

Cardiovascular disease (CVD) is a term used to describe all diseases of the heart and blood vessels. Coronary heart disease (which includes heart attacks and angina) and stroke are common forms of CVD. In Australia, coronary heart disease is the leading cause of death, accounting for 18% of all deaths, while stroke accounts for 9% of all deaths. Whilst death rates from CVD have fallen over recent decades, it is still Australia's greatest health problem and prevention of CVD is an important national health priority.

A healthy lifestyle plays an important role in the prevention and management of CVD. This leaflet outlines risk factors for CVD, the measures you can take to manage CVD, and the role of dairy foods in your heart-healthy lifestyle plan.

## Risk factors for CVD

The cause of most CVD is the gradual narrowing or blockage of blood vessels. This process is called atherosclerosis and is due to the build-up of fatty deposits in the lining of blood vessels.

There are a number of factors that are associated with developing CVD. Risk factors include:

- High blood cholesterol;
- High blood pressure;
- Smoking;
- Physical inactivity;
- Being overweight;
- Excessive alcohol consumption;
- Diabetes; and
- Depression.

Many of these risk factors can be prevented and managed by lifestyle changes.

A family history of CVD, older age and being male also increases the risk of developing CVD.

## What is blood cholesterol?

Cholesterol is a fatty wax-like substance, produced by the body and consumed in the diet, which plays a major role in the body's normal functioning. However, the wrong balance of cholesterol in the blood can increase the risk of atherosclerosis and CVD.

There are two main types of cholesterol in the blood:

- **LDL (low density lipoprotein) cholesterol** makes up the majority of blood cholesterol and is often termed the 'bad' cholesterol. LDL cholesterol is the type that clogs up blood vessels. The target level for LDL cholesterol is less than 2.0 mmol/L for people with existing heart disease, and less than 2.5 mmol/L for others at high risk.
- **HDL (high density lipoprotein) cholesterol** or 'good' cholesterol actually helps protect against CVD by unclogging blood vessels. The target level for HDL cholesterol is more than 1.0 mmol/L.

You should aim to lower your LDL cholesterol and raise your HDL cholesterol.

## What is blood pressure?

'Blood pressure' refers to the pressure of blood in the arteries as it is being pumped around the body by the heart. Higher than normal blood pressure is called hypertension and is a key risk factor for both heart disease and stroke. As an approximate guide, normal blood pressure is less than 120/80 mmHg.

## A lifestyle for good cardiovascular health

Adopting a healthy lifestyle is the best way to lower your risk of developing CVD. It is never too early or too late to begin! Making lifestyle changes can also help stop existing CVD from getting worse. The key steps to reducing the risk factors for CVD include:

- Healthy eating;
- Regular physical activity (aim for 30 minutes of moderate-intensity activity on most days of the week);
- Not smoking;
- Maintaining a healthy weight; and
- Limiting alcohol consumption.

For good cardiovascular health, try the following healthy eating recommendations:

- Base your meals around vegetables (including legumes), fruits and grain-based foods (preferably whole grain) such as pasta, noodles, rice and bread.
- Eat moderate amounts of lean meat (trimmed of fat) and poultry (without skin).
- Choose low or reduced fat dairy products, aiming for 3 serves every day.
- Eat fish (fresh or canned) two to three times a week to get enough marine omega-3 fats.
- Include omega-3 fats from plant sources such as walnuts, linseeds and canola oil.

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- Limit fried takeaway foods, cakes, pastries, crisps and biscuits.
- Use moderate amounts of monounsaturated and polyunsaturated fats and oils e.g. olive oil and canola oil.
- Use plant sterol enriched foods, for example, margarines, low fat milk and yogurt.
- Limit your intake of salt.

## Try a DASH of healthy eating

A major study demonstrated that blood pressure and cholesterol can be lowered by following an eating plan called the Dietary Approaches to Stop Hypertension (DASH). In fact, in people with slightly raised blood pressure, the DASH plan lowered blood pressure by an amount similar to that expected from medication! The DASH eating plan is low in fat and salt, and contains plenty of fruits, vegetables and three serves of mainly low fat dairy foods. Blood pressure can begin to fall after just two weeks on this eating plan. The DASH eating plan was also found to lower total cholesterol by 7% and LDL cholesterol by 9%.

## Dairy foods and cardiovascular health

The Australian Dietary Guidelines emphasise that dairy foods are a key component of a healthy balanced diet. The Heart Foundation also recognises the importance of including dairy foods in your diet to manage high blood cholesterol and blood pressure, by recommending low or reduced fat milk and yogurt.

## Dairy linked to better cardiovascular health

Recently, research reports have specifically highlighted the beneficial role dairy foods play in preventing CVD.

The fat in dairy foods has a reputation of being bad for blood cholesterol levels. However, a number of studies have found that consuming dairy foods in fact had either a neutral or beneficial effect on HDL cholesterol (good cholesterol).

In addition, research suggests that regular milk drinkers have a reduced risk of heart disease and stroke. The research involved 10 major studies exploring milk drinking and cardiovascular health. Almost 400,000 men and women from a range of countries were followed for 8 to 28 years.

The research found that the people with the highest daily milk consumption had a 16% lower risk of heart disease or stroke compared to the people with the lowest milk intake. Interestingly, the majority of the milk consumed was regular-fat milk.

## Enjoy 3 serves of dairy every day

Dairy foods such as milk, yogurt and cheese are important sources of at least 10 essential nutrients including vitamins A and B12, calcium, carbohydrate, magnesium, phosphorus, potassium, protein, riboflavin and zinc. For good general and cardiovascular health, make sure you get your 3 serves of dairy foods every day. A serve of dairy could include one glass (250mL) of milk, one tub (200g) of yogurt or two slices (40g) of cheese. With the wide variety of dairy foods available, there is a choice to suit everyone as part of a heart-healthy lifestyle.

