

5.4 membranes, osmosis, dialysis

membranes - barrier between 2 environments

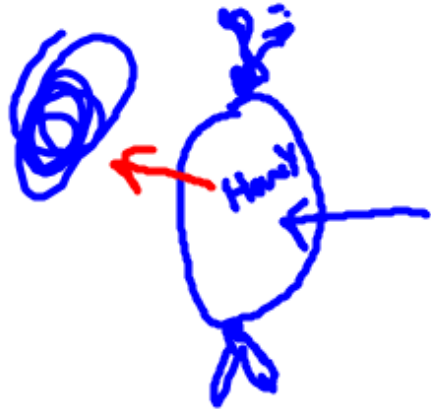
semipermeable membrane - some small particles may pass

cell membranes - semipermeable - very specific

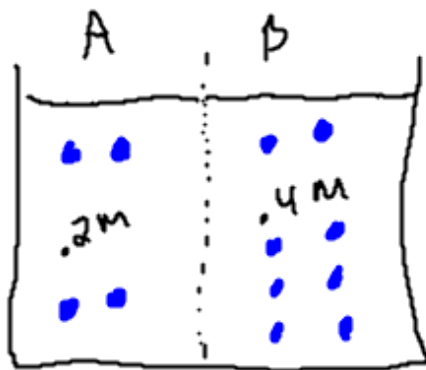
Osmosis - flow of the water from low [] to high []



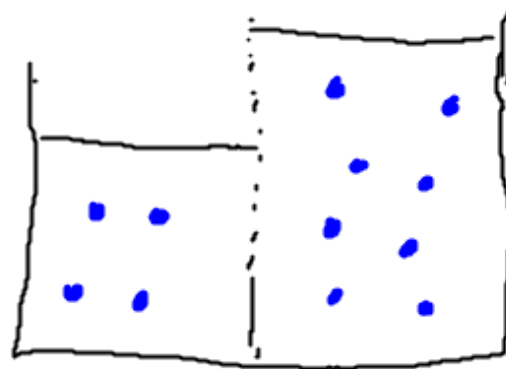
Dialysis - movement of solute particles



Osmosis



osmosis
 \rightarrow
 H_2O



amount of
 solvent

hypotonic hypertonic
 \downarrow \downarrow
 low [] high []

3M
 isotonic
 equal []'s

osmotic pressure

pressure needed to hyper \rightarrow hypo

stops water from flowing

Reverse osmosis

High [] to low []



Osmosis in Red Blood Cells flow of H_2O

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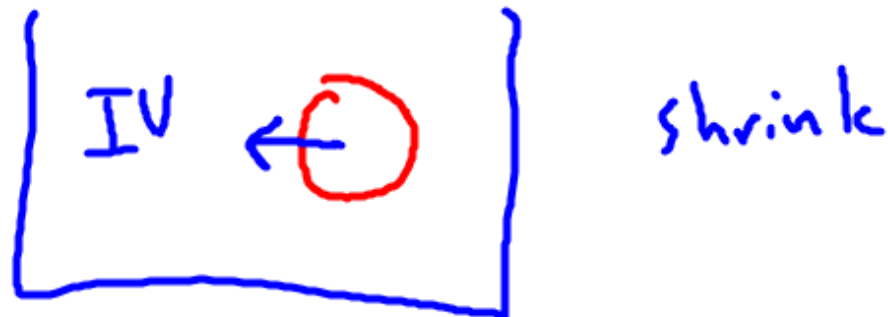
IV's must be Isotonic

hemolysis - hypotonic solution



crenation -

hypertonic

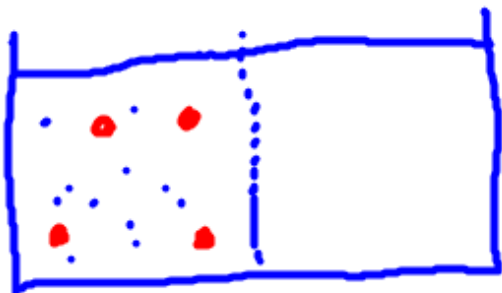


Dialysis

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A

B



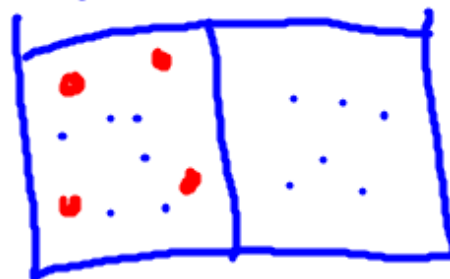
Read 172-173

hyper

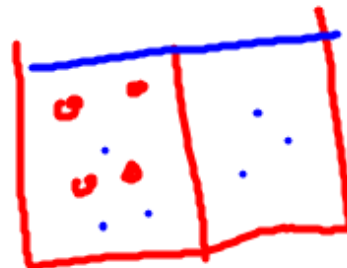
hypo

A

B



go pee



•

a colloid