HEALTH AND HYGIENE

- ❖ word "health" refers to a state of complete emotional and physical wellbeing.
- ❖ As defined by World Health Organization (WHO), it is a "State of complete physical, mental, and social well being, and not merely the absence of disease or infirmity."
- ❖ Health is a dynamic condition resulting from a body's constant adjustment and adaptation in response to stresses and changes in the environment for maintaining an inner equilibrium called homeostasis.
- Hygiene is a science of the establishment and maintenance of health conditions or practices
- * Hygiene is the practice of keeping yourself and your surroundings clean,
- The Chemical constituents of food which give us energy, help to build our body and protect us from diseases are called Nutrients.
 - 1. Carbohydrate
 - 2. Proteins
 - 3. Fats
 - 4. Vitamins
 - 5. Minerals
 - 6. Water.
- **Carbohydrates** are energy giving component of the food.

S. No.	Form of Carbohydrates	Sources
1.	Sugar	Fruits, Honey, Cane Sugar, Sugar Beet

2.	Starch	Rice, Wheat, Maize, Potato, etc.
3.	Dietary fibre	Whole grain, nuts, etc.

- ❖ The presence of Carbohydrate as Starch in the given food item.
- ❖ Iodine reacts with Starch to formStarch-Iodine complex which is blue-black in colour.
- ❖ Thus, the appearance of blue-black colour confirms the presence of Starch in the food item.

FATS:

- ❖ An energy-giving food provides more energy than Carbohydrates.
- ❖ Butter, ghee, milk, cheese, paneer, nuts, meat, fish, egg yok etc.
- ❖ They insulate our body and protect the cells.

PROTEIN:

- ❖ Proteins are necessary for our growth repair, as well as for regulating various body functions such as digestion.
- sources of proteins pulses, eggs, fish, milk, chicken, soya bean, nut, grams etc,
- ❖ Soyabean is the highly rich source of protein.
- ❖ The presence of Protein
- * Two drops each of Copper sulphate solution and Sodium hydroxide
- Change in colour of the given food sample turns purple or violet confirms the presence of Protein.

VITAMINES:

- Vitamins are required for carrying out various biochemical reactions in our body.
- * Fruits, vegetables, grains, meat products are good sources of vitamins.
- ❖ Protective food. six major vitamins A, B, C, D, E and K. Vitamins B and Vitamins C are water soluble, Vitamins A, D, E and K are fat soluble.

Vitamin	Found abundantly in	Disease we get if	Symptoms
		deficient in this	

Vitamin A	Fish oil, egg, milk, ghee,	Night blindness	Poor vision,
	carrot, corn, yellow		difficulty
	fruits, greens		in seeing in dim
			light
Vitamin B	Whole grain, unpolished	Beriberi	Nervous
	rice, milk, fish, meat,		weakness,
	peas, lentils		fatigue
	Green vegetables		MIO
Vitamin C	Oranges, Gooseberry,	Scurvy	Bleeding gums
	Greenchilly, Tomato	2757	
Vitamin D	Fish oil, milk and eggs.	Rickets	Weak, flexible
	Itis also made in our	1270	bones
	skin using	11/8/2/	
	sunlight	RAII	
Vitamin E	Vegetable oils, Green	Nervous	Childlessness,
	vegetables, whole	weakness,	lack of
	wheat,	dimming of	resistance power
	Mango, apple, greens	eyesight	to
	SAC		illnesses
Vitamin K	Green vegetables,	Weakness of the	Even a small cut
CHANAKYA	Tomato,	bones, teeth etc.	bleeds profusely.
NAA	cabbage, eggs, milk		
CHIA	products.		

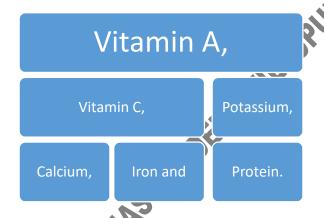
- ❖ Sun screen lotion reduces your skin's ability to produce Vitamin D by up to 95% which may lead to Vitamin D deficiency.
- ❖ Gooseberries contains nearly 20 times the vitamin C than Orange.
- Minerals are required for growth as well as for the regulation of normal body

function.

❖ Green leafy vegetables like spinach, pulses, eggs, milk, fish and fruits are important sources of minerals protective foods.

