

Healthy Eating Guide for High Blood Pressure

High blood pressure, also known as hypertension, occurs when blood flows through the blood vessels with too much force. If your high blood pressure is not controlled, it can cause stroke, heart attack, heart failure, kidney disease and other issues. Managing blood pressure well is crucial and can stop these diseases from starting or worsening.



Risk Factors for the Development of Hypertension

Non-modifiable	Modifiable
<ul style="list-style-type: none"> • Increasing age • Family history • Male 	<ul style="list-style-type: none"> • Excessive chronic alcohol intake • High dietary sodium intake • Overweight/ Obesity • Physical inactivity • Sleep apnea • Hyperlipidemia • Diabetes mellitus • Smoking and tobacco use (including exposure to secondhand smoke) • Stress

High Blood Pressure Complications



Stroke

Blood vessels in the brain burst or clog more easily



Vision Loss

Strain and damage blood vessels in the eyes



Heart Failure

Heart enlarges and fails to supply blood to the body

Heart Attack

Damages and blocks blood vessels in the heart



Kidney Failure

Damages the blood vessels around the kidneys and disrupts their ability to filter blood well



Sexual Dysfunction

Erectile dysfunction in men or lower libido in women

Ways to Manage High Blood Pressure

1. Maintain a Healthy Body Weight

$$\text{BMI} = \frac{\text{Weight (kg)}}{\text{Height (m)} \times \text{Height (m)}}$$

- Aim for gradual weight loss of 5-10% in 3 - 6 months if your Body Mass Index (BMI) is above 23 kg/m² to improve your health

Do you know?

A 1kg weight loss is associated with ~1mmHg drop in blood pressure!

Cardiovascular Risk	BMI (kg/m ²)
Low	18.5 - 22.9
Moderate	23.0 - 27.4
High	27.5 - 32.4
Very High	≥ 32.5

2. Eat a Well-Balanced Diet

The Dietary Approaches to Stop Hypertension (DASH) diet is a balanced way of eating that can lower blood pressure and cholesterol.

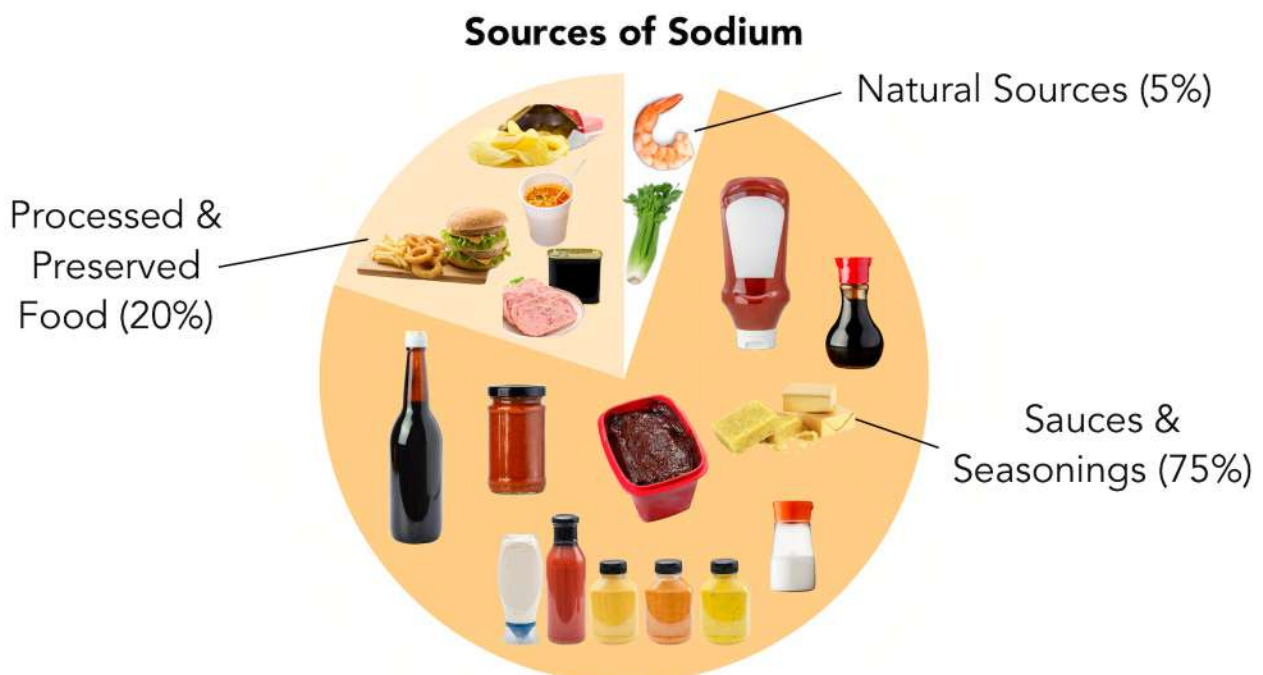
What does the DASH diet include?

