



EDITOR'S NOTES:

Foods That Fool

Each year, as many as 20,000 new foods and beverages are introduced into your local grocery store. Many claim to be super-nutritious. But, some healthy sounding foods are imposters, implying they offer more than they really do. Here is a sampling of what to watch out for this year when it comes to foods that aren't as healthy as they sound.

1. **Cranberry Almond Crunch Cereal:** Many of those sophisticated cereals aimed at adults have as much or more sugar as does Cocoa Puffs. Granted the Crunch has a bit more fiber, but it also has 80% more calories. Both are made with whole grains, but no one would venture to say a chocolate cereal is healthy for you. Well, guess what... many of those cereals aimed at adults are not much better.

2. **Banana or Apple Chips:** The manufacturer has taken a healthy, fat-free fruit, loaded it with fat and sugar, then tried to pass it off as healthy. These fruit chips have the same calories per ounce as potato chips.

3. **Bottled Teas:** Green tea has antioxidant compounds with fancy names like polyphenols that lower cancer and heart disease risk. Those polyphenols don't make it into bottled teas in appreciable amounts, if at all. What does make it into the bottle is sugar. Many of these teas have the calorie equivalent of a side order of hashbrowns. And, because they are liquid calories, they don't fill us up, so it is easy to over-consume calories, which means weight gain. Save your money and brew your own green tea at home.

4. **Bagged Full Salads:** Use the entire salad dressing pouch and croutons in a Garlic Caesar Salad kit and you are consuming more calories than you'll get in a Quarter Pounder with Cheese.

5. **Bran Muffins:** The only advantage most store-bought bran muffins hold over a croissant is that they are higher in fiber. A 4-ounce muffin can easily be higher in calories, fat, and sugar. (For example, Dunkin Doughnuts Honey Bran Muffin has 490 calories and a teaspoon of bad fat.)

6. **Reduced-Fat Peanut Butter:** Must be better than full-fat, right? Actually, it's a wash, since they both have about the same calories. The reduced-fat makes up for the calories by adding more sugar in the form of corn syrup solids. When it comes to your weight, a calorie is a calorie whether it comes from sugar or fat.

7. **All-Fruit Jam:** Jam is jam. Some all-fruit jams even have more calories than regular jam. Both list whole fruit as the first ingredient. The only difference is that regular jam uses corn syrup (a vegetable-based ingredient..hence it can't be called "all fruit.") while in all-fruit the sweetener is concentrated white grape or pear juice, which is just highly refined sugar extracted from fruit.

8. **Garlic Pepper:** The second ingredient in this "pepper" is salt. Use a dusting of this seasoning and you've added 105 milligrams of sodium to the plate. Granted, that's much less than you would get from salt, but at least with the salt, you're calling it what it is. Thinking it's low-salt, you also might add more than a dusting and wind up with a sizeable sodium intake

9. **Turkey Hot Dogs:** Many products contain the skin and fat of the bird, so are the nutritional equivalent of a dog made from beef or pork. Almost any hot dog is over the top when it comes to sodium (1 turkey hot dog supplies 22% of your total day's upper limit for sodium).

Elizabeth Somer, M.A.,R.D.



Elizabeth Somer

My Dad Was Right!

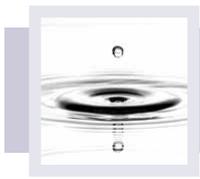
When I was a little girl, my dad gave me a tablespoon of honey when I had a nighttime cough. Decades later, researchers at the Pediatric Community Ambulatory Care Clinic in Israel report that honey is just as effective as commercial medicines for stilling a cough in children. The study looked at 300 children between the ages of 1- and 5-years-old with upper respiratory infections, nocturnal cough, and a cold that had lasted less than seven days. The children received either a tablespoon of honey or placebos 30 minutes before bedtime. Results found that honey produced significant improvements in cough symptom relief and improved sleep quality.

Cohen H, Rozen J, Kristal H, et al: Effect of honey on nocturnal cough and sleep quality. Pediatrics 2012;130:465-471.

HOT TOPIC: Chromium picolinate supplements helped normalize blood sugar levels, lipid peroxidation, and antioxidant status in a study on diabetic rats at Panjab University in India. *Journal of Trace Elements in Medicine and Biology 2012;October 31st.*

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Calcium Not Harmful to Heart

Remember that study a few months back that found calcium supplements increased heart disease? Well, forget all of that! A study from Harvard Medical School and the Institute of Aging Research report that high calcium intake has no harmful effects on heart disease or calcification of arteries. Data was gathered on 690 women and 588 men between the ages of 36- and 83-years-old from the Framingham Study who attended clinic visits and completed food-frequency questionnaires for several years. Comparing age-adjusted coronary artery-calcification scores with calcium intake, the researchers found nothing to support the hypothesis that high calcium

Attention Deficit: What's Diet Got to Do With It?

