



MARCH/APRIL 2015

VOLUME 21 NUMBER 2

## EDITOR'S NOTES:

### Food Trends for 2015: Thumbs Up or Thumbs Down?

Every year brings a wealth of new food trends. Some are good for us, some are just fads. Here is my take of some of this year's projected trends.

**Trend #1: Pistachios:** All nuts are good for you, lowering your risk for heart disease and possibly diabetes. In small amounts, they even aid in weight loss. Pistachios are the forgotten child in this category, but are coming into their own. Like all nuts, they are high in fiber, healthy fats, protein, vitamins and minerals, and antioxidants. Unlike other nuts, pistachios also contain lutein and zeaxanthin, two compounds typically found only in dark greens like spinach and are know to help prevent the major causes of vision loss in this country - cataracts and macular degeneration. *Thumbs Up.*

**Trend #2: Flavored Salts:** You'll be coaxed into eating more salt with the new flavors coming out, from smokey bacon to cider vinegar salts. Sea salt also continues to trend. Don't be fooled here. Americans already are consuming far too much sodium, raising our risk for high blood pressure and more. *Thumbs Down.*

**Trend #3: Coconut Sugar:** First there was honey. It was supposed to be loaded with nutrients. But it takes almost 19 cups of honey for 19,200 calories to get the calcium you'd get in one cup of nonfat milk. Then there was agave syrup, last year's trendy sugar, which turned out to have more unhealthy fructose than high fructose corn syrup. Coconut sugar is no different. It is just sugar. In fact, it is 80% sucrose, which is the same as table sugar. *Thumbs Down.*

**Trend #4: Good Fats, Good Carbs:** There has been news lately pardoning saturated fat, saying it doesn't cause disease. Besides, butter is natural, so it must be good for us, right? Again, don't be fooled. Decades of research show diets high in saturated fats increase the risk for a whole host of ills, from heart disease to colon cancer and dementia. As for carbs, a trend toward 100% whole grains, such as oats and ancient grains, cooked al dente helps lower blood sugar and improves your risk for avoiding weight gain, heart disease, and cancer. **Fat:** *Thumbs Down.* **Carbs:** *Thumbs Up*

**Trend #5: Eat Local:** The 2014 trend to eat locally grown food continues. It is better for the planet, and it puts farming back into the hands of small farmers and your community, rather than huge companies based elsewhere. Finally, choosing a bounty of fresh, unprocessed food is better for you than grabbing a prepared meal high in sodium and fat from the freezer aisle of a supermarket or a drive through. *Thumbs Up.*

**Trend #6: Supplements:** Supplements got a bad rap in 2014 with studies slamming their use, but you'll see a resurgence in positive attitudes this year. Supplements are just that, they are not intended to substitute for healthful eating, but they do fill in the gaps on days when you don't eat perfectly. And trust me, no one eats perfectly every day! *Thumbs Up.*

**Trend #7: Fermented Foods:** Fermented foods, ranging from sauerkraut to yogurt, are increasingly being seen as a boon to the gut and digestive health. However, not all fermented foods contain probiotics. Plain yogurt and kefir are great, but most fermented foods that come in a jar or can, such as pickles, kimchi, miso, and sauerkraut, have been pasteurized and cooked at high heat, killing any friendly bacteria. Also, beware of the salt content. **Yogurt:** *Thumbs Up.* **Pickles:** *Thumbs Down.*

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



Elizabeth Somer

### Food, Mood, Weight, and Minerals

Your intake of selenium could be a factor in your mood, according to a study from the University of Otago in New Zealand. Serum selenium levels were compared to mood in a group of 978 adults between the ages of 17- and 25-years-old. Results showed that those people with the lowest selenium levels, and to a lesser extent those with the highest levels, were significantly more likely to be depressed than were people with selenium levels in the normal, mid range. Depression was least likely when selenium levels were between 82 and 85 micrograms/L.

Overweight people are more likely to have elevated inflammation, which is associated with depression and the metabolic syndrome, according to a study from the University of Texas Southwestern Medical Center in Dallas.

*Conner T, Richardson A, Miller J: Optimal serum selenium concentrations are associated with lower depressive symptoms and negative mood among young adults. Journal of Nutrition 2015;145:59-65.*

*Rethorst C, Bernstein I, Trivedi M: Inflammation, obesity, and metabolic syndrome in depression. Journal of Clinical Psychology 2014;75(12):e1428-e1432.*

#### INSIDE THIS ISSUE:

- Antacids and Vitamins.....2
- Mediterranean diet and longevity.....3
- Supplements and Alzheimer's.....4
- Vitamin D and pregnancy.....5
- Omega-3s and hearing.....6
- Household chemicals and intelligence...7



## The Fattening of the World

Obesity is linked to almost 500,000 new cancer cases worldwide each year, according to a study from the International Agency for Research on Cancer in Lyon, France. Body weights were compared to cancer risk in 184 countries. More than 345,000 new cancers in women and 136,000 new cancers in men were associated with excess body fat. Among women, postmenopausal breast, endometrial, and colon cancers accounted for almost three-quarters of the cases. In men, colon and kidney cancers accounted for more than two-thirds of obesity-related cancers. No surprise that almost two-thirds of obesity-related cancers occur in North America and Europe. The researchers state that the global prevalence of obesity in adults has doubled since 1980.

