



Improving Cardiovascular Health through Implementation of a Dietary Approaches to Stop Hypertension (DASH)-diet-based Multi-component Intervention with Senior Services Programs

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High Blood Pressure

Who, What, Where, When and How to Control!

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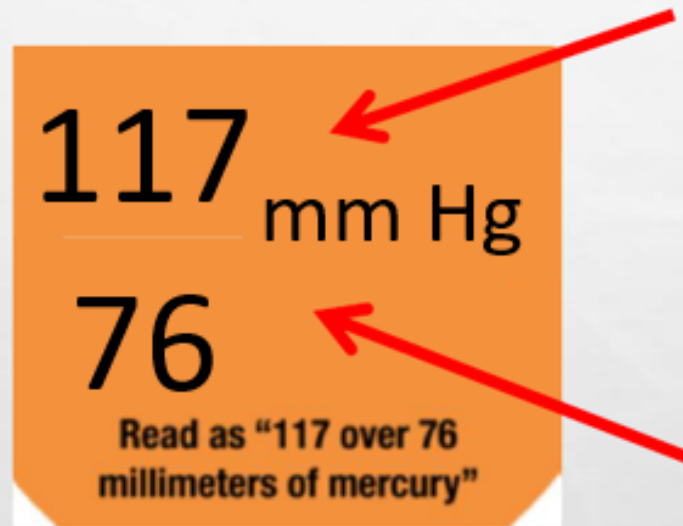
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Outline...

- What is Blood Pressure (BP) and High Blood Pressure?
- What are the Risks of Having Uncontrolled BP?
- When and How Should it Be Checked?
- How to Take Control of Your BP!

What is Blood Pressure?



Systolic blood pressure: how much pressure your blood is pushing against your artery walls when the heart beats

Diastolic blood pressure: how much pressure your blood is pushing against artery walls when the heart rests in between beats

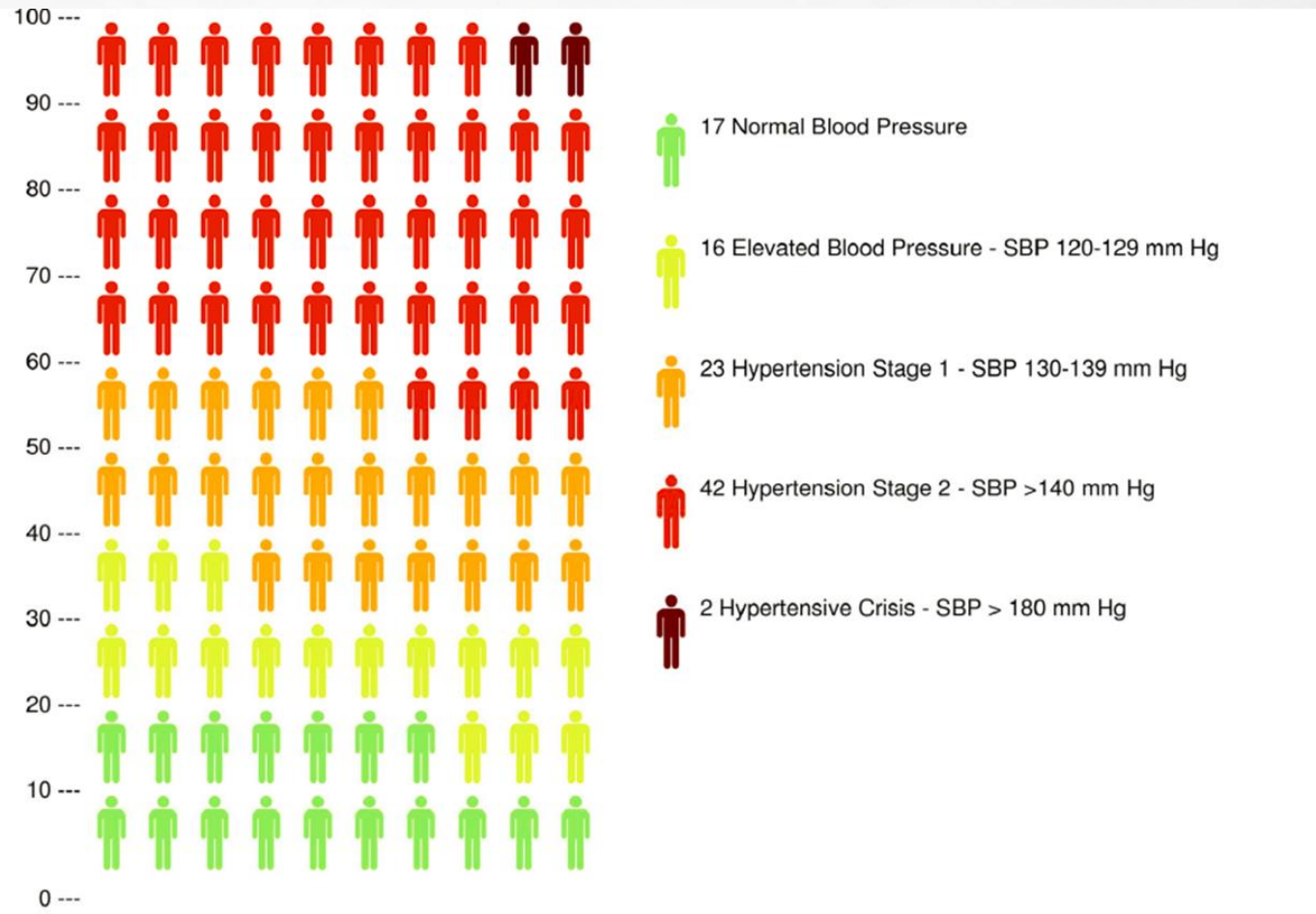
What is Normal Blood Pressure?

