

Q1) Write 4 points of difference between aerobic & anaerobic respiration

Aerobic Respiration	Anaerobic Respiration
- It occurs in cytoplasm & mitochondria.	- It occurs in cytoplasm. Mitochondria are not involved.
- Oxygen is required.	- Oxygen is not required.
- Due to complete oxidation of food more energy is released.	- Due to incomplete oxidation of organic food less energy is released.
- End products are $CO_2$ & $H_2O$ .	- End products are lactic acid and ethyl alcohol.

Q2) What are the different ways in which glucose is oxidised to provide energy in various organisms.

There are two different ways in which glucose is oxidized to provide energy, aerobic & anaerobic respiration.

i) In aerobic respiration the glucose food is completely broken down by the oxygen inhaled during breathing to form  $\text{CO}_2$  & water and a lot of energy is released.

ii) In anaerobic respiration the glucose food is incompletely broken down by microorganisms like yeast in the absence of  $\text{O}_2$  to form ethanol &  $\text{CO}_2$  but much less energy is released.

Q) What are the difference between aerobic & anaerobic respiration? Name some organism that use anaerobic mode of respiration.

- The respiration which takes place without oxygen is called anaerobic respiration.
- The respiration which uses  $\text{O}_2$  is called aerobic respiration.

→ Anaerobic mode of respiration is used by certain ~~type~~ microorganisms such as yeast and some bacteria known as anaerobic bacteria.