## Nutrient-Poor Diets Common in U.S.

Four out of every ten Americans consume diets far too low in major nutrients, according to a study from NutriScience in Battle Creek, Pennsylvania. Using data obtained from the National Health and Nutrition Examination Survey (NHANES 2001-2008), researchers determined typical intakes for micronutrients using only subjects with reliable dietary records and who were not pregnant or breast-feeding. Results showed that overweight people typically consumed diets too low in calcium, magnesium, and vitamins A, C, D, and E. Compared to healthy weight adults, obese adults had a 5% to 12% lower intake of micronutrients and a higher prevalence of

Being overweight robs people of almost a decade of life and close to two decades of a healthy life, with increased risk for disease, such as heart disease and diabetes, state researchers at McGill University Health Centre in Montreal, QC.

Researchers at University College London conclude that the notion of a "healthy" obesity is unfounded. Most overweight people suffer poor health, chronic disease, and premature death.

*Arnold M, Pandeya N, Byrnes G, et al: Global burden of cancer attributable to high body-mass index in 2012. Lancet Oncology 2014;November 26th.*

*Grover S, Kaouache M, Rempel P, et al: Years of life lost and healthy life-years lost from diabetes and cardiovascular disease in overweight and obese people. Lancet Diabetes Endocrinology 2014;December 4th.*

*Bell J, Hamer M, Sabia S, et al: The natural course of healthy obesity over 20 years. Journal of the American College of Cardiology 2015;65:101-102.*

nutrient inadequacy.

A study from Arizona State University found that 60% of Hispanic women in the United States consume diets low in fiber, calcium, vitamin C, and folate and average dietary scores on the Healthy Eating Index (which rates diets from 0 to 100) no higher than 63, equivalent of a "D" rating. Up to 57% of the women were classified as having a very poor diet.

*Agarwal S, Reider C, Brooks J, et al: Comparison of prevalence of inadequate nutrient intake based on body weight status of adults in the United States. Journal of the American College of Nutrition 2015;January 7:1-9.*

*Pignotti G, Vega-Lopez S, Keller C, et al: Comparison and evaluation of dietary quality between older and younger Mexican-American women. Public Health Nutrition 2015;January 7th: 1-10.*

## Antacids Lead to Vitamin Deficiency

Nexium. Prilosec. Zantac. Protonix. Prevacid. The list of acid-blocking medications is endless and the number of Americans using them to control heartburn and acid reflux continues to increase. According to a study from the University of New South Wales in Australia, long-term use of these medications could lead to a vitamin B12 deficiency. In this meta-analysis, the researchers found ample evidence that

chronic use of acid-blocking medications is a risk factor for developing vitamin B12 deficiency. They conclude that, "Judicious prescribing of [these medications] and regular monitoring of vitamin B12 in patients who are inevitably on long-term therapy ... are recommended."

*Jung S, Nagaraja V, Kapur A, et al: The association between vitamin B12 deficiency and long-term use of acid lowering agents. Internal Medicine Journal 2015; January 13th.*

## Healthy Lifestyle Eliminates Heart Disease

A woman can reduce her risk for heart disease by 90% if she adopts six healthy lifestyle habits, according to a study from Indiana University and Harvard School of Public Health. For 20 years, researchers followed 88,940 women in the Nurses' Health Study who ranged in age from 27- to 44-years old at the study's start. Heart disease risk was compared to six dietary habits: 1) not smoking, 2) exercising at least 2.5 hours a week, 3) having a normal weight, 4) watching seven or fewer hours of television a week, 5) eating a healthy diet, and 6) drinking some, but no more than one, alcoholic beverage a day. Results showed that 45% of the women developed one or more risk factors for heart disease during the study, such as diabetes, high cholesterol, or high blood pressure. While only 5% followed all six of the healthy habits, those women were 90% less likely to develop heart disease. Even in women who had diabetes, hypertension, or high cholesterol, those who adhered to a healthy lifestyle had a much lower risk of subsequently developing heart disease. Unhealthy lifestyle habits were responsible for almost 75% of heart disease cases in younger and middle-aged women.

A study from Danube University Krems in Austria found that healthy diets and regular exercise were effective in preventing prediabetes from progressing to type 2 diabetes in both men and women.

**IN PERSPECTIVE:** *It doesn't get much clearer than this. The #1 killer disease in this country can be almost completely eliminated if people took care of their bodies and hearts with good nutrition, daily exercise, and healthy lifestyle habits.*

*Chomistek A, Chiuve S, Eliassen A, et al: Healthy lifestyle in the primordial prevention of cardiovascular disease among young women. Journal of the College of Cardiology 2015;65(1):43-51.*

*Glechner A, Harreiter J, Gartlehner G, et al: Sex-specific differences in diabetes prevention. Diabetologia 2014;December 3rd.*



## Taste Trumps Health for Food Choices

If you want to eat well, then you must quickly engage your cortex and ignore the knee-jerk reaction to go for the junk, according to a study from McGill University. In this study, 28 hungry people were asked to rate 160 foods on a scale from -2 to 2 based on that food's healthfulness, its tastiness, and how much the person would like to eat that food after the experiment was over. The subjects also were presented with 280 random pairings of those same foods and were asked to use a computer mouse to click on or choose which food they preferred from each pairing. Results showed that taste information began to influence food choices 200 milliseconds earlier than health information. For almost a third of the subjects, health information did not influence food choices at all. The researchers then compared those subjects that showed the most self-control when choosing between health and taste with those subjects who had little or no self-restraint. On average, the low-self-control group began to factor in health information 323 milliseconds later than the high-self-control group. The researchers conclude that, "...the more quickly someone begins to consider a food's health benefits, the more likely they are to exert self-control by ultimately choosing the healthier food." In short, you must engage your higher brain centers or your lower or "animal" brain will run the ship!

