

# **MRU23-1PE0101**

## **PHYSICAL FITNESS & WELLNESS**

### **UNIT-1**

#### **Historical Development of Physical Education in India:-**

The physical Education development in india various Periods. i.e

- 1.vedic Period - 2000-1000BC
- 2.Epic Period - 1000-600BC
- 3.Historied age- 600 BC
- 4.Nalanda period - 300 AD
- 5.Rajput period - 300-1200 AD
- 6.Muslim period- 1200-1750AD
- 7.British Period- 1750-1947.

#### **1) vedic Period -2000-1000 BC:**

In this age the aryans migrated to india from central asia generally they are farmers yoga was born at this time Pranayama is a sacred practice in this age and also yogie exercises, yogasanas are practice to control the mind and maintain the bodily postures.

Surya namalkars were performed to keep the healthy bady.

#### **2) Epic Period - 1000-600AD:**

Legendary mens became very popular during this period. In those days for during physical activities wearing the different things were very popular.

Arjuna - Archery,

Bhima - Wrestling,

Ravana - Axe Wielding,  
Krishna - Disc Throwing,  
Meganatha's - Celestial Weapons (Brahmasthanas).

In gurukula schools, students are educated till the age of 25 years. During this time they were trained in physical activities and mental pursuits.

The most common game played during this period - Gambling.

During this period wrote many books on astronomy, astrology, philosophy, agriculture, music and dances.

### **3. Historical Age - 600 BC**

Hinduism was at its peak and declined.

Caste system is entrenched. India was divided into many small kingdoms.

Buddhism and Jainism were formed.

Megasthenes visited India during Chandragupta's period.

Running, jumping, throwing are very common during this period.

Ashoka had a large army. During this period, martial training was well maintained

### **4. Nalanda Period (300 AD):**

6000 students from all over the country have studied in Nalanda University.

Pranayama and Suryanamaskar were performed every day throughout the year without missing a single day.

Student life was very difficult during this period.

Walking was considered a tonic for health.

## **5.Rajput period - 300-1200AD**

This period was like a revival of Hinduism Rajput period was also known as Chvalri.

Chivali means Horse Back.

The Rajputs were divided into several tribes.

They do not have faith in their central government. Rajputs threw swords at each other. They shone a light till the 13th century. They considered themselves Kshatriyas.

They were born into fighting.

physical - cum - military training well developed in this period

All their children, including girls, are proficient in using dagger and sword at an early age. They do not hesitate to die for the country under the necessary circumstances.

If husbands died in battle, their wives performed jauhar (burning on husband's pyre).

Their children cut off the head of the cattle with a single knife. They considered this as an auspicious sign.

During this period girls used to ride horses without saddles and dance and music were a part of their lives and they knew how to play chess or satraj.

## **6.Muslim Period - 1200-1750 AD**

In this period Wars were fought between Hindus and Muslims for sovereignty. Yoga practiced by Hindus is rejected by Muslims.

In this period very popular sports are Hunting, Chaogan. And wrestling was patronised by the government.

Animal fightings are very popular in this periodperiod like elephant fighting, cock fighting etc.

Chess, chopar, pachies sports are played this period.

## **7. British Period (up to 1947)**

Although the British were leaders in sports in their country, they did not develop sports in India. Most of the sports originated in England. The British did not make any effort to develop education and sports even in school.

In 1882, the Indian Education Commission recommended that "physical training should be provided to every class of the school in rural sports, gymnastics and drills based on the interest of the youth".

In 1894, it was felt that physical education should be made compulsory. But the government on this He did not announce his policy. During this time cricket, a western sport, became popular without any help.

In 1914 General Vaidya Brothers Sir Hanuman Vyamya Prasrak Mandal established in Amaravati, Maharashtra.

In 1920 H.C Buck YMCA College of Physical Education was established in Saidabad, Madras.

Govt College of Physical Education was established in Hyderabad in 1931.

Christian College of Physical Education was established in Lucknow in 1932.

1938 Training Institute of Physical Education established at Kandivali, Bombay.

## GREECE

The first civilized country in Europe – Greece and Greece was the first country to think of General education and physical education. Ancient Greece was divided into small kingdoms. All these were independent. There were no friendly relations between these states. There are always wars between these kingdoms. These were called city states. Among the city-states in Greece 20 states are important. The most important of these are Athens, Sparta and Crete etc. These two kingdoms are called Two eye of Greece. Fut a name given to them by Milton. Athens is a democratic state and Sparta is a dictatorial state.

Athens and Sparta are regimes where two mutually contradictory feelings can be reconciled. Citizens of Athence Freedom remains. Citizens of Sparta were loyal to the state. The people of Greece - they believed that music was necessary for exercise and soul. The Greeks were keen thinkers, eager to learn, and creative. Greece is considered to be the golden age of physical education and sports.

Sports are very natural for Greeks. They like music and exercise is given more priority. Greece is the birthplace of arts. All the arts of poetry, art, drama, music, sculpture, oratory, mathematics, astrology, philosophy were born in Greece.

The Greeks were the first to think about "all round development of man".

The history of Greek physical education can be divided into 3 parts. They are (1) Homeric Period (2) Spartan Period, (3) Athenian period,

### **1.Homeric Period:**

Homer was a great blind poet He wrote two books, the Iliad and the Odyssey. The Iliad describes the games and sports of the

Greeks. The Odyssey describes the civilization of the Greeks. During this period people depended on agriculture for their livelihood.

The main aim of education in this period is Man of action and Man of wisdom. The main purpose of physical education is to make the citizens as Man of action. Their exercises are very natural and to increase endurance, agility, strength, courage and bravery in citizens. At this time, physical education was not seen as an organized effort. There were no Gymnashias during this period. Opportunity to participate in athletic events is for royals

Only (noble people) remained.

Homer explained that Chariot races, Wrestling, Foot races, shooting the arrows, fourline are the most common events. Dancing is common in this period.

Childrens learned athletics, art of speech, poetry, dance by imitating elders. Competitions during this period were not only personal, but occasionally took place between some clans and some cities.

Physical excellence to called 'Man of Action' & intellectual brilliance to called 'Man of wisdom'.

## **2.Sparta Period:**

It was a totalitarian state whose life was characterized by strict discipline and resembled military training. People were not free, all people had to be subject to the state. The main objectives of the sparta physical education is promote military excellence.

The constitution of the Spartans was written by Lycurgus in 800 BC. If the son died in the war, the mother would be proud. A woman who lost a son or husband in war was respected in the society. The Spartans rejected the tendency of the Homeric Greeks. The state is responsible for the education of children. From birth to death (Womb to tomb) the kingdom is responsible. State officials or elders are the ones who check whether the born babies are alive or not. If a child was born with a disability, the child was abandoned on Mount Tegetus. If the baby is

strong and healthy, it is handed over to the parents. Sparta was a nation that prioritized the education of warriors.

The life or education of the citizens of Sparta can be divided into 5 parts. They are

- (1) Period of Home.
- (2) Period of Studentship.
- (3) Period of military.
- (4) Period of Citizenship.
- (5) Period of Retirement.

#### (1) Period of home:

A child grows up under the mother's care from birth till the age of seven. Mother's motto is State About Self. The main institution of primary education is the home.

#### (2) Period of studentship:

After passing the age of 7 years, the child joins the Public barracks. This curriculum was called Agoge. Agoge means Public Compulsory Training. The officer supervising the Agoge is called Paidonomus or Superintendent. He will not be paid. Students studied in public barracks from 7 years to 18 years. Students were not given enough food and clothes during this training. So for these they used to thieves. Theft is not a crime. But if caught stealing, the punishments are severe.

#### (3) Military period :

Boys after reaching 18 years will be registered Secret Corps. They are called Crypteia. Slaves are called Helots. The brutal

slaves were exterminated by the Secret Corps. By the time they are 20 years old, they learn the tactics of war and complete their training as soldiers. The government canteen is called Sissisiya.

They liked wrestling for two reasons. They are (1) for all-round development (2) to gain an advantage (upper hand) over the opponent. He was skilled in military training wrestling, jumping, throwing, pankration. The main purpose of their training is not for recreation, but only for military preparedness.

#### (4) Period of citizenship:

After the arrival of 30 years Citizenship recognition As a full citizen he is registered as a member of their assembly Apella. Men can get married at the age of 30 years. However, he does not have a family life.

#### (5) Period of Retirement:

To retirement from Spartans military services usually after reaching 50 years. In case of any emergency their services are availed by the state at this time only after attaining 60 years of age he is completely retirement from military service. After attaining 60 years of age he becomes a member of their senate Gerousia.

