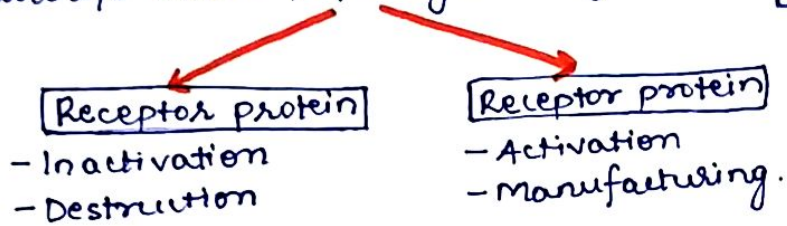
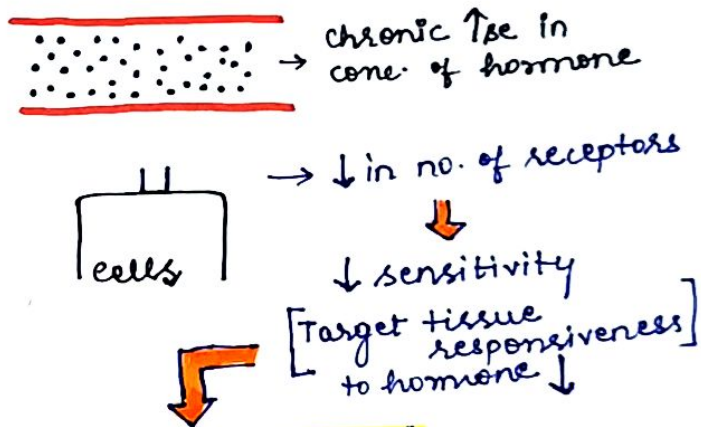
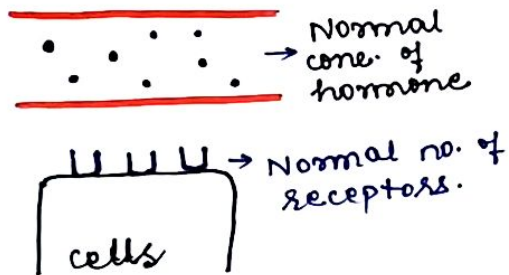


REGULATION OF RECEPTORS

Number & sensitivity of hormone receptors are always under physiological regulation [Day to Day, Time to Time]



Downregulation of Receptors

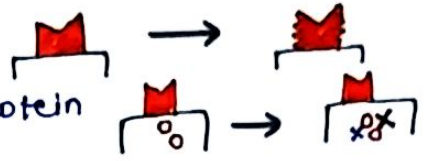


"DOWNREGULATION"

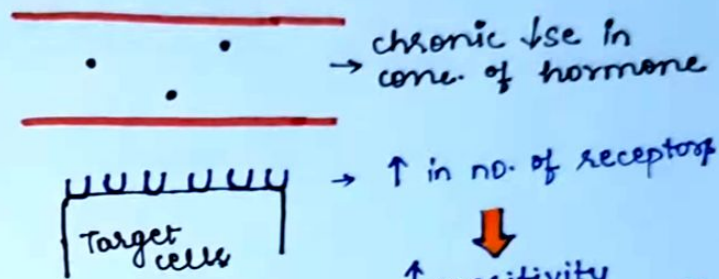
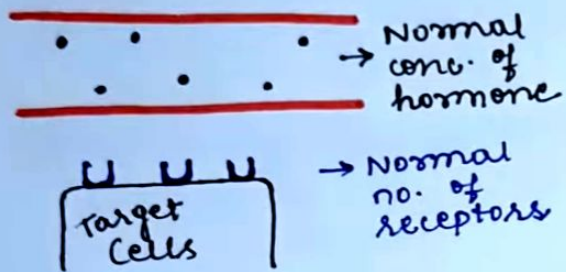
To prevent overstimulation of cell

Reasons for downregulation

- Inactivation of receptors
- Inactivation of intracellular protein signalling molecules.
- Temporary sequestration of receptor to inside of cell, away from site of action of hormone.
- Destruction of receptor by lysosome once they are internalised.
- Decreased production of receptors.



Upregulation of Receptors:-



↓
↑ sensitivity

[Target tissue responsiveness to hormone ↑]

↓
"UPREGULATION"

↓
To cause effective stimulation.

Reasons for upregulation

- Activation of inactivated receptors
- Overproduction of receptors