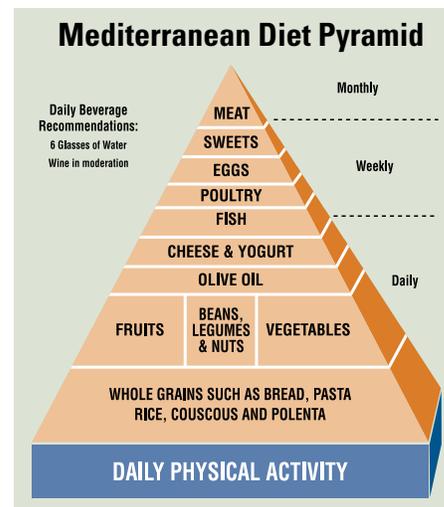
*Tang D, Fellows L, Dagher A: Behavioral and neural valuation of foods is driven by implicit knowledge of caloric content. Psychological Science 2014;25(12):2168.*

**HOT TOPIC:** Americans are buying 24% fewer store-bought packaged sweets, like doughnuts, pastries, and other goodies, but are not choosing healthier foods in their place, according to researchers at the University of North Carolina, who go on to say that manufacturers are adding more saturated fat to these junk food items than they did a few years ago. *Journal of the Academy of Nutrition and Dietetics 2014;December 16th.*

## Mediterranean Diet Extends Life

Adopting a Mediterranean-style diet slows aging, according to a study from Brigham and Women's Hospital and Harvard Medical School in Boston. Using data from the Nurses' Health Study, the researchers compared food frequency questionnaires to telomere length in 4,676 disease-free women. The participants were given a score of 0 to 9 on how closely they followed a Mediterranean diet, with higher scores indicating greater adherence to this diet. Results showed that telomeres aged more slowly for every point a woman went up on the scale. No one food was associated with healthier telomeres; it was the total diet that mattered.

**IN PERSPECTIVE:** *Telomeres are located at the ends of chromosomes, much like the plastic tips on the end of shoelaces. They prevent chromosomes from fraying and scrambling the genetic codes they contain. Telomeres naturally shorten with age, but typically shorten more slowly in healthy people. Shortened telomeres are associated with obesity, cigarette smoking,*



and sugar consumption, and as a result, a greater risk of age-related disease and a shorter life expectancy. This study shows that eating a diet rich in colorful fruits and vegetables, whole grains, legumes, nuts, fish, and olive oil might help lengthen life by protecting our DNA from unraveling.

*Crous-Bou M, Fung T, Prescott J, et al: Mediterranean diet and telomere length in Nurses' Health Study. British Medical Journal 2014;December 2nd.*

## Slam-Dunk Disease Prevention

Men can lower their risk for heart attacks by more than 80% if they adopt five healthy lifestyle habits, according to a study from the Karolinska Institute in Stockholm. The researchers examined medical records and surveys of 20,721 men between the ages of 45- and 79-years-old who were symptom-free of cancer, heart disease, diabetes, hypertension, and high cholesterol at the study's start. At the end of 12 years, their health status was compared to how many of five health behaviors they had followed: 1) moderate alcohol consumption, 2) no tobacco use, 3) a healthy diet, 4) daily exercise, and 5) a healthy body weight. Only 1% (212 men) of men involved in the study embraced all five behaviors, but were 86% less likely to have heart attacks compared to the 8% of men who ate poorly, were overweight and sedentary, and smoked and drank too much. Each behavior by itself lowered risk. For example, a diet rich in colorful produce, whole grains,

low-fat milk products, and nuts lowered risk by almost 20%. The researchers conclude that, "...almost four out of five [heart attacks] in men may be preventable with a combined low-risk behavior."

The same researchers found that women who followed these same healthy behaviors significantly lowered their risk for having a stroke. A study from the German Institute of Human Nutrition Potsdam-Rehbruecke found the same behaviors significantly lowered colon cancer risk, by up to 37%, in a group of more than 347,000 adults.

