.

**Safety** **First**

* Use the correct safety equipment for an activity
* Pay attention to other people, objects, and weather
* Play or exercise at your skill level to know your limits
* Warm up before exercise and cool down afterward
* Stay within the areas designated for a given activity
* Obey all rules and restrictions
* Practice good sportsmanship

**Use right Equipment**

* Wear well- fitting athletic shoes that are designed for your sport or activity. Wear socks to cushion your feet and keep them dry.
* For cycling always wear a helmet that fits you properly, make sure it is approved by Snell or ANSL. Use front and rear reflectors, light colored clothing, and reflective patches.
* Skating or skateboarding wear a helmet, knee and elbow pads, gloves, and wrist guards
* For contact sports males should wear a cup.
* Special adaptive equipment helps those with disabilities take part in a variety of sports from bowling to golf.

**Watch The Weather**

Watch weather and don’t exercise outside during extreme weather like thunderstorm or blizzard

Cold weather activity- warm up and cool down, drink plenty of fluids because cold air can lead to dehydration, cover nose and mouth to prevent breathing cold dry air.

**Frostbite-** damage to the skin tissues caused by extreme cold.

**Hypothermia-** or dangerously low body tempertures

**Overexertion-** or over working the body.

**Heat exhaustion-** a form of physical stress on the body caused by overheating. Symptoms include heavy sweating, cold clammy skin, dizziness, confusion, or fainting a weak rapid pulse, cramps, shortness of breath; nausea or vomiting. Find a shady area or douse yourself with cold water. Seek help if not better in ½ hour.

**Heatstroke-** a dangerous condition in which the body loses its ability to cool itself through perspiration.

-Can cause sudden death, get medical help if you recognize the symptoms

**Sun and Wind Protection**

**Windburn-** or irritation of the skin caused by wind exposure. Skins protective oil layer is stripped away leaving it red, dry, and sore.

**Sun Burn-** a buring of the skins outer layers. Mild sunburn makes the skin red and painful. Severe sunburn can cause blistering and swelling.

**Skin Cancer-** can result from repeated or prolonged sun exposure. Sunscreen provides protection by blocking UVA or Ultraviolet A rays that lead to skin cancer.

**Eye Damage-** can be caused by exposure to ultraviolet (UV) rays. Wear sunglasses a wide- brimmed hat in the summer or UV abosorbing goggles during winter months.

**Minor Injuries**

**Blisters-** fluid filled bumps cause by friction. Well -fitting socks and athleticshoes can prevent it.

**Muscle Cramps-** or sudden and sometimes painful contractions of the muscles can occur when muscles are tired, overworked, or dehydrated. Stretching can relieve cramps.

**Strains-** result from overstretching and tearing a muscle. Warm up before exercises to reduce the risk of strains.

**Sprains**- are injuries to the ligaments around a joint that produce pain, swelling, and stiffness. If it hurts to move your joint, or you can’t put weight on it, see your doctor.

**Tendonitis-** is inflammation and swelling in the tendons. Tendons are bands of fiber that connect muscles to bones.

**Major Injuries**

**Fractures:** or broken bones, cause severe pain, swelling, bruising, or bleeding.

**Dislocation-** occurs when a bone pops out of its normal position in a joint. The joint will be painful and may appear misshapen.

**Concussion-** an injury to the brain can result in a severe headache, unconsciousness, or memory loss. A severe concussion can cause brain damage. Signs of brain damage include vomiting, confusion, seizures, or weakness on one side of the body. If you experience any of these get help immediately.