

HIGH BLOOD PRESSURE/HYPERTENSION AND HEALTHY EATING HABITS

- ▶ Blood pressure – force of blood pushing against blood vessel walls
- ▶ Heart pumps blood into the arteries (blood vessels) which carry blood
- ▶ High blood pressure (hypertension) – pressure in arteries is consistently above normal
- ▶ Systolic blood pressure (SBP) (the first or top number) states how much pressure blood is exerting against artery walls when the heart beats
- ▶ Diastolic blood pressure (DBP) (the second number) represents how much pressure blood is exerting against artery walls while the heart rests between beats.
- ▶ Either elevated SBP or DBP can be used to make a diagnosis
- ▶ Known as the “silent killer” most times no obvious symptoms
- ▶ Many people are unaware they have the disease
- ▶ Develops slowly over time
- ▶ Many causes
- ▶ No cure
- ▶ Can be managed effectively (American Heart Association AHA)

KEY FACTS

- ▶ 103 million American adults
- ▶ Nearly half of all adults
- ▶ Death rate increased by nearly 11 percent between 2005 and 2015
- ▶ Actual number of deaths rose to almost 38 per cent
- ▶ Most common cause of cardiovascular disease-related deaths
- ▶ Cardiovascular diseases remain the leading cause of death worldwide
- ▶ About 1.13 billion worldwide with two-thirds living in low- and middle-income countries
- ▶ Global target to reduce the prevalence by 25% between 2010 and 2025
- ▶ Higher in men 34.6% than women 30.8%
- ▶ More prevalent in females after age 60
- ▶ Higher prevalence in black than white
- ▶ Estimated cost of treating HBP annually 3.4 billion

RISK FACTORS

- ▶ Age – increases with age as blood vessels naturally thicken and stiffen
- ▶ Family history and genetics – sensitivity to salt run in families. Research states certain DNA changes in an unborn baby to adult life
- ▶ Lifestyle habits - unhealthy eating habits too much salt and little potassium
- ▶ Drinking too much alcohol or caffeine
- ▶ Physical inactivity
- ▶ Smoking or using illegal drugs, “bath salts” and methamphetamine
- ▶ Inadequate good quality sleep
- ▶ Medicines – some prescription and over the counter medication decongestants, antidepressant, birth control pills, non-steroidal anti-inflammatory (NSAIDs) like aspirin or ibuprofen
- ▶ Medical conditions (thyroid disorders, metabolic syndrome) that change the way your body controls fluids, sodium and hormones.
- ▶ Race or ethnicity - –blacks more than white
- ▶ Sex - men are more likely throughout middle age, but in older adults women are more likely to develop high blood pressure
- ▶ Social and economic factors – income, education, where you live, job. Working early or night shift. Experience of discrimination (AHA)

SCREENING

- ▶ Everyone ages 3 or older should have checks at least once a year by a health care provider
- ▶ Annual healthcare screening for blood pressure if reading 120/80 mm or less
- ▶ If blood pressure higher than 120/80 mm more frequent checks by health care provider
- ▶ Before blood pressure checks – do not smoke, exercise, drink caffeinated beverage or alcohol within 30 minutes of check. Empty your bladder.
- ▶ Rest in a chair for at least 5 minutes with your arms resting comfortably on a flat surface at heart level. Sit calmly and do not talk
- ▶ Make sure you are relaxed sit still in a chair with feet flat on floor with your back straight and supported

- ▶ Weight – as your body weight increases so does your risk. Reduce your weight (AHA)

SYMPTOMS

- ▶ Typically, none. May take years before symptoms are noted and may be attributed to other problems
- ▶ Severe hypertension may include:
 - ▶ Headaches
 - ▶ Shortness of breath
 - ▶ Nose bleeds
 - ▶ Flushing (body may be flushed)
 - ▶ Dizziness
 - ▶ Chest pain
 - ▶ Visual changes
 - ▶ Blood in urine (AHA)

CATEGORY/DIAGNOSIS

- ▶ Normal blood pressure. Blood pressure is normal if it's below 120/80 mm Hg.
- ▶ Elevated blood pressure. Elevated blood pressure is a systolic pressure ranging from 120 to 129 mm Hg and a diastolic pressure below (not above) 80 mm Hg. Elevated blood pressure tends to get worse over time unless steps are taken to control blood pressure. Elevated blood pressure may also be called prehypertension.
- ▶ Stage 1 Hypertension is a systolic pressure ranging from 130 to 139 mm Hg or a diastolic pressure ranging from 80 to 89 mm Hg.
- ▶ Stage 2 Hypertension. More-severe hypertension, stage 2 hypertension is a systolic pressure of 140 mm Hg or higher or a diastolic pressure of 90 mm Hg or higher.

