What is hypertension?

Hypertension (high blood pressure) is when the pressure in your blood vessels is too high (140/90 mmHg or higher). It is common but can be serious if not treated

What are the factors that increase the risk of developing hypertension?

Things that increase the risk of having high blood pressure include:

older age , genetics, being overweight or obese, not being physically active , high-salt diet and drinking too much alcohol

What are the symptoms of hypertension?

People with very high blood pressure (usually 180/120 or higher) can experience symptoms including: severe headaches, chest pain, dizziness, difficulty breathing, nausea, vomiting, blurred vision or other vision changes, anxiety, confusion, buzzing in the ears, nosebleeds and abnormal heart rhythm. If you are experiencing any of these symptoms and a high blood pressure, seek care immediately.

What health risks are associated with hypertension?

hypertension can cause serious damage to the heart. Excessive pressure can harden arteries, decreasing the flow of blood and oxygen to the heart. This elevated pressure and reduced blood flow can cause: (1) chest pain, also called angina, (2) heart attack, which occurs when the blood supply to the heart is blocked and heart muscle cells die from lack of oxygen. The longer the blood flow is blocked, the greater the damage to the heart; (3) heart failure, which occurs when the heart cannot pump enough blood and oxygen to other vital body organs; and (4)irregular heart beat which can lead to a sudden death. Hypertension can also burst or block arteries that supply blood and oxygen to the brain, causing a stroke. In addition, hypertension can cause kidney damage, leading to kidney failure.

How to manage hypertension with dietary and lifestyle changes?

Lifestyle changes can help lower high blood pressure. These include:

(1) eating a healthy, low-salt diet, the DASH diet is a great guideline, (2) losing weight, (3) being physically active, (4) quitting tobacco.

What are the dietary changes to adopt to manage or reduce the risks associated with hypertension?

(1) eat a variety of fruits and vegetables, a good way to keep track is to consume 5 a day. Fruits and vegetables of different colours contain different nutrients and compounds (phytochemicals) that have a protective effect on health , (2) consume wholegrains instead of refined grains , (3) limit the consumption of saturated fats present in fatty meats, full fat dairy products and tropical oils such as palm oil, (4) limit sugar-sweetened foods and beverages, (5) limit consumption of salt to 2300 mg, limiting to 1500 mg add further benefits . Rinse canned vegetables, limit cured meat and fish to occasions , read food labels to ensure salt intake remains limited

What is a DASH Eating Plan?

The DASH eating plan requires no special foods and instead provides daily and weekly nutritional goals. This plan recommends: (1) Eating vegetables, fruits, and whole grains, (2) Including fat-free or low-fat dairy products, fish, poultry, beans, nuts, and vegetable oils, (3)Limiting foods that are high in saturated fat, such as fatty meats, full-fat dairy products, and tropical oils such as coconut, palm kernel, and palm oils (4) Limiting sugar-sweetened beverages and sweet (5) When following the DASH eating plan, it is important to choose foods that are: Low in saturated and *trans* fats, Rich in potassium, calcium, magnesium, fiber, and protein, Lower in sodium

Give me an example of a daily serving of the dash diet?

Grains 6-8, Meats, poultry and fish 6 or less, vegetables 4-5, fruit 4-5, Low-fat or fat-free dairy products 2–3, Fats and oils 2–3, Sodium 2,300 mg*

1,500 milligrams (mg) sodium lowers blood pressure even further than 2,300 mg sodium daily.

Give an example of weekly serving of the dash diet eating plan?

Nuts, seeds, dry beans and peas 4-5, sweets 5 or less

How much salt can I consume daily to avoid high blood pressure?

To avoid high blood pressure the daily total salt recommendation should be between 2-3g/ day (estimated to a teaspoon). It is recommended to limit your salt intake to less than 2,300 milligrams (mg) per day, which is equivalent to 1 teaspoon of salt per day. limiting salt to 1500 mg add further benefits . For adults with high blood pressure, a more ideal limit is around 2/3 (or 0.65) of a teaspoon which is equivalent to about nearly 3/4 of a teaspoon of salt.

