Mock Clinic Educational Session

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About Project Meducate

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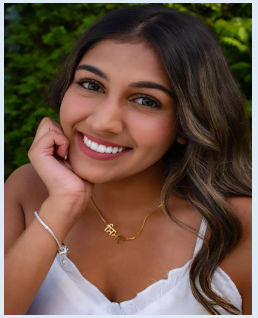

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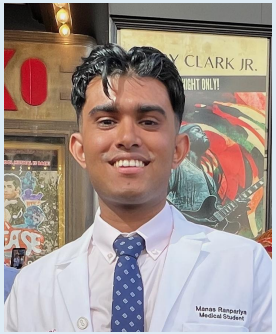

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02

What We Do

What We Do

Clinics

Mentorship Program

Seminars

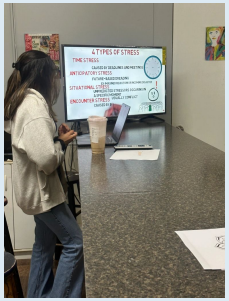
Clinics

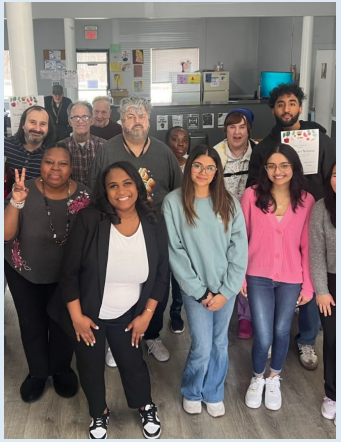
- Occurring since 2019
- Served over 1000 patients
- Services provided:
  - BP
  - Blood Sugar
  - BMI
  - Free Health Resources
  - Consults from volunteer healthcare providers




Seminars

- Seminars offered on diet improvement, hypertension, mental health, exercise, etc.
- Includes audience engaging activities
  - Activity relates to seminar topic (ex: memory games, exercises, coloring activities, trivia, & more!)
- Presentations created by our Student Leader Content Creation Teams





03

Setting Up and Running a Clinic

What a Typical Clinic Looks Like:

How We Set Up & Run Clinic

- In this session, we will cover the key roles and responsibilities at different stations in the clinic.
- We will practice the skills and demonstrate each procedure.

04

Skills and Demos

Blood Pressure

Roles and Responsibilities:

- Check for any pre-existing conditions or medications affecting BP
- Ensure that patient has correct posture and BP cuff is the right size
- Interpret and record results
- Provide information on managing blood pressure

Blood Sugar

What is it?

The amount of glucose in your blood

(Glucose is a sugar that comes from food and provides energy)

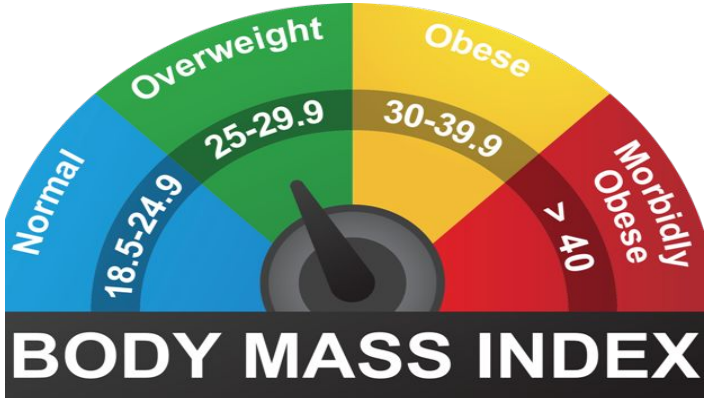
Roles and Responsibilities:

- Check for any pre-existing conditions or medications that may affect blood sugar
- Always ask meal history prior to blood sugar
- Set up lancet and glucometer
- Clean finger for blood sugar reading
- Dispose of lancet and other materials
- Interpret and Record Results

Body-Mass-Index (BMI)

What is it?

