Health and Physical Education

(for Class VIII)

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Punjab School Education Board

Sahibzada Ajit Singh Nagar

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Foreword

It has always been the endeavour of Punjab School Education Board since its constitution in 1969, to improve the syllabuses of different subjects on the modern lines and prepare the textbooks in a scientific manner as per the revised syllabuses.

Keeping in view the importance of sports on National and International Level. Punjab is the pioneer state to introduced the subject of Health and Physical Education, as a compulsory subject in the curriculum from class VIth to VIIIth.

The syllabus of the subject has been given a new shape as per the recommendation of PCF-2013, which will serve as a supplement tot he study of the subject of Physical Education. This book has been got prepared by able, experienced and the concerned field experts of this subject. The language of the book is very simple, interesting and of the mental level of the students of the concerned classes. Proper illustration have been provided to deal with the difficult ideas ans sub topics. It has been our endeavour to make the study-material teacher friendly. It is hoped that this book will prove beneficial for both the students and the teachers as well. Suggestions from the field teachers and experts will be gratefully acknowledged by the Board.

Chairman

Punjab School Education Board

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Lesson 1

FIRST AID

First aid is the assistance given to an ill or injured person at the spot, according to the rules before the arrival of a doctor.

Now a days, life is full of hustle and bustle and accidents can happen at home, school, play grounds, roads, factories and at any place at any time. The victim of an accident may die if he is not given first aid on time. Many times when an organ gets cut it bleeds continuously. Bleeding can cause death if not stopped immediately.

Only a first aid trained person can give first aid to a victim. But many times an untrained person can also help the victim in an

emergency. In these circumstances the first aider should call the doctor or a near by hospital or dial at 108 for the ambulance by giving the complete information about the place of the accident so that the victim can be given the treatment, immediately.



Fig. 1.1 Ambulance No. 108

Objectives of First Aid

- To save the life of a victim.
- 2. To prevent any further injury
- 3. To promote recovery
- To carry the victim to a nearby hospital or a doctor at the earliest.

First Aid Kit

A First Aid Box must contain these following things.

1. Antiseptics, Germicides, Spirit, Betadine, Boric acid, Soap, Burnol, Tincher Iodine and dettol.



- 2. Splints of different sizes
- 3. A Cotton packet
- 4. A measuring beaker or glass
- An Inhaler
- 6. lecopor or adhesive tape
- 7. ORS Sachets
- 8. Bandages: Triangular, round & warm.
- 9. Sterilized cotton balls
- 10. Thermometer, Forceps, Scissors, Torch and Safety pins.



Fig. 1.2 First Aid Kit

It is advised that such First aid boxes should be kept in homes, Educational institutions Factories, Public places and play grounds.

Rules of First Aid

Today, everyone should have the skill to do first aid so that he/she can help a victim whenever needed. Following rules should be kept in mind while giving first Aid:

- 1. If the victim is choked, he should be given artificial respiration.
- 2. Try to control the bleeding from the deep wounds.
- 3. While giving first aid, the first aider should not have any kind of fear or hesitation.

- 4. If there is bleeding from the nose or mouth or ear do not try to stop it because it may enter into the brain causing paralysis or disability. It may chock the victim by entering into the respiratory tract and victim may die
- 5. Do not allow the people gather around the causality. The victim may feel uneasiness as he does not get fresh air. Remove his shoes and socks.
- 6. Only do that what is necessary to prevent further injury.
- 7. Never take off victim's clothes unnecessarily.
- 8. Assure immobilization in case of injury.
- 9. Assure the injured for getting well soon
- 10. Do not waste time in selecting the doctor. Make the arrangements for quick transportation of the victim to the doctor.
- 11. Carry on giving first Aid till the arrival of a doctor even if the victim is very serious.

First Aider

The word first aider had no existence before 1894 but after that it has been used very often. A person who has got a certified course of first aid training from an authentic organization is called a first aider

Role of a First Aider

It is appreciable to give first aid to a victim. If a victim is not given an appropriate first aid on time he may die. Therefore a first aider should have the following qualities:

- 1. First aider should be an experienced, first aid trained person.
- 2. A first aider should start first aid immediately and with full confidence.

- 3. First aider needs to take quick decisions and act wisely.
- 4. A first aider should be calm and a tolerant person. He should not become impatient while giving first aid.
- A first aider has to face different situations. He should be able to face them with courage. If he himself loses heart, the victim's condition might worsen. Therefore he should never be perplexed.
- 6. While giving first aid, the first aider should act politely and sympathetically. This has a positive psychological impact on the victim.
- First aider should be sweet tempered and friendly. He should try to divert the victim's attention by engaging him in gossiping.
- 8. First aider should keep it in his mind that he is not a doctor. He should only provide the necessary assistance needed before the arrival of a doctor first aid is not only important for an injured or an ill person but it is also important in some other incidents. i.e. snake bite, drowning, electric shock, burns, dog bite. The victim of such accidents needs immediate first aid and this aid can save life as well.

Methods of artificial respiration

C.P.R.

- C-Cardio
- P-Pulmonary
- R-Resuscitation

If the pulse and the breathing of the victim is not felt, the patient's eyes are still and the victim is unconscious, C P R method should be used to restart his heart and lungs. Place the palms of your hands on

the patient's heart and press hard for about thirteen times. Then give mouth to mouth respiration twice. Repeat the procedure till the pulse of the victim is felt. If C P R is performed properly on time life of the victims can be saved.



Fig. 1.3 Pressing patient's heart while giving C.P.R

C.P. R when?

- 1. When there is no heart beat. (Cardiac arrest)
- 2. When you don't feel the pulse of the victim.
- 3. When victim's eyes are still.
- When the victim is unconscious.

When should C.P. R not to be Performed?

- 1. If the victim is suffering a heart attack
- 2. If the victim is finding difficulty in breathing

Artificial Respiration

An activity of restoration or initiation of breathing in a person who has stopped breathing is called artificial respiration.

Mouth to Mouth Artificial Respiration

- 1. Firstly, remove any blockage from the victim's mouth. Secondly, hold his chin with one hand and with the other hand close his nose tightly. Thirdly, the first aider immediately blows in his breath force fully into the victim's mouth.
- 2. The breath of the first aider will go into the victim's mouth. The Victim's chest will



Fig. 1.4 mouth to mouth respiration

then be filled up with air and it will swell up. This action should be repeated 12 to 16 times or until the victim starts breathing.

Schafer's Method

This method of artificial respiration was discovered by Sir Edward A. Sharpey—Schafer. That is why it is called Schafer's Method. Schafer's method is used if there is bleeding from the victim's nose, mouth or ear. Some times it is difficult to breathe because of broken jaws or if someone has swallowed poison and his mouth and nose smell of poison.

Position of the Victim

- 1. Place the victim on his stomach with his face down.
- 2. Put victim's both hands one above the other under his forehead.
- 3. Turn his head to a side.
- 4. Victim's nose and mouth should be free of any blockage.



Fig. 1.5 Schafer's method

First Aider's Position

- 1. Kneel down near the victim's thigh, facing towards the victim's head.
- Place your hands on the victim's loin keeping one hand towards one side of the spine and the other hand on the

other side of the spine and your thumbs touching each other and fingers towards the ground.

