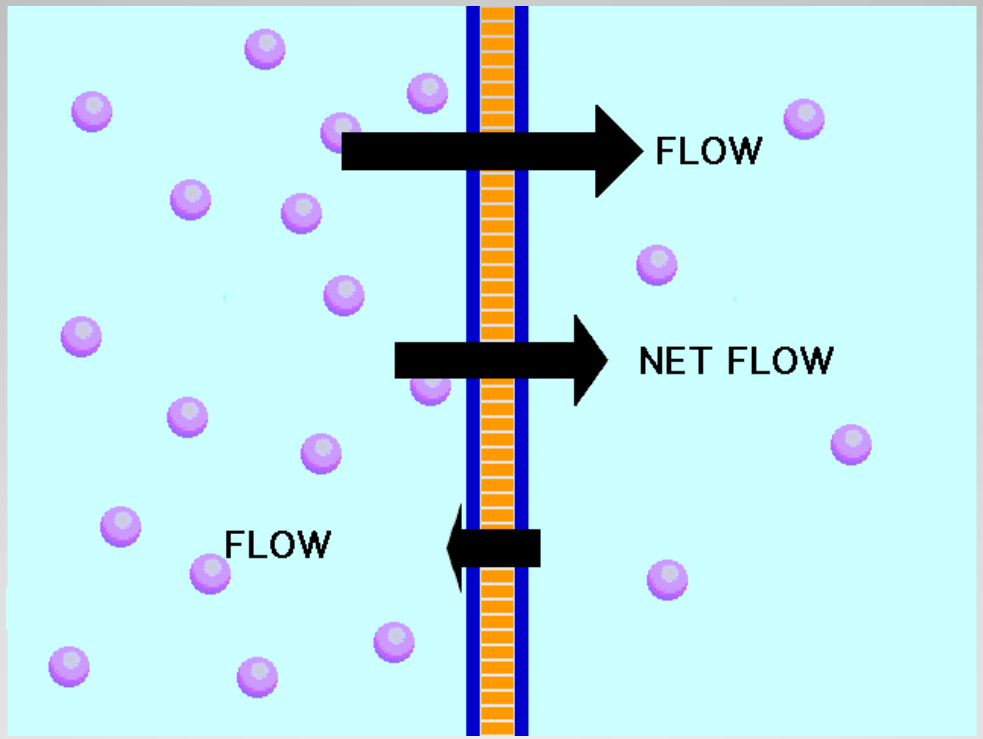
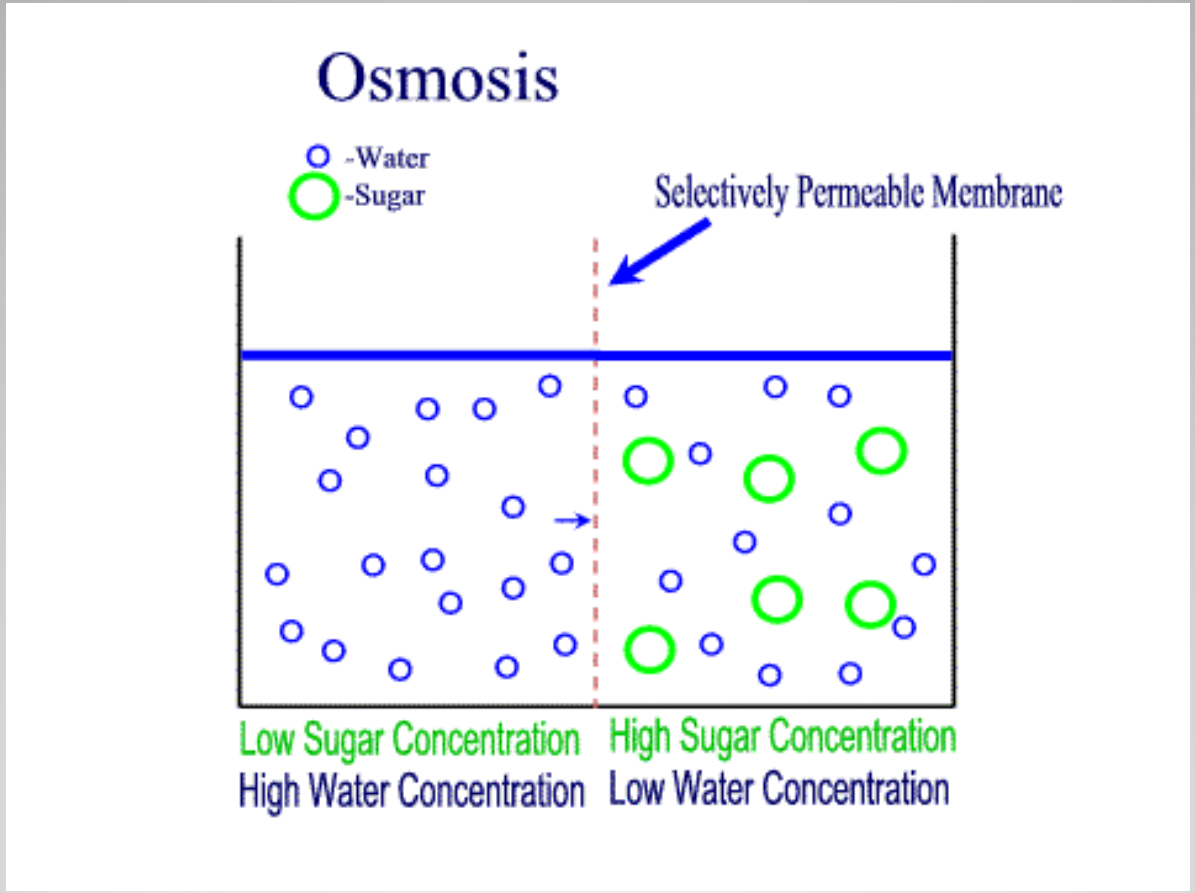
Diffusion Notes