### **3.Athens Period:**

Athens people's were independent, progressive and democratic. Therefore, Athens was called a democratic state. The aim of the government is to establish a welfare state. "The man of action" and "the man of wisdom" were key elements in the education of the citizens of Athens. Physical education was a part of general education in Athens. Should a born child live? or ? It is the father who confirms that. We know that they were herdsmen before the start of the Olympics in 776BC. Two important characteristics coexisted in the Athenians. 16 head and heart. The aim of education in this period is to develop body & mind being mentally strong will be useful in times of war and peace.



The main purpose of religion in this period is respect to elders, reverence to god, loyalty to the state. Physical education develops self-discipline, courage, humility, determination and sportsmanship in youth.

The life or education of the people of Athens can be divided into 4 parts. They are (1) period at home (2) Period of studentship (3) Period of military service, (4) Period of free citizenship.

#### (1) Period at home (Grihadasa):

I grow up at home from birth to 7 years. They were brought up by mother or nurse or slaves in the house.

#### (2) Period of studentship (student phase):

7 years of age for boys to learn education started. Students go to school every day. What is the nature of their education is individual, social, political, military etc.

"Improvement" as part of their curriculum (curriculum) has 3 subjects namely gymnastics, grammar and music.

As part of this curriculum, their educational institutions are divided into 2 types. They are Palestra, Dyda Scaleum.

**Palaestra:** It is called a gymnastics school or a wrestling school. In this school to training in wrestling, boxing, jumping, gymnastic exercises. They gave training with such topics. The teacher who runs the palaestra is called the Paidotribe. He is called physical education teacher.

#### **Didascaleum:**

This is also called Grammar school or music school. In the school they gave training in literature, music and arithmetic. These were also run by private individuals who taught 3R's as part of the curriculum in this school. They are Reading, Writing and Arithmetic. They learned music on a lyre-like instrument which had 7 strings.?

Primary education for boys is conducted in this school till the age of 14-years and high school education start the age of 18 years.

(3) Period of military service:

Recorded as Ephebus Or cadet at the age of 18 years. All the youth take a pledge. Athenian youths were required to undergo military training from their 18s to their 20s.

(4) Period of free citizenship:

Citizens are enrolled as members of the ecclesia, the assembly of After the age of 20 years they can do any profession or business they like. Even at this time young people could participate in public gymnasiums, there are 3 gymnasiums in Athens. They are (1) Lyceum founded by “Aristotle” (2) Academy founded by “Plato” (3) Cynasargus founded by “Antasthenes. Dance is very important in Adhinian life. Bacchic or Dionysaic is a choral dance. It is a very complex dance process. EPHEBI who perform the Phyrice or War Dance.

## **PANHELLENIC GAMES**

The city-states of Greece all participated in 4 types of festivals. These are called Panhellenic Games or National games or National festivals or National athletic contest. Thus the culture of the Greeks was called the Panhellenic culture. Pan Hellenic Games - **4 types**. They are **Olympias, Isthmian, Pythian, Nimian**.

### **1.Pythian Games:**

These games are the second most important of the Pan-Hellenic Games. Occurs once in every 4 years. That is, they were held for the third year in every Olympiad. These games were held at the place of Delphi in the honour of God Apollo. First there were competitions in music. After that competitions were also organized in athletics. The winners were crowned with bay leaves. 582 BCS are restarted.

### **2.Isthmian Games:**

These games are held once in 2 years i.e. 2nd year of Olympiad and 4th year in spring season. These games were held in the Isthmus of Corinth in honor of Poseidon, the sea god. The winner is decorated with a crown made of dry parcely leaves. Once upon a time Plato was also the winner of these games.

### **3.Nimian Games:**

These games are held once every 2 years. That is, the Olympiad was held in the 2nd and 4th summers. These games were held in the region of Argolis in honor of God Zeus. The winner is awarded with a crown made of fresh parcely leaves. Started in 1226 BC. These are the first sports competitions in human history.

#### **4.Olympic Games:-**

776 BC held from the honor of the god Zeus in Olympia, the city of Elis, once every four years. The period between two Olympic Games is called an Olympiad. In the center of this Olympian area is a 40 feet tall statue of God Zeus is made with ivory and overlaid with gold. It is one of the seven Wonders of the world. The period between two Olympics is called an Olympiad. They went on unopposed for 11 centuries and were abolished in 394 AD by the Roman Emperor Theodosius-I due to the high loss of life and property caused by the competitions. These games were held in the month of August. Laureates crowned with 16 olive leaves, with olive horns.

## **OLYMPICS**

### **A)Ancient Olympics:**

The ancient Olympics were held every 4 years in honor of the God Zeus, on the full moon day of August and September in Olympia, Greece. The Ancient Olympics began in 776 B.C. due to the efforts of Cleosthenese (King of Pisa) and Iphitus (King of Elis). have become 293 Olympic Games were held over 12 centuries. The Romans conquered Greece These games lost their existence due to encroachment. The Roman emperor Theodosius abolished these games in 394 A.D. because of the loss of life and Loss of property. Corobus was the winner of the first Olympics in 776 BC The last winner of the ancient Olympics was the Barbarian.

Greece was divided into city-states. Wars were always going on between them. During the Olympics, these kingdoms stopped their wars for a while. This is because the purpose of the Olympic Games is "Preservation of Peace". The oldest show on earth is the Olympics.

A month before the start of the Games, they stopped war. | Truce declared- Heralds are the ones who tell the world that the Olympics will take place.

### **RULES FOR CONTEST PARTICIPANTS:**

10 months- Training at Palesta

1 month - Training in Olympia

- 1) Contestant must be born in Greece.
- 2) Competitions are for amateurs only.
- 3) Competitors should participate in training from 10 months before the Olympics.

Then the Hellenodikoi should be under 10 judges for one month.

- 4) Contestants should not have criminal record.

5) No entry for women.

6) Should participate in competitions as nude.

In the ancient Olympic Games, the winner of the pentathalon was declared the champion.

### **Conduct of Games:-**

Before the start of the competitions, the competitors' their coaches, fathers, brothers Judges assemble in front of Zeus Horkios (God of oaths). A pig is then sacrificed to Zeus.

They swear to do no corruption (unfair means) for success. They swear that they have trained for 10 months according to the rules of the Olympics.

### **Events:-**

In ancient Olympics there was only one event called foot race. After that foot races, chariot races, horse race, pentathalon (running, long jump, discus throw, javelin throw, wrestling) Boxing, wrestling, pancratiun etc events there.

During the Sports & Games In front of the Altar of Zeus, the sacred flame was burning.

According to history, ancient Olympics were held for **five** days....

**Day 1:** Contestants take oath in front of the statue of Zeus. Entries are taken.

Heats & ties are laid. There will be no competitions today.

**Day 2:** March Past will be held. All contestants will be introduced to the public. After the games are started. Chariot races, horse races and pentathlon competitions are held.

**Day 3:** It is a full moon day. In the morning 100 bulls are sacrificed in front of the statue of Zeus. In the afternoon, Foot Race, Wrestling and Boxing were conducted for boys.

**Day 4 :** Today is dedicated to the men's major athletic events. That is Three Foot Race and Dual combats, wrestling, boxing & pancratium. Today's programme end with race in full armour.

**Day 5:** Last day The winners are felicitated before the banquet followed by religious ceremonies.

### **Awards:-**

The winners of the competitions were worshiped as Demi Gods. Every Greek citizen considered it an honor to win the Olympics. The winners were honored with garlands of "Olive Leaves".

### **B) MODERN OLYMPIC:**

After 394 AD the Olympics did not take place for about 1500 years. Again in 1859 and 1870 the Greeks made several attempts to reconcile these games. Evangelios Zappas, a Greek living in Romania, tried to revive the Olympic Games. Eventually a Frenchman named Coubertin was credited with starting the games. The first Greeks organized two Olympic Games in 1859 and 1870. At that time many countries of the world were unable to participate in the competition or were not ready. Successful will be given. In theory Greece could not afford to host the competitions.

Restored by Baron Pierre De Coubertin. Therefore he is called Father of Modern Olympic Games. He told the world that because of the Olympics games, all countries will come together like international peace and brotherhood. Due to the irregularity of the ancient site of Olympia, the first Olympic Games were decided to be held in Athens, Greece.

The Greek government released two and a half million drachmas for these games. the rest

The money was bequeathed by Evangelios Zappas through his will. But even this money was not enough.

