

A Diet to Lower Cholesterol

Ask someone what is the best way to reduce the risk of heart disease and chances are they'll say "reduce your cholesterol." That message has been ingrained in our psyche. So it isn't surprising that any study that shows a cholesterol lowering effect by some dietary intervention, be it oat bran, soy protein or plant sterols, gets a great deal of publicity. And imagine the publicity that can be garnered if all these interventions are used simultaneously to achieve a cumulative cholesterol lowering effect. Well, no need to imagine. Such a study has been carried out at the University of Toronto under the leadership of Dr. David Jenkins one of Canada's leading nutritional experts.

Some 345 Canadians with no history of heart disease but having high levels of LDL, the so-called "bad cholesterol" were enlisted for the study. One group served as a control and was just given the usual advice to stick to a low fat diet. The others were asked to follow essentially a vegan diet in which soy foods were substituted for meat, soy milk was consumed instead of milk, whole grain oats and barley replaced other cereals, psyllium supplements were taken for extra fiber, snacks were mostly nuts and fruits and plant sterol enriched margarine was used instead of butter. The plan was to provide about two grams of plant sterols a day, ten grams of soluble fiber, forty-five grams of soy protein and forty-five grams of nuts since these amounts had been shown in previous studies to reduce cholesterol.

A sample daily diet included oat bran and strawberries for breakfast with oat bran bread and margarine. For lunch, black bean soup and soy deli slices on oat bran bread. For supper, ratatouille with eggplant, onions, barley, broccoli and cauliflower. In-between meals, nuts and fruit. Not exactly a mouth-watering diet for most people. But it did reduce cholesterol by about 13.5% in three months.

Now for the important question. What does that really mean in practical terms? Not as much as you might think. High cholesterol is certainly a risk factor for heart disease, but it is only one of many. Obesity, sedentary lifestyle, diabetes, hypertension are all important risk factors. And you have to remember that about half of all heart attack victims have normal or below normal cholesterol levels. The pertinent question to ask is how much can one expect to benefit from lowering one's cholesterol if it is elevated. Surprisingly the situation is not as clear as most people think. Most of the evidence for lowering the risk by lowering cholesterol comes from studies that used statin drugs. But there is a fly in the ointment here. Statins also reduce risk when cholesterol levels are normal. The thinking now is that their benefit may actually derive not from their cholesterol lowering effect, but from their ability to reduce inflammation, which is a risk factor for heart disease.

As far as diet goes, there is good evidence that the Mediterranean diet, featuring olive oil, fruits, vegetables, fish and little meat reduces the risk of heart disease even if cholesterol is not elevated. Again this may be due to the anti-inflammatory effects of the diet. None of this is to suggest that the portfolio diet, as the one used by the Toronto group has been christened, is not beneficial in reducing the risk of heart disease. It may well be. But that is not what the study showed. It showed that cholesterol was reduced. That is not the same as saying that heart disease was reduced. For that the experimental and control groups would have to be followed for years to see what the cardiovascular outcomes are. Adhering to such an austere vegan diet may not be necessary. The less stringent Mediterranean diet may be just as protective. And it sure is easier to stick to.