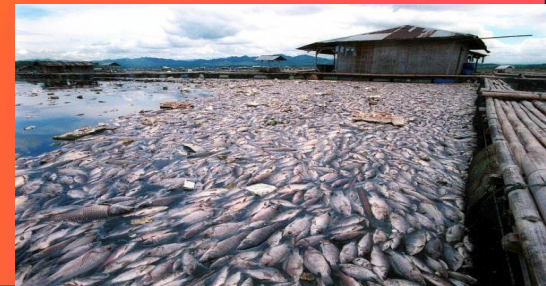
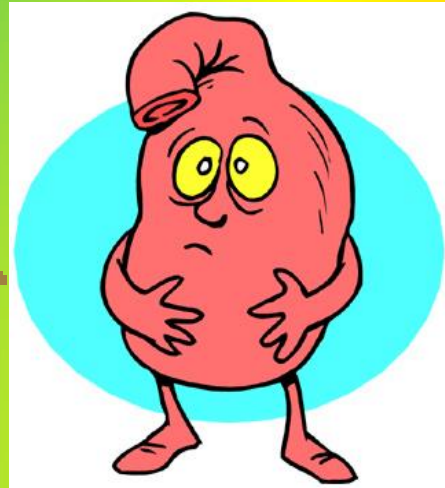


BY REKHA CHOUDHARY T.G.T SCIENCE



Importance Of pH In Everyday Life



pH

- HUMAN BODY WORKS WITHIN THE pH RANGE OF 7.0 TO 7.8
- pH ALSO FINDS IMPORTANCE IN
 - ACID RAIN
 - SOIL
 - DIGESTIVE SYSTEM
 - TOOTH DECAY
 - SELF DEFENCE BY PLANTS AND ANIMALS

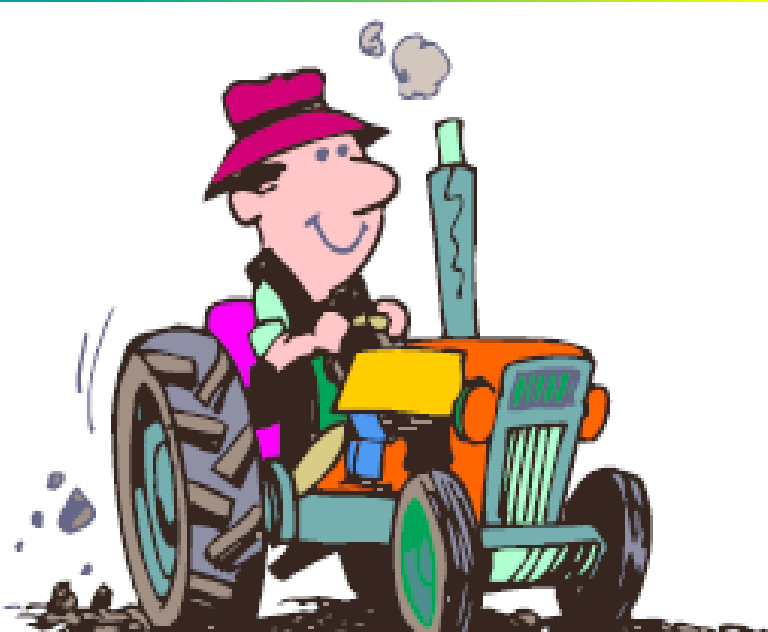
Acid Rain

- When the pH of rain water is less than 5.6 , it is called Acid Rain.
- When Acid Rain flows into river water, it lowers the pH which makes the survival of aquatic animals difficult



pH Of The Soil

- Plants require a specific pH range for their healthy growth.
- Plants do not grow well when the soil is too acidic or too basic.



pH number

4.5

5.0

5.5

6.0

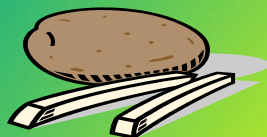
6.5

7.0

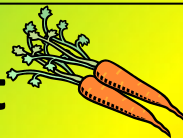
7.5

8.0

Potato



Carrot



Tomato



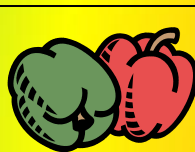
Beans



Lettuce



Peppers



pH Of The Soil

- When the soil is too acidic, bases like quick lime (calcium oxide) or slaked lime (calcium hydroxide) is added to neutralise the effect of acid.



