



جامعة بغداد – كلية الصيدلة

وحدة التعليم المستمر

ورشة العمل:



Mastering Blood Pressure Measurement: Accurate Readings, Better Health Monitoring



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يوم الاثنين 2025-6-30
الساعة 11:00 صباحاً
قاعة الرازي

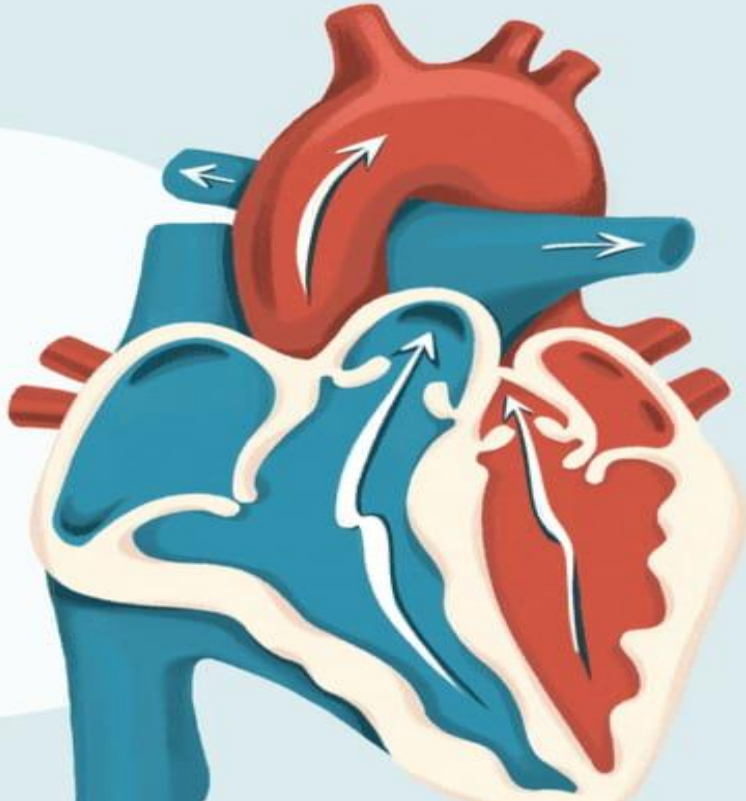
What is Blood Pressure?

• **Definition:** Force of blood against artery walls.

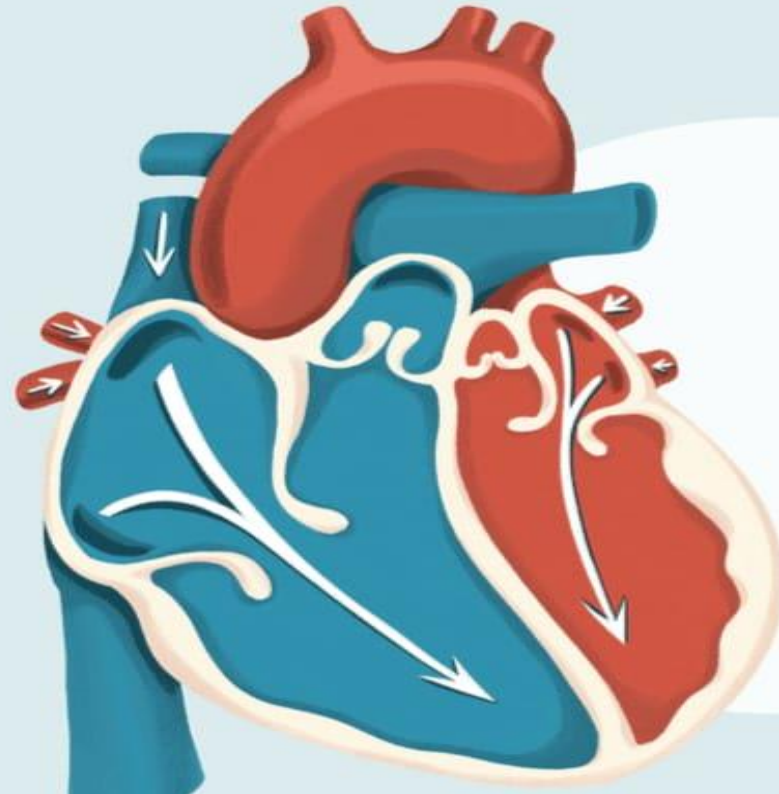
Two Measurements:

- **Systolic (Top Number):** Pressure when the heart beats.
- **Diastolic (Bottom Number):** Pressure when the heart rests.

Systole



Diastole





BLOOD PRESSURE

SYSTOLIC MM HG
(Top Number)

DIASTOLIC MM HG
(Bottom Number)

NORMAL

<120

AND

<80

ELEVATED

120-129

AND

<80

HIGH BLOOD PRESSURE

Stage 1 Hypertension

130-139

OR

80-90

HIGH BLOOD PRESSURE

Stage 2 Hypertension

>140

OR

>90

HYPERTENSIVE CRISIS

Seek Medical Attention

>180

AND/OR

>120

Why Accurate BP Readings Matter



Prevents Misdiagnosis

Up to 20% of clinic readings can be inaccurate, leading to incorrect treatment paths. Precise home readings help avoid this.



Confirms Treatment Efficacy

Regular accurate measurements ensure medications and lifestyle changes are effectively managing your blood pressure.



Proactive Management

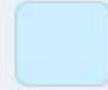
Helps differentiate "white coat hypertension" (20-30% of cases) from true hypertension, guiding appropriate intervention.



Prevents Complications

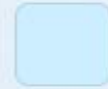
High BP is a leading cause of heart attack, stroke, and kidney disease. Accurate monitoring aids prevention.

Preparation is Key: The 5-Minute Rule



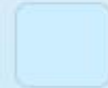
Rest

Sit quietly for 5 minutes before measurement to ensure a stable reading.



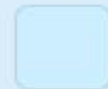
Avoid Stimulants

No caffeine, exercise, or smoking for 30 minutes prior, as these can artificially elevate BP.



Empty Bladder

A full bladder can add 10-15 mmHg to your reading. Empty it beforehand.



No Talking

Talking or interacting during measurement can increase readings by 10-15 mmHg.

Types of blood pressure measuring devices





Electronic digital sphygmomanometer



Manual aneroid sphygmomanometer



Manual mercury sphygmomanometer

Choosing the Right Cuff Size

Too small → False high reading.

Too large → False low reading.

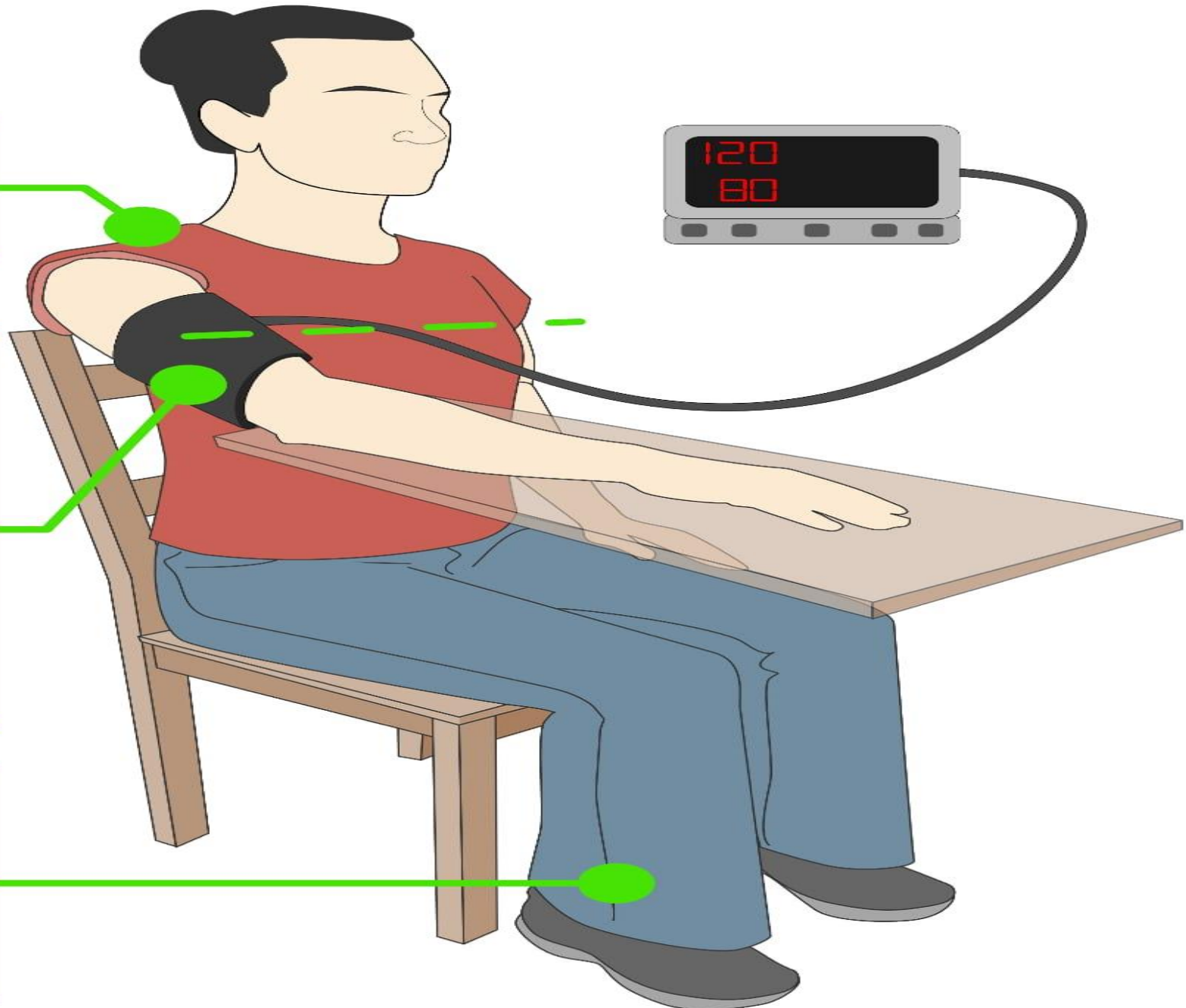


Correct Seating Position

- Sitting position
- Back supported

- Arm bare and supported
- Use a cuff size appropriate for your arm
- Middle of the cuff at heart level
- Lower edge of cuff 3 cm above elbow crease

- Legs uncrossed
- Feet flat on floor
- Do not talk or move before or during the measurement