3. Keep your arms straight.

Initiating Breathing

Lean forward slowly; put your weight on the loin region of the patient. Victim's belly is touching the ground and with the pressure on the diaphragm, the air is pushed out of the lungs, with this the exhaling starts. It takes two seconds. Now come back to the previous position and release the pressure. As a result of it the organs of the belly will come back and the air will move into the lungs. It means the act of inhaling has begun It takes three seconds. The complete process will take five seconds. It means this process can be repeated 12 times in a minute.

This process should be repeated till the respiration gets normal.

Exercise

Answer the following

- 1. What is first aid?
- 2. What are the objectives of first aid?
- 3. Which things can be included in a first aid box?
- 4. Write the rules of first aid.
- 5. Who is a first aider?
- 6. Write the qualities of a first aider.
- 7. What do you know about CPR?
- 8. What do you know about mouth to mouth respiration?
- 9. How artificial respiration can be given by using Schafer's method? Explain.



Lesson 2

NUTRITIOUS and BALANCED DIET

Food is the basic necessity of life. It is impossible to live without food. It provides energy to the body, So that one can complete one's daily activities and it protects our body from diseases.

Food

The eatables which we eat daily are collectively called as food. Food repairs the wear and tear of cells. It builds the body. It gives power and energy to the body. It protects the body from diseases.

Nutritious Food

Nutrients present in the food nourish the body. The food which contains nutrients is called nutritious food. Nutritious food is helpful in the growth and correct development of the body.

Balanced Diet

The food which contains nutrients in an appropriate quantity is called a balanced diet. In simple words we can say that the food which contains all the nutrients e.g. carbohydrates, proteins, fats, minerals, vitamins and water in an appropriate quantity, is called a balanced diet.

While choosing food items one should think of the nutrients present in the food items and the available quantity of calories obtained from it. It has been observed that some people eat same kind of food daily. In this way some nutrients get gathered in their body in excess and they become deficient of other nutrients. It weakens their immunity. Proper balanced diet is necessary for the growth and development of the body.

Balanced Diet for Different Persons

The requirement of food varies from person to person. It is never the same for any two persons. It depends upon the age, gender, atmosphere, size and the functions of the person. It is as follows:

- 1. Age: Quantity of balanced diet depends upon the age. A child grows very fast in his childhood. Children are more active as they play, run and do so many activities. Many physical changes occur in the adolescents. they need extra nutrients for growth and extra calories for activities i.e. they need more proteins, more calories and fat. An aged person needs fewer calories because of being less active as compared to an adolescent. In this way requirement for balanced diet differs because of age difference.
- 2. Body Size: The need of a balance diet depends on the size of the person. A thin and slim person needs less balanced diet than a fat man. Similarly a tall man needs more quantity of balanced diet than a short man.
- 3. Body Function: The quantity of food also depends on the physical work because a person working hard physically needs more energy therefore he needs more calories e.g. a labourer and a sportsman. But the people who are in static jobs, their physical activities are limited therefore they need fewer calories e.g. a doctor and an official who remain in a sitting job.
- 4. Gender: Men are stronger than women physically therefore they can take up harder tasks. They can perform more physical activities as compared to women so they need a more balanced diet. Therefore there is a difference between the balanced diet required for men and women.

- 5. Atmosphere: Requirement of the quantity of balanced diet also depends upon the atmosphere. The muscles of the people living in the colder region contract and expand more frequently. Though this process is unwanted, the people living in these regions have to take the food which gives more heat and energy. So they need more fats and proteins than the people living in warm regions.
- 6. **Special Conditions:** Pregnant women and the mothers feeding their children need more balanced diet hence they need more nutrients as compared to the other women. In this way every individual needs a different quantity of nutrients.

Balanced Diet is very essential for the development of a human body because a human body cannot stay healthy without it.

Necessary Nutrients In a Balance Diet

The following nutrients are necessary in a balanced diet:

1. Proteins 2. Carbohydrates 3. Fats

4. Vitamins 5. Minerals 6. Water

1. Proteins:

It is a compound composed of carbon, Hydrogen, Oxygen, Nitrogen and Sulphur. Nitrogen is present only in proteins. Therefore protein is called a Nitrogenous food. Proteins are of two types:

Animal protein
 Plant Protein

Animal protein and Plant Protein

(i) Animal Protein: It is found in animals. It is available in mutton, eggs, milk, curd, cheese, and the products made form milk. Egg protein is considered as the best protein because it contains enough amino acids. (ii) Plant Protein: It is found in plants e.g. cereals, pulses, soya beans, groundnut, green vegetables, dry fruits, green chili, peas, sun flower and watermelon seeds, etc..

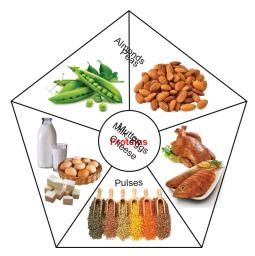


Fig. 2.1 Source of Proteins

- → Required Quantity of Proteins: Proteins are verye essential for the repair of wear and tear of cells. 50 70 gm of Protein is required for a normal individual.
- ► Function of Proteins: Proteins build the body. They are necessary to form new cells, to repair cells. for the development of body. They make the bones strong and nourish our hair. They strengthen our nails and make the skin shine. They help in the formation of hormones in our body. They enable our body to fight with various diseases. Proteins are very useful for pregnant women and breastfeeding mothers.
- → Risks of Protein Deficiency: The deficiency of proteins delays the physical and mental development of children. Muscles become inactive and weak. Protein deficiency weakens the immune system.
- → Harms of the Excess of Proteins: Taking too much of proteins, is harmful for the body. It causes the diseases of liver and kidney. The excess of proteins can cause joint pain. It

hardens the arteries that can lead to high blood pressure and other serious problems.

(2) Carbohydrates:

Carbohydrates are composed of carbon-hydrogen and oxygen. Most of human food is composed of carbohydrates. It is easily available food. Carbohydrates are of three types.

(i) Source of Sugar: It is available in jaggery (gurh), Sugar, honey, Fruits, fruit juice, Sugar cane, Dates, dried fruits, Bananas, mangoes, etc.

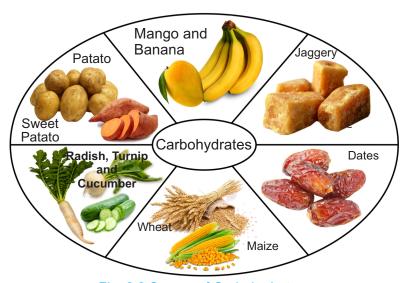


Fig. 2.2 Source of Carbohydrates

- (ii) **Source of Starch:** Starch is present in wheat, Sorghum, maize, barley, rice, millet and potato, etc.
- (iii) Cellulose (Fiberous Food/Roughage): Fibrous carbohydrates are called roughage. It does not provide energy in a human body. They are passed out unchanged with the excretion because no digestive enzymes have any effect on the cellulose. They help to pass out the excretion from the body. They absorb water from the food and add weight to the waste and speed up the movement of solid waste products

- from the large intestine. Roughage in the food satisfies hunger.
- ◆ Source: Fiber rich food items include vegetables, fruits, radish, Turnip, carrot, cucumber, salad and vegetative eatables if eaten unpeeled. Deficiency of roughage causes constipation whereas excess of it causes dysentery.
- → Required Quantity of Carbohydrates: A healthy person needs 400 gm to 700 gm of carbohydrates daily. However, sometimes we have to decrease the quantity of carbohydrates for some or the other reason. For example a diabetic needs only 90 gm. to 110 gm. of carbohydrates.
- → Risks of Carbohydrates Deficiency: Deficiency of carbohydrates retards the activities of the body. During its deficiency fats and amino acids are used for producing energy. Deficiency of Carbohydrates may cause cell damage. It causes wrinkles on the skin.
- → Dangers of Excess of Carbohydrates: Consumption of excess of carbohydrates causes indigestion. It causes obesity and weight gain. The victim feels tired. It slows down the movements of muscles. In order to digest more carbohydrates pancreas has to work hard to more produce more insulin. The pancreas loses the capacity to produce more insulin and it gets damaged gradually. As a result of it the quantity of fats and glucose increased in the blood.

