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Do You Have High Blood Pressure?

Mona Tan is a 58-year-old mother who was diagnosed with high blood pressure about 10 years ago. Her father suffered a stroke due to high blood pressure so she knew she would be at greater risk of developing it too.

“ When my doctor told me I needed medication to lower my blood pressure, I wasn't sure if I really wanted to take a pill every day. After all, I felt fine. But once I learnt that people with high blood pressure usually do not have any symptoms until it is too late, I decided to take control of my health. In addition to the medication, I have cut down on salty and oily foods in my diet, exercise several times a week, and try to avoid stress. Now my blood pressure is below 130/80 and I feel healthier. ”



What is Blood Pressure?

“Blood pressure” is the force of blood pushing against the walls of arteries, which are blood vessels that carry blood from the heart to the rest of the body.

Blood pressure is measured using two numbers (e.g. 120/80). The first number of a blood pressure reading is known as the **systolic BP** and measures the pressure blood places on the arteries as the heart is actively pumping blood into the arteries and through the circulatory system of the entire body. The second number is known as the **diastolic BP** and measures the pressure of the blood against the arteries when the heart is at rest between beats. Normal blood pressure for adults is less than 130/80mmHg (millimeters of mercury, a measure of pressure).

Your blood pressure changes depending on what you are doing. It may go up when you are excited, stressed, or exercising. It usually goes down when you are relaxed or sleeping. If your blood pressure is higher than 130/80mmHg most of the time even when you are resting, it is a sign that you need to take action to get your blood pressure under control.



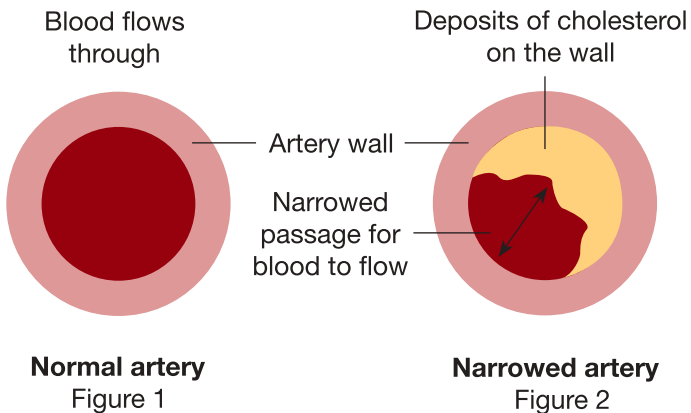
The Ups and Downs of Blood Pressure

Like water in a hose, the amount of blood in your arteries and the speed at which the heart pumps it through your body determines how much pressure your blood places against your blood vessel walls.

Your blood pressure goes up when:

- There is too much salt in your diet which leads to water retention and an increase in the volume of blood circulating in your body.
- Your blood vessels become harder and narrower due to fatty deposits and prolonged high blood pressure (Figure 2).
- Your heart has to consistently pump too hard and too fast because of excessive smoking or alcohol.

If your blood pressure reading goes over 130/80mmHg, it is important to follow your doctor's advice to get your blood pressure under control.



Why is High Blood Pressure Dangerous?

People with high blood pressure usually don't feel anything at the beginning. You can have high blood pressure for years without experiencing any symptoms even as it gradually causes damage to your heart, blood vessels, kidneys, and other parts of your body. That is why high blood pressure is called "the silent killer".



People with high blood pressure are at risk of:



- Coronary heart disease
- Heart failure
- Stroke
- Peripheral artery disease (narrowing of the blood vessels of the limbs)
- Kidney failure

You can reduce the risk of developing these conditions by following your doctor's advice and changing your lifestyle.

What Causes High Blood Pressure?

High blood pressure is a fairly common problem in Singapore. Around 1 in 5 Singaporeans aged 18 to 69 years have high blood pressure. For more than 95% of people with high blood pressure, there is no clear cause although there are risk factors that make it more likely for someone to develop the condition.

Your risk of high blood pressure tends to increase as you age and if you:

- Are a smoker
- Have a body mass index of 23kg/m² or higher
- Eat foods that are high in salt and fat
- Drink more than 1-2 alcoholic drinks per day
- Do not get enough physical activity
- Experience high levels of stress on a constant basis
- Have other health conditions such as diabetes, kidney disease, thyroid disease, sleep apnoea, or pregnancy
- Take certain medication, such as asthma medicine (corticosteroids), cold-relief products, birth control pills, or hormone replacement therapy
- Have close relatives with high blood pressure



How do I Know if I Have High Blood Pressure?

Understand your numbers

Blood Pressure	Systolic BP (mmHg)	Diastolic BP (mmHg)
Normal	Less than 130	Less than 80
Borderline	130 – 139	80 – 89
High	140 or greater	90 or greater

Most people with high blood pressure do not have any symptoms and feel fine. It is possible that you could have high blood pressure for some time without knowing it. This is why it is important to have your blood pressure measured at regular check-ups; people over 40 years old should have their blood pressure checked at least once a year. If you are diagnosed with high blood pressure, it is important to follow your doctor's advice especially if you have been prescribed blood pressure medication. In addition to medication, dietary and lifestyle modifications will help lower your blood pressure and keep it from becoming a more serious illness.