Eventually Alexandrian merchant George Averoff donated one million drachmas to help restore the Pan-Athenian Stadium and start the

Games. The first modern Olympics were held in Athens in 1896 AD from 5th to 15th April.

Only 13 countries participated in it. The 9 events to conducted in this Olympics.

### **Eligibility for participation in Modern Olympics:**

1. Competitors Caste, Color, Religion should not be released.
2. Participants must be amateurs.

Olympic movement supreme authority is International Olympic Committee (IOC). It was formed at the Paris Congress on 25th June 1894 to control the modern Olympic Games.

IOC members elect one of them as president through ballot. Total number of members of IOC Committees – **9**.

**One President** - elected for a period of 8 years. If necessary, he can be elected again for a period of 4 years.

**Two Vice presidents** - elected for a period of 4 years. Can be re-elected if necessary.

**Five members of Executive Board** - elected for a period of 4 years.

**One General Secretary** - He is the chief executive of this committee and works under the orders of the President.

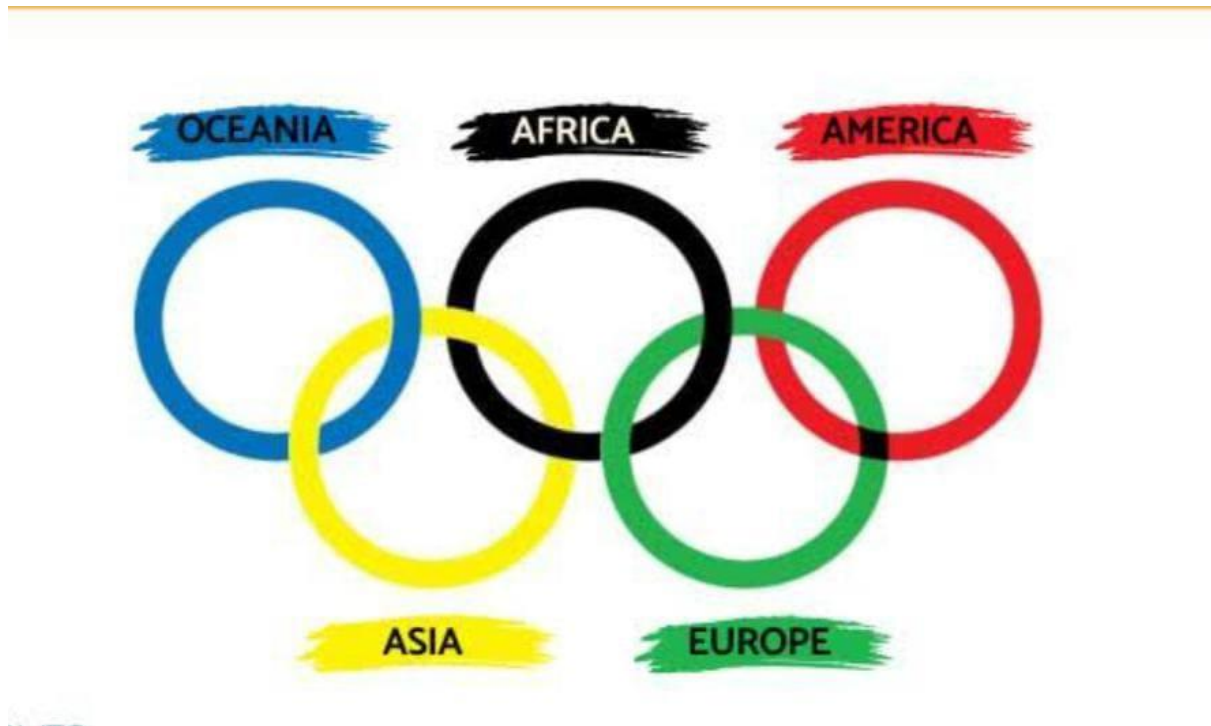
### **Olympic Emblem / Symbol / Olympic Flag:-**

The IOC uses two olympic flags.

- (1) For hoisting during the Olympic Games,
- (2) Ceremonial Flag.



(1) Olympic Flag for Hoisting purpose during olympics:-



The Olympic flag is made of white silk cloth and has no borders and In the center of the flag are five interlaced rings (circles) there. These rings are represent the five continents i.e

(1) BLUE - Continent of Europe

(2) YELLOW – Continent of Asia

(3) BLACK - Continent of Afrika

(4) GREEN - Continent of Australia.

(5) RED - Continent of Americ

The shape of the rings is **W**, the Blue Ring is on the left side of the Pole. RINGS+MOTTO= EMBLEM. Below the 5 rings is the Olympic Motto, Citius, Altius, Fortius. These are Latin words.

Citius Ever Faster (Running Faster),

Altius Ever Higher (Jumping higher),

Fortius Ever Stronger (Throwing more strongly),

Communicator – Together.

The 5 rings and the Motto together are called the Olympic Emblem.

These are the exclusive property of the IOC. It is flown during the Olympics.

The Olympic Emblem was designed by Baron Pierre de Coubertin in 1913.

The Olympic flag was hoisted for the first time in 1920 at the Olympics held in Antwerp.

### **Introduction to Sports and Games:**

Games and sports are very similar: a game is a physical or mental activity or contest that has rules and that people do for pleasure. A sport is a contest or game in which people do certain physical activities according to a specific set of rules and compete against each other

The difference is subtle. A game is any mental or physical activity with rules that is done for fun, such as physical activities like baseball and soccer, or board games such as chess and Monopoly, or card games, or electronic games (like apps), or video games. Sports are specific physical activities one can compete in such as baseball, soccer, football, field hockey, running, cycling, rock climbing, swimming, diving, race car driving, kayaking, or weight lifting. There are many more games and sports than what is listed here. Below are some examples of 'game' and 'sport' in sentences.

## **Sports Awards**

The Govt. of India, in recognition of meritorious achievements in sports has instituted following National Awards for sports persons:

- \* Arjuna Award
- \* Major Dhyan Chand Khel Ratna Award
- \* Dronacharya Award
- \* Maulana Abul Kalam Azad Award.
- \* Rashtriya khel Protsahan Puraskar Award.

### **1.ARJUNA AWARD**

The Arjuna Award is the highest national recognition given to distinguished sportspersons for their contribution in the field of sports. The award was instituted in 1961. It is for outstanding performance given by a sportspersons during the year for which it is presented after taking into account the achievements during the preceding three years. The awardee is presented with bronze statuette of Arjuna, the legendary Pandava, a scroll, and a cash prize of Rs. 15laks- alongwith a monogram, a blazer and a tie. The President of India presents the Arjuna Awards on August 29th, the birthday of the legendary, hockey wizard, late Capt Dhyan Chand, Olympian and celebrated as 'National Sports Day'.

The scope of the award has been enlarged to include such sports persons who have made lifetime contribution to their sport.

From the year 1965 onwards, the award is given in the following three categories of competitions :

- 1.Olympic/Asian/Commonwealth Games and Cricket.
- 2.Indigenous Games
- 3.Physically Challenged Category.

## **2.MAJOR DHYAN CHAND KHEL RATNA AWARD**

Highest honour given for outstanding performance in sports. It is given to recognize excellence in sports over 4 years.

The Major Dhyan Chand Khel Ratna Award, originally named the Rajiv Gandhi Khel Ratna Award, is India's highest sporting honor. Since its inception in 1991-1992, it has been awarded annually by the Ministry of Youth Affairs and Sports.

The award recognizes athletes for their exceptional achievements in sports at the international level over four years. Winners receive a medallion, a certificate, and a cash prize of Rs 25 lakhs. In 2021,

The award was renamed to honor Dhyan Chand, a legendary Indian field hockey player known for scoring over 1000 goals in his career.

Viswanathan Anand, a chess grandmaster, was the first recipient of this award. Abhinav Bindra, who won at 18 years old, is the youngest recipient.

## **3.DRONACHARYA AWARD**

The great Indian Saint Kabir aptly described the significant role of Guru (Teacher) in his famous lines:

"Guru Gobind dou Khare Kake lagun Pao, Balihari guru aapki jin gobind deeo batai".