(3) Fats:

Fats produce more energy than carbohydrates. Fats are of two types Animal fat and plant fat

- (i) Animal Fat: Animal fat is present in milk, curd, ghee, Mutton, fish oil, egg, liver and butter, etc.
- (ii) Plant Fat: It is available in groundnut, coconut, dried fruits, sunflower seeds, mustard seeds, etc.
- → Required Quantity of Fats for our Body: A normal person needs 50-70 gm of fats daily.



Fig. 2.3 Source of fats

- ↓ Functions of Fats: Fat gives heat and energy. It regulates the body temperature. It protects the vital organs. It transports the vitamins which are soluble in it. It acts as a lubricant for the organs in the body.
- → Effects of Fat Deficiency: Deficiency of fats causes the deficiency of fat soluble vitamins in the body. As a result the metabolic activities lessen down and one feels tired.
- → Harmful Effect of Excess of Fat: Excess of fats in body cause obesity. It may course stone in gall bladder and kidney. It can damage your heart, Kidney and brain. It may also cause cancer of gallbladder and kidney.

Vitamins

We will discuss about vitamins in the next chapter.

Minerals:

Human body needs the following elements like calcium, sodium, potassium, phosphorus, iron, magnesium, lodine, sulphur, copper, zinc, cobalt, etc. as minerals prevent us from diseases. The minerals are divided into two categories depending on the quantity we need.

- (i) Macro Minerals: These are those minerals which are required in large amount in our body e.g. Calcium, Phosphorus, magnesium, sodium, potassium, chloride and sulphur.
- (ii) Micro Minerals: Our body needs a very small amount of these minerals e.g. iron, manganese, copper, iodine, zinc, cobalt, fluoride, selenium.

Source of Minerals:

We get minerals from green leafy vegetables; spinach, fruits, soya beans, dried fruits, cheese, eggs, honey, salt, etc. Milk contains sufficient amount of calcium.

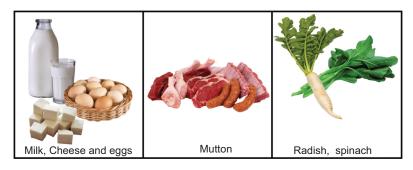


Fig. 2.4 Source of minerals

→ Requirement of Minerals: Our food contains required amount of minerals in it. A normal person needs 10-15 gm. of minerals in daily diet.

Water:

Water is a compound of hydrogen and oxygen. It transports the nutrients to the cells. Oxygen is carried to cells through water. Water also plays an important role of throwing out the waste out of our body after digestion. The activities regarding digestion cannot work without water.



Fig. 2.5 Water

- (1) Quantity of Water Required: Enough water is taken through the food we take daily. A normal person should drink about 1.5 litre to 2.5 litres of water in a day. The need of water may increase or decrease with the change of weather. We should always drink clean and fresh water. Filtered water is good for health. But it should not be filtered in such a way that all the minerals dissolved in water get washed away.
- (2) Functions of Water: All the chemical activities carried by our cells can undergo only in the presence of water. It transports the nutrients, from one part to the other part by dissolving them in itself. It washes away the poisonous and waste products from the body through sweat and urine. It results in the cleaning of body. A lot of water is required for excretion. It regulates the temperature (98.4) of the body. It prevents the dryness of the skin.

The food gets digested only in the presence water.

- (3) Dangers of Water Deficiency: Lack of water in the body results in dehydration. The skin becomes loose and wrinkled. The victim suffers from constipation and he feels thirsty again and again. The deficiency of water causes low blood pressure. Sometimes people die because of deficiency of water. It causes disorder of kidney. The body loses its weight and the activities slow down. The loss of water in the summer season may cause stroke. It results in less urination. The body becomes weak and lethargic.
- (4) Harmful Effects of Excess of Water: Where as deficiency of water causes many dreadful diseases, the excess of water is also harmful to the body. It overburdens the kidney. It affects our heart and other systems badly. It causes lack of appetite.

Milk as a Complete Food:

No food contains all the nutrients in it. But only milk is a food which contains all the nutrients in it. Therefore milk is called a perfect diet.

There are a lot of proteins in milk. Except for Iron and vitamin C, milk contains all the nutrients; Calcium, Phosphorus Vitamin A and Vitamin B in large amounts. Whatever the source may be milk contains nutrients. In mother's milk lactose is in excess whereas buffalo's milk contains more fat and cow's milk contains more calcium. The milk products like curd, butter milk, cheese and khoya also contain similar nutrients as that of milk. It gives energy to the body.

It builds muscles and maintains healthy hair and nails. It helps in fighting diseases. Calcium contained in milk makes bones and teeth healthy. It is good for eye sight and improves the immune system. It helps in the growth and repair of cells. It regulates the metabolism in the human body. Breast feeding to babies up to first 6 months is very beneficial as it increases the immunity. It increases intelligence as well.

Precautions For Food Processing

All the food materials are not to be taken as raw. Cooking is necessary to make them eatable. The following following precautions should be taken while cooking food:

- 1. Kitchen should be neat and clean There should be no mosquitoes, flies, cockroaches, lizards, etc. in the kitchen.
- 2. The man/woman who cooks the food should be clean. His nails should be cut and cleaned. Hands should be washed with soap before cooking.
- 3. Utensils used for cooking should be cleaned properly otherwise it will cause infections.
- 4. Brass utensils should be tinned.
- 5. While cooking food one should cover his/her head and should tie hair properly.
- 6. While cooking food, proper amount of water should be used so that extra water is not thrown out as throwing out water from cooked food means throwing out the dissolved nutrients.
- 7. Do not use baking powder as it destroys vitamin B.
- 8. Do not cook food on high flame for longer time. it may results in the loss of many vitamins.
- 9. Do not use red chilies in excess as they cause disorders of the stomach.
- 10. The food should be properly cooked as half raw food does not get digested properly and is not tasty.
- 11. Wash the vegetables before cutting them. Do not wash after cutting the vegetables as vitamin B and C will be washed away because vitamin B and C are soluble in water.
- 12. Whole flour is better for our body because many nutrients get separated during the seiving process.

- 13. Keep the food covered while cooking and cooked food should be kept covered as well.
- 14. Vegetables should be cut only just before cooking otherwise vitamins may get oxidized if the cut pieces kept are for a longer time.
- 15. Dip the pulses and rice in water before cooking them. Do not throw out the water otherwise the water soluble vitamins will get thrown away.

Cooking Food

Many food items become worth eating only after cooking e.g. pulses, grains and vegetables. Food materials can be cooked in many ways on the fire. This process is called cooking.

In ancient times man used to feed on fruits, flowers, raw meat obtained from the forest. After the discovery of fire, he started roasting the meat on fire. Roasted meat was tasty to eat so man started cooking food. Since then by using his knowledge and Intelligence, he discovered many ways of cooking for different food items e.g. boiling, steaming, roasting, frying, etc. Cooking makes the food tasty and digestible.