Diffusion, Osmosis, Facilitated Diffusion and Active Transport



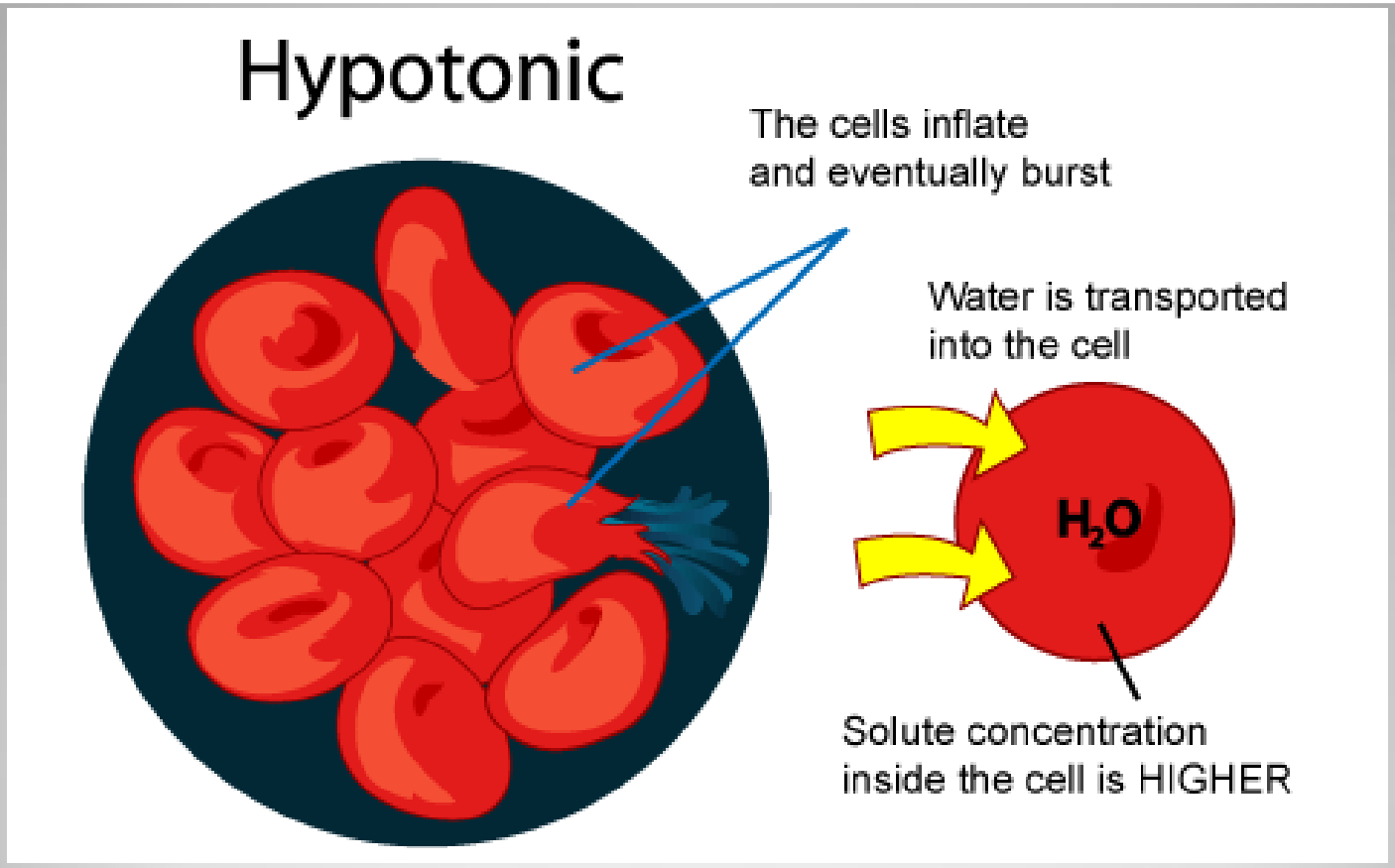
Diffusion

Molecules move from an area of high concentration to an area of low concentration. Homeostasis/equilibrium: maintaining a balance



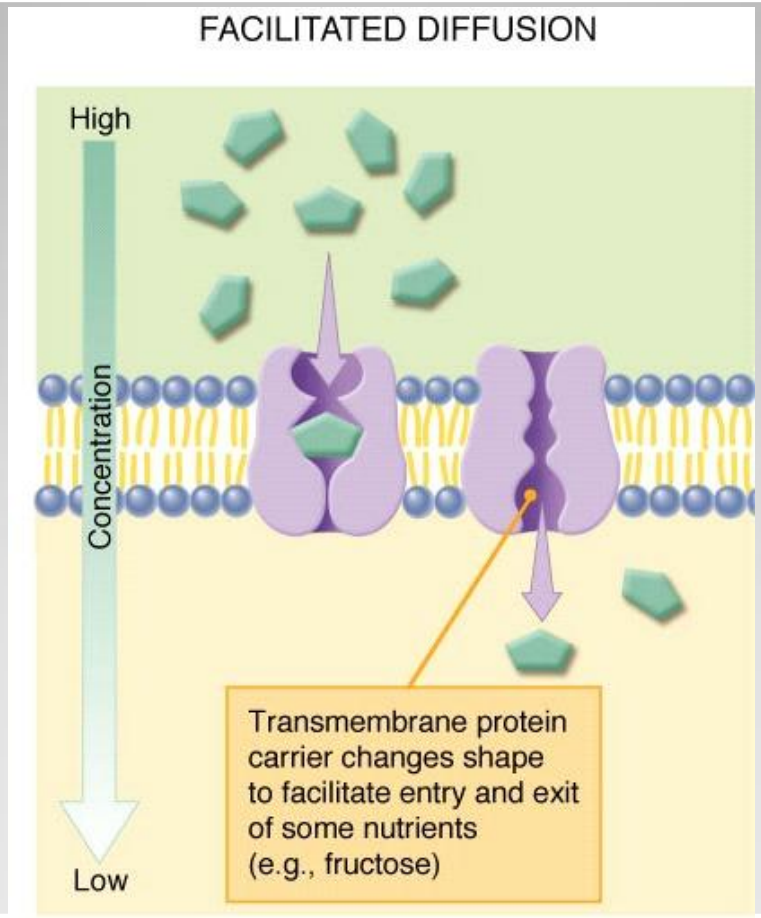
Osmosis

Diffusion of water through a selectively permeable membrane; some molecules can't pass through the membrane so water does instead to balance it out.



