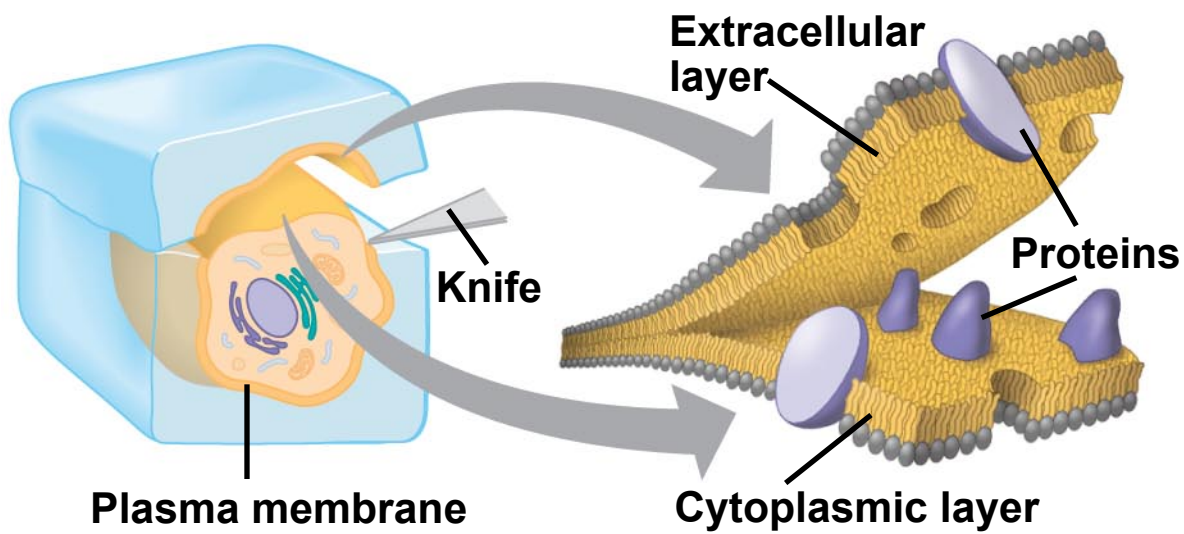


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TECHNIQUE



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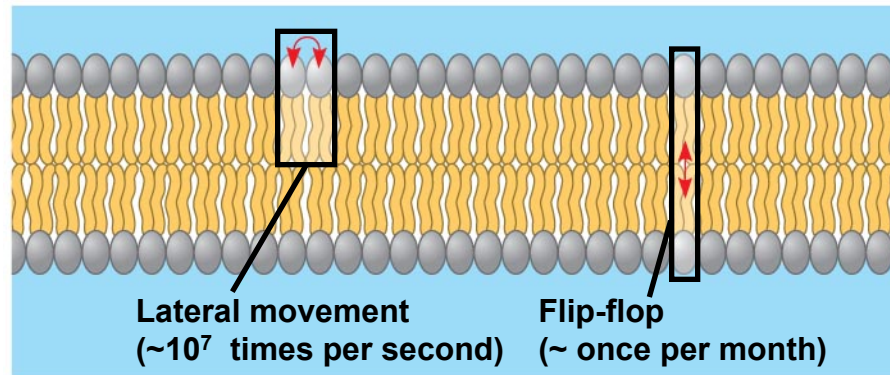
RESULTS



