EAT-RITE NEWS

January 2012

Broccoli, Squash, Apples and Other Produce Can Help Prevent Colorectal Cancer

We all know that fruits and vegetables are an important part of a healthy diet, but new research shows that eating specific types of produce can decrease your chance of getting various kinds of colorectal cancer. In a study published in October 2011 in the *Journal of the American Dietetic Association,* researchers from the Western Australian Institute for Medical Research analyzed dietary information over a two-year period from 834 people with colorectal cancer and 939 people with no history of the disease. The researchers found that the risk of cancer in the proximal colon (the left side of the colon, including the appendix) was reduced in people who ate brassica vegetables like broccoli, cauliflower, brussels sprouts and cabbage, but was not affected by eating other vegetables or fruits. For cancer of the distal colon (the right side, including the large intestine), all fruits and vegetables significantly decreased risk—particularly apples and dark yellow vegetables like squash, pumpkin, sweet potatoes and carrots. Fruit and vegetable consumption didn't affect the incidence of rectal cancer in study participants, but drinking fruit juice was associated with a higher risk of getting the disease. "Future studies might consider taking into account the location of the tumor when examining the relation between fruit and vegetable consumption and the risk of CRC (colorectal cancer)," the researchers concluded.

Tune in to the Eat-Rite Wellness hour every Thursday at 5:00 on 88.3 fm

Like us on Facebook

Follow us on Twitter *@eatritehealth*

Sign up for E-mail at www.eat-rite.com

Diets Rich in Antioxidants May Reduce Stroke Risk

New research shows that even if you have a history of cardiovascular disease, eating a diet loaded with antioxidants may substantially lower your risk of having a stroke. In a long-term study of nearly 37,000 women ages 49 to 83, Swedish researchers discovered that a diet packed with antioxidant-rich vegetables, fruits, whole grains, tea and chocolate lowered the risk of stroke by 17 percent in healthy women and 45 percent in those who have a history of heart disease or stroke. The study, published in the December 2011 issue of the journal *Stroke,* analyzed 31,035 women without cardiovascular disease and 5,680 women with cardiovascular disease. The women filled out questionnaires about how frequently they ate 96 different types of food. Researchers tracked the women between 1997 and 2009 and discovered that 1,322 of the healthy women had had strokes, along with 1,007 of the women with cardiovascular disease. After adjusting for the risk factors of body mass index, high blood pressure, alcohol consumption and smoking, researchers concluded that the healthy women who ate the most antioxidants had a 17 percent lower risk of stroke than the women who ate the least amount. Even more strikingly, among the women with a history of cardiovascular disease, those who consumed the highest number of antioxidants had a 45 percent lower risk of hemorrhagic stroke. Fruits and vegetables made up about 50 percent of the women's antioxidant consumption, with whole grains accounting for 18 percent, tea at 16 percent and chocolate at 5 percent. This study contrasts with previous research that didn't find a link between antioxidant supplements and stroke risk. Lead study author Susanne Rautiainen, a PhD student at Sweden's Karolinska Institutet, told Medscape Medical News that those studies looked at single antioxidants, whereas hers examined a variety of antioxidants consumed in the diet rather than taken as supplements. Rautiainen speculates that some strokes may be caused by oxidative stress, which can be combated by antioxidants. In addition, antioxidants, particularly flavonoids, may reduce blood clotting, blood pressure and inflammation—all of which contribute to strokes, she says. Rautiainen and the rest of the research team said their next step is to see whether antioxidant intake affects other cardiovascular diseases such as heart attacks.

New Research Helps Unlock the Secrets of Obesity

New studies are helping to combat the obesity epidemic by offering clues about why we gain weight and the best ways to lose it. Research published in October 2011 in the *New England Journal of Medicine* found that hormones may influence appetite regulation and, consequently, weight gain.

Researchers put 50 overweight or obese people on a low-calorie diet for 10 weeks. Before the diet began, the researchers measured the levels of hormones involved in appetite control— eptin, ghrelin, peptide YY (PYY), gastric inhibitory polypeptide, glucagon-like peptide 1, amylin, pancreatic polypeptide, cholecystokinin and insulin. They also measured these hormone levels at the end of the diet and again 62 weeks later. The researchers found that up to a year after weight loss, there were reductions in the appetite-suppressing hormones leptin, PYY and cholecystokinin. Meanwhile, the subjects had an increase in ghrelin, gastric inhibitory polypeptide and pancreatic polypeptide—hormones that encourage us to eat. In addition, the study participants reported a significant increase in appetite and hunger.

