



JANUARY/FEBRUARY 2014

VOLUME 20 NUMBER 1

**EDITOR'S NOTES:**

## Don't Believe Anything You Hear on the News!

I sympathize with people trying to sift through nutrition headlines to make wise food choices. In most cases, the media reports on controversy, not consensus. And, because nutrition is anything but a black-and-white science, never should a decision be made based on one study.

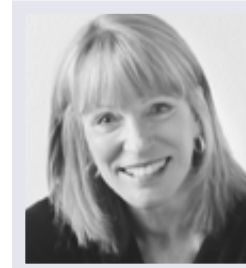
Case in point: A Ohio State University College of Medicine study published last year in the *Journal of the National Cancer Institute* and picked up by the media and reporters found an increased prostate cancer risk among men with high levels of omega-3s in their blood. This study was in direct contrast to several population based studies that have shown benefits with increased omega-3 fatty acid intake on prostate cancer risk. The Ohio study was based on observational data from subjects recruited for the SELECT study, a trial designed to determine the effects of vitamin E and/or selenium supplementation on prostate cancer. Omega-3 fatty acids were not part of the original trial design and subjects were not given omega-3 fatty acids (fish oil) as part of the study. The study was not even designed to look at the relationship between omega-3 fatty acid intake and prostate cancer. The researchers's conclusions were based solely on a single blood serum sample taken at the start of the study..

It is important to note that research on nutrition and chronic disease is difficult and complex, and observational data only provide associations, not cause and effect, between dietary behaviors and disease. The literature regarding omega-3 fatty acids and prostate cancer is mixed and is not definitive. The literature is, however, very strong regarding the importance of omega-3 fatty acids for brain, eye, and heart health throughout life, with hundreds of studies over the past two decades showing beneficial effects of omega-3 fatty acids on cardiovascular health, perinatal health, inflammation, cognitive function, and more. For example, research has shown that the omega-3 fats, DHA and EPA, help lower blood pressure in people with hypertension, and help maintain healthy triglyceride levels. Additionally, the omega-3 fat, DHA, a major structural fat in the brain and retina, is important for infant brain and eye development, and has been associated with a decreased risk of cognitive decline in aging adults. This significant body of research has led to numerous recommendations regarding increased omega-3 consumption from respected organizations, scientific boards and healthcare practitioners around the world.

Despite the important health benefits of the omega-3s DHA and EPA, average consumers do not get enough of these nutrients in their diets. For example, the typical American diet contains less than 100milligrams/day of EPA/DHA, well below recommendations by expert bodies. The American Heart Association, the World Health Organization (WHO), the U.S. Institute of Medicine's Food Nutrition Board (IOM FNB) and the 2010 Dietary Guidelines all have current policies advising Americans to eat more fatty fish to get the benefits of omega-3-rich fish oils.

With this background information, it is easy to see that the Ohio study is no where near conclusive and should not change recommendations or behaviors related to consumption of omega-3s. The bottom line? Don't believe anything you hear on the news or at the health food store. Base your food decisions on commonsense and tried-and-true facts!

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



Elizabeth Somer

## The Anti-Cancer Routine

Women could reduce their risk for developing endometrial cancer by almost 60% if they exercised daily and maintained a healthy weight, according to a new report from the American Institute for Cancer Research. The researchers estimate that 59%, or approximately 29,500 endometrial cancer cases each year in the U.S., could be prevented if women exercised at least 30 minutes a day and avoided gaining excess body fat, which produces hormones that promote cancer growth and inflammation. Exercise not only helps maintain a desirable weight, it also decreases estrogen and insulin levels, strengthens the immune system, and helps maintain a healthy digestive system. In contrast, eating a diet rich in high glycemic foods increases risk, state the researchers.

**IN PERSPECTIVE:** *Endometrial cancer is the most common cancer of the female reproductive system. About 49,600 new cases of endometrial cancer occur each year in the U.S., more than ovarian cancer and cervical cancer combined.*

*Bandera E, Bender A, Gaudet M, et al: Continuous Update Project Report: Preventing Endometrial Cancer. AICR/WCRF, September 10, 2013.*

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## The Probiotic Weight-Loss Diet

Here is an example of how Americans can have their cake and eat it, too. Previous studies show that eating fