

Healthy eating when your cholesterol is high

What you need to know

Fat in the diet and fat stored in the body both play an important part in how the body works. Some fat in the diet is essential. Food contains several different types of fat. Eating too much of some types of fat can increase the risk of developing heart disease and other health problems. A healthy diet provides a balance between the different types of fat:

- **Saturated fats:** Consuming large amounts of saturated fat increases blood cholesterol levels. It is recommended to limit these fats in the diet. Saturated fats are found in animal foods and some cooking oils (e.g. palm and coconut oils). The visible fat on meat and chicken is mainly saturated fat. The fat used in commercially baked biscuits and cakes, and the oil used in many deep-fried takeaway foods is often high in saturated fat.
- **Dietary cholesterol:** People with high blood cholesterol levels should limit foods high in cholesterol, such as offal (e.g. brains, kidneys, liver), prawns, squid and eggs.
- **Trans fats:** are another type of fat that can increase the risk of heart disease. Trans fats are found in foods high in saturated fat.
- **Monounsaturated and polyunsaturated fats:** Replacing saturated fat with monounsaturated and polyunsaturated fats can have a beneficial effect on your blood cholesterol levels. Monounsaturated fats are found in nuts (e.g. peanuts, almonds, cashews, macadamia nuts), vegetable oils (e.g. olive oil, canola, peanut oils) and avocados. Polyunsaturated fats are found in a wide range of foods including vegetable oils (e.g. sunflower and safflower, soybean), nuts (e.g. pine nuts and walnuts), polyunsaturated margarines and fish.

Other components of food are also important in reducing cholesterol. **Soluble fibre** is one type of fibre found in some plant foods (e.g. oats, barley, legumes, apples and berries). **Soy products** (e.g. soy beverages, tofu and soy-based meat alternatives) are also useful. **Plant sterols** occur naturally in many plant-based foods and in a concentrated amount in sterol-enriched margarine spreads.

What to eat

Balance fat in the diet by:

- Eating less saturated fat:
 - Increase the amount of low-fat, high fibre foods such as wholegrain breads and cereals, pasta, rice, vegetables, fruit and legumes (dried beans, peas, lentils).
 - Choose low fat dairy foods (see table), lean meat cuts, trim the fat off meat and remove the skin from chicken.
 - Use healthy cooking methods such as grilling, baking and stir-frying instead of deep-frying.
 - Limit takeaway foods such as pastries, pies and deep fried foods. Choose low fat dishes when you eat away from home.
 - Try to eat at least two serves of fruit and five serves of vegetables each day.



- Choosing foods that contain monounsaturated and polyunsaturated fats:
 - Use monounsaturated and polyunsaturated margarines, rather than butter or dairy blends.
 - Try other spreads and fillings in sandwiches such as avocado or peanut butter, rather than butter or cheese.
 - Use a variety of oils for salads and cooking (e.g. canola, sunflower, soybean and olive oil).
 - Eat fish (canned or fresh) at least twice a week - particularly oily, deep-sea fish (e.g. tuna, salmon, sardines).
 - Add unsalted nuts to stir-fries, salads or vegetable dishes.

Some healthy fat alternatives

Food/ Ingredient	Healthier Alternatives
Full fat dairy products, ice cream	Low or reduced fat milk, cheese, yoghurt, ice cream, soy products
Sour cream	Plain, low fat yoghurt
Creamy sauces	Ricotta cheese mixed with cottage cheese, sauce made with low fat milk and reduced fat cheese
Fried chicken	Barbecue chicken with skin and stuffing removed
Processed meats (e.g. sausages, salami)	Lean roasted meat, turkey, chicken breast, low fat ham or pastrami
High fat snacks	Plain fruit and vegetables (fresh, canned, dried) and unsalted nuts
Toasted muesli	Untoasted muesli
Mayonnaise	Poly - or monounsaturated mayonnaise
Cream in desserts	Vanilla fruche or ricotta cheese blended with vanilla essence and sugar to taste
High fat pastry (e.g. short crust, puff)	Filo pastry sprayed with canola oil or brushed with plain yoghurt

Practical tips

- Learn to read labels on packaged foods to compare the fat content of different food products (check the nutrition panel column showing fat content per 100g).
- Roast meat on a rack with water underneath. This allows fat to drain away whilst keeping the meat tender.
- Exercise is an excellent way of reducing body fat and is essential to a healthy lifestyle.