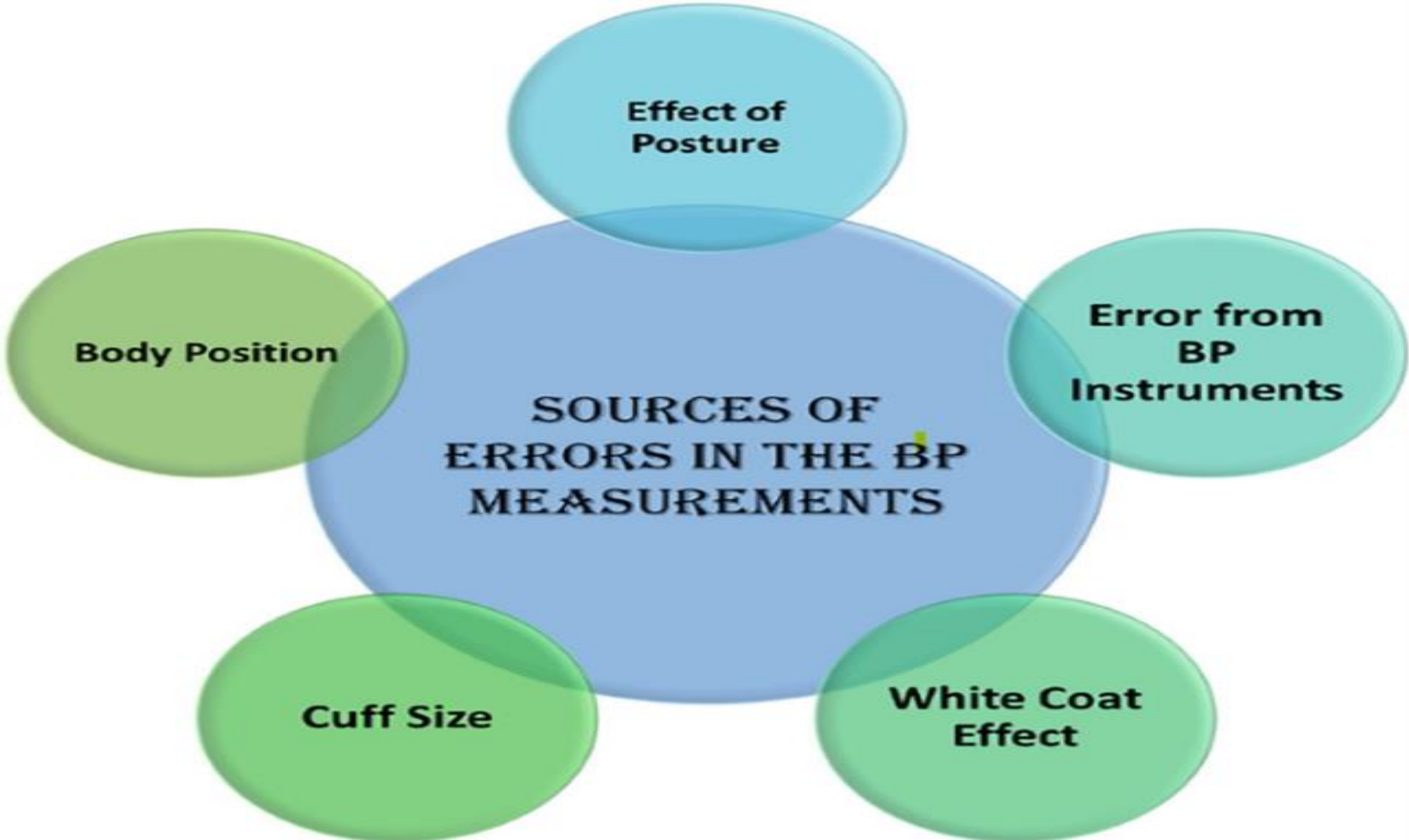


Manual BP Measurement Steps:

1. Inflate cuff to ~180 mmHg.
2. Slowly deflate (~2-3 mmHg per second).
3. Listen for Korotkoff sounds with a stethoscope.

