ATHEROSCLEROSIS

BY
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Atherosclerosis is commonly called hardening of the arteries. It is the underlying cause of heart attacks, strokes, and poor circulation to the legs. We are going to examine the process whereby atherosclerosis develops and place it in the context of Arnold Ehret's Mucusless Diet Healing System.

In the famous medical textbook Harrison's Principles of Internal Medicine (15th Edition) we find a detailed description of how atherosclerosis develops.

An artery is a flexible elastic pipe in which blood flows to various tissues. It has an inner lining called the "intima". In its healthy state it is smooth, flexible, and strong.

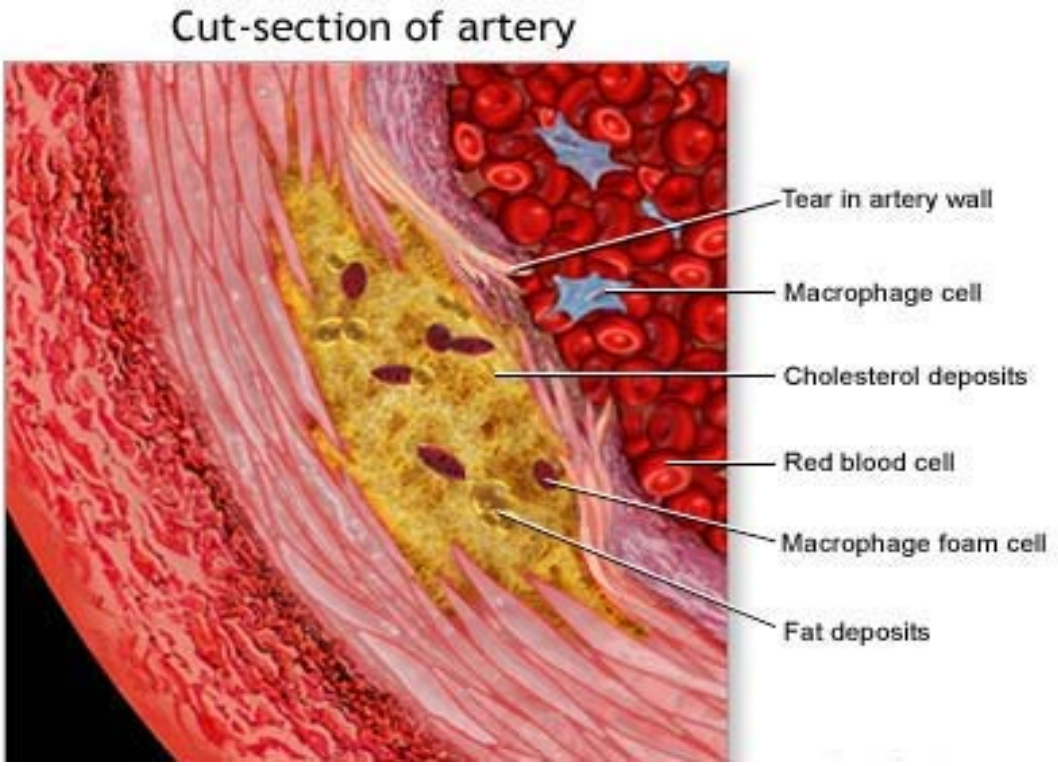
The earliest step in the development of atherosclerosis is the formation of the fatty streak. In the blood there are lipoproteins which carry cholesterol and fatty acids. Some will diffuse between the cells lining the inside of the artery. When these lipoprotein molecules are oxidized the structures of both cholesterol and fatty acids are modified. They have deteriorated and are not biologically useful. As they accumulate in the lining of the blood vessel you can see this under the microscope as an area of fat accumulation ("fatty streak"), In addition if the person is diabetic with elevated blood sugar, molecules of sugar can stick to other molecules in the lining of the blood vessel.

The second step is the arrival of white blood cells called monocytes. It is thought that they stick to receptors in the fatty streak. They are attracted to oxidized lipoprotein. This is analogous to a patrolling cop car stopping by the road when he sees an accident. The monocytes penetrate through the lining of the artery and take up residence in the intima.

The third step is foam-cell formation. The monocytes in the lining of the blood vessel transform into macrophages, which ingest the fatty material. The macrophages surround a portion of fatty debris with the outer cell membrane. The membrane then is pulled to the interior of the cell as a storage particle. In other words the macrophages act as scavengers collecting the deteriorated fat and cholesterol. Under the microscope these look like cells containing foamy material.

At this stage macrophages may leave the area and remove the lipid material. Also high density lipoprotein (HDL) is a molecule which brings cholesterol back to the liver. In this way the fatty area may recede or remain stationary.

The fourth step is the migration and proliferation of smooth-muscle cells. The artery has a layer of muscle cells. When activated by the inflammation caused by the fatty deposits and macrophages, smooth-muscle cells move into the inner lining of the artery and begin to reproduce. The smooth-muscle cells produce fibrous material known as "collagen". The fatty streak turns into a fibrous plaque. Small blood vessels are formed. Calcium is deposited. Macrophages and smooth-muscle cells die. A mature atherosclerotic plaque is composed of hardened, scarred material which causes the artery to be narrow and stiff. Heart attacks and strokes occur when blood clots form in the narrow arteries or the atherosclerotic plaque ruptures.



How can Ehret's Mucusless Diet Healing System benefit a patient with atherosclerosis?

When a patient with a tendency to atherosclerosis begins to follow Ehret's dietary recommendations there will be a reduction in red meat, eggs, and dairy products which are high in cholesterol. There will be a reduction in processed fatty foods which contain hydrogenated fats. There will be an avoidance of fried foods which will reduce the amount of fat in general and especially heat-injured oxidized fats. A large amount of fruits and vegetables brings more natural anti-oxidants into the diet. Short fasts and an increasing number of Mucusless diet meals per week can begin to cleanse the system and allow the body to export cholesterol, calcium, and fat.

When following a Mucus-Lean diet, a young person with a family history of heart disease and stroke may be able to arrest or even reverse the development of atherosclerosis. When a person has advanced atherosclerosis with hardened, narrowed arteries, the healing process will take time. It may not be fully reversible, but it certainly should help arrest the progression of atherosclerosis. The standard medical treatment may include cholesterol-lowering medication and aspirin to prevent a blood clot-induced heart attack. Ideally the person who diligently applies Ehret's teachings will be able to reduce his serum cholesterol level, reverse plaque formation, and reduce, if not eliminate, medication.

Ehret Health Club - http://www.arnoldehret.org