Ultra-Processed Foods Linked to Greater Risk for Colon Cancer, Heart Disease and Death

Consumption of such foods was associated with a 29% higher risk for colorectal cancer in men.

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While ultra-processed foods can be more affordable and convenient, they are also linked to poor health outcomes. Packaged snacks, factory-made breads, soft drinks, breakfast cereal and other ready-to-eat items are all considered ultra-processed foods. Two recent studies find that such foods are linked to an increased risk for colorectal cancer as well as cardiovascular and all-cause mortality.

“Much of the dependence on these foods can come down to factors like food access and convenience,” Fang Fang Zhang, MD, PhD, of Tufts University in Boston, said in a press release. “Chemically processing foods can aid in extending shelf life, but many processed foods are less healthy than unprocessed alternatives. We need to make consumers aware of the risks associated with consuming unhealthy foods in quantity and make the healthier options easier to choose instead.”

In the first study, published in the BMJ, Zhang and colleagues examined the potential link between ultra-processed foods and the risk for colorectal cancer. Such foods could affect gut health, promote inflammation or even be a source of contaminants that contribute to the development of cancer.

The researchers assessed three prospective cohort studies in the United States that used questionnaires to evaluate dietary intake every four years. The study population included 46,341 men from the Health Professionals Follow-up Study, and 159,907 women from the Nurses’ Health Study and the Nurses’ Health Study II who had valid dietary intake measurements and no cancer diagnoses at baseline.

Over a follow-up period of 24 to 28 years, a total of 1,294 men and 1,922 women developed colorectal cancer. Men who ate the most ultra-processed food had a 29% higher risk for colorectal cancer, especially in the distal colon, compared with men who ate the least ultra-processed foods. The link persisted even after adjusting for body mass index and dietary nutrition. However, the association between ultra-processed food and colorectal cancer was not seen in women.

Eating more ready-to-eat meals made from meat, poultry or seafood and drinking sugary beverages were linked to a greater risk of colorectal cancer in men. Ready-to-eat meals were also associated with a higher rate of colorectal cancer in women, while yogurt and yogurt-based desserts were linked to a lower risk. “We found an inverse association between ultra-processed dairy foods like yogurt and colorectal cancer risk among women,” said Zhang.

In another prospective cohort study, also published in the BMJ, Marialaura Bonaccio, PhD, of IRCCS NEUROMED, and colleagues assessed the potential relationship between nutritional scores and mortality. They took into account two different food measures: the Food Standards Agency Nutrient Profiling System (FSAm-NPS), which is used to calculate the Nutri-Score placed on food packaging, and the NOVA classification, an indicator of the level of food processing.

The study population included 22,895 Italian adults. The average age was 55 years, and 48% were men. Over 272,960 person-years of follow-up, 2,205 deaths occurred.

People with the least healthy diet based on the Nutri-Score had a 32% higher risk for death from cardiovascular conditions and a 19% higher mortality risk from any cause compared to people with healthier diets. People who ate the most ultra-processed foods had a 27% higher risk for cardiovascular death and a 19% higher risk for death from any cause compared with people who ate the least amount of ultra-processed foods.

“A significant proportion of the higher mortality risk associated with an elevated intake of nutrient-poor foods was explained by a high degree of food processing. In contrast, the relation between a high ultra-processed food intake and mortality was not explained by the poor quality of these foods,” wrote the researchers.

These studies bolster calls for improvements in food policies to limit the consumption of overly processed foods. “Long-term change will require a multistep approach,” Lu Wang, PhD, of Tufts University, in the press release. “Researchers continue to examine how nutrition-related policies, dietary recommendations, and recipe and formula changes, coupled with other healthy lifestyle habits, can improve overall health and reduce cancer burden. It will be important for us to continue to study the link between cancer and diet as well as the potential interventions to improve outcomes.”

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