*Akesson A, Larsson S, Discacciati A, et al: Low-risk diet and lifestyle habits in the primary prevention of myocardial infarction in men. Journal of the American College of Cardiology 2014;64:1299-1306.*

*Larsson S, Akesson A, Wolk A: Healthy diet and lifestyle and risk of stroke in a prospective cohort of women. Neurology 2014;October 8th.*

*Aleksandrova K, Pischon T, Jenab M, et al: Combined impact of healthy lifestyle factors on colorectal cancer. BMC Medicine 2014;12:168.*



## Magnesium in Review

Magnesium is the second most abundant mineral in the body and is involved in more than 600 enzymatic reactions, yet three out of four Americans consume too little of this mineral. Researchers at the Radboud University Medical Center in The Netherlands reviewed the research on magnesium and found this mineral is critical for energy metabolism and protein synthesis in all tissues. It plays a critical role in the brain, heart, and skeletal muscles and functions in the prevention and treatment of numerous disorders, from preeclampsia, migraine, and depression to coronary artery disease, hypertension, osteoporosis, and

asthma. Not only are diets typically low in this mineral and several genetic defects can lead to a deficiency, but certain types of drugs also cause hypomagnesemia, including diuretics, proton pump inhibitors, and more.

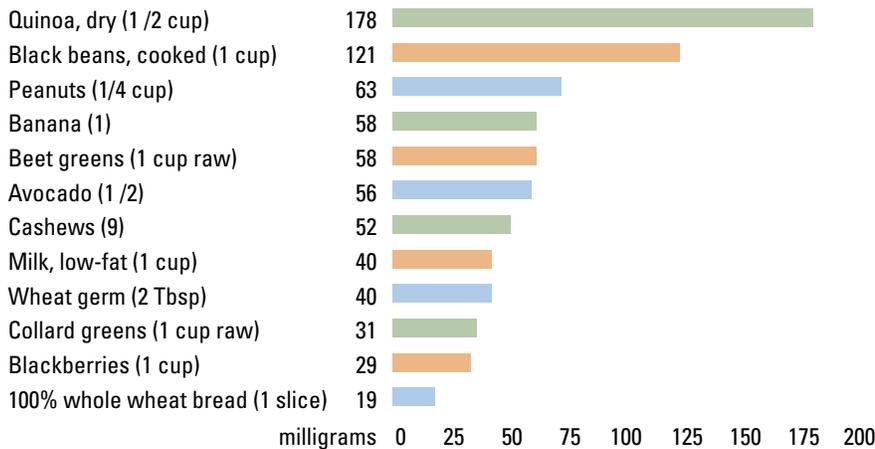
Magnesium intake is inversely related to metabolic syndrome, state researchers at Yeouido St. Mary's Hospital College of Medicine in Korea.

*DeBaaij J, Hoenderop J, Bindels R: Magnesium in man: Implications for health and disease. Physiology Reviews 2015;95:1-46.*

*Ju S, Choi W, Ock S, et al: Dietary magnesium intake and metabolic syndrome in the adult population. Nutrients 2014;6:6005-6019.*

### Magnesium: Are You Getting Enough?

You need at least 300 milligrams of magnesium every day. The best sources include:



## Surgery and an Eye on Vitamins

Obese patients who undergo bariatric surgery are at risk for vision problems down the road if they don't take supplements, according to a study from Central Hospital in Central Lisbon, Portugal. The researchers reviewed the available studies on post-surgery complications and found that nutrient deficiencies after weight-loss surgery led to a wide range of eye conditions, including night blindness, ulcers, scarring of and changes to the cornea, involuntary eye movement, paralysis of the eye muscles, and dry eyes. They speculate that digestive system changes caused by the surgery reduce nutrient absorption

from food. This combined with insufficient intake of vitamins A, E, and thiamin, as well as copper, nutrients critical to eye and optic system function, places these patients at risk. These people should supplement post-surgery to help prevent eye-related complications in the future.

**IN PERSPECTIVE:** *Although not considered in this study, other nutrients are critical for healthy ocular tissue and vision, including lutein, zeaxanthin, zinc, and vitamin C.*

*Guerreiro R, Ribeiro R, Ophthalmic complications of bariatric surgery. Obesity Surgery 2015;25:167-173.*

## Supplements Lower Alzheimer's Risk

While you still are thinking clearly, it might be a good idea to start supplementing to protect your brain in the future. Researchers at the University of Tsukuba in Japan asked 171 cognitively normal seniors to supplement for three years with a combination of omega-3 fats, Ginkgo biloba leaf dry extracts, and lycopene. Another 241 healthy seniors joined a two-year exercise intervention that included both a community center-based and a home-based exercise program. A third group, composed of 148 healthy seniors, supplemented and exercised. Cognitive function was measured before and at the end of the study. Results showed that 76 of the seniors were diagnosed with Alzheimer's disease during the follow-up period. Those who most closely followed the supplement requirements showed significantly lower risks for developing Alzheimer's. Daily exercise also showed benefits in lowering dementia risk.

**IN PERSPECTIVE:** *While this study did not specify which omega-3s were used, a wealth of previous research shows that it is the omega-3s in fatty fish, and of those most importantly DHA, that show promise in lowering dementia risk.*

*Bun S, Ikejima C, Kida J, et al: A combination of supplements may reduce the risk of Alzheimer's disease in elderly Japanese with normal cognition. Journal of Alzheimers Disease 2014;December 16th.*

## Vitamin E: Vision Nutrient

Vitamin E might lower the risk for cataracts, according to researchers at Qingdao University Medical College in the People's Republic of China. In this meta-analysis that included people of all ages, results showed that optimal dietary and supplemental vitamin E intake and high blood levels of the vitamin were significantly linked with a decreased risk for cataracts. People who maintained the highest vitamin E levels had a 27% lower risk for developing age-related cataracts. Risk decreased as intake of vitamin E increased above 7 milligrams a day.