Minerals	Functions
Calcium	Strong bones and teeth, clotting of blood
Phosphorus	Strong bones and teeth
Iodine	Synthesis of thyroid hor- mone
Iron	Formation of haemoglobin and brain
	development

- ❖ 80% of the world production of Moringa Leaves is in India. The Major countries which import Moringa Leaves are China, US, Germany, Canada, South Korea and European countries.
- ❖ Moringa leaves are rich in



It also contains Powerful anti oxidants

WATER:

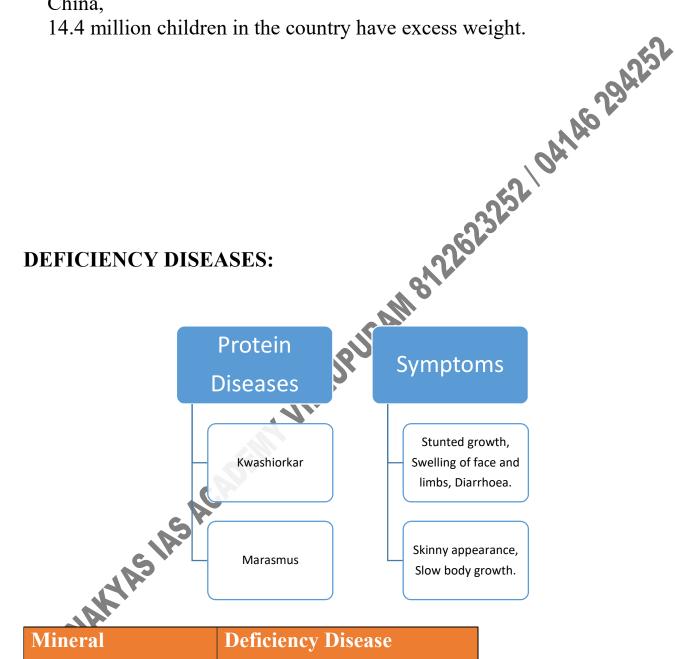
- ❖ Our body needs an adequate supply of water is order to maintain good health.
- * minimum eight tumblers (2 Litres) of water every day.
- ❖ A diet should contain adequate amount of all the necessary nutrients required for healthy growth and activity.

MALNUTRITION:

❖ When your diet is not a balanced,

- ❖ Malnutrition occurs when all the nutrients that the body needs are not obtained in the proper proportions from the diet.
- * leads to deficiency disease. caused due to lack of Nutrients in the diet are called Deficiency Diseases.
- ❖ India has the second highest number of obese children in the world after China,

14.4 million children in the country have excess weight.



Mineral	Deficiency Disease
Calcium	Rickets.
Phosphorus	Osteomalatia
Iodine	Cretinism (in Child)
	Goitre (in adult)

Iron	Anaemia	

PHYSICAL EXERCISE AND REST:

❖ Physical exercise is any bodily activity that enhances or maintains physical

fitness and overall health and wellness.

- ❖ Increase in growth and development,
- ❖ Strengthening muscles and the cardiovascular system,
- * developing athletic skills, weight loss or maintenance, and enjoyment.
- ❖ Deep sleep seems to be one of the most critical time for body repair.

REST:

- * Rest is as important as nutrition and physical activity for growth and development and good health.
- * "Early to bed and early to rise make a man healthy, wealthy and wise" Benjamin Franklin
- * Personal hygiene involves those practices performed by an individual to care for one's bodily health and well being, through cleanliness.
- ❖ 1. Diarrhoea
- ❖ 2. Tooth decay
- 2. Toom decay
 3. Athlete's foot(Madurai's foot)
 4. Dandruff.
 Bacteria
 Virus
 Protozoa
 fungi

BACTERIA:

- ❖ Small prokaryotic microorganisms.
- ❖ Membrane bound organelles.
 - Bacteria can exist either as independent organisms or as parasites
 - They invade tissues
 - > They produce pus or harmful wastes

BACTERIAL DISEASES:

S.No	Bacterial	Mode of transmission
	diseases	

1.	Cholera	contaminated water
2.	Pneumonia	inhalation of airborne droplets from a sneeze or cough.
3.	Tetanus	contamination of wounds with the bacteria
4.	Tuberculosis	inhalation of airborne droplets from a sneeze or cough.
5.	Typhoid	contaminated food or water

- ❖ Disease is a definite pathological process having a characteristic set of signs and symptoms.
- ❖ Disorder is a derangement or abnormality of function.
- ❖ Virus is an acellular agent that replicates only inside the cells of other living organisms.
- ❖ can infect plant, animals and microorganisms.

Diseases Caused By Virus 1. Common cold 2. Influenza 3. Hepatitis 4. Polio 5. Smaller

- 5. Smallpox
- 6. Chicken pox
- 7. Measles