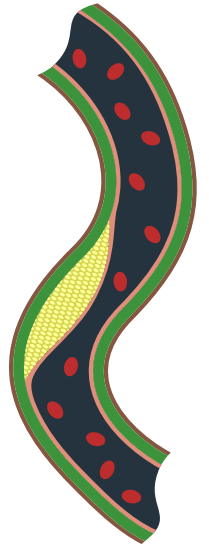


مستشفى الملك فيصل التخصصي ومركز الأبحاث
King Faisal Specialist Hospital & Research Centre
مؤسسة عامة - Gen. Org.



For Better Health Series (10) Part One: Cholesterol Between Facts and Delusions

Hussein Raef, MD
Consultant Endocrinologist

Recently, there have been many conflicting opinions and posts about cholesterol, is it an enemy or a friend? Does it cause vascular sclerosis? Is the diet about it valuable or not? Do we need to treat it with medications? And when? Are there any damages from these medications? This caused a lot of confusion, misunderstanding, misconceptions and possibly harmful behaviors.

In this topic and the next one, I will try to address these points in a simple way hoping that I agree to clarify them scientifically as much as possible.

Is Cholesterol Harmful?

Cholesterol is a natural and essential substance in building the cells, including nerve and brain cells, as well as in the production of many hormones in the body. Cholesterol is also present in the blood and is transmitted by special carriers (lipoproteins) that have several types, including the high density lipoprotein (HDL), and it is also called the good cholesterol because it carries cell residues from cholesterol to the liver and another type called low density lipoprotein (LDL) which is linked to arterial diseases, and therefore it is called the bad cholesterol.

Is LDL Cholesterol Blood Level Linked to Atherosclerotic Diseases?

There are many convincing evidences and scientific studies that link high level of bad cholesterol (LDL) with these diseases. For example, high familial hypercholesterolemia, a relatively rare genetic disease, causes cardiovascular disease at an early age. Also, lowering the cholesterol level using Statins reduces the percentage of these diseases and even deaths by 30% or more, and commensurate with the decrease in the LDL level, but this does not completely prevent the occurrence of these diseases. The reason is that bad cholesterol is not the only factor that determines the occurrence of vascular diseases, it also relates to the presence of other contributing factors such as diabetes, arterial hypertension, genetic predisposition and family history, abdominal obesity, and smoking, and maybe other factors that are not well-known yet. Therefore, we will see that dealing with high cholesterol varies from person to another according to the presence of these factors.

Is There Any Importance of Diet in Treating High Cholesterol Level?

It has been recently spread that a low-cholesterol diet is un-necessary, and it does not affect blood cholesterol level in contrary to what was previously known. This is relatively true because what is contained in food from cholesterol does not determine its level in the blood, but these foods such as meat, animal fats, and skimmed milk derivatives are also rich in saturated fats. They are fatty substances different from cholesterol and have a negative effect on the level of bad cholesterol and lead to an increase in its level. They are also found in hydrogenated vegetable oils used in the food industry and unfortunately still exist in many of our countries despite their harmful effect.

Consequently, the appropriate diet for high cholesterol is a diet low in saturated fats and compensated by unsaturated fats such as olive oil, canola, avocado, fish and unsalted nuts, as well as high-fiber foods such as whole grains and legumes without the need to overestimate in decreasing the cholesterol in food (for example there is no need to avoid eating eggs and seafood).

But do we need to use medications, and who needs them and what are their side effects? We will discuss this in the next topic.