*Zhang Y, Jiang W, Xie Z, et al: Vitamin E and risk of age-related cataract. Public Health Nutrition 2015;January 16th: 1-11.*



## The Vitamin-D-for-Pregnancy Diet

Pregnant women with low blood levels of vitamin D are at risk for giving birth to premature babies, according to a study from the University of Pittsburgh. Blood samples taken at or before 20 weeks gestation were compared to pregnancy outcome in more than 2,100 women who went full term in their pregnancies and 1,126 women who gave birth prematurely. Results showed that as vitamin D blood levels decreased, the risk of having a preterm birth increased. Women with the lowest levels of vitamin D were 1.5 times as likely to deliver early compared to those with the highest levels. The reason why vitamin D might improve pregnancy outcome is unclear, but the researchers speculate that the vitamin might help reduce bacterial infection in the placenta, which can trigger an early delivery.

*Bodnar L, Platt R, Simhan H: Early-pregnancy vitamin D deficiency and risk of preterm birth subtypes. Obstetrics & Gynecology 2015; January 7th.*

## Pregnancy Supplements Make Healthier Babies

Pregnant women who take a multi vitamin and mineral supplement give birth to bigger, healthier babies, according to a study from Johns Hopkins Bloomberg School of Public Health in Baltimore. From early pregnancy through 12 weeks postpartum, almost 45,000 women were given supplements containing either 15 vitamins and minerals or just iron and folic acid alone. Infant mortality through six months, length of pregnancy, and birth weights were measured. Results showed that those women given the multis were 15% less likely to give birth prematurely. The babies born to this group were 12% less likely to be born at low-birth-weights and 11% less likely to be stillborn. They also were heavier than babies born to women who received only iron and folic acid.

*West K, Shamim A, Mehra S, et al: Effect of maternal multiple micronutrient vs iron-folic acid supplementation on infant mortality and adverse birth outcomes in rural Bangladesh. Journal of the American Medical Association 2014;312:2649-2658.*

## Whole Grains Add Years to Life

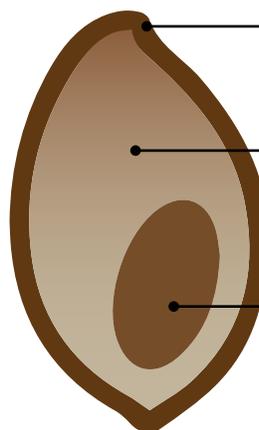
Including 100% whole grains in the daily diet extends life expectancy, according to a study from Harvard School of Public Health. Dietary intakes and mortality rates of 74,341 women from the Nurses' Health Study and 43,744 men from the Health Professionals Follow-Up Study were compared. After 26 years, the researchers documented 26,920 deaths. After adjusting for age, smoking, body mass index (BMI), and physical activity, frequent whole grain intake was associated with a lower death rate. As the number of daily servings of whole grains increased, the death rate decreased. One-third fewer people died among the group

that ate the most whole grains every day compared to those who ate the fewest servings of whole grains.

**IN PERSPECTIVE:** *Why might whole grains be so healthful? First, they are rich in fiber, which slows digestion, prevents blood sugar spikes, and provides a high level of satiety. Second, the bran and germ are rich in vitamins and minerals, such as vitamin E and magnesium, as well as antioxidants. Without the bran and germ, about 25% of the grain's protein is lost, along with at least 17 nutrients and most, if not all, of the phytonutrients.*

*Wu H, Flint A, Qi Q, et al: Association between dietary whole grain intake and risk of mortality. JAMA Internal Medicine 2015; January 5th.*

### Anatomy of a Grain of Wheat



#### BRAN protects seed

- fiber
- B vitamins
- trace minerals

#### FLOUR provides energy

- carbohydrates
- protein
- a few B vitamins, added back in processing

#### GERM provides nourishment

- phytonutrients
- vitamin E
- B vitamins
- antioxidants

## Get 'em Cooking

When children take cooking classes and help in the kitchen, they eat healthier, according to a study from the University of Minnesota in St. Cloud. In this review of studies, the researchers found that children between the ages of 5- and 12-years-old who participated in cooking education programs chose healthier diets at home including more positive preferences, attitudes, and behaviors toward fruits and vegetables.

Researchers at the University of Illinois, Urbana report that children score higher on cognitive tests when they eat healthy diets, especially diets rich in fiber. In contrast,

feeding kids fast food lowers their grades and academic performance. With the more fast food a child is allowed, the worse the grades, according to a study from Ohio State University in Columbus.