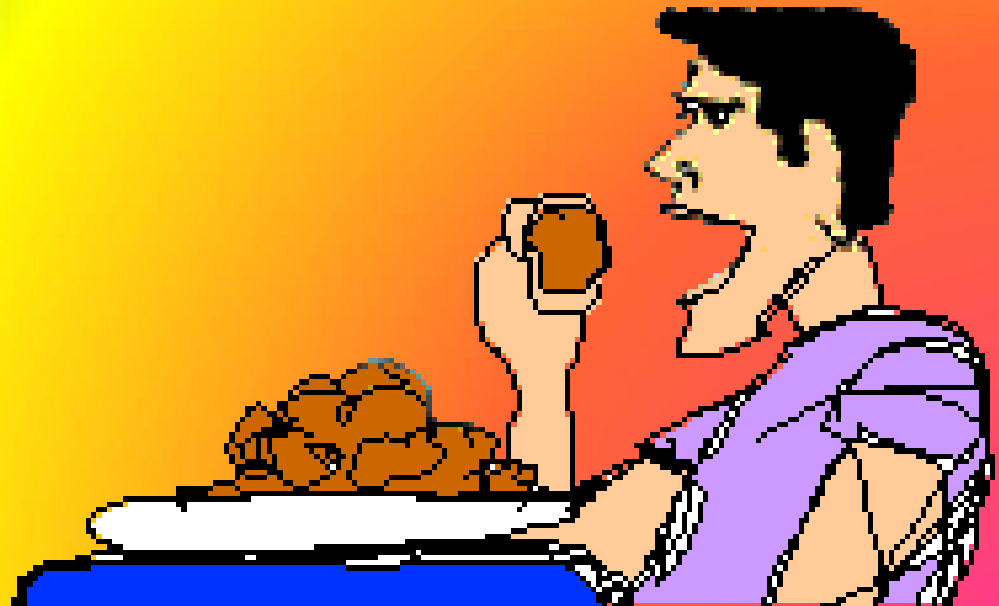
pH Of The Soil

- When the soil is too basic, organic matter (compost) is added to it to neutralise the effect of base.



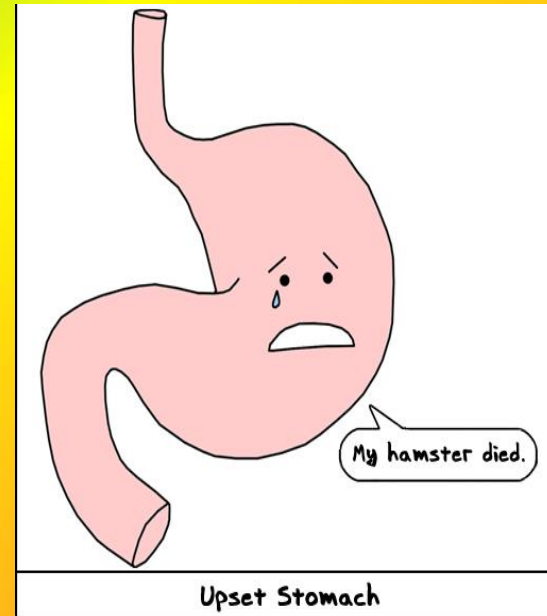
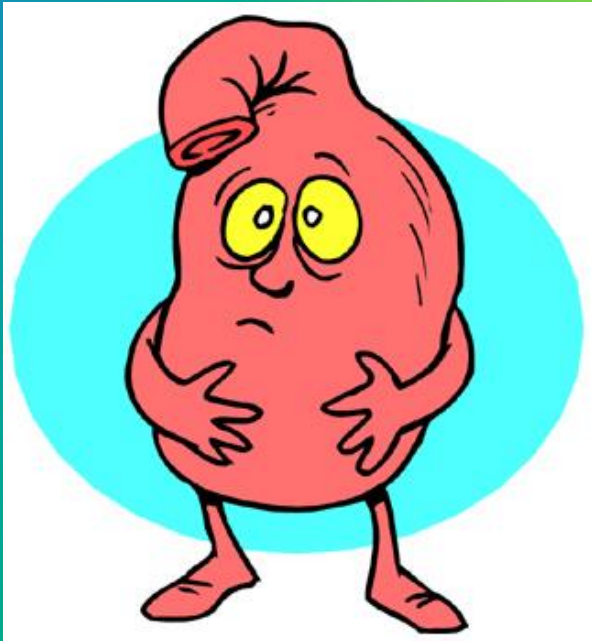
pH In Our Digestive System

- Our stomach produces hydrochloric acid which helps us to digest food .
- Sometimes when we eat a lot of food, too much acid is produced. This is INDIGESTION



INDIGESTION

- Indigestion is Painful and causes Irritation.



