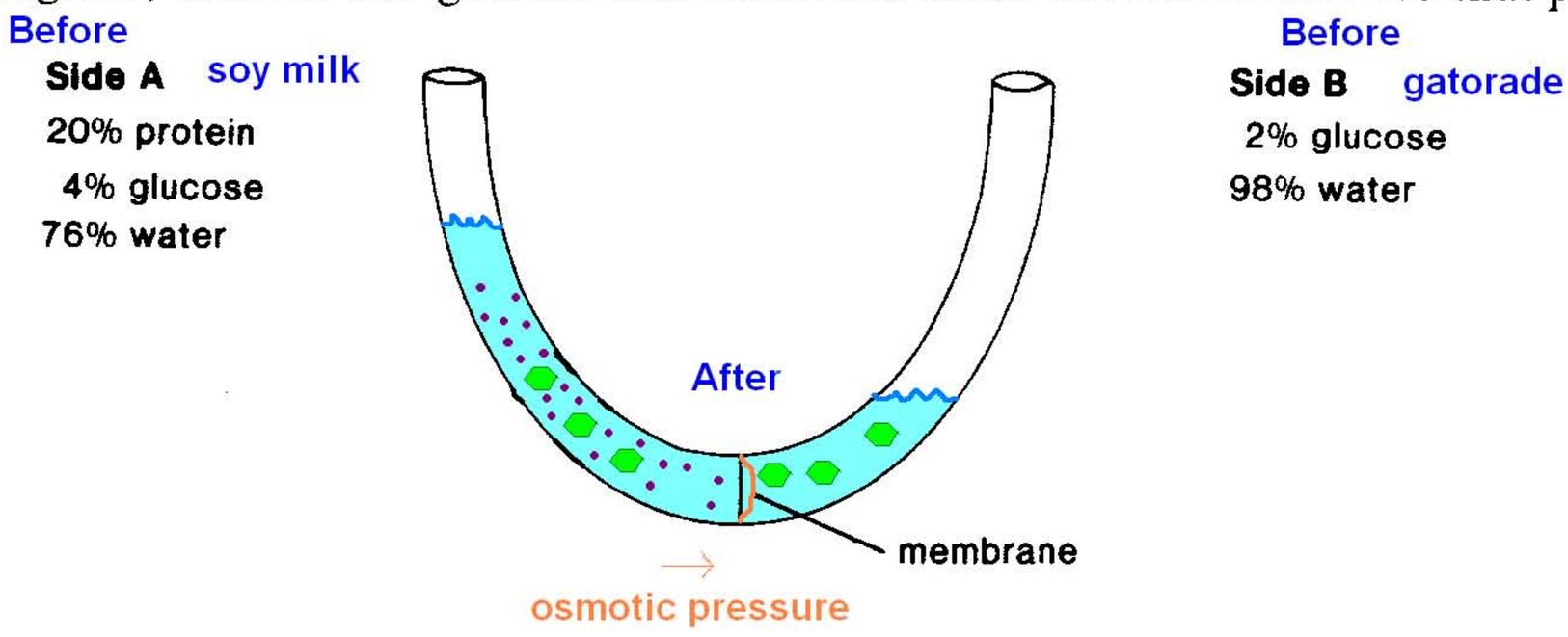
Use the Anatomy book pgs. 65 and 66

1. In the following diagram, assume that glucose and water can cross the membrane and that protein cannot.



2. Will the amount of water on side A stay the same, or increase or decrease with time? a. increase

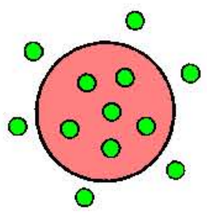
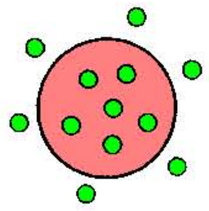
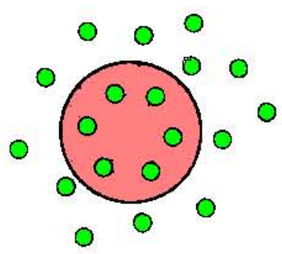
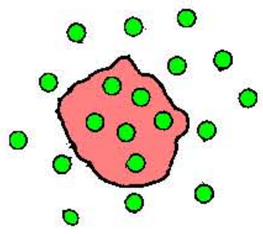
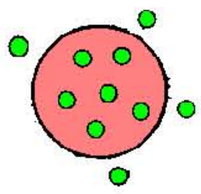
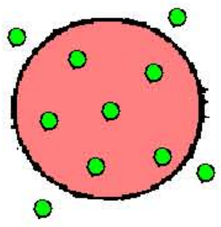
3. Will the amount of protein on side A stay the same, or increase or decrease with time? b. stay the same

4. Will glucose cross the membrane toward side A or side B? c. B

5. On which side is there an osmotic pressure? d. within side A

6. What will happen to the level of solution on each side of the membrane? e. The net flow of water will cause A to rise

7. Complete this diagram to describe the effect of tonicity on red blood cells.

Tonicity	Before	After
Isotonic Solution		 a.
hypertonic solution b.		
Hypotonic Solution		 c.

tonicity = the amount of osmotic pressure that pushes against the cell membrane. Too much tonicity can burst the cell, this is called lysis.

8. If a solution is 8% solute, it is a. 92 % solvent.

9. If a solution is 99.5% solvent, it is b. 0.5 % solute.

10. If solution A is 2% solute and solution B is 3% solute, then solution A is c. hypotonic to solution B which is d. hypertonic to solution A.

11. Compared to solution A, a solution with 2% solute is e. isotonic.