The role of nutrition in attention deficit/hyperactivity disorder (ADHD) was reviewed by researchers at Wroclaw Medical University in Poland. They report that the conventional treatment is based on the combination of behavioral and psychological therapy and pharmacotherapy, which may produce results, but often is associated with undesirable side effects, such as: loss of appetite and weight, growth inhibition, abdominal pain, headaches, sleeping problems and increased blood pressure. In contrast, dietary and supplemental treatments have no side effects and are gaining in popularity. The diet of pregnant/nursing women and their offspring has an effect on the development and severity of ADHD. Poor intake of zinc, iron, magnesium, iodine and omega-3s is linked to an increased risk for ADHD. The omega-3 fat, DHA, in particular is critical for brain and vision development in the child, and a deficiency might contribute to an increase risk of ADHD. In addition, eliminating certain food components, such as artificial food dyes and preservatives, salicylates, and high glycemic foods may help.

Konikowska K, Regulaska-Ilow B, Rozanska D: The influence of components of diet on the symptoms of ADHD in children. Roczniki Panstwowego Zakladu Higieny 2012;63:127-134.

intake was associated with coronary artery calcification, an important measure of atherosclerosis risk. They conclude that there, "...is not sufficient [evidence] to modify current recommendations for calcium intake to protect skeletal health..."

Samelson E, Booth S, Fox C, et al: Calcium intake is not associated with increased coronary artery calcification. American Journal of Clinical Nutrition 2012;November 7th.

Vitamin D Against Multiple Sclerosis

Low blood levels of vitamin D might worsen symptoms of multiple sclerosis, state researchers at the University of California, San Francisco. Clinical evaluations, brain MRIs, and blood draws were done on almost 500 multiple sclerosis (MS) patients. Results showed that each increase of 10 nanograms per milliliter in blood vitamin D levels was associated with a 15% lower risk of new brain lesions and a 32% lower risk of spots of active disease. Higher vitamin D levels also were linked to lower subsequent disability. The researchers conclude that, "Vitamin D levels are inversely associated with MS activity."

IN PERSPECTIVE: *Multiple sclerosis is an autoimmune disease that damages the lining of nerve fibers. Symptoms include fatigue, numbness in the legs and arms, balance and coordination problems, vision problems, pain and even paralysis. While this study does not prove a cause-and-effect relationship, it does add to the growing body of research showing a strong link between the vitamin and the disease.*

Mowry E, Waubant E, McCulloch C, et al: Vitamin D status predicts new brain magnetic resonance imaging activity in multiple sclerosis. Annals of Neurology 2012;72:234-240.

HOTTOPIC: Compared with other forms of folate, 5-methyltetrahydrofolate is the best treatment option for major depressive disorders because of its greater bioavailability and lower risk for side effects, state researchers at Harvard Medical School. *Canadian Journal of Psychiatry 2012;57:406-413.*

Did You Remember to Take Your B Vitamins?

Certain B vitamins might be important in preventing or at least slowing the development of mild memory loss and possibly even Alzheimer's disease, state researchers at Ewha Womans University in Seoul, Republic of Korea. Blood levels of folate and vitamin B12, as well as homocysteine were analyzed in 121 normal patients and 321 patients with either mild cognitive impairment or Alzheimer's disease. Results showed that homocysteine levels were highest in the patients with both cognitive impairment and Alzheimers, and homocysteine was highest and folate levels lowest in those with Alzheimers. In addition, performance on a battery of cognitive tests worsened as levels of vitamin B12 and folate decreased, while those scores were inversely associated with homocysteine levels.

Maintaining a normal blood pressure also is important in preventing dementia, since a study from the University of California at Davis concludes that the harm to blood vessels in the brain from elevated blood pressure is associated with damage to the structure of the brain's white matter and mental decline even in people as young as 40-years-old. On the other hand, seniors who stay physically active show less brain tissue atrophy and white matter lesions in the brain, according to a study from the University of Edinburgh.

Kim G, Kim H, Kim K, et al: Relationship of cognitive function with B vitamin status, homocysteine, and tissue factor pathway inhibitor in cognitively impaired elderly. Journal of Alzheimers Disease 2012;October 5th.

Maillard P, Seshadri S, Beiser A, et al: Effects of systolic blood pressure on white matter integrity in young adults in the Framingham Heart Study. Lancet neurology 2012;November 1st.

Gow A, Bastin M, Munoz Maniega S, et al: Neuroprotective lifestyles and the aging brain. Neurology 2012;79:1802-1808.

Verdelho A, Madureira S, Ferro J, et al: Physical activity prevents progression for cognitive impairment and vascular dementia. Stroke 2012;November 1st.



