A properly functioning circulatory system, bringing oxygen-rich blood to the extremities, is one of the wonders of the human body. As with so many other health benefits, this system is usually taken for granted and given no attention until complications arise. Some of the major problems that can arise in relation to the circulation include hardening of the arteries (aortierosclerosis), blockages, and spasms. These developments, often more prominent in patients with diabetes, can lead to Raynaud's disease, Buerger's disease, and the rare Marfan's syndrome. Problems of this type carry certain general precautions. Eliminating smoking is of utmost importance to preserve a healthy circulatory system. Although we do not have a huge amount of data on this topic, secondary smoke may also be a contributing factor to vascular problems.

Certain medications must be checked for their possible side effects. Plaque is a major contributor to poor circulation. It is basically a result of deposits of oxidized cholesterol on the arterial walls. It is noteworthy that iron can act as an oxidizing agent, making cholesterol more dangerous than usual. It therefore may be prudent that non-anemic men and women, especially postmenopausal women, avoid the ingestion of iron in their daily vitamin-mineral supplements. The "granddaddy" of iron supplements, ferrous sulfate, seems to be more of a troublemaker than the later organic "grandchildren," such as ferrous fumarate.

The most widely prescribed drug in the U.S. is Lipitor® (atorvastatin), which is used to lower blood cholesterol levels. Although it is widely known among nutritionists and nutrition-conscious physicians, Lipitor® causes coenzyme Q10 levels to decline; in most cases, this essential enzyme should be supplied to the body.

Normal aging also results in some degree of aortierosclerosis. Thus, nutritionists recommend the use of various healthy oils, which may be beneficial in preventing hardening of the arteries.

**Circulatory Problems and Heart Disease**

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finally closed off, the person would have a heart attack because all of the blood and nutrients that were being supplied through a portion of the heart muscle was suddenly gone. Then a portion of the heart muscle. now know that they themselves are the locus of control for this disease.

We have since learned that only about 10 percent of heart attacks occur in the manner I just described. About 88 to 90 percent of heart attacks occur from one of these small, young unstable plaques, which is on the side of the wall of the artery. Under the influence of the traditional Western diet, one of these small plaques eventually ruptures. As long as that artery is not blocked more than 70 percent, the person is unlikely to have any symptoms. However, there is a cascade of events that is tragic and serious.

The contents of this ruptured plaque now begin to ooze out into the circulating walls of the vessel. It activates the platelets, the clotting factors of the blood. Suddenly we now have a thrombosis that reaches all the way across the vessel. Now the vessel is completely closed. This explains the common scenario that people refer to about someone they know who had a heart attack but showed no symptoms and did not appear to be a high-risk candidate for this disease.

Q: Can a vegetarian diet prevent coronary heart disease?
A: The amazing thing is that a heart attack seems to be tragic, but it also is exciting, because within three of four weeks, patients can heal those plaques so they cannot rupture. If patients become totally compliant with plant-based nutrition, the metabolism and the biochemical profile are completely changed. Within weeks, patients can make themselves heart attack-proof. There can be significant lessening of the amount of angina (chest pain). The heart pain may completely disappear. This turnaround is very powerful for these patients to suddenly realize that.

It is interesting to see how patients, especially those who had bypass surgery, a stent, or a recurrence of angina, can be empowered when they see that by making profound changes in their nutrition, they can do within weeks what surgery and stents had failed to do over the long run. They now know that they themselves are the locus of control for this disease. It is reassuring for them and their loved ones to think that they do not have to wait for the other shoe to fall.

Q: Is diet more essential than exercise, stress management, and carefully monitored medications?
A: We know that the patients are achieving this goal when their low-density lipoprotein cholesterol (LDL-C)—the "bad" cholesterol—goes under 80 mg./dl. (milligrams per deciliter). We try to keep the total cholesterol under 150 mg./dl. I do not mean to reach under 80 mg./dl. by taking a large dose of a statin drug (which lowers cholesterol). Statins can achieve the same result, but they do not efficiently treat the disease.

Q: Do you feel that the widespread use of statin drugs has reduced the incidence of heart attacks?
A: Some studies show that patients who are driving their cholesterol to very low levels by taking statins are not achieving the benefits of stopping the disease. Statins lower the cholesterol number, but the disease continues to progress.

Q: Are coronary bypasses and angioplasty effective? Have these interventions actually extended lives?
A: Despite the knowledge we have about bypass surgery, angioplasty, and stents, surgical interventions are simply treating symptoms. These procedures do not even begin to treat the disease. Even specialists concede that surgical interventions are merely a Band-Aid. Many patients in the study that I began back in 1985 were told by expert cardiologists that... then I told the doctor, 'No way will I become a vegetarian!'