Hypertensive crisis. A blood pressure measurement higher than 180/120 mm Hg is an emergency situation that requires urgent medical care (heathinaging.org)

TREATMENT

- ▶ Education – knowledge is power
- ▶ Lifestyle changes – healthy diet with less salt
- ▶ Regular physical activity
- ▶ Maintaining a healthy weight or losing weight if overweight or obese
- ▶ Limit alcoholic drink
- ▶ Medications – type depends on overall health and blood pressure prescribed by health care provider
- ▶ Take medication as prescribed do not skip, adjust or discontinue without prescriber's knowledge
- ▶ Monitor blood pressure as instructed and keep an accurate log
- ▶ Take blood pressure log to doctor's appointment

COMPLICATIONS OF HIGH BLOOD PRESSURE

- ▶ Heart attack – arteries blocked with decrease blood supply to the heart muscle
- ▶ Stroke – can cause blood vessels in the brain to clog more easily or burst
- ▶ Heart failure – the increased workload on the heart can result in enlarged heart with decrease blood supply to the body
- ▶ Kidney disease or failure – can damage arteries and impair the ability to filter blood
- ▶ Vision loss – strain or damage blood vessels of the eyes
- ▶ Angina – leads to heart disease, microvascular disease chest pain common symptom
- ▶ Peripheral Artery disease (PAD) atherosclerosis causing narrowing of arteries in legs, arms, stomach and head resulting in fatigue

HEART HEALTHY DIET

- ▶ Fruits (fresh, frozen or canned no added salt)

- ▶ Vegetables (fresh, frozen or canned no added salt) 5-9 servings a day bright colored green, orange, red ones high in minerals and potassium
- ▶ Low-fat dairy products, cheeses, skim or 1% milk, Greek yogurt
- ▶ Skinless poultry and fish
- ▶ Healthy oils
- ▶ Whole grain, plain rice, pasta, potatoes and legumes
- ▶ Unsalted seeds (pumpkin, squash, sunflower) unsalted nuts are mineral rich foods that lower blood pressure
- ▶ Daily water intake men 15 8-ounce glasses, women 11 glasses (AHA)

FOODS TO LIMIT OR AVOID

- ▶ Butter, margarine and regular salad dressings
- ▶ Fatty meats
- ▶ Salted snacks
- ▶ Canned soups
- ▶ Deli meats
- ▶ Fried foods
- ▶ Fast foods
- ▶ Whole milk dairy products ([myclevelandclinic.org heart healthy diet](http://myclevelandclinic.org/heart/healthy-diet))

FOODS HIGH IN SODIUM

- ▶ Processed foods such as bacon, ham, sausage and lunch meat
- ▶ Canned soups, bouillon, dried soup mixes
- ▶ Deli meats
- ▶ Condiments (catsup, soy sauce, salad dressings)
- ▶ Snack foods (pretzels, peanuts, chips and popcorn)
- ▶ Pickled or marinated food in brine
([myclevelandclinic.org.healthHeartHealthyDiet](http://myclevelandclinic.org/health/HeartHealthyDiet))

DIFFERENCE BETWEEN SODIUM AND SALT

- ▶ Salt – mineral occurs naturally in food and is mostly sodium
- ▶ Sodium - cause blood pressure to increase
- ▶ Monosodium glutamate (MSG) – type of sodium added to food

- ▶ Other forms of sodium also present in food (myclevelandclinic.org)

HOW MUCH SALT IS TOO MUCH?

- ▶ AHA – recommends no more than 1500 milligrams of sodium per day
- ▶ A teaspoon of salt – 2400 milligrams of sodium
- ▶ Do not use table salt
- ▶ Don't use lite salt as a substitute

HOW TO REDUCE YOUR DAILY SODIUM INTAKE

- ▶ Read the Nutrition Facts Label stay under 2300mg per day. no salt added means none added during processing but not necessarily salt or sodium free
- ▶ Sodium Free Labels – foods have less than 5 mg per serving
- ▶ Very Low Sodium – foods contain less than 35mg per serving
- ▶ Low Sodium – foods have less than 140mg per serving
- ▶ Light Sodium/Lightly Salted – at least 50 per cent less sodium than the regular product
- ▶ Reduced Sodium – 25 per cent sodium than the regular product
- ▶ Prepare your own meals limit salt
- ▶ Buy fresh meats, fruits and vegetables
- ▶ Rinse canned foods containing sodium - beans, tuna and vegetables
- ▶ Add spices/fresh herbs – black pepper, cumin, coriander, cilantro, garlic, onion, scallion, oregano, dill, marjoram, rosemary, thyme, bay leaf, nutmeg, ginger
- ▶ Reduce portion size (AHA)

CHANGE

- ▶ Observe – lifestyle modifications observing their effect through self-monitoring
- ▶ Analyze – what you are doing, be non-judgmental be willing to see what's there what is going on under the surface
- ▶ Strategize - imagine what kind of change will work and how it will look after you make the change
- ▶ Action – dig deep to find the motivation and toughness to get through, know yourself

CONTROL

- ▶ Know your numbers
- ▶ Do not accept “good” “normal” or “okay”
- ▶ Become your best motivator, coach cheerleader and fan rolled into one
- ▶ Know what works and what doesn't
- ▶ Clearly state your intentions
- ▶ Build self-awareness
- ▶ Enjoy the change

Hypertension can be controlled with any of many recommendations. The key is to implement the one that works for you and produce the best results. Keep all medical appointments discuss changes or unusual findings with your health care provider. Remember this is not a race. It does not require speed or big steps it just needs effective changes while you check and remain in control.