Antioxidants Against Arthritis

Many antioxidant-rich foods help lower inflammation and oxidation associated with rheumatoid arthritis (RA), according to a review of the research from the National Research Centre in Cairo, Egypt. Researchers looked at foods rich in antioxidants and anti-inflammatory compounds, such as phenols, omega-3 fats, phytosterols, tocopherols, and carotenoids and compared these constituents with their effects on oxidative damage associated with RA. Results showed that many foods helped lower inflammatory biomarkers such as C-reactive protein (CRP) and oxidative stress, while improving antioxidant status and colonic microflora in RA patients. These foods included fish oil, primrose oil, fenugreek, coriander, tomato, carrot, sweet potato, broccoli, green tea, rosemary, walnuts, and wheat germ. The researchers conclude that, "Anti-inflammatory and antioxidant nutraceuticals may serve as complementary medicine for the management of RA."

Al-Okbi S. Nutraceuticals of anti-inflammatory activity as complementary therapy for rheumatoid arthritis. Toxicology and Industrial Health 2012;October 26th.

Soy Good for Lungs

Soy food consumption lowers the risk for lung cancer, according to a study from Chongqing Medical University in China. A meta-analysis that included 71,550 women and compared usual soy intake with lung cancer risk over the course of 9.1 years, found that as soy food intake increased, lung cancer risk decreased. Those women who consumed the most soy foods had a 37% lower cancer risk compared to women who consumed the least soy foods. This inverse relationship appeared to be strongest for women with a later age at menopause and for aggressive lung cancer. The researchers conclude that, "...soy food consumption may reduce lung cancer risk in nonsmoking women..."

Yang G, Shu X, Chow W, et al: Soy food intake and risk of lung cancer. American Journal of Epidemiology 2012;176:846-855.

Nourish Your Brain

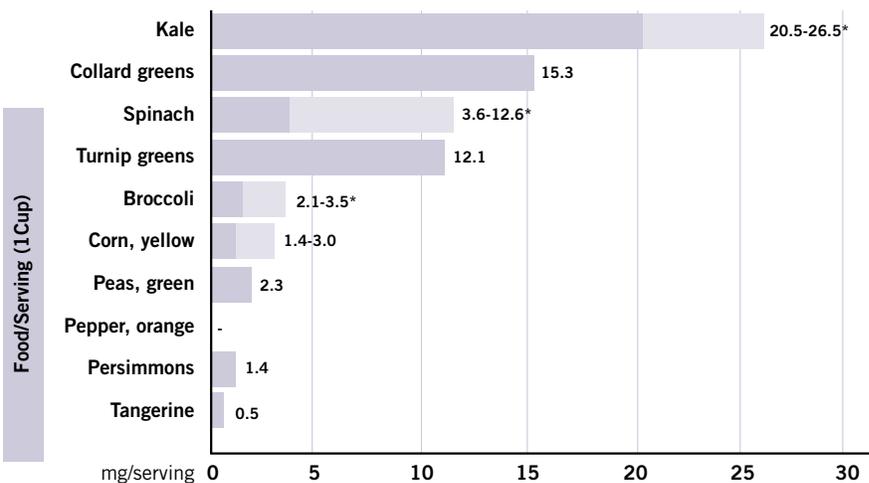
Researchers at the USDA Human Nutrition Research Center on Aging at Tufts University in Boston report that lutein and zeaxanthin benefit cognitive health. These two carotenoids are the only ones that cross the blood-retina barrier to form macular pigment (MP) in the eye. They also accumulate in the brain and there is a significant correlation between MP density and cognitive function in healthy seniors. An examination of the link between cognition and lutein and zeaxanthin concentrations in the brain tissue of decedents from a population-based study in centenarians found that zeaxanthin concentrations in brain tissue were significantly related to measures of cognitive function, memory

retention, verbal fluency, and dementia severity. Lutein also appears to improve recall and verbal fluency, while lutein concentrations in the brain are lower in people with mild cognitive impairment. In addition, preliminary research shows that lutein supplementation in combination with the omega-3 fat DHA (800 milligrams/day) results in improved verbal fluency, memory, and rate of learning. The researchers conclude that, "When all of these observations are taken into consideration, the idea that lutein and zeaxanthin can influence cognitive function in older adults warrants further study."

Johnson E: A possible role of lutein and zeaxanthin in cognitive function in the elderly. American Journal of Clinical Nutrition 2012;96:1161S-1165S.

GOOD FOOD SOURCES OF LUTEIN AND ZEAXANTHIN

Lutein and zeaxanthin are found together in many food sources. Dark green leafy vegetables are the primary source of lutein and zeaxanthin, but they are also present in lesser amount in other colorful fruits and vegetables such as broccoli, orange peppers, corn, peas, persimmons and tangerines.