Important Rules For Eating Food

If some rules are not followed while eating food we cannot make full use of the nutrients available in food.. Therefore following rules should be kept in mind while eating food.

- 1. Wash your hands with soap before taking meals and always wear clean clothes. Nails should be cut and cleaned.
- 2. Always have your food at a fixed time. Untimely eaten food causes indigestion.

- Food should be taken in an adequate quantity. Over eating may cause indigestion.
- 4. We should not eat too hot or too cold food. Hot food causes blisters or boils and cold food cannot be chewed properly.
- 5. Food should be nutritious and easily digestible.
- 6. Food should be chewed slowly and properly so that it can be digested easily.
- 7. We should be happy while taking food. Never talk or watch T.V. while taking food.
- 8. Never take stale food because it causes food poisoning.
- 9. Rest a while after meals.
- 10. Take dinner at least two hours before sleeping because it is dangerous to sleep immediately after taking a meal.
- 11. Do not take hot and cold food simultaneously.
- 12. We should not exercise or do yoga or physical work immediately after meals.
- 13. Do not use used or unclean utensils.
- 14. Never cough or sneeze over the food.
- 15. Always eat less spicy food.
- 16. Never eat deep fried food because it is hard to digest and the nutrients are destroyed during the process of deep frying.
- 17. We should not take the type of food daily. Instead, try always to eat a variety in food.
- 18. We should not eat odd combinations of food, e.g. never take milk and lemon or milk and meat together. It may cause many disorders.
- 19. Fruits should be washed before eating.
- 20. Clean your mouth and teeth after meal.

Exercise

Answer the following questions.

- 1. What do you mean by food?
- 2. What do you mean by nutritious food?
- 3. What do you mean by balanced diet?
- 4. What do you understand by protein? How many types of proteins are there?
- 5. What are carbohydrates? What are the harmful effects of its deficiency and excess?
- 6. What do you mean by fats? What are its types?
- 7. Milk is a complete food. Explain it.
- 8. What are the principles of cooking food?
- 9. Explain the rules of taking food.
- 10. Right notes on the following:
 - (a) Roughage (b) Water
 - (c) Minerals (d) Cooking food

Lesson 3

VITAMINS

Vitamins are a type of organic compound available in food materials. In order to keep the body healthy not only carbohydrates, fats, proteins, minerals and water is required but some other organic compounds are also needed to make the most use of them. They are called vitamins.

Importance of Vitamins

Vitamins are very important part of the human food. They are greatly helpful in the process of digestion of food. They are very important for the growth and development of body. Though they themselves cannot produce energy but they help the other nutrients in this process. They help in metabolism. They help in the formation of blood cells in the blood. They make the immune system strong. They are supposed to be the base of development of our body. Therefore they are called as life savers.

Vitamins are mainly divided into two categories;

- 1. Fat Soluble Vitamins: Vitamin A, Vitamins D, Vitamin E and Vitamin K are soluble in fats
- Water Soluble Vitamins: Vitamin B and Vitamin C are soluble in water.

Although many more types of vitamins have been discovered so far but there are 6 major types of vitamins: Vitamin A, Vitamin B, Vitamin C, Vitamin D, Vitamin E, and Vitamin K.

Vitamin A

Vitamin A is soluble in fat. It helps in growth and proper development of children. It makes the skin healthy and promotes good vision especially in low light. It protects the body from diseases. Vitamin A is lost during deep frying or over cooking.

(1) Source of Vitamin A: Vitamin A is present both in the

vegetable and animals. Vitamin A rich food includes sweet potatoes, carrots, dark green leafy vegetables, lettuce, dried apricots, bell peppers, fish liver,

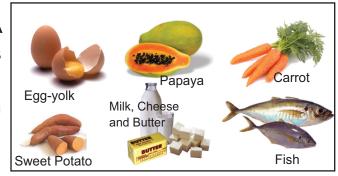


Fig. 3.1 Source of Vitamin A

fish oils, eggyolk, milk cheese, butter, liver, ghee, melon, etc.

(2) Effects of Deficiency of Vitamin A: Deficiency of vitamin A in the body weakens the immune system which results in many diseases. It causes irritation in eyes and causes colour blindness. Tear glands do not work property. Skin becomes dry and hard. There is a risk of kidney stone. Teeth fall frequently. It may cause pyorrhea.

Dangers of Excess of Vitamins A: Excess of vitamin A in children may cause dryness of skin. Toes and fingers swell up. An individual may feel weakness and exertion. It may cause restlessness and laziness. It causes constipation, headache and joint pain. One may feel the symptoms of bleeding in eyes.

Vitamin B:

Vitamin is not a single type of vitamin rather it is a group of vitamins called vitamin B complex. It includes vitamin B_1 , vitamin B_2 , vitamin B_6 , and vitamin B_{12} .

These vitamins take care of nervous system. It strengthens the muscles and brain. It gives strength to the bones. It increases appetite. It protects from skin diseases.

(1) Source of Vitamin B: Vitamin B rich food includes milk, curd, butter, cheese, meat, fish, egg, soya been and grains. It is found in rich quantity in liver and kidney.

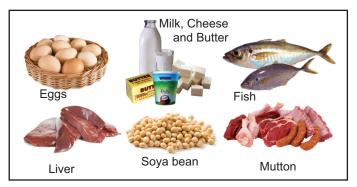


Fig. 3.2 Sources of Vitamin B

(2) Harmful Effects of Vitamin B Deficiency: Deficiency of Vitamin B causes Beriberi disease. It may cause skin disorders, indigestion and loss of appetite.

Vitamin C

Vitamin C is soluble in water. It gets destroyed in heat, sun light and air in dry conditions but in liquid form it gets dissolved. It gets destroyed when the fruits and vegetables are cut or washed after cutting. Baking powder too destroys the Vitamin C from the vegetables and grains.

Vitamin C helps in the absorption of iron from the food materials. It maintains and repairs cartilage, bones and teeth. It keeps the blood vessels healthy. It helps in healing bone-injuries. It strengthens the immune system. It maintains good eye health and improves vision. The cells of nose, throat and respiratory tract are kept healthy by vitamin C. It helps in the synthesis of peptide hormones in the glands. It cannot be stored in the body. So it passes out with urine and sweat.

1. Effects of Vitamin C Deficiency: The deficiency of vitamin C causes scurvy. It results in the swelling and aching of hand and feet. The development of bones becomes slow and sometimes the bones get distorted. It delays the healing of wounds and weakens the teeth. It results in gum bleeding. The skin becomes pale. It results in dark circles under eyes. There is always a risk of communicable diseases.

2. Source of Vitamin C: Vitamin C rich food includes all citrus fruits. Indian gooseberry (Amla) is very rich in vitamin C. Other vitamin rich food includes lemon, orange, guava, chilies, coriander, cabbage, leaves of raddish, amaranth (cholai), bitter gourd, papaya, Malta, sweet lime (mousammi), banana, tomatoes, fenugreek (methi) pineapple, etc.

