

Chapter – 1: Food – Where does it Comes from?

- Some people eat – roti, rice, bread, butter, fruits, vegetables, pulses
- Other people eat – eggs, meat, chicken, fish
- These – examples of food – anything we eat
- Food – provide ‘matter’ for growth and ‘energy’ for work
- Food – substance eaten by us – work, grow, maintain our body, remain healthy
- Food – fuel for body
- All living beings – eat food – very precious – do not waste it

Variety in the Food

- Different days – different times – eat different food
- Different food – according to habits, life style, taste, availability
- Some people – eat food made of wheat (chapatti, bread, noodles) and pulsed (dal), etc
- Some people – eat food made of rice – biryani, dosa, idli, boiled rice
- Some other people – eat eggs, meat, chicken, fish
- Particular variety of food – served as a part of meal – **dish**
- Foods and other substances – make up food – **ingredients**

Food Items and Their Ingredients

- Food item – we eat daily – made of different ingredients
- Boiled rice – rice and water
- Chapatti – flour and water
- Vegetable curry – vegetables, salt, spices, oil, water
- Dish of dal – pulses (dal), salt, spices, oil, water
- Oil – used to prepare many dishes – cooking oil – groundnut oil, sunflower oil, mustard oil, coconut oil, etc
- Instead of oil – ghee also used
- Some food ingredients – rice, flour, vegetables, pulses, spices, oil – plant products
- Other food ingredients – milk, ghee, chicken, mutton, fish – animal products

Sources of Food: Plants and Animals

- 2 main sources – plants and animals
- Food grains (wheat, rice, maize), pulses, vegetables – all are plant products
- Plants – provide us oils – mustard, sunflower, coconut, groundnut
- Plants – major source of food – cereals (wheat, maize, rice, millet), pulses, oils, fruits, vegetables, sugar, spices, tea, coffee
- Animals – also provide food – milk, eggs, chicken, meat, fish, honey
- Cows, buffaloes, goats, camels – provide milk
- Hens – provide eggs, chicken (meat)
- Goat and sheep – provide us meat (mutton)

- Fish and prawns – used as food
- Honey – provided by honeybees

Plant Parts as Food

- All the parts – used as food – one way or other
 - Plant roots as food
 - Some plants – store food inside roots (modified roots)
 - Carrot, radish, beet, sweet potato, turnip
 - Plant stems as food
 - Some plants – store food inside stems (modified, underground stems)
 - Onion, potato, ginger, garlic, turmeric
 - Plant leaves as food
 - Many leafy vegetables – leaves of plants
 - Spinach, leaves of mustard plant, cabbage, lettuce
 - Flowers as food
 - Flowers of some plants – eaten as food
 - Flowers of banana plant, pumpkin plant, sunflower, gladiolus, dandelion, jasmine
 - Flowers of pumpkin plant – dipped in rice paste, fried and then eaten
 - Fruits as food
 - Some plants – store food inside fruits
 - Apple, orange, peach, mango, pears, banana, plums, grapes, guava, pomegranate
 - Vegetables – tomatoes, brinjal, lady's finger, pumpkin, chilli – are also fruits
 - Seeds as food
 - Some plants – store food inside seeds
 - Wheat, maize, rice, sorghum, millet, Bengal gram, peas, pulses
 - Groundnut, mustard, soyabean – oilseeds – used to extract edible oil
- Some plants – 2 or more edible parts
- Leaves of mustard – leafy vegetables – seeds of mustard – used to extract mustard oil
- Fruit of banana and glowers of banana – both edible
- All plants – not edible – some – poisonous – not fit for eating

Sprouts

- Seeds – begin to grow – tiny roots
- Food value – increased
- Sprouts – contain vitamins A, B and C – more nutritious food
- Moong, moth, chana
- Take some seeds – soak them in water overnight – take them out – wrap them in wet cloth – spray water continuously – keep it wet for a day – sprouts germinate (prepared) – use them as snacks

Animal Products as Food

- Imp. animal product – milk
- Milk – used for drinking – also converted to – curd, butter, ghee, cheese – milk products
- Other animal products – eggs, chicken, mutton, fish
- Eggs – eat as boiled egg, omellete, egg curry

- Fish – gives cod liver oil – rich in vitamin A
- Another animal product – honey
- Produced by honeybees
- Bees – collect nectar from flowers – convert to honey – store inside hives – honeycombs
- Food – 2 major sources plants and animals
- Even animal food – comes from plants
- All the animals – give us various food products – eat plant products
- Cows – eat grass – gives milk
- Hens – eat grains – gives eggs
- Goats – eat grass – gives meat

What do animals eat?

- Human – eat plant food and animal food – large variety of food
- Animals – either eat plants or animals
- Some – eat both

Food Producers and Consumers

- Green plants – make their own food – photosynthesis – **producers**
- Absorb water and nutrients from soil, carbon dioxide from air, energy from sunlight – make food
- Plants – produce food – provide to others – chapatti (wheat), rice, fruits, vegetables
- Animals – do not make food – depend on plants – eat or consume plants – **consumers**

Animals Obtain their Food from Plants or Other Animals

- Animals – cannot make food – depend on readymade food
- Obtain food from plants or other animals
- We (humans) – obtain foods like wheat, pulses, fruits, vegetables from plants – obtain foods like milk, curd, butter, cheese, eggs from animals
- Animals – divided into 3 groups – based on eating habits
 - Herbivores –
 - Some animals – only eat plants
 - Eat – grass, leaves, grains, fruits, bark of trees
 - Goat, cow, buffalo, sheep, horse, camel, deer, ox, elephant, giraffe, monkey, squirrel, rabbit, grasshopper, butterfly, parrot, hippopotamus
 - Plant eaters or herbivorous animals
 - Carnivores –
 - Some animals – only eat other animals
 - Eat – meat of other animals
 - Lion, tiger, frog, vulture, kingfisher, lizard, wolf, snake, hawk, seal, dragonfly
 - Meat eaters or carnivorous animals
 - Omnivores –
 - Some animals – eat both – plants and animals
 - Humans, cat, dog, crow, hen, pig, sparrow, bear, mynah, ant
 - Plant as well as animal eaters or omnivorous animals