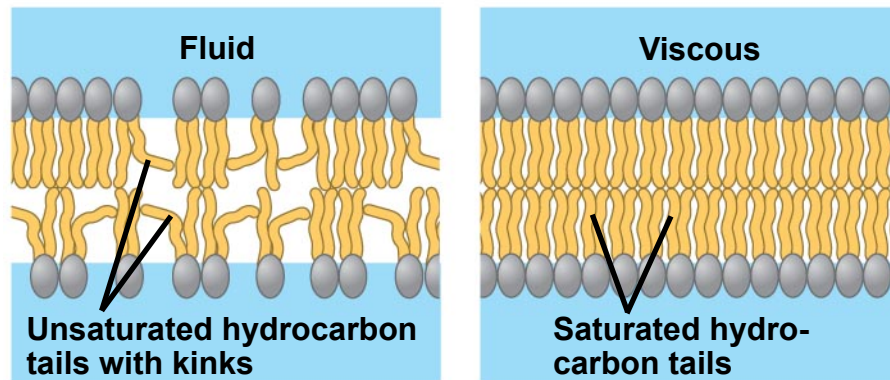
Inside of extracellular layer



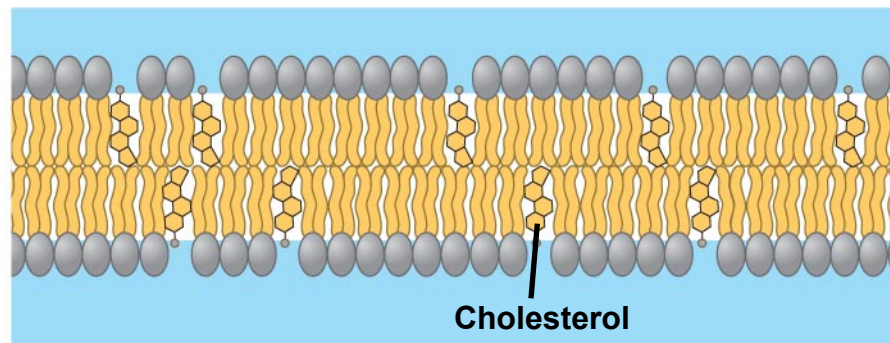
Inside of cytoplasmic layer



(a) Movement of phospholipids

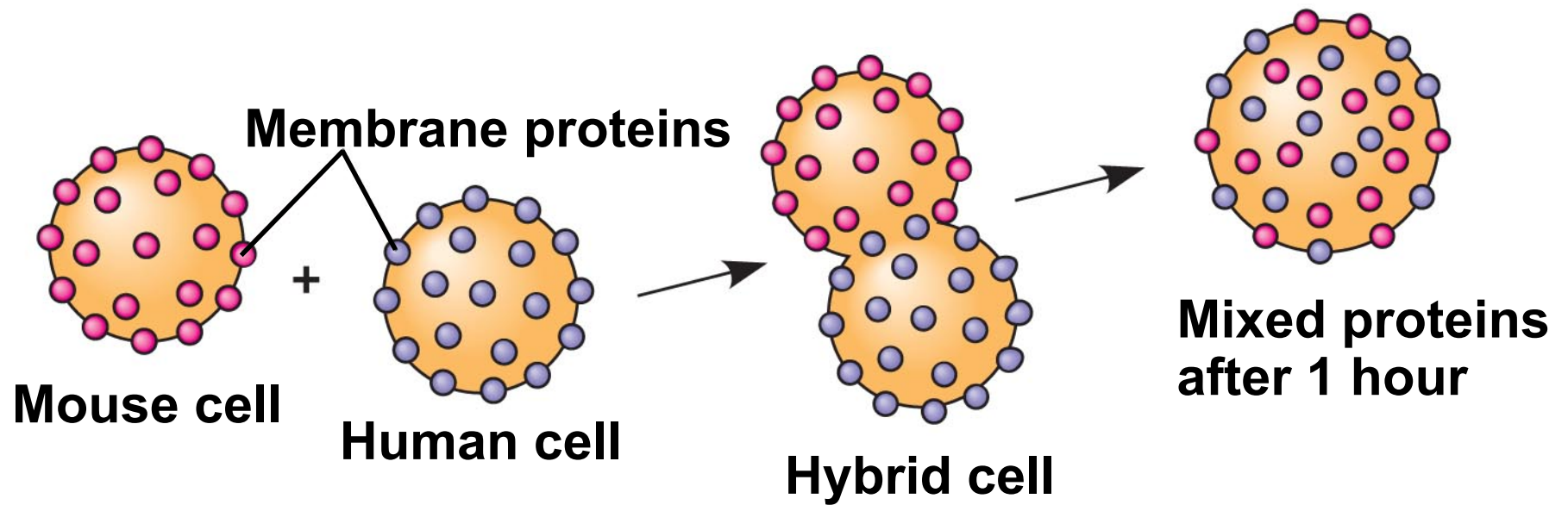


(b) Membrane fluidity

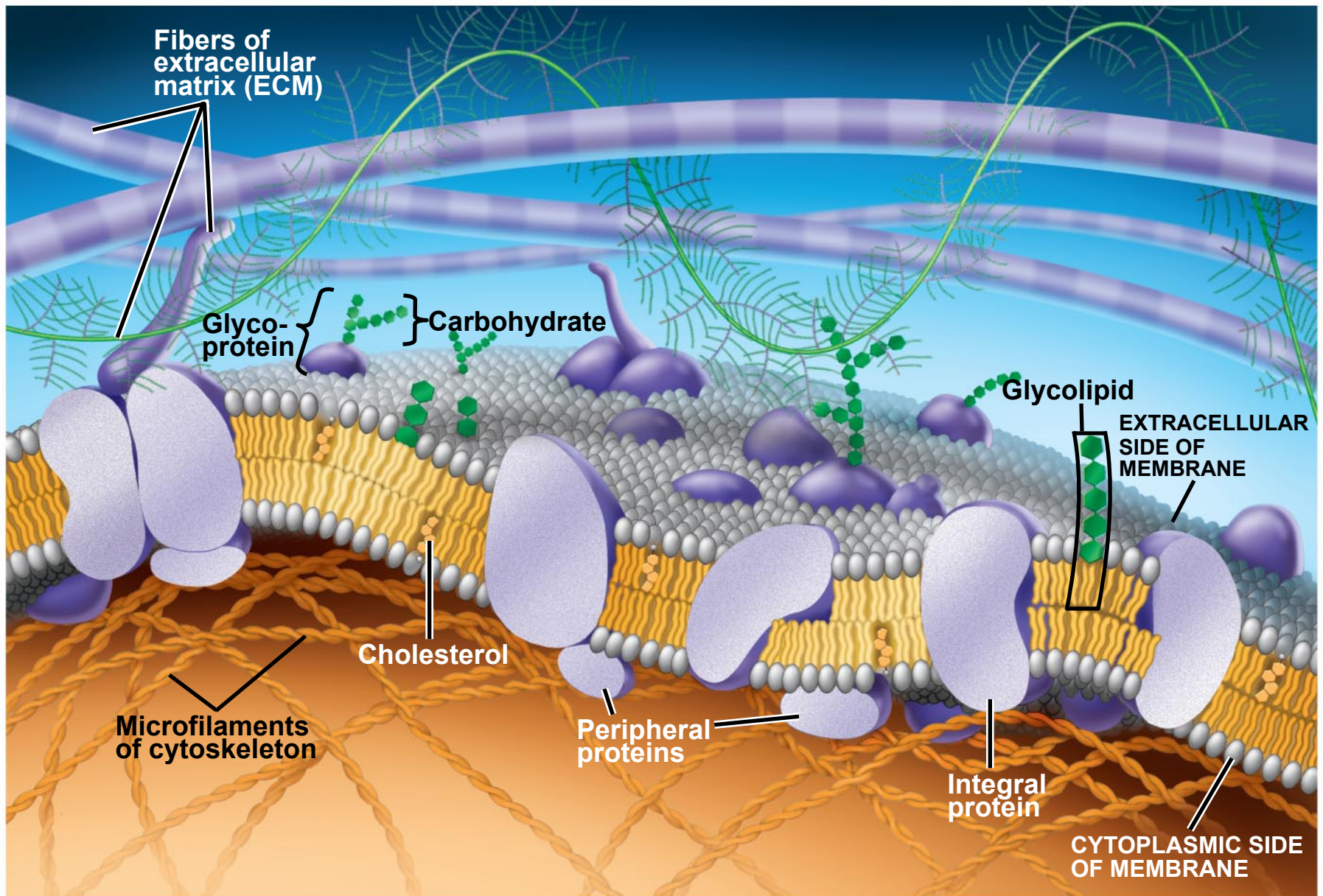


(c) Cholesterol within the animal cell membrane

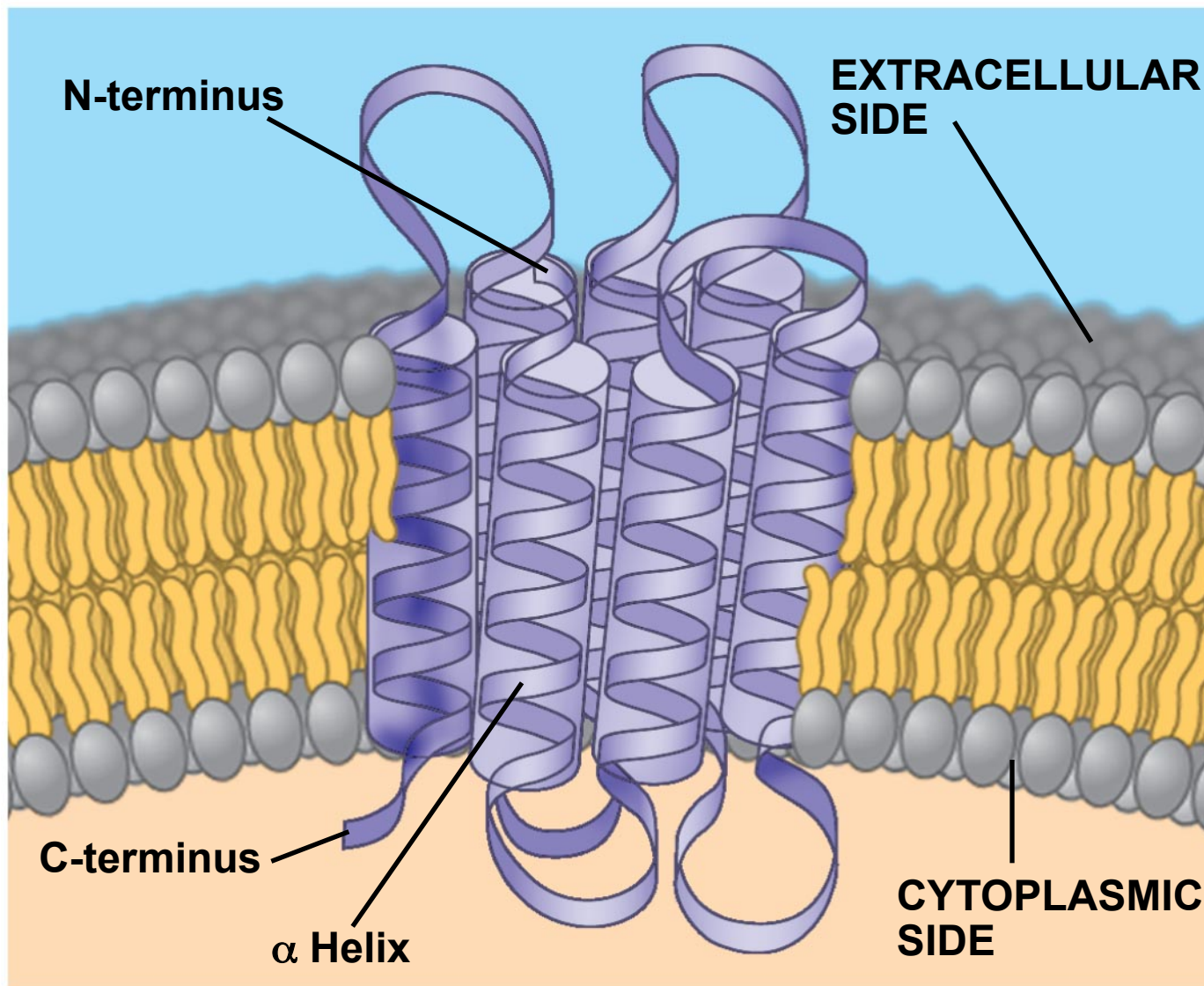