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
<u>HYPERTENSIVE CRISIS</u> (consult your doctor immediately)	HIGHER THAN 180	and/or	HIGHER THAN 120

What is High Blood Pressure?

- Systolic blood pressure represents the pressure while the heart is beating
 - Normal Systolic Pressure is **120 mm Hg or below**
- Diastolic pressure represents the pressure when the heart is resting between beats
 - Normal diastolic pressure is **80mm Hg or below**
- Blood pressure that stays persistently above the level is considered high and the person is said to have **high blood pressure** or **hypertension**.

Blood Pressure in CBN Pilot Population (n = 217)



Risk Factors

- Overweight
- Eat too much salt
- Regularly consume large quantities of alcohol
- Do not have enough exercise
- Constantly under stress
- Family history of high blood pressure
- Certain medical problems such as kidney disease

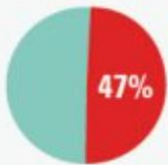
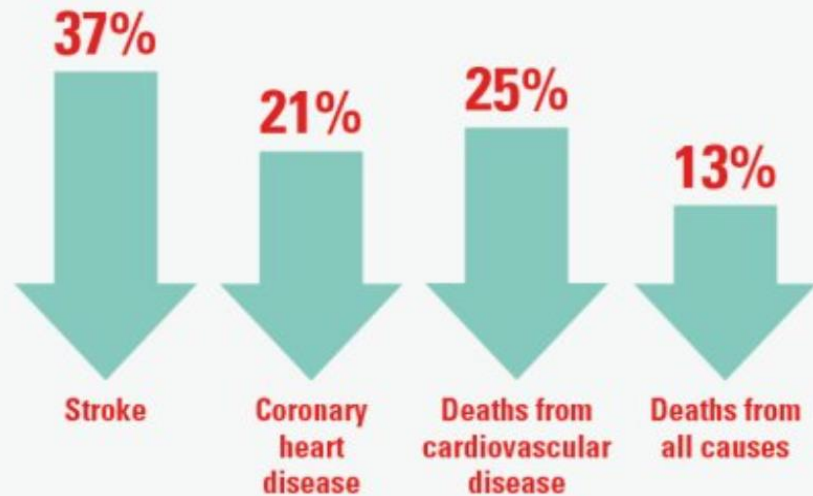
What are the symptoms of Hypertension (HTN) ?

High blood pressure has no warning signs or symptoms, and many people do not know they have it. The only way to know if you have it is to measure your blood pressure. Then you can take steps to control it if it is too high.