*Hersch D, Perdue L, Ambroz T, et al: The impact of cooking classes on food-related preferences, attitudes, and behaviors of school-aged children. Preventing Chronic Disease: public Health Research, Practice and Policy 2014;November 6th: 11:E193.*

*Khan N, Raine L, Drollette E, et al: Dietary fiber is positively associated with cognitive control among pre-pubertal children. Journal of Nutrition 2015;145:143-149.*

*Purtell K, Gershoff E: Fast food consumption and academic growth in late childhood. Clinical Pediatrics 2014;December 5th.*



## The New Quit-Smoking Program

Taking supplements of the omega-3 fats, DHA and EPA, might help lower nicotine cravings and help smokers quit, according to a study from the University of Haifa in Israel. In this double-blind, randomized, placebo-controlled study, 48 smokers between the ages of 18- and 45-years-old were given either placebos or supplements containing 950 milligrams of DHA and EPA. Nicotine cravings and number of cigarettes smoked each day were monitored. Results showed that no differences were noted between the two groups at the start of the study, but after one month, the smokers who had taken the omega-3 supplements had reduced their cigarette use by an average of two a day,

an 11% reduction. This is despite the fact that they had not been asked to change their smoking habits and had no intention or interest in stopping at the study's start. They also reported a significant reduction in nicotine cravings. After 30 days of not taking the supplements, their cravings increased, but remained lower than their initial level. Those taking placebos showed no change in cravings or cigarettes smoked. The researcher concludes that this, "...reinforces the assumption that taking omega-3s can help smokers regulate their addiction and reduce their smoking."

*Rabinovitz S: Effects of omega-3 fatty acids on tobacco craving in cigarette smokers. Journal of Psychopharmacology 2014;28(8): 804-809.*

## Vision-Boosting Nutrients

Supplements of lutein and zeaxanthin significantly improved vision in patients with macular degeneration, in a study from

Xi'an Jiaotong University Health Science Center in China. In this meta-analysis of eight well-designed studies, the researchers found that for each 1 milligram/day increase in both lutein and zeaxanthin there was an improvement in visual acuity, as tested by the level a person with macular degeneration could read on the visual chart (called the logMAR). As supplementation levels increased, so did macular pigment optical density and improvements in visual acuity. The researchers conclude that "lutein and zeaxanthin supplementation is a safe strategy for improving visual performance in patients [with macular degeneration]..."

Researchers at Tufts University report that the typical American diet high in red and processed meats, fatty dairy products, French fries, refined grains, and eggs, raises risk for macular degeneration by 56% compared to diets with more fruits, vegetables, whole grains, and seafood.

*Liu R, Wang T, Zhang B, et al: Lutein and zeaxanthin supplementation and association with visual function in age-related macular degeneration. Investigative Ophthalmology and Visual Science 2014;December 16th.*

*Chiu C, Chang M, Zhang F, et al: The relationship of major American dietary patterns to age-related macular degeneration. American Journal of Ophthalmology 2014;158:118-127.*

## Omega-3s For Your Ears

Want to hear your grandchildren's voices in the future? Then make sure to add more omega-3-rich seafood to your diet today. Researchers at Brigham and Women's Hospital in Boston compared hearing loss to dietary intakes in 65,215 women from the Nurses' Healthy Study, who were followed from 1991 to 2008. Results showed that 11,606 cases of hearing loss were reported during that time. Consuming at least two servings of fish each week helped prevent or delay hearing loss. Women who rarely consumed fish (less than 2 servings a month) had a 20% higher rate of hearing loss than did women who consumed two or more servings a week. Higher intake of the omega-3s found in seafood, EPA and DHA, also was inversely linked with hearing loss risk. Women with the highest omega-3 intake had a 22% lower risk.

*Curhan S, Eavey R, Wang M, et al: Fish and fatty acid consumption and the risk of hearing loss in women. American Journal of Clinical Nutrition 2014;100:1371-1377.*

## IN THE NEWS

- Low-fat diets reduce the risk of early death in some women with breast cancer, according to a report from the Los Angeles Biomedical Research Institute at UCLA Medical Center and presented at the San Antonio Breast Cancer Symposium in December.
- Clever packaging and marketing of weight-loss supplements promise miraculous help for shedding unwanted pounds, thus tricks consumers into thinking these products work when there is no evidence that any them have been effective, according to a Consumer Reports investigation.
- Higher vitamin D intake in people with advanced colon cancer improves response to chemotherapy and survival, according to a study reported at the Gastrointestinal Cancers Symposium in San Francisco.
- Neural tube defects have dropped 35% since mandatory folic acid fortification of enriched grain products was introduced in 1998, according to the Centers for Disease Control and Prevention.

## A Pancreatitis Fish Tale

People who frequently consumed seafood showed lower risks for pancreatitis compared to people who shunned fish, in a study from the Karolinska Institute in Stockholm, Sweden. In this study, 39,267 men and 32,191 women between the ages of 45- and 84-years-old were monitored for fish consumption over the course of 13 years. At the end of the study, 320 cases of non-gallstone-related acute pancreatitis were identified. People who consumed two to three servings of fish a week had a 14% lower risk for developing the disease compared to people who ate less than one serving a week. Whether this reduction in risk was due to an increased intake of omega-3 fats is unclear.

*Oskarsson V, Orsini N, Sadr-Azodi O, et al: Fish consumption and risk of non-gallstone-related pancreatitis. American Journal of Clinical Nutrition 2015;101:72-78.*



## HOT TOPICS

**1** Artificial sweeteners alter gut bacteria, increasing the risk for glucose intolerance, state researchers at the Kfar Shaul Hospital in Jerusalem. *Nature* 2014;514:181-186.