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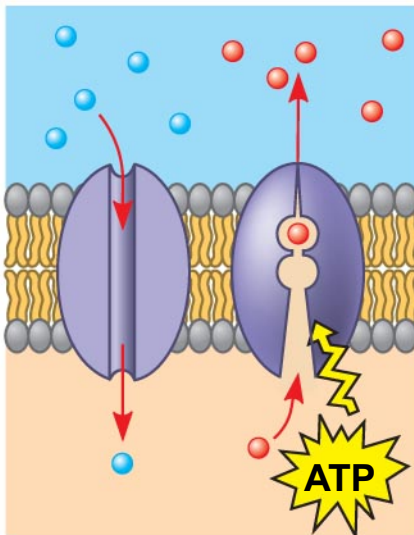
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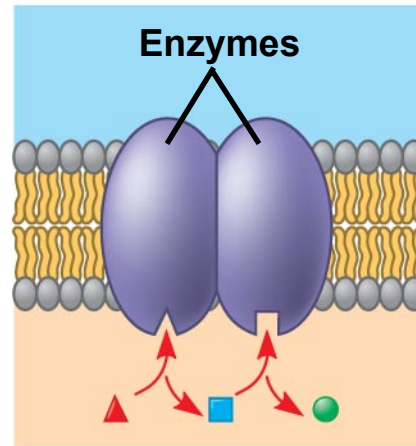
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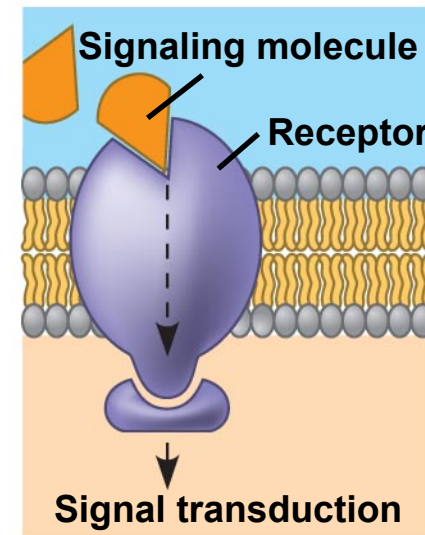
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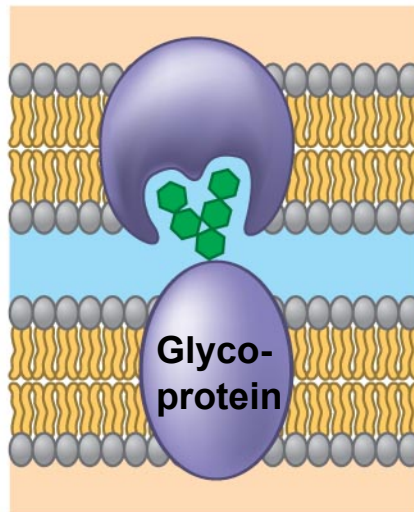
(a) Transport



