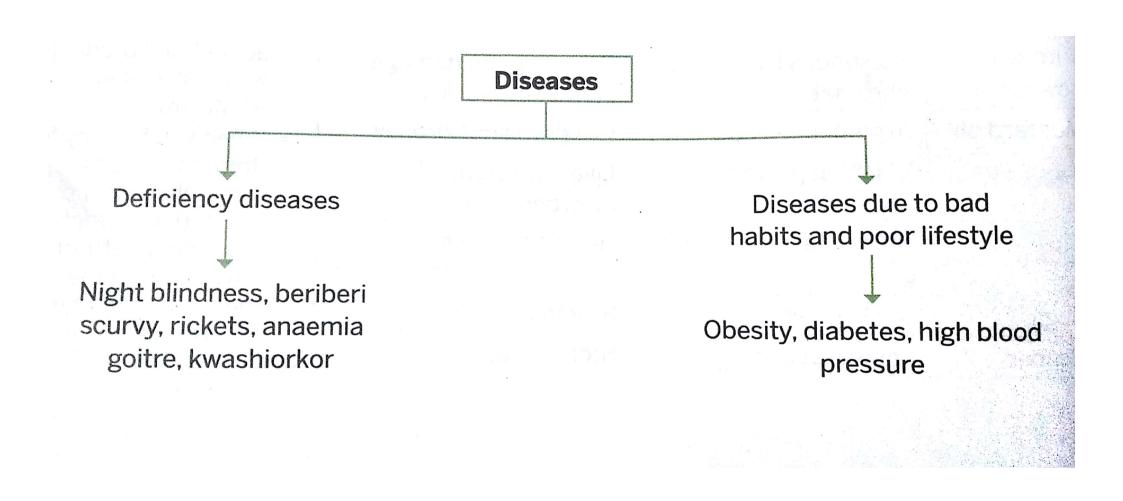


FOOD AND HEALTH

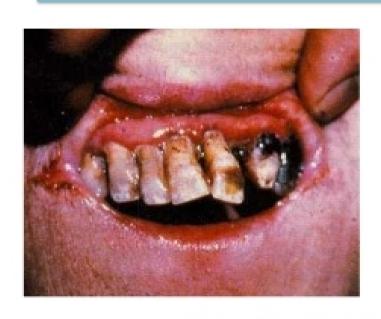


What is Disease?

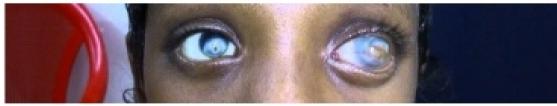
"A disease is a condition that deteriorates the normal functioning of the cells, tissues, and organs."



Deficiency Diseases



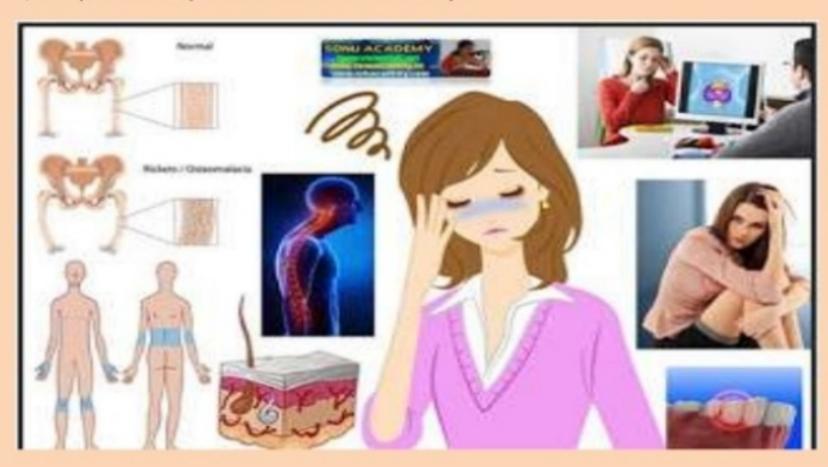




What has caused these things to happen?

DEFICIENCY DISEASES

Deficiency diseases are diseases that are caused by the lack of certain essential nutrients. A person may be getting enough food to eat, but sometimes the food may not contain a particular nutrient. If this continues over a long period of time, the person may suffer from its deficiency.



DEFINITION:

Diseases that are caused by the lack of some particular nutrient in a person's diet are called *deficiency* diseases.



Some deficiency diseases are given below in the table.

Deficiency diseases	Nutrient deficiency	Source of nutrients
Night blindness	Vitamin A	Carrots, papaya, green leafy vegetables, mango, milk, fish, egg
Beriberi	Vitamin B1	Brown rice, milk, meat, cereals, green vegetables
Scurvy (Swollen, bleeding gums)	Vitamin C	Citrus fruits, tomato, amla, green leafy vegetables
Rickets	Vitamin D	Sunlight
Anaemia	Iron	Banana, apple, spinach, jaggery, meat, liver
Poor development of bones and teeth	Calcium	Milk and milk products
Goitre	lodine	lodized salt, seafood
Kwashiorkor	Protein	Eggs, meat, pulses, milk and dairy products, soya bean