**2** In a review of restaurant menus, researchers at Johns Hopkins Bloomberg School of Public Health found that new, lower-calorie options have an average of 60 fewer calories than other menu choices, which could have a modest benefit in curbing the obesity epidemic. *American Journal of Public Health* 2014; October 8th.

**3** Polyphenols in tea might help reduce brain damage caused by stroke, at least in animals, according to a study from The Second Affiliated Hospital of Xi'an Jiaotong University in China. *Nutritional Neuroscience* 2014; November 20th.

**4** Daughters of mothers who developed gestational diabetes while pregnant might be at high risk for being obese later in childhood, according to researchers at Kaiser Permanente Division of Research in Oakland, California. *Diabetes Care* 2014;October 23rd.

**5** Colon cancer incidence in adults 20- to 49-years-old is on the rise, according to a study from the University of Texas MD Anderson Cancer Center in Houston. While causes have not been identified, it's likely the American diet plays a role. *JAMA Surgery* 2014;November 5th.

**6** The omega-3 fat DHA might help reduce brain damage from concussions, state researchers at both the University of Chicago School of Medicine and the National Institutes of Health in Bethesda. *Military Medicine* 2014;179(11S): 106-111 and 112-116.

**7** A doctoral dissertation at the University of Gothenburg found that the omega-3 fats, DHA and EPA, improved symptoms of attention deficit-hyperactivity disorder (ADHD) in children and teens, however a study from Tel Aviv University concluded that the omega-3 ALA is not effective in lowering symptoms of ADHD. *Frontiers in Human Neuroscience* 2014;8:780.

**8** While nuts help lower heart disease risk, 60% of Americans fail to include them in their diets, snacking more frequently on potato chips, according to a study from the Centers for Disease Control and Prevention. *NCHS Data Brief* 2014;December (176):1-8.

**9** Supplements of folic acid and vitamin B12 lowered homocysteine levels in seniors in a study at Wageningen University in the Netherlands, but there was no observable improvement in memory. *Neurology* 2014;November 12th.

**10** Two thirds of supplements recalled by the Food and Drug Administration (FDA) because they contained banned ingredients, such as sibutramine, remained on store shelves at least six months after their recall, according to a study from Harvard Medical School. *Journal of the American Medical Association* 2014; October 22nd.

**11** Children exposed in the womb to high amounts of two common household chemicals, DnBP and DiBP found in cleaning supplies, air fresheners, and personal care products (as well as plastics labeled as #3, #6, and #7), may be at risk for lowered IQs, according to a study from Columbia University Medical Center in New York City. *PLoS One* 2014;December 10th.

**12** Obesity is linked with worsened prognosis after cancer diagnosis, and negatively affects the delivery of systemic therapy, contributes to morbidity of cancer treatment, and might raise the risk of second malignancies and comorbidities, according to the American Society of Clinical Oncology. *Journal of Clinical Oncology* 2014;32:3568-3574.

**13** Postmenopausal women who own a dog get more exercise than people who don't have pets, according to a study from the University of Arizona Cancer Center in Tucson. *Preventive Medicine* 2015;70:33-38.

**14** The anti-inflammatory health benefits of the spice curcumin might not be well absorbed, but curcumin powder mixed with castor oil and polyethylene glycol in a process called nano-emulsion allows for easy absorption by the gut, state researchers at Ohio State's Wexner Medical Center in Columbus. *PLoS ONE* 2014;9(11).

**15** Researchers at Harvard School of Public Health found that combining aerobic exercise with weight training was critical to preserving muscle and avoiding weight gain, especially belly fat accumulation, as people age. *Obesity* 2014; December 19th.

**16** Frequent intake of yogurt lowers diabetes risk, while there is no positive or negative effects from other dairy products on the disease, according to a study from Harvard School of Public Health. *BMC Medicine* 2014;November 25th;12:215.

**17** Greater adherence to a low-carb diet high in animal fat and protein was associated with higher all-cause and cardiovascular mortality, in a study from Harvard School of Public Health. The researchers found no health benefit from greater adherence to a low-carb diet after a heart attack. *Journal of the American Heart Association* 2014;3(5):e001169.

**18** People are most successful at weight loss when they weigh themselves daily. If they let weeks go by without stepping on the scale, they tend to gain weight again, according to a study from Tampere University of Technology in Finland. *PLoS One* 2014;9(11):e113164.

**19** Beware of food or nutrition products that are promoted with graphs or formulas, which imply scientific validity where there is none, warn researchers at Cornell University. *Public Understanding of Science* 2014;October 15th.

**20** Up to 73.4% of seniors are low in vitamin D at some point during the year, despite their level of sun exposure, according to a study from Ulm University in Germany. *Journal of Epidemiology and Community Health* 2015;January 6th.



