

Department of Pharmacy and Pharmaceutical Sciences Faculty of Science



# **HIGH BLOOD PRESSURE**

ALL ABOUT HYPERTENSION

## WHAT IS HIGH BLOOD PRESSURE?



Scan the QR code to find out more about high blood pressure!

When your heart pumps blood around the body, the blood puts pressure on the artery walls. This is known as blood pressure. If you have high blood pressure, also known as hypertension, your heart has to work harder to pump blood around your body.

Dubbed the "silent killer", high blood pressure does not cause any symptoms, but it may damage various body organs in the longterm. Over time, untreated high blood pressure may damage your heart and blood vessels, leading to heart attack, stroke or kidney failure.

The aim of controlling high blood pressure is to lower your risk of stroke, heart and kidney diseases. High blood pressure is only one

of several things that can lead to heart attack, stroke or kidney failure. Your healthcare professional may use a risk assessment tool to assess and help you understand your risk.

# WHAT LIFESTYLE CHANGES CAN I MAKE TO TRY TO LOWER MY BLOOD PRESSURE?

- $\sqrt{}$  Eat a healthy diet Eat more fruits and vegetables, and limit added salt to foods
- $\sqrt{}$  Exercise regularly At least 150 minutes of physical activity each week
- $\sqrt{}$  Maintain a healthy body weight Check with your healthcare professional on your healthy weight range
- $\sqrt{}$  Quit smoking Smoking may increase your blood pressure
- √ Avoid drinking too much alcohol Limit to 2 standard drinks for men and 1 standard drink for women

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# WHAT ARE THE COMMON MEDICATIONS USED TO LOWER MY BLOOD PRESSURE?

	ACE inhibitors	Calcium Antagonists	Diuretics
Common examples	<ul> <li>Enalapril</li> <li>Lisinopril</li> <li>Perindopril</li> </ul>	<ul><li>Amlodipine</li><li>Nifedipine</li></ul>	<ul> <li>Indapamide</li> <li>Hydrochlorothiazide</li> </ul>
How does it work?	Targets the kidney	<ul> <li>Targets the blood vessels</li> </ul>	Targets the kidney
What are the common side effects?	<ul> <li>Persistent dry cough</li> <li>Changes in kidney function</li> <li>High blood potassium levels</li> </ul>	<ul> <li>Swelling of ankles</li> <li>Flushing</li> <li>Headaches</li> <li>Palpitations</li> </ul>	<ul> <li>Increased need to pass urine</li> <li>Light-headedness on standing</li> <li>Salt imbalance (low blood sodium or potassium)</li> </ul>
Will I need blood tests?	<ul> <li>Yes</li> <li>Kidney function testing will be performed before starting treatment, and 2-4 weeks after starting treatment and increasing doses.</li> </ul>	<ul> <li>Blood tests are usually not needed with these medications</li> </ul>	<ul> <li>Yes</li> <li>Kidney function testing will be performed before starting treatment, and 2-4 weeks after starting treatment and increasing doses.</li> </ul>
What else do I need to know?	<ul> <li>If you have diabetes, these medications help to protect the kidneys</li> </ul>	<ul> <li>Some people suffer from swelling in the ankles. This can be managed.</li> </ul>	<ul> <li>If you have gout, these medications can make it worse</li> </ul>



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### WHICH IS THE BEST OPTION FOR ME?



The following table lists some benefits and risks for you to think about when choosing the best option for you. It is important to remember that no one can say for certain what will happen to an individual person, or when. Your risk of developing heart attack, stroke or kidney failure will change over time. Making lifestyle changes or taking medications will prevent some people from developing heart attack, stroke or kidney failure, but these things will still happen to some people.

Scan the QR code to watch a video by the Singapore Heart Foundation!

The target BP is suitable for most people and vary on a case-by-case scenario. Speak to your healthcare provider for something suitable for you. Start by monitoring your home blood pressure!

You may find that you have more things to add to this list as you think about each option. Your healthcare provider will be able to offer more personalised information, advice and support.

	Do nothing	Lifestyle changes	Lifestyle changes + medications
What does this involve?	• Carry on as I am	<ul> <li>Not all the lifestyle changes may apply to you, but any will help</li> </ul>	<ul> <li>You will take one or more medications every day, long-term, as well as make lifestyle changes at the same time</li> </ul>
What are the benefits?	<ul> <li>No lifestyle changes</li> <li>No extra medications</li> </ul>	<ul> <li>You are less likely to have a heart attack, stroke or kidney failure</li> <li>You might not need to take medications</li> </ul>	<ul> <li>You are even less likely to have a heart attack, stroke or kidney failure</li> <li>Medications can help to lower your blood pressure more than lifestyle changes alone</li> </ul>
What are the risks?	<ul> <li>You are more likely to have a heart attack, stroke or kidney failure, although these are not certain to happen</li> </ul>	<ul> <li>Making lifestyle changes may be difficult</li> <li>Your risk of heart attack, stroke or kidney failure may not be lowered if your blood pressure remains high despite the lifestyle changes</li> </ul>	<ul> <li>There might be times when your blood pressure may be too low, and some people may feel light-headed</li> <li>You might experience side effects from your medications</li> <li>You might need blood tests</li> </ul>

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