

# Recent Health Issues

## **Soda and other sweet drinks tied to risk for some rare cancers**

July 13, 2016

People who drink lots of soda or other sugary beverages may have a higher risk of developing rare cancers in the gallbladder and bile ducts around the liver, a Swedish study suggests.

Little is known about the causes of biliary tract and gallbladder tumors, but emerging evidence suggests obesity as well as elevated blood sugar levels that are a hallmark of diabetes may increase the risk of these malignancies.

Because sodas and other sugary drinks have been linked to high blood sugar and weight gain, researchers wondered if these beverages might play a role in these types of cancer, said lead study author Susanna Larsson of the Karolinska Institute in Sweden.

To explore this possibility, researchers analyzed survey data on the eating and drinking habits of more than 70,000 adults then followed them for more than 13 years on average to see whether cancers got diagnosed.

Only about 150 people developed biliary tract or gallbladder cancers during the study period.

But compared with people who avoided sugar-sweetened drinks altogether, individuals who consumed two or more juice drinks or sodas, including artificially sweetened sodas, a day had more than twice the risk of developing gallbladder tumors and 79 percent higher odds of getting biliary tract cancer, the study found.

The people who drank two or more sodas or sugary beverages a day were more likely to be overweight and eat a higher-calorie diet with more sugar and carbohydrates and less protein and fat.

The increased risk of gallbladder and biliary tract tumors persisted, however, even after researchers adjusted for whether participants were overweight. Because the study is observational, the findings don't prove soda and sugary drinks cause cancer.

It's also possible that because researchers only had data on drinking habits at the start of the study,

the findings might have been influenced by changes over time in the beverages people consumed, the authors note in *JNCI: Journal of the National Cancer Institute*.

Researchers also lacked precise data to assess how often the sugary drinks people chose were diet sodas, said Dr. Margo Denke, a former researcher at the University of Texas Southwestern Medical School in Dallas who wasn't involved in the study.

Even so, "this study suggests that there is more than a plausible link; the incidence of biliary and gall bladder cancer was higher among individuals who consumed more sodas and juices," Denke said.

The exact reasons for the connection between sodas and these tumors may be unclear, but the message for consumers is still simple, said Dr. Igor Astsaturov, a medical oncologist at Fox Chase Cancer Center in Philadelphia who wasn't involved in the study.

"Obviously, this finding signals again and again that healthy lifestyle is the key to cancer-free life," Astsaturov said by email. "Regardless of the cause, it is easy enough to quench the thirst with water to stay fit and healthy."

**Source:** <http://www.foxnews.com>

## **Overweight men more likely to die prematurely**

14th July 2016

A new study published in *The Lancet* has found being overweight or obese increases the risk of premature death – and for the most obese group, it is about three times greater in men than in women. However, underweight people are at a higher risk too.

Research has already shown that maintaining a healthy weight can help prevent and manage many medical conditions, such as type 2 diabetes, high blood pressure and high cholesterol. Despite this, the number of people who are overweight and obese has been increasing worldwide.

This new research adds to the growing evidence that being overweight or obese increases the risk of coronary artery disease, stroke, respiratory disease and cancer – and it can increase the risk of premature death before the age of 70.

Professor Peter Weissberg, medical director at the British Heart Foundation, which helped to fund the research, says in a statement: "The results show that being overweight does have a significant impact on your health and strengthens the arguments for public health measures to reduce obesity in our society."

**Source:** <http://www.webmd.boots.com>

### **Discovery of pomegranate's anti-ageing molecule is a 'milestone'**

11 July 2016

Pomegranates slow down the ageing process by prompting cells to recycle and rebuild themselves, a study shows. The ruby red fruit was revered by the ancients as "food of the gods", but it has taken until now for scientists to identify the precise chemical that holds the key to youthful ageing.

Researchers in Switzerland have isolated a single molecule – urolithinA – which they believe drives a process called mitophagy, allowing parts of the cell that become defective to be cleared away, making way for replacements. We believe this research is a milestone in current anti-ageing efforts Professor Johan Auwerx, EPFL

However, humans can only benefit from the anti-ageing chemical if they possess the right sort of bacteria in their gut. The microbes are needed to convert the fruit's raw ingredient into urolithin A.

