

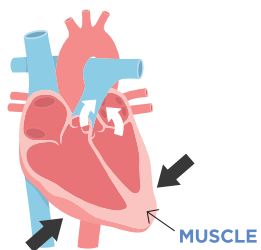
HYPERTENSION

Hypertension or high blood pressure is called the “**silent killer**” because it seldom causes symptoms unless it is severe.



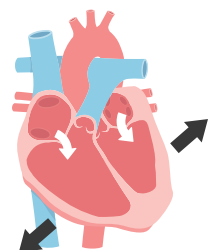
? What is blood pressure?

It is the force of blood against the walls of the blood vessels. Your blood pressure consists of two numbers. The higher reading is called the systolic pressure and it measures the maximum pressure of your blood when the heart is pumping. The lower reading is the diastolic pressure and it measures the pressure in the blood vessels when the heart is in the relaxation phase and filling up before pumping again.



“SISTOLE”

THE HEART MUSCLES CONTRACTS, BLOOD PRESSURE RISES AND BLOOD MOVES ALONG THE VESSELS.



“DIASTOLE”

THE HEART MUSCLES RELAXES, BLOOD PRESSURE FALLS AND THE BLOOD FILLS THE HEART.

Blood pressure reading is classified as follows:

BLOOD PRESSURE	SYSTOLIC BLOOD PRESSURE (mmHg)	DIASTOLIC BLOOD PRESSURE (mmHg)
Normal	<130	<80
Borderline	130-139	80-89
High	>140	>90

What causes high blood pressure?

Factors known to increase blood pressure include:

- Obesity
- High intake of alcohol
- High intake of salt
- Family history
- Aging
- Sedentary lifestyle



How will I know if I have high blood pressure?

Usually there are no symptoms and you may not be aware until your blood pressure is checked using a blood pressure set or sphygmomanometer. However, some patients do experience some nonspecific complaints and these include the following:

- Headache
- Nausea and vomiting
- Visual disturbances
- Tiredness
- Anxiety
- Excessive perspiration
- Facial redness
- Muscle tremors

What are complications of high blood pressure?

If you are hypertensive and not on any treatment, it can lead to:



STROKE



KIDNEY FAILURE



HEART DISEASES

How is high blood pressure diagnosed?

Hypertension is established when blood pressure measurement is high on three or more separate occasions. They are usually measured one or two weeks apart.

What are the treatments for high blood pressure?

The doctor usually advises lifestyle changes. These include cutting down on salt intake, quit smoking, limit alcohol intake, healthy diet, and regular exercise. The doctor may also prescribe medications if the blood pressure control is inadequate or if a person has one or more risk factors. Treatment is more aggressive in preventing organ damage especially if you are in the high-risk group.

You must take your medication (which may be more than one kind) daily according to your doctor’s prescription. Do not stop your medication without checking with your doctor.

Inform your doctor if you experience side effects from the prescribed medications, as there are many types of blood pressure medications and a suitable type for you can usually be found.

What kind of lifestyle changes must I make to lower my blood pressure?

Lifestyle modification is recommended. It is especially important to start these good habits early for those who have high risk for hypertension. Risk factors include obesity, diabetes, kidney disease, heart disease and family history of hypertension.

Lifestyle modifications include:

- Maintain a normal body weight with a Body Mass Index (BMI) of 18.5 kg/m² to 23 kg/m².

YOU MAY CALCULATE YOUR BMI BY USING THIS FORMULA:

$$\frac{\text{WEIGHT (kg)}}{\text{HEIGHT (m)} \times \text{HEIGHT (m)}}$$

- Reduce your dietary salt intake
- Exercise regularly
- Stop smoking
- Healthy diet
- Limit alcohol intake to no more than two standard drinks per day:
 - 2/3 small can of beer (220ml)
 - 1 glass of wine (100ml)
 - 1 nip of spirit (30ml)

(Health Promotion Board, 2009)

What should I do if my blood pressure is high?

You should see a doctor. Occasionally, high blood pressure is a symptom of another disease, which may be curable, or potentially a larger problem than “just” hypertension. In any case, the high blood pressure must be treated. If no cause is found and it is determined to be the “essential type”, you must still maintain a regular follow-up with your doctor from whom you are taking your medication.

Your doctor may also order a series of investigations to determine your risk of developing complications or associated problems. These may include:

- Blood samples for kidney function, sugar and cholesterol levels.
- Urine tests to detect early kidney damage.
- Electrocardiogram to determine whether there is any damage to the heart.

If you have other medical condition, other tests may be needed. It is important to consult your doctor.

High blood pressure is usually not curable, but it can be controlled if you make changes to your lifestyle and by taking medication. Treatment is a life-long process.