In recognition of such Gurus (Coaches) the Govt. of India instituted Dronacharya Award in 1985, to honour eminent coaches who make outstanding contribution in their respective fields. The awards are given for commendable work performed on a consistent basis in the promotion of that sport. The awardees are thus motivated to dedicate themselves to raise the standard of sportspersons in international events and bring glory to the country. Karan Singh, a renowned physical educationist, who produced more than a dozen international athletes

thas the honour of receiving Dronacharya Award. He is the only person from the field of Physical Education having the distinction of coaching and producing international repute athletes. Some of them are Ajmer Singh, Brig. Labh Singh, Vijay Singh Chauhan, Baby Thomas, A.S.V. Prasad, Kamlesh Chhatwal, J.P. Singh, Pillay, Rajgopal and so on. Each awardee is given a cash prize of Rs. 15laks alongwith a bronze statuette of Dronacharya, a scroll, a suit, a blazer, and a tie. The award is presented by the President of India on August 29th, every year, which happens to be the birthday of late Capt Dhyan Chand, known as 'Hockey Wizard' and celebrated as 'National Sports Day'.

#### **4.MAULANA ABUL KALAM AZAD TROPHY**

This running trophy was instituted by the Govt. of India in 1956-57 in memory of Maulana Abul Kalam Azad, former Education Minister of India. The trophy is awarded annually by the President of India to the University which gives the best overall sports performance in All India Intervarsity, National and International level competitions, in the year of the award. The university receives a replica of the trophy and a cash award of ₹7.5lakhs for the promotion of university sports.

It is worth mentioning here that two universities of Punjab State i.e. the Guru Nanak Dev University, Amritsar (Pb.), Panjab University, Chandigarh and Punjabi University, Patiala have won this trophy for 21 times and 13 times and 9 times respectively. No other state in India matches Punjab's distinction.

#### **5.RASHTRIYA KHEL PROTSAHAN PURUSKAR**

With a view to recognizing the contribution made to sports development by entities other than sportspersons and coaches, Government has instituted a new award entitle from the year 2009, which has four categories (i) Identification and nurturing of budding/young talent (ii) Encouragement to sports through Corporate Social Responsibility (iii) Employment of sportspersons and sports welfare measures (iv) Sports for Development. The awards consist of a certificate and a trophy in each of above four categories. There is no cash award.

## **Moral & Ethical Values of Physical Education:**

Physical education (PE) can help students develop moral and ethical values, as well as social skills, self-esteem, and stress management.

For example, in PE class, we teach positive values, such as sportsmanship, teamwork and honesty, and skills such as striving for best personal performance, positive self-esteem and group participation. We believe that learning values and skills important in one area of study can help another.

Physical education (PE) plays an integral role in the school curriculum, mainly because the activities and lessons included in PE classes encourage children to live a healthy lifestyle. These fast-paced, action-packed classes give energetic students an opportunity to stay active during the school day, but they are also an opportunity to teach children important values and essential life skills that they will need now and in the future.

Values that can be Taught Through Physical Education On the surface, it may seem like physical education is a class where students learn about the fundamentals of sports, the rules of various games and the exercises they can do to stay healthy, fit and active. However, one of the many benefits of physical education lessons is the capability to teach human values like empathy and cooperation that all children can benefit from, laying the groundwork for important life skills and moral education.

This instils in them the **5 values** of physical education necessary for success both inside and outside the classroom, preparing them to tackle life's challenges with confidence and respect for others.

### **1. Respect**

Respect is the first of the 5 values of physical education. It emphasises the importance of treating others with dignity and acknowledging their worth. This core value is crucial not just for sports but in all aspects of life, teaching students the importance of appreciating the efforts of peers, coaches and opponents alike.

## **2. Responsibility**

Responsibility in physical education is all about personal accountability and the collective duty within team settings. This value teaches students the importance of reliability and understanding that one's actions directly influence the team's success.

## **3. Fairness**

Fairness is the third out of the 5 values of physical education, focusing on treating everyone equally and playing honestly. It ensures that all students understand and appreciate the importance of playing by the rules and respecting each other's rights to equal opportunities. Fairness sets the stage for an inclusive culture in schools where merit and effort determine success.

## **4. Trustworthiness**

Trustworthiness is the development of reliable and dependable relationships among peers and between students and teachers. It emphasises the importance of being someone others can count on, whether in collaborative tasks or in competitive settings.

## **5. Citizenship**

Citizenship as a value of physical education is all about civic-mindedness and helping out the community. It teaches students that being a part of a team or a group is more than just winning games, it's about working together, helping each other out and, most importantly, making everyone feel included.

## **HUMAN LIFE STYLE**

### **A) FOOD HABITS:**

The best and the easiest way to lose and ney maintain weight is sensible eating combined with regular physical activity. A combination men of the two results in loss of more fat and gy retention of muscle. One should try to inculcate -ly the following food habits in his/her diet regime and get that svelte body. However, food habits are individual matter and get affected by many factors.

- 1.The right sources of carbohydrates.
- 2.Tricks to cut down on Fat.
- 3.Meals before meals.
- 4.Snack time.
- 5.Eat the right sources of Protein.
- 6.use less Sugar.
- 7.Balance in the Calories.
- 8.Small but frequent meals.



## **UNIT-2**

### **Introduction to Physical fitness and wellness for healthy body and mind:**

#### **Physical fitness:**

Today, there is a growing emphasis on looking good, feeling good and living longer. Increasingly, scientific evidence tells us that one of the keys to achieving these ideals is fitness and exercises. Getting moving is a challenge because today physical activity is less a part of our daily lives. There are fewer jobs that require physical exertion. We have become a mechanically mobile society, relying on machines rather than muscles to get around. In addition, we have become a nation of observers with more people (including children) spending their leisure time pursuing just that-leisure. Consequently, statistics show that obesity and over weight, the problems that come with high blood pressure, diabetes, cardiac arrest, etc. are on the rise. But statistics also show that preventive medicine pays off, so one should not wait until his/her doctor gives an ultimatum. Every one must take the initiative to get active now.

#### **Wellness:**

Wellness is the capacity of an individual by which he leads a well balanced life.

Wellness is the full integration of states of physical, mental, and spiritual well-being.

Wellness may be defined as "the optimal state of health of individuals and groups. There are two focal concerns: the realization of the fullest potential of an individual physically, psychologically, socially, spiritually, and economically, and the fulfillment of one's role expectations in the family, community, place of worship, workplace, and other settings."

## **Dimensions of Wellness:**

There are six wellness dimensions i.e

1. Physical
2. Mental
3. Social
4. Emotional
5. Spiritual
6. Environmental

### **1. Physical Dimension**

Physical dimension purely refers to the perfect functioning of the body externally as well as internally. Externally: having good physique, good appearance, good texture and complexion, attractive features, well structured and strong body parts and limbs, well groomed posture, graceful carriage and efficient movement. Internally: all systems of the human body i.e. digestive, circulatory, respiratory, nervous, and excretory system, and sensory organs are functioning optimally. The pulse rate, blood pressure and body weight being in normal limits according to the age and sex. Physical dimension i.e. physical health means proper functioning of the systems and physical well being of the body, cumulative result being perfect and harmonious functioning of the human body.

### **2. Mental Dimension**

Mental health is the balanced development of an individual's personality and emotional attitudes which enable him to live harmoniously with his fellow beings. Sartorius has defined mental health as "a state of balance between the individual and the surrounding world, a state of harmony between oneself and others, a co-existence between the realities of the self and that of other people, and that of the environment". It is influenced by both biological and social factors. A good mental health implies that an individual has adjusted satisfactorily

to his environment, home, work place, and other people of the society, so that he is realizing the maximum amount of happiness from living.

### **3. Social Dimension**

Social health is the ability to get along with one self and with others, to be independent but at the same time to realize how dependent one is on others. Donald has defined social well being as "the quantity and quality of an individual's interpersonal ties and the extent of involvement with the community".

Social health is concerned with helping an individual in making personal adjustment, group adjustment and adjustments as a member of a society. Sound social interaction at the early stage of life builds up correct attitude which goes a long way in helping the child to adjust in the society.

Social maladjustment is a problem which is often reflected in reduced mental health. Thus social interaction becomes a means of achieving mental health. One's social health status is measured not in terms of personal feelings of well being but in terms of one's effect on the well being of others.

### **4. Emotional Dimension**

Emotions are the feelings which have great role in our life and lead to the modification of attitude, conducive to personal adjustment and well being. The environment we create by our behaviour, our attitudes, and our actions is the emotional environment and it greatly influences the personality of an individual. Emotion is an essential element in the adjustive nature of the life process. Emotional health means emotional fitness and emotional control. A person can be called emotionally healthy if his emotions are always positive, and has full control over his emotions. On the other hand, a person who has no control over his emotions or is over powered with negative emotions can be called emotionally imbalanced or emotional ill.

### **5. Spiritual Dimension**

In the context of Indian culture, where people are having faith in divine powers, and another distinctive feature of human life, the presence of spiritual element spiritual health refers to that part of

the individual which reaches out and strives for meaning and purpose in life. Man is a complex multi-dimensional being. He is not only having spirit, he also has mind, body and life. But these multiple sides of his nature are not contradictory. He is indivisible and nothing in him can be rejected.