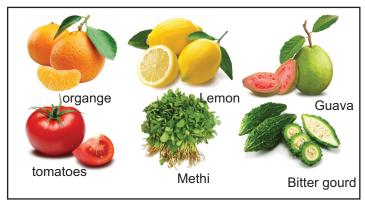


Fig. 3.3. Source of Vitamin C

Vitamin D:

It is very important for the development of bones and absorbs calcium and phosphorus from the food. It develops bones and teeth in children. It helps in the development of body therefore it is very useful for children, pregnant women and breast feeding women. It maintains the calcium in blood. It protects from small pox, whooping cough, asthma and pneumonia. It activates muscles and nerves. It maintains the ratio between the calcium and phosphorous which results in strengthening of bones.

- (1) Source of Vitamin D: Vitamin D rich food includes mutton, fish, fishoil, egg yolk, butter, cheese, milk, liver and sun rays.
- (2) Vitamin D Deficiency Diseases: Lack of vitamin D causes pain of muscles and bones. It may cause asthma in children. It can cause rickets in children.

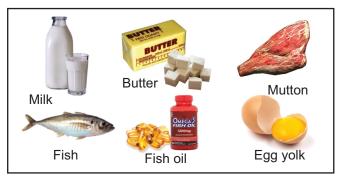


Fig. 3.4- Source of Vitamin D

(3) Effects of excess of Vitamin D: Excess of vitamin D has harmful effects on the body. It may cause disorder regarding movement of muscles. It causes loss of appetite. It may cause dizziness and nausea. It may cause damage of kidney and paralysis.

Vitamin E:

Vitamin E is soluble in fats. It helps in the absorption of iron. It protects red blood cells. It helps in growth and development of muscles. It helps to maintain metabolic activities. It strengthens the reproductive system.

Source of Vitamin E:
Vitamin E rich food materials are; grain, soya been, coconut oil, Fish liver oil, meat, liver, carrot, ghee, tomatoes, butter, sprouted pulses, milk, eggs, green leafy vegetables, peanuts, pulses, honey and lettuce.

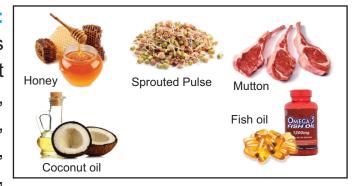


Fig. 3.5 Source of Vitamin E

Effects of Vitamin E Deficiency: Deficiency of Vitamin E causes infertility in the women. It causes loss of productivity in both men and women. It causes delay in growth and development of muscles in the children.

Vitamin K

Vitamin K is soluble in water. It helps in the clotting of blood which helps to stop bleeding. It helps in the transportation of glucose in the cell membrane. It helps in conversion of glucose into glycogen.

Source of Vitamin K: Vitamin K rich food includes cabbage, Carrot, Tomato, pork, eggs gelatin, milk, butter, soya been, spinach and leafy vegetables. It is formed in the small intestine by bacteria.

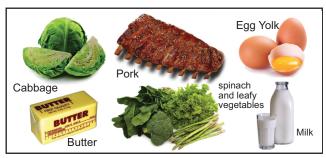


Fig. 3.6 Source of Vitamin K

Vitamin K Deficiency Disease: Vitamin K is formed in the small intestine so its deficiency is very rare. Deficiency of vitamin K prevents clotting of blood from an injury which continues bleeding. Deficiency of vitamin K makes the skin rough and hard. It causes liver disorders and diarrhea. It causes blood deficiency diseases. Premature children suffer from vitamin K deficiency.

Exercise

Answer the following questions.

- 1. What do you know about vitamins?
- 2. What is the importance of vitamins?
- What do you know about vitamin A? Write the effects of deficiency and excess of it.
- 4. What is vitamin B complex? What is the source of it?
- 5. What is vitamin C? Write its functions.
- 6. What is vitamin D? Write the effects of its deficiency.
- 7. What is vitamin E? Write its sources.
- 8. What is vitamin K? Write effects of its deficiency.

Lesson 4

KILA RAIPUR SPORTS

History of the Village Kila Raipur:

Rai Lala in 1560 took the possession of the village Kila Raipur. He built five forts to protect his sons from the attackers. That is why the village Raipur became famous as Kila Raipur. The village Kila Raipur is 11 kilometers towards the south of Ludhiana near 'Dehlon' (name of a town). The village Raipur is connected with rail and roads.

Origin of Rural Olympics:

Kila Raipur sports were initiated in 1933 after the hockey tournaments held in Jalandhar. Kila Raipur hockey team won second position in this tournament. Though this tournament was not that important but this victory played an important role for the initiation of Kila Raipur sports. At that time the main motive of these sports was to encourage the winners in order to motivate the children towards sports. When these sports were initiated, no one had ever thought that Kila Raipur sports would become the famous Rural Olympics, one day.

Natives of Kila Raipur formed 'Garewal Sports Association' in 1933 under the headship of S. Inder Singh Garewal, which includes Kabaddi, Volley ball and some athletics events.

Kila Raipur Sports Festival Rural Sports:

This sports festival is the combination of modern and old sports. This sports festival showcases the Physique of Punjabies; broad chests, open minds, handsome youth, beautiful women and the deeds of 'babaas' dwelling on the land of five rivers. This sports festival has conserved the traditional sports from being extinct. The Kila Raipur sports have set up the trend of organizing rural sports in Punjab. This

sports festival is the backbone of all the rural sports festivals of Punjab.

When the sports festival was originated farming was practiced with the help of oxen in Punjab. The farmers, after sowing their crops used to be free in the month of 'katak' (15 October to 15 November), therefore in order to avoid their oxen to be lazy. They decided to organize bullock-races and in 1934 bullock-



Fig. 4.1 An old man lighting a rock

cart races were included in the sports festivals. Bullock-cart-races became the centre of attraction in the sports festival. Once the number of the bullock-carts participants was 133 which broke all the previous records. Baba Bakshish Singh set the trend for pulling four bullock-carts simultaneously from the Kila Raipur playground. Baba Bakshish Singh was the famous bullock-cart puller of his times. He continuously won prizes for decades. Therefore the spectators used to recite the following lines:

"Bakshi chalak nahi kise ne ban jana, Ghar ghar put jamde"

At last Baba Bakshi said good bye to this world on October 1989. The Garewal Sports Association made a gold cup weighs 10 tole

(110gm.) for the winner of the bullock-cart-race in honour of Baba Bakshi.



Fig. 4.2 Kila Raipurs Sports Festival : A Nihang Singh riding two horses

This sports festival includes old sports like; camel-

race, Suhaga-race, Moonglian Chalauna, saclifting, colt-lifting, ass-lifting, passing tractor on one's body, pulling tractor with teeth, pulling tractor with ear, weight-lifting by teeth, senior-citizen-race, dog-race, mare-dance, horse-race, bullock-coats-



Fig. 4.3 weight lifting with teeth

jump, deeds of Nihang Singhs, tricycle-race, rock-lifting, plough-lifting, pigeon-flights, mule-race, elephant-race, etc.

Modern Sports of Kila Raipur:

Many world level sports; hockey, kabaddi, volley-ball, shooting, Gatka, Gymnastic, Para Gliding, etc. are played in this festival in the month of February. The Winner hockey team is awarded with 'Bhagwant Singh Memorial Trophy. S. Prahlad Singh Grewal donated 100 tola gold cup to Grewal Sports Association in the memory of his late son Bhagwant Singh who had died young.

Commentary during a Kabaddi match was initiated by S. Joginder Singh P.T.I. at Kila Raipur play ground. Today commentary has become a part and parcel of Kabaddi.