*depending on variety and preparation

Source: USDA-NCC Carotenoid Database, 1998; USDA Food Nutrient Database for Standard Release 13

HOTTOPICS: "Current evidence does not support any meaningful nutritional benefits or deficits from eating organic compared with conventionally grown foods, and there are no well-powered human studies that directly demonstrate health benefits or disease protection as a result of consuming an organic diet," con-

cludes a review of the research from the Council on Environmental Health. *Pediatrics 2012;130:e1406-e1415.*

The omega-3 fat DHA improves cognitive performance, but the exact mechanism of action within the brain is still unclear, report researchers at the University of Pittsburgh. *PLoS One 2012;7:e46832.*



IN THE NEWS

- A new strain of probiotic, called lactobacillus reuteri, lowers total and LDL-cholesterol, possibly reducing heart disease risk, according to a study reported at the American Heart Association's Scientific Sessions.
- Diets rich in flavonoids from tea, fruit, and vegetables lower a man's risk for developing prostate cancer in the future, according to a study reported at the American Association for Cancer Research in Anaheim, California.
- Overweight and obese people who lose weight show reduced inflammation throughout their bodies, which lowers their risk for heart disease, according to a study reported at the American Heart Association's meeting in Los Angeles.
- Skipping breakfast makes people hungrier and more tempted to eat high-calorie foods, report researchers at the Society for Neuroscience's annual meeting, who analyzed MRI brain scans and eating behaviors of people who skipped breakfast.
- Every meal based on processed foods that a person eats damages blood vessels contributing to risk for heart disease, while every Mediterranean-like meal has either no damaging effects or possibly even improves blood vessel function, according to a study reported at the Canadian Cardiovascular Congress in Toronto.
- Even one indulgence of choosing a fast-food breakfast sandwich (which BTW averages 25 grams of fat, much of it saturated, and 450 calories) impairs blood vessel function and clogs blood flow for hours after the meal, according to a study reported at Canadian Cardiovascular Congress in Toronto.

Multis Lower Cancer Risk

Taking a multi-vitamin every day lowers a man's risk for cancer, according to a study from Harvard Medical School. Researchers compared supplement use with cancer rates in this large-scale, randomized, double-blind, placebo-controlled study of 14,641 men followed since 1997. Results showed that compared to the placebo takers, men who took a daily multi-vitamin showed a modest, but significant, reduction in the incidence of total cancer.

Gaziano J, Sesso H, Christen W, et al: Multivitamins in the prevention of cancer in men. Journal of the American Medical Association 2012;October 17th.

WHAT SHOULD YOU LOOK FOR IN A MULTI?

Select a broad-range multiple vitamin and mineral supplement. Choose one that contains vitamins A, D, E, and K, all of the B vitamins (vitamins B1, B2, B6, B12, niacin, and folic acid), and the trace minerals (chromium, copper, iron, manganese, selenium, and zinc).

Ignore chloride, pantothenic acid, biotin, potassium, choline, and phosphorus since the diet either already supplies optimal levels of these compounds or supplements contain too little to be useful. Also ignore nickel, iodine, vanadium, and tin, since it's not clear whether or not they're essential for humans.

Read the column titled "Daily Value" on the back label. Look for a multiple that provides approximately 100%, but no more than 300% of the Daily Value for all nutrients provided. You want a "balanced" supplement, not one that supplies 2% of one nutrient, 50% of another, and 600% of another.

Supplement your multi. All one-pill-a-day multiples are short on calcium and magnesium, so consider taking a calcium-magnesium supplement if you consume daily less than 3 glasses of milk and few servings of magnesium-rich soybeans, wheat germ, and dark green leafy vegetables. Look for one that supplies these two minerals in a two to one ratio, such as 500 milligrams calcium to 250 milligrams magnesium. You also may need extra supplements of vitamin D and the omega-3 fat, DHA.

The Real Foods Diet Fights Cancer

Diets based on flavonoid-rich foods lowered stomach cancer risk in women, in a study from the Catalan Institute of Oncology in Torino, Italy. Data, including food diaries, during the course of 11 years on almost 500,000 men and women between the ages of 35- and 70-years-old in 10 European countries were compared to cancer risk. Results showed that women who consumed more than 580 milligrams of flavonoids each day had a 51% lower risk of developing stomach cancer com-

pared to women who consumed no more than 200 milligrams a day of flavonoids. The researchers conclude that, "This kind of diet combined with less consumption of red and processed meat can be a good way to reduce the risk of developing stomach cancer."

IN PERSPECTIVE: *Fruits, vegetables, whole grain cereals, nuts, legumes, chocolate, and wine are all good sources of flavonoids. Green tea is particularly rich in flavonoids, containing more than 12,500 milligrams for every 100 grams of leaves. Pinto beans also are a rich source with about 769 milligrams of flavonoids in every three ounces.*

Zamora-Ros R, Agudo A, Lujan-Barroso L, et al: Dietary flavonoid and lignan intake and gastric adenocarcinoma risk in the European Prospective Investigation into Cancer and Nutrition (EPIC) study. American Journal of Clinical Nutrition 2012;October 17th.

