Cholesterol—Atherosclerosis Is Kaput!

The "Lipid Hypothesis" proposes (1) that dietary fat increases blood cholesterol, (2) elevated blood cholesterol eventually causes obstructive atherosclerosis in the coronary arteries. The second step in this chain of events has now been shown to be just as erroneous as the first. Autopsy studies do not confirm any consistent correlation with elevated cholesterol or LDL except in people with very high values due to genetic defects. If hypercholesterolemia were the culprit one might expect that the longer it had persisted the greater the severity of atherosclerosis one could demonstrate on coronary angiography. Five studies failed to find this and two showed that atherosclerosis progression was associated with a decrease rather than increase in cholesterol.

Electron beam angiography detects calcified plaque regardless of its location. Since vessel occlusion often occurs at sites other than those suggested by routine angiograms this technique may be a better predictor of coronary events. However, total plaque content shows no correlation with cholesterol or any blood lipid fraction. Despite this and mounting evidence from other studies and large scale clinical trials, the conviction that total cholesterol or "bad" LDL cholesterol is the root problem continues to be the focus of research.

Coronary heart disease is not a specific disease like tuberculosis because the atherosclerotic plaque that produces coronary events can have multiple causes. The cause vera or true cause of tuberculosis is the tubercle bacillus since the disease cannot occur in its absence. Prior to its discovery tuberculosis had been thought to be due to close and unsanitary living conditions because it occurred much more frequently under these circumstances. Such statistical associations do not prove a direct causal relationship unless they are always present and at least half of heart attack victims have normal cholesterol and LDL levels. Cholesterol, hypertension and smoking are considered to be "risk factors" for coronary disease, which implies a causal effect. "Risk marker" would be a more accurate description since these are simply statistical observations.

If you get people to stop smoking you will significantly reduce the incidence of emphysema and cancer of the lung because cigarettes contribute to these disorders. Treating hypertension lowers the likelihood of stroke for the same reason. However, as with cholesterol, neither intervention significantly affects future heart attack or coronary mortality rates. The MRFIT study of some 13,000 men divided those with hypertension, elevated cholesterol and/or smoking habits into two groups: one that received medication and counseling to reduce these leading risk factors and controls who did not. At the end of seven years there was no significant difference in coronary mortality rates and total death rates were higher in the intervention group. After eleven years the intervention group actually had more deaths from coronary disease and cancer. In other words, removing or reducing these risk factors did nothing to lower actual risk.

In addition to cholesterol, hypertension and smoking, there are some 300 other "risk factors" for coronary disease ranging from various lipid abnormalities, a deep earlobe crease, abdominal obesity and premature male type baldness to living in Eastern Finland. These are simply statistical associations that are markers, not causes of increased risk. Removing them does not influence either the rate, severity or course of coronary events, but that doesn't stop vested groups from implying otherwise.

This approach has been aggressively promoted and perpetuated by the cholesterol cartel of pharmaceutical and low fat food manufacturers despite the lack of any supportive scientific proof and abundant evidence to the contrary. It is not likely that things will change because so much money is at stake. Statin sales exceed $16 billion annually and Lipitor has now become the best selling drug in the world. Thousands of low fat food products are available and an avalanche of new ones are in the wings despite the fact that they provide no benefits and in some instances have proved harmful. The continued success of the cholesterol cartel is almost assured because they spend megabucks to barrage consumers with misleading commercials about the dangers of dietary fat and elevated blood cholesterol.