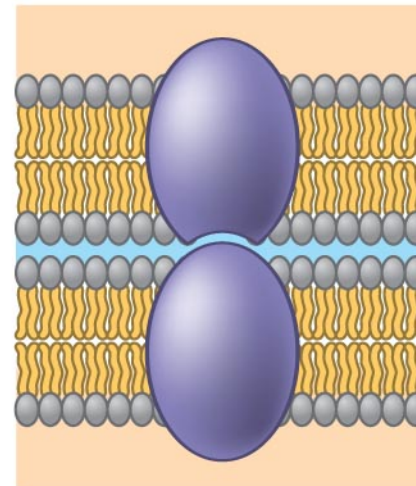
(b) Enzymatic activity



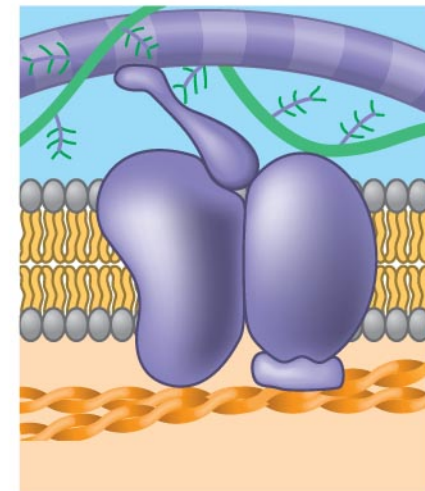
(c) Signal transduction



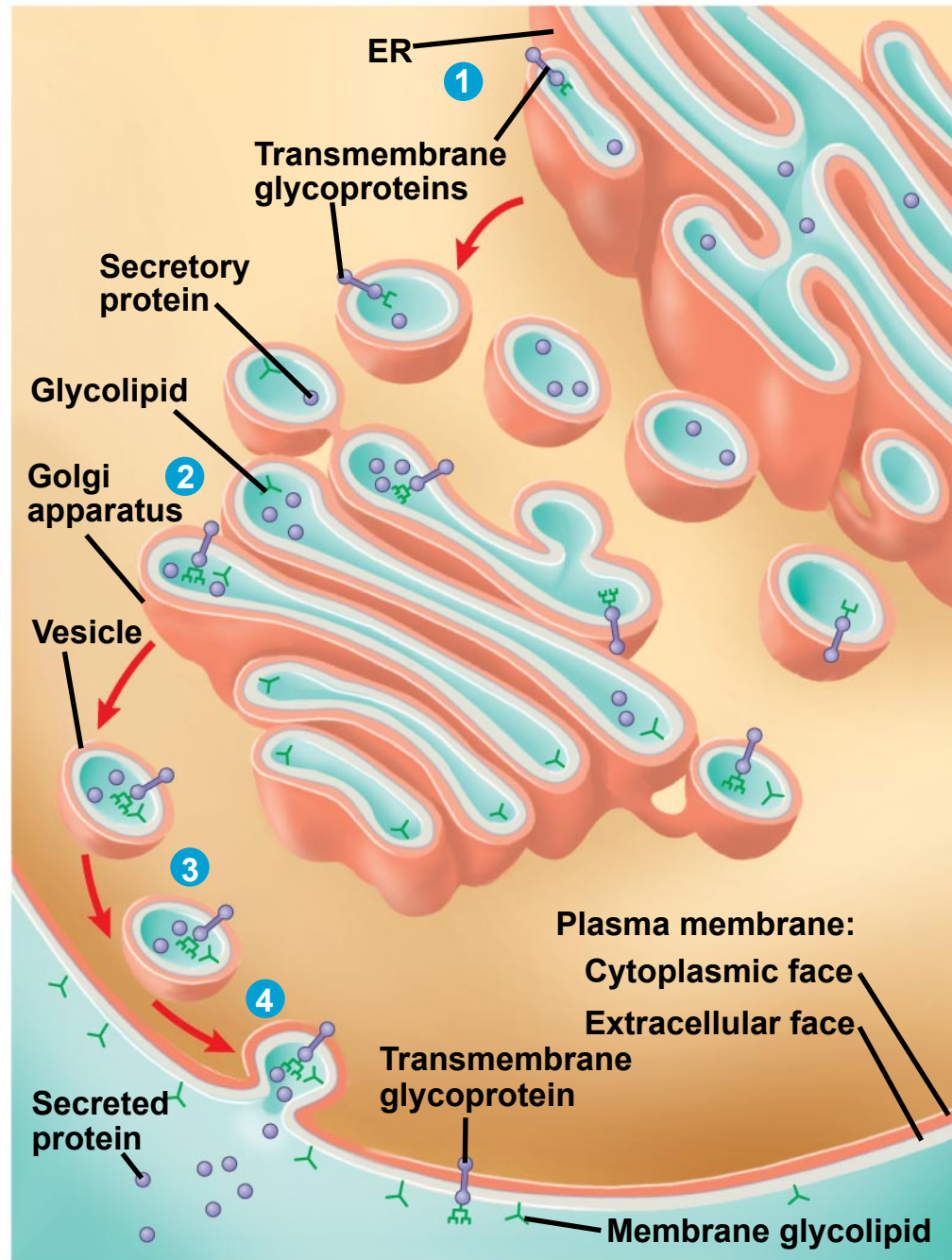
(d) Cell-cell recognition



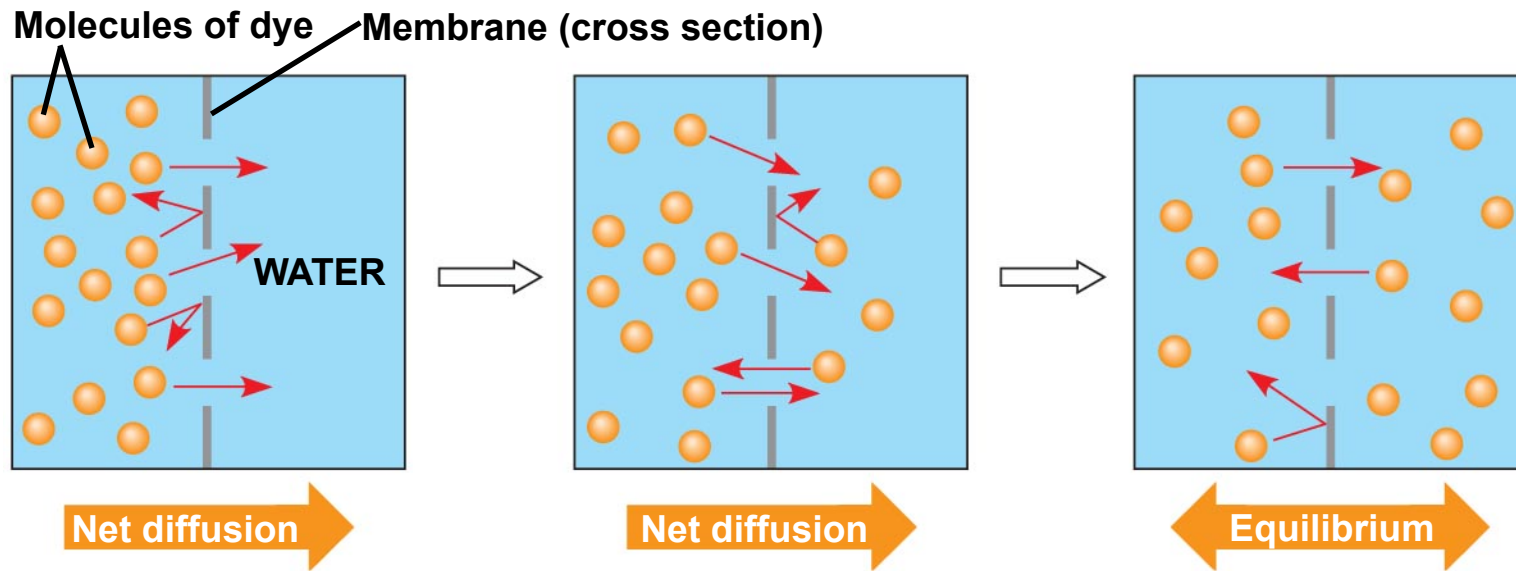
(e) Intercellular joining



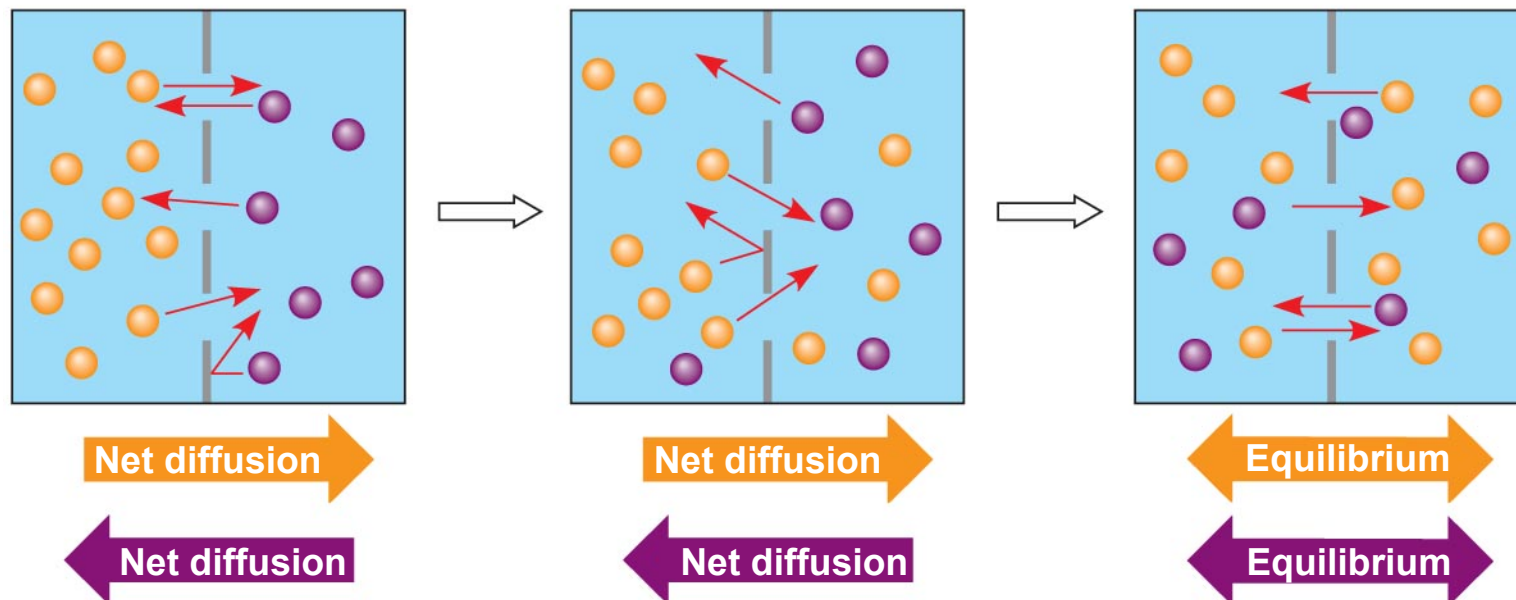
(f) Attachment to the cytoskeleton and extracellular matrix (ECM)