You may visit these websites for more information:

- <http://www.kdf.org.sg>
- <http://www.davita.com>
- <http://www.uptodate.com/patients/index.html>

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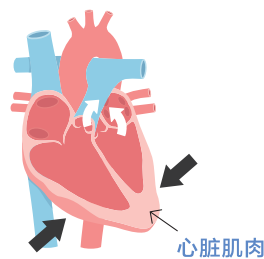
高血压

高血压也被称为“无声杀手”，因为它往往待病情严重时才会出现症状。



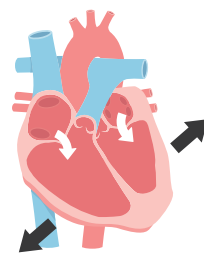
什么是血压？

血压是血液在血管内流动时对血管壁产生的一种压力。血压包含收缩压和舒张压。收缩压（俗称高压）测量心脏收缩时血液对血管壁的侧压力；舒张压（俗称低压）则测量心脏在舒张时血液对血管壁的侧压力。



“收缩压”

心脏肌肉收缩，以至血压上升并助血液流向各血管



“舒张压”

心脏肌肉舒张，以至血压下降并使血液流回心脏内

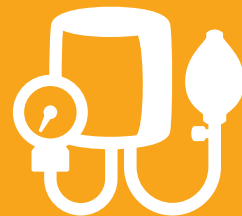
血压可分为以下的等级：

收缩压	收缩压 (mmHg)	舒张压 (mmHg)
正常血压	<130	<80
临界高血压	130至139	80至89
高血压	>140	>90

导致高血压的原因？

导致高血压的因素包括：

- 肥胖
- 饮酒过量
- 盐分摄取过量
- 遗传
- 年长
- 缺乏运动



要怎么知道自己患有高血压？

高血压通常不会有任何症状，所以患者也不容易察觉自己已患有此病，唯有通过血压测量器的检测才能被确定。然而，有些患者也会感到类似以下的一些不适：

- 头痛
- 忧虑
- 作呕及呕吐
- 多汗
- 视觉受影响
- 脸部赤红
- 疲累
- 肌肉不时颤抖

高血压有哪些并发症？

高血压患者若没有接受治疗，将会导致：



如何诊断高血压？

要在不同时间段做三次或以上的检测；时段最好相隔一至两个星期。若数次检测结果血压都呈现偏高的现象，即可断诊为高血压。

如何治疗高血压？

医生通常会建议患者改善生活习惯，这包括减少钠的摄入、戒烟、少喝酒、健康饮食及定时运动。只有在血压无法受到良好的控制，或患者有一个或更多的高风险因素时，医生才会配予抑制血压的药物。尤其是高风险患者，必须接受更积极的治疗，以预防器官受损。

你必须每天定时服用医生所配予的降压药物（或须同时服用不同组合的降压药）。若没有医生的指示，请勿自行停止服用。

若药物产生副作用，请通知你的医生。市面上有多种降压药物，要找到适合你的并不困难。

须要改善那些生活习惯有助于降低血压？

若要降低血压，医生会建议你改善生活习惯。对于高风险群，及早培养良好的生活习惯是重要的。高风险因素包括肥胖、糖尿病、肾疾病、心脏疾病和有家族史的遗传性高血压。

生活习惯的改善包括：

- 保持正常体重，维持体重指数于18.5kg/m²至23kg/m²之间。

以下是计算体重指数（BMI）的方程式：

$$\frac{\text{体重 (公斤)}}{\text{身高 (公尺)} \times \text{身高 (公尺)}}$$

- 减少食盐的摄入
 - 经常运动
 - 戒烟
 - 健康饮食
 - 少喝酒— 每天只限于两杯，例如：
 - 葡萄酒100毫升
 - 啤酒220毫升
 - 烈酒30毫升
- （保健促进局，2009年）

如果患有高血压，应该怎么办？

患者应该向医生求诊。有些时候，高血压是其他疾病的征兆，它或许可以痊愈，也或许是更严重，更棘手的问题。无论如何，高血压患者都必须接受治疗，即使找不到病因，确定只是自发性的，患者也应当定时到主治医师的诊所复诊。

为了确定患者的高血压无并发症或相关疾病的风险，医生会为你进行一系列的检验，包括：

- 血液检验— 检测肾脏功能，以及血糖和胆固醇含量。
- 尿液检验— 检定肾脏是否有初期削损的迹象。
- 心电图（ECG）— 确定心脏是否受损。

如果你其他的病症，必须与你的医生商量，可能须要进行更多的检验。

高血压一般是不能痊愈的，然而如果你肯改善生活习惯且定时服用药物，它是能受到控制的。这是一项必须终生持守的治疗。

欲知更多，可浏览以下网页：

- <http://www.kdf.org.sg>
- <http://www.davita.com>
- <http://www.uptodate.com/patients/index.html>

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