An apple a day may keep cardiovascular disease at bay

Patients with cardiovascular disease are living longer. Since 1950, deaths related to coronary artery disease have been slashed in half. This increased survival rate can be attributed to several factors. Among them are improved diagnostic procedures (Doppler ultrasound, intravascular ultrasound, angioscopy, contrast echocardiography) and interventional techniques (angioplasty, coronary bypass, thrombolytic therapy), as well as a greater availability of pharmacologic agents.

Yet, despite an increase in the number of interventional cardiac procedures being performed (bypass procedures alone increased from an estimated 332,000 in 1987 to approximately 407,000 in 1991), the actual prevalence of cardiovascular disease has not declined to the extent that mortality has. Patients are still having myocardial infarctions and strokes.

As managed care looms on the healthcare-reform horizon, the economic feasibility of interventional cardiology will likely be scrutinized, particularly as it relates to clinical outcome. Now more than ever, it seems appropriate to reemphasize the importance of preventive healthcare, particularly in cardiology.

Research continues to show that diet and nutrition and exercise can significantly reduce the risks associated with cardiovascular disease. One small study found that patients with cardiovascular disease who were placed on a low-fat diet and an exercise and meditation regimen had a 9% decrease in arterial stenosis during a 4-year period. These study results were presented at the American Heart Association's 66th Scientific Session, held in Atlanta, Ga, earlier this year. Devised by Dean Ornish, MD, of the Preventive Medicine Research Institute in Sausalito, Calif, this study also found that 72% of the 22 subjects had an actual reverse of their heart disease. Certainly, such a regimen deserves further large-scale study.

Another group of agents with possible cardiovascular benefits are flavonoids. Polyphenolic antioxidants, flavonoids are found in fruits, cereals, tea, and coffee, among other foods and beverages. Researchers in the Netherlands found that elderly men who had a daily flavonoid intake of more than 110 g (which included at least one apple a day) reduced their relative risk of dying of a cardiovascular disease by 51%, compared with men who ate no apples daily. (The results of their work are published in the October 23, 1993 issue of *Lancet.*) An inverse relationship was also noticed between flavonoid intake and a first-time myocardial infarction.

Admittedly, diet and lifestyle changes alone will not prevent all cardiovascular events. High-tech modes of diagnosis, interventional procedures, and the new generation of pharmaceuticals do have a place in cardiac medicine. Yet, we sometimes lose sight of the basic holistic approach to preventive medicine, which lies at the core of our osteopathic medical heritage. Education—whether dietary or otherwise—plants the seed for our patients' healthy futures.

Thomas Wesley Allen, DO
Editor in Chief