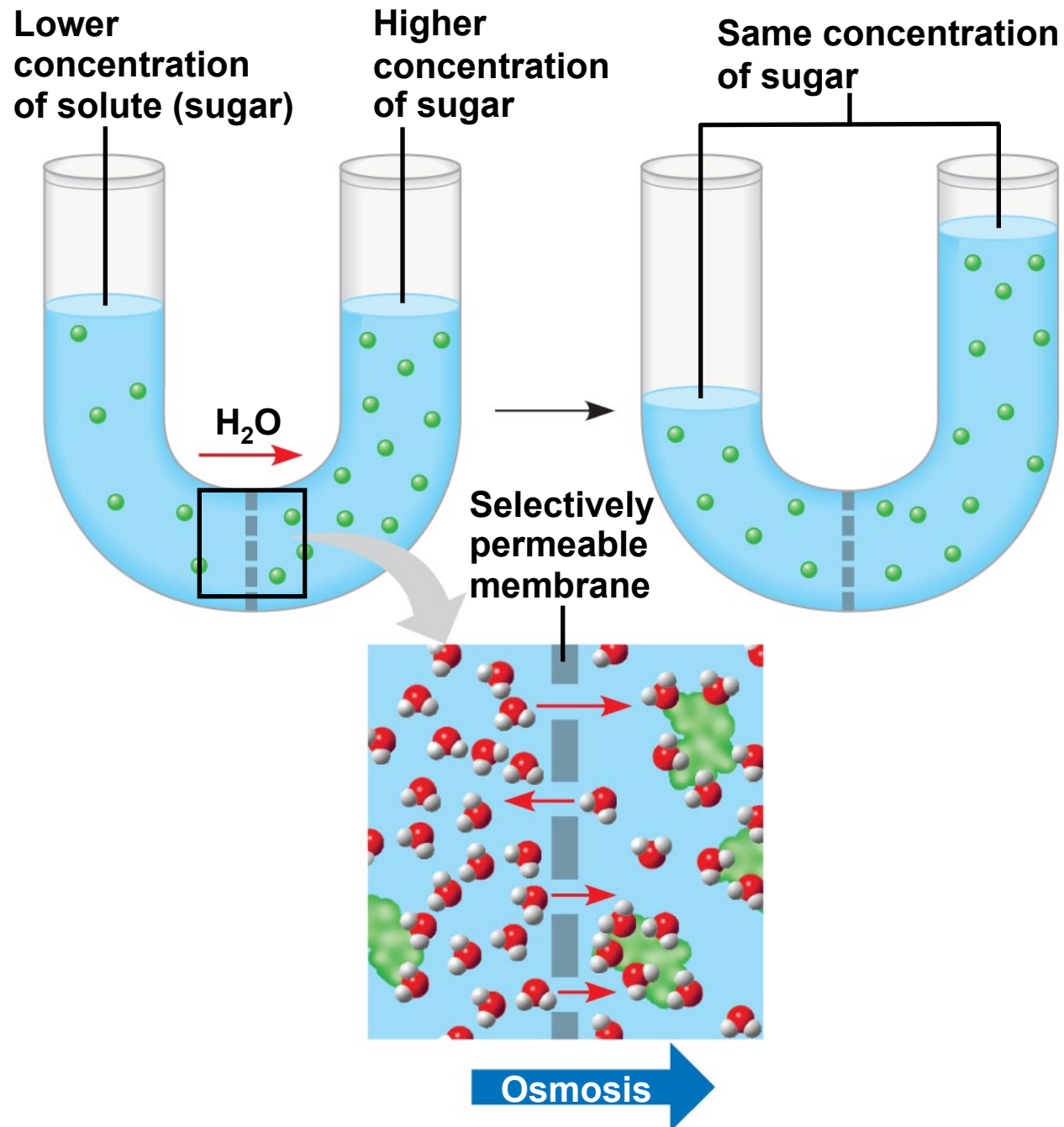
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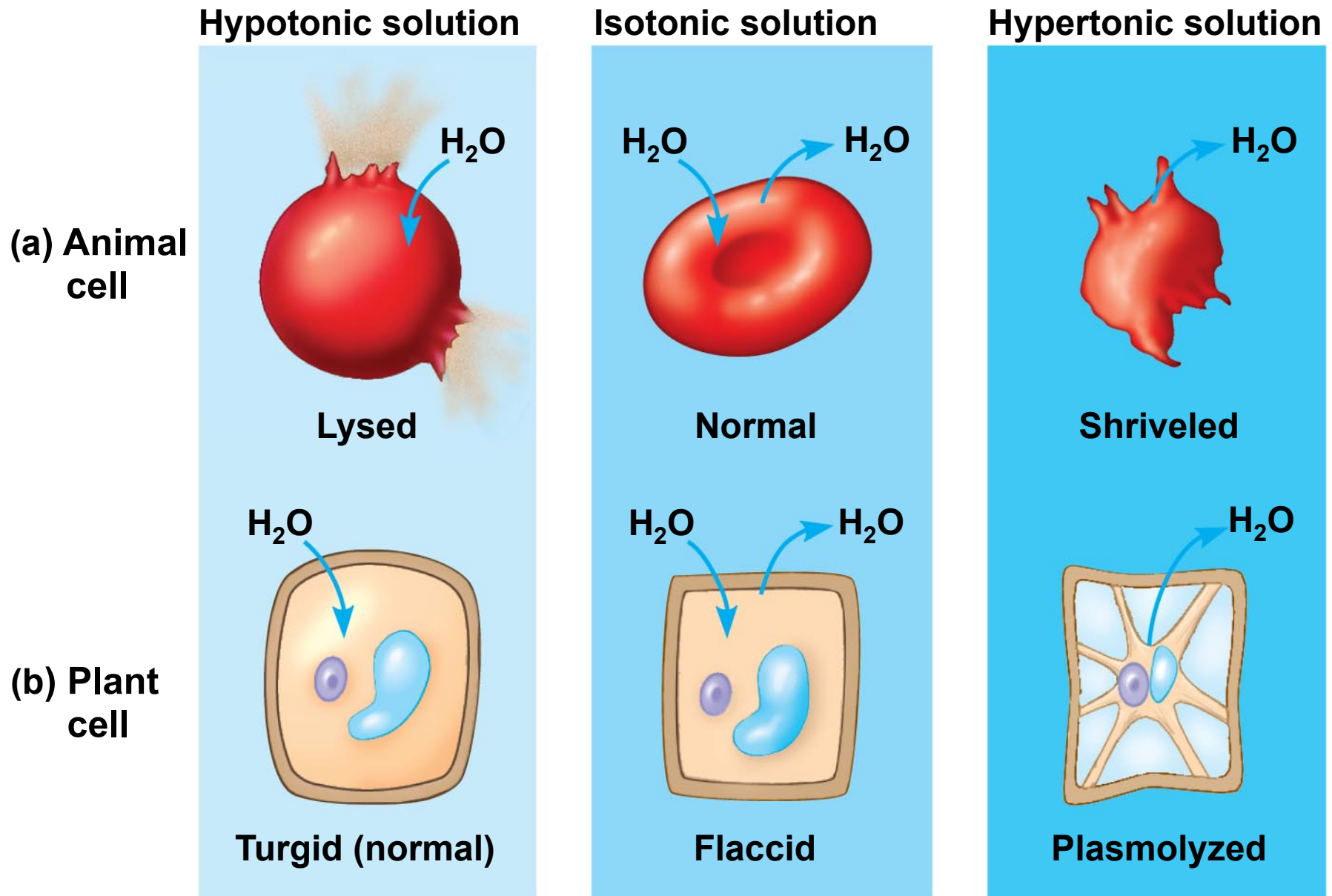


