

Lycopene may ward off kidney cancer in older women

March 2 2015

A higher intake by postmenopausal women of the natural antioxidant lycopene, found in foods like tomatoes, watermelon and papaya, may lower the risk of renal cell carcinoma, a type of kidney cancer.

A team led by Cathryn Bock, Ph.D., M.P.H., associate professor of Oncology at Wayne State University's School of Medicine, made the conclusion after analyzing data from 96,196 women nationwide and in Detroit who enrolled in the Women's Health Initiative from 1993 to 1998 and were followed through July 2013 by participating initiative sites, including Wayne State University.

"We were surprised to observe a protective effect of lycopene, as several previous studies in other populations did not detect a similar relationship," Bock said.

The results are explained in "[Antioxidant micronutrients and the risk of renal cell carcinoma](#) in the Women's Health Initiative cohort," featured in the Feb. 15 issue of *Cancer*.

The investigators analyzed the risks for kidney cancer associated with intake of lycopene and other micronutrients that have antioxidant properties, including lutein and vitamins C and E. During follow-up, 240 women were diagnosed with kidney cancer. Compared with women who reported a lower intake of lycopene, those who ingested more had a 39 percent lower risk. No other micronutrient was significantly associated with the same risk.

The 63,920 estimated new cases of kidney and renal pelvis cancer in 2014 made up 3.8 percent of all new cancer cases, according to the National Cancer Institute's Surveillance, Epidemiology, and End Results Program. In 2011, there were an estimated 358,603 people living with the cancer in the United States.

It is the eighth-leading cancer among women and is commonly diagnosed at a more advance stage.

"Kidney cancer is a relatively rare cancer, and so focusing only on reducing risk of this disease would be short-sighted," Bock said. "Rather, a diet focused on one's own personal risk factors, such as family history, would be more beneficial."

A low-salt diet is recommended for women with a risk of hypertension, a major risk factor for kidney cancer. There are other steps women can take now for their health, including eating more foods and fruits with naturally-occurring lycopene.

"Lycopene from food sources has also been associated with decreased risk of breast and prostate cancers, and a diet high in vegetables and fruits are generally well-accepted for promoting good health," she said.

Good sources of lycopene include tomatoes and tomato-based products, watermelon, pink grapefruit, guava and papaya. Dr. Bock suggests consulting a doctor before taking a lycopene supplement.

The team is now examining whether there is a relationship between antioxidant nutrient intake and [kidney cancer](#) risk in a National Cancer Institute-funded case-control study primarily conducted with participants from the metropolitan Detroit area.

"This study included a broader population, including both men and

women, and with greater representation of African-Americans, and therefore may help describe the associations in populations beyond post-menopausal [women](#) who are primarily of European descent," Dr. Bock said.

Provided by Wayne State University

Citation: Lycopene may ward off kidney cancer in older women (2015, March 2) retrieved 23 April 2024 from

<https://medicalxpress.com/news/2015-03-lycopene-ward-kidney-cancer-older.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.