

HYPERTENSION

Basics That Everyone Should Know



- Quiet room, comfortable temperature
- No smoking, coffee, exercise for 30 min
- Empty bladder
- Relax for 3–5 min
- Take 3 measurements at 1 min intervals
- Use the average of the last 2 measurements

Back supported

No talking during and between measurements

Cuff to fit arm size (small, usual, large)¹

Arm bare and resting. Mid-arm at heart level

Validated electronic upper-arm cuff² or manual auscultatory

Feet flat on floor

¹ For manual auscultatory devices the inflatable bladder of the cuff must cover 75–100 % of the individual's arm circumference. For electronic devices use cuffs according to device instructions.

² See validated electronic devices lists at www.stridebp.org

KNOW YOUR NUMBERS

BLOOD PRESSURE is the force of your blood moving against the walls of your arteries. It's expressed as **TWO NUMBERS**:

Top Number:

SYSTOLIC (mm Hg)

The pressure or force in the arteries when the heart beats

Bottom Number:

DIASTOLIC (mm Hg)

The pressure measured between heartbeats

WARNING!

Over time elevated or high blood pressure weakens your heart, blood vessels and kidneys, and makes a stroke or heart attack much more likely

LIFESTYLE CHANGES that Lower Blood Pressure



Move More

Get regular physical activity



Focus on Nutrition

Follow the DASH diet and eat potassium-rich vegetables



Cut Salt

Aim for 1,500 mg of sodium or less per day



Limit Alcohol

For men, not more than 2 drinks per day; for women, 1



Lose Weight

Losing just a few pounds can make a big difference



Don't Smoke

If you smoke, stop



De-stress

Meditation and rest help lower blood pressure

NORMAL

below
120

below
80

ELEVATED

120
to
129

below
80

HIGH

STAGE 1

130
to
139

80
to
89

STAGE 2

140
and above

90
and above

Also called *Hypertension*



Systolic BP

Diastolic BP

Pulse Rate

Things to know

Commonly used medicines for hypertension (HTN) are rigorously tested, proven to be safe and effective with very rare side effects. Risk of organ damage with uncontrolled BP is much higher than extremely small chance of medicine side effects.

Few HTN medicines protect the heart and kidneys. Such medicines are often used in patients with heart or kidney disease even without high blood pressure.

HTN is a lifelong disease. It can only be controlled, not cured.

Pain control medicines like Ibuprofen, Diclofenac etc. can lead to rise in BP and should be avoided as much as possible.







Self-monitored Blood Pressure at home (refer to picture on front page)

- Check BP 2-3 times a week or as directed by a physician.
- Maintain a logbook with date and time.
- Avoid checking BP when: hungry, had a big meal, just took a long shower, angry/distressed, need to go to the bathroom.
- Use high quality alkaline batteries.
- Wait for minimum 30 minutes after: a major meal, moderate to high intensity physical activity, coffee/tea, smoking.
- Use an upper-arm device. Wrist-based devices are not validated.
- BP is expected to fluctuate depending on the time of the day, level of mental engagement, and hormonal changes.

Patients with HTN should get periodic check up with their doctors.

Most of the medical assessment is directed towards 3 things:

- Assess for any organ dysfunction related to HTN
- Assess for any side effects of medications
- Identify and institute strategies to prevent future organ damage

LIFESTYLE CHANGE	RECOMMENDATION	LOWERS SYSTOLIC BLOOD PRESSURE (TOP NUMBER)
 Lose weight	- Maintain a normal body weight - For those who are overweight, aim to lose at least 1 kg	2-5 mmHg; expect to lower systolic blood pressure 1 mmHg per kg lost
 Follow DASH diet	Eat lots of fruits, vegetables, low-fat dairy	3-11 mmHg
 Reduce salt	Aim for less than 1,500 mg per day	2-6 mmHg
 Boost potassium	Aim for 3,500 mg-5,000 mg per day	2-5 mmHg
 Be more active	90-150 minutes of aerobic exercise per week	2-8 mmHg
 Limit alcohol	For men, less than 2 drinks daily; for women, less than 1	3-4 mmHg

To get a list of validated BP machines, scan this QR code using your phone camera →



For public use, by:
Dr. Anoop Agrawal
 Interventional Cardiologist
 Cardiology clinic, 3rd Floor, B-wing
 KIMS Hospital, Secunderabad
 WhatsApp for queries: +91-6281487406
 Email: anoopaiims@gmail.com