

### VITAL SIGNS

## At Risk: Hormone Troubles for Men, Too

By ERIC NAGOURNEY

Diabetic men with low levels of testosterone are at increased risk of heart disease and may benefit from hormone replacement therapy, researchers say. Writing in the June issue of *Diabetes Care*, researchers say they have established a direct association between thickening arteries filled with plaque, or atherosclerosis, and low levels of testosterone in the blood of men with Type 2 diabetes, which occurs when the body produces insulin, but not enough.

The findings may be of interest not only to physicians who treat diabetics, but also to researchers interested in heart disease and testosterone.

Diabetics are two to four times as likely to develop heart disease as nondiabetics, and men are more prone than women to have heart disease, the researchers noted.

Scientists have long theorized that testosterone may be a cause. The study suggests that any relationship between the hormone and heart disease is more complicated.

The results were based on 153 men and examinations that included blood tests and the use of ultrasound to measure thickening and plaque buildup in the carotid artery. Men with low testosterone levels had significantly greater carotid changes, according to the study, which listed Dr. Michiaki Fukui of Osaka General Hospital in Japan as the lead author.

In an accompanying editorial, Dr. Shalender Bhasin and Dr. Karen Herbst of Charles R. Drew University in Los Angeles said that researchers should begin studies to determine if testosterone replacement therapy could reduce heart disease among diabetics.

Some doctors are concerned that the use of testosterone supplements by healthy men, among them those trying to undo the testosterone decline that comes with aging, may increase the danger of prostate cancer or heart disease. But that is not an issue for men who genuinely need treatment, Dr. Bhasin said. "In younger men who have testosterone deficiencies," he said, "giving testosterone is not only desirable, it's very safe."