Study Links Leisure Time Sitting to Higher Risk of Specific Cancers

July 13, 2015– Spending more leisure time sitting was associated with a higher risk of total cancer risk in women, and specifically with multiple myeloma, breast, and ovarian cancers, according a new study. The higher risk was present even after taking into account BMI, physical activity, and other factors. The study, appearing in *Cancer Epidemiology, Biomarkers, and Prevention*, found no association between sitting time and cancer risk in men.

While extensive research links physical activity to cancer prevention, few studies have examined the link between sitting time and the risk of specific cancers. Over the past few decades, time spent sitting has increased due to several factors, including technological advancements, like computers and video games, and changes in transportation.

For their study, investigators led by Alpa Patel, PhD, compared leisure time sitting to cancer risk among more than 146,000 men and women (69,260 men and 77,462 women) who were cancer-free and enrolled in the American Cancer Society Cancer Prevention Study II Nutrition Cohort. Between 1992 and 2009, 18,555 men and 12,236 women were diagnosed with cancer.

They found longer leisure-time spent sitting was associated with a 10 percent higher risk of cancer in women after adjustment for physical activity, BMI and other factors. The association was not apparent in men.

In women, sitting time was associated with risk of multiple myeloma (RR=1.65, 95% CI 1.07-2.54), invasive breast cancer (RR=1.10, 95% CI 1.00-1.21), and ovarian cancer (RR=1.43, 95% CI 1.10-1.87). Once again, among men no association between sitting time and site-specific cancers was found.

The authors conclude: “Longer leisure-time spent sitting was associated with a higher risk of total cancer risk in women, and specifically with multiple myeloma, breast and ovarian cancers, but sitting time was not associated with cancer risk in men. Further research is warranted to better understand the differences in associations between men and women.”

American Cancer Society guidelines for nutrition and physical activity recommend reducing sitting time when possible. The authors say given the high rate of time spent sitting in the U.S., even a modest positive association with cancer can have broad public health implications. However, they add, further research is warranted to better understand the differences in associations between men and women.

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