BMI is a measure of weight relative to height



Roles and Responsibilities:

- Set up scale
- Record patient's height
- Convert weight and height into BMI value
- Interpret and record results

Auscultation

Roles and Responsibilities:

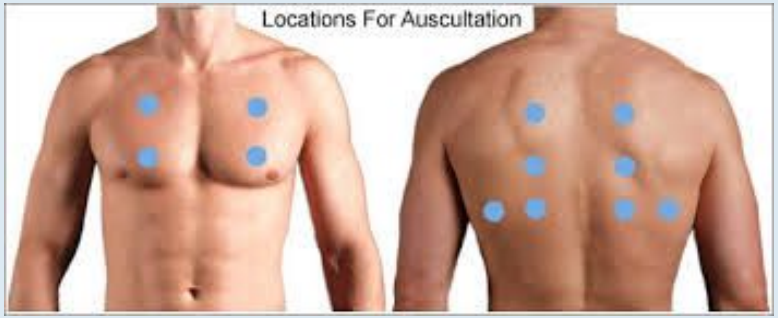
- Place stethoscope (the larger part) on the patient
- Listen for sounds at different locations
- Compare and interpret sounds

What is it?

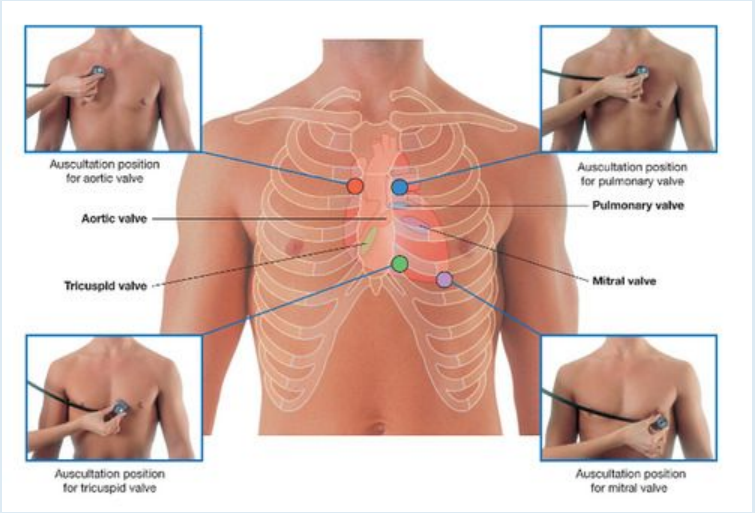
Listening to the sounds of your heart, lungs, and abdomen

Auscultation Points

Lung Auscultation



Heart Auscultation



Pulse Oximetry

What is it?

It measures the level of oxygen in your blood and heart rate.

Roles and Responsibilities:

- Check for any pre-existing conditions (e.g. lung/heart disease) or medications that may affect oxygen levels
- Check for:
  - Dirty finger
  - Cold skin temperature
  - Dark nail polish
- Position pulse ox on patient's finger
- Interpret and record results

