



IV Fluids 101

Contents

Crystalloids	pH	Na+	Cl-	Ca++	K+	other	Osm
0.9 NaCl (normal saline)	5.5	154	154				308
0.45 NaCl (1/2 normal saline)		77	77				154
Lactated Ringers (LR)	6.5	130	109	3	4	Lactate (28)	275
5% Dextrose in water (D5W)	4.5					Dextrose 50g/l (252)	252
5% Dextrose in 1/2 Normal Saline (D5 1/2 NS)	4.0	77	77			Dextrose 50g/l (252)	406
Plasmalyte	7.4	140	98	0	5	Mag (3) Acetate (27) Gluconate (23)	294

Note: Units are mmol/L unless otherwise noted

Colloids	Contents	Notes
Human Albumin 5% Albumin 25%	50g/1000mL albumin 250g/1000mL albumin	130-160 mmol Na+ <2 mmol K+ Expensive
Hydroxyethyl Starch (HES) Hetastarch (Hespan)	Synthetic colloid 6% solution in isotonic saline	Cheaper, assoc w/ renal failure
Dextrans 10% or 6%	Glucose polymer in isotonic saline	Assoc w/ bleeding
Blood products	packed Red Blood Cells, Fresh Frozen Plasma, Platelets, Cryoprecipitate	Blood is the best