◀ BLOOD PRESSURE CONTROL ▶

Reducing average population systolic blood pressure by **only 12–13 mmHg** could reduce:



ONLY ABOUT HALF

of people with high blood pressure have their condition under control



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Taking Control of Your BP

- Know your BP numbers; check BP at home
- Stop smoking
- Taking your medications
- Healthy diet
- Physical activity
- Maintain a healthy weight
- Reduce stress

Taking Control of Your BP: Know Your Medications

The “ABCD” of common blood pressure medications

- **ACE Inhibitors:** block enzyme that tightens blood vessels
 - E.G.: Quinapril (accupril), enalapril (vasotec)
- **ARBs:** block receptor that tightens blood vessel
 - E.G.: Cozaar (losartan), diovan (valsartan)
- **Beta blockers:** decrease heart rate and help blood vessels relax
 - E.G.: Atenolol (tenormin), metoprolol (lopressor, toprol – XL)
- **Calcium channel blockers:** relax blood vessels
 - E.G.: Amlodipine (norvasc), verapamil (calan, verelan)
- **Diuretics** (water pill): removes extra water in the body
 - E.G.: Hydrochlorothiazide (microzide), furosemide (lasix)

Taking Control of Your BP: Taking Medications

Did you know....

- People don't take their medications as prescribed about **50%** of the time
- Taking blood pressure medications can be a lifelong commitment for many people
- About **25%** of new prescriptions are never filled at the pharmacy
- Many people require more than one different prescription medication to control their blood pressure
- Most blood pressure medications are available as a generic prescriptions which can help keep costs lower
- Most individuals who decide not to take a medicine do not tell their doctor

Taking Control of Your BP: Taking Medications

Consequences of not taking medications...

- Doctors will prescribe more medications to treat high BP
- Symptoms of high BP: headaches, visual changes
- Risk of emergency department visits (costly, time-consuming)

CONSEQUENCES

of High Blood Pressure



High blood pressure is often the first domino in a chain or “**domino effect**” leading to devastating consequences, like:



STROKE

HBP can cause blood vessels in the brain to burst or clog more easily.



VISION LOSS

HBP can strain the vessels in the eyes.



HEART FAILURE

HBP can cause the heart to enlarge and fail to supply blood to the body.



HEART ATTACK

HBP damages arteries that can become blocked.



SEXUAL DYSFUNCTION

This can be erectile dysfunction in men or lower libido in women.



KIDNEY DISEASE/ FAILURE

HBP can damage the arteries around the kidneys and interfere with their ability to effectively filter blood.



A simple **blood pressure check** is the first step to preventing the “domino effect.”

Learn more at heart.org/hbp.

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Tips for Taking Medications As Prescribed

- Know your medications (keep list in wallet)
- Same time everyday (i.e., brushing teeth in AM/PM, walking the dog)
- Keep medications in the same place (i.e., sink, drawer next to microwave)
- Pill box/medi-set
- Choose a pharmacy that delivers
- Reminders
 - Daily telephone alarm
 - Apps on the phone (i.e., “ Smart” pill caps that sync to phone)



Tips for Taking Medications As Prescribed

If you are having trouble with medications → TELL your doctor

- Trouble swallowing/injecting
- Too costly
- Can't remember three times a day
- Side effects



Taking Control of Your BP: Healthy Eating

- Eat at home (rather than at a restaurant)
- Regular meals with a routine eating pattern (don't skip meals!)
- Plan meals for the week
 - Grocery-shop efficiently
 - Decreases eating out
 - Saves money and time
- DASH diet
- Low salt diet

Taking Control of Your BP: Lower Salt Intake

Think Fresh: Decrease prepared/"ready to eat" foods

Fill up on veggies/fruits:

Eat at least 1 fresh or frozen veggie/fruit with each meal

Choose unsalted nuts to snack on

Adjust your taste buds

slowly: Cut back on salt little by little

Skip the salt

- Remove salt from kitchen counter and dinner table
- Use spices instead (garlic, herbs, vinegar, pepper)



Read the label

- Look for "low-sodium" or "reduced sodium"
- Pay attention to condiments (soy sauce and ketchup)

