

FREE PATIENT RESOURCE · ELINMED PREVENTIVE CARDIOLOGY

Understanding Your Blood Pressure Numbers

A Plain-Language Guide from Dr. Nyange, FACC

WHAT THE NUMBERS MEAN

Every blood pressure reading gives you two numbers — for example, 128/82 mmHg. Each has a specific meaning:

Number	Name	What It Measures
Top	Systolic	Pressure in arteries when your heart beats and pumps blood. Rises with age and stress.
Bottom	Diastolic	Pressure between beats, when your heart rests and refills. Elevated levels indicate arterial stiffening.

BLOOD PRESSURE CATEGORIES

The American Heart Association and American College of Cardiology define five categories. Knowing yours determines what action is needed.

Category	Systolic		Diastolic	Action
Normal	< 120	AND	< 80	Maintain healthy habits
Elevated	120–129	AND	< 80	Lifestyle changes now
Stage 1 Hypertension	130–139	OR	80–89	Lifestyle + consider medication
Stage 2 Hypertension	≥ 140	OR	≥ 90	Medication required
Hypertensive Crisis	> 180	AND/ OR	> 120	Seek care immediately

■ Seek Emergency Care Immediately If Your BP Is:

- Systolic > 180 AND/OR diastolic > 120 (hypertensive crisis)
- Accompanied by: severe headache, chest pain, shortness of breath, vision changes, or confusion
- Do NOT wait — call 911 or go to the nearest emergency room immediately

WHY HYPERTENSION IS 'THE SILENT KILLER'

Most people with high blood pressure have no symptoms — you cannot feel your blood pressure. This is why routine monitoring is essential. Sustained high blood pressure damages:

- Blood vessels — causing stiffening, narrowing, and accelerated atherosclerosis
- The heart — forcing it to work harder, leading to enlargement and heart failure
- The kidneys — damaging the filtering units, causing chronic kidney disease
- The brain — dramatically increasing stroke risk
- The eyes — damaging the delicate retinal blood vessels (hypertensive retinopathy)

HOME BLOOD PRESSURE MONITORING

A single office reading is a snapshot. Home monitoring gives your cardiologist the full picture. Dr. Nyange recommends the following protocol:

Step	Instruction
1. Rest first	Sit quietly for 5 minutes. Empty your bladder.
2. Proper position	Back supported, feet flat on floor, arm at heart level on a flat surface.
3. Cuff placement	Wrap snugly around bare upper arm, 1 inch above elbow crease.
4. Stay still	Do not talk or move during the measurement.
5. Two readings	Wait 1–2 minutes between readings. Record both.
6. Twice daily	Morning (before medications) and evening for 7 consecutive days.
7. Record everything	Date, time, both readings, which arm, and any notes.

LIFESTYLE STRATEGIES THAT LOWER BLOOD PRESSURE

Intervention	Estimated BP Reduction	Key Details
--------------	------------------------	-------------

DASH Diet	8–14 mmHg	High in fruits, vegetables, low-fat dairy; low in saturated fat and sodium
Sodium Reduction	2–8 mmHg	Target <1,500 mg/day; most impact in salt-sensitive individuals
Weight Loss	1 mmHg per kg	Even modest weight loss produces meaningful BP benefit
Aerobic Exercise	4–9 mmHg	150 min/week moderate intensity; consistent practice is key
Limit Alcohol	2–4 mmHg	No more than 1 drink/day for women, 2 for men
Stress Management	2–6 mmHg	Sustained relaxation practice, breathing techniques, mindfulness

A Note from Dr. Nyange

- Hypertension is one of the most modifiable cardiovascular risk factors. With consistent home monitoring, lifestyle changes, and the right medication when needed — most patients achieve excellent control.
- If you are newly diagnosed or have been managing hypertension for years, I encourage you to track your readings consistently and partner closely with your cardiologist.