HOT TOPIC: Every meal eaten in a restaurant increases a child's risk for being fat, since these meals contain more calories, fat, and sugar than do home-cooked meals, state researchers at the University of Illinois in Chicago. *Archives of Pediatrics and Adolescent Medicine 2012;November 5th: 1-7.*



Sugar Addiction Gaining Ground

Brains, or at least rat brains, can't resist sweet and creamy foods, according to a study from the University of Michigan. Researchers gave the animals a drug to artificially boost the action of a portion of the brain, called the neostriatum, then gave them a hefty dose of M&Ms. The animals ate twice as much candy as they normally would, or the equivalent of a 150-pound person eating seven pounds of candy in an hour. Endorphin-like chemicals produced in the neostriatum also increased, producing a very pleasurable experience. When presented with a choice of their usual rat chow or M&Ms, the rats with high levels of the chemical consistently ignored the rat chow and dove into the candy. The researchers feel these findings have important implications for humans, food addiction, and weight management.

Difeliceantonio A, Mabrouk O, Kennedy R, et al: Enkephalin surges in dorsal neostriatum as a signal to eat. Current Biology 2012;September 18th.

Bad Grains. Bad!

Study after study is finding that refined grains are just no good. A study from the Dana-Farber Cancer Institute in Boston found that cancer recurrence or death is more common for colon cancer patients when they consume too many refined carbohydrate foods, and a study from Skane University Hospital in Sweden found a link between refined carbohydrate intake and increased prostate cancer risk. Finally, researchers at the Mayo Clinic in Rochester, Minnesota report that seniors who consume lots of refined grains and sugar are at increased risk for cognitive impairment.

Meyerhardt J, Sato K, Niedzwiecki D, et al: Dietary glycemic load and cancer recurrence and survival in patients with stage III colon cancer. Journal of the National Cancer Institute 2012;November 7th.

Drake I, Sonestedt E, Gullberg B, et al: Dietary intakes of carbohydrates in relation to prostate cancer risk. American Journal of Clinical Nutrition 2012; November 7th.

Roberts R, Roberts L, Geda Y, et al: Relative intake of macronutrients impacts risk of mild cognitive impairment or dementia. Journal of Alzheimers Disease 2012;32:329-339.

Energy Drinks a Threat to National Security?

Those "harmless" energy drinks packed with caffeine might not be so harmless, according to a study reported by the Centers for Disease Control and Prevention in Atlanta. Army researchers looked at soldiers deployed in Afghanistan and found that 45% of them consumed one or more energy drinks a day and 14% consumed three drinks or more each day. Compared to soldiers who consumed two or fewer drinks, soldiers who consumed three or more energy drinks a day were more likely to get four hours or less of sleep each night. They also were more likely to report sleep disruptions related to personal or combat stress and illness and to fall asleep during briefings or while on guard duty. In another study from the US Army Research Institute, energy drinks were the largest source of caffeine in young male soldiers' diets.

IN PERSPECTIVE: While listing caffeine content on labels would appear to help soldiers make wise decisions, according to Consumer Reports, the caffeine content listed on the label of energy drinks is not always accurate, sometimes being 20% higher than stated. Monster Beverage Corporation is currently being sued for possibly contributing to the death of a 14-year-old girl with a heart condition who died after drinking two Monster energy drinks in a 24-hour period.

Lieberman H, Slavtchova T, McGraw S, et al: Caffeine use among active duty US Army soldiers. Journal of the Academy of Nutrition and Dietetics 2012;112:902-912.

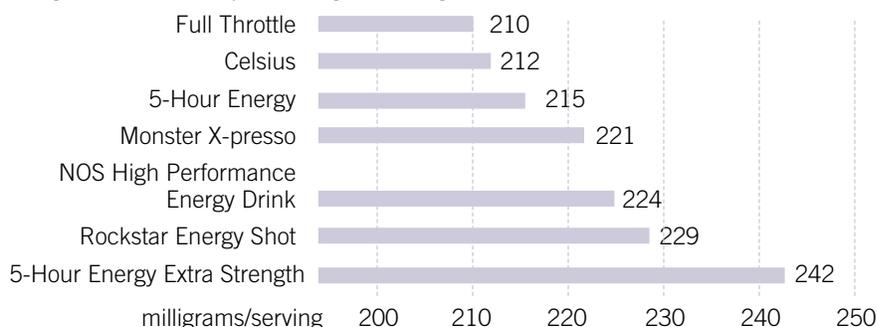
US Centers for Disease Control and Prevention, November 8th, 2012

Fakhouri T, Kit B, Ogden C: Consumption of diet drinks in the United States, 2009-2010. NCHS Data Brief 2012;Oct:1-8.

Ng S, Slining M, Popkin B: Use of caloric and non-caloric sweeteners in US consumer packaged foods, 2005-2009. Journal of the Academy of Nutrition and Dietetics 2012;112:1828-1834.

CAFFEINE IN ENERGY DRINKS

Consumer Reports found seven brands of energy drinks that contain more than 200 milligrams of caffeine per serving, including.



