

Introduction , Water consist 60% of the body Wt ; 2/3 is Intra-Cellular Fluid (ICF) * .weakness , confusion , and ocular palsy in severe cases Types & Causes : A) Hypo-osmotic Hypo-natremia (most common type) & Hypo-volemic (due to Extra-renal loss like Vomiting & Diarrhea – Burns , when Urine Na 10 mmol/L) or (due to Renal loss like in & Interstitial Nephritis & Obstructive Nephropathy & Proximal RTA PCKD & Diuretics & Aldosterone Def.while 1/3 is Extra-Cellular Fluid (ECF) Extra-Cellular Fluid (ECF) subdivided into Interstitial Fluid (75%) * .and Intra-Vascular Fluid (25% , 5L Blood) , The primary Cations (Positively charged) include Sodium (Na^+) * Potassium (K^+) , Calcium (Ca^{2+}) , Magnesium (Mg^{2+}) ; whereas , the Anions (Negatively charged) are include Chloride (Cl^-) .collecting ducts under control of aldosterone hormone +For Sodium (Na^+) assessment in suspected cases of low or high Na * we need to check Serum Na^+ & Plasma Osmolality & Urine Na^+ to .Lungs & kidneys are regulators of water & electrolytes & pH * Sodium (Na^+) .ICF are (K^+ , Mg^{2+} , phosphates , protein) .