Lab Values
CHEAT SHEET

VITAL SIGNS

- **BLOOD PRESSURE:**
  - ⇨ SYSTOLIC: 120 mmHg
  - ⇨ DIASTOLIC: 80 mmHg
- **HEART RATE:** 60-100 BPM
- **RESPIRATIONS:** 12-20 breaths per min
- **OXYGEN:** 95%-100%
- **TEMPERATURE:**
  - ⇨ °F 96.4 - 99.5
  - ⇨ °C 36.1-37.2

LIPID PANEL

- **TOTAL CHOLESTEROL**
  - ⇨ MALE: < 205 mg/dL
  - ⇨ FEMALE: < 190 mg/dL
- **TRIGLYCERIDES**
  - ⇨ MALE: 44-180
  - ⇨ FEMALE: 10-190
- **LDL:** < 100 mg/dL
  BAD cholesterol
- **HDL:** > 60 mg/dL
  GOOD cholesterol

COMPLETE BLOOD COUNT [CBC]

- **WBC:** 5000-10,000
- **RBC:**
  - ♂ MALE: 4.2-5.4
  - ♀ FEMALE: 3.6-5
- **PLATELETS [PLT]:** 140,000-400,000
  - CRITICAL: < 50,000 [↑ risk of bleeding]
  - > 100,000 [↑ risk of clots]
- **HEMOGLOBIN [Hgb]:**
  - ♂ MALE: 13-18
  - ♀ FEMALE: 12-16
- **HEMATOCRIT [HCT]:**
  - ♂ MALE: 42%-52%
  - ♀ FEMALE: 36%-48%

GLUCOSE

- **FASTING:** 70-110 mg/dL
- **CASUAL:** < 200 mg/dL

HbA1C

- **Non-Diabetic** 4-6%
- **Pre-Diabetic** 5.7-6.4%
- **Diabetic** > 6.5%

HbA1C is a better indicator of blood sugar control.... = the average over 3 months [lifespan of an RBC]

BASIC METABOLIC PANEL [BMP]

- **SODIUM [Na]:** 135-145 mEq/L
- **POTASSIUM [K]:** 3.5-5 mEq/L
- **CHLORIDE [Cl]:** 97-107 mEq/L
- **CALCIUM [Ca]:** 8.5-10.5 mEq/L
- **MAGNESIUM[Mg]:** 1.2-2.3 mg/dL
- **PHOSPHORUS [P]:** 2.5-4.5 mg/dL
- **ALBUMIN:** 3.5-5.5 g/dL
- **TOTAL PROTEIN:** 6-8 g/dL

RENAL

- **BUN:** 10-20 mg/dL
- **CREATININE:**
  specific to kidney function
  - ⇨ MALE: 0.6-1.2 mg/dL
  - ⇨ FEMALE: 0.4-1 mg/dL
- **SPECIFIC GRAVITY:**
  1.005-1.03
  ← dilute concentrated →
- **GFR:** 125-200 mL/min

COAGs

- **PT:** 11-13 seconds
  - ⇨ 22-32.5 seconds on Warfarin
- **INR:** 0.8-1.1 seconds
  - ⇨ 2-3 seconds on Warfarin
- **PTT:** 21-35 seconds
  - ⇨ 31.5-87.5 seconds on Heparin

The higher these numbers are, the ↑ risk of bleeding!!

ABGs

- **pH:** 7.35-7.45
  ← acidic basic →
- **PaCO2:** 35-45 mmHg
  ← basic acidic →
- **PaO2:** 80-100 mmHg
- **HCO3:** 22-26 mEq/L
  ← acidic basic →

- ⇨ CO2↑ pH↓ = Respiratory Acidosis
- ⇨ CO2↓ pH↑ = Respiratory Alkalosis
- ⇨ HCO3↓ pH↓ = Metabolic Acidosis
- ⇨ HCO3↑ pH↑ = Metabolic Alkalosis

"ROME" tip for ABGs
Respiratory
Opposite
Metabolic
Equal

SERUM OSMOLALITY

280-300 mOsm/L water

Concentration of particles compared to water

LIVER [LFT]

- **ALT**
  - ⇨ MALE: 10-40
  - ⇨ FEMALE: 8-35
- **AST:** 5-40 U/L
- **ALP:** 40-120 U/L
- **BILIRUBIN:** 0.3-1.0 mg/dL

OTHER

- **MAP:** 70-100 mmHg
- **ICP:** 5-15 mmHg
  [intracranial pressure]
- **BMI:** 18.5-24.9
- **GLASCOW COMA SCALE**
  Best = 15 Mild = 13-15
  Moderate = 9-12 Severe = 3-8

PANCREAS

- **AMYLASE:** 25-125 U/L
  Older Adults: 24-151 U/L
  - ⇨ *Breakdown of starches*
- **LIPASE:** < 140 U/L
  - ⇨ *Breakdown of fats*
- **PANCREATITIS**
  > 200 U/L COMBINED
  - ⇨ *AMYLASE total + LIPASE total*

Values may vary slightly by agency