

Your Blood Pressure

What is blood pressure?

Blood pressure is the pressure of the blood in the arteries as the heart pumps it around the body.

How is blood pressure measured?

Blood pressure is usually measured by wrapping an inflatable pressure bag around the upper arm. The bag is connected to a pressure-measuring device. The entire instrument is called a “sphygmomanometer” (sfig-mo-mah-nom-eh-ter).

Blood pressure is recorded as two numbers, e.g. 120 over 80 (120/80). The higher number indicates the pressure in the arteries as the heart squeezes out blood during each beat. It is called the systolic blood pressure. The lower number indicates the pressure as the heart relaxes before the next beat. It is called the diastolic blood pressure. It is measured in millimetres of mercury.

It is best to measure blood pressure when you are relaxed and sitting or lying down.

Blood pressure varies

Blood pressure does not stay the same all the time. It is always changing to meet your body’s needs. If a reading is high, your doctor will measure your blood pressure again on several occasions to confirm the level. Your doctor may also recommend that you measure your blood pressure at home or have a recording with a monitoring device. This will be particularly so if your doctor believes that coming to the clinic makes your blood pressure rise. You can read more about measuring your blood pressure and monitoring devices in the Heart Foundation’s information sheet, *Self-Measurement of Blood Pressure* (available on our website or call Heartline for a copy on 1300 36 27 87).

What is high blood pressure?

There is no rule about what is high blood pressure, but the following figures are a useful guide:

Normal blood pressure: less than 120/80 (i.e. systolic less than 120 and diastolic less than 80). This is a guide only.

High – normal blood pressure: between 120/80 and 140/90.

High blood pressure: Equal to or more than 140/90. If the level is confirmed as equal to or more than 180/110 you have very high blood pressure.

Note: the word ‘hypertension’ is often used for high blood pressure. ‘Hypertension’ does not mean nervous tension.

Why does blood pressure matter?

If the blood pressure remains high it can cause serious problems like a heart attack, a stroke, heart failure or kidney disease. High blood pressure usually does not give warning signs. You can have high blood pressure and feel perfectly well. The only way to find out if your blood pressure is high is by having it checked regularly.

The following increase the risks of serious problems associated with high blood pressure:

- Smoking
- High blood cholesterol
- Being overweight
- Diabetes.

What can you do if you have high blood pressure?

Lifestyle is very important in helping to control high blood pressure and its associated risks. Your doctor will probably advise you to:

- Be a non-smoker (for information on quitting smoking call the Quitline 131 848);
- Reduce salt intake;
- Achieve and maintain a healthy body weight;
- Limit alcohol intake (no more than two drinks per day (men), or one drink per day (women));
- Undertake regular physical activity.

Note: Some specific types of exercises should be avoided by people with high blood pressure. These include body presses and lifting heavy weights.

Many people with high blood pressure require ongoing medication. It is important to take any blood pressure medication exactly as prescribed. Don't stop or change it unless advised to do so by your doctor.

If your blood pressure is normal (less than 120/80)

You can help to prevent your blood pressure increasing and control the risk of heart disease.

- Have your blood pressure checked regularly. If your blood pressure is 'normal' and you have no personal or family history of the condition, we recommend a check every two years and during routine visits to your doctor. If it is 'high-normal' (or higher) or you have a personal or family history of high blood pressure, stroke or heart attack, it is best to have it checked more frequently, as advised by your doctor.
- Be a non-smoker.
- Limit alcohol intake.
- Achieve and maintain a healthy body weight.
- Be active every day – accumulate 30 minutes or more of moderate physical activity on all or most days of the week – walking, cycling or anything that you enjoy.
- Enjoy healthy eating. Choose mainly plant-based foods – vegetables, fruits and legumes (dried peas, dried beans and lentils) and grain based foods (preferably wholegrain) such as bread, pasta, noodles and rice; moderate amounts of lean meats, poultry, fish and reduced fat dairy products; and moderate amounts of polyunsaturated or monounsaturated fat.

Further information

You can find out more information about blood pressure by calling Heartline on 1300 36 27 87 for a copy of our *High Blood Pressure, the Facts* booklet. Heartline is the Heart Foundation's national telephone information service (local call cost). A range of information sheets are available on the Heart Foundation website www.heartfoundation.com.au.