A Spicy Treatment for Diabetes

Taking cinnamon supplements every day helps prevent and even treat type 2 diabetes, say researchers at Tehran University of Medical Sciences. Diabetics took either 3 grams of cinnamon supplements or placebos every day for eight weeks. Numerous parameters were measured at the start and end of the study. Results showed that those patients receiving the

cinnamon supplements showed improved levels of fasting blood glucose, HbA1c (an indicator of diabetes severity), triglycerides, body weight, body mass index (BMI), and body fat mass compared to baseline, while the placebo group showed no changes.

Vafa M, Mohammadi F, Shidfar F, et al: Effects of cinnamon consumption on glycemic status, lipid profile and body composition in type 2 diabetic patients. International Journal of Preventive Medicine 2012;3:531-536.



More Watermelon, Please!

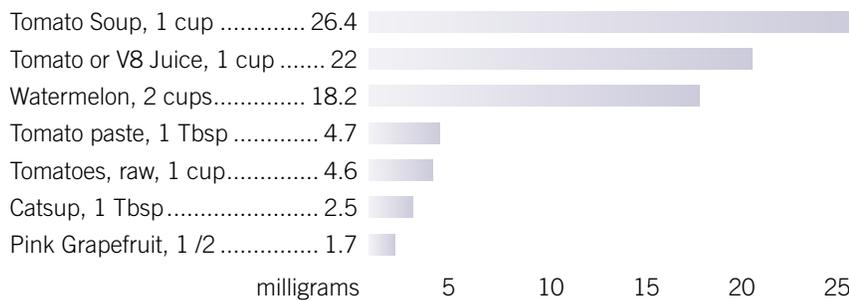
Men who consume lycopene-rich diets are at low risk for having strokes, according to a study from the University of Finland. The study included more than 1,000 men between the ages of 46- and 65-years-old who had their blood levels monitored for lycopene, alpha and beta-carotene, and vitamins E and A. By the end of 12 years, 11 men with the highest lycopene levels had suffered strokes, while 25 strokes were noted in men with low lycopene levels. Even when factoring in smoking, high blood pressure, and

diabetes, men with the highest blood levels of lycopene had a 55% lower risk of suffering a stroke.

IN PERSPECTIVE: *Lycopene, a carotenoid in tomatoes and watermelon, is a potent antioxidant, anti-inflammatory, and anti-blood clotting compound. Or, it could be that lycopene has a direct effect on stroke risk that is as yet undetermined.*

Karpai J, Laukkanen J, Sivenius J, et al: Serum lycopene decreases the risk of stroke in men. Neurology 2012;79:1540-1547.

LYCOPENE IN SELECTED FOODS



Lycopene Aids in Heart Failure

Lycopene, a carotenoid found in watermelon and tomatoes, might be helpful for patients with heart failure, state researchers at the University of Kentucky. Dietary intakes of lycopene and sodium were measured in this prospective study of 212 patients with heart failure. Patients were grouped by the median split of lycopene of 2,471 grams/day and stratified by daily

sodium levels above and below 3 grams/day. At the end of one year, results showed that higher lycopene intake was associated with longer cardiac event-free survival compared with lower lycopene intake. The worst cardiac event-free survival was observed in the low lycopene intake group regardless of sodium intake. These findings suggest that increased lycopene intake has the potential to improve cardiac event-free survival in patients with heart failure, even when sodium intake is high.

IN PERSPECTIVE: *Processed tomato products are a good source of lycopene, but they typically are high in sodium. In contrast, watermelon is rich in this carotenoid, almost sodium-free, and also contains other heart-healthy compounds, such as potassium, citrulline, and arginine.*

Biddle M, Moser D, Song E, et al: Higher dietary lycopene intake is associated with longer cardiac event-free survival in patients with heart failure. European Journal of Cardiovascular Nursing 2012;October 16th.

HOTTOPICS: In a study on animals, researchers at the Federal University of Rio Grande do Sul in Brazil report that a soy-based diet lowers oxidative stress associated with heart failure. *Canadian Journal of Physiology and Pharmacology 2012;90:1095-1103.*

Another “duh!” study. Researchers at the University of Pittsburgh found that cutting back on desserts, restaurant eating, sweetened beverages, and fried foods resulted in weight loss. *Journal of the Academy of Nutrition and Dietetics 2012;112:1347-1355.*

Heart Attacks Don't Grow on Trees

Women who consume diets packed with colorful fruits and vegetables significantly lower their risk for having a heart attack, state researchers at the Karolinska Institute in Stockholm. Food-frequency questionnaires and total antioxidant capacities were calculated on 32,561 women between the ages of 49- and 83-years-old. At the end of 10 years, results showed that those women who consumed at least seven servings daily of colorful produce and, as a result had the highest antioxidant levels, had a 20% lower risk of having a heart attack.

A study from Texas A&M College of Medicine and reported at the American Society of Nephrology's annual meeting in San Diego found that diets rich in colorful fruits and vegetables improve the health of people with kidney disease.

Rautiainen S, Levitan E, Orsini N, et al: Total antioxidant capacity from diet and risk of myocardial infarction. American Journal of Medicine 2012;125:974-980.