## Blueberries: Just Do It!

Just one cup of blueberries every day could be enough to lower blood pressure and reduce arterial stiffness, according to a study from Florida State University. During an eight-week period, 48 postmenopausal women with pre- and stage 1-hypertension were randomly assigned to receive either 22 grams of freeze-dried blueberry powder (the equivalent of 1 cup of blueberries) or 22 grams of a placebo powder. Normal diets and exercise routines were maintained. Results showed that those women who consumed the blueberry powder had an average of 7mmHg (5.1%) decrease in systolic blood pressure and a 5mmHg decrease (6.5%) in diastolic pressure. In addition, the blueberry group had a 6.5% reduction in arterial stiffness, while the placebo group showed no differences. The researchers also noted that nitric oxide, a blood biomarker known to be involved in the widening of blood vessels, increased by 68.5% in the blueberry group. This rise explained the blood pressure reductions.

*Johnson S, Figueroa A, Navaei N, et al: Daily blueberry consumption improves blood pressure and arterial stiffness in postmenopausal women with pre- and stage 1-hypertension. Journal of the Academy of Nutrition and Dietetics 2015;January 2nd.*

### NUTRITION ALERT

Copyright 2015 Nutrition Communications. As provided by US copyright law, no part of this publication may be reproduced, displayed, or transmitted in any form or by any means, electronic or mechanical, including photocopying or by an information storage or retrieval system, without prior written consent.

Elizabeth Somer, M.A., R.D. .... *Editor-in-Chief*  
 Kelly Fitzjarrell ..... *Managing Editor*  
 Ideas to Inks ..... *Design/Art Production*

Published bi-monthly by Nutrition Communications. Send subscription inquiries and editorial communications to: Nutrition Communications, 4742 Liberty Road S., PMB 148, Salem, OR 97302

Subscriptions: \$15/year in the United States, \$20 (US) in Canada. Group rates and back issues available upon request.

**ABOUT THE EDITOR:** Elizabeth Somer, M.A., R.D. appears regularly on national television and is author of several books including her latest book, *Eat Your Way to Sexy*. For more information, follow Elizabeth on Facebook (Elizabeth Somer, nutritionist), Twitter, her blog and visit her website- [www.ElizabethSomer.com](http://www.ElizabethSomer.com)

### REVIEW

## Fruits With Benefits

While nutrition news seems to fluctuate, there is one thing we know for sure: The more colorful fruits (and vegetables) people eat, the healthier they are, the longer they live, and the leaner they stay. It's a little trickier when you try to match individual fruits to specific diseases. But even then, research is beginning to sort out the differences.

Aren't fruits loaded with sugar? The problem with sugar is the glut of added sugars in processed foods. Americans are averaging up to 50 teaspoons a day of added sugars, from high fructose corn syrup to agave and honey. We need to seriously cut back on that junk. But the natural sugars in whole fruit come packaged with fiber and a wealth of vitamins, minerals, antioxidants, and phytochemicals, with no cholesterol or fat and hardly any sodium. While diabetics still must manage how much and when they consume sugar of any kind, the rest of us can rest assured that whole fruit is a very healthy inclusion in the diet.

What about fruit juice? Whole fruit is better than juice. People do not compensate for the calories they drink by eating less food later, so are more prone to weight gain with juice. One study found that women who drank an average of five servings of fruit juice a week had an 18% greater risk of developing diabetes than women who averaged 1½ servings a week. Juice has none of the fiber and less of the phytonutrients of whole fruit, so it's not as good an option even as far as nutrition goes. You can have a glass of 100% real juice, but keep it small and not more than a few times a week.

Fruit is good for us because of its vitamins and minerals, right? A few decades ago, researchers studied and evaluated fruits (and vegetables) based on their vitamin and mineral content, such as vitamin C and potassium. That's important because vitamin C helps curb disease and even helps keep your skin youthful. Potassium helps lower the risk for high blood pressure. We now know there are many phytochemicals in a slice of watermelon or a bowl of berries. Hundreds of thousands of phytochemicals have been identified, such as polyphenols, anthocyanins, carotenoids, and monoterpenes, that act as antioxidants and even tweak our genetics to help our cells protect themselves against disease.

Are trendy fruits, like acai, noni, or mangosteen, better for us? These pricey tropical fruits claim to regenerate muscles or help you lose weight, fight cancer or cure diabetes, boost energy or lower cholesterol. There is no research to support these claims. All the well-designed research on fruit has been done on conventional produce. For example, all berries, from blueberries to strawberries, improve learning and memory, at least in animal studies. Granted, they each have a different benefit. For example, raspberries appear to help with balance, but not memory, while blueberries aid with memory. Cranberries help lower the risk for urinary tract infections. Berries are more than just antioxidant-rich snacks. Research from Tufts University shows that these little fruits regulate our genes! They turn on the cells' production of disease-fighting chemicals that then work 24-7 to protect the brain and all the body's tissues from damage. No wonder they improve cell communication, stimulate nerve cell growth, and enhance brain cell connections.

*British Medical Journal 2014;349:g4490/Yi Chuan 2014;36:566-573/British Journal of Nutrition 2014;112:1341-1352/ Rocz Panstw Zakl Hig 2014;65:79-85.*

**HOT TOPIC:** The calories, salt, and saturated fat in fast food items, such as hamburgers and cheeseburgers, fries, soft drinks, and grilled chicken sandwiches, have not changed in the past 17 years, despite massive educational campaigns and research showing these foods are unhealthy, according to a study from USDA's Human Nutrition Research Center on Aging at Tufts University in Boston. *Preventing Chronic Disease 2014;December 31st.*