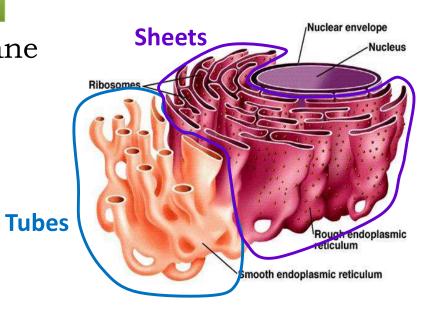
Endoplasmic reticulum: (ER)

It is a large network of membrane bound, tubes and sheets.

Covered by membrane

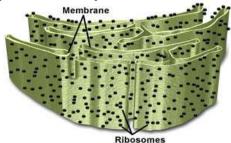


Endoplasmic reticulum:

is of two types

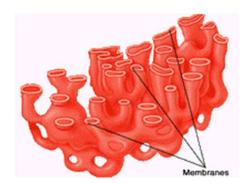
Rough endoplasmic reticulum (RER)

- It looks rough under an electron microscope.
- It has particles called ribosomes attached to it.
- Ribosomes are site for protein synthesis.



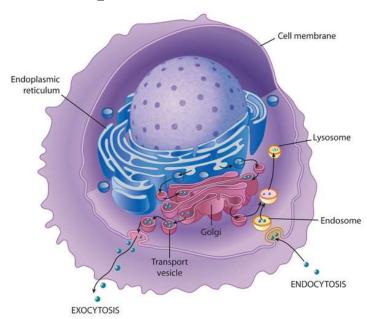
Smooth endoplasmic reticulum (SER)

- It is without ribosomes
- It manufactures fat molecules or lipids.



Functions of endoplasmic reticulum:

- It helps in intracellular transport.
- It synthesizes proteins and lipids (fats) and transports them.
- Proteins and lipids synthesized by ER are used in building plasma membrane. This process is known as membrane biogenesis.



Functions of endoplasmic reticulum:

- Some lipids and proteins are used as enzymes and hormones.
- It transports proteins synthesized by ribosomes.
- SER of certain cells of liver play a crucial role in detoxifying many poisons and drugs which enter our body through food, air or water.