Demos

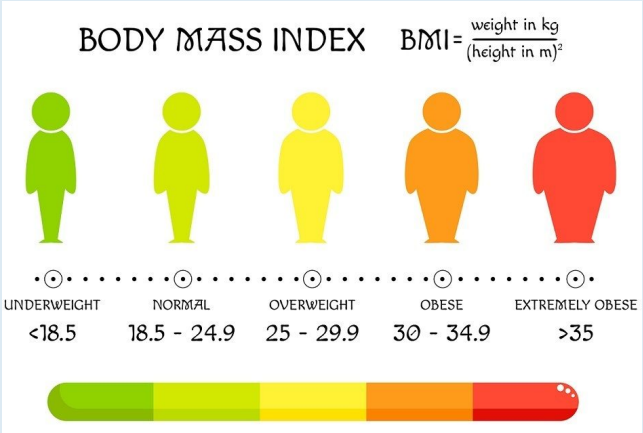
05

Interpreting Results

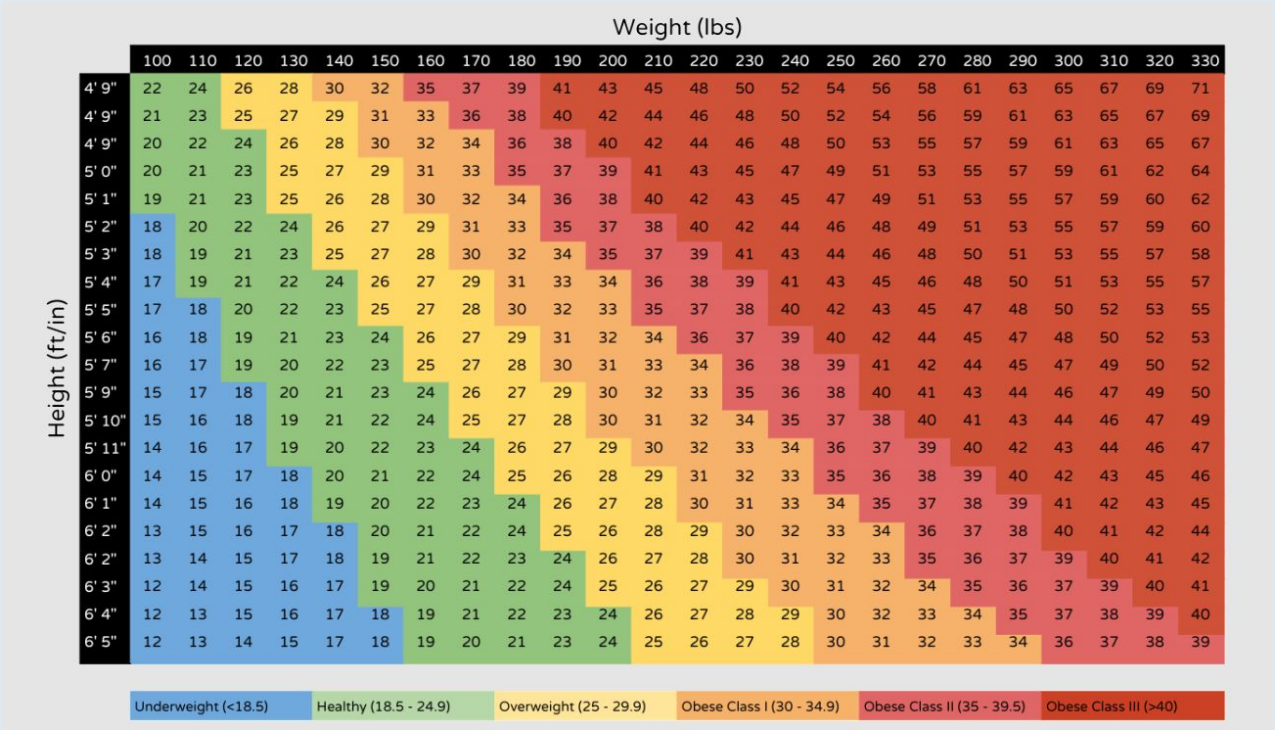
BMI: Body Mass Index

How is it measured?

Dividing **weight in kg by height in meters squared**



BMI Chart



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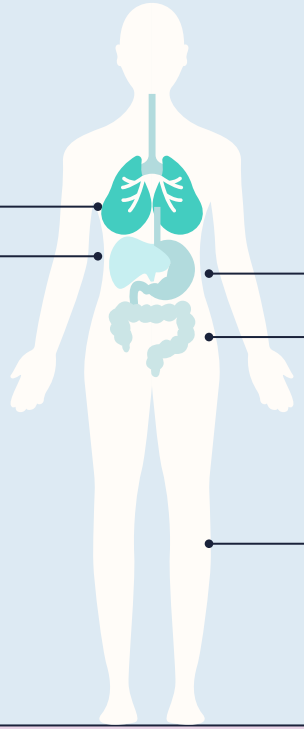
Factors that Can Increase BMI

- Lack of Exercise
- Genetics
- Inadequate Sleep
- Stress
- Unhealthy Eating Habits



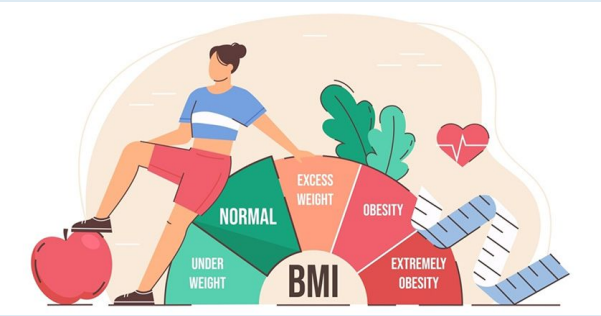
Factors That Can Cause Abnormally Low BMI

- Over exercising
- Malnourishment
- Medical Conditions and/or Medications
- Stress

Effects of High/Low BMI

Effects of Increased BMI

- Increased risk for:
  - Type 2 diabetes
  - Heart disease
  - Breathing problems, etc



Effects of Decreased BMI

- Increased risk for:
  - Osteoporosis (weakened bones)
  - Weakened immune system
  - Decreased muscle strength
  - Anemia (low levels of healthy red blood cells)

Blood Sugar Readings & Interpretations

- How is it measured?
  - **mg/dL (milligrams per deciliter)**

- What do the readings mean?
  - Ranges for patients that haven't eaten for 2+ hours
  - <100 : Normal, Healthy Range
  - 100-125 : At-increased risk of developing diabetes
  - > 126 : At increased risk of heart disease or stroke

Blood Glucose Chart			
Mg/DL	*Fasting*	*After Eating*	*2-3 Hours After Eating*
Normal	80-100	170-200	120-140
Impaired Glucose	101-125	190-230	140-160
Diabetic	126+	220-300	200+

What can affect blood sugar?