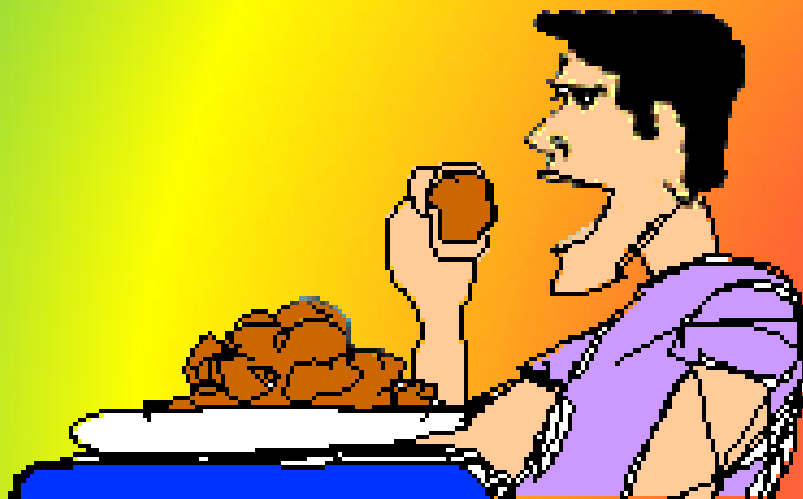
INDIGESTION

- To relieve indigestion, we should take an ANTACID that contains base. E.g. milk of magnesia (contains magnesium hydroxide).
- It neutralises the effect of excessive acid.



Tooth Decay

- Tooth Enamel is made up of Calcium phosphate. It is the hardest substance in the body.
- It do not dissolve in water but is corroded when the pH in the mouth is below 5.5 .



Tooth Decay

- When the food left in our mouth, it is degraded by the bacteria present in our mouth. This produces acid which lowers the pH in our mouth.
- The best way to prevent this is to clean the mouth after eating food.



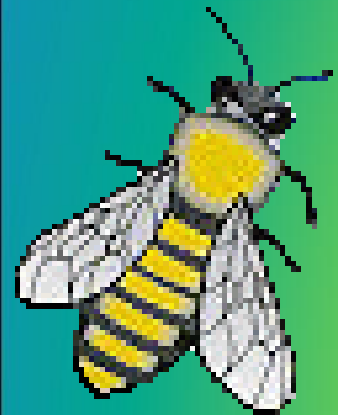
Tooth Decay

- We use toothpastes for cleaning our teeth. They are generally basic.
- They can neutralise the excess acid and prevent tooth decay.



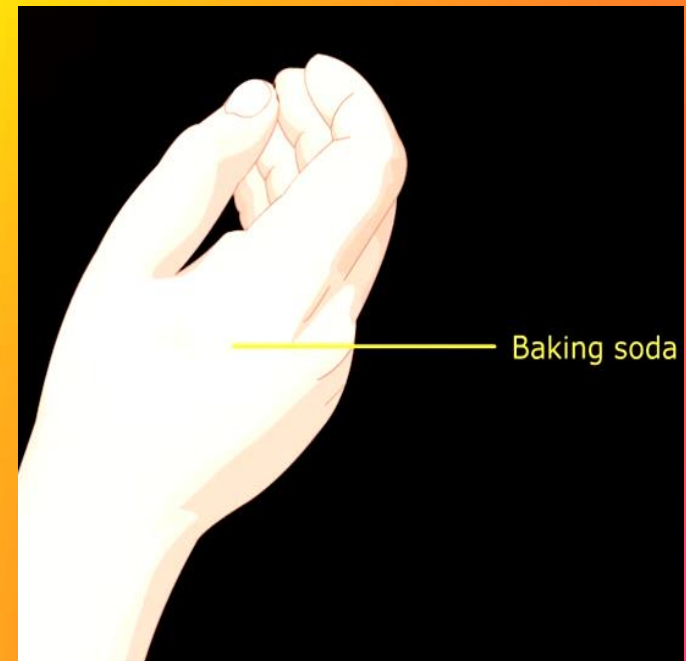
Self Defence by Animals

- When a bee bites, it injects acidic liquid (formic acid) into the skin .
- This is painful.



BEE-BITE

- The effect of Acid can be neutralised by rubbing moist baking soda (contains sodium hydrogencarbonate) OR calamine solution (zinc carbonate).



Self Defence by Plants

- Stinging hair of nettle leaves inject methanoic acid.
- This causes burning pain.



Self Defence by Plants

- The effect of acid can be neutralised by rubbing the area with the leaf of Dock plant (which is basic in nature).