I have hypertension. How can I enhance flavor when cooking food at home?

Methods to enhance flavor without excess salt: use of herbs and spices such as parsley, coriander, spring onions, ginger, turmeric, nutmeg, garlic, lime juice. Use light soy sauce paringly for Chinese cuisine

What are hidden sources of salt that should be avoided for hypertension?

(1) Monosodium glutamate (ajinomoto), sodium bicarbonate (especially while preparing vegetables), baking soda, rock salt, mineral salts. (2) Ham, sausages, burgers, smoked fish, nuggets, all processed and preserved food where a lot of salt has been added namely cheddar cheese, pickles, fruit confit, snoek fish poisson salée, Smoked Salmon saumon fumée, salted nuts, (3) Canned food such as luncheon meat, corned beef (4) Sauces such as soy sauce, fish sauce, oyster sauce, tomato & chili sauce (5) Ready-made soups (in sachet), stock cubes, gravies, and ready-made sauces. (6) savory snacks in packets namely crisps, baguette fromage, sev.

Give me some general guidelines for hypertension

It is important to limit food containing sodium (especially packaged or tinned food items)

Choose foods that are rich in potassium, calcium, magnesium, dietary fibre and protein.

If you suffer from hypertension, it is important to manage stress levels, ensure adequate sleep (approx. of 6-7hr) daily and practice a regular physical activity.

What is the lifestyle to avoid so as to prevent hypertension (high blood pressure)?

(1) Adopt DASH eating plan: Consume a diet rich in fruits, vegetables, and low-fat dairy products with a reduced content of saturated and total fat, (2) quitting tobacco (3) Limit Saturated and Trans Fats: Fried foods, fatty meats, and high-fat dairy products, (4) Limit Alcohol: Limit to moderate consumption (up to one drink per day for women and up to two drinks per day for men). Moderation of alcohol consumption (e.g.,24 oz of beer, 10 oz of wine, or 3 oz of 80-proof whiskey): Limit consumption to no more than 2 drink per day in most men and to no more than I drink per day in women and lighter weight persons, (5) Reduce your weight: Maintain normal body weight of body mass index 18.5-24.9 kg/m2

What is the lifestyle to avoid so as to prevent hypertension (high blood pressure)?

(6) Dietary sodium reduction: Reduce dietary sodium intake to no more than 100 mmol per day (2.4 g of sodium or 6 g of sodium chloride), (7) You may also adopt a mediterranean diet as they are rich in healthy fats and colourful vegetables, (8) Physical activity: Engage in regular aerobic physical activity such as brisk walking (at least 30 min/day most dabs of the week), (9) Stress

Commented [IP1]: Add meditarranean diet rich in healthy fats and colourful vegetables

management is another key aspect of reducing your risk. Practice relaxation techniques such as deep breathing exercises, meditation, yoga, or tai chi. Regularly engage in activities that you enjoy and that help you relax. Adequate sleep is also important for managing stress and overall health, so establish a regular sleep routine and aim for seven to eight hours of sleep per night, (10) limit sugar-sweetened foods and beverages

Which and how much exercise should I do if I have hypertension (high blood pressure)?

Aerobic exercises are particularly effective in preventing hypertension. These exercises increase your heart rate and breathing, improving the efficiency of your cardiovascular system. For walking, aim to walk most days of the week for at least 30 minutes per day. If you prefer jogging or running, try to engage in this activity 3-5 days per week for 20-30 minutes per session. Cycling is another excellent option; aim to cycle most days of the week for 30-60 minutes per session. Swimming can also be very beneficial; aim to swim 3-5 days per week for 30-45 minutes per session. Dancing is a fun way to stay active; try to dance most days of the week for 30-60 minutes per session.

Which and how much exercise should I do if I have hypertension (high blood pressure)?

Strength training helps build muscle mass and improve metabolic rate, which can contribute to better blood pressure control. For weight lifting, aim to lift weights 2-3 days per week for 20-30 minutes per session. Resistance band exercises are also effective; perform these exercises 2-3 days per week for 20-30 minutes per session. Bodyweight exercises, such as push-ups, squats, and lunges, should be done 2-3 days per week for 20-30 minutes per session.