## **6. Environmental Dimension**

The internal environment of man himself and external environment which surround him reflect the health status of the individual, the society and the nation. Sanitation is one of the important aspects of environmental health. It is the quality of living that is expressed in clean home, clean neighbourhood and clean community. Environmental sanitation can be defined as "the control of all those factors in man's physical environment which exercise or may exercise a negative effect on his physical development, health and survival." Being a way of life, it must come from within the people. In the recent years, the subject of environment and its pollution has become a critical health area, as much of the ill health in the country is due to defective and polluted environment.

### **Basic Principles of Physical Fitness:**

1.Exercises

2.Yoga

#### **1.Exercise:**

Exercise is physical activity that enhances or maintains fitness and overall health. It is performed for various reasons, including weight loss or maintenance, to aid growth and improve strength, develop muscles and the cardiovascular system, hone athletic skills, improve health, or simply for enjoyment.

Some exercises names given below....

1. Flexion
2. Extension
3. Hyper flexion
4. Hyper extension

5. Arms circumduction
6. Sideward langing
7. Gollaping
8. Buttock run
9. Off neck rotation
10. Hip rotation
11. Ankle rotation
12. Invarion
13. Eversion
14. Inward rotation
15. Outward rotation
16. Dorsi flecsion
17. Flanter flecsion
18. Abduction
19. Adduction
20. Wrisr rotation and etc....

## **2. Yoga**

### **Meaning of Yoga:**

The literal meaning of the word yoga is yoke. It means for uniting the individual spirit with the universal spirit, or God.

The word yoga is derived from the roots of Sanskrit Yuj which means to join, to attach, to bind, and yoke, and to concentrate on one's attention. It also means union. Yoga is the true union of our will with the will of God.

## **Stages of Yoga (or) Astanga Ypga:**

There are eight stages of yoga to secure purity of body, mind and soul. They are-

- \* Yama
- \* Niyama
- \* Asana
- \* Pranayama
- \* Pratyahara
- \* Dharana
- \* Dhana
- \* Smadhi

### **1. Yama (Social Discipline) :**

Yama means restraint or abstention. It has five moral practices.

- a) Non-violence (Ahimsa) means not to har hurt any creature mentally or physically is through mind, speech or action.
- (b) Truthfulness (Satya) is the presentation org of a matter as perceived with the help of the sense organs.
- (c) Non-stealing (Asteya) means not to the covet and acquire physically, mentally res or by speech other's possessions.
- (d) Celibacy-Moderation in sex (Brahma- the charya). Brahmacharya does not mean life long celibacy, but moderation in foc sex between married couples.
- (e) Non-acquisitiveness (Aparigraha) DH means abandoning wealth and means par of sensual pleasures.

### **2. Niyama (Individual Discipline):**

Physical and mental rules of conduct towards throneself.

- (a) cleanliness (Shuchita) means internal and external purification of the body and the mind.

(b) Contentment (Santosh) is a state of free mind by which one lives happily and satisfied in a congenial or uncongenial atmosphere.

(c) Austerity or Penance (Tapas) is the conquest of all desires or sensual pleasures by practising purity in thought, speech and action.

(d) Self-study (Svadhyaya) means exchange of thoughts in order to secure purity in thought and accomplish knowledge.

(e) Surrender to God (Ishvara Prasadhana) It is pure devotion to God and surrender of all actions to him.

### **3. Asana (Postures):**

Asana means holding the body in a particular posture to bring stability to the body and poise to the mind. The practice of Asana brings firmness to the body and vitality to the body and the mind.

### **4. Pranayama (Breath Control):**

Practice of pranayama is to stimulate, regulate and harmonize vital energy of the body. e.g. as bath is required for purifying the body, pranayama is required for purifying the mind, and internal organs. Bringing back.

### **5. Pratyahara (Discipline of the senses):**

The extroversion, of the sense organs due to their hankering after worldly objects has to be restrained and directed inwards towards the source of all existence. This process is putting the sense under restraint.

### **6. Dharana (Concentration):**

It means focussing the pure mind on one's personal deity or on the individual self. The practice of Dharana helps the mind to concentrate on a particular object..

### **7. Dhyana (Meditation):**

When one sustains and maintains the focus of attention through Dharana unbound by time and space, then it becomes dhyana (Meditation).

## **8. Smadhi (Self-realisation):**

In this one's identity becomes both externally and internally immersed in meditation. Supreme happiness, free from pleasure, pain or misery, is experienced. Smadhi is the climax of Dhyana.

### **TYPES OF YOGA:**

- \* **Karma Yoga** is the yoga of action.
- \* **Jnana Yog** is the yoga of knowledge and wisdom,
- \* **Hatha Yoga** is the yoga of attaining physical and mental purity, (shuddi).
- \* **Raj Yoga** is the yoga of awakening the psychic awareness and facilities"
- \* **Mantra Yoga** is the yoga of freeing the mind by utilizing a second vibration.
- \* **Laya Yoga** is the yoga of conscious dissolution of individuality.
- \* **Bhakti Yoga** is the yoga of intense devotion.

intended. Through these, the spine and vertebral muscles are strengthened.



## **Yoga Asanas:**

There are some yoga asanas listed below.....

- 1) Padmasana- Padma (lotus flower) pose
- 2) Bhujangasana- looking up "Tracupamubhangima"
- 3) Salabhasana -means locust pose
- 4) Dhanur- is called Anavvavillu,
- 5) Halasana means -Plow pose, should be done after Sarvangasana.
- 6) Paschimottasana -means 'pull forward'. An asana that expands the spine and buttocks
- 7) Vajrasana -makes the body very firm and radiant. It is called Thunderbolt.
- 8) Utkasana -This is called squatting pose.
- 9) Sarvangasana -means sarva means whole and anga means body.
- 10) Matsyasana -matsya means fish shape
- 11) Bakasana - baka means stork
- 12) Kukkutasanam -kukkatam means hen
- 13) Uddyanasana -Uddiyanam means flying
- 14) Shirshasana- means head, Keeping the whole body above the head.
- 15) Mayurasana- Mayuram means Peacock
- 16) Ardha Shalabhasana -Shalabham means grasshopper
- 17) Tadasana- Tada means mountain
- 18) Ustrasana- Ustra means camel
- 19) Makarasana- Makara means crocodile
- 20) Sirshasana- Headstand, which is like the "King" of all asanas.

## **SPORTS TRAINING COMPONENTS**

### **Meaning of Sports Training :**

The training is a process of preparing individual for any event Or an activity or job. Usually in sports we use the term sports training which denotes the sense of preparing sportspersons for the highest level of performance. But now a days sports training is not just a term but it is very important subject that affects each and every individual who takes up physical activity or sports either for health and fitness or for competition at different level. Hence, sport training is the physical, technical, intellectual, psychological and moral preparation of an athlete or a player by means of physical exercises.

### **Definition of Sports Training:**

Sports training is the basic form of an athlete's training. It is the preparation systematically organised with the help of exercises, which in fact is a pedagogically organised process of controlling an athlete's development (his sporting perfectioning). - **Matveyev (1981)**

"Sports training is a planned and controlled process in which, for achieving a goal, changes in complex sports motor performance, ability to act and behavior are made through measures of content, methods and organisation." -**Martin (1979)**

### **Training Components:**

There are five training components i.e

- 1.Speed
- 2.Strength
- 3.Flexibility
- 4.Coordination
- 8.Balance

## **1.Speed:**

Speed is the quickness of movement of limb, whether this is the legs of a runner or the arm of the shot putter. Speed is an integral part of every sport and can be expressed as any one of, or combination of, the following:

- \* Maximum speed
- \* Explosive strength (power)
- \* Speed endurance

### **Factors influencing Speed:**

Speed is influenced by the athlete's mobility, special strength, strength endurance and technique.

### **Energy system for speed:**

The anaerobic alactic pathway supplies energy for absolute speed. The anaerobic (without oxygen) alactic (without lactate) energy system is best challenged as an athlete approaches top speed between 30 and 60m while running at 95% to 100% of maximum. This speed component of anaerobic metabolism lasts for approximately six seconds and should be trained when no muscle fatigue is present (usually after 24 to 36 hours of rest)

### **Development of Speed:**

The technique of sprinting must be rehearsed at slow speeds and then transferred to run at maximum speed. The stimulation, excitation and correct firing order of the motor units, composed of a

motor nerve (Neuron) and the group of muscles that it supplies, makes it possible for high frequency movements to occur. The whole process is not totally clear but the complex coordination and timing of the motor units and muscles most certainly must be rehearsed at high speeds to implant the correct patterns.

