

What's in a fluid?

Tonicity	Osmolality mOsm/L	Na meq/L	Cl meq/L	K meq/L	Buffer
↓ 0.45% Saline (1/2 NS)	154	77	77	0	
↓ 5% Dextrose (D5W)	253	0	0	0	
✓ Ringer's Lactate	273	130	109	4	Lactate
✓ Plasma	290	140	103	4	HCO3
✓ Plasma-lyte	294	140	98	5	Gluconate, acetate
✓ 0.9% Saline (NS)	308	154	154	0	
✓ D5W + 150 meq NaHCO3	480	150	0	0	HCO3
↑ 3% Saline	1027	513	513	0	

↓ = **hyPO**tonic
 ✓ = **ISO**tonic
 ↑ = **hyPER**tonic

Adapted from
www.nephsim.com

Theoretical Distribution of IV Fluids

	1L D5W	1L of 1/2 NS	1L NS or LR	1u pRBC	25g albumin (colloid)
ICF	667	333	0	0	0
ECF	250	500	750	0	0 (colloids draw water from the interstitium into the plasma)
PLASMA	83	167	250	300	450 (short half-life)

*All values reported in "mL"