Flexibility and balance exercises improve overall body flexibility, balance, and stress reduction, which can indirectly help manage blood pressure. Yoga should be practised 2-3 days per week for 30-60 minutes per session. Tai chi is another great option; aim to practise tai chi 2-3 days per week for 30-60 minutes per session. Stretching should be done daily or most days of the week for 10-15 minutes per session.

What are the foods to avoid when I have high blood pressure (hypertension) or to prevent high blood pressure?

When you have high blood pressure, it is essential to avoid foods that can exacerbate the condition. Here are some types of foods and specific examples to limit or avoid:

Avoid High-Sodium Foods (i) Processed and packaged foods, such as canned soups and broths, are often high in sodium. Instant noodles and packaged meals, like ramen and microwaveable dinners, should also be limited. Snack foods, including potato chips, pretzels, popcorn, and salted nuts, contribute significantly to sodium intake. Frozen meals, especially many frozen dinners and entrees, contain high levels of sodium.

Avoid Cured, smoked, and processed meats are also high in sodium. Bacon contains significant amounts of sodium and nitrates. Sausages and hot dogs are often preserved with sodium-rich compounds, and deli meats like ham, turkey, roast beef, and other lunch meats are high in sodium. Smoked fish, such as smoked salmon or trout, should also be avoided or limited.

What are the foods to avoid when I have high blood pressure (hypertension) or to prevent high blood pressure?

Avoid Certain dairy products can be high in sodium as well. Cheese, particularly processed cheeses and cheese spreads, should be consumed in moderation. Cottage cheese can be high in sodium, so opting for low-sodium versions is better if available.

Avoid Condiments and sauces are common sources of hidden sodium. Soy sauce is extremely high in sodium, and ketchup and mustard can also contain high levels of sodium. Many bottled salad dressings, barbecue sauce, and teriyaki sauce are high in sodium.

Avoid Bread and bakery products can contribute to sodium intake. Many types of bread have added salt, and bagels and pretzels often contain added salt.

Avoid Restaurant and fast-food meals typically have high sodium content. Burgers, fries, and other typical fast-food items should be limited, and many restaurant dishes, particularly those from chain restaurants, are high in sodium.

What are the foods to avoid when I have high blood pressure (hypertension) or to prevent high blood pressure?

Avoid Canned and pickled foods are another source of high sodium. Canned vegetables are often preserved in salty brine, so opting for no-salt-added versions is a better choice. Pickles and olives are also preserved in salty brine and should be limited.

Avoid Seasonings and mixes often contain added sodium. Salt-based seasonings like garlic salt, onion salt, and celery salt, as well as bouillon cubes and powdered soups, can be high in sodium. Pre-made spice blends often contain salt as well.

Should I avoid/ limit alcohol when I have high blood pressure (hypertension)?

Avoid Excessive Alcohol Consumption: Drinking too much alcohol raises blood pressure and harms overall cardiovascular health. Limit alcohol intake to moderate levels, which is up to one drink per day for women and up to two drinks per day for men. Moderation of alcohol consumption (e.g.,24 oz of beer, 10 oz of wine, or 3 oz of 8O-proof whiskey): Limit consumption to no more than 2 drink per day in most men and to no more than I drink per day in women and

Should I avoid/ limit caffeine beverages if I have hypertension? energy drinks are high in caffeine and should be avoided. **Caffeinated Beverages** High-Caffeine Drinks: While moderate caffeine intake is generally safe for most people, excessive consumption of coffee, energy drinks, are highly caffeinated beverages can increase blood pressure.

I have hypertension. What fruits can I eat daily?

Potassium rich fruits are encouraged. To help lower blood pressure, incorporating potassium-rich foods into your diet is essential. You should priorities eating potassium rich fruits. Bananas are one of the most well-known sources of potassium. A medium-sized banana contains around 400-450 mg of potassium. Avocados are not only rich in healthy fats but also contain a substantial amount of potassium. One medium avocado provides approximately 700 mg of potassium.

Oranges and other citrus fruits like grapefruits are good sources of potassium. One medium-sized orange contains about 200-250 mg of potassium.