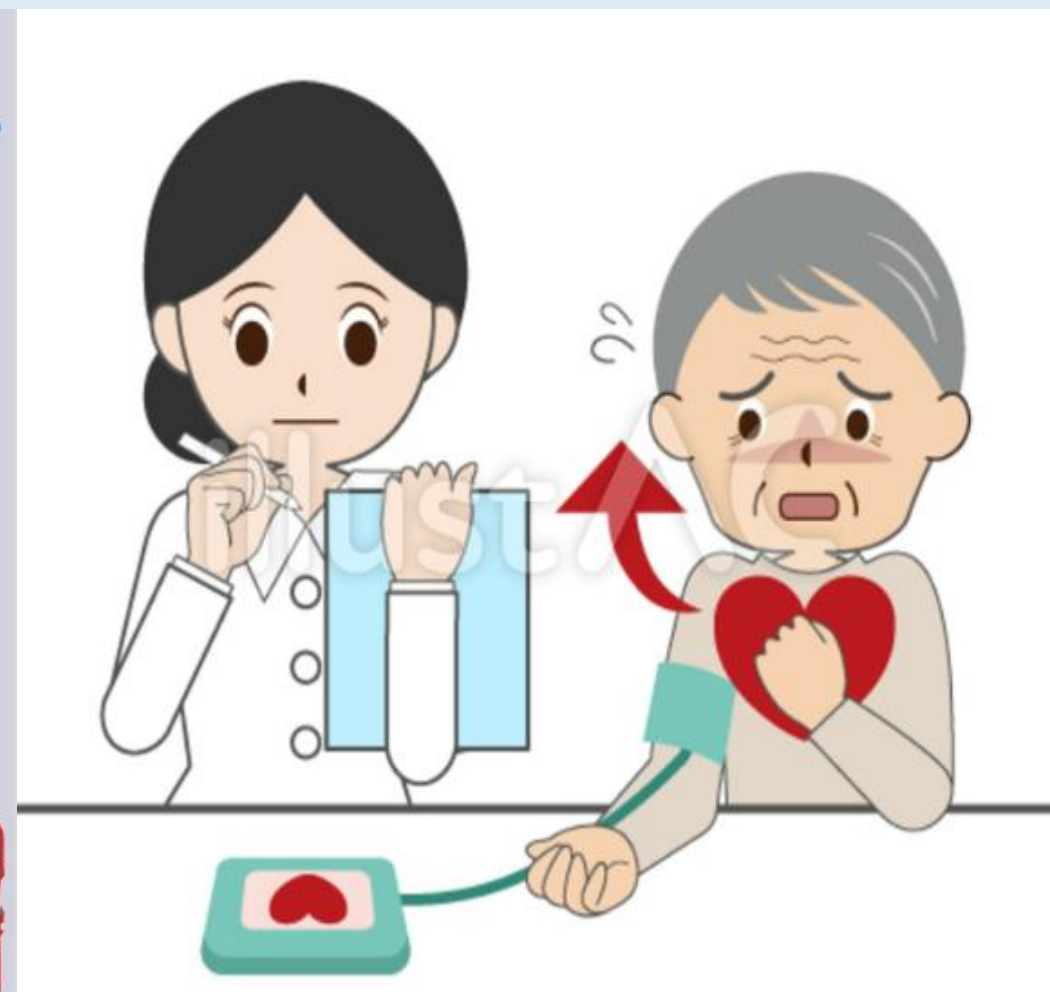
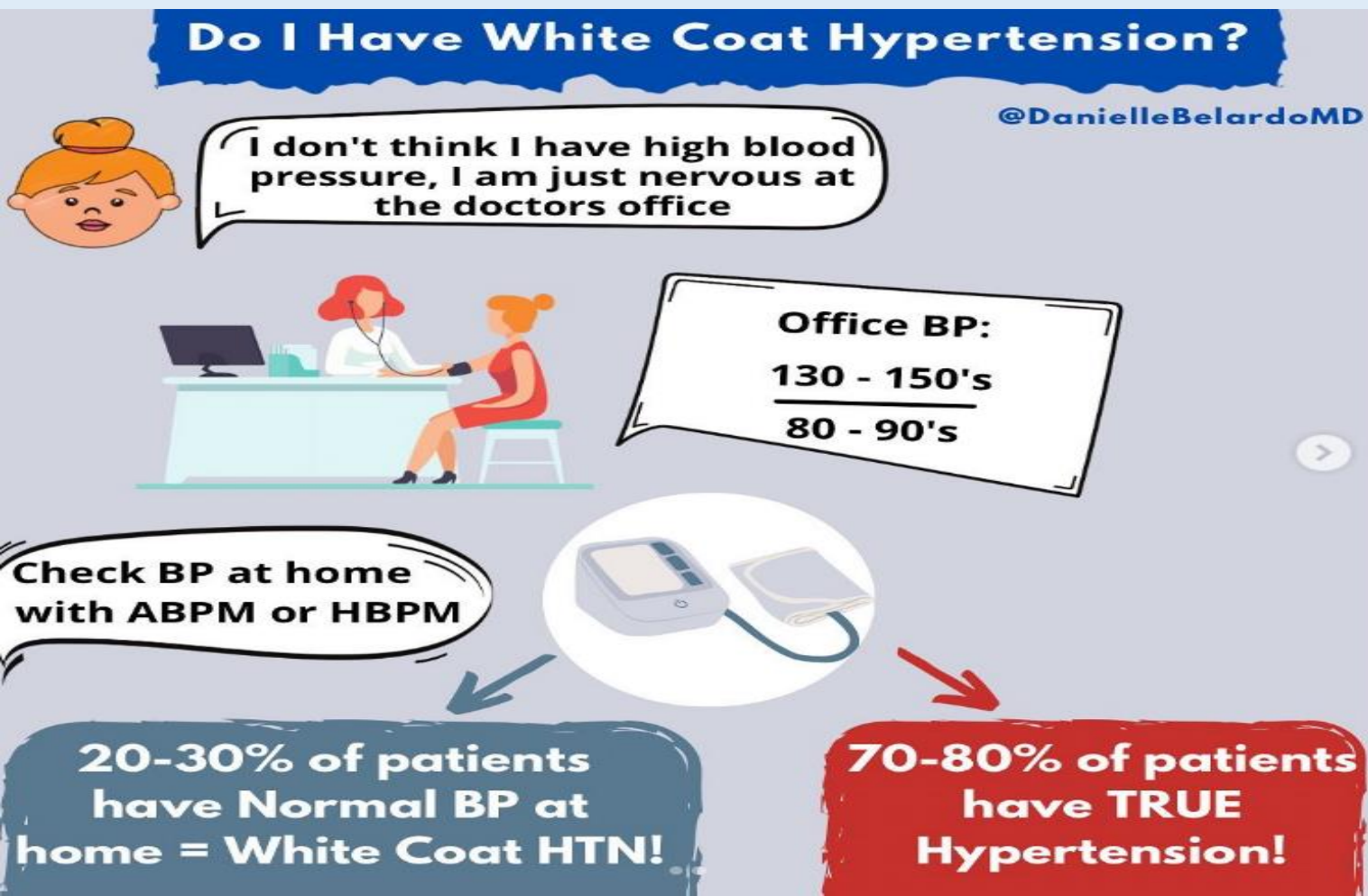
Digital BP Measurement Steps:

1. Press start button.
2. Remain still and silent.
3. Wait for reading.



White Coat Hypertension

- High BP at the doctor's office (due to anxiety).
- Solution: Home monitoring or ambulatory BP.



Masked Hypertension

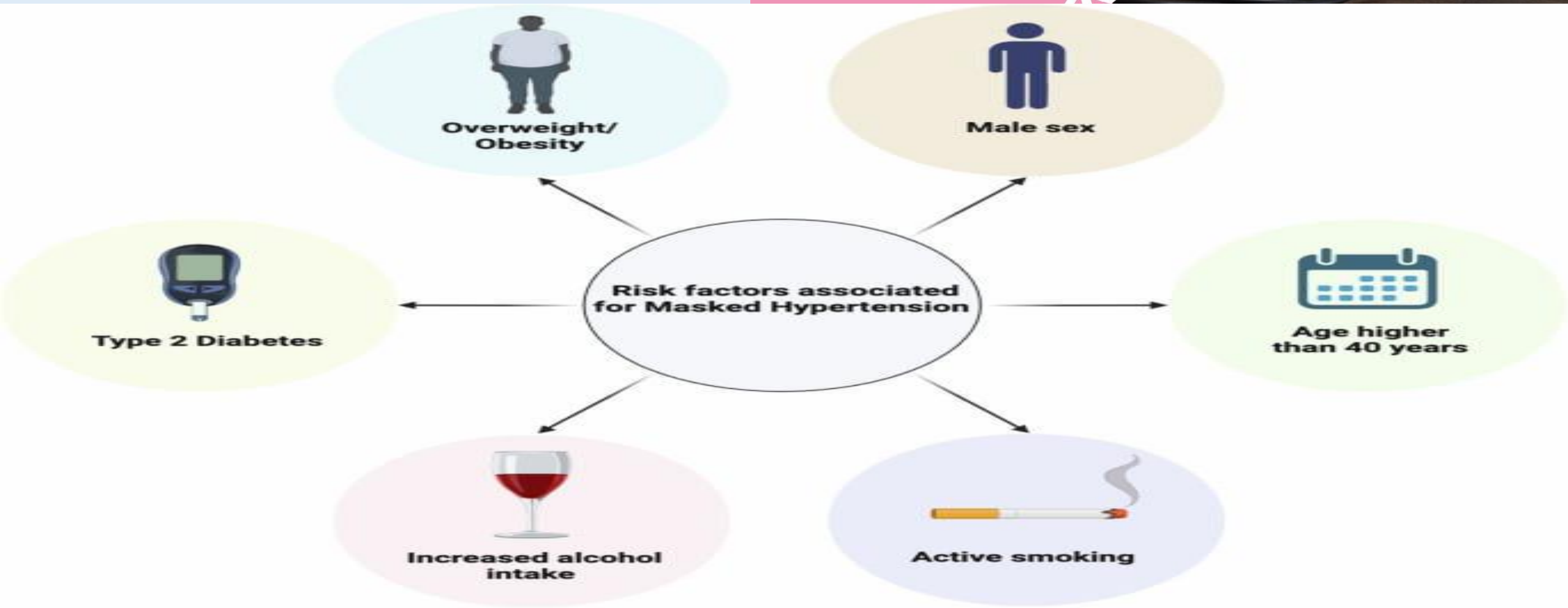
- Normal BP at the clinic but high at home.
- Risk of undetected hypertension.

