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Cholesterol: The Culprit

What is cholesterol?

Cholesterol is a sterol, a complex alcohol constituent of animal fats and oils. This is the substance that forms the plaques which adheres to the inner wall of arteries causing hardening of the arteries and stenosis (blockages), many leading to heart attacks, strokes, or poor leg circulation.

Is there such a thing as “good” cholesterol?

Yes, it is called High Density Lipoprotein (HDL), and the bad cholesterol is called the Low Density Lipoprotein (LDL). For better health, a person should have a high level of the HDL and low level of LDL. These two triglycerides or lipids are important risk variables, hence their serum (blood) levels are also determined, together with Total Cholesterol level.

Where does our body get cholesterol from?

While our liver produces (endogenous) cholesterol, the main source of (exogenous) cholesterol in our body and the blood is from the food we eat. Food that are high in cholesterol include: egg yolk, pork, beef (and other red meats), butter, lard, and other dairy products.

Does milk contain cholesterol?

Yes, but the 2% milk, skim milk, or reduced cholesterol milk have been reconstituted to attain the reduction in cholesterol in them, and marketed as such. For young children, skim milk is not recommended, unless they are hyperlipidemic (with high triglyceride level, especially the LDL). Two percent milk is acceptable, but not lower.

How much fat is in our usual diet?

The average U.S. diet contains about 37% total calories as fat. In the

Philippines, this may even be as much as 45%, which is a very unhealthy diet. Even 37% is too high, and the American Heart Association recommends that this needs to be reduced to 10% to have a major effect in heart attack, stroke and cancer prevention.

What are the types of dietary fats?

There are three kinds: saturated, monosaturated, and polyunsaturated. Sources of saturated fats are meat, non-skim dairy products, artificially hydrogenated vegetable oils. Monosaturated fats are found in olive oil and canola oil. Polunsaturated fats are from Omega-3 (sea plankton, deep-sea cold water fatty fish, like salmon, tune, mackerel), and from Omega-6 oils in cultivated vegetable oils (like corn oil).

Is pork white meat?

No, pork is red meat, just like beef is red meat. Both are high in cholesterol and fats. Obviously aimed at confusing the public to promote pork, a television ad in the United States, featuring actor Robert Mitchum as its spokesman, says “Pork, the other white meat.” This is a misrepresentation and a great public disservice.

How about chicken meat?

Chicken breast is white meat, lower in cholesterol compared to pork or beef, but chicken skin is very high in cholesterol. The dark chicken meat (neck, wings, back, legs) is slightly higher in cholesterol compared the breast portion.

Why does the fatty portion of any meat taste good?

The portions of the meat that is “loaded” with fats, such as skin, intestines, omentum (chicharon bulaklak), taste better because the taste of the food we eat is in the cholesterol content of the food. If cholesterol is totally removed scientifically from beef or pork, for instance, these meats will taste like rope fibers...flat and tasteless. The higher the cholesterol content of the food, the better it tastes, but the worse it is for our health.

Does fish meat have fats?

It does, but the fats in fish meat is the good kind, one that is good for the heart and blood vessels. They are called Omega-3 oils. Regularly eating only fish (not together with pork, beef, eggs, butter, etc.) has been scientifically shown to lower the incidence or risk of sudden cardiac death. These oils (eicosapentaenoic

acid and decosaheanoic acid) have also been shown to lower serum triglycerides and “bad cholesterol,” and makes blood thinner and less prone to clot, and, therefore, slows down hardening of the artery.

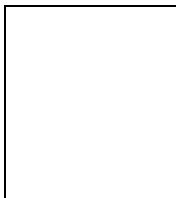
What is the normal level of serum cholesterol?

The National Cholesterol Education Program (NCEP) defines the normal Total Cholesterol level as levels less than 200 mg/dL or 5.18 mmol/L. However, new medical studies have shown that this current “normal level” is still too high to be effective in lowering the risk of heart attacks and strokes. The predominant new concept today for desirable level is about 150-160 mg/dL. The level of triglycerides is also very important, if not more, in the maintenance of cardiovascular health. It is wise to have a screening and baseline cholesterol and triglyceride blood tests.

How does one lower his/her cholesterol level?

The initial step, which is quite successful in majority of people, is by not eating red meats or meat products made of pork or beef, non-skim dairy products, eggs (the yolk of which is in itself very high in cholesterol). The diet should consist of fish, vegetables, white chicken meat (no skin) and fruits. Indulging a bit in red meats during the holidays is acceptable, except among those whose cholesterol and LDL are very high and the HDL is very low. If this recommended diet regimen is followed religiously, chances are the cholesterol and triglyceride levels will come down to the desired levels. Medications to lower the cholesterol and triglyceride levels are reserved for those where weeks of strict fish, vegetable, and fruit diet has failed. Some of these are people have a genetic predisposition (two out of 100 people, or 2%) to having high cholesterol level, and therefore would need the help of cholesterol/lipid lowering drugs (Lipitor, Mevacor, Zocor, etc). Your physician will be a most beneficial partner in planning an effective strategy for you.

Our readers are invited to send in their medical questions for possible inclusion in future issues of this column. Mail your questions to the author at Heart to Heart Talk, c/o Cebu Cardiovascular Center, Cebu Doctors' Hospital, Osmeña Boulevard, Cebu City, Philippines, or e-mail them to heart@chua.net



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