Lab Assessment	Normative Ranges	Comments
BMI: kg / m^2	18.5 – 24.9 Underweight = <18 Overweight = >25 Medically Obese = 30 - 39.9 Morbidly Obese = >40	BMI in the USA: lbs x 703 / in^2
Serum Albumin (Alb)	>3 years old: 3.5 – 5.0 g/dL <3 years old: 2.9 – 5.5 g/dL	Not used as criteria for malnutrition. Half-life: up to 3 weeks/21 days (Greatly influenced by dehydration, critical illness, stress, inflammation & more. See blog)
Prealbumin (PAB)	18 – 45 mg/dL (also reported as 15 – 40 mg/dL) <11 mg/dL = significant risk	Half-life: 2-3 days (Still affected by pregnancy, medications, inflammatory processes, & medical conditions, like renal disease)
RBC	Men: 4.7 – 6.1 million cells/µL (microliter) Women: 4.2 – 5.4 f	
Hgb	Men: 14 – 17 g/dL Women: 12 – 16 g/dL	
HCT	Men: 41 – 51% Women: 36 – 47%	
WBC	4.8 – 10.8 K/mm^3	Total number of leukocytes in sample. Could be response to inflammatory process (i.e., stroke, cancer, injury).
Neut %	40 – 70 % of the WBC	>70% could indicate acute bacterial infection
Lymph %	25 - 33%	how prepared is the host's immune system to fight off infection
ANC (normal)	>1500/mm3	Normal Absolute Neutrophil Count
ANC	500 – 1500/mm3	Mild Neutropenia
ANC	<500/mm3	Moderate-severe Neutropenia
ANC	>7500/mm3	Neutrophilia - may indicate acute bacterial infection
Sodium	135 – 145 mmol/L	Hypo vs Hypernatremia
BUN	5mg/dl – 25 mg/dL	Narrower range: 8 – 20 mg/dL
Creat.	0.7 – 1.3 mg/dL	Range may vary male vs female. Narrower ranges: Male – 0.6-1.2 Female: 0.5-1.1
Ammonia	15 – 50 µmol/L	High: encephalopathy?
Potassium	3.5 – 5.0 mmo/L	Low: Hypokalemia
Chloride	98 – 107	
Ionized Calcium	4.4 – 5.4 mg/dL; 1.1 – 1.35mmo/L	Low: Hypocalcemia

INR	Therapeutic range: 2.0 – 3.0	High: blood does not clot, bleed risk Low: blood clots too quickly, embolic stroke risk
RR (respiratory rate)	16 - 20 breaths/minute	>25 assoc. w/ aspiration (Cvejic, 2011)
ABG's		
PH	7.35 – 7.45	<7.35: Acidosis
$PaCO_2$	35 – 45 mmHg	>45: Acidosis
PaO_2	80 – 100 mmHg	
HCO_3	22 – 26 mEq/L	
SaO_2	> 95%	
Base Excess	+ or – 2	amount of hydrogen ions needed to return blood pH to 7.35

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See blog for details & references: *Critical Lab Values in Dysphagia:* https://swallowstudy.com/critical-lab-values-in-dysphagia/