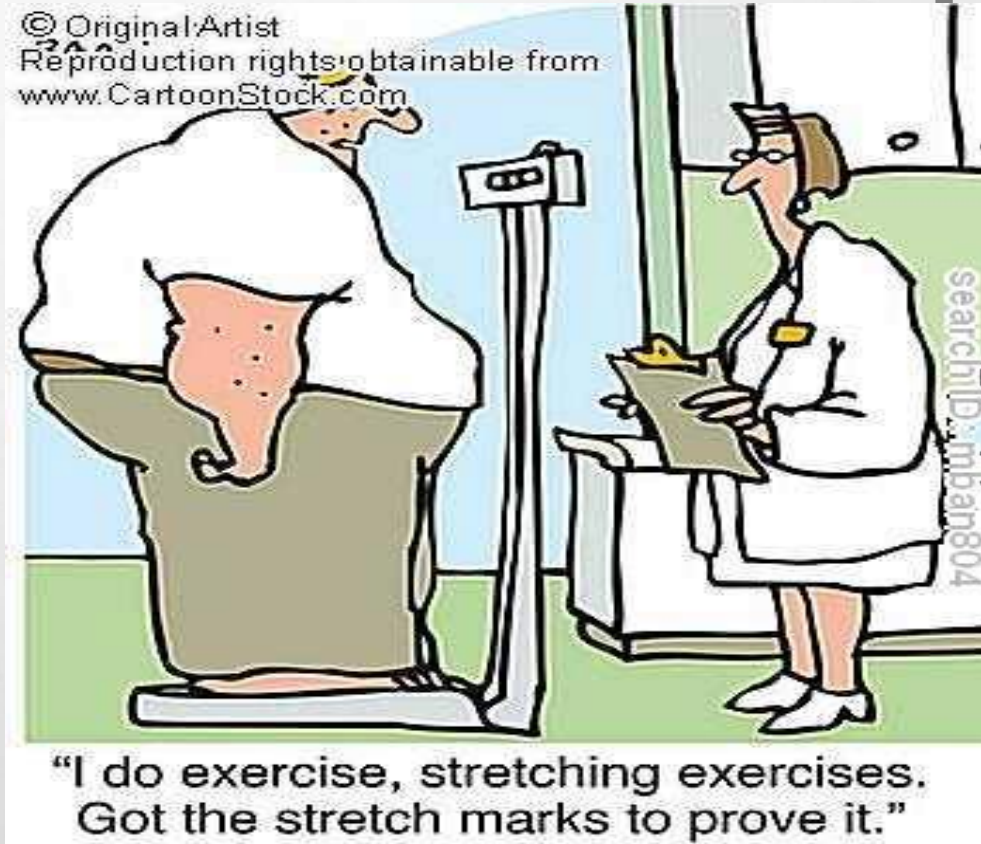
Ask for low-sodium foods when you eat out: Ask for sauces and salad dressings on the side

Increase your potassium intake

- Potatoes, beans, bananas, avocados
- Orange juice, milk, halibut

Take Control of Your BP: Choose an Active Lifestyle

- Walking (working up a mild sweat) for 30 minutes
- Gardening for 30 minutes
- Pushing oneself in a wheelchair for 30 minutes
- Raking leaves for 30 minutes
- Washing windows/floors for 45 minutes
- Stair-walking for 15 minutes
- Playing with children



Take Control of Your BP: Engage with Your Health Care Team

- Jot questions down and bring to your **doctor's appointment visit**
- Bring all medications (including over the counter ones) to clinic visits
- If you are having a difficult time taking medications, **ASK** for help
- If you are having side effects of a medication, **TELL** someone

Steps that Carter Burden Network, Rockefeller University, and Clinical Directors Network are Taking

