Hygiene – A Key to Healthy Life

- The science and practice of maintaining good health is known as hygiene.
- The main factors which contribute to personal hygiene and good health are personal cleanliness, physical exercise, rest and sleep and healthy habits.

1. Personal Cleanliness

- a. Hands and Skin
 - We must wash our hands with soap after handling things such as books, coins, furniture, tools and machinery in workshops, seats and supporting rods in buses and even pets and other domestic animals as many of them carry germs.
 - Bathing regularly keeps the skin free from germs and body odour. Undergarments and handkerchiefs must be washed daily.

b. Hair

- We should keep our hair clean by regularly washing it with a good shampoo.
- We should brush and comb our hair regularly so that we look smart and tidy.

c. Teeth

• We should brush our teeth twice a day, once when we get up in the morning and before going to bed at night.

d. Nose

- We should cover our nose and mouth with a handkerchief while sneezing or coughing to prevent the spread of germs.
- Always blow your nose into a handkerchief.
- Make sure that you always breathe through your nose and not through your mouth.

e. Eyes

- We must wash and clean our eyes twice or thrice a day.
- Avoid watching television for long hours as it causes eye strain. Do not sit close to the television as it is harmful for your eyes.
- Avoid bright light which shines directly into your eyes.

f. Ears

- Remember to dry your ears after bath and shake out the water which enters your ears after you return from a swim.
- We should also protect our ears from extreme cold or heat.
- If at any time, a small insect enters your ear, it can be removed by filling the external ear with saltwater.

2. Physical Exercise

- Exercise helps maintain efficiency, size and strength of the muscles. It keeps the muscles, bones and joints in good condition.
- We should include a minimum of 15 minutes of regular exercise in our daily routine.

3. Rest and Sleep

• Our body gets sufficient rest when we sleep. We need sufficient sleep to wake up refreshed and recharged for the next day.

4. Healthy Habits

- We must try to go to bed early and not go to sleep immediately after eating dinner.
- We must ensure that our bowels are cleared every day, if possible in the morning.
- We should eat a balanced diet which contains sufficient amounts of fibrous vegetables, fruits and buttermilk.
- We must drink plenty of water throughout the day. We should try to avoid drinking water with our meals.

Social Hygiene and Sanitation

- It is important to keep our surroundings clean to stay healthy.
- Eatables should be kept covered at all times.
- Public drains and garbage should be covered and sprinkled with disinfectants such as bleaching powder and lime.

Control of Disease Carriers (Vectors)

• Some creatures act as carriers, vectors or reservoirs of pathogens and are responsible for the spread of diseases from one person to another. Such intermediate carriers of pathogens are called **vectors**.

Housefly and its Control

• The most common Indian housefly is *Musca nebulo*.



- Dysentery, cholera and typhoid are some diseases spread by houseflies.
- The housefly feeds on all kinds of organic food. It gets attracted to particularly sweet foodstuffs and rotting meat.
- A housefly transmits diseases through its hairy body and legs, by pouring out saliva, through excreta or by direct transmission of germs.
- Houseflies can be controlled by removal of dirty material from the house. The waste should be disposed of so as to prevent breeding of flies. The refuse should be covered with a layer of soil to allow decomposition.
- Food should be covered properly to prevent flies from sitting on it. Babies should be well-protected with baby umbrellas when sleeping.

Mosquito and its Control

• Three kinds of mosquitoes commonly found in India are the malaria mosquito *Anopheles*, the filaria mosquito *Culex* and the dengue mosquito *Aedes*.



- The female Anopheles mosquito is responsible for spreading malaria in humans, monkeys and birds.
- Elephantiasis or filariasis is spread by the *Culex* mosquito.
- The *Aedes* mosquito is involved in spreading **yellow fever** and **dengue**, which are caused by two types of viruses.
- Mosquitoes act as carriers of disease-causing pathogens and spread diseases through the bite of an infected person.
- The population of mosquitoes can be controlled by eliminating adult mosquitoes by spraying
 insecticides, such as dichlorodiphenyltrichloroethane (DDT) on breeding grounds. Breeding places of
 mosquitoes must be destroyed. The population of mosquitoes can be controlled by the elimination of
 mosquito larvae. Mosquito larvae are biologically controlled by releasing *Gambusia* fish in stagnant
 water.

Cockroach and its Control

- Cockroaches are commonly occurring household insects and are usually found breeding in manholes and sewers.
- They may act as carriers of viruses, especially those which cause cancer.
- They can be controlled by destroying their breeding places, removing dirty material from the house and preventing their contact with food and water.

Rat and its Control

- Rats are considered serious domestic pests.
- A parasite named rat flea lives on the skin of rat. It possibly carries the germs of plague.
- To prevent the spread of diseases through rats, rat poisons or raticides should be used to trap, kill or dispose of rats.

Contamination of Water

- Contamination of water is the addition of undesirable substances such as foreign matter, organic and inorganic matter, and biological or radioactive substances which deteriorate the quality of water and make it harmful for consumption.
- Sewage, defecation, tannery wastes and pesticides are some sources of water pollution.

Common Water-borne Diseases

DISEASE	INCUBATION PERIOD	SYMPTOMS	PREVENTION
Cholera (<i>Vibrio</i> <i>cholera</i>)	Few hours to 6 days	 Severe stomach ache, diarrhoea with white, watery and foul smelling faecal waste and vomiting Dryness of tongue, sunken eyes and muscular pains 	 Control of houseflies by destroying their breeding grounds Personal hygiene, cleanliness of the surroundings Anti-cholera injection
Bacillary dysentery (<i>Shigella</i> <i>dysenteriae</i>)		 Continuous loose motions or diarrhoea Slight fever and severe intestinal pain 	 Consumption of fresh, clean and nutritious food Consumption of pure and fresh drinking water Population of flies should be reduced
Amoebic dysentery or Amoebiasis (<i>Entamoeba</i> <i>histolytica</i>)	About 1 week	 Diarrhoea or watery motions Intestinal lining is destroyed Constipation alternating with diarrhoea Stomach convulsions 	 Food should be kept covered properly to avoid contamination by flies and dust carrying cysts Clean, boiled and cooled water should be used for drinking Raw vegetables and fruits bought from the market should be cleaned and washed properly before storing and eating