"One year after initial weight reduction, levels of the circulating mediators of appetite that encourage weight regain after diet-induced weight loss do not revert to the levels recorded before weight loss," the researchers concluded. "Long-term strategies to counteract this change may be needed to prevent obesity relapse."

Several additional studies reveal what those strategies can be**. Polyglycoplex (PGX**), a revolutionary supplemental dietary fiber, has been shown to significantly address changes in appetite-control hormones. **A 2010 study published in the *European Journal of Clinical Nutrition* showed that PGX raised levels of the appetite-suppressing hormone PYY while reducing levels of the appetite-stimulating hormone ghrelin.**

Resveratrol—an antioxidant found in red wine, grapes and other fruits and vegetables—has also been shown to effect appetite hormones. In a study published in November 2011 in the journal *Cell Metabolism,* Dutch researchers tracked 11 obese men who took either 150 grams of resveratrol a day, or a placebo. After 30 days, each group received the opposite supplement. During the trial, researchers tracked the subjects' metabolic rate by measuring their energy expenditure, fat storage, fat burning, blood sugar levels and blood pressure.

Researchers found that the resveratrol group burned more calories and had decreased blood glucose and insulin levels, less fat storage in the liver and lower levels of inflammatory markers in the blood. Although the study is small, the research team believes it's a starting point for further studies on resveratrol's effect on obesity

Vitamin D is Particularly Important for Children

The vitamin D studies just keep on coming. Previous research has linked the sunshine vitamin with bone health and enhanced immunity, along with lowered risk of osteoporosis, arthritis, cardiovascular disease, certain cancers, cognitive decline and depression. New research shows that this critical nutrient can also help lower the risk of diabetes and asthma in kids. Meanwhile, other research shows our intake of vitamin D from foods has dropped substantially in the last 30 years, and that many people don't get enough D from the sun. A September 2011 study by researchers from the University of Minnesota is the first to evaluate how much vitamin D Americans get from food. Researchers took information from the Minnesota Heart Survey, which collected data between 1980 and 2009. They found that overall, survey participants got 15 percent less vitamin D from food in 2009 than they did in 1980. The average daily D intake in 1980 to 1982 was 7.24 mcg for men and 4.77 mcg for women, compared to 6.15 mcg for men and 4.53 mcg for women in 2007 to 2009. Researchers said this is "somewhat consistent" with studies that have tracked vitamin D blood levels in the U.S. population during the last 25 years. Noting that one-third of Americans have inadequate or deficient blood levels of vitamin D, the researchers believe the drop can be partially attributed to our declining consumption of milk, which is often vitamin D fortified. Few other foods contain D—mainly fatty fish such as salmon, sardines, herring, mackerel, tuna and cod; shiitake mushrooms; and eggs.

Sun exposure helps our bodies manufacture vitamin D, but a study published in October 2011 in *Cancer Causes and Control* looked at 1,200 participants and found that 730 had a suboptimal blood level of D—defined as below 60 nanomoles per liter. Researchers noted that in order to reach that level, people need an average of six hours a day of summer weekend sun exposure, which can be difficult for sun-sensitive individuals to reach. Consequently, the researchers concluded that people with very fair skin or skin cancer consider taking vitamin D supplements year-round. Vitamin D supplementation may be particularly important for children, according to two recent studies. A British study published in September 2011 in the *American Journal of Respiratory and Critical Care Medicine* analyzed 86 children and found that those with severe therapy-resistant asthma (SRTA) had significantly lower levels of vitamin D than those without SRTA. Researchers concluded that low levels of the vitamin are associated with poorer lung function and an increase in airway smooth muscle mass, which can make breathing difficult.

Another children's study, published in December 2011 in *The Journal of Clinical Endocrinology & Metabolism,* is among the first to examine vitamin D levels and diabetes risk factors in kids. Researchers measured body mass index and vitamin D, blood pressure, blood sugar and insulin levels in 411 obese and 87 normal-weight children, ages 6 to 16. Half of the obese kids had vitamin D levels below 50 nanomoles per liter, compared to 22 percent of the normal-weight kids. The obese children with low D levels also had insulin resistance and high blood sugar, but didn't have elevated blood pressure. Low D levels are associated with risk factors for type 2 diabetes in obese children, the researchers concluded.