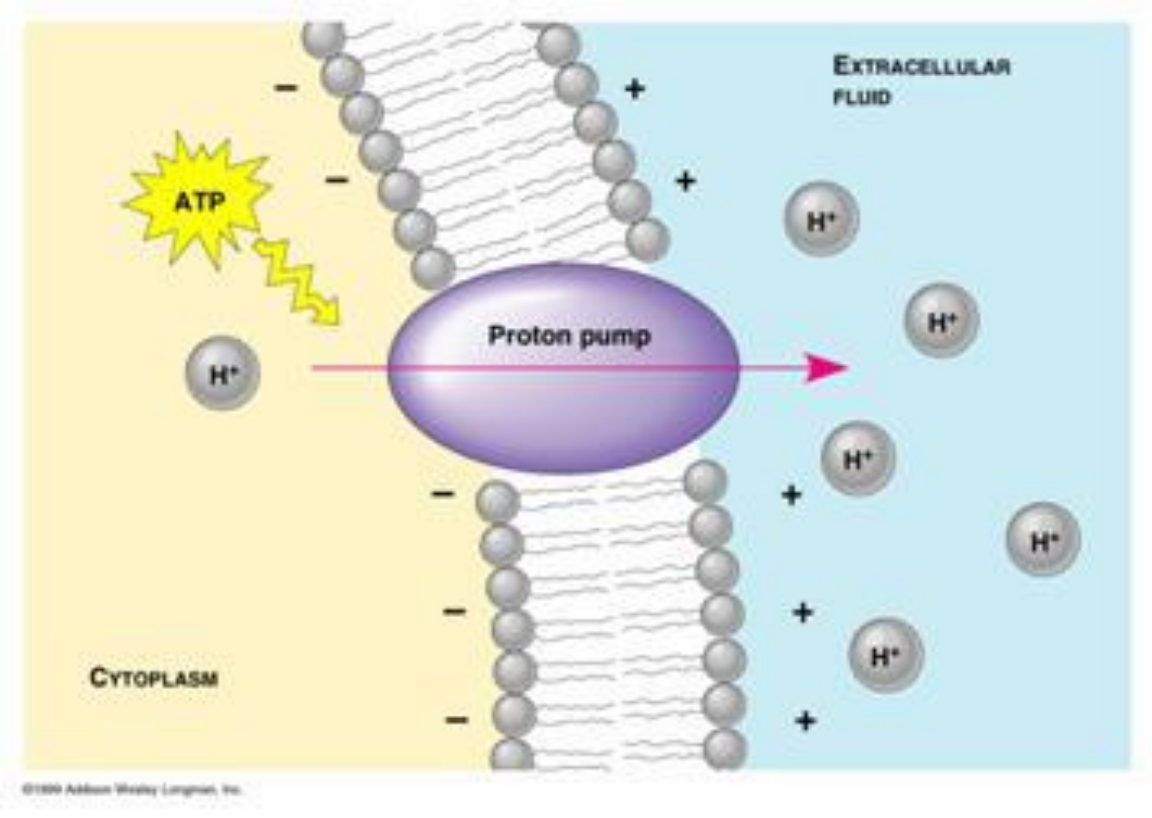
Types of solutions in osmosis:

Isotonic: same
Hypotonic: low concentration (swell or shrink?)
Hypertonic: high concentration (swell or shrink?)



