Excess Weight and Adult Weight Gain Increase Risk of Prostate Cancer Death

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-A new study finds that obesity increases the risk of death from prostate cancer, even though it does not increase the overall risk a man will be diagnosed with the disease. Published in the February 15, 2007 issue of CANCER, a peer-reviewed journal of the American Cancer Society, the study reveals that higher body mass index (BMI) and weight gain in adulthood correlated strongly with increased risk of death from prostate cancer. However, no such association was found between BMI or weight gain and the development of the cancer. The study is the first large, prospective study to identify increasing weight after age 18 as an independent, poor prognostic factor for prostate cancer.

The incidence of obesity has increased dramatically worldwide. In the U.S., for example, the number of states reporting obesity rates greater than 20 percent increased from zero in 1985 to 46 in 2005. Today, 30 percent of American adults are categorized as obese – i.e., a BMI greater than 30. Obesity is linked to chronic medical problems, including heart disease, diabetes, gallbladder disease, and stroke. In addition, studies indicate higher BMIs are linked to some cancers, including breast and colorectal cancer.

The influence of obesity and weight gain on the development of localized and aggressive forms of prostate cancer is not clear. A recent meta-analysis suggested only a weak correlation between obesity and prostate cancer incidence. However, clinical studies have suggested that men with higher BMI or men who gained weight most rapidly since age 25 were at greater risk of treatment failure or being diagnosed with advanced disease.

Led by Margaret E. Wright, Ph.D., of the Division of Cancer Epidemiology and Genetics at the National Cancer Institute in Bethesda, MD, researchers followed 287,760 men, ages 50-71 years as part of the NIH-AARP Diet and Health Study to examine the individual impact of BMI and adult weight change on the incidence, severity and outcome of prostate cancer.

The researchers found that higher BMI and weight gain since the age of 18 were associated with significantly higher risk of death from prostate cancer. As BMI increased, so did the relative risk of death. Men who were overweight (BMI 25-29.9) had a 25 percent higher risk, mildly obese men (BMI 30-34.9) had a 46 percent higher risk, and severely obese men (BMI greater than 35) had a 100 percent, or doubled risk. Similarly, men who gained weight since the age of 18 were also at increased risk of a fatal outcome. Neither overweight nor obesity, however, was associated with developing prostate cancer.

That obesity did not impact the incidence of prostate cancer is consistent with findings from most other studies. However, that “BMI and adult weight gain were each linked with higher prostate cancer mortality,” significantly links “adiposity to prostate cancer progression leading to death,” conclude the authors.

Article: “Prospective Study of Adiposity and Weight Change in Relation to Prostate Cancer Incidence and Mortality,” Margaret E. Wright, Shih-Chen Chang, Arthur Schatzkin, Demetrius Albanes, Victor Kipnis, Traci Mouw, Paul Hurwitz, Albert Hollenbeck, Michael F. Leitzmann, CANCER; Published Online: January 8, 2007 (DOI: 10.1002/cncr.22443); Print Issue Date: February 15, 2007.

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