(a) Diffusion of one solute

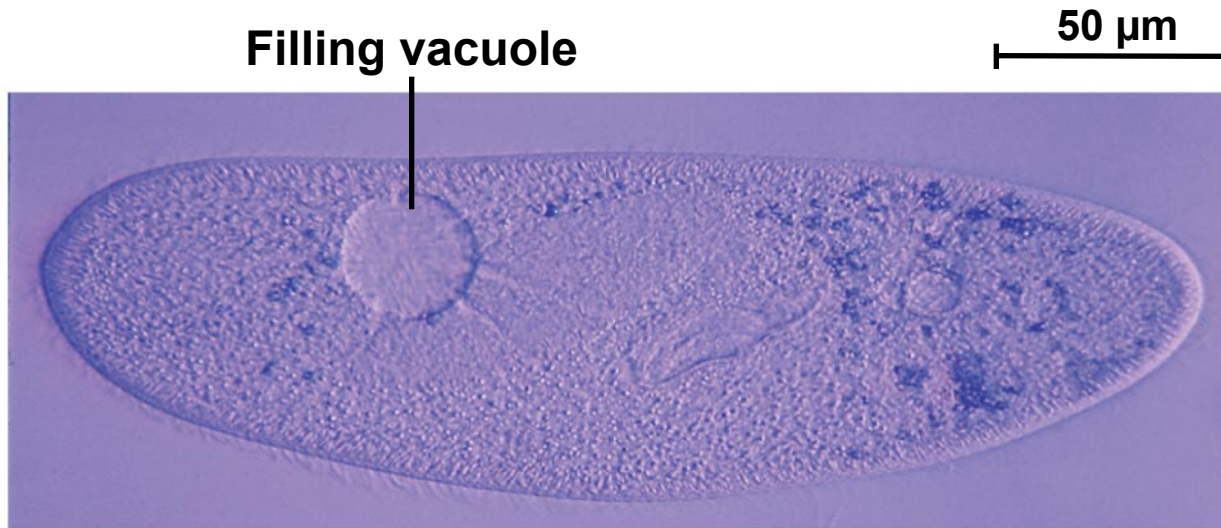


(b) Diffusion of two solutes

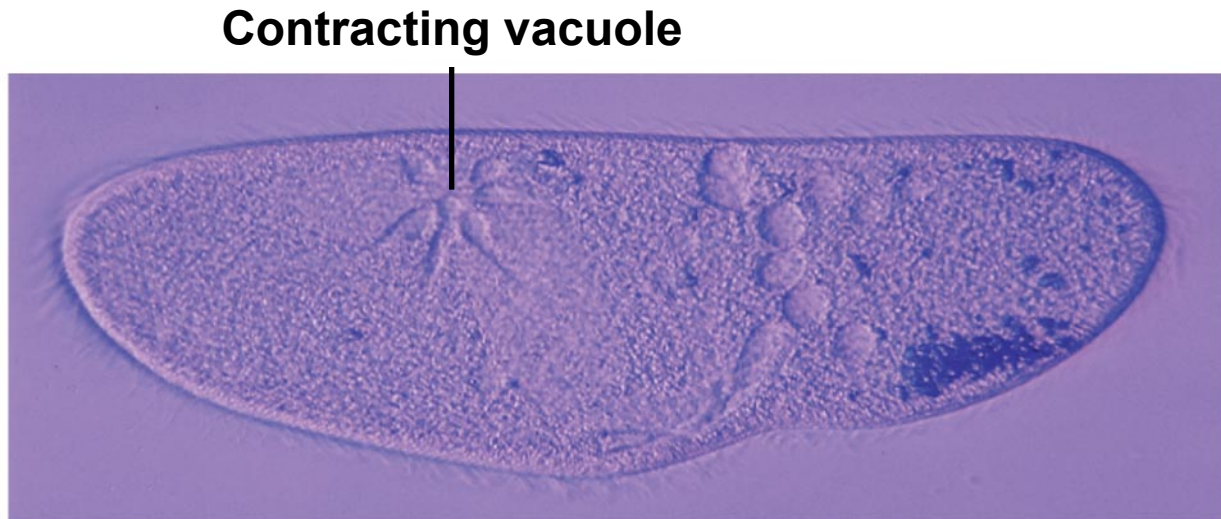




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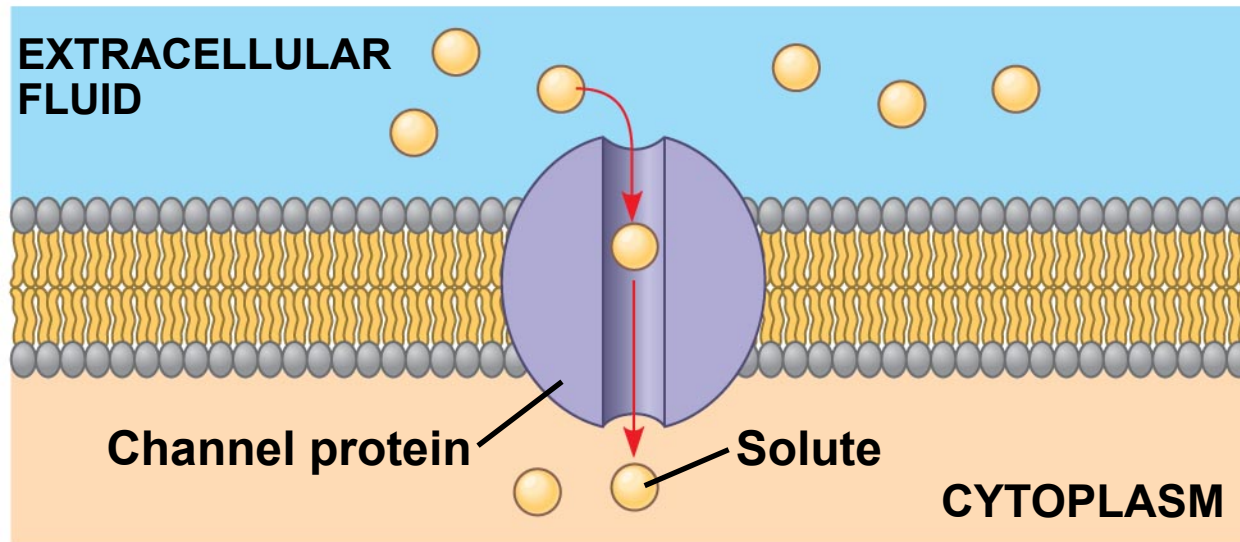


(a) A contractile vacuole fills with fluid that enters from a system of canals radiating throughout the cytoplasm.

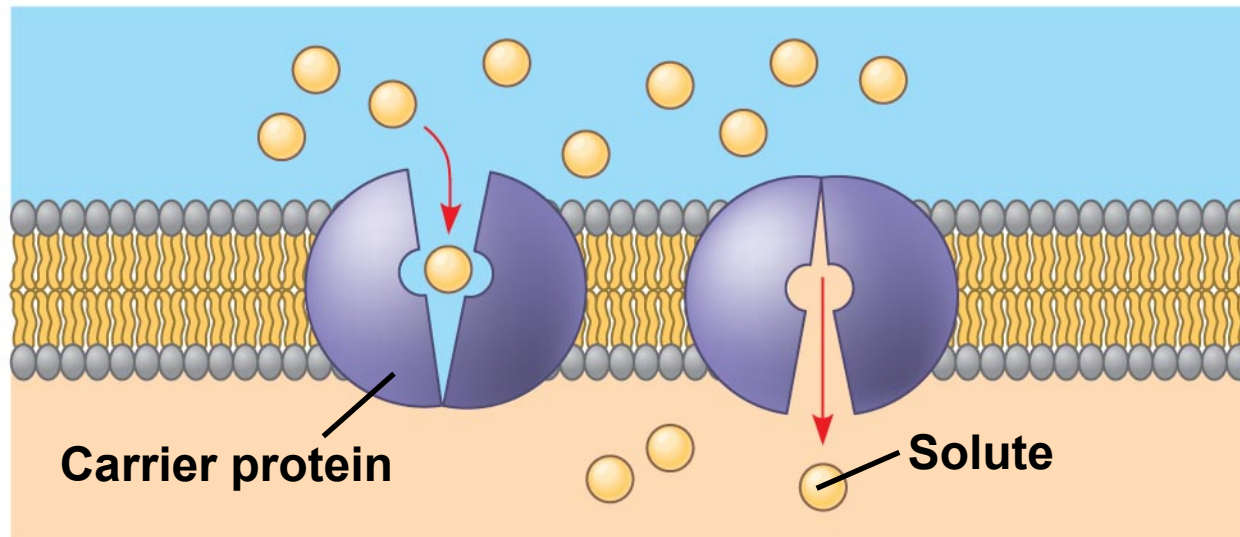


(b) When full, the vacuole and canals contract, expelling fluid from the cell.

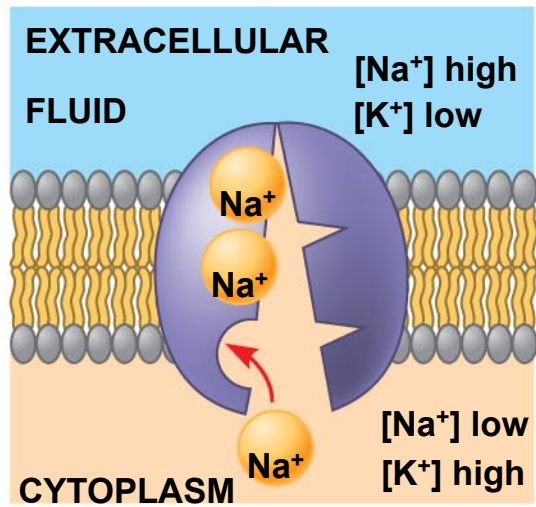
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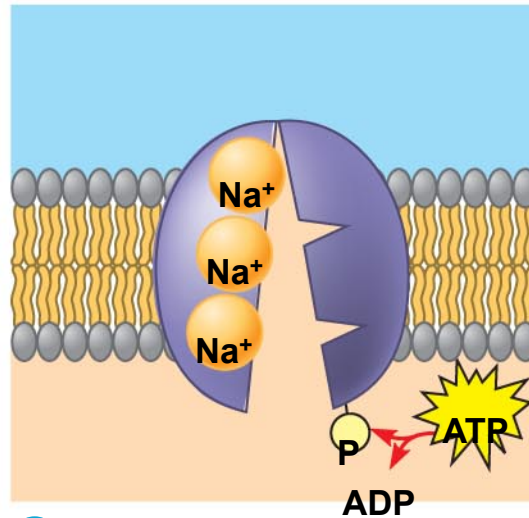
(a) A channel protein