Your Goals

To improve the balance of fat in my diet 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'.

plant sterols



YOUR DIET CAN PROVIDE PLANT STEROLS

Plant sterols (also known as phytosterols) are natural substances that can help lower your cholesterol. They exist in wood pulp and leaves, but are also found naturally in certain foods such as vegetable oil, nuts, legumes, corn, fruits and vegetables. You can obtain higher levels through enriched margarine spreads.

HOW DO THEY WORK?

When consumed, plant sterols reduce the absorption of cholesterol from your intestines into the body. This includes both the cholesterol you eat (called dietary cholesterol) and that made by your liver, which enters the intestines through bile. Studies show that plant sterols can lower LDL (or 'bad') cholesterol in the blood by around 10 per cent.

HOW MUCH DO YOU NEED?

Typical western diets supply only around 200-400 mg plant sterols per day. Vegetarians usually consume more, around 600-800 mg, because they eat more plant foods.

If you have a raised blood cholesterol level, you will require 2-3 g plant sterols per day to lower your cholesterol. This is 5-15 times more than the level typically eaten!

WHAT CAN YOU DO?

FOOD AND NUTRITION TIPS

TO EASILY ACHIEVE THE REQUIRED INTAKE FOR CHOLESTEROL LOWERING:

Use 20-30 g of an enriched margarine spread* daily – enough to cover 3-4 slices of bread.

In some countries there are a variety of foods enriched with plant sterols to choose from, such as salad dressings and mayonnaise. However, margarine spreads are the only foods presently allowed to be fortified in Australia. The Australian food industry has applied to the regulatory authority for permission to add plant sterols to fibre-increased bread, breakfast cereal bars, low fat milk and low fat yoghurt.

*NB: Some plant sterol enriched margarines can't be used in frying, refer to the directions on the packaging carefully.

It is important to remember that sterol margarines are not a substitute for a healthy diet and should be used in combination with a diet which is low in saturated fat and high in fruit and vegetables and wholegrain foods.

SAFETY PRECAUTIONS

While foods naturally containing plant sterols are safe to eat for the whole family, the safety of enriched foods has needed to be evaluated as these contain higher levels of plant sterols, not usually consumed in the human diet.

More than 30 clinical studies show that margarine spreads with added plant sterols are safe to use. However, safety data is presently lacking for pregnant and breastfeeding women. Also, there are no long-term studies showing the effects in children who consume these products.

One potential concern about consuming plant sterol enriched margarine spreads is that they can lower blood levels of carotenoids and fat-soluble vitamins, which are important for good health. The CSIRO has shown that carotenoid concentrations can be maintained so long as you include **at least five serves of fruits and vegetables each day**, and **one of these is carotenoid-rich** e.g. carrots, sweet potatoes, pumpkin, tomato, apricots, spinach or broccoli.

FOOD AND NUTRITION TIPS

To lower high blood cholesterol and protect against heart disease:

- ▶ Eat a diet low in saturated fat and cholesterol (see fact sheet on 'high blood cholesterol')
- ▶ Include a minimum of five serves (and preferably seven) of fruits and vegetables daily, such as yellow, orange, dark green, red and purple types
- ▶ Select wholegrain breads and cereals
- ▶ If desired, and you are not pregnant or breastfeeding, use plant sterol enriched margarine spreads; Note - these can add nearly 20 g fat and more than 700 kJ daily, so you may need to compensate by reducing your fat intake from other foods. Also, look for 'light' versions of sterol spreads.
- ▶ Please remember, if you are already on cholesterol lowering medication, you should continue to take it while using sterol margarines.