- Nutrients: Vitamin A
- Food source: Fish liver oil, egg, milk, ghee, butter, carrot, corn, yellow fruits, greens.
- Deficiency disease:
 Night blindness
- Symptoms: Defective vision, blindness in dim light



- · Nutrients: Vitamin B
- Food source: Whole grains, pulses, unpolished rice, milk, fish, meat, peas, gram, raw vegetables
- Deficiency disease: Beriberi
- Symptoms: Unhealthy nerve, muscle fatigue



- · Nutrients: Vitamin C
- Food source: Orange, lemon, gooseberry, green chillies, tomato.
- Deficiency disease:
 Scurvy
- Symptoms: Bleeding gums



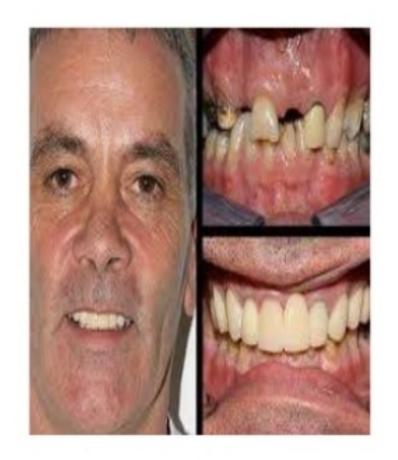
- Nutrition: Vitamin D
- Food source: Fish-liver
 oil, milk, egg. It is also
 synthesised by the skin
 with the help of
 sunlight.
- Deficiency disease:
 Rickets
- Symptoms: Weak and bow bones



- · Nutrients: Iron
- Food source: Meat, Apple, Greens, Dates
- Deficiency disease:
 Anaemia
- Symptoms: Body fatigue, Giddiness.



- · Nutrients: Calcium
- Food source: Milk, Fish, Wheat, Green Gram
- Deficiency disease:
 Disintegration of bones and teeth
- Symptoms: Weak bones and teeth.



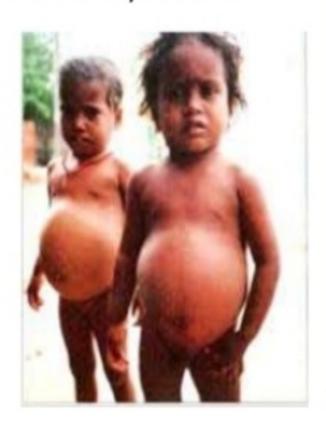
Minerals

- Nutrients: Iodine
- Food source: Milk, lodized Salt, Prawn, Crab
- Deficiency disease:
 Goitre
- Symptoms: Inflammation in neck



Deficiency Diseases:

Diseases caused due to the deficiency of nutrients in food that we eat are called deficiency disease



Deficiency diseases and their symptoms

- Nutrient : Protein
- Food source: Fish, meat, egg(albumin), milk, peas, cereals
- Deficiency disease:

 Kwashiorkar (children from 1-5 age)
- Symptoms: retarded growth, potbelly, swollen limbs

Diseases Related to Poor Habits and Lifestyle

There are other kind of diseases related to poor food habits and poor lifestyle. These are called **lifestyle diseases**.

Eating too much fried food; junk food like pizzas, burgers and cold drinks; and food rich in sugar such as chocolates, cakes, sweets, etc., and not exercising enough can lead to obesity (overweight) and diabetes. Eating too much salt and processed food can also lead to high blood pressure.

Some diseases may also be caused due to the presence of harmful substances in the air like smoke or fumes which may lead to cough and affect the lungs and the heart. These may also be caused due to bad habits like smoking.



Blood pressure



Diabetes

Smoking

Lifestyle disease

Health



Obesity >



Fertility

Alzheimer



Food adulteration

 The process of lowering the nutritive value of food either by removing a vital component or by adding substances of inferior quality, is called food adulteration. The substance that is used to lower the quality is known as adulterant.

Reasons for food adulteration are

To get more profit
To increase the weight
To increase volume of trade by showing lower prices



Some common food adulterants and their harmful effects are given in the table below:

Product	Adulterant	Harmful effects
Milk	Dirty water, starch, soap water, chalk powder	Food poisoning, cancer, vomiting
Aam papad	Urea, sawdust, lead powder	Heart problems, diarrhoea
Coffee powder	Tamarind seeds, chicory	Diarrhoea, stomach upset
Chilli powder	Brick powder, sawdust	Stomach disorder
Turmeric powder	Poisonous lead chromate	Cancer, brain damage, stomach disorder
Mustard oil	Argemone seeds	Eye problems, dropsy
Ice-cream	Washing powder	Liver and stomach disorder
Ghee	Animal fats, vegetable oil	Heart problems
Sugar	Chalk powder	Stomach upset
Pepper	Papaya seeds	Stomach upset



Mixing water in milk leads to adultration



Overuse of pesticides leads to food adultration

We must be aware and alert at all times. When we buy food items, we must ensure they are safe and healthy. The danger in eating street food is that they are mostly unhygienic and the ingredients used may not be of good quality.

Eating adulterated food is a serious health hazard.

Home Work

What is meant by deficiency diseases? What causes them? How can they be prevented?

What are lifestyle-related diseases? Explain with examples.

Mention any four ways in which food might get adulterated. What can be done to prevent consumption of adulterated food?