Entertainment Activities in the Sports Festival: The sports festival of Kila Raipur entertains the spectator very well. In the festival, some cultural activities are also organized along with sports. Folkdances of Punjab; Gidha, Bhangra, Haryanvi-dance, Rajasthanidance, Malvai-Gidha are the centre of attraction. Famous Punjabi Singers entertain spectators with their folk Songs.

Girls in Raipur Sports Festival: Though the girls were not included in the earlier sports festivals but Garewal Sports Association felt the absence of Girls' Sports. In 1950 Ludhiana verses Sidhwan girls' hockey was played for the first time in the festival. In spite of some problems due to girls' participation, girls sports were initiated, in 1953. Now a days, some other games along with girls athletics are held every year.

Popularity of Kila Raipur Sports In Foreign Country: The popularity of the Kila Raipur sports crossed the boundary of India and reached some other countries. As a result in 1954 Pakistan Kabaddi team participated in this tournament. After this, teams from developed countries like Canada, America, Malaysia, Singapore and England also participated in this sports festival.

Foreign animals have also been the centre of attraction in this festival. S Bhola Singh Rouli and S. Charanjit Singh Sidhu came all the

way from Vancouver (Canada) with his Grey hound breed. The foreign dogs won first prize in this festival. The overwhelmed master said that he had bought it from Paramjit Singh for 1300 US dollars.

Specialty of Kila Raipur Sports Festival: This sports festival has produced countless olympians international and national level players. This sports festival is motivating countless players. So many olympians, international and national level players participated in this sports festival time to time. Beside this the President of India, The Central Sports Minister and The Chief Minister of Punjab would come to encourage the players. It was a matter of pride for this sports festival.

Every one is overwhelmed with joy during the sports festival. The villagers remain on their toes. During the sports festival people commute on feet, bicycle, motor-bike and tractors- trolleys. Well dressed people can be seen on bicycles, motor-bikes, cars and on tractor-trolleys.

People from all over flow towards Grewal Sports stadium to see various events. The stadium is full of spectators and it makes us feel as if the entire Punjab has arrived in the sports festival.

Exercise

Answer the following questions

- 1. When did Kila Raipur Sports initiate?
- 2. Which are the rural games played in Kila Raipur Sports Festival?
- 3. What are the modern sports played in Kila Raipur Sports Festival?
- 4. Which countries did take part in the Kila Raipur Sports?
- 5. When did the women sports include for the first time in kila Raipur Sports?
- 6. What is special about Kila Raipur Sports Festival?

Lesson 5

THE GOLDEN-BOY, ABHINAV BINDRA

Historical

On 11th August 2008 when the first ray of sun struck the earth, the heart beats of millions of Indians who were waiting for Olympics shooters' competition at Beijing, became faster. It was because in this great competition India's Abhinav Bindra was the big challenge. During the struggle for the competition many thoughts must be emerging in Abhinav Bindra's mind. The Dreams of millions of Indians were being exhibited by each and every drop of Bindra's sweat. His parents and the whole of India was praying, while holding their breath. Though, he was losing in the first round of the competition. He kept on trying and at last he shot the best aim of his life but at that moment he was ignorant of the fact that he had become the first Indian who had won a gold medal in Olympics. When he looked into the eyes of his coach Gabriele Buhlmann (Switzerland), she told him by making the sign of victory that he had won the first position and marked a new record. In this way Abhinav Bindra's name got written in golden words. He had won in the 10 meter Air Riffle event.

Abhinav Bindra's Early life:

Abhinav Bindra was born on 28th September 1982 to Doctor Upjeet Singh Bindra and Mrs. Babali Bindra. They were sikhs and live in S.A.S Nagar. They are a brother and a Sister. Being a younger child his parents loved him very much. He studied at the Doon



Fig. 5.1 Abhinav Bindra in Action

School for two years before moving to St. Stephen's School Chandigarh. He holds a B.B.A Degree from a foreign University.

Abhinav Bindra's Intrest in Shooting:

Abhinav Bindra's inspirations are hereditary though he was not interested in physical activities. Since his childhood he preferred to play with toy guns. Abhinav Bindra's father owned three guns. One day when his father was cleaning and oiling the guns he found a fault with a gun. So he went to Dehradun to get it repaired. Abhinav was also with him. The guns were set in a very decorative manner in the gun shop. Those guns tempted him and Abhinav fell in love with guns. He was hardly 10 years old when his father allowed him to shoot but only in his presence. His father gifted him an air-gun on his 10th birthday but his mother was very worried as she thought Abhinav was too small to own one. He started aiming at glass bottles and empty medicine vials with the gifted air gun. His father brought empty medicine vials from his friends so that he could practice by aiming at them and he taught him the fundamentals of shooting.

Training for Shooting:

One day Rana Gurmeet Singh Sodhi came to Abhinav Bindra's farmhouse to meet his father. He saw piles of broken bottles in the room. So he asked the reason for the broken pieces scattered here and there. Then his father explained to him about Bindra's hobby. Gurmeet Singh often helped the upcoming players as he had been the Sports Minister of Punjab. He identified Abhinav's talent and suggested to Abhinav's father to encourage him to be a shooter. Bindra's father agreed and they decided to appoint a good coach for him. The matter was decided and Rana Gurmeet's friend Lt. Col. Jagir Singh Dhillon was thought off. and after a lot of persuading the Lt. Col agreed to take Abhinav on as his coach. Abhinav Bindra wrote a letter to the coach, Dhillon that he wished to get training from him. and he also mentioned that one day he would be proud of having coached him. The coach, Dhillon was impressed seeing the dedication and

determination of Abhinave at the age of 13. This made the coach Dhillon agree to train him. So the training started in an Indian dun on the shooting yard made in his courtyard under a mango tree. After some time the coach, Dhillon suggested to him to buy a superior gun. His father bought him a good rifle from abroard. Abhinav Bindra's father was impressed at seeing Bindra's devotion for shooting so he made a shooting range in his house. Now he could practice without any break. Abhinav practiced in the severe hot days of summer. He used to practice the entire day. He focused himself only at shooting because his aim was to win gold in Olympics. His parents gave him whatever he needed to fulfill his dream. He faced hardships during his practice. He got training from abroad, time to time. He got training in commando, forest training and Burma bridge training.

Abhinav Bindra's Achievements:

Abhinav Bindra's hard work bore fruit. In 1998 he was selected for the Common Wealth Games at the age of 15 and he became the youngest Indian player. In Sydney, he participated in the 2000 Olympics at the age of 18. Though he did not get any position there but participating in Olympics at such a small age was itself an achievement.

He participated in 2004 Athens Olympics, despite of breaking the Olympics record, Bindra failed to win a Medal. But in 2006 Bindra became the first Indian shooter to win the world championship gold in Zagreb. It strengthened him. In Olympic Games Beijing 2008, Abhinav Bindra won the gold and defeated the world level shooters. It was India's first gold medal after 1980, after 26 years. He won many medals in the international tournaments. He became the champion at Asian games, Grand-Prix and common wealth sports.



Fig. 5.2 Abhinave Bindra with the Olympic Gold Medal

He has been honoured many times for his achievements. A foreign company, who makes guns, honoured him by gifting a gun made of gold. The government of India has awarded him Arjuna Award, Rajeev Gandhi Khel rattana Award and Padma Bhushan. He is called Golden Boy because of winning many gold medals at International level.