Flexibility and a correct warm up will affect stride length and frequency. Stride length can be improved by developing muscular strength, power, strength endurance and running technique.

The development of speed is highly specific and to achieve it we should ensure that:

Flexibility is developed and maintained all year round.

Strength and speed is developed in parallel.

Skill development (technique) is pre- learned, rehearsed and perfected before it is done at high-speed levels.

Speed training is developed by using high velocity for brief intervals. This will ultimately bring into play the correct neuromuscular pathways and energy sources used.

## **2.FLEXIBILITY**

Flexibility is the ability to perform a joint action through a range of movement.

In any movement there are two groups of muscles at work:

1. Protagonistic muscles which cause the movement to take place
2. Opposing the movement and determining the amount of flexibility are the antagonistic muscles.

### **Flexibility Training:**

The objective of flexibility training is to improve the range of stretch of the antagonistic muscles.

## **Benefits of Flexibility:**

Flexibility plays an important part in the preparation of athletes by developing a range of movement to allow technical development and assisting in the prevention of injury.

## **Flexibility exercises:**

The various techniques of stretching may be grouped as Static, Ballistic and Assisted. In both Static and Ballistic exercises the athlete is in control of the movements. In Assisted the movement is controlled by an external force that is usually a partner.

### **Static stretching:**

Static stretching involves gradually easing into the stretch position and holding the position. The amount of time a static stretch is held may be anything from 6 seconds to 2 minutes. Often in static stretching you are advised to move further into the stretch position as the stretch sensation subsides.

### **Ballistic stretching:**

Ballistic stretching involves some form of rapid movement into the required stretch position. Where the event requires a ballistic movement, it is appropriate.

and perhaps necessary to conduct ballistic stretching exercises. Start off with the movement at half speed for a couple of repetitions and then gradually work up to full speed. Appropriate preparatory static stretching exercises should be conducted before any ballistic exercises are carried out.

### **Assisted stretching:**

This stretching involves the assistance of a partner who must fully understand what his role is otherwise the risk of injury is high. A partner can be employed to assist with Partner stretches.

### **Partner stretches:**

Your partner assists you to maintain the stretch position or help you ease into the stretch position as the sensation of stretch subsides. You should aim to be fully relaxed and breathe easily throughout the

exercise. Partner assisted stretches are best used as developmental exercises, with each stretch being held for thirty seconds.

### **Methods:**

Static methods produce far fewer instances of muscle soreness, injury and damage to connective tissues than ballistic methods. Static methods are simple to carry out and may be conducted virtually anywhere. For maximum gains in flexibility in the shortest possible time ballistic stretches technique is the most appropriate. Where the technique requires ballistic movement, ballistic stretches should be employed.

When conducting flexibility exercises it is recommended to perform them in the following order-Static, assisted and then dynamic.

Flexibility exercises could be part of:

- >the warm up programme
- >a stand alone unit of work.

It is considered beneficial to conduct flexibility exercises as part of the warm down programme but should not include ballistic exercises, as the muscles are fatigued and more prone to injury.

## **3.STRENGTH**

The common definition is the ability to exert a force against a resistance. The strength needed for a sprinter to explode from the blocks is different from the strength needed by a weight lifter to lift a 200 kg barbell. This therefore, implies that there are different types of strength.

### **Types of strength**

- \* **Maximum strength**-the greatest force that is possible in a single maximum contraction
- \* **Explosive strength** the ability to overcome a resistance with a fast contraction
- \* **Strength endurance** the ability to express force many times over

Overload can be progressed by increasing the:

- \* Number of repetitions of an exercise
- \* Number of sets of the exercise
- \* Intensity-reduced recover time

### **Development of strength:**

Maximum strength can be developed with.....

Weight training

Explosive strength can be developed with:

Conditioning exercises

Medicine ball exercises

Polymeric exercises

Weight training

Strength endurance can be developed with:

Circuit training

Dumbbell exercise

Weight training

Hill running

## **4.COORDINATION**

The training of coordination is generally considered a volitional activity, during which, by trial and perception of results, an individual selects the muscular activity resulting in the desired performance.

Coordination training can be customized for different sports or rehabilitation needs.

Coordination training is a volitional activity that involves a number of components, including:

The ability of your body to sense its position and movement.

Neuromuscular control:

Coordination exercises can help improve neuromuscular control, which is important for efficient muscle activation during movement.

Trial and error:

Coordination training involves trying different things and learning from them.

Selecting muscular activity:

Coordination training involves learning which muscles to use for different tasks.

Developing patterns of performance:

Coordination training involves developing patterns of performance that can be combined into more complex patterns.

Inhibiting muscles:

Coordination training involves learning to inhibit muscles that don't contribute to the performance.

Following are some of the types of practices that enhance coordination

- \*physical Exercises

- \*General & special Exercises

- \*movements should be done correctly consciously

- \*Variation of Exercise

- \*Improving motor sense organs.

## **5.BALANCE**

Balance Training Definition and Meaning:

Balance training uses specific exercises to improve one's ability to stay upright, whether moving around (dynamic balance)



or standing still (static balance). Balance training exercises focus on strengthening muscles and enhancing coordination to reduce the risk of injury, particularly from falls.

### Balance Training Exercises:

Balance training exercises include a range of activities that challenge the body's ability to maintain its center of gravity. You can practice them almost anywhere and no equipment is needed for most exercises. Balance training exercises include: single leg balance, heel-to-toe walks, sit to stand, and tandem stance. Practices like yoga and tai chi also focus on balance. They include many poses and moves that help improve overall body strength and can lower fall risk.

### Benefits of Balance Training:

Challenges with balance can make even basic activities (like walking, getting out of a bed, or standing up from a chair) challenging. Balance training can counteract changes in your balance and mobility as you age and make everyday tasks easier and more enjoyable. The benefits of balance training are numerous, including reduced fall risk, improved posture, stronger bones, and enhanced joint stability and mobility.

### Balance Training:

Movement is critical to maintaining good balance, especially as you age. When you slow down or aren't moving as much, whether due to an injury, a health condition, or too much sedentary living, you're not activating the sensory feedback loop between your muscles and joints and your brain. This, in turn, can impact how well you're able to maintain your balance.

Inactivity also causes declines in muscle strength and flexibility, essential components of balance. As a result, you may be less steady when you move and less confident in your stability. When that happens, you may further limit your activity. This is an understandable reaction, but it can make the problem worse and can lead to impaired function,

frailty, and injuries. It can also have a negative snowball effect on other aspects of your health.

That's why it's important to ease into movement with balance training exercises instead of avoiding activity. Working with a physical therapist (PT) can help you safely practice balance exercises. A PT can help you build the strength, stability, and coordination necessary so you feel confident incorporating these moves into your daily life.

You can see a physical therapist in person or use a program like Hinge Health to access a PT via telehealth/video visit.

### How Hinge Health Can Help You:

If you have joint or muscle pain that makes it hard to move, you can get the relief you've been looking for with Hinge Health's online exercise therapy program.

The best part: You don't have to leave your home because our program is digital. That means you can easily get the care you need through our app, when and where it works for you.

Through our program, you'll have access to therapeutic exercises and stretches for your condition.

Additionally, you'll have a personal care team to guide, support, and tailor our program to you. See if you qualify for Hinge Health and confirm free coverage through your employer or benefit plan [here](#).

This article and its contents are provided for educational and informational purposes only and do not constitute medical advice or professional services specific to you or your medical condition.

## **UNIT-3**

### **Introduction of Health Psychology in Sports & Games:**

Health psychology is the study of psychological and behavioral processes in health, illness, and healthcare. The discipline is concerned with understanding how psychological, behavioral, and cultural factors contribute to physical health and illness. Psychological factors can affect health directly. For example, chronically occurring environmental stressors affecting the hypothalamic–pituitary–adrenal axis, cumulatively, can harm health. Behavioral factors can also affect a person's health. For example, certain behaviors can, over time, harm (smoking or consuming excessive amounts of alcohol) or enhance (engaging in exercise) health. Health psychologists take a biopsychosocial approach. In other words, health psychologists understand health to be the product not only of biological processes (e.g., a virus, tumor, etc.) but also of psychological (e.g., thoughts and beliefs), behavioral (e.g., habits), and social processes.

