



PNS SCHOOL OF ENGINEERING & TECHNOLOGY



Sub: SPORTS and YOGA

**Chapter 1: Physical Fitness,
Wellness & Lifestyle**

IMPORTANCE OF SUBJECT

- Physical Education, which includes **sports** and **yoga** has moved from being an **extra-curricular** part of school syllabus to being an **integral part of the curriculum since UN convention on the rights of the child on May 1st 2012**, brought in through article 31 “**The child’s right to play**”. In India, too, with the focus on “Swasth Bharat”, the primary thrust is on wellness, preventive health care and awareness.
- This makes it essential that physical fitness issues are addressed at different levels of schooling. With this objective, SCTE&VT has made **sports** and **yoga** compulsory for Diploma Engg. Students to train children for a healthier lifestyle.

Meaning & Importance of Physical Fitness & Wellness

- The word “**physical**” means related to body or related to any one or all of the bodily characteristics, that include physical strength, physical endurance, physical fitness, physical appearance and physical health.
- **Physical Fitness** – The degree to which one is healthy and strong. Physical activity – Body movement that is carried out by the skeletal muscles and requires energy.
- **Wellness** – The state of being healthy and free from disease.

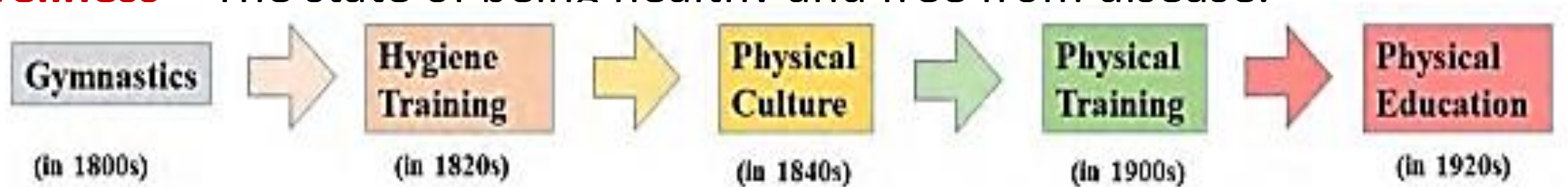


Fig: Evolution of Physical Education

SIGNIFICANCE OF SPORTS AND YOGA



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- Develops Skill
- Encourages Physical Growth and Development
- Enhances Intellectual Development
- Leads to Emotional Control and Development
- Promotes Social Adjustment
- Facilitates Personal Adjustment
- Enhances Neuro-muscular Development
- Promotes Cultural Integration
- Develops Leadership Qualities

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- Develops Health and Safety Habits
- Develops Democratic Values and Citizenship Quality
- Encourages Constructive Use of Leisure Time
- Improves Expression and Creativity
- Develops Economic Values
- Helps in Mental Relaxation
- Improved Self-confidence and Self-esteem
- Helps in Goal Setting

Components of Physical Fitness

Physical fitness can be broadly divided into Metabolic fitness, Health- related and Skill-related.

Metabolic fitness

- It depicts the physiological systems' state of health when they are at rest.

1. Blood pressure- It involves indirect measuring the effectiveness of the heartbeat, adequacy of blood volume and presence of any obstruction to vascular flow through the use of sphygmomanometer and a stethoscope. Normal BP is 120/80

2. Pulse rate- It is the number of throbbing sensations felt over a peripheral artery when the heart beats. Normal ranges from 60 to 100 pulses per min.

3. Blood insulin- Insulin test measures blood samples for the amount circulating insulin, responsible for blood glucose usage by surrounding tissue. Normal values are 5 to 20µm/mL while fasting. Lower than normal suggest Type 1 diabetes and above normal level suggests Type 2 diabetes.

Components of health related fitness

- **Cardiovascular endurance:** the ability to perform exercises at moderate-to-vigorous intensities for a prolonged period of time.
- **Muscular strength:** how much force your muscles can exert or how heavy weights they can lift.
- **Muscular endurance:** the ability of your muscles to sustain exercise for a period of time.
- **Flexibility:** the ability to move muscles and joints through a full range of motion.
- **Body composition:** your body's ratio of fat mass to fat-free mass like muscle and bone.

Skill-related Fitness

- It is also known as performance-related fitness components.
- It is associated with athletic competition but should be considered in the overall fitness of all individuals.
- These components are pertaining with the athletic ability of an individual.
- There are 6 components of physical fitness: balance, coordination, agility, speed, power, and reaction time.

Components of Wellness

- Most people think that physical fitness alone is sufficient to lower the risk of health related diseases but it is not true. e.g., consider an individual who regularly does vigorous physical training in which she/he does aerobic exercises thrice a week, does weight training, and stretching and maintains a good ratio of fat percentage of the body, but at the same time she/he eats junk food regularly, smokes and drinks alcohol. By doing so, she/he is increasing her/his chances of suffering from cardiovascular disease and other health related issues.



Preventing Health Threats through Lifestyle Change

Being informed and intentional about **diet, activity, sleep, and smoking** can reduce your health risks and potentially add years to your life. Following are some points to refer

- Getting the Right Amount of Sleep
- Eating Well-Balanced Meals
- Making Time for Physical Activity
- Keeping a Healthy Body Weight
- Avoiding Smoking or Chewing Tobacco
- Limiting or Avoiding Alcohol
- Managing Mental Health