Exercise

Answer the following question

- 1. When was Abhinav Bindra born?
- 2. When did Abhinav Bindra participate in Olympics for the first time?
- 3. When did Abhinav Bindra become world champion?
- 4. When did Abhinav Bindra win gold medal in Olympics?
- 5. Which awards are awarded to Abhinav Bindra by the government of India?

Lesson 6

SPORTS and DISCIPLINE

Sports and Discipline are inseparable from each other. Victory in the sports cannot be imagined without discipline. Sports builds the character of the player. Discipline plays an important role in character building. Character building is impossible without discipline because indiscipline creates many problems in the life of a player. It becomes difficult for a player to overcome these problems. All the heavenly bodies work in discipline. The sun rises in the east in the morning and sets in the west in the evening. The earth moves in an order. Similarly discipline is very important in the life of a human being. Childhood is the best period to teach discipline. Sports inculcate discipline in the innocent minds of children. Sports teaches them to be disciplined because sports teaches punctuality, coordination, unity, leadership, mental balance, honesty and sense of responsibility to fulfil their duties. Discipline is the key to success because it creates opportunity to succeed.

Meaning of the Word Discipline:

Discipline means accomplishing a piece of work by abiding with some rules.

Types of Discipline

There are two types of Discipline;

1. Internal Discipline: Internal discipline is the discipline that is driven by itself and comes from within. A student becomes habitual of following the path of discipline in order to make his futures bright. The inspiration of discipline is driven by himself. This type of discipline is sustainable. This type of discipline brings good results.

External Discipline: This type of discipline is imposed by the others. Children are made to obey for the fear of a cane, fine, or insult.

Discipline Need and Importance:

Man is a social animal. Discipline plays an important role in the development of a healthy society. A student's life is the base of his personality. A Student's mind is very naughty and mischievous. Discipline keeps his mind focused. The stability of mind helps him to progress in his life. Whatever a student does good or bad becomes the part of his character. A disciplined student is always hard working. He never shirks work and never lies. He never put off his work till the next day.

How do Sports Teach Discipline?

Sports always teaches discipline to the students because basic or fundamental training begins with discipline only. Only that student who learns with discipline can grow as an excellent player. Sports with discipline inculcate many good qualities in them which are very useful to be a good citizen. Following are the qualities which can be developed through sports.

- 1. Punctuality: Sports makes the students punctual as they daily come to the play ground to exercise on time. If a player does not reach the play ground on time then he has to bear the scolding of their coach. In this way they learn to progress with discipline to achieve their goal.
- 2. Obedience: Sports makes the player obedient as every player has to obey his coach, captain and the referee. If a player does not abide by the rules of the game, the game cannot be played properly.

- 3. Cooperation: While playing a game the players need to show cooperation amongst themselves. If there is lack of coordination between the players the performance will be poor and the team has to face failure. Therefore each and every player of the team needs to cooperate and coordinate with each other for the betterment of sports.
- 4. Tolerance: Sports build the power of tolerance in the players. During a play every player plays open mindedly. If he gets success he should never get too overwhelmed and nor should he get disheartened when he fails. He learns to overcome all kinds of situations. In this way he becomes capable of facing all the problems in his life with endurance.
- 5. Self Confidence: When a player practices for the morning and evening sessions regularly it improves his game and he becomes confident. He performs very well because of self confidence and avoids committing mistakes during the game but a player who lacks self confidence cannot perform well in the game.
- 6. Feeling of Respect: Sports develops respect and regards for others. Every player respects his coach, referee and his team members. They respect the referee's decision during the game. All the players praise the good performance of the opponent team members when the match gets over. In this way they learn to respect elders and to love younger in their social life.
- 7. Honesty: Sports makes the players honest. The players play honestly. They do not cheat to win. They perform fairly in the game and feel proud to win by playing honestly. In this way they become honest for ever

The sports play an important role in the character building of the students who participate in the games. Whenever a person attains the

above mentioned qualities he becomes disciplined and lives his life happily. In this way we can say that sports builds the character of a player.

Exercise

Answer the following questions

- 1. What is the relation between sports and discipline?
- 2. What is the meaning of discipline?
- 3. What are the types of discipline?
- 4. What do you know about the needs and importance of discipline?
- 5. How do the sports create discipline in the life of the students?

Lesson 7

YOGA

You have already studied about the basic information of yoga in your previous class. Yoga was originated in the ancient India and It is the contribution of Indian yoga gurus. Today, yoga prevails all over the world.

Many people are making use of yoga asanas to make their body active, to concentrate and to sharpen their mind. Yoga increases the immunity of our body and keeps us calm. Yoga helps the people to connect his soul to God.

Philosophy of Yoga

Yoga is based on the belief that soul of every creature is a small portion of God Himself. Today, Man has forgotten God and as a result he has lost his actual power gifted to him by God. That is why he is not able to do his duties well. As a result of it he fails in every walk of his life and his mind gets distracted. He is unable to solve his problems and feels weak physically, mentally, spiritually and emotionally. So his life becomes full of worries and sorrows.

The Philosophy of yoga shows the right path to the people. Yoga always motivates to follow non-violence. We should not be the "diverted" human being. Yoga philosophy accepts 'non-violence' as a big religion.

Ultimate Goal of Yoga:

Ultimate Goal of Yoga is to connect one's soul to God by strengthening him physically, mentally, emotionally and spiritually. In other words it is the liberation from worldly sufferings or problems. Yoga prepares a person to face all the problems of life with determination so that he may not distract from his path.

Objectives of Yoga Education:

Yoga education is very important in the life of a student. To achieve the goal of Yoga we should keep in mind the following objectives of yoga.

- To Achieve Good Health: Yoga asanas are like physical exercises but when performed properly and regularly one's body becomes strong, healthy and fit. Different asanas work very well to keep the different organs of the body fit and healthy because it increases the immunity of the body.
- 2. To Achieve Mental Strength: Yoga exercises not only strengthen a person physically but it makes him. meditate so that his mind becomes stable and the person becomes mentally strong. He develops self confidence and because of self confidence he does not lose his heart even in the most difficult situations. He faces them bravely and becomes capable to solve the entire problem in no time
- 3. To Achieve Emotional Stability: Yoga exercises make the person capable of overcoming their one's emotions. Hence it helps in maintaining balance of mind. Therefore yoga has been proved as a boon to the worried and stressed people. Yoga relaxes them and makes them able to control their emotions in the critical conditions so that they can lead a happy and contented life.
- 4. To infuse Moral Values: Yoga asanas helps the students to meditate and as a result of meditation they feel inner calm and peace which leads to religious faith, values, ethics, principles and morals.
- 5. To Achieve Higher level of Consciousness: Through meditation and other spiritual practices our soul can be connected to the eternal power. In this way by elevating your consciousness to higher level you get enlightenment.

ASHTANG YOGA:-

Ashtang word is derived from the Sanskrit word 'asht' and 'ang'. 'Asht' means eight and 'ang' means limb. 'Ashtang yoga' means eight limbed yoga. It is very difficult to follow Ashtang Yoga. By practicing exercises of ashtang yoga one can overcome the problems of his social life and mind. It can make his body strong. The eight limbs of ashtnag yoga are Yama, Niyama, Asanas, Pranayama, Pratiyahara, Dharana, Dhyana, Samadhi, these eight limbs play an important role to make the body healthy, strengthen mind and connecting human soul to God, These are as follows.

1. Yamas:-

Yamas represent some moral codes. The Moral codes are as follows.

