Mortality Risk of Overweight and Obesity Similar for Blacks, Whites

Study is largest to date to investigate issue

ATLANTA – October 8, 2014 – A study from American Cancer Society researchers finds the increased risk of premature death associated with a higher body mass index (BMI) is similar for African Americans and whites, in contrast to previous, smaller studies that indicated the association may be weaker for African Americans. The study, published in the open-access, online publication PLOS ONE, finds that among never smokers without prevalent disease, overweight and obesity are strongly associated with subsequent risk of mortality in every race. The authors say given the high prevalence of overweight and obesity among all racial-ethnic populations, and the disproportionately higher rates in African Americans among whom 35 percent are obese, the findings are of considerable clinical and public health relevance.

For the study, researchers led by Alpa V. Patel, Ph.D., analyzed data from the Cancer Prevention Study II (CPS-II), a large, prospective study. The analysis included approximately one million men and women. The study was able to address several major unresolved issues in the study of BMI and mortality. Results showed that men and women who were underweight were at higher risk of mortality as were men and women who were overweight and obese compared to normal weight men and women. The study also confirmed that smoking and prevalent disease significantly modified the association between BMI and mortality, such that the strongest associations were among never smokers without prevalent disease for men and women. In healthy never smokers, mortality rates were lowest within the upper end of the normal BMI category for all race sex groups. In addition, weight in late middle age but not older (i.e., 70 years or older) was strongly associated with future mortality. Excess body weight is known to increase risk of premature death and risk of various chronic diseases such as heart disease, diabetes, and many types of cancer.

“While recent large studies have examined the relationship between BMI and all-cause mortality in white and Asian populations in the United States, this relationship has not been well-characterized in African Americans,” said Dr. Patel. “The American Cancer Society’s Cancer Prevention Study-II is very well-suited to address this issue because of its large size, including nearly a million participants, and long-term follow-up of 28 years, making it the largest study to date in African Americans.”

Additional co-authors on the study are Janet S. Hildebrand, MPH and Susan M. Gapstur, PhD, both of the American Cancer Society.

Article: Body mass index and all-cause mortality in a large prospective cohort of White and Black U.S. adults, Alpa V. Patel, Janet S. Hildebrand, Susan M. Gapstur; Published: October 08, 2014DOI: 10.1371/journal.pone.0109153