I have hypertension. What fruits can I eat daily?

Cantaloupe, also known as muskmelon or rockmelon, is a delicious and nutritious fruit that can offer several benefits for individuals with hypertension Cantaloupe. Cantaloupe is an excellent source of vitamin C, which is a powerful antioxidant that helps reduce inflammation and protect blood vessels from damage. Adequate intake of vitamin C has been associated with lower blood pressure levels. Cantaloupe contains dietary fibre, which can help improve heart health and regulate blood pressure.

Berries: Berries such as strawberries, blueberries, raspberries, and blackberries are rich in antioxidants, fibre, and flavonoids, which have been associated with lower blood pressure levels. Aim for 1 cup of berries per day as a serving.

I have hypertension. What vegetables can I eat daily?

Potassium rich vegetables are encouraged. There is a myth that says that legumes are not recommended for high blood pressure which is not true. You should priorities eating potassium rich vegetables

Leafy greens: Leafy greens such as spinach, kale, Swiss chard, and collard greens are rich in potassium, magnesium, and dietary nitrates, which help regulate blood pressure. Aim for 1 to 2 cups of leafy greens per day, either raw in salads or cooked in dishes.

Broccoli: Broccoli is high in fibre, vitamins, and minerals, including potassium and magnesium, which can support heart health. Enjoy 1/2 to 1 cup of cooked broccoli per day.

Sweet potatoes are a nutritious root vegetable loaded with potassium. A medium-sized sweet potato can contain around 450-500 mg of potassium.

Spinach is an excellent source of potassium. One cup of cooked spinach contains approximately 800 mg of potassium.

Tomatoes are not only rich in antioxidants but also contain potassium. One medium-sized tomato provides around 400-450 mg of potassium.

White potatoes, especially when consumed with the skin, are a good source of potassium. One medium-sized potato with the skin contains approximately 900 mg of potassium

I have hypertension. What vegetables can I eat daily?

Potassium rich vegetables are encouraged. There is a myth that says that legumes are not recommended for high blood pressure which is not true. You should priorities eating potassium rich vegetables

Beets are packed with essential nutrients and compounds that can benefit individuals with hypertension. Beets contain potassium, an essential mineral that helps regulate blood pressure by counteracting the effects of sodium and relaxing blood vessel walls. Beets are a good source of dietary fibre which can help improve blood pressure. Beets contain vitamin C, a powerful antioxidant that helps reduce inflammation and protect blood vessels from damage. Adequate intake of vitamin C has been associated with lower blood pressure levels. Beets contain magnesium, another essential mineral that plays a role in regulating blood pressure and supporting cardiovascular health.

Edamame, which are young soybeans, are a nutritious food that can provide several nutrients beneficial for managing hypertension. They are rich in potassium, magnesium, fibre, and isoflavones, all of which can help manage hypertension by regulating blood pressure and promoting heart health. Start with a serving size of about 1/2 to 1 cup of cooked edamame per day and adjust based on individual dietary needs and preferences.

How much higher is the risk of developing hypertension in overweight individuals compared to those with normal weight?

The risk of developing elevated blood pressure is two to six times higher in overweight people than in normal-weight persons. Risk estimates from population studies suggest that 30% or more of cases of hypertension can be directly attributed to obesity. Weight gain during adult life is responsible for much of the rise in blood pressure seen with ageing. Virtually all clinical trials on weight reduction and blood pressure support the efficacy of weight loss on lowering blood pressure.

What snacks are can be enjoyed for someone with hypertension (high blood pressure)?

For someone with high blood pressure, choosing snacks that are low in sodium and rich in potassium, magnesium and fibre is essential. Here are some healthy snack options:

Fresh Fruit: Enjoy fruits like bananas, apples, oranges, berries, and pears. These fruits are high in fibre and potassium, which help regulate blood pressure.

Vegetable Sticks with Hummus: Snack on sliced carrots, celery, bell peppers, celery sticks and cucumber dipped in hummus. Vegetables are low in calories and sodium, and hummus provides healthy fats and protein.

