

Are statin worth the trouble, should we stop using statin drugs?

Editorial

Published in the BMJ Open journal, the new study found that 92 percent of people with a high cholesterol level lived longer.¹ High cholesterol does not cause heart disease new research finds, so treating with statins is a waste of time, said Professor Sherif Sultan from University of Ireland. A review of research involving nearly 70,000 people found that there was no link between what has traditionally been considered “bad” cholesterol and the premature deaths of over 60-year-olds from cardiovascular disease. Co-author of the study Dr. Malcolm Kendrick, acknowledged the findings would cause controversy but defended them as robust and thoroughly reviewed. What we found in our detailed systematic review was that older people with high LDL (low-density lipoprotein) levels, the so-called bad cholesterol, lived longer and had less heart disease.

Vascular and endovascular surgery expert Professor Sherif Sultan, who also worked on the study, said cholesterol is one of the most vital molecules in the body and prevents infection, cancer, muscle pain and other conditions in elderly people. Every In 1913, Dr. Anitschkov, a Russian scientist found that feeding cholesterol to rabbits induced heart disease. He failed to realize that rabbits, being vegetarians, have no means of dealing with this animal fat. This theory suited very well for the pharmaceutical industry as they developed cholesterol-lowering drugs like statins to sell at premium prices.

In 1971, Akira Endo, a Japanese biochemist began the search for a cholesterol-lowering drug. He discovered HMG-CoA reductase inhibitor Mevastatin produced by the fungus *Penicillium citrinum*. Mevastatin side effects were horrible that it was never marketed. Side effects included tumors, muscle deterioration, and deaths in laboratory dogs. P. Roy Vagelos, chief scientist and later CEO of Merck & Co, was interested in statin development, and made several trips to Japan. By 1978, Merck had isolated lovastatin from the fungus *Aspergillus terreus*, and the first statin was marketed in 1987 as Mevacor.²

To market statins effectively, Merck had to, first, convince the public about the dangers of high cholesterol, and second, convince the doctors that statins would extend lives. As a result of public campaigns, people in the U.S. became familiar with their cholesterol numbers and the made up story of “good” and bad “cholesterol. If statins are so effective in lowering cholesterol and thereby heart disease, why are heart attacks still so prevalent? Currently, 43% of U.S. population is dying with heart disease;

Statins: false cure for fat-related diseases

Many people consider fats and cholesterol to be the enemy of heart disease without really understanding the root cause of heart disease. Many believe that lowering cholesterol and dietary fat intake is the way to prevent heart disease. Unfortunately, this is still the prevailing therapeutic approach of many allopathic doctors. Medical

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practitioners often prescribe statin drug on the assumption that lowering cholesterol will fix heart disease.

It is true that statin drugs can lower cholesterol levels, but there is little proof that they are effective in preventing heart disease. Here are three of the major studies and the results: Osper study³ randomized control trial with 5,804 patients: Statins did not reduce total heart attacks and total strokes in primary prevention group. Allhat-Lt study⁴ randomized controlled study with 10,355 patients. Result: Statins did not reduce total heart attacks and strokes; also, it did not reduce the rate of deaths in patients. Ascot-Lla study⁵ randomized control study with 10,305 patients. Result: Statins did not reduce total heart attacks and strokes compared to placebo.

A review of all the major studies accounted for more than 65,000 patients using statin drugs for primary prevention.⁶ Combined data of 11 randomized control trials showed that statins did not reduce the rate of deaths compared to placebo. Additionally, there was no relationship between reduction of LDL-cholesterol (so called bad cholesterol) and the rate of death among patients. To conclude, the reduction of LDL cholesterol does not protect individuals from heart attacks; in other words, fats are not the enemy.

For years, we have been misguided about the fats incorporated into our diets.

Yes, Statin can lower cholesterol effectively. However, do we see a reduction in heart attacks and strokes? The answer is No.