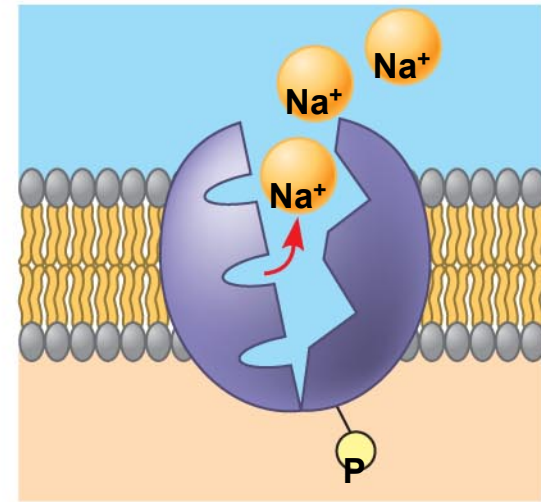
(b) A carrier protein



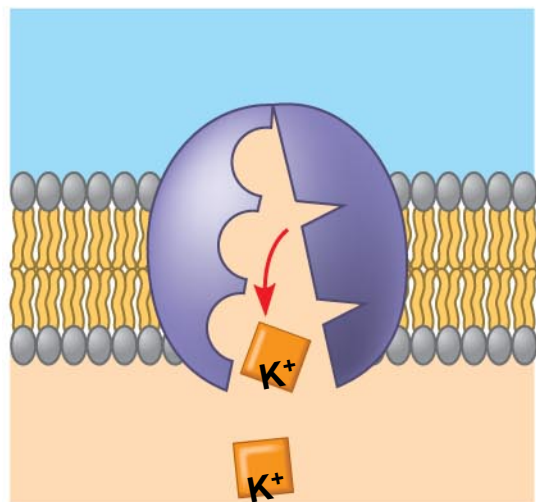
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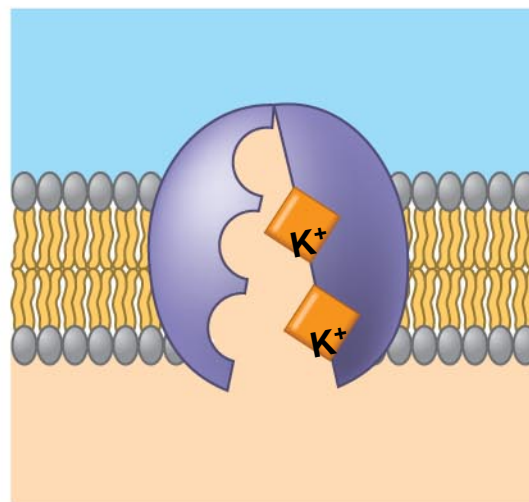
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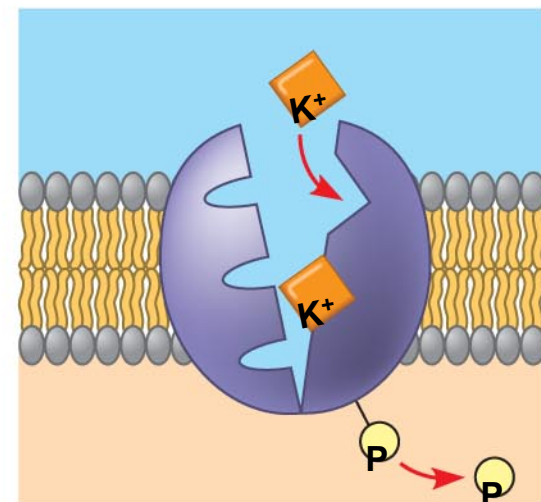
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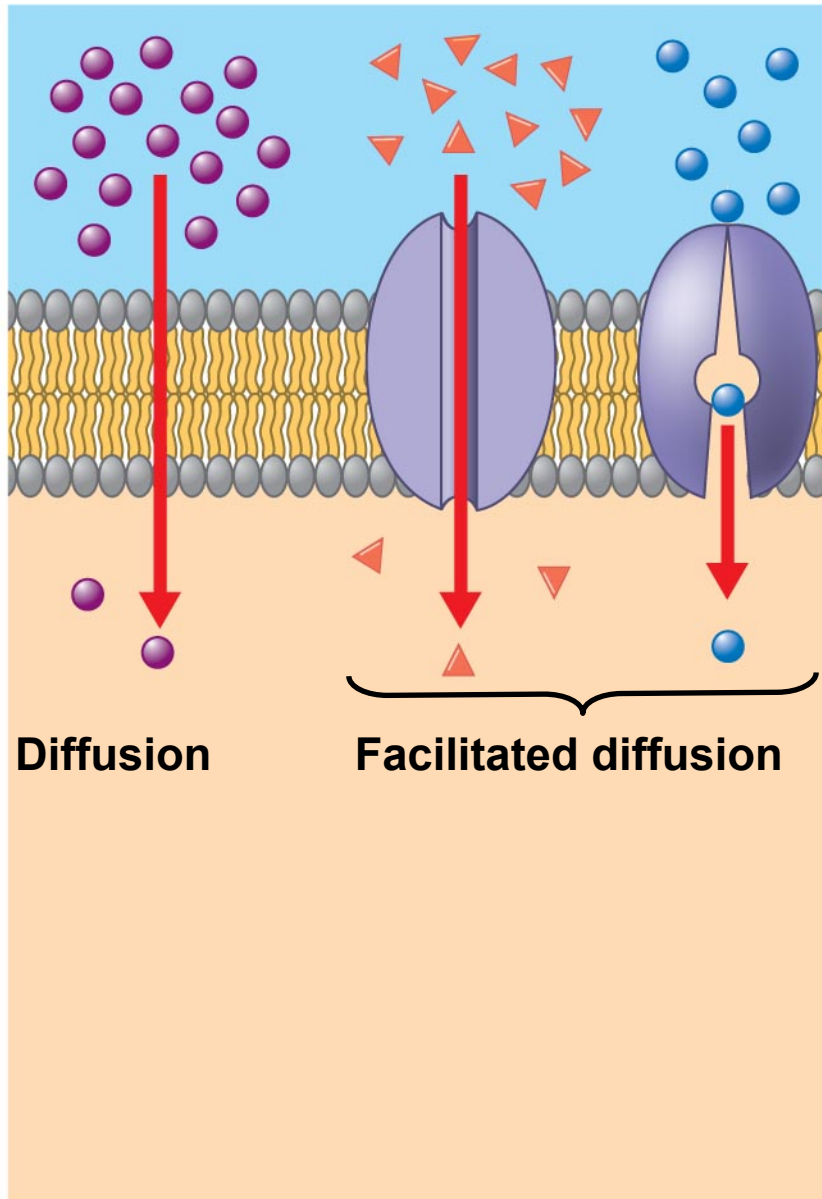


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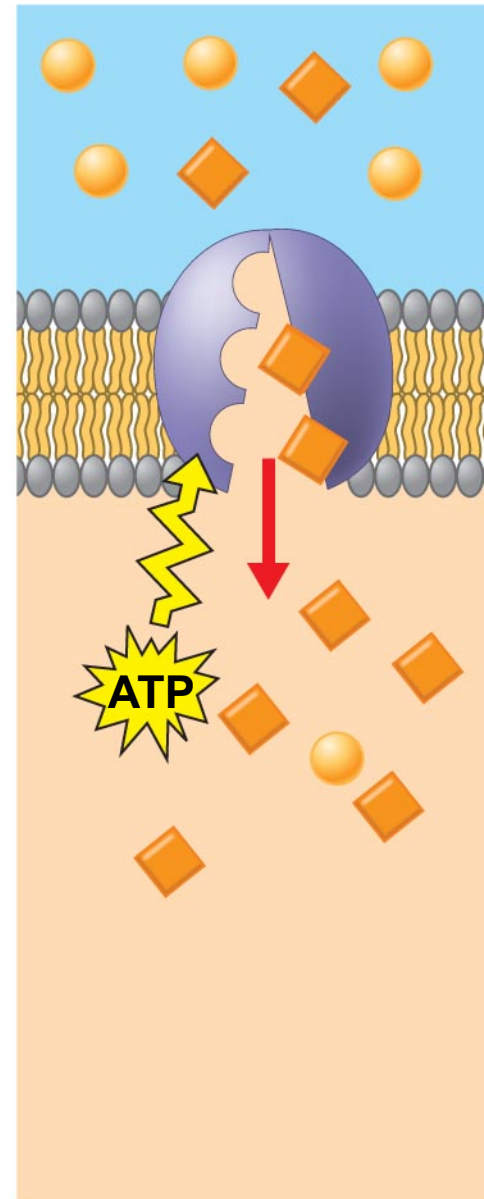


