"Knowing that lysyl residues are what cause Lp(a) to get stuck to the wall of the artery and form atherosclerotic plaques, any physical chemist would say at once that the thing to do is prevent that by putting the amino acid lysine in the blood to a greater extent than it is normally." — Linus Pauling, *Journal of Optimum Nutrition*, Aug 1994

Chapter 6

Lp(a) Binding Inhibitors

The liver produces more Lp(a) molecules in humans with chronically low intake of vitamin C. These numerous Lp(a) molecules have a tendency to deposit on top of existing plaque formations. Over time, the healing process overshoots and arteries narrow. The resulting reduction in blood flow introduces several dangers, including a greater likelihood that any blood clot will cut off the flow of blood entirely.

According to Linus Pauling, this problem has a solution. He announced in the year 1992, "We're at the point where I think we can get almost complete control of cardiovascular disease, heart attacks and strokes."

The key to a possible "nonsurgical" treatment for heart disease came when highly regarded biochemists and chemists uncovered the direct means by which atherosclerotic plaques begin to form. Brown and Goldstein's discovery that this process begins when Lp(a) is attracted to amino acids within the lesion is of great significance. As the walls of arteries break down, strands of lysine (and proline) that were once a part of the collagen helix become exposed. Pauling called these exposed strands "lysyl and prolyl" residues.