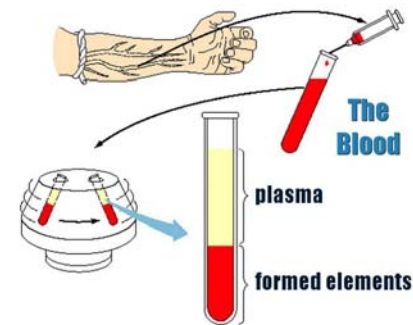


# Solutions, Body Fluids

R. Hernandez

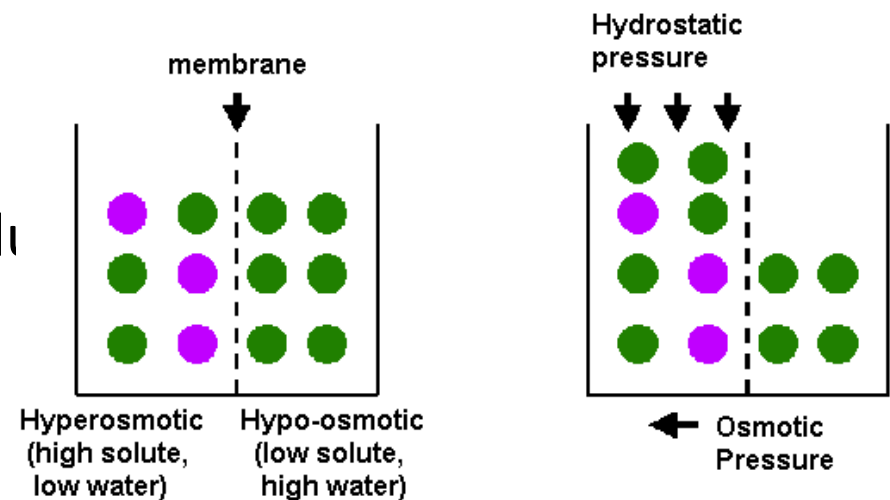
# Physiologic Chemistry

- Colloids
  - Large molecules
  - Attract and hold water
  - Remain distributed
- Suspensions
  - Large particles suspended
  - Will settle if allowed
- Solution
  - Stable mixture of substances
    - Solute
    - Solvent

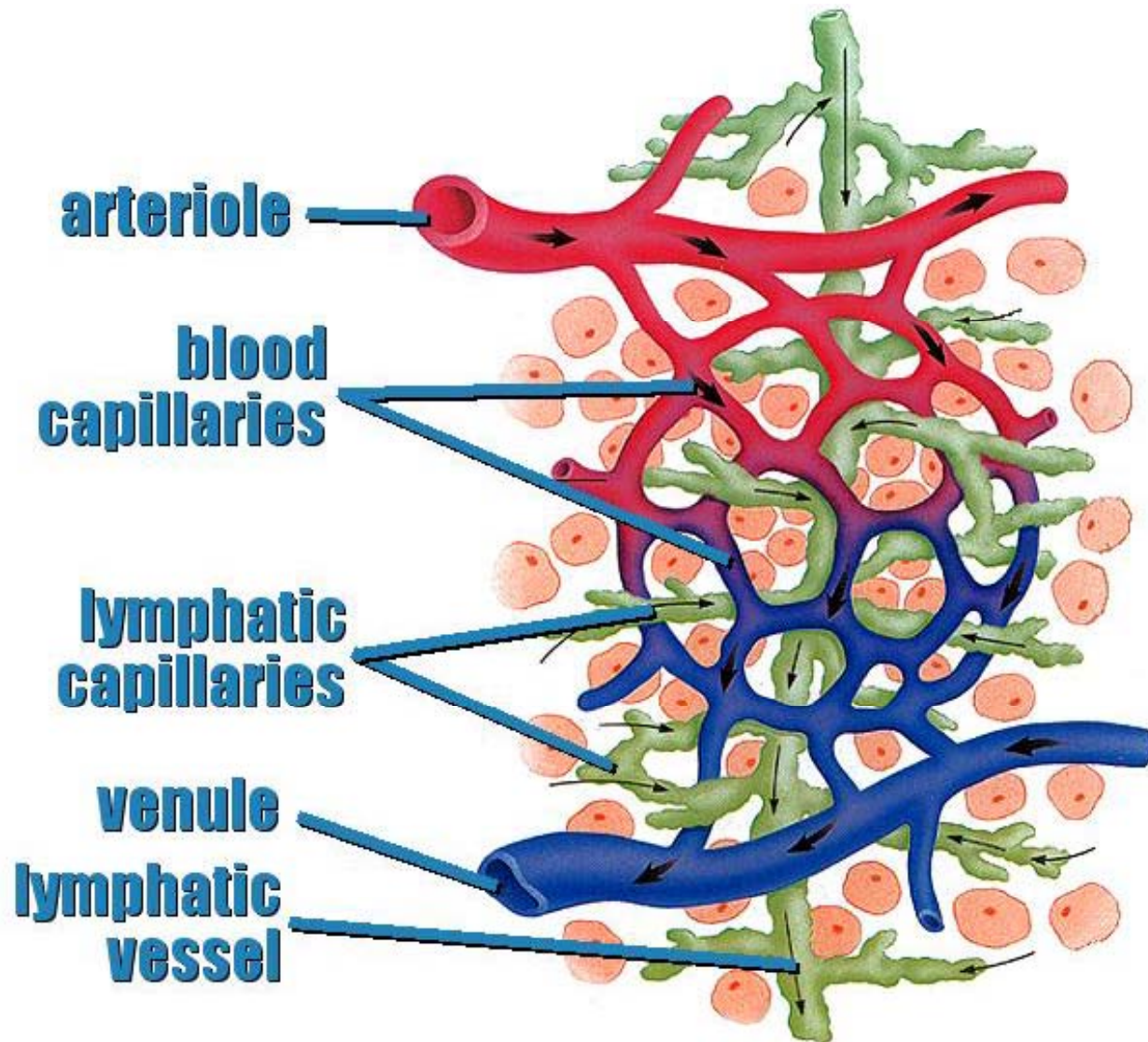


# Fluids

- 50-80% of Body Weight
  - Intracellular – 65%
  - Extracellular – 35%
    - Intravascular
    - interstitial
- Osmotic
  - Force produced by solvent particles
- Hydrostatic
  - Weight of fluid related to volume
    - Effects of gravity



# Capillary Blood Flow



# Solutions

- Isotonic
  - Normal Saline
- Hypertonic
  - Higher Osmotic Pressure
- Hypotonic
  - Lower Osmotic Pressure