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Unit -I

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PHYSICAL FITNESS AND WELLNESS

UNIT-1

PHYSICAL FITNESS AND WELLNESS

UNIT 1

Introduction to physical fitness Meaning and Definition of Physical Fitness, Physical Fitness Concepts and Techniques, Principles of physical fitness, Physiological principles involved in human movement. Components of Physical Fitness. Leisure time physical activity and identify opportunities in the community to participate in this activity. Current trends in fitness and conditioning, components of total health fitness and the relationship between physical activity and lifelong wellness.

INTRODUCTION TO PHYSICAL FITNESS

- Meaning and Definition of Physical fitness
- Physical fitness concepts and techniques
- Principles of Physical fitness , physiological principles involved in human movement.
- Components of Physical fitness.
- Leisure time physical activity and identify opportunities in the community to participate in this activity.
- Current trends in fitness and conditioning , components of total health fitness and the relationship between physical activity and life long wellness

MEANING AND DEFINITION OF PHYSICAL FITNESS

MEANING OF PHYSICAL FITNESS

- Physical fitness is a measure of how well your body function during daily activities, whether for work or leisure.it is a state of health and well-being that allows you to perform daily activities with optimal strength , endurance and performance

DEFINITION OF PHYSICAL FITNESS

- Exercise scientists have identified nine elements that comprise the definition of fitness. The following lists each of the nine elements and an example of how they are used.
- Speed
- Strength
- Power
- Agility
- Balance
- Flexibility
- Local muscle strength
- Cardiovascular endurance
- Strength endurance
- Co-ordination

PHYSICAL FITNESS CONCEPTS AND TECHNIQUES

Is the ability of an individual to perform one's daily activities efficiently without undue fatigue, reduce the risk of health problem and extra reserve in case of emergency. Is a set of abilities that one process in order to perform physical activity

BASIC CONCEPTS

- **Physical fitness**

A set of attributes that people have or achieve that relates to the ability perform physical activity

- **Physical activity**

Any bodily movement produced by skeletal muscles that result in energy expenditure

- **Exercise [subset of physical activity]**

Planned, structured , and repetitive activity designed to improve or maintain physical fitness

TECHNIQUES

- Physical fitness is achieved through physical activity, exercise, nutrition, rest, and stress management.
- It reduces disease risk, improves health by lowering cholesterol and better sleep , And provider relaxation and stress relief.
- The key components of physical fitness are cardiovascular endurance

PRINCIPILES OF PHYSICAL FITNESS, PHYSIOLOGICAL PRINCIPLES INVOLVED IN HUMAN MOVEMENT

- Physical is a personal responsibility, a person physical fitness is determined by such factors age, heredity and behaviour.
- A person level of physical fitness depends largely on how frequently and intensely he or she exercise
- The basic principles of fitness training are summed up in the acronym FITT.
- F - Frequency - how often
- I - Intensity - how hard
- T- Time - how long
- T- Type - the type of training [strength , endurance]

PHYSIOLOGICAL PRINCIPLES INVOLVED IN HUMAN MOVEMENTS

Human movement is a complex function that involves multiple physiological systems in the body, including the skeletal, muscular, nervous, respiratory, and cardiovascular systems. Some physiological principles of human movement include:

Rotation: The ability to twist in the core, from the pelvis to the ribcage, is a key factor in efficient human movement.

Axial elongation: This positions the body to increase the range of motion and make movement more efficient.

Muscle contraction: Muscles provide the power for movement.

Energy metabolism: Energy metabolism supplies ATP.

Cardiovascular system: The cardiovascular system delivers oxygen to mitochondria.

Breathing: Movement facilitates breathing.

COMPONENTS OF PHYSICAL FITNESS

Strength

Speed

Endurance

Flexibility

Agility and Coordination

LEISURE TIME PHYSICAL ACTIVITY

- Leisure Time Physical Activity (LTPA) has been defined as “Physical activity performed during exercise, recreation or any time other than those associated with one regular occupation, housework, or transportation”, and is often distinguished other domains of physical activity
- Walking
- Swimming
- Meditation
- Dancing

CURRENT TRENDS IN FITNESS AND CONDITIONING

Fitness trackers: The latest generation of fitness trackers can monitor many aspects of your health, including heart rate and mileage.

High-intensity interval training (HIIT): A popular workout that can be adapted for almost everyone.

Bodyweight exercises: A popular trend that uses minimal equipment and is more affordable.

Personal training: A growing trend as people become more health-conscious and want to avoid large groups

Functional fitness: A trend that focuses on training your body to perform well in everyday activities.

Outdoor fitness : A growing trend that allows people to exercise in fresh air at parks,

Mini workouts: Short, fun, and accessible exercises that are one to three minutes long.

Flexible memberships: Many gym members became accustomed to online fitness training during lockdowns and found it convenient.

COMPONENTS OF TOTAL HEALTH FITNESS

Body composition: The ratio of body fat to total body mass

Flexibility: An important component of physical fitness

Muscular strength; important component of physical fitness

Muscular endurance: An important component of physical fitness

Cardiorespiratory endurance: An important component of physical fitness

Physical fitness is important for maintaining a healthy lifestyle. It can help you stay in shape, reduce the risk of illness, and increase your energy levels

THE RELATIONSHIP BETWEEN PHYSICAL ACTIVITY AND LIFELONG WELLNESS

Reduced risk of disease: Physical activity can help reduce the risk of developing heart disease, stroke, diabetes, high blood pressure, and some types of cancer.

Improved quality of life: Physical activity can improve your overall quality of life and help you feel better mentally.

Increased longevity: People who are physically active and at a healthy weight may live up to seven years longer than those who are not active and are obese.

Improved bone density: Physical activity can help increase and maintain bone density.

Improved flexibility: Physical activity can improve flexibility.

Improved insulin sensitivity: Physical activity can improve insulin sensitivity.

Improved lipid profiles: Physical activity can improve lipid profiles.

Improved blood flow: Physical activity can improve blood flow.

Improved energy levels: Physical activity can boost energy levels.

Improved stress management: Physical activity can help manage stress and tension

Improved sleep: Physical activity can help you fall asleep faster.

Physical activity can be beneficial for people of all ages and abilities. Even a minimum of 30 minutes of activity per day can provide significant health benefits