Tomato Extract Fights Fat

Supplements of tomato extract aid in weight loss and improve blood flow according to several studies. Researchers at Chungbuk National University in the Republic of Korea found that tomato extract added to the diets of mice decreased body weight despite a high-fat diet. Total cholesterol and LDL-cholesterol also were reduced. The anti-obesity effect of the tomato extract was suspected to be caused by a change in enzyme activity. At the University of Talca, researchers found that rats supplemented with tomato extract showed reduced platelet aggregation, which would reduce blood clotting and improve blood flow, a significant factor in reducing heart disease risk.

Choi K, Lee Y, Shin D, et al: Green tomato extract attenuates high-fat-diet induced obesity through activation of the AMPK pathway in C57BL/6 mice. Journal of Nutritional Biochemistry 2012;September 10th.

Fuentes E, Astudillo L, Guierrez M, et al: Fractions of aqueous and methanolic extracts of tomato present platelet antiaggregant activity. Blood Coagulation and Fibrinolysis 2012;23:109-117.



HOT TOPICS

1 Vitamin D supplements lowered children's risk for respiratory infections in a study from Massachusetts General Hospital in Boston. *Pediatrics* 2012;130:e561-e567.

2 The number of children drinking diet beverages has doubled to 12.5% in the past decade, according to a study from the National Institutes of Health in Bethesda, Maryland. With no studies on the long-term effects of artificial sweeteners in growing children, it is unknown whether this trend is good or bad. *American Journal of Clinical Nutrition* 2012;96:640-646.

3 The artificial butter flavoring, diacetyl, found in margarine, snack foods, candy, baked goods, and other processed foods, might worsen the harmful effects of amyloid protein in the brain linked to Alzheimer's disease, state researchers at the University of Minnesota. *Chemical Research in Toxicology* 2012;July 6th.

4 Don't believe a word they say! Americans are in such denial about their expanding waistlines that when asked about weight changes, they report they think they have lost weight, when in fact they have gained weight, according to a study from the University of Washington in Seattle. *Preventive Medicine* 2012;55:93-100.

5 Contrary to popular opinion, researchers at the Institute of Endocrinology in the Czech Republic found that soy supplements did not affect thyroid function in women with adequate iodine intake. *Food and Chemical Toxicology* 2012;50:2774-2779.

6 Several antioxidants show promise in reducing depression, including N-acetyl-cysteine, curcumin, vitamin E, zinc and Coenzyme Q10, as well as enzymes, such as glutathione peroxidase, according to a review of the research from the University of Molise in Italy. *CNS Drugs* 2012;26:477-490.

7 Researchers reviewed the evidence on diet and risk for developing age-related macular degeneration (ARMD) and conclude that there is a benefit in reducing risk by increasing intake of the omega-3s in seafood (EPA and DHA) and carotenoids, while following a low glycemic diet. *Molecular Aspects of Medicine* 2012;33:318-375.

8 A study from Johns Hopkins Asthma and Allergy Center in Baltimore found that participants who consumed moderate to high amount of soy genistein had better lung function and better asthma control than those who consumed no genistein. *Primary Care Respiratory Journal* 2012;August 10th.

9 In a study on mice, researchers at Oregon State University found that zinc absorption declines with age, requiring up to 10 times the normal dietary requirement to lower inflammation and bring zinc levels up to normal, at least in older animals. *Journal of Nutritional Biochemistry* 2012;October 1st.

10 Canned peaches were just as nutrient-rich as fresh peaches in a study from Oregon State University. *Journal of Science and Food Agriculture* 2012;September 11th.

11 Topical application of Coenzyme Q10 and vitamin E improved recovery from cataract surgery in a study from the G.B. Bietti Foundation for the Study and Research in Ophthalmology in Rome, Italy. *Ophthalmologica* 2012;September 20th.

12 Researchers at St. Luke's-Roosevelt Hospital and Columbia University report that the higher a country's dark chocolate consumption, the more Nobel laureates it produces per capita, with the Swiss leading the pack at 120 three-ounce bars for every man, woman, and child each year. *New England Journal of Medicine* 2012;367:1562-1564.

13 Diets based on fiber-rich foods and low in total sugars was associated with a lower risk for liver and bile duct cancers in a study from the International Agency for Research on Cancer in Lyon, France. *Annals of Oncology* 2012;November 2nd.

14 While the benefits for treating urinary problems in men were no better with saw palmetto supplements than with placebos, the fruit extract was found safe when used for short periods of time in a study from the University of California, San Francisco. *Journal of Urology* 2012;October 9th.

15 Melatonin supplements help improve sleep in people taking beta blocking medications for the treatment of hypertension, according to a study from Harvard Medical School. *Sleep* 2012;35:1395-1402.

16 Adding legumes to the daily diet helps control blood sugar and lowers the risk for heart disease and stroke in diabetics, state researchers at St. Michael's Hospital in Toronto. *Archives of Internal Medicine* 2012;October 22nd.

