

CONTACT: Ann Williams Office: 214/688-3404 Home: 214/375-6043

\*\*\*\*\*\*Restricted salt diet aids hypertensive patients taking diuretic

DALLAS--Patients with high blood pressure who take diuretic drugs can also benefit by restricting their salt (sodium chloride) intake. These findings from a study of human volunteers in the General Clinical Research Center at The University of Texas Health Science Center at Dallas were presented today by Dr. Norman Kaplan at a symposium on human research.

"Restriction of sodium intake alone may help lower the blood pressure in those with hypertension (high blood pressure). Most previous studies have been with very low sodium diets, which are impractical for most patients," said Kaplan, professor of internal medicine at UTHSCD.

And because of the impracticality of a very low salt diet, diuretics are commonly given as treatment for high blood pressure. The problem with this is that about 20 percent of patients on continuous diuretic therapy will develop a low body potassium level.

Using measurements of total body potassium of patients in the GCRC, Kaplan and his co-workers have shown that moderate sodium restriction will lower the blood pressure and preserve body electrolyte (sodium and potassium) composition even with diuretic therapy. This happens because, Kaplan says, "The less sodium you put into the kidney, the less potassium you waste. The kidney grabs sodium and releases potassium." Thus the undesirable side effect of potassium loss with diuretics can be checked by restricting salt intake. An additional benefit was found in the lower blood pressures measured with the restricted salt diet.

Hypertension, a condition affecting more than 30 million Americans, is a major factor in most heart attacks, strokes and kidney failures. "Though the specific cause of most hypertension is unknown, a lifelong intake of large amounts of table salt may be responsible for the disease in those who are genetically predisposed. Circumstantial evidence that sodium is a cause continues to mount and seems strong enough to call for a general reduction in everyone's sodium intake, starting in infancy," said Kaplan.

In the GCRC study patients received a 'moderately low' salt diet, averaging four grams of salt a day. The usual American diet includes 10 or more grams a day.

Kaplan is head of the Hypertension Section at Southwestern Medical School, a component of UTHSCD. He is author of the textbook <u>Clinical Hypertension</u>, published in 1973; the layman's book <u>Your Blood Pressure</u>: <u>The Most Deadly High</u>, published in 1974; and more than 60 scientific papers. He has been a full-time member of the faculty at Southwestern since 1961, serving as deputy vice president for research programs of the American Heart Association in 1975-76.

A Fellow of the American College of Physicians and a diplomate of the American Board of Internal Medicine, subspecialty of Endocrinology and Metabolism, he is also a member of numerous scientific and academic organizations including the American Society for Clinical Investigation.

GCRC is funded by the Research Resources Division of the National Institutes of Health.