### **Stages of growth and development of human body**

#### **Growth:**

Ordinarily, the term growth is used in a limited way to refer to increase in size and F weight, becoming larger and heavier. We speak of growth of muscles, growth of skeleton, growth of the brain, and growth of the body in general. Growth can be viewed as physical changes that occur from conception to maturity. Term growth is generally used to indicate a growing that causes increase and enlargement. The heart grows and becomes bigger, the bones become longer, thicker and heavier. Meredith, an authority on physical growth, has defined growth as "the entire series of anatomical and physiological changes taking place between the beginning of the prenatal life and the death."

#### **Development:**

Growth and development are often used interchangeably to mean one and the same thing. But development is different and distinct

term having different connotation. Development - indicates that there is an advancement, more unfoldment, progressive changes, and a going forward to greater maturity. The term development means a progressive series of changes that occur in an orderly, predictable pattern as a result of maturation and experience. Development does not consist of merely adding to one's height or weight, it is much more than that. Development refers to both qualitative and quantitative changes.

Stages of developments are divided into 3 i.e

1. Physical
2. Mental
3. Social

### **Stages of Growth and Development of human body**

| <b><u>Developmental stage</u></b> | <b><u>Age</u></b> | <b><u>Changes that happen</u></b>   |
|-----------------------------------|-------------------|---|
| 1. Infancy                        | 0-2 weeks         | 1. Eating<br>2. Breathing<br>3. Excretion of impurities<br>4. Cold temperature.   |
| 2. Boyhood                        | 3 weeks-2yrs      | 1. Extremely rapid growth<br>2. More diseases<br>3. Teething<br>4. Sensory development<br>5. Walking<br>6. Critical phase |

|                    |            |  |
|--------------------|------------|--|
|                    |            | <ul style="list-style-type: none"> <li>7. Development of motor skills</li> <li>8. Listening comprehension</li> <li>9. Sweet words talking</li> <li>10. Alone Playing ability.</li> </ul>   |
| 3. Early childhood | 3-5yrs     | <ul style="list-style-type: none"> <li>1. School precedent</li> <li>2. Age of exploration</li> <li>3. Parallel sports, imitation</li> <li>4. Self-esteem</li> <li>5. Height gain, weight gain</li> <li>Teething</li> <li>6. Eruption of deciduous teeth and permanent</li> <li>7. Risk age</li> <li>8. Beginning of Self-Esteem</li> <li>9. Foundation of social development</li> <li>10. The age of questioning.</li> </ul> |
| 4. Late childhood  | 6-10years  | <ul style="list-style-type: none"> <li>1.School stage</li> <li>2.Eruption of permanent teeth</li> <li>3. Development of skills</li> <li>4.Imitation</li> <li>5.Language development</li> <li>6.Interests grow.</li> </ul>  |
| 5. Puberty         | 11-12years | <ul style="list-style-type: none"> <li>1. Puberty (in English)</li> </ul>  |

|                    |                    |  |
|--------------------|--------------------|--|
|                    |                    | <ul style="list-style-type: none"> <li>2. Secondary sexual characteristics</li> <li>3. Severe mental stress</li> <li>4. Maturity.</li> </ul>   |
| 6.Erly Adolescence | 13-17yrs           | <ul style="list-style-type: none"> <li>1. Antagonistic nature</li> <li>2. Daydreaming</li> <li>3. Interest in sexual matters</li> <li>4. Age of stress</li> <li>5. Emotional instability.</li> </ul> |
| 7.Late Adolescence | 18-21yrs           | <ul style="list-style-type: none"> <li>1. Attraction between men and Women</li> </ul>  |
| 8.Adult hood       | 21-40yrs           | <ul style="list-style-type: none"> <li>1. Perfectionist</li> <li>2. Life settlement</li> <li>3. Physical and mental growth stops.</li> </ul>   |
| 9.Middle Age       | 40-60yrs           | <ul style="list-style-type: none"> <li>1. Adjustment phase</li> <li>2. No reproduction</li> <li>3. Health becomes</li> <li>4. Self-confidence decreases</li> </ul>                                   |
| 10.Old Age         | 60yrs<br>And above | <ul style="list-style-type: none"> <li>1. Age of departure</li> <li>2. Memory slows down</li> <li>3. Sight slows down.</li> </ul>  |

## **First Aid**

### **Meaning and Definitions of First Aid:**

The terms 'First Aid' was adopted officially in England for the first time in 1879 by the St. John Ambulance Association. First aid is a combination of simple but quite effective and active measures to prevent possible complications. First Aid means the treatment given to the casualty till proper medical aid comes. In other words, the first aid is the process of carrying out the essential emergency treatment of an injury/illness in order to benefit the casualty till the proper medical services are rendered.

First aid is the immediate and temporary care given to the victim of an accident or sudden illness. Purpose of First Aid is an immediate care till the medical aid is given by the competent and qualified medical personnel.

### **TYPES OF FIRST AID**

There are two types of "First Aid":

- \* Self Aid

- \* First Aid

**Self Aid**, is what injured person (casualty) can do for himself. In many cases the first form of help/aid is provided by the affected person himself. Much can usefully be done by the casualty himself in stopping bleeding, supporting injured parts, covering the wounds, summoning others for help and reaching the nearby health centre for emergency treatment, if possible.

**First Aid**, means what other people can do for the casualty when he / she is unconscious or unable to move; there help provided to the casualty is known First Aid. He may be a person trained for the purpose or atleast knowing the underlying principles of the First Aid. He can give skilled help, prevent death, promote recovery and see that an

injury or condition of casualty does not get worse until the doctor arrives.

### **FIRST AID BOX:**

This is a small and handy kit box which contains the following articles required by the First Aider while providing First Aid

1. Sterile gauze pieces.
2. Bandages of different sizes.
3. Adhesive plasters of different sizes.
4. Scissors, safety pins, needles, tweezers etc.
5. Pads of various sizes
6. Splints
7. Antiseptics, e.g., dettol, spirit, tincture and so on.
8. Silver sulfa diazine cream
9. Drugs e.g., analgesics, antibiotics, packets of O.R.S. etc.

The complete first aid box should be readily available in every home, institution, houses, factories, public places, swimming pools, gymnasium halls, and play fields for immediate use.

### **REASONS OF SPORTS INJURIES:**

Injuries on the play fields, swimming pool and gymnasium may take place due to the reasons listed below

1. Poor physical fitness of players/ students.
2. Inadequate warming up before practising/competition.
4. By using substandard sports equipment or sports wears.
5. Adopting faulty skill of the particular game.
6. Lack of knowledge of rules of the game/s.
7. Poor maintenance of sports fields/ surfaces of gymnasium/swimming pools.



8. Absence of a qualified supervisor/a coach/a teacher on sports fields.
9. Absence of a life saviour/guard on the swimming pool.
10. Arrogant behaviour of a player.
11. Adverse climatic conditions for training/competition.
12. Heterogeneous grouping of physical education class or team for practice/ training.
13. Avoiding the use of sports guards.

If the above given reasons are kept in mind and looked into seriously, the chances of sports injuries are minimized to a greater extent.

### **FUNCTIONS OF THE FIRST AIDER:**

In order to control the emergency situation, on reaching at the place of casualty, the first aider should obtain a brief history of accident/ cause of injury from the patient or from people around, if the patient is unconscious.

The following functions should be considered utmost important to identify the emergency priorities:

1. General condition of the patient: Assess the general condition of the patient in terms of nature of injury (serious/minor), age, physical status (disabled/not), conscious or unconscious, fracture or dislocation, and so on.
2. Pulse of the patient: If the pulse is weak and rapid it indicates severe bleeding. If the pulse is not felt, it indicates cardiac arrest/ heart attack.
3. Respiration Check the breathing rhythm of the casualty, whether it is normal, slow, or fast. When the patient cannot breathe, artificial respiration should be carried out at once and this is continued till the revival of re- operation/arrival of proper medical aid. Clothing around the chest and the neck is loosened.
4. Colour of tongue, lips, conjunctiva (eyes) and nails: If the colour of tongue or lips is blue it indicates lack of oxygen. Whiteness (Pallor) of the tongue, eyes (conjunctiva) and nails indicates severity of bleeding.

5. Bleeding: Parts of the body particularly the ears, mouth, nose and limbs for fracture must be checked for bleeding.
6. Burns: In case of burns, the cause, degree, and site of the burns should be noted.
7. Fracture of a bone or dislocation of a joint: Limbs/joints of the body should be examined carefully to see if there is any fracture / dislocation of a joint, accordingly first Aid arrangements may be made.
8. Poisoning: In suspected cases of poisoning, signs and symptoms should be observed carefully. The vomiting material may be collected if possible for the identification of poison.