17 Folic acid supplementation increased progesterone levels and improved fertility by reducing sporadic anovulation (where the egg does not mature, so there is no ovulation) by 64%, in a study from the National Institute of Child Health and Human Development in Rockville, Maryland. *PLoS One* 2012;7:e46276.

18 Low intake of folate and the resultant hyperhomocysteinemia contributes to neurodegeneration associated with Alzheimer's disease, but can be improved with supplements of a form of folate called 5-methyltetrahydrofolate, state researchers at the University Hospital Zurich in Switzerland. *Journal of Alzheimers Disease* 2012;October 25th.

19 While soft drinks and beverages with vitamin C caused erosion of tooth enamel, fruit juice, sports drinks, milk, and yogurt were not harmful, according to a study from Zhejiang University School of Medicine in China. *PLoS One* 2012;7:e42626.



Antioxidants Against Colon Cancer

Antioxidant supplementation might help lower the risk for developing colon cancer, according to a study from Genoa, Italy. More than 400 patients who had been successfully treated for adenomas of the large bowel were randomly assigned to take either placebos or antioxidant supplements containing 200 micrograms selenium, 30 milligrams zinc, 2 milligrams vitamin A, 180 milligrams vitamin C, and 30 milligrams vitamin E. After five years, 330 of those patients had colonoscopies. Results showed 100 patients had recurrence - 38 patients in the supplemented group and 62 in the placebo group. The 15-year recurrence rate was 48.3% in the antioxidant-treated group and 64.5% in the placebo group. In other words, there was a 39% reduction in recurrence when patients supplemented with antioxidants.

Bonelli L, Puntoni M, Gatteschi B, et al: Antioxidant supplement and long-term reduction of recurrent adenomas of the large bowel. Journal of Gastroenterology 2012;October 13th.

NUTRITION ALERT

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REVIEW

Eat to Sleep

A wealth of recent research shows that lack of adequate sleep leads to cognitive impairment, weight gain, depression, stress, and more. If sleep is elusive to you, the road to dreamland might be in your kitchen, not the medicine cabinet. But, forget everything you've heard about tryptophan in turkey making you sleepy or warm milk helping you drift off. *Here's the low-down on how to eat to sleep:*

Tea Time: Several herbal teas might help with sleep, including chamomile, lemon balm, and hops. Valerian extract might help insomniacs drop off to sleep faster and stay asleep longer, but the research is inconclusive. If nothing else, the warm liquid soothes and relaxes you.

Carb Calmers: A light, all-carb snack boosts levels of the brain's sleep chemical - serotonin. When serotonin levels are high, people sleep longer and more soundly. All it takes is 30 grams of carbs, so 2 to 4 cups of air-popped popcorn will do the trick. Also melatonin, a hormone that aids in sleep, is found in a few foods, such as tart cherries.

You could be sabotaging your sleep efforts by eating foods that rev you up, interfere with sleep phases, or just make you down-right uncomfortable, such as:

Big Dinners: They make you temporarily drowsy, but they also prolong digestive action, which keeps you awake. Instead, eat your biggest meals before mid-afternoon and then have a light evening meal of 500 calories or less. Include some chicken, extra-lean meat or fish at dinner to help curb middle-of-the-night snack attacks.

Spicy or Gas-Forming Foods: Dishes seasoned with garlic, chilies, cayenne, or other hot spices can cause nagging heartburn or indigestion, while the flavor-enhancer MSG can disrupt sleep. There is nothing like a tank full of gas to keep you up all night. Have beans, cauliflower, broccoli, Brussels sprouts, etc. before mid-afternoon. Also, thoroughly chew food to avoid gulping air, which causes abdominal discomfort.

Caffeine After Noon: Caffeine can linger in the system for up to 12 hours, revving your nervous system and interfering with sleep. Eliminate caffeine for two weeks to see if you notice improvements in sleep.

Nightcap Nightmare: Alcohol might make you sleepy at first, but you'll sleep less soundly and wake more tired. Alcohol and other depressants suppress a phase of sleeping called REM (Rapid Eye Movement) where most of your dreaming occurs. Less REM means more night awakenings and restless sleep. One glass of wine with dinner won't hurt, but avoid drinking any alcohol within two hours of bedtime and never mix alcohol with sleeping pills!

Stress & Exercise: Stress is a common cause of insomnia. Often solving tensions and anxieties eliminates sleep problems. In addition, physical activity helps a person cope with daily stress and tires the body so it is ready to sleep at night, which explains why exercisers sleep more soundly than couch potatoes.

Note: Some cases of chronic insomnia require the help of trained personnel. The American Sleep Association can help identify your problem and find a reputable professional or center in your area. www.sleepassociation.org

McEwen B: Brain on stress. Proceedings of the National Academy of Sciences 2012;109:17180-17185.

St Onge M, O'Keefe M, Roberts A, et al: Short sleep duration, glucose dysregulation and hormonal regulation of appetite in men and women. Sleep 2012;35:1503-1510.