

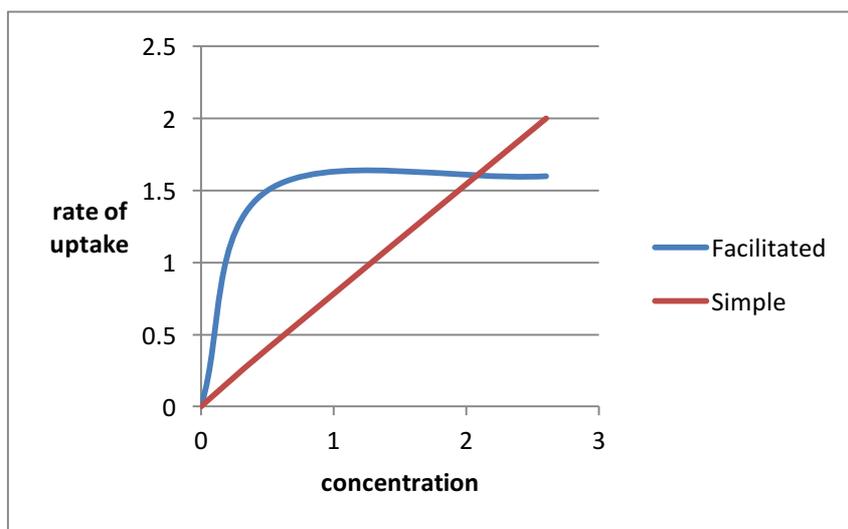
### Facilitated diffusion

Integral proteins and membrane proteins are both facilitated diffusion.

Channel proteins: have polar/charged substance and water on the inside and nonpolar amino acids on the outside. These are specific for only one substance through.

Water can enter by hydrating ions as they pass through ion channels or through water channels (aquaporins).

Carrier proteins: actual binding of the transported substance to a membrane protein. They transport polar molecules (sugar + amino acids)



In facilitated diffusion, a point is reached at which further increase in the conc gradient would not increase the rate of diffusion (saturated). There are only a number of carrier proteins.