Greek Yogurt with Berries: Have a small bowl of Greek yogurt topped with fresh or frozen berries. Greek yogurt is a good source of calcium and protein, while berries add antioxidants and fibre.

Nuts and Seeds: A small handful of unsalted almonds, walnuts, or sunflower seeds can be a great snack. They are rich in healthy fats, magnesium, and protein, which are beneficial for heart health.

What healthy snacks are can be enjoyed for someone with hypertension (high blood pressure)?

Whole-Grain Crackers with Avocado: Spread mashed avocado on whole-grain crackers. Avocado is high in potassium and healthy fats, while whole-grain crackers provide fibre.

Smoothie: Blend a smoothie using spinach, a banana, some berries, and low-fat milk or a dairy alternative. This combination offers a mix of potassium, fibre, and vitamins.

Cottage Cheese with Fruit: Pair low-fat cottage cheese with sliced peaches or pineapple. Cottage cheese provides protein and calcium, and fruit adds sweetness and fibre.

What healthy snacks are can be enjoyed for someone with hypertension (high blood pressure)?

Edamame: Steamed edamame beans are a high-protein, high-fibre snack. They are also rich in magnesium and potassium.

Dark Chocolate: A small piece of dark chocolate (at least 70% cocoa) can be a heart-healthy treat. Dark chocolate contains antioxidants and may help lower blood pressure.

Popcorn: Air-popped popcorn is a whole grain that provides fibre. Avoid adding butter and salt to keep it heart-healthy.

I have hypertension (high blood pressure). What nuts that are good for hypertension can I eat daily?

Almonds: Almonds are rich in monounsaturated fats, magnesium, and potassium, all of which can help lower blood pressure levels and support heart health. Enjoy a small handful, about 1 ounce (approximately 23 almonds), per day as a snack or added to meals.

Walnuts: Walnuts are high in omega-3 fatty acids, which have been associated with lower blood pressure levels and improved heart health. They also contain magnesium, potassium, and fibre. Enjoy a small handful, about 1 ounce (approximately 14 walnut halves), per day as a snack or added to salads, oatmeal, or yogurt.

I have hypertension (high blood pressure). What nuts that are good for hypertension can I eat daily?

Pistachios: Pistachios are rich in potassium, which helps regulate blood pressure, as well as protein, fiber, and healthy fats. Enjoy a small handful, about 1 ounce (approximately 49 pistachios), per day as a snack or added to salads, yogurt, or smoothies.

Cashews: Cashews are a good source of magnesium and potassium, both of which can help lower blood pressure levels. They also contain healthy fats and protein. Enjoy a small handful, about 1 ounce (approximately 18 cashews), per day as a snack or added to stir-fries, trail mix, or nut butter.

Brazil nuts: Brazil nuts are high in selenium, which may help reduce inflammation and improve heart health. They also contain magnesium, potassium, and healthy fats. Enjoy a small handful, about 1 ounce (approximately 6 to 8 Brazil nuts), per day as a snack or added to salads, oatmeal, or baked goods

I have hypertension (high blood pressure). What legumes can I eat daily?

Lentils: Lentils are rich in fibre, protein, and various nutrients such as folate, iron, and potassium. Enjoy 1/2 to 1 cup of cooked lentils per day as part of your meals.

Chickpeas (Garbanzo beans): Chickpeas are packed with fiber, protein, and minerals like potassium and magnesium. Enjoy 1/2 to 1 cup of cooked chickpeas per day in salads, soups, or as a snack.

Black beans: Black beans are high in fiber, protein, and antioxidants, including anthocyanins. They also contain potassium, magnesium, and folate. Enjoy 1/2 to 1 cup of cooked black beans per day in dishes like salads, tacos, or soups.

I have hypertension (high blood pressure). What legumes can I eat daily?

Kidney beans: Kidney beans are rich in fiber, protein, and essential nutrients such as potassium and magnesium. Enjoy 1/2 to 1 cup of cooked kidney beans per day in chili, salads, or stews.

Pinto beans: Pinto beans are a good source of fiber, protein, and minerals like potassium and magnesium. Enjoy 1/2 to 1 cup of cooked pinto beans per day in dishes like burritos, soups, or salads.

