

Cardiovascular Diseases

Cholesterol - Critical in Disease Defense

Cholesterol Elevates in Response to Inflammation. It is Protective!



Medicine is becoming more aware that heart disease is a result of inflammation and its causes rather than cholesterol. Studies at Harvard Medical School and elsewhere show that the marker for inflammation, C-reactive protein, is far more predictive of heart disease compared to elevated cholesterol levels.

New research shows that infection, including that generated in the mouth, causes heart disease.

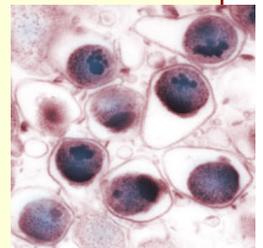
Scientific American presented a detailed special publication titled "Oral and Whole Body Health" that highlighted the strong scientific and medical connection between oral bacteria and cardiovascular disease.

LDL "Bad" Justified?

A recent article by Harvard Medical School researchers gave a detailed explanation of the importance of LDL cholesterol and how medicine missed an important fact shown by Dr. Koester in 1863.

LDL is critical because it "binds and inactivates microbes and their toxins effectively by complex formation." Biological trouble occurs when there is too many microbes and toxins to manage and the "complex" precipitates causing clogging and hypoxia (lack of oxygen).

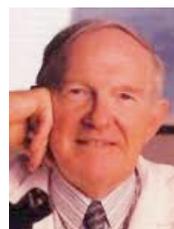
The immune system continues to work, creating what essentially looks like a black-head (pimple) inside the vessel. This is the "vulnerable plaque" of cardiovascular disease that, when it ruptures, cause heart attack or stroke.



LDL Cholesterol Involved in Immune Response

According to Dr. McCully of Harvard, LDL (bad) cholesterol is part of an immune system defense system that binds and inactivates microbes and the toxins they produce

Because of high extra-capillary tissue pressure, aggregates of such complexes may be trapped in vasa vasorum (outer layer) of the major arteries. Obstruction of the circulation in the vasa vasorum, caused by the aggregated complexes, may result in



local ischemia (blood flow restriction and lack of oxygen) in the arterial wall, cell death, bursting of the capillary, and escape of microorganisms into the area inside the blood vessel wall, all of which is part of inflammation and creation of vulnerable plaques. Thus heart disease is a disease of the small vessels that support the large vessels.