



# Clinical Digest

## PRIMARY CARE

### Testing Your Knowledge of CKD Risk Factors

Is your knowledge of chronic kidney disease (CKD) and end-stage renal disease (ESRD) sufficient to ensure that your patients receive early diagnosis and treatment? According to researchers from Emory University, Atlanta, GA and the National Institutes of Health, primary care physicians (PCPs) do not have a good understanding of the populations at highest risk.

The investigators asked 464 PCPs who treat patients at high risk for these conditions to rate such CKD risk factors as African-American race, diabetes, hypertension, and family history of CKD on a scale from “does not increase risk” to “greatly increases risk.” Although most identified diabetes and hypertension as CKD risk factors, family history and African-American race were not recognized as such by one third and one fifth of the respondents, respectively.

The researchers point out that diabetes and hypertension are associated with about 70% of ESRD in the United States. And compared with whites, African Americans have nearly five times the rate of diabetes-related ESRD and seven times the rate of hypertension-related ESRD. In addition, the researchers cite studies in which one quarter of patients with ESRD reported having a first- or second-degree relative with CKD, and the prevalence of a positive family history of ESRD was substantially greater among African Americans than among whites (roughly 23.4% versus 14.4%).

Source: *Am J Kidney Dis.* 2006;47:72-77.

## CARDIOLOGY

### AHA Revises Soy Recommendations

In 2000, the American Heart Association (AHA) Nutrition Committee released a scientific advisory, recommending a diet of soy protein foods to improve risk factors for cardiovascular disease (CVD). Now, after evaluating 22 well controlled studies, the AHA is revising its opinion. The promise of earlier research indicating that soy protein has clinically favorable effects on low-density lipoprotein (LDL) cholesterol levels and other CVD risk factors has not been fulfilled.

In eight studies that examined the effects of soy protein with isoflavones on LDL cholesterol, it took 50 g of soy protein—half or more of the daily average total protein intake—to achieve a small drop in LDL cholesterol (about 3% overall). No significant effects were seen for high-density lipoprotein (HDL) cholesterol or triglycerides in most of the studies; the weighted average effects were very small: a 1.5% increase in HDL and a 5% reduction in triglycerides. Similarly, neither removing isoflavones from the soy protein nor administering isoflavones alone significantly reduced LDL cholesterol levels.

Six studies compared the effects on blood pressure (BP) of soy protein with isoflavones versus casein or milk protein. BP declined significantly in only one of the studies, and the weighted average change was a 1-mm Hg reduction in systolic BP. Soy isoflavones had no significant effect on BP in several of the studies.

Because of their weak estrogenic activity, soy isoflavones are commonly believed to improve estrogen

dependent conditions associated with menopause and to lessen the effects of endogenous estrogens on certain cancers. Most studies, however, have found either no menopausal benefit, only modest improvement in menopausal hot flashes that disappears after six weeks, or a reduction in hot flashes similar to that which occurs in placebo groups. Clinical trials investigating soy's effects on postmenopausal bone loss have had varied results. The efficacy and safety of soy isoflavones in the prevention or treatment of breast, endometrial, or prostate cancer is unknown. Epidemiologic studies find inconsistent associations between soy foods and cancer. Some even suggest that, in premenopausal women, soy may stimulate epithelial cell proliferation in the breasts, a potential precursor of cancer. The use of soy in preventing and treating any cancer should be approached with caution.

According to the AHA, the direct cardiovascular benefit of soy protein is minimal at best. They suggest that it may be beneficial to substitute such soy products as tofu, nuts, or burgers—which are high in polyunsaturated fats, fiber, vitamins, and minerals and low in saturated fat—for foods that are high in animal protein and contain saturated fat and cholesterol. And they note that soy may be used to increase total dietary protein and reduce carbohydrate and fat intake. They add, however, that little is known about the potential impact of high protein diets on CVD risk factors. ●

Source: *Circulation.* 2006;113:1034-1044.

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