

Weight Loss is Associated with Decreased Cancer Risk in Individuals with Obesity

Study Featuring Cleveland Clinic Data Underscores the Importance of Treating Obesity as a Chronic Disease

ORLANDO, FL. (JUNE 21, 2024) – Today, data from a retrospective observational study conducted using the electronic health record at the Cleveland Clinic, shows that real-world weight loss can be associated with a reduced risk of obesity-related cancers. The findings were presented as a Late-Breaking Poster at the 84th Scientific Sessions of the American Diabetes Association® (ADA) in Orlando, FL.

Overall, 78% of people with diabetes have clinical obesity. Obesity is <u>linked to higher risks</u> of at least 13 types of cancer due to excess estrogen and elevated insulin, including breast, kidney, ovary, liver, and pancreatic cancer. There is an increased need to further understand the association between diabetes, obesity, and cancer and corresponding treatments.

The study included a total of 172 patients including 100,143 in the control arm and 5,329 cases. The median body mass index (BMI at censoring (kg/m²) was 34.2 for cases and 34.5 for controls, which are considered to have obesity according to the Centers for Disease Control and Prevention (CDC). The association between the percentage change in body mass index (BMI) with three, five, and 10-year intervals prior to cancer diagnosis (for cases) versus controls for each cancer endpoint was assessed using logistic regression models. The primary endpoint of this study shows 13 obesity-related cancers found. The secondary endpoint of this study was highlighted with the occurrence of 16 other types of cancer including melanoma and other skin malignancies as well as cancers related to the urinary tract, hematopoietic and lymphoid tissues, respiratory and intrathoracic organs, male genital organs, female genital organs, eye, brain and other parts of the central nervous system, and digestive organs.

In this study, data shows that real-world weight loss is associated with a reduced risk of obesityrelated cancers. The results show a reduced risk of developing obesity-related cancers with weight loss at three years (OR 0.99, 95%CI [0.984, 0.996]) and five years (OR 0.989,95% CI [0.983-0.995]), and for other types of cancer for all time intervals (ORs<1, P <0.001). The risk was reduced for renal cell carcinoma (three years), multiple myeloma (10 years), and endometrial cancer (three and five years) among primary cancer endpoints (P<0.05).

"This study reinforces how crucial it is to treat obesity as a chronic disease," said Kenda Alkwatli, MD, Clinical Fellow at Cleveland Clinic, and author of study. "We are hopeful that these results can help us better understand how we can use weight loss to address comorbidities including cancer in patients with obesity."



This study is an example of why more research is needed to determine whether cancer risk is influenced by the amount, rate, and method of weight loss. Future studies will focus on and test to see if specific anti-obesity medications can reduce cancer risk.

Research presentation details:

Dr. Alkwatli will present the findings at the following session:

- Late-Breaking Poster:
 Reduced Risk of Obesity-Related Cancers with Real-World Weight Loss
- Session: Saturday, June 22, 2024 from 12:30-1:00 PM EDT (Late Breaking Poster Session)

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About the American Diabetes Association's Scientific Sessions

The ADA's 84th Scientific Sessions, the world's largest scientific meeting focused on diabetes research, prevention, and care, will be held in Orlando, FL on June 21-24. More than 11,000 leading physicians, scientists, and health care professionals from around the world are expected to convene both in person and virtually to unveil cutting-edge research, treatment recommendations, and advances toward a cure for diabetes. Attendees will receive exclusive access to thousands of original research presentations and take part in provocative and engaging exchanges with leading diabetes experts. Join the Scientific Sessions conversation on social media using #ADAScientificSessions.

About the American Diabetes Association

The American Diabetes Association (ADA) is the nation's leading voluntary health organization fighting to bend the curve on the diabetes epidemic and help people living with diabetes thrive. For 83 years, the ADA has driven discovery and research to treat, manage, and prevent diabetes while working relentlessly for a cure. Through advocacy, program development, and education we aim to improve the quality of life for the over 136 million Americans living with diabetes or prediabetes. Diabetes has brought us together. What we do next will make us Connected for Life®. To learn more or to get involved, visit us at diabetes.org or call 1-800-DIABETES (1-800-342-2383). Join the fight with us on Facebook (American Diabetes Association), Spanish Facebook (Asociación Americana de la Diabetes), LinkedIn (American Diabetes Association), Twitter (@AmDiabetesAssn), and Instagram (@AmDiabetesAssn).