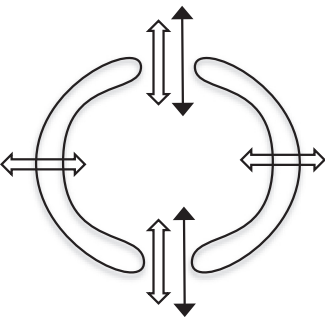


a) Peripheral microvessels

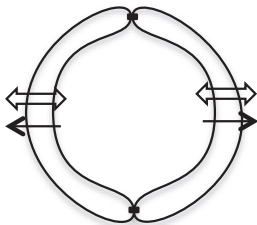


Water passes through and between the cells.

Small solutes follow passively between the cells staying close to osmotic equilibrium.

Net movement is down the resultant of hydrostatic and colloid osmotic pressure differences (i.e. $\sum_i (\sigma_i \Delta c_i)$ for all the small solutes is much smaller than $\sum_i (\sigma_i \Delta c_i)$ for the colloids).

b) cerebral microvessels



Water passes through the cells down the resultant of the hydrostatic and *total* osmotic pressures.

Solutes are secreted across the cells.

Because hydrostatic pressure differences are small, and water is still relatively permeant, solute movements dictate net movement of water (i.e. water movement proceeds so that $\sum_i (\sigma_i \Delta c_i)$ for all solutes stays close to zero).