Plant sterols are one strategy for lowering high blood cholesterol. For maximum results, also consume nuts, soy protein foods and soluble fibres (from foods such as oats, barley and psyllium husks) on a daily basis. Combined, these foods have been shown to lower LDL (the 'bad') cholesterol by 20-30 per cent!



WOULD YOU LIKE MORE INFORMATION?

Sanitarium's purpose is to help people enjoy the benefits of healthy eating, as part of an overall healthy lifestyle. Our **Sanitarium Nutrition Service**, offers a free service to the community.

We invite you to contact us during work hours to:

- ✓ Receive a copy of our 'HEART HEALTH' leaflet.



- ✓ Subscribe to our **FREE**, quarterly food & nutrition newsletter, 'GOOD FOOD NEWS'.



- ✓ Talk with a qualified dietitian about any nutrition issue of interest to you.

SANITARIUM NUTRITION SERVICE 1800 673 392
www.sanitarium.com.au

This nutrition sheet has been developed by the Sanitarium Health Food Company and favourably reviewed by Nutrition Australia.



DEVELOPED BY

THE HEALTH FOOD COMPANY

AS A NUTRITION SERVICE
FOR THE COMMUNITY

The information contained in this leaflet is correct at the time of publication with every effort made to ensure that it follows the latest nutrition guidelines. Please consult your accredited Practising Dietitian (APD) or doctor for advice on your personal dietary requirements.

© Sanitarium June 2004



Heart Foundation

Being active is an important part of leading a healthy lifestyle. Young or old, physical activity brings with it a range of significant benefits. Your doctor has just prescribed an increase in your activity level.

Why be active?

Being physical activity will make you:

Feel better

- With more energy, improved sleep and added fun in your day

Enjoy better health

- Through controlled weight, blood pressure and cholesterol, and lower risk of heart disease, diabetes, some cancers, injury, stroke, osteoarthritis and osteoporosis (bone loss). Also improves symptoms of chronic disease such as arthritic pain or limitations in movement.

Have a healthier state of mind

- With lower stress, better concentration and more self-confidence.

Research has confirmed that it is never too late to start being active. People of all ages can improve their health and well being by starting some moderate-intensity activity. Physical activity cannot be stored so people who were fit in early life will still need to increase their physical activity gradually.

How much activity?

The good news is ***activity doesn't have to be vigorous***. Health experts recommend that people should do at least ***30 minutes of moderate*** physical activity, such as brisk walking, on all or most days of the week to enjoy the resulting health benefits. This can be accumulated in bouts of ***ten minutes*** or more if this is more convenient for you.

How do I start?

Activity can be fun for everyone, not just the young and fit. Here are some tips on how to make a start to being more active everyday:

- Think of ways to fit physical activity into your normal day, for example
 - take the stairs
 - walk to the shops
 - get off the train or bus a stop earlier
 - take the dog for a walk
- Find an activity you enjoy, that way you are more likely to keep it up
- Set a goal and work towards it, starting with short-term and realistic goals
- Vary the type of activity you do, so that you don't become bored
- Be active with friends or a partner. This way you can motivate and encourage one-another. Another way to gain social support is to join a sport, health or recreation club
- Be prepared to deal with setbacks that interrupt your activities. The key is to treat setbacks as temporary and get going again as soon as you can
- Talk to your GP. Follow up and regular review by someone you trust can help you stay active

If you feel discomfort, have chest pain, are more breathless than you should be, or your heartbeat becomes rapid or irregular during activity, stop immediately and seek medical advice.

The National Physical Activity Guidelines for Australians are:

Think of movement as an opportunity, not an inconvenience
Be active every day in as many ways as you can
Put together at least 30 minutes of moderate-intensity physical activity on most, preferably all, days. If you can, also enjoy some regular, vigorous exercise for extra health and fitness