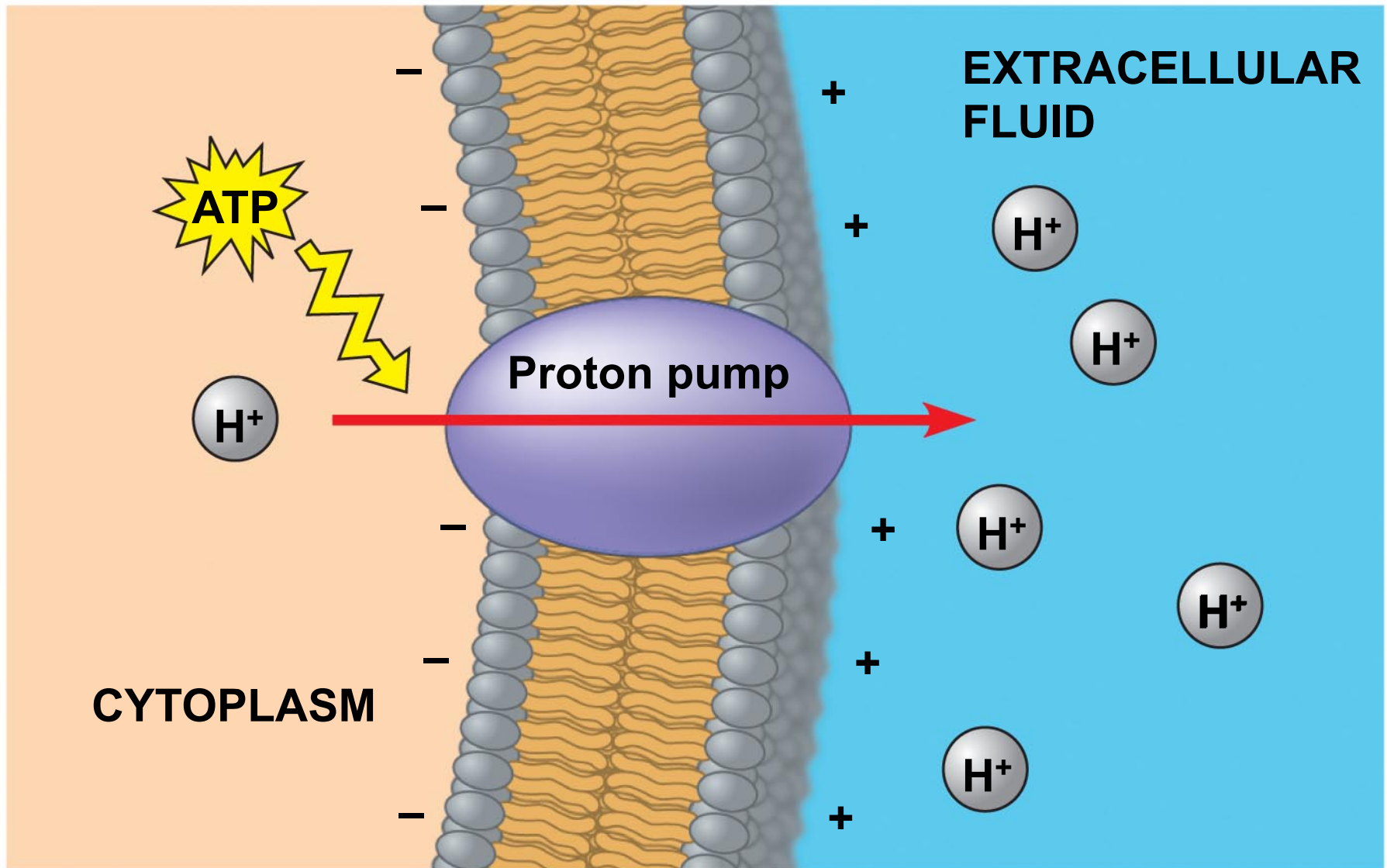
4

Passive transport

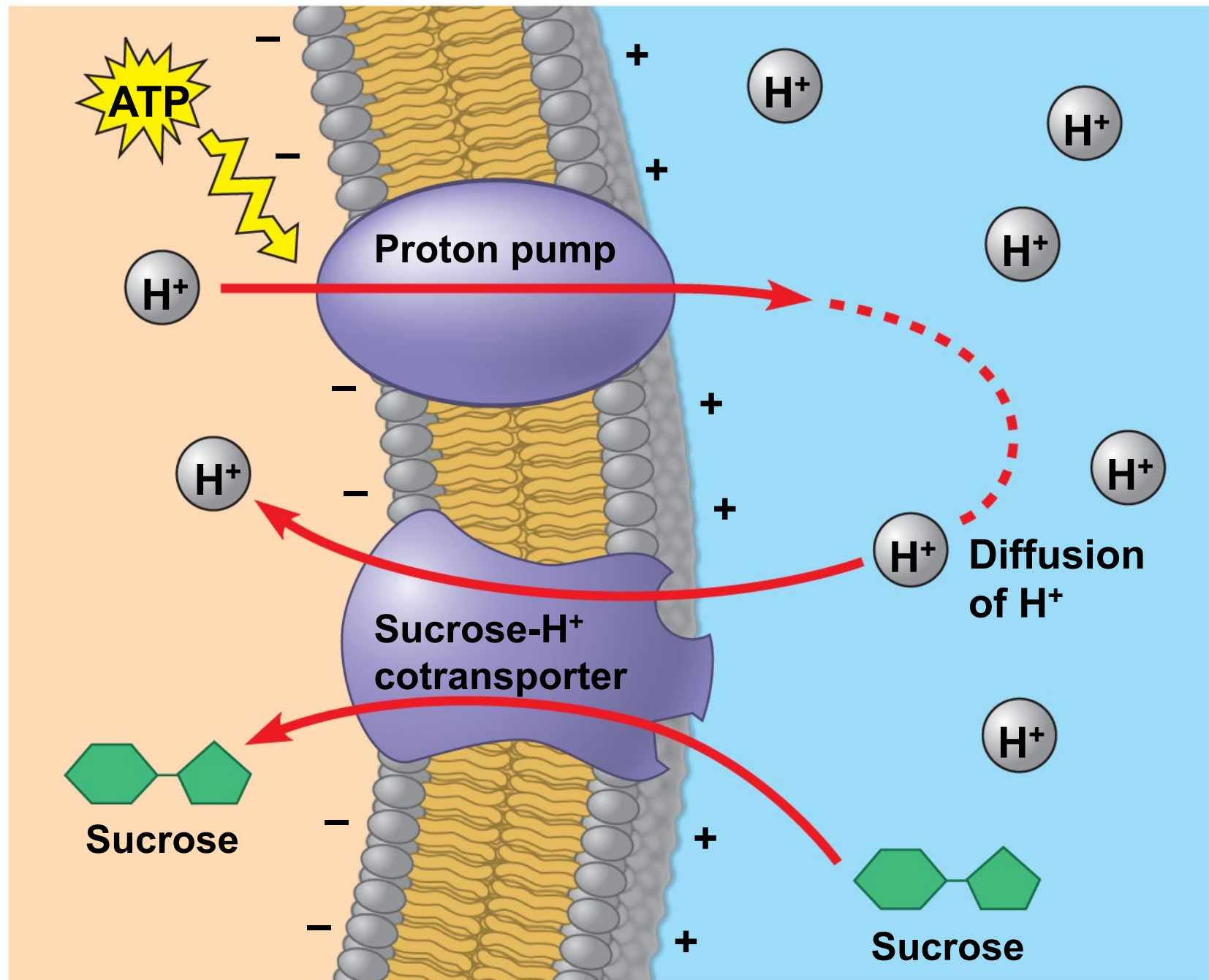


Active transport

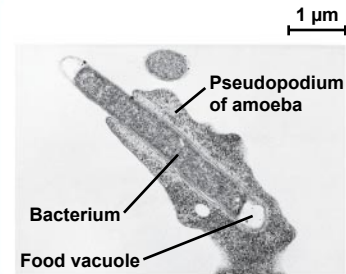
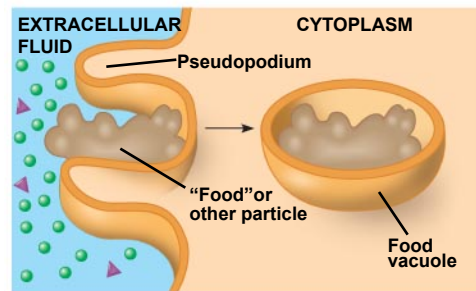




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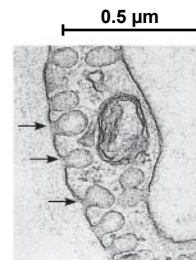
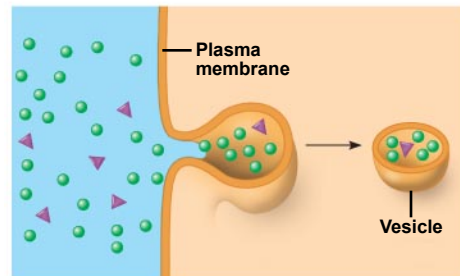


PHAGOCYTOSIS



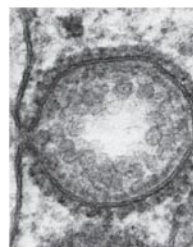
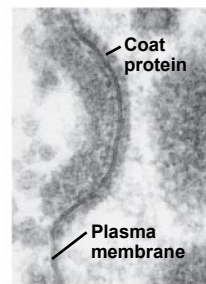
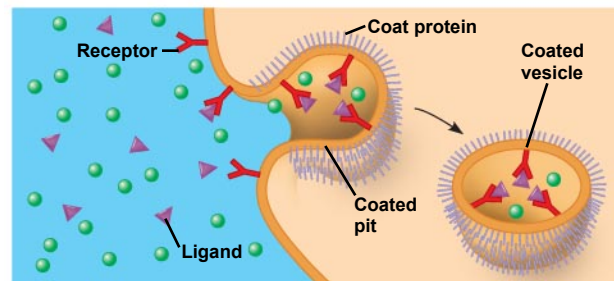
An amoeba engulfing a bacterium via phagocytosis (TEM)

PINOCYTOSIS



Pinocytosis vesicles forming (arrows) in a cell lining a small blood vessel (TEM)

RECEPTOR-MEDIATED ENDOCYTOSIS



A coated pit and a coated vesicle formed during receptor-mediated endocytosis (TEMs)