Dehydration

Illness

Food

Exercise

Medications

Stress

Blood Pressure

Systolic

Pressure during a heart beat (top number)

Diastolic

Pressure between heart beats (bottom number)

Blood Pressure

Factors that can raise BP (**hypertension**):

- Lifestyle factors - lack of exercise, unhealthy eating, etc
- Other medical conditions, medications, genetics, age

Factors that can lower BP (**hypotension**):

- Dehydration / fluid loss (excessive sweating, vomiting)
- Anemia (low levels of healthy red blood cells)/ nutritional deficiencies that lead to anemia

BLOOD PRESSURE CATEGORY	SYSTOLIC mm Hg (upper number)		DIASTOLIC mm Hg (lower number)
NORMAL	LESS THAN 120	and	LESS THAN 80
ELEVATED	120 – 129	and	LESS THAN 80
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 1	130 – 139	or	80 – 89
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 2	140 OR HIGHER	or	90 OR HIGHER
HYPERTENSIVE CRISIS (consult your doctor immediately)	HIGHER THAN 180	and/or	HIGHER THAN 120

Pulse Oximetry: Pulse

Normal resting heart rate:
60–100 bpm

Age	Men	Women
18-25	62-73 bpm	64-80 bpm
26-35	62-73 bpm	64-81 bpm
36-45	63-75 bpm	65-82 bpm
46-55	64-76 bpm	66-83 bpm
56-65	62-75 bpm	64-82 bpm
Over 65	62-73 bpm	64-81 bpm

Factors that can affect heart rate:

- Health Conditions
- Age
- BMI
- Smoking
- Exercise
- Medications

Pulse Oximetry: Oxygen Levels

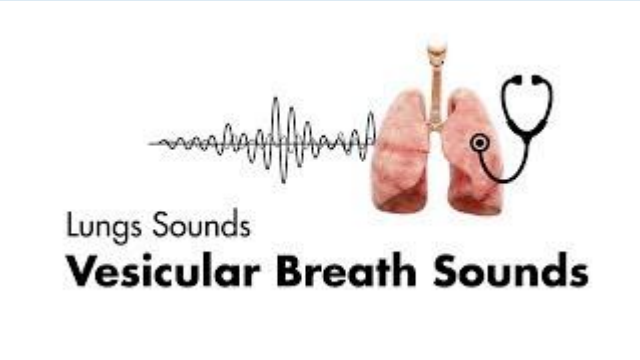
Normal Range

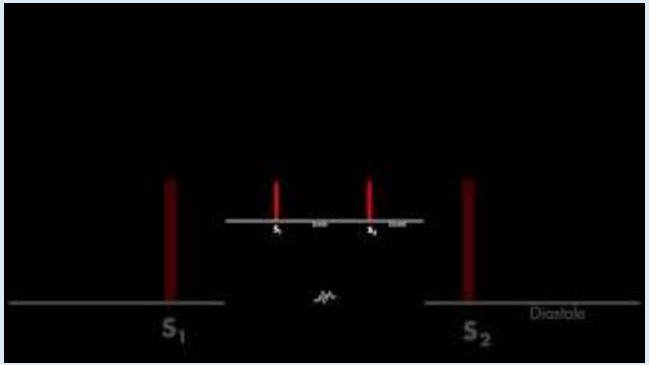
95-100%

Factors that can Affect Oxygen Levels

- Age
- Health Conditions (heart/lung disease)
- Altitude
- Smoking
- Medications that affect breathing

