

What is cholesterol?

Cholesterol is a lipid (a form of fatty substance) essential for the proper functioning of the body. However, the right balance is also paramount to maintain health. An excessive amount of cholesterol in blood is what is categorized as hypercholesterolemia/ or hyperlipidemia. Note: Cholesterol is not the only type of lipid that is generally of concern, triglycerides are another type of lipid that increases the risk of diseases like cardiovascular diseases when it rises above a certain level. There are several types of lipids that give them different properties and propensities to clog arteries by forming plaques.

What are the health risks associated with elevated cholesterol levels?

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What are the health risks associated with elevated cholesterol levels?

HDL is commonly known as 'Good Cholesterol', it is a substance that carries cholesterol to the liver, where it is broken down and removed from your body, keeping your cholesterol levels balanced. When HDL levels are too low, there might be too much cholesterol in the bloodstream. LDL, commonly known as 'bad cholesterol', if too elevated it causes plaque to form in the arteries which may lead to strokes, coronary heart disease, high blood pressure among others.

What are the causes of high cholesterol?

1. Lifestyle – (a) Dietary habits- consuming a diet high in saturated fats causes the accumulation of LDL cholesterol in the bloodstream. A diet rich in fast-food, fried foods, convenience foods that contain a lot of hidden, trans fats, red meat with fat too frequently increase the risk of developing cardiovascular diseases, (b) Sedentarily – being physically inactive has been associated with a higher BMI ($> 24.9 \text{ kg/m}^2$) and an increase in LDL and decrease in HDL, (c) Smoking – can cause tar build up in the arteries and nicotine constrict arteries increasing damage and accelerating plaque formation.

What are the causes of high cholesterol?

2. Biological and genetic factors (a) Aging, plaque formation happens as early as the age of 8 years old and exacerbates as a person ages, (b) Males are more likely to have high cholesterol than menstruating females. Females past the menopause stage have a similar risk of developing hypercholesterolemia as their male counterparts, (c) Ethnicity. People of south Asian origin have a higher propensity of developing elevated cholesterol, (d) Familial hypercholesterolemia, is a condition that is inherited via genetic transmission.

What are the causes of high cholesterol?

3. Underlying health conditions - (a) chronic kidney disease can also lead to high cholesterol levels, (b) Liver disease, (c) Overweight and obesity, (d) Type 2 diabetes, (e) Hypothyroidism

How to manage cholesterol levels with lifestyle changes?

(1) If you smoke, stop smoking, (2) If you are overweight/ obese, lose weight. Seek professional help if you think you are unable to do it alone (3) Carry out a physical activity regularly, a minimum of 4 times a week for 30 minutes each time.

How to manage cholesterol levels with diet?

Increase food that will (1) Increase your HDL such as mono and polyunsaturated fatty acids, omega-3, rich sources such as fatty fish and nuts, (2) Lower down LDL and Triglycerides – from deep fried food items (samosa, bajia (bean cake), gateau piments), red meat (such as beef, goat, venison, hare, lamb, mutton, boar, pork and veal), chicken skin, vegetable and frying oils, cream, full cream milk, butter, cookies and cakes and other sources of hidden fats, (3) Have high fibre – wholegrains, fruits and vegetables. Consume at least 25g of fibre daily. Seafood (crevette, calamari, octopus (ourite) should also be avoided.

How to manage cholesterol levels with diet?

Priorities Wholegrain cereals, Brown rice, wholegrain, flour bread/wrap/roti, jumbo or rolled oats, flour, Priorities Non-starchy vegetables of different colors Peppers, broccoli, leafy greens, courgettes (zucchini), pumpkin, pattypan, squash, aubergines (eggplant), cabbage, cruciferous veg, salads, spinach, prioritize Mono & polyunsaturated, fatty acids, Extra virgin olive oil, avocados, nuts, linseed, chia seed, pumpkin seed, Prioritise Natural sugar sources, Fresh fruits, dried fruits (raisins, apricots, prunes, dates, cranberries)

How to manage cholesterol levels with diet? What food should I limit if I have high cholesterol?

(1) Limit Refined cereals such as White rice, white flour, cookies, biscuits, white bread, pastries, (2) Limit saturated fats and Trans-fat such as Butter, oil, fried foods, pastries, cookies, cream, (3) limit Added sugars such as Juices and fizzy drinks, candies and chocolate, desserts, (4) Limit High salt foods such as canned foods, pre-salted foods (5) Limit Eating too many added sugars as this increases cholesterol levels. Fructose should be avoided as fructose increases the number of oxidized LDL cholesterol particles which contribute to heart disease (6) Lower down LDL and Triglycerides – from deep fried food items (samosa, bajia (bean cake), gateau piments), red meat (such as beef, goat, venison, hare, lamb, mutton, boar, pork and veal), chicken skin, vegetable and frying oils, cream, full cream milk, butter, cookies and cakes and other sources of hidden fats.