Researchers investigating the molecule fed it to nematodes and found it increased their eight-to-10-day lifespan by more than 45 per cent.

The scientists have already set up a company, Amazentis, to exploit the discovery, and early clinical trials testing finely calibrated doses of the molecule in human patients are under way in a number of European hospitals.

Lead researcher Professor Johan Auwerx, from the Ecole Polytechnique Federale de Lausanne, in Switzerland, said: "We believe this research is a milestone in current anti-ageing efforts, and illustrates the opportunity of rigorously tested

nutritional bioactive agents that we consider to have outstanding potential for human health."

The study, published in the journal *Nature Medicine*, focused on mitochondria - tiny rod-like "power plants" in cells that play a vital role in turning food into energy.

Over time, mitochondria become worn out and damaged, mitophagy becomes less efficient and cells end up cluttered with old, poorly functioning mitochondria. This harms the health of many organs and tissues and weakens muscles. The build-up of dysfunctional mitochondria is associated with many conditions of ageing, such as Parkinson's disease. A host of other health benefits have already been linked to pomegranates with varying degrees of evidence.

The fruit is packed with antioxidants and is said to reduce the risk of heart disease, fight inflammation and arthritis, improve memory, boost exercise performance, and combat prostate cancer.

**Source:** <http://www.telegraph.co.uk>

### **How to |Fight ageing?**

**Cut 500 calories:** Experts agree that reducing calorie intake and/or intermittent fasting could extend your lifespan significantly. Reducing your daily calorie consumption to 1,500 (as opposed to the average 2,000 for women generally advised by health authorities) could lead to significant improvements in long-term health.

**Avoid sugar, but don't plump for too much protein either:** "Sugar is the worst thing you can eat in terms of ageing," says Laura Deming. "But protein isn't great either. It turns on systems that tell your body that it is full – so it thinks it is in a safe place, and doesn't need to try to fight to live longer, so it won't generate new cells." She advises a diet focused on high-density, low-GI carbohydrates, like wholewheat cereals.

**Do a 15-minute workout:** "It makes sense that people who exercise have lower rates of diabetes and cardiovascular disease, but now we are finding they have lower rates of Alzheimer's too, because exercise slows down ageing overall," says Brian Kennedy.

You don't need to run a marathon though. In a study this year at the University of Kansas Medical Center, previously sedentary adults who did an

average of just 15 minutes aerobic exercise a day, such as walking, five days a week, saw a significant improvement in their cognitive test scores.

**Learn a new skill:** According to a 2013 study by the University of Texas at Dallas, older people who learned cognitively demanding activities, like photography or a new language, improved their memory. The brain loves novelty and we can strengthen the frontal lobe regions that control short-term memory by engaging in new tasks.

**Source:** <http://www.telegraph.co.uk>

### **Eating cinnamon could improve your ability to learn**

13 July 2016

Researchers at The Rush University Medical Center in California say cinnamon could help one's ability to learn. In an experiment on laboratory mice, rodents with poor learning ability were found to show improvement after being fed ground cinnamon.

The rodents' bodies metabolized the spice into sodium benzoate, a chemical used in treatments for brain damage. When the chemical entered into the brain, it promoted changes that led to improvement in memory and learning.

"We have successfully used cinnamon to reverse biochemical, cellular and anatomical changes that occur in the brains of mice with poor learning," said Kalipada Pahan, lead researcher and Professor of Neurology at Rush.

"We need to further test this approach in poor learners. If these results are replicated in poor learning students, it would be a remarkable advance."

In an earlier study Professor Pahan and colleagues determined that cinnamon could reverse changes in the brains of mice with Parkinson's disease. The researchers looked at two types of cinnamon widely available in the United States -- Chinese and Ceylon.

"Although both types of cinnamon are metabolized into sodium benzoate, we have seen that Ceylon cinnamon is much more pure than Chinese cinnamon, as the latter contains coumarin, a hepatotoxic (liver damaging) molecule," Pahan said.