Navy beans: Navy beans are high in fiber, protein, and nutrients such as potassium and magnesium. Enjoy 1/2 to 1 cup of cooked navy beans per day in dishes like bean soups, casseroles, or salads.

Cannellini beans: Cannellini beans are similar to navy beans and are rich in fiber, protein, and minerals. Enjoy 1/2 to 1 cup of cooked cannellini beans per day in dishes like pasta salads, soups, or casseroles.

I have hypertension (high blood pressure). What oils that are good for hypertension can I use daily?

Olive oil: Olive oil is rich in monounsaturated fats and antioxidants, which can help reduce inflammation and lower blood pressure. Enjoy up to 1 to 2 tablespoons of olive oil per day as part of cooking, salad dressings, or drizzling over dishes.

Canola oil: Canola oil is high in monounsaturated fats and low in saturated fats, making it a hearthealthy choice. Enjoy up to 1 to 2 tablespoons of canola oil per day for cooking, baking, or salad dressings.

Avocado oil: Avocado oil is rich in monounsaturated fats and antioxidants, which can help support heart health and lower blood pressure. Enjoy up to 1 to 2 tablespoons of avocado oil per day for cooking, grilling, or salad dressings.

I have hypertension (high blood pressure). What oils are good for hypertension can I use daily?

Flaxseed oil: Flaxseed oil is high in omega-3 fatty acids, which have been shown to have beneficial effects on heart health, including lowering blood pressure. Enjoy up to 1 to 2 tablespoons of flaxseed oil per day added to smoothies, salad dressings, or drizzled over dishes.

Walnut oil: Walnut oil is another source of omega-3 fatty acids, which can help support heart health and reduce inflammation. Enjoy up to 1 to 2 tablespoons of walnut oil per day for salad dressings or drizzling over dishes.

Grapeseed oil: Grapeseed oil is high in polyunsaturated fats and contains antioxidants that can help support heart health. Enjoy up to 1 to 2 tablespoons of grapeseed oil per day for cooking, baking, or salad dressings.

I have hypertension (high blood pressure). What proteins are good for hypertension can I eat daily?

Fatty fish: Fatty fish such as salmon, mackerel, sardines, and trout are rich in omega-3 fatty acids, which have been associated with lower blood pressure levels and improved heart health. Enjoy 3 to 4 ounces of cooked fatty fish per day as part of your meals

Salmon is rich in omega-3 fatty acids and also contains potassium. A 3-ounce serving of cooked salmon provides approximately 300-400 mg of potassium.

Skinless poultry: Skinless poultry such as chicken and turkey are lean sources of protein. Enjoy 3 to 4 ounces (about the size of a deck of cards) of skinless poultry per serving, which provides about 25 to 30 grams of protein.

Fish: Fatty fishlike salmon, mackerel, sardines, and trout are rich in omega-3 fatty acids, which have been shown to support heart health and help lower blood pressure. Enjoy 3 to 4 ounces of cooked fish per serving, which provides about 20 to 25 grams of protein.

I have hypertension (high blood pressure). What proteins are good for hypertension can I eat daily?

Lean cuts of beef and pork: Lean cuts of beef and pork, such as sirloin, tenderloin, and loin chops, are good sources of protein. Enjoy 3 to 4 ounces of cooked lean beef or pork per serving, which provides about 25 to 30 grams of protein.

Eggs: Eggs are a versatile and affordable source of high-quality protein. Enjoy 1 to 2 whole eggs per serving, which provides about 6 to 12 grams of protein. You can also include egg whites for additional protein while keeping cholesterol intake in check.

Legumes: Legumes such as lentils, chickpeas, black beans, and kidney beans are excellent plant-based sources of protein. Enjoy 1/2 to 1 cup of cooked legumes per serving, which provides about 7 to 15 grams of protein.

Tofu and tempeh: Tofu and tempeh are plant-based sources of protein derived from soybeans. Enjoy 3 to 4 ounces of tofu or tempeh per serving, which provides about 10 to 15 grams of protein.