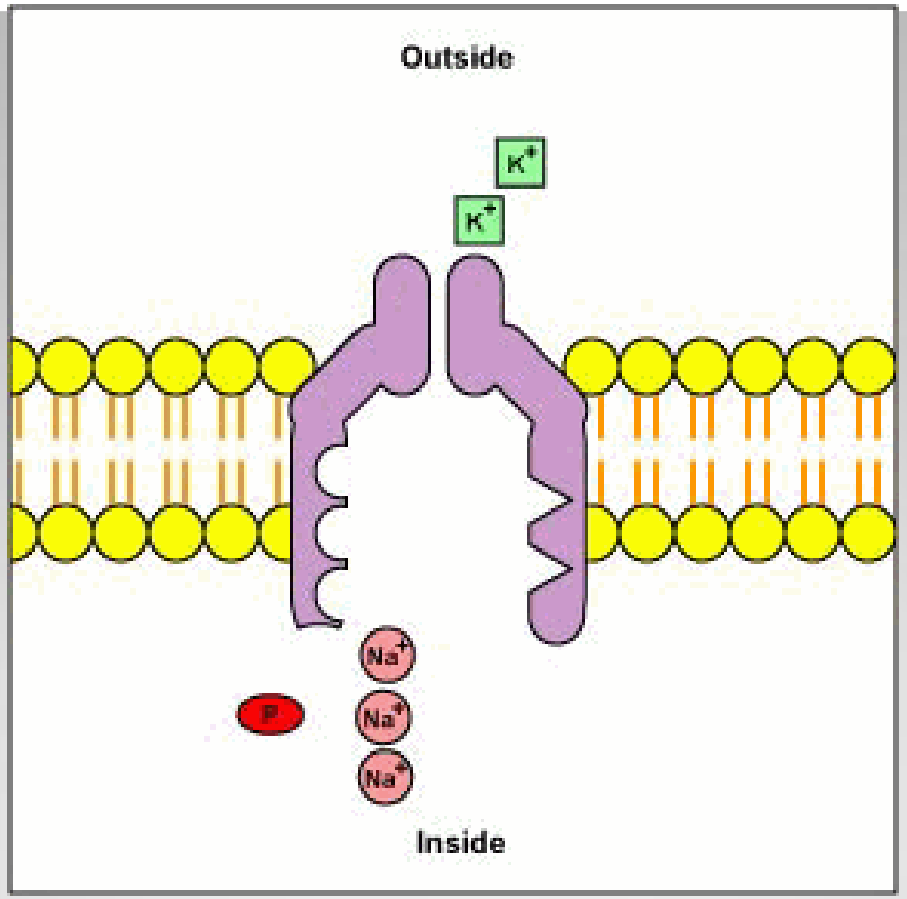
Facilitated Diffusion

Diffusion using a protein channel (example: sugar in cells)