How do I Control my Blood Pressure?

High blood pressure is both preventable and manageable. With changes to your lifestyle and by taking your medication as prescribed, you can avoid many serious complications of high blood pressure.

Here are some tips for keeping your blood pressure at healthy levels:

1 **Cut back on cigarettes.**

It is never too late to stop smoking. The chemicals in cigarettes directly increase your risk of high blood pressure and also cause hardening of your arteries (atherosclerosis). Your doctor or pharmacist can help you find effective ways to quit smoking.



2 **Know your limits when it comes to alcohol.**

Alcohol not only increases your blood pressure, it is also high in calories which contribute to weight gain, another risk factor for high blood pressure.



Women should drink no more than 2 standard drinks a day and men should limit themselves to 3 standard drinks a day. A standard drink contains 10 grams of alcohol and is equivalent to two-thirds of a can (220ml) of regular beer, 1 glass (100ml) of wine, or 1 nip (30ml) of spirit.

3 Maintain a healthy weight.

If you are overweight (with a BMI of over 23kg/m²), make the commitment to lose weight by eating less and exercising more; both efforts are important for achieving a healthy weight.

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

4 Reduce the amount of salt and fat in your diet.

Eat more whole grains, fruits, and vegetables. Limit the amount of butter, processed and deep-fried foods, and other fatty items you eat. Cook using polyunsaturated fats like soybean, canola, or corn oil. Instead of salt, use lime, ginger, pepper, herbs, and spices to flavour your food.



5



Get active.

Exercise keeps you healthy and happy along with helping you maintain your weight. Walking, swimming, yoga, and other activities strengthen your heart and reduce stress.

6 Manage stress.

Your blood pressure goes up when you are angry, excited, frightened or under stress. When you are in a constant state of stress, your blood pressure can go up and stay up. Bring your stress levels down by making time to rest, relax, and get adequate sleep.



7 Go for regular check-ups.

If you have other conditions, such as obesity, diabetes, kidney disease, thyroid disease, sleep apnoea, or if you are pregnant, you are at greater risk of developing high blood pressure. Also, if you are taking certain medication that are known to increase the risk of high blood pressure, be sure to have your blood pressure checked regularly by your doctor.

8 Take blood pressure medication as prescribed.

Your doctor will decide which drug is most suitable for you. It is important to take the medication as prescribed.

My Plan to Prevent or Control High Blood Pressure

Check two or three things you will do. Add more things over time.

Add spice – not salt, to your life

- Season foods with herbs and spices like garlic, hot pepper, coriander, and onion instead of salt.
- Eat more fruits and vegetables instead of salty snacks.



Take heart. Try to:

- Lose weight if you are overweight.
- Eat smaller portions – do not go for a second serving.
- Get 30 to 60 minutes of moderate physical activity on most days.
- Limit alcohol.

If you have high blood pressure:

- Have your blood pressure checked every 3-6 months.
- Take your medicine as instructed by your doctor.



Commonly Asked Questions about High Blood Pressure

Q What are the symptoms of high blood pressure?

A High blood pressure alone usually does not cause any symptoms until complications like kidney damage develop. That is why it is important to go to your doctor for regular check-ups and have your blood pressure monitored.

Q Should I take medication for high blood pressure?

A Weight loss, exercise, and diet are important parts to controlling your blood pressure. However, some people do need medication. If you need medication, be sure to take it as prescribed. Never stop or change the dosage without consulting your doctor.

Q Can I stop taking blood pressure medication if my blood pressure is under control?

A No. Blood pressure treatment is usually life-long. Never stop or change the dose of your medication without consulting your doctor.

Always Take Your Medication as Prescribed

If you are taking blood pressure medication, it is important that you know the names of the medication and how to take them. Follow your doctor's directions precisely. Never skip days or take more or fewer pills than prescribed. Be sure to get refills before your current supply runs out.

If you experience side effects from your blood pressure medication, talk to your doctor immediately. Your dosage may need to be changed or you may need to switch to another medicine. You should always consult your doctor before you make any changes to your medication plan.

For More Information On High Blood Pressure

- Talk to your GP or family doctor for more information about high blood pressure and how you can keep your condition under control. Keep to one doctor.
- Call HealthLine at **1800 223 1313** to speak to a Nurse Advisor during office hours. This service is available in 4 languages.

Using Medisave

Under the Chronic Disease Management Programme (CDMP), individuals can draw on their Medisave account to help reduce out-of-pocket payments for outpatient treatment of their chronic disease. The use of Medisave for CDMP is applicable for the following medical conditions:

- Diabetes Mellitus
- High Blood Pressure
- High Blood Cholesterol
- Stroke
- Asthma
- Chronic Obstructive Pulmonary Disease (COPD)
- Schizophrenia
- Major Depression

Please check with the doctor or CDMP clinic for more details.

Participating clinics will display this sticker:



