

Diabetes and Cancer

Nebraska Diabetes Prevention and Control Program
Nebraska Comprehensive Cancer Control Program

Even when adjusting for age, Type 2 diabetes and cancer are diagnosed in the same individuals more often than is expected by chance.¹

What's the concern?

- People with type 2 diabetes are more likely to get cancer, even when adjusted for age.
- Diabetes is a risk factor for certain types of cancer.

What types of cancers are more common in people with diabetes?

- Post-menopausal women with diabetes have a 12% higher risk of breast cancer than those without diabetes.
- Colorectal, hepatobiliary (liver, bile ducts, gall bladder), bladder, and endometrial cancers occur more often in people with diabetes.³
- People with diabetes also have higher risk of dying from liver, pancreatic, and colon cancer than those without diabetes.

What are the shared risk factors for the development of type 2 diabetes and cancer?

- Overweight/obesity
- Tobacco use
- Inactivity?
- Hyperglycemia
- Hyperinsulinemia

What is the impact of the diabetes drug metformin on the development of cancer?

- Metformin may be protective against liver cancer.

How do you manage diabetes while undergoing cancer treatment?

- Cancer cells thrive on glucose, and hyperglycemia is linked to poor cancer outcomes, so glycemic control is key.
- Prevent hyperglycemia by proper meal planning, careful timing of meals.



What can you do to prevent the development of both diabetes and cancer?

- Avoid tobacco and secondhand smoke
- Healthy eating
- Regular physical activity

For further information on diabetes, see the State of Nebraska Diabetes Prevention and Control Program website: http://dhhs.ne.gov/PublicHealth/pages/diabetes_campaign.aspx

For information on cancer diagnosis and treatment, see the CDC recommendations for cancer screenings: <http://www.cdc.gov/cancer/dcpc/prevention/screening.htm>

1. Redaniel MT, Jeffreys M, May MT, Ben-Shlomo Y, Martin RM. Associations of type 2 diabetes and diabetes treatment with breast cancer risk and mortality: a population-based cohort study among British women. [published online ahead of print Sept 13, 2012]. *Cancer Causes Control*. DOI: 10.1007/s10552-012-0057-0.

2. Campbell PT, Newton CC, Patel AV, Jacobs EJ, Gapstur SM. Diabetes and cause-specific mortality in a prospective cohort of one million U.S. adults. *Diabetes Care*. 2012 Sep;35(9):1835-44. doi: 10.2337/dc12-0002. Epub 2012 Jun 14.

3. [Mayoclinic.org/medicalprofs/diabetes-and-cancer.html](http://www.mayoclinic.org/medicalprofs/diabetes-and-cancer.html)

4. <http://www.ncbi.nlm.nih.gov/pubmed/20154728>

5. <http://www.sciencedaily.com/releases/2012/03/120331151136.htm>

6. <http://well.blogs.nytimes.com/2012/12/31/juggling-diabetes-and-cancer/?ref=health>

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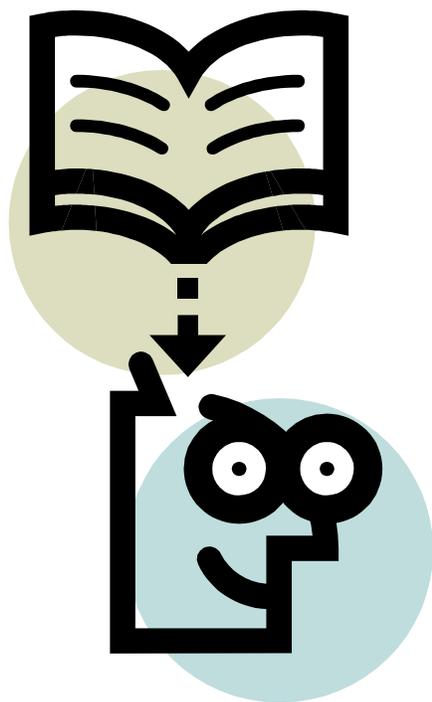
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For Further Reading:

- [American Diabetes Association Information on Cancer and Diabetes](#)
- [Nebraska DHHS Diabetes Prevention and Control Program](#)
- [National Cancer Institute](#)
- [In the News: MPR Special Report on Diabetes](#)
- [In the News: Physicians Develop Diabetes Prevention Guidelines for Children](#)