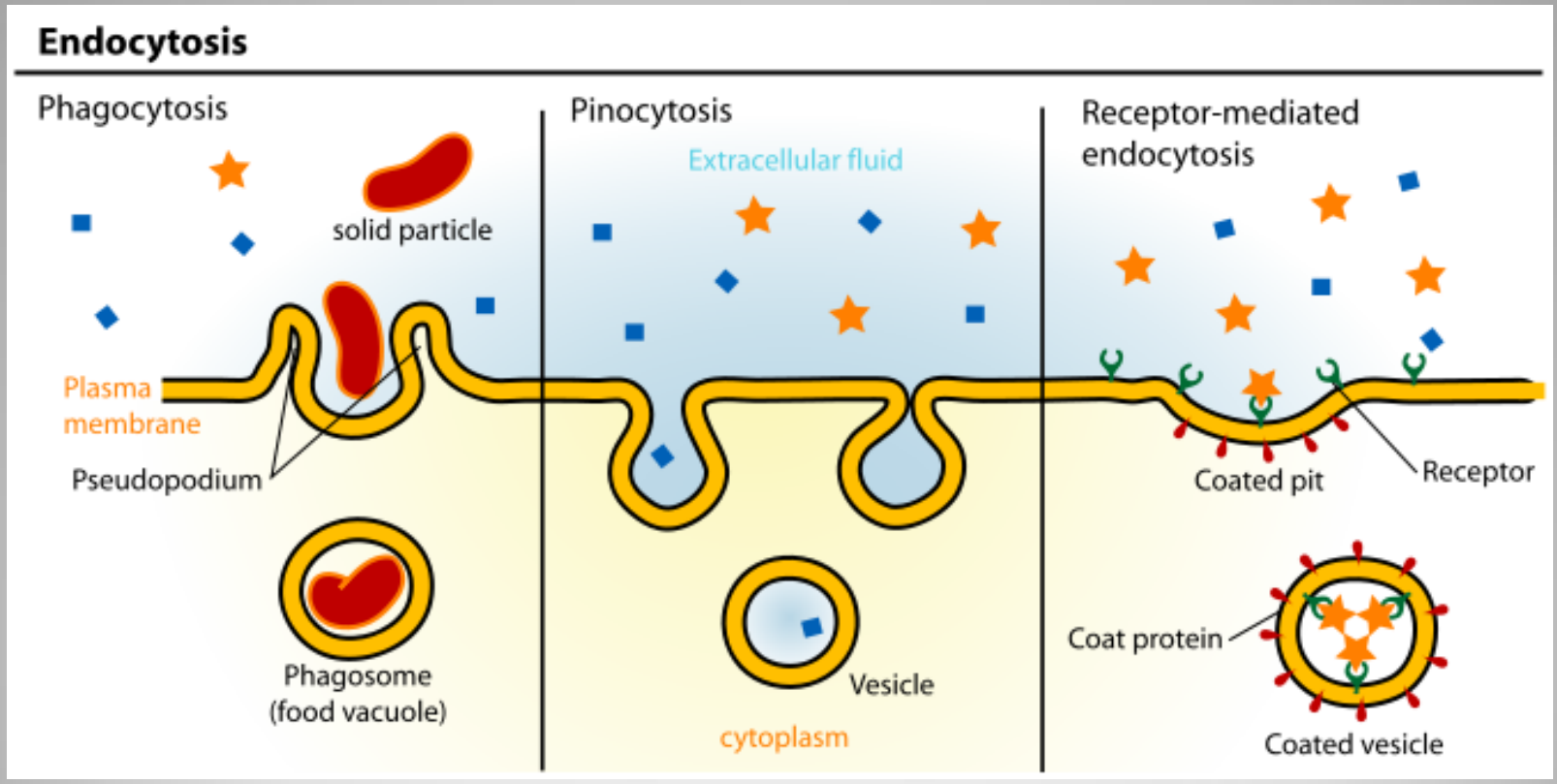
Active Transport

Requires energy, is used against the concentration gradient
Types: pump, endocytosis, exocytosis



