

Yo-Yo Dieting Not Associated with Increased Cancer Risk

Largest Study to Date Reassuring for Millions of Americans Who Struggle to Lose Weight

The first comprehensive study of its kind finds weight cycling, repeated cycles of intentional weight loss followed by regain, was not associated with overall risk of cancer in men or women. The study by American Cancer Society investigators is the largest to date to investigate weight cycling with cancer risk. It appears [early online in the American Journal of Epidemiology](#).

The authors of the report found weight cycling was not associated with overall risk of cancer in men or women after adjusting for body mass index and other factors. Weight cycling was also not associated with any individual cancer investigated. The authors of the study say people trying to lose weight should be encouraged to do so even though they may regain it.

With almost half of American adults reporting they are trying to lose weight, and with most weight loss not maintained, weight cycling is very common. Previous studies in animals and humans had suggested that weight cycling may affect biological processes that could lead to cancer, such as increased T-cell accumulation, enhanced inflammatory responses in adipose tissue, and lowered natural killer cell cytotoxicity. However, many of these findings have not been replicated, and at least two previous studies showed no associations between weight cycling and cancer.

For the latest study, researchers led by Victoria Stevens, PhD, American Cancer Society Strategic Director, Laboratory Services, examined weight cycling and cancer among more than 132,000 men and women enrolled in the Cancer Prevention Study II Nutrition Cohort. Begun in 1992/1993, the Nutrition Cohort gathered detailed dietary information from men and women ages 50 to 74 participating in the Society's larger Cancer Prevention Study II, to explore nutrition's effect on and cancer incidence and mortality.

Investigators looked at weight cycling and incidence for all cancer and 15 individual cancers. More than 25,000 participants developed cancer during 17 years of study.

"For the millions of Americans struggling to lose weight, the last thing they need to worry about is that if it comes back, they might raise their risk of cancer," said Dr. Stevens. "This study, to our knowledge the largest and most comprehensive to date on the issue, should be reassuring. Our findings suggest that overweight and obese individuals shouldn't let fears about their ability to maintain weight loss keep them from trying to lose weight in the first place."

Other authors on the study were: Eric J. Jacobs, Alpa V. Patel, Juzhong Sun, Marjorie L. McCullough, Peter T. Campbell, and Susan M. Gapstur, all of the American Cancer Society.

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