**MASKED
HYPERTENSION:
YOUR SILENT
HEALTH THREAT**

#HYPERTENSION



 **THEEMTSPOT**



	Office BP high	Office BP normal
Out of office BP high	Sustained hypertension	Masked hypertension
Out of office BP normal	White-coat hypertension	Normal blood pressure

Importance of Multiple Readings

- Take 2-3 readings, 1-2 minutes apart.
- Average the results for accuracy.

Tracking BP Over Time

- Keep a log (date, time, readings).
- Use apps or journals.

BLOOD PRESSURE MONITORING CHART

[illegible]

When to See a Doctor

- Consistently high readings ($\geq 130/80$).
- Dizziness, headaches, vision changes.

HYPERTENSION IS THE SILENT KILLER

Hypertension usually doesn't
have any symptoms

Pledge to:



Monitor your
BP regularly



Follow healthy
lifestyle





LIFESTYLE CHANGES TO TREAT **HYPERTENSION**

Improve your diet and nutrition.

Get more exercise.

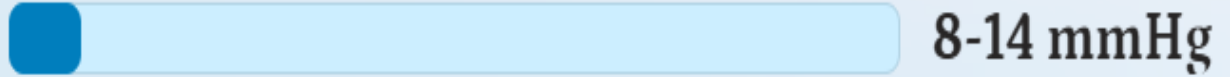
Stop smoking.

Get better sleep.

Manage stress.

Be grateful for the good things.

Beyond the Numbers: Holistic Health Support



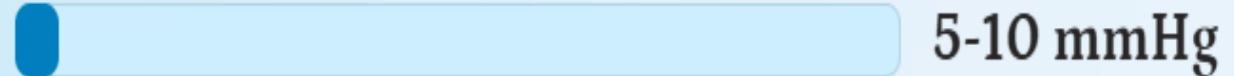
The DASH diet effectively reduces BP by optimizing nutrient intake.



Limiting sodium intake is crucial for maintaining healthy blood pressure levels.



Regular exercise (150 minutes/week) significantly lowers blood pressure.



Stress management techniques like meditation aid in reducing BP.

Alcohol moderation (1 drink/day for women, 2 for men) also contributes to BP control.

Conclusion: Empowering Your Health Journey

Mastering accurate blood pressure measurement is a vital self-care tool that puts you in control of your cardiovascular health. Small changes in your technique can yield significantly more accurate data, providing a clearer picture for informed health decisions.

Self-Care & Data Accuracy

Accurate BP measurement is a vital self-care tool, where small changes in technique yield significant data accuracy.

Informed Decisions & Professional Guidance

Regular monitoring empowers informed health decisions. Always consult your healthcare professional for personalised advice and treatment plans.

Summary of Key Points

- Proper technique = Accurate readings.
 - Monitor regularly for better health.
 - Lifestyle changes help control BP.



THANK YOU