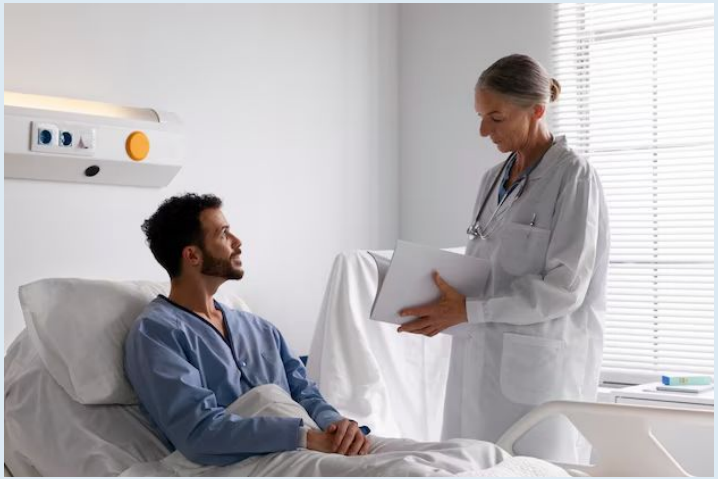
Auscultation: What are you looking for?





“What If” Scenarios

What might you recommend to a 25 year old male, 5’10 and 200 lb?



Weight (lbs)

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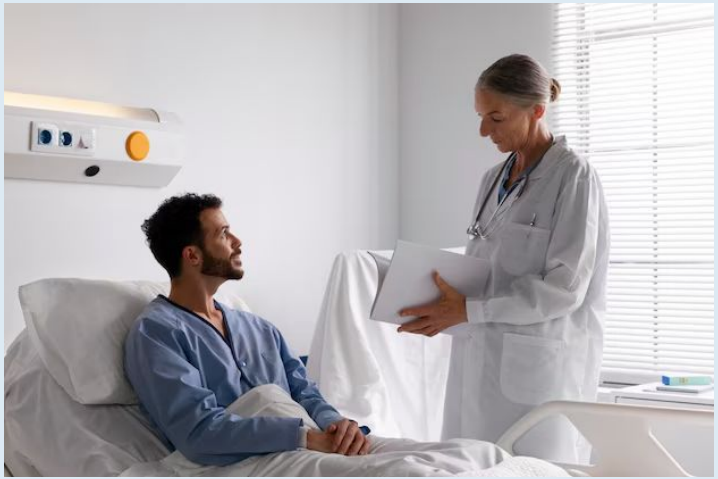
Underweight (<18.5) | Healthy (18.5 - 24.9) | Overweight (25 - 29.9) | Obese Class I (30 - 34.9) | Obese Class II (35 - 39.5) | Obese Class III (>40)

“What If” Scenarios

What might you recommend to a 25 year old male, 5’10 and 200 lb?



BMI of patient: 30

Healthy BMI Range: 18.5-25 kg/m^2;
Healthy weight for height: 128.9 - 174.2 lbs

Recommend: Diet changes, exercise, consult with health professional to address any risk factors specific to the patient based on health and family history

“What If” Scenarios

What might you recommend to a 47 yr old male, 6’1, 220 lb, with a fasting blood sugar of 150?

Blood Glucose Chart			
Mg/DL	Fasting	After Eating	2-3 Hours After Eating
Normal	80-100	170-200	120-140
Impaired Glucose	101-125	190-230	140-160
Diabetic	126+	220-300	200+

“What If” Scenarios

What might you recommend to a 47 yr old male, 6’1, 220 lb, with a fasting blood sugar of 150?

Healthy fasting blood sugar range: 80-100 mg/dL

Recommend: Potential risk for diabetes, should consult with a healthcare professional

“What If” Scenarios

What might you recommend to a 52 y old, female, 5’5, 195 lb, with a BP of 174/100?

BLOOD PRESSURE CATEGORY	SYSTOLIC mm Hg (upper number)		DIASTOLIC mm Hg (lower number)
NORMAL	LESS THAN 120	and	LESS THAN 80
ELEVATED	120 – 129	and	LESS THAN 80
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 1	130 – 139	or	80 – 89
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 2	140 OR HIGHER	or	90 OR HIGHER
HYPERTENSIVE CRISIS (consult your doctor immediately)	HIGHER THAN 180	and/or	HIGHER THAN 120

“What If” Scenarios

What might you recommend to a 52 y old, female, 5’5, 195 lb, with a BP of 174/100?

Normal Systolic BP: <120 mmHg
Normal Diastolic BP: <80 mmHg

Recommend: Patient could be at risk for future heart attack, stroke, or heart disease, should consult a health professional to manage and lower BP

Any questions?

Thanks!

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