- 1. Ahimsa (non-violence)
- 2. Satya (truthfulness)
- 3. Asteya (non stealing)
- 4. Brahmcharya(Chesty)
- 5. Aparigraha (non-avarice)

They are very helpful to lead a moral life.

2. Niyamas:-

Niyamas means self purification. It helps to purify our body and mind. By practicing it one can get rid of hate for others and it includes the list of 'do's' some of them are:

1. Shauch (purity)

- 2. Santosh (contentment)
- 3. Tapas (austerity)
- 4. Svadhyay (study of self)
- 5. Isvaraprauidhana (contemplation)

3. Asanas

It is the third limb of Ashtang. Asana is defined as a position in which one sits firmly but in a relaxed mind. Asanas are very important for a healthy body and a calm life.

4. Pranayama

Pranayama means controlling one's breathing, When a person inhales air and exhales air the process is known as breathing. Pranayama should be practiced in an open and fresh atmosphere. It strengthens our lungs and protects us form respiratory diseases. Pranayama avoids all the diseases related to heart, lungs, brain and digestive system.



Fig. 7.1 Pranayama

5. Pratyahara

The state of withdrawing our mind from the external and negative impressions and focusing inward towards our mind is called pratyahara. By practicing pratyahara man becomes able to control over his senses. The person becomes introvert. That means all his senses are focused towards his mind. In this way he becomes able to listen and be in harmony with his inner knowledge and truth.

6. Dharana

Dharana means immovable concentration of mind. When the man, in order to achieve something, concentrates on it and remains in the same position for some time this state of immovable concentration is called dharana. In the state of dharana man stops his mind from wandering and becomes immovable, calm and meditated. This state leads to dhyana and Samadhi.

7. Dhyana

Dhyana means deep meditation, In other words concentrating our mind on a particular point without any external and internal diversion. In simple words we can say that dhyana is the perfect and balanced state of dharana. In the state of dhyana our mind gets rid of all the physical and emotional sensations and gets focused on the point. It helps in the purification of mind

8. Samadhi

Samadhi means union with the object of meditation. In the state of Samadhi one gets connected with a point keeping the mind still for such a long time that he forgets all about the other external and internal distractions. In this way man gets connected to the eternal power. Samadhi is the extreme position of dhyana. As a result of Samadhi one can be able to connect one's soul to God.



Fig. 7.2 Samadhi

Above mentioned Ashtang Yoga can help a man to connect his soul to God and achieve liberation. This is the only path to achieve liberation.

Exercise

Answer the following questions.

- 1. What is the philosophy of Yoga?
- 2. What do you know about the goal of Yoga?
- 3. What are the objectives of yoga education?
- 4. What do you know about Ashtang yoga?

Lesson 8

AWARENESS ABOUT NARCOTICS

Narcotics are the drugs which make a person lose his/her mental and physical balance. Very strange kind of changes can be seen in his behaviour, gestures and personality. He loses his senses.

These intoxicants not only affect a person's body and conscience (psyche) but also, adversely affect the social and economic status of the family. He ruins his family-life by losing trust of his family members. Shunned by his friends and relatives, he is left alone completely taken over by these drugs. Therefore every one should avoid taking narcotics.

Reasons of increasing Trend of Narcotics Addiction:

Reasons of increasing trend of drug abuse in our society are as follows:

1. Social Reasons: Children are attracted towards drugs due to their surroundings, movies and picturisation of songs. The Scenes shown in the movies regarding drugs, present the character played by the actors in a glorified manner. Today, the scenes of drugs in picturisation of songs are also



Fig. 8.1 Avoid Narcotic drug

- presented as a symbol of glory. In this manner, the children feel proud in imitating them and get motivated.
- 2. Breaking of Family Relations: Sometimes, broken family relations push the children towards use of drugs. The child may get addicted to drugs due to parental dispute or divorce. It spoils the family atmosphere and pushes the child towards

- drugs. Usually, the parents spoil a child with their love and pampering as the reality of a child doesn't come to the lime light due to blinded with the love and affection. In such situations too, children tend to take drugs stealthily.
- 3. Show-off in the Peer Group: Often children start comparing their economic status with that of their friends and sometimes they try to boast by using costly drugs.
- 4. Impact of the Company of Friends: A child spends most of his time with his friends away from his family atmosphere. Therefore the influence of his friends on the child is very natural. If a few of them are addictive of drugs it will affect the others badly.
- 5. Effect of Technology: Although technology has made human life very comfortable, but social networking sites on the internet have affected the children a lot. Now a day, the child gets attracted towards new way of using drugs available on the internet. In this way, he gets trapped in the web of drugs due to the modern technology.

Harmful Effects of Narcotics

Now a day, harm full effects of narcotic drugs have become a major problem in the society. The drugs affect the user's body, family and society. They the human body very badly.

- 1. Effects on the Body: Narcotic drugs weaken the human body. Use of narcotics causes digestion related diseases. There is a risk of cancer. Blood Pressure increases and the blood vessels become weak. The risk of heart attack increases. It weakens the memory and thinking skills, limbs start shaking and The uses may lose his senses gradually.
- Adverse Effect on Behaviour: Use of narcotics affects one's behaviour very badly. A drug addicted person loses control on

- him and often quarrel with the people without any reason. He remains irritated all the time therefore his family members and his friends start avoiding him.
- 3. Effects on the Social Life: As the narcotics affect the body and mind, they affect the user's social life too. A drug addict loses his respect in the society. No one likes to be near him. He loses his character and hence loses his relation to the society ultimately.

Drug-Addiction

It is not so difficult to make a person quit narcotics, However the addicted person should be made ready to give up the habit by transforming him physically and mentally.

The addicted person should be prepared mentally to give up the narcotic by using following methods:

- Motivation: The parents and the teachers play an important role to motivate the children to avoid narcotics. They should create awareness about the harmful effects of narcotic drugs so that he may get motivated to keep a distance from the narcotics.
- 2. Psychological Methods: An addicted person never admits that he takes narcotic. Therefore only friendly and sympathetic behaviour can work well. It seems difficult then he should be prepared to give up drugs with the counseling of a psychologist.
- 3. Yoga Asans: Yoga is a gift from the Indian culture and is now popular all over the world. Not only that it is highly useful relieving mental and physical stress but its asanas are equally good to get rid of mental diseases, physical diseases and drug addiction as well.

- 4. Role of Family: The co-operation of the family plays an important role to make him de-addicted because if such a person is not treated with love and affection he will feel alone. Therefore such people need full cooperation from his family. He should not be criticized or cursed anywhere.
- 5. Sports and Entertainments: Sports and entrainment help the children to strengthen them physically and make best use of their free time. In this way their attention gets diverted from the bad company and the children are saved from the bad habits like drug addiction.
- 6. Organizing Seminars: Today, it is highly needed that schools and colleges should organize seminars to make them aware of the harmful effects of narcotics. Experts should be invited in there Seminars to erected awareness. These seminars serve to sensitize the students about the drugs so that they stay away from narcotics.
- 7. Friendly Attitude: Parents and teachers should have friendly and sympathetic attitude towards the children so that they can share their problems and feelings with them. In this way the child remains away from the bad habits of drug addiction.

Exercise

Answer the following questions

- 1. What is the effect of the use of narcotics?
- 2. What are the reasons of the increasing trends of drug addiction?
- 3. What are the harmful effects of narcotics?
- 4. What are the measures to get rid of drug addiction?