Good nutrition for the heart

What you need to know

Good nutrition is very important for maintaining a healthy heart. Some of the most important nutritional factors to be aware of are:

- **Dietary Fats:** play an essential part in the body but some fats can contribute to heart disease. Saturated fats in food can raise cholesterol in the blood, increasing the risk of heart disease. Unsaturated fats (monounsaturated and polyunsaturated including the omega-3 polyunsaturated fats found in fish) all lower the risk of heart disease. People with high blood cholesterol levels should also limit foods high in cholesterol, such as offal (e.g. brains, kidneys, liver), prawns, squid and eggs.
- **Soluble fibre:** is one type of fibre found in some plant foods (e.g. oats, barley and legumes), which helps to reduce cholesterol levels in the blood.
- **Folate:** is a B vitamin that can help to lower the level of a substance in the blood called homocysteine. Homocysteine may be linked to a higher risk of heart disease. Folate is found in many fruit and vegetables, wholegrain cereals, nuts and seeds.
- **Antioxidants:** (e.g. vitamin C and E) derived from fresh fruits, vegetables, wholegrain foods, seeds, some oils and nuts are important in maintaining a healthy heart.
- **Salt (sodium):** when eaten in excess, can contribute to high blood pressure, which is a risk factor for heart disease.
- **Alcohol:** up to two standard drinks a day may reduce the risk of heart disease, but alcohol in excess does not. Too much alcohol can raise blood pressure and triglycerides (a type of fat in the blood), and increase the risk of becoming overweight.

Another very important point is to achieve a good balance between physical activity and food intake, to ensure you maintain a healthy weight.

What to eat

- Base your meals around vegetables, fruit, wholegrain breads and cereals, rice, pasta and noodles. Also aim to eat more legumes (e.g. lentils, split peas, kidney beans, chickpeas, bean mix, baked beans etc). This will ensure you get plenty of fibre, folate, antioxidants, vitamins and minerals – all needed for a healthy heart.
- Eat fish at least twice a week (fresh or canned).



- Reduce saturated fat in your diet by:
 - Choosing lean cuts of meat, skinless poultry, low fat dairy foods (e.g. low or reduced fat milk, cheese and yoghurt) and low fat ice cream. Alternatively, try a calcium fortified soy beverage in place of milk if desired.
 - Using polyunsaturated or monounsaturated spreads instead of butter. For cooking and salad oils, choose polyunsaturated oils (e.g. soybean and sunflower) and monounsaturated oils (e.g. canola and olive).
 - Using healthy cooking methods (e.g. grilling, baking and stir-frying instead of deep-frying).
- Avoid adding salt to meals and choose salt reduced products (e.g. salt reduced sauces, stock and canned products) where available.

Practical tips

- Combine a healthy mix of the different types of unsaturated fats. For example, use canola or soybean oil in cooking, and canola, olive or sunflower oil in salad dressings.
- For snacks, choose fruit (fresh, canned or dried) and unsalted nuts.
- Limit those takeaway and snack foods that are high in saturated fat (e.g. pies, hamburgers, pastries, pizzas, creamy pasta dishes, chips, creamy biscuits, potato crisps, cakes).
- Make it a habit to read food labels and food information panels to detect the saturated fat and salt in foods.
- Instead of salt, use a variety of herbs, spices, citrus juices, vinegars or wine in your cooking to make food tastier.
- Explore ways to increase your regular daily activity, such as walking the last kilometer to work, taking the stairs instead of the lift and participating in regular recreational exercise. Aim to do 30 minutes or more of moderate intensity physical activity on most, if not all, days of the week. This will protect the heart in many ways, including helping you maintain a healthy weight.



Your Goals

To improve my 'healthy heart' eating habits, I will by/...../.....



The Dietitians Association of Australia endorses this nutrition guide and participated in its development as part of our work towards better food, better health and better living for all Australians. We are the largest professional nutrition-focused body in Australia. For general nutrition information, please visit www.daa.asn.au. For expert nutrition and dietary advice we recommend you contact an Accredited Practising Dietitian (APD). To find one near you, call our hotline 1800 812 942, visit www.daa.asn.au or look in the Yellow Pages under 'Dietitians'.