What are the normal cholesterol levels in your blood?

Total cholesterol should be 5 mmol/L or below, HDL (good cholesterol) should be 1 mmol/L or above, non-HDL (bad cholesterol) should be 4 mmol/L or below, Fasting triglycerides (when you are asked not to eat for several hours before the test) should be 1.7 mmol/L or below

What food should I eat/consume so as to lower LDL cholesterol level?

Increase your HDL such as mono and polyunsaturated fatty acids, omega-3, 6,9 rich sources such as fatty fish and nuts. Have high fibre – wholegrains, fruits and vegetables. Consume at least 25g of fibre daily.

Soluble fiber (oats, beans, legumes (grain secs), whole grains, flaxseeds, apples, and citrus fruits) is important in helping lower cholesterol levels. It moves through your digestive tract, absorbing water and forming a thick paste. As it travels, soluble fiber absorbs bile, a substance produced by your liver to help digest fats. Eventually, both the fiber and attached bile are excreted in your stool. Bile is made from cholesterol, so when your liver needs to make more bile it pulls cholesterol out of your bloodstream, which lowers cholesterol levels naturally.

Eating fruits and vegetables is another easy way to lower LDL cholesterol levels. Studies show that adults who consume at least four servings of fruits and vegetables each day have roughly 6% lower LDL cholesterol levels than people who eat fewer than two servings per day.

Two main kinds of fats found in food are saturated and unsaturated. Longer-term studies have found that people who eat more unsaturated fats and fewer saturated fats tend to have lower cholesterol levels over time.

So as lower LDL cholesterol “good” HDL cholesterol may be beneficial for your health. Foods that contain healthy unsaturated fats, which you should consume: all fatty fish, tuna, sardines, salmon and local fish, olives, olive oil, canola and sunflower oils; avocado; most nuts, but especially walnuts; most seeds, including sunflower and chia seeds.

What food should I avoid eating to lower LDL cholesterol levels?

Bad” LDL cholesterol (found in saturated fats), particularly when oxidized, have been linked to an increased risk of heart disease, heart attack and stroke.

While Trans fats (another kind of fat) occur naturally in red meat and dairy products, most people’s main source of artificial Trans-fat is in processed foods. It’s not just saturated and Trans fats that can raise cholesterol levels. Eating too many added sugars can do the same thing. Even more troubling, fructose increases the number of oxidized LDL cholesterol particles which contribute to heart disease.

Foods that are high in saturated fats and should be limited/ avoided include: red meat (such as beef, goat, venison, hare, lamb, mutton, boar, pork and veal), butter, baked goods, such as cakes and cookies, cheese, pizza, ice cream, processed meats, such as sausages and fried foods, full fat dairy products, seafood (crevette, calamari, octopus (ourite)), egg yolks

I have high cholesterol. What diet/food should I eat/consume daily?

1 portion of nuts (almond, peanut, walnut, pistachio...), 1 portion of seeds (chia, flax seed, sunflower seed...) , 1 portion Oatmeal for breakfast (almost every day) , 3 portions of wholewheat cereals (brown rice, wholewheat bread, wholewheat farata(Indian parantha, layered flaky pan-fried flatbread), quinoa) , 2 portions of fruits (with peel and not in the form of juice or smoothie) , Grain sec (lentil, haricot rouge, dhal (dholl),) , 1 portion raw salad , 2-3 portions cooked vegetables

I have high cholesterol. What diet/food should I eat/consume 2—3 per week?

Fatty fish (red tuna, fresh salmon etc.), Avocado, Soya milk, Tuna/ Sardine/ Pilchards (in tin), 1 tsp olive oil (in salad) and Eggs (2-3 units, 1 yolk only).

I have high cholesterol. What Foods should be eaten sparingly?

Seafood (crevette, calamari, octopus (ourite)), Fried cakes (samosa, bajia(bean cake), gateau piments), Ice-cream Chips/fried chicken can be eaten once per month but in a reasonable portion

I have high cholesterol. What food should I eliminate till cholesterol levels are stabilized?

Red meat, Liver and offal, Cheddar cheese, Butter and Margarine, Gateau cravatte (KRAVAT- BOWTIE COOKIE), sev(deep-fried snack food consisting of small pieces of crunchy noodles made from chickpea flour paste.), baguette fromage and other salty fried snacks, Nuggets, sausages, readymade burgers.