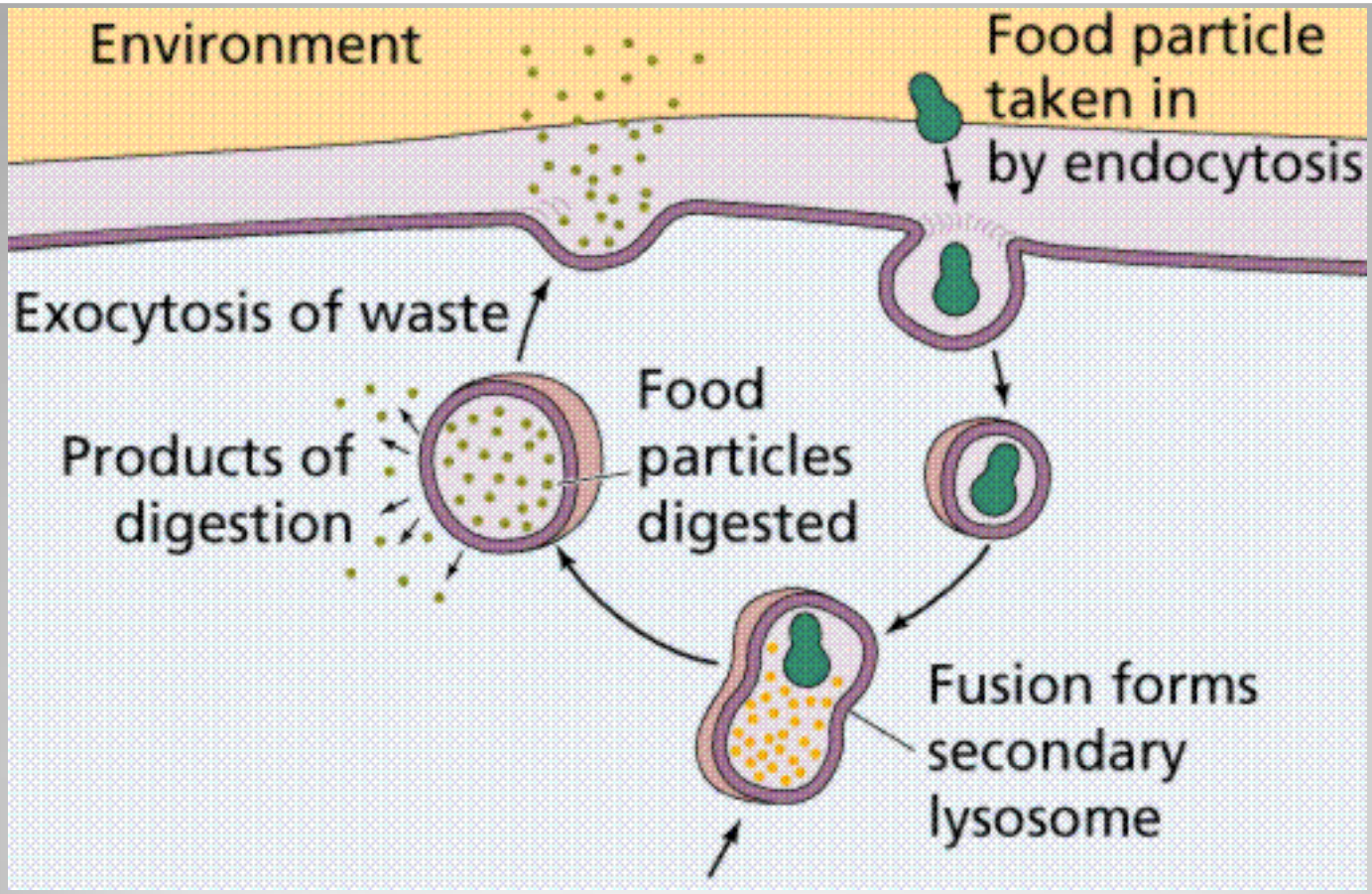
Pump

Pump one molecule in while pumping another out



Endocytosis

Taking material into the cell by infoldings (specifically phagocytosis)



Exocytosis

Spitting out material