- Eating a diet rich in vegetables, fruits, and wholegrains
- Including low-fat dairy products, fish, poultry, beans, nuts, and vegetable oils
- Limiting foods that are high in saturated fat (e.g. fatty meats, full-fat dairy products, and tropical oils such as coconut, palm kernel, palm oils)
- Limiting sugar-sweetened beverages, food and snacks
- Low sodium intake



3. Limit Sodium Intake

Sodium is found in many common foods. It can occur naturally, be added for flavour while cooking, or during manufacturing as a preservative. Eating too much sodium can increase your chances of getting high blood pressure. You can reduce your sodium intake gradually and allow your taste buds to adapt to a lower sodium diet.



Aim for no more than 2000 – 2400mg of sodium a day

That's about 1 teaspoon (5g) of salt!



According to the 2018 National Nutrition Survey, the average person in Singapore consumes 3,600mg of sodium each day. This is equal to about 9g or 2 teaspoons of salt. This was contributed mostly by seasonings, salt and sauces added during food preparation.



Salt intake reproduced from <https://www.healthhub.sg> with permission by Health Promotion Board, Singapore

Tips to Reduce Sodium Intake

1. Home Cooking

- Use salt, seasoning and sauces sparingly
- Use fresh herbs & spices to flavour food
- Use fresh vegetables instead of ready-to-use broth to cook soup

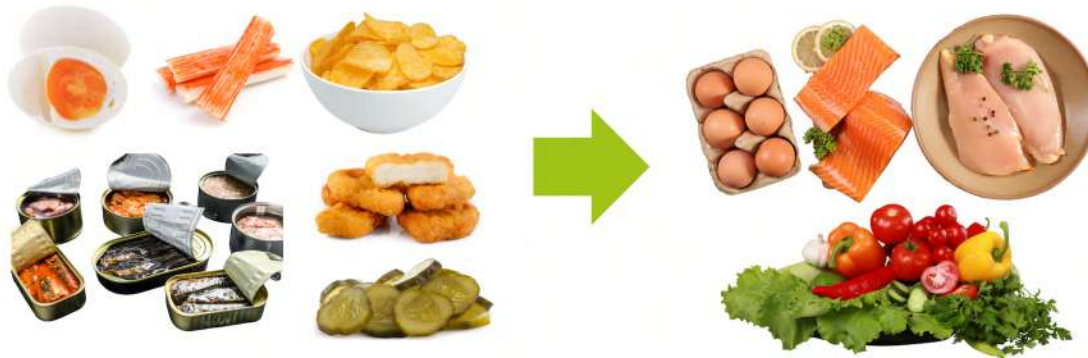


- Cook food that require simple preparation like broiled, baked or roasted meat or vegetables with no heavy sauces, breading or batter



2. Grocery Shopping

- Choose fresh produce over processed or preserved food items



- Choose food products labelled with the "No Added Sodium" or "Lower in Sodium" Healthier Choice Symbols



No Added Sodium



Lower in Sodium

- Choose food products which do not list sodium as the first few ingredients or appear multiple times in the ingredient list. Sodium can be listed as salt, sea salt, vegetable salt, rock salt or compounds with sodium in its name.

INGREDIENTS

Leaf Mustard, Vegetarian Soy Sauce, Sugar, Salt,
Monosodium Glutamate, Sodium Metabisulphite

- You may consider reduced-sodium salt substitutes. If you have kidney disease or take certain medications for high blood pressure or heart disease, ask your dietitian or doctor about using salt substitutes.

Do you know?

Himalayan, kosher, sea or rock salt have almost the same amount of sodium as table salt, which should be consumed in moderation.



3. Eating Out

- Leave soup behind & avoid excess gravy
- Avoid dipping sauces
- Choose plain rice over flavoured rice

	Where is the sodium?	How to reduce sodium intake?
 <p>Fishball Noodle (Soup)</p>	<ul style="list-style-type: none">• Fishball• Soup• Sauces	<ul style="list-style-type: none">• Leave soup behind• Avoid dipping soy sauce
 <p>Nasi Biryani</p>	<ul style="list-style-type: none">• Gravy• Seasoning for rice and meat	<ul style="list-style-type: none">• Go easy on the gravy• Share this dish• Choose plain rice
 <p>Chicken Masala</p>	<ul style="list-style-type: none">• Gravy• Seasoning for meat	<ul style="list-style-type: none">• Go easy on the gravy• Share this dish
 <p>Fast Food</p>	<ul style="list-style-type: none">• Salt in fries• Processed meats• Sauces	<ul style="list-style-type: none">• Ask for unsalted fries• Limit fast food intake to once a week• Avoid dipping sauces

4. Limit Alcohol Intake

- Excessive intake of alcohol can lead to high blood pressure
- If you want to drink, limit to 2 standard drinks for men, and 1 standard drink for women
- Individuals who do not drink should not start drinking regularly

1 Standard Drink = 10g Alcohol



330ml Beer



100ml Wine



30ml Spirits

5. Quit Smoking

- Smoking and/or exposure to second-hand smoke harms blood vessels, making them stiff
- The heart needs to work more to move blood around the body, which raises blood pressure
- Quit smoking early to prevent irreversible damage to your blood vessels



6. Stress Management

- When you are stressed, your body releases stress hormones that make your heart beat faster and narrow your blood vessels. This can increase your blood pressure.
- Stress can also lead to behaviours like binge eating, excessive smoking and drinking, which can further worsen blood pressure
- Learn how to recognise stress in your life and take steps to manage them. Try talking to a close friend or family member. If required, seek professional help such as visiting a counsellor or psychologist.



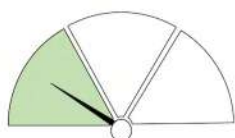
7. Physical Activity

Exercise can help to manage your body weight, lower stress levels and subsequently control your blood pressure better. All adults should limit the amount of time spent being sedentary. Always stay active!

- Try to do 150–300 minutes of moderate-intensity aerobic exercise; or 75–150 minutes of vigorous-intensity aerobic exercise; or a mix of both each week
- You can gain more health benefits by doing muscle-strengthening activities. These activities should work all your major muscles and be done at a moderate or higher intensity. Aim for 2 or more days a week.

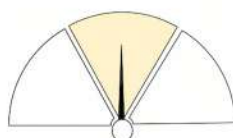


Exercise Intensity



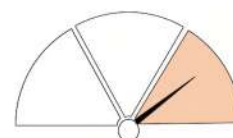
Light

Can talk in full sentences and sing



Moderate

Can talk in phrases or short sentences but cannot sing



Vigorous

Have difficulty talking

By maintaining a healthy weight, making dietary and lifestyle changes, you can better manage your blood pressure!

Note: Please consult a physiotherapist or doctor for personalised recommendations or if you have been advised to limit the intensity of physical activity.

Contributed by Nutrition & Dietetics Service, Allied Health Services

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Information shared is accurate as of March 2024 and subject to revision without prior notice.



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