

SOUTHWESTERN NEWS

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CHOLESTEROL-LOWERING DIET MAY REDUCE HEART DISEASE RISK IN POST-MENOPAUSAL WOMEN

DALLAS — July 29, 1994 — A low-fat, low-cholesterol diet can be effective in lowering cholesterol for post-menopausal women, thus reducing their risk for heart disease, according to a study performed at The University of Texas Southwestern Medical Center at Dallas.

Dr. Margo A. Denke, assistant professor of internal medicine and a researcher in UT Southwestern's Center for Human Nutrition, tested the American Heart Association's Step-One Diet on a group of post-menopausal women with moderately high cholesterol levels. The results of the study, supported by a National Institutes of Health-National Heart, Lung and Blood Institute Clinical Investigator Award to Denke, are reported in the July 13 issue of Archives of Internal Medicine.

"The need for this study arises from the fact that the original dietary design was done as the outgrowth of many studies in men," Denke said. This study was the first to test the Step-One Diet on an outpatient basis among a population of women with hypercholesterolemia.

While the cholesterol lowering produced by the change in diet may not be as much as could be achieved through the use of drug therapy, Denke said it could be enough for some individuals to avoid the use of cholesterol-lowering drugs. "When you think about the purpose of a cholesterol-lowering diet, it is to achieve a significant LDL reduction," she said. "Even if it's a small reduction, it's still beneficial and should reduce the risk of heart disease."

The benefits of the Step-One Diet are not limited to those with high cholesterol, Denke said. "We recommend a cholesterol-lowering diet for the American population as a whole."

For her study, Denke recruited 41 women through local health fairs. All were post-menopausal, were not taking supplemental estrogen and had moderately

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high low-density lipoprotein (LDL) cholesterol levels of 140-200 milligrams per deciliter. An LDL cholesterol level less than 130 mg/dL is considered desirable.

For one month, the subjects ate a diet high in saturated fat and cholesterol, similar to that eaten by many Americans. The subjects then were counseled on the American Heart Association's Step-One Diet, which recommends eating less than 30 percent of total calories from fat, less than 10 percent of total calories from saturated fat and less than 300 mg of dietary cholesterol per day.

Subjects followed the Step-One Diet for three months. Their dietary compliance was verified by monthly office visits and food records, but the patients planned their own meals and went about their ordinary daily lives. Blood was drawn from the patients five times during the last two weeks of each dietary period and analyzed.

"We found that the women did achieve significant reductions in LDL cholesterol on this diet," Denke said. The group as a whole had a mean decrease of 11 mg/dL in LDL, the so-called "bad" cholesterol. There also was a small, statistically insignificant decrease in high-density lipoprotein (HDL) cholesterol, the "good" cholesterol.

But within the group, there were marked individual variations in response to the diet. A quarter of the women did not achieve LDL reduction, despite the dietary modifications. Noncompliance with the diet may account for some of the lack of response. Obesity may be another factor. Women who were not obese or who lost weight on the Step-One Diet had a better cholesterol-lowering response. This reflects the results of an earlier study by Denke that found a link between obesity and high cholesterol.

Denke found the same individual variation of response to diet in a previous study testing the Step-One Diet on men. "We still don't know why it is that some people have a paradoxical or absent response to diet, and that will probably be the basis for some additional studies in our laboratory," Denke said.

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