### **BALANCED DIET**

The balanced diet is the intake of appropriate types and adequate amounts of foods

and drinks to supply nutrition and energy for the maintenance of body cells, tissues and organs and to support normal growth and development.

"A balanced diet is that contains the proper amounts of each nutrient."

### **Functions of Diet**

1. It provides energy for the various activities of the body.
2. It helps the body to grow and replace worn out tissues.
3. It has the chemicals, which help to control the body functions and protect the body from diseases.

### **Factors Affecting Diet**

Diet depends on the following factors:

1. Age, sex and body surface area: Diet differs from age to age. Young ones need different types of food both in quality as well as quantity as
  1. well as quantity as compared to older people who need diet in less quantity and with lesser fats.
2. Types and duration of activity: Diet also depends on types of activity that we do and its duration. An athlete involving in vigorous training needs more caloric food as compared to office clerk. A sedentary person requires light food whereas a worker who does eight to ten hour hard work needs good diet.
3. Eating habits and social customs: Eating habits and social customs also affect the diet of an individual. Some individuals are habitual of eating fast food whereas others do not like it. Similarly, our social customs play an important role in food preparation. A section of society prefers non-vegetarian food whereas in other section of society only vegetarian food is served.
4. Climatic factors: Food is varied in different climates. As you have an experience of having different diet in summer and winter. Similarly, people living in different climatic zones have different foods.
5. Health status and growth: If you are in good state of health then you will have good diet whereas unhealthy individual cannot have similar diet. In growing age we give good food to the children. Sick individuals cannot have normal diet; usually they take light meal or as recommended by a doctor.
6. Psychological considerations: Some of the psychological factors affect the diet like how the food is cooked Or what is the taste of food? If the meal is tasty then everybody likes to have it.

## **Elements of Balanced Diet**

There are hundred nutrients in the food.

These are mainly grouped into six classes namely carbohydrates, proteins, fats, vitamins, minerals and water. Three nutrients, carbohydrates, proteins and fats supply us energy. Before understanding details of these we must know about measuring unit of energy. The energy value of food is measured in heat units called calorie or kilo calorie. Calorie is the amount of heat required to raise the temperature of 1 gram of water by 1°. A Kilocalorie is equal to 1000 calories. A Kilo calorie is written.

### **DAILY ENERGY REQUIREMENTS:**

Personal energy requirement basic  
energy requirements extra energy requirements

Basic energy requirements For every Kg of body weight 1.3 calories of energy is required every hour. (An athlete weighing 50 kg would require  $1.3 \times 24 \text{ hrs} \times 50 \text{ kg} = 1560$  calories/day) Extra energy requirements. For each hour of training you require 8.5 calories of energy for each kg of body weight. (For a two hour training session our 50 kg athlete would require  $8.5 \times 2 \text{ hrs} \times 50 \text{ kg} = 850$  calories) An athlete weighing 50 kg who trains for two hours would require an intake of approx. 2410 calories (1560+850).

## **FOOD & NUTRITION**

### **Introduction:**

Nutrition is the science that deals with food and its uses by the body. We, like all other living things, need food to live. Food supplies the energy for every action we undertake from eating banana to running a race. Food also provides material that our body needs to build up and repair its tissues and to regulate the functions of its organs and systems.

To keep our body cells running properly, they must be supplied with correct amount of food having required chemicals in ratio of the food. The chemicals in food, which our body needs, are called nutrients.

What we eat directly affects our health. A proper diet helps in prevention of certain illnesses and also helps in recovery from diseases/injuries. An inadequate or improper diet increases the risk of different diseases. Eating a balanced diet is the right way to have all the nutrients that our body needs.

### **Important Nutrients:**

The types of nutrients in food are as under:

1. Carbohydrates
2. Proteins
3. Fats
4. Vitamins
5. Minerals

All foods contain one or more of these nutrients in varying amounts. Each type of nutrient serves particular functions:

#### **1.Carbohydrates:**

Carbohydrates include sugars, starches and dietary fibre. They are the major source of food energy for most of the world's population. The sugars, or simple carbohydrates, are either monosaccharides (glucose, fructose and galactose) or disaccharides (sucrose, lactose and maltose). Starch, glycogen and dietary fiber (including cellulose, hemicellulose and pectin) are referred to as complex carbohydrates or polysaccharides.

Some complex carbohydrates cannot be digested by humans and therefore are not a significant source of dietary energy. These are referred to as dietary fibre and come primarily from the walls of plant cells. Even though it is not a significant source of energy, fibre is still a very important part of the diet. It is important in keeping the digestive tract healthy and working properly.

## **2. Proteins:**

Proteins are needed to build and maintain muscle, blood, skin and bones and other tissues and organs of the body. Proteins can also be used to provide energy. Proteins are made from amino acids-the primary building blocks of the body. When proteins are eaten and digested they are broken down into their amino acids which are then absorbed and used to build new tissues. Protein is especially important for growing children. Breast milk contains the perfect combination of amino acids for growth and mothers should be encouraged to breastfeed as long as possible. As children are weaned from the breast it is important that their staple foods are supplemented with adequate protein-rich foods.

## **3. Fat:**

Dietary fat includes cooking fats, oils and butter and ghee and is also a natural component of meats, milk, eggs, nuts and other vegetable foods.

Fats are an essential part of a nutritious diet. They are a concentrated form of energy and are the form in which much of the energy reserve of animals and some seeds is stored. In addition to serving as an energy source, fats (also known as lipids) are essential components of cell membranes and are needed for the absorption and use of some vitamins. Fat also makes meals more tasty and satisfying.

Fats and oils provide more than twice the amount of food energy as carbohydrates and proteins. Adding fat in the form of oil to the food of young children is a particularly good way to increase their energy intake. This is important since often children are not able to eat enough

'bulky' foods to meet their energy needs. Young children should receive between 30%-40% of their calories from the fats.

Depending on their activity levels and dietary patterns, adults should receive between 15% and 35% of their calories from fat. Generally, people are advised to avoid excessive intakes of saturated fats (less than 10% of energy intake) to reduce their risk of heart disease.

#### **4. Vitamins and Minerals:**

Vitamins and minerals are called micronutrients. They are needed in much smaller amounts than carbohydrate, protein and fat but are essential for good nutrition. They help the body work properly and stay healthy. Some minerals also make up part of many of the body's tissues, for example, calcium and fluoride are found in bones and teeth and iron is found in the blood.

Iron is a major component of red blood cells (RBCs) and is necessary to keep all of the body's cells working properly. Iron deficiency anaemia is the most widespread nutritional problem in the world. It can be very serious in children and women of childbearing age, especially during pregnancy, but it also affects men and older women. It leads to lethargy (low work capacity), learning difficulties, poor growth and development, and increased morbidity (illness) and maternal mortality, especially at delivery.

The best sources of iron are meat, fish, poultry, liver and other organ meats. Iron is also found in legumes, dark-green leafy vegetables and dried fruits, but this iron is not absorbed as well by the body as is the iron from animal products. Increasing the intake of Vitamin C along with the vegetable sources of iron can help more of the iron to be absorbed and utilized.

Vitamin A is needed for building and maintaining healthy tissues throughout the body. particularly eyes, skin, bones and tissues of the

respiratory and digestive tracts. It is also very important for effective functioning of the immune system. Vitamin A deficiency can lead to poor night vision (night blindness), severe eye lesions and in severe cases permanent blindness. This occurs mainly in undernourished children, especially those affected with measles and other infections. Vitamin A deficiency can also lead to increased illness and death from infections.

Vitamin A is found naturally only in foods of animal origin, notably breast-milk, liver, eggs and many dairy products. However, many dark coloured fruits and vegetables contain pigment, called carotenes, that the body can convert to vitamin A. Foods rich in carotene include red palm oil, dark green vegetables, carrots, deep yellow and orange sweet potatoes, mangoes and papaya..

Thiamin, riboflavin, niacin, B6, folate, pantothenic acid, B12 and biotin belong to what is sometimes called the vitamin B complex. The B-vitamins are necessary for converting carbohydrates, fat and protein into energy and for using them to build and repair the body's tissues. Deficiencies of these vitamins can lead to serious effects including muscular weakness, paralysis, mental confusion, nervous system disorders, digestive problems, cracked and scaly skin, severe anaemia and heart failure.

Folate (folic acid, folacin) is needed to make healthy blood cells and its lack is a common cause of anaemia among women and young children. Folate deficiency during pregnancy can lead to birth defects.

**ALL THE BEST**