

# Common cooking oil fueling colon cancer in young Americans: What a new study says

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The past decade has seen a sharp rise in cancer cases and the worrying part is, this rise is also seen in younger population. A deadly form of cancer which is spreading fast is Colon cancer. Colon cancer cases are increasing among young Americans, and one of the major risk factors could be the use of popular cooking oils in ultra-processed diets, a new US government-backed research, published in Gut Journal has found out. In a striking discovery, the study analysed the tumors from over 80 colon cancer patients, and identified seed oils to be the potential culprits behind colon cancer, which has been one of the fastest-growing cancers in recent times.

These tumors were loaded with high concentrations of bioactive lipids, which are tiny greasy substances that were found to accumulate during the metabolic breakdown of seed oils.

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Eating foods high in sunflower, canola, corn, and grapeseed could trigger inflammation in the body which could lead to the development of cancer. Chronic inflammation can also lead to heart conditions, arthritis, metabolic syndrome, or stroke.



Seed oils are refined vegetable oils that come from plant seeds, rather than the fruit. They are neutral in taste and have a high smoke point. Some common seed oils include:  
Canola oil, Corn oil, Sunflower oil, Grapeseed oil, Safflower oil, Rapeseed oil, Soybean oil, Peanut oil, Linseed oil, and Castor oil.

Seed oils are often used in processed foods to provide flavor and shelf stability. While they can be a good source of omega-3 and omega-6, some research suggests that the trace amounts of omega-6 in seed oils are unlikely to harm health.

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Seed oils are highly refined and processed with bleaching, deodorizing, and heating, which can lead to the creation of harmful compounds. When heated at high temperatures and used in deep-frying or cooking at high heat, they may undergo oxidation, producing potentially toxic byproducts like aldehydes.

These toxic compounds can damage tissues and contribute to aging and chronic diseases, increase the risk of cancer, and lead to insulin resistance. Besides, the refining process can also increase trans fat content which can lead to heart disease, high cholesterol, and high blood pressure. It can also lead to weight gain.

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## Findings of the study

The study probed 81 tumor specimens from individuals between 30 to 85 years old.

These tumor samples contained significantly higher levels of oil-induced lipids compared to those derived from healthier fats within their malignant growths.

These lipids are notorious for increasing levels of inflammation, aiding tumor proliferation, and hindering the body's anti-cancer defenses.

## This is the right oil to prevent colon cancer





The team of scientists has advised switching to oils with omega-3 fatty acids which are found in olive or avocado oil to prevent cancer risk. Adding a fibre-rich diet including a lot of fruits, vegetables and whole grains can significantly reduce risk of colon cancer. It is also important to quit smoking and alcohol for avoiding this dreaded disease.

Peanut oil is high in monounsaturated and polyunsaturated fats, which can help lower LDL cholesterol and reduce the risk of heart disease. Peanut oil contains phytosterols, which are plant compounds that can block the absorption of cholesterol from food. It can also ward off cancer risk.

According to a review of 19 studies published in *Lipids in Health and Disease*, people who consumed the most olive oil had a lower risk of developing breast cancer and digestive system cancers than those who consumed the least. Another study published in *Journal of Epidemiology and Community Health* that assessed the cancer rates in 28 countries worldwide found that areas with a higher intake of olive oil had lower rates of colorectal cancer.

## Role of smoke point

When it comes to use a cooking oil which is healthy for you, one must consider the harmful compounds they may create upon heating. It is important to consider their smoke point which is the temperature beyond which it starts creating toxic compounds. When an oil is heated past its smoke point, it releases free radicals which react with oxygen to form harmful compounds. One of the harmful compounds that is produced in the process is called HNE. This compound is linked to vascular diseases like atherosclerosis, diabetes, and neurodegenerative disorders.

When it comes to use of cooking oil, apart from the right product, certain guidelines must be kept in mind for cancer prevention. Reusing oil more than 2-3 times could be harmful for health, especially if its appearance changes or it starts smelling rancid. As per USDA, if the oil is clouded or if the oil starts to foam or has a foul odor, taste, or smell, discard it. Reheating oil may also create harmful byproducts like Total Polar Compounds (TPC), trans fats, free radicals which can cause inflammation, and aldehydes.

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A diet low in fibre, high red meat consumption, especially processed meats, being overweight or obese, alcohol consumption, smoking tobacco, inherited genetic risk and family history, inflammatory bowel disease such as Crohn's disease, polyps, and having a previous diagnosis of bowel cancer are some of the common causes of bowel cancer.

Seed oils are widely used as they have a high smoke point which is good for high-temperature cooking. They are also cheaper than animal fats due to which eateries may use them more often. However, they are high in omega-6 fats, which may promote inflammation if consumed in excess. They can also become unstable at high heat forming harmful byproducts. The American Heart Association says there is no reason to avoid seed oils and promotes their consumption for their heart health benefits.

However, critics, including public figures like Robert F. Kennedy Jr., claim seed oils contribute to the obesity epidemic and related health concerns. Adding to the controversy, a recent study from the University of South

Florida linked seed oils to rising cases of colon cancer in young adults. The researchers suggested that the fats in seed oils might promote inflammation, thus creating an environment conducive to tumor growth.

Forever chemicals or PFAs are another menace that can pose grave risk of diseases like cancer. In the UK, it was reported in April that 'forever chemicals' were found many common fruits, vegetables and spices. These dangerous chemicals can accumulate in the bodies of living organisms including humans. They have been linked to severe health conditions, like kidney and testicular cancer, an increase in cholesterol and high blood pressure in pregnant women.

Colon cancer can be avoided by making healthy dietary choices and avoiding foods that can increase risk of developing cancerous cells. Alcohol is believed to increase the risk of creating cancer-causing compounds in the body, which can damage the lining of the colon. Another culprit that could be responsible for colon cancer growth is highly processed fast food that is low in nutrients and fibre and can increase chances of obesity. To fight colon cancer, it is imperative to increase your dietary fiber intake. Consume fiber-rich foods, such as whole wheat bread or brown rice, and beans and legumes, such as soybeans, lentils, peas, pinto beans, black beans and kidney beans.