

Hyperlipidaemia or elevated cholesterol levels

Ever wondered what role cholesterol plays in your body?

Your body requires a certain amount of fat to function naturally. It uses cholesterol to:

- Make hormones such as estrogen, testosterone and adrenalin
- Helps metabolism to work efficiently
- Builds structure of cell membrane
- Produces bile acids that help digest fat and absorb important nutrients

Cholesterol is a soft, waxy fat-like substance that can not be dissolved in the blood therefore it needs transporters to transport it to fat cells throughout the body.

A medical condition called HYPERLIPIDEMIA occurs when you have increased levels of cholesterol in the blood and this almost always leads to Heart Disease. This though can be managed through good diet and some lifestyle changes

The cholesterol low down

Lowering your cholesterol is still a good idea so let's have a look at what is 'good' and 'bad' cholesterol:

- *Low density lipoprotein (LDL)*
This is the **bad** (Lousy) cholesterol because it builds up in the arteries and so should always be **Low**.
- *High density lipoprotein (HDL)*
This is the **good** (Healthy) cholesterol as it is broken down in the liver and removed from the body. It also helps to remove some of the cholesterol that has already been deposited on the artery walls. It is preferable for this type of cholesterol to be **High**.

The good news is that cholesterol is one of the few risk factors over which we do have some control. Cholesterol levels can be lowered and controlled by reducing fat intake (specifically *saturated* fat), eating foods that lower cholesterol (see below) and taking part in regular exercise.



Nutritional tips for managing heart disease and high cholesterol:

1. Cut down on unhealthy fats

Not all fats are alike in composition or in the effect they have on our bodies and health. Dietary fats can be classified as follows:

- **Saturated Fat**

Saturated fats are generally considered **unhealthy** fats and a sub group of saturated fats called trans-fats are particularly harmful. You should try to limit saturated fats and eliminate trans fatty acids altogether! *Red meat (especially beef and mutton); Full cream milk and dairy products; Coffee or tea creamers; Coconut oil; Palm kernel oil; Cream; Ghee; Hard or brick margarine; Pies and pastries made with lard or hydrogenated fat, margarines.*

- **Monounsaturated Fat and Polyunsaturated Fat**

Monounsaturated and polyunsaturated fats are generally considered your **healthy** fats and are not harmful. You should aim to include more of these fats (in small portions). *Good oils that are cold pressed such as olive or avocado oil. Unsalted and un-roasted nuts like almonds, cashews, macadamias, hazel nuts, pecans and peanuts. Avocado's and olives are also good for your heart. Although these fats are more expensive you only need them in VERY small portions.*

1 portion of good fat = 1 tablespoon nuts or seeds **OR** 1 teaspoon oil **OR** 5 olives **OR** 1 tablespoon peanut butter **OR** ¼ avocado.

Dietary tips to reduce saturated “unhealthy” fat intake and include good “healthy” fats:

- Save money and reduce unhealthy fats by using meat and meat products less frequently and by "stretching" such products by using other ingredients. Combine a small quantity of meat with dry beans, lentils or other pulses or potatoes and vegetables in a stew. Make use of textured soya protein products to stretch mince. Make use of substitutes such as eggs, legumes, and cheese and remember fish (especially canned pilchards) is generally cheaper and healthier than meat.
- Many dishes can be prepared with much less oil. Better yet, avoid frying . rather **dry fry**+using MSG free vegetable stock or even a little wine. Experiment with other cooking methods such as steaming, baking, grilling and roasting. Adding healthy oil on something like vegetables after roasting them is a good idea.
- Avoid or limit luncheon cold meats like polony, salami, viennas and boerewors.
- If there is fat/skin on the meat cut it off before cooking.
- Watch out for hidden saturated fat in chocolates, commercial cakes, pastries, doughnuts, biscuits and muffins.
- Read labels and avoid products with the words **hydrogenated**+or **partially hydrogenated**+and **trans fats**+. Also try when you can to buy foods with a total fat content of less than 10g per 100g.
- Use low-fat, skim or fat-free milk and dairy products such as yoghurt and cottage cheese. Avoid coffee/tea creamers.



- Substitute legumes (dry, cooked beans, peas, lentils or soya) for meat at least twice a week.

2. Boost your fruit and vegetable intake

- Half your plate should be filled with vegetables or salad at least twice a day.
- Aim for at least 5 servings of fruit and vegetables every day (i.e. at least 2 fruits and 3 x ½ - 1 cup servings of vegetables).
- Eat 2-4 pieces of fresh fruit daily . perfect as a healthy snack!

DID YOU KNOW: The results of some of the largest trials done in the world indicate that people who eat ample quantities of fruits and vegetables every day have less heart disease and actually have less of any disease!

3. Fibre frenzy

- Soluble fibre may help reduce cholesterol levels. Aim to eat at least one serving of a food high soluble fibre daily. E.g.: *oatbran, oats, sweet potato, all beans and legumes.*
- TIP: Try the recipe book **EATING FOR SUSTAINED ENERGY** by L Delpont and G Steenkamp for healthy and delicious meal ideas that are high in fibre and low in fat.

4. Something fishy

- Salmon, mackerel, herring, pilchards and fresh tuna are all high in omega 3 fatty acids. These essential fats help to reduce blood clots and inflammation therefore good for heart health. Aim to eat fatty fish at least 3 times per week.

5. Alcohol in moderation

- **Men:** 2-3 units per day
- **Women:** 1-2 units per day
- Aim for at least 2 alcohol free days per week

1 unit = 120ml wine; 340ml beer; 25ml spirits

Bottom line: The best thing you can drink here is one glass of red wine per day.

6. Supplement suggestions

- Supplement a good all-round multivitamin and mineral that supplies on a daily basis:
2000 . 4000mg of vitamin C
400mg of vitamin E
500mcg of beta-carotene
100mcg of selenium
400 . 1000IU vitamin D per day
100% RDA and more of all the required vitamins and minerals





- Magnesium assists with elevated blood pressure and provides energy to the heart muscle. People who don't take enough magnesium are at risk of a heart attack (500mg elemental per day)
- Co-Enzyme Q10 (60mg/day), especially if you're on statin drugs (cholesterol lowering drugs)
- Omega 3 essential fatty acids (600-1000mg/day of EPA and DHA). This works out to 3000mg of salmon oil per day or 3 tablespoons of cold pressed flaxseed oil daily.
- Use a good all-round antioxidant.
- Take low dose aspirin daily (1/4 tablet)

NOTE: It is very important though to start these nutritional supplements under the guidance of a health professional that understands their working and mechanism of action.

IN A NUT SHELL: Don't smoke, get fit, lose weight and learn to manage your stress.

Disclaimer: The information contained in this document is not intended to replace the attention or advice of a physician or other health care professional. Anyone who wishes to embark on any dietary, drug, exercise, or other lifestyle change that is intended to prevent or treat a specific disease should first consult a qualified health care professional.