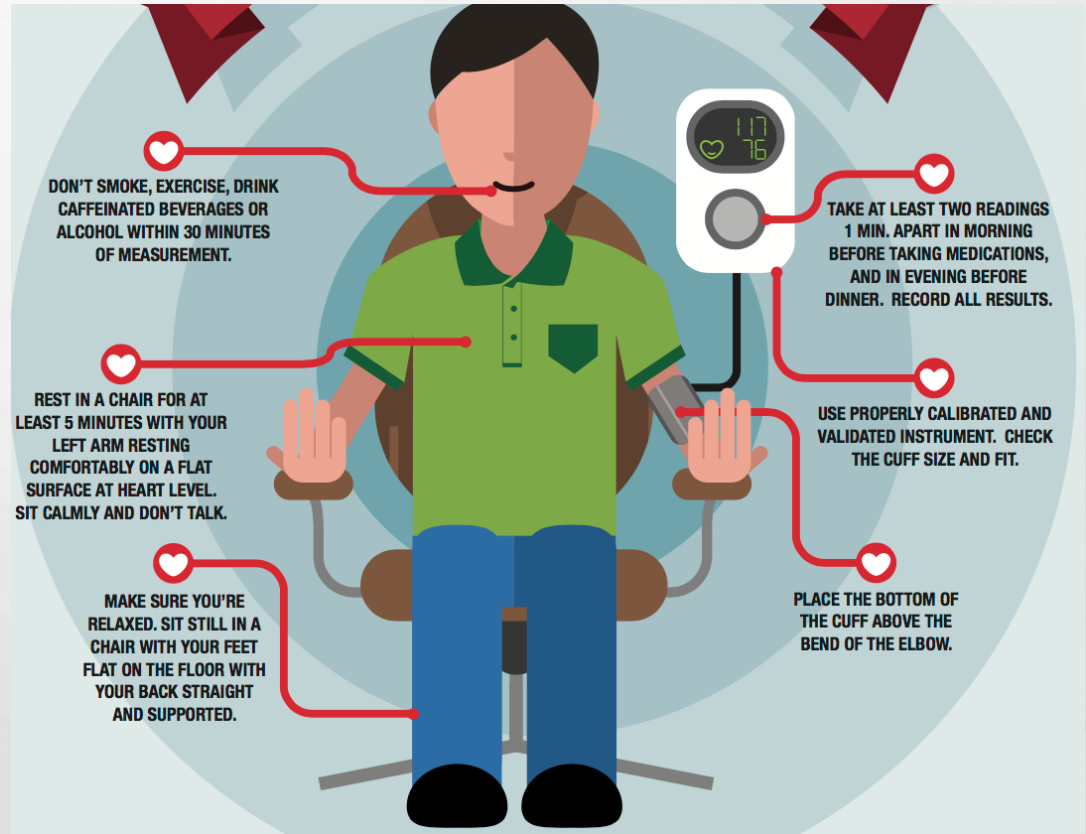
1. Providing DASH diet meals at Covello & Luncheon Club Senior Program
2. At-Home Blood Pressure Monitoring – we will provide monitors (Omron 10) and show you how to use them to keep track of your blood pressure
3. Pill boxes to help you remember to take your medicine
4. Health Education

How to Get Started with Blood Pressure Monitor?

1. Plug the AC adapter or insert 4 AA batteries into bottom of unit
2. Plug arm cuff into the main unit.
3. Place cuff directly on bare skin of upper left arm, with the bottom of the cuff edge $\frac{1}{2}$ inch above the elbow.
4. Align cuff so the air tube is centered on the inside of your arm. Wrap cuff snugly
5. To turn the unit on and take the measurement, press START / STOP button once. The cuff will inflate automatically.
 1. Hold still until cuff deflates and results are displayed.

Proper Technique for Blood Pressure Measurement:

- Use an upper arm monitor
- Use correct cuff size
- Be still
- Sit correctly
- Check at the same time and record results
- The monitor will take 3 measurements to increase accuracy



Our Question:

How else can we help you to control your blood pressure?

What Happens Next?

Each Healthy Eating: Healthy Heart participant will receive a free blood pressure monitor, as well as training on how to use the device. During training you will...

1. Learn how to use the device and keep it charged
2. Be reminded to take your bp measurement **twice a day**
3. Receive a card for recording your BP measurements
4. Learn how to share the data with your doctor
5. Be reminded when you should bring your device in to have your data downloaded

Questions?



Acknowledgements

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THANK YOU!