**Source:** <http://www.telegraph.co.uk>

### **Omega-3s linked with lower risk of fatal heart attacks**

July 12, 2016

Omega-3 fatty acids (omega-3s) are a group of molecules that have many important functions in the body. These include blood clotting, muscle activity, digestion, fertility, and brain development.

There are several types of omega-3s, some of which must come from the diet. Eicosapentaenoic acid (EPA), docosapentaenoic acid (DPA), and docosahexaenoic acid (DHA) are found in seafood, including fatty fish (such as salmon, tuna, and trout) and shellfish (such as crab, mussels, and oysters). Alpha-linolenic acid (ALA) is found in leafy green vegetables, nuts, and some vegetable oils, such as canola, soybean, and flaxseed. Omega-3s are also available as dietary supplements.

Past research suggests that omega-3s may help protect against heart disease. However, the results have been inconclusive. These variable findings may be because some studies used self-reported dietary information rather than directly measuring omega-3 levels. An international team led by Drs. Dariush Mozaffarian and Liana C. Del Gobbo at Tufts University set out to directly examine the relationship between levels of omega-3s in the body and the onset of heart disease. The research was supported by several NIH components. Results appeared online on June 27, 2016, in *JAMA Internal Medicine*.

The scientists combined findings from 19 large studies. Together, these included more than 45,000 healthy people from 16 countries (United States, Australia, Costa Rica, Finland, France, Germany, Ireland, Israel, Italy, Norway, Singapore, the Soviet Union, Spain, Sweden, Switzerland, and the United Kingdom). The participants had a median age of 59 years at the start of the studies, and 63% were male.

Blood or tissue levels of several seafood- and plant-derived omega-3s were measured in each study. During a median of 10 years of follow up, almost 8,000 participants developed a first heart attack, including about 7,200 nonfatal heart attacks and 2,800 deaths.

The researchers found that EPA, DPA, DHA, and ALA were all associated with a lower risk of fatal heart disease. DPA was also associated with a lower risk of total heart disease, whereas ALA, EPA, and DHA weren't. The group didn't find any associations

between omega-3s and nonfatal heart attacks. These relationships held across participant's age, sex, diabetes status, and use of aspirin or cholesterol-lowering medications.

"Our results lend support to the importance of fish and omega-3 consumption as part of a healthy diet," Mozaffarian says.

The researchers are conducting further work to understand how omega-3s and other fatty acids in the diet might affect the risk of developing diabetes, obesity, cancers, and other conditions.

## **Physical activity linked to reduced cancer risk**

July 2016

Leisure-time physical activity—such as walking, running, or swimming—is associated with a reduced risk of developing 13 different types of cancer, a new study reports.

Past research has shown that the benefits of physical activity can include weight control; strengthening bones and joints; and reducing the risk for heart disease and other disorders. An international research team decided to take a close look at the links between physical activity and different types of cancer.

The researchers pooled data from 12 studies that together followed 1.44 million people over time to

assess cancer risk. Study participants ranged from 19 to 98 years old. They were surveyed about time spent in moderate to vigorous leisure-time physical activities. The scientists took into account factors such as age, smoking, alcohol use, diet, and education.

During a follow-up of about a decade, 187,000 new cases of cancer arose. People with the highest level of leisure-time physical activity had a reduced risk for 13 of 26 types of cancer compared to those with the lowest level of activity.

Those with the highest activity had a 20% lower risk for 7 cancer types: esophageal adenocarcinoma, liver, lung, kidney, gastric cardia, endometrial, and myeloid leukemia. They also had a 10-20% lower risk for myeloma and cancers of the head and neck, rectum, bladder, and breast. Leisure-time physical activity was also linked to a higher risk of malignant melanoma—likely due to greater sun exposure.

"Leisure-time physical activity is known to reduce risks of heart disease and risk of death from all causes. Our study demonstrates that it's also associated with lower risks of many types of cancer," says study lead author Dr. Steven Moore of NIH. "Health care professionals counseling inactive adults should promote physical activity as a component of a healthy lifestyle and cancer prevention."

**Source:** <https://newsinhealth.nih.gov>

### **Information collected and compiled by:**

**Mr. Md. Akbar Hossain**

Assistant Professor, Department of Pharmacy  
Dhaka International University, Dhaka