Good and bad cholesterol

- Cholesterol is considered very important for the whole body. Fatty molecules attached to proteins are called low-density lipoprotein (LDL cholesterol) and high-density lipoprotein (HDL cholesterol).
- When we eat a fatty meal, the fats are sequestered by our lymph system, then sorted and packaged by the liver. The liver forms very-low-density lipoproteins (vLDL)-fluffy balls of fat that

deliver cholesterol, fats and protein which signals to various parts of the body. As the vLDL is emptied, they become LDL, which are less fluffy. As the LDL continues to deliver its contents around the body, it is repackaged to form HDL.

- c. HDL or good cholesterol stems from LDL or the “bad cholesterol.” Now, studies prove that this conversion of LDL to HDL can be achieved through a healthy diet and regular exercise.⁵ LDL cholesterol is not the real problem. The real problem is the under-utilization of the fatty nutrition. When we metabolize the LDL properly, it becomes HDL and protects one’s health.
- d. The terminology of “good” and “bad” fat or cholesterol just adds to the confusion. The effects of fats are relative to the source of the fat and then how our body processes and uses it.

Inflammation: the real problem

In the past decade, studies have shed more light on how fatty acids become involved in disease processes. The primary culprit appears to be inflammation and oxidative stress. Inflammation is a normal part of the healthy body’s metabolic activity of destruction, healing and regeneration. Oxidative stress is the main tool of the inflammatory process. In a healthy body, these processes are better controlled. When natural homeostasis controls are stressed or malfunction, the inflammation’s destructive effects become prevalent.

The process of plaque formation is called atherosclerosis; it is the main cause of arterial dysfunction that results in coronary heart disease, strokes and embolism. Studies on fatty plaque in blood vessels demonstrate that the development of plaque and inflammation go hand-in-hand.⁶ Arterial plaque may occur by:

- a. Eating excessively oxidized fatty meals or meals with excess hydrogenated fats. This triggers the inflammatory process in blood vessels-resulting in oxidative stress that generates initial atherosclerotic plaque.
- b. Excessive low-grade inflammation. This causes “peroxidation” of fatty acids and cholesterol that circulates in blood vessels, resulting in arterial plaque.

Low-grade inflammation has been associated with many diseases from diabetes to cancer. Even mental diseases are due to chronic inflammation in the gut, which is the main warehouse of neurotransmitters. Low-grade inflammation is also associated with elevated blood sugar,⁷ thyroid dysfunction⁸ cigarette smoking⁹ chronic exposure to pollutants¹⁰ as well as psycho-social stress.¹¹

Studies have also shown that fatty molecules like LDL, saturated fats and trans-fats have a greater susceptibility to peroxidation by the body’s inflammatory processes. Therefore, these fats are associated with greater risk of developing heart disease.¹² While it is important to mindfully manage the quality and amount of fats we eat, it is equally essential to monitor and balance inflammation to prevent heart disease.

Before 1960s, when saturated fats were used in all the cooking and confectionary, heart attacks were lower. With the introduction of modified and hydrogenated fats, sugar and excessive meat consumption, heart attacks went through roof.

In summary, for health benefits, here is how to proceed:

- Eat 4 to 6 variety servings of vegetables, 2 to 3 servings of fruits, 2 handfuls of nuts or seeds, and 1 to 2 tablespoons of healthy non-oxidized variety of oils including saturated fats like butter, ghee and saturated oil. We should consume a variety of mono-

unsaturated like olive oil and mustard oil, poly-unsaturated like sesame oil, MCT rich oil like coconut and ghee. Cut down sugar to 2 teaspoons per day, I prefer raw honey. Consume a variety of whole grains. Amaranth, buckwheat and barley are low glycemic index grains.

- Drink 8 to 10 glasses of water daily. Avoid sugary drinks including juices.
- Do breathing exercises, yoga, walking and light weight bearing exercises.
- Diets low in calories but rich in nutrients like vegetables, fruits, nuts, seeds, healthy oils, whole grains, limited amount of dairy, meat and fish will not only save us from having heart attacks, but also from developing almost all major diseases of our century.

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