

**Corrections****Corrected Ca** =  $[Ca + (4 - alb) \times 0.8]$ **Corrected Na** =  $[Na] + 1.7$  for every 100 above 100 serum glucose**Corrected K** = Adjust by 0.6 for every 0.1 change in pH from 7.4**General Labs****ESR**: Male: 1-15 mm/hr Female: 1-20 mm/hr**AST**: 0-37 IUnits/L**ALT**: 0-37 IUnits/L**Amylase**: 20-100 Units/L**Lipase**: 115-285 Units/L**Alk phos**: 30-120 units/L**INR**: 1**aPTT**: 21-45 sec**MCV**: 80-96 fL/cell**MCH**: 27-33 pg/cell**Tbili**: 0.3 – 1 mg/dL Unconj bili: 0.2-0.7 Conj bili: 0.1-0.3 mg/dL**UA**: Sp grav 1.01-1.025 pH: 4.5-8**WBC diff**: neutrophils 60%, lymphocytes 30%, monocytes 6%, eosinophils 3%, basophils 1%**Reticulocytes**: 0.5-2.5% of RBC**RBC**:  $4-5.9 \times 10^6$ /mcl

<b>Na<sup>+</sup></b> 135-145 mEq/L	<b>Cl<sup>-</sup></b> 95-105 mEq/L	<b>BUN</b> 8-20 mg/dL	<b>Glucose</b> 70-110 mEq/L
<b>K<sup>+</sup></b> 3.5-5 mEq/L	<b>HCO<sub>3</sub><sup>-</sup></b> 22-28 mEq/L	<b>Cr</b> 0.6-1.2 mg/dL	

<b>Hgb</b> Female: 12.3-15.3 g/dL Male: 14-17.5 g/dL	<b>Platelets</b> 150-450 $\times 10^3$ /mcl
<b>WBC</b> 4.4-11.3 $\times 10^3$ /mcl	
<b>Hct</b> Female: 36-45% Male: 42-50%	

**Useful Equations****AG** =  $[Na^+] - (Cl^- + HCO_3^-)$  goal: 8-12**HCO<sub>3</sub><sup>-</sup> deficit (mEq)** = (goal bicarb – measured bicarb) x TBW**Serum Osm** =  $(2 \times Na) + (BUN/2.8) + (glucose/18)$ **Osm gap** = measured Osm – calculated Osm**TBW** = wt in kg x 60% for males or 40% females**Na deficit** = (Vd Na which is 0.5L/kg) (wt in kg) (desired Na – actual Na)**Daily fluid needs**: 30-35mL/kg/day**Daily fluid needs**: 100mL/kg/day for the first 10kg, 50mL/kg/day for the next 10kg, 20mL/kg/day for anything over 20kg (add 10% for each degree of body temp C over normal, add excessive fluid losses)**Insensible loss**: ~ 1L/day**Fluid deficit (L)** = normal TBW – Present TBW

Present TBW = (desired Na/actual Na) x normal TBW

**Water excess (L)** = TBW – [TBW x (observed Na/actual Na)]**Schwarz Equation** =  $[(K \times ht \text{ in cm}) / SCr]$ 

where K = 0.45 infant &lt; 1 yr, 0.55 children &amp; adolescent girls, 0.7 adolescent boys

**IV Fluids****LR** contains/L: Na 130 K 4 Cl 109 Lactate 28 Ca 1.5**Dextrose** contains 3.4 kcal/g

Disclaimer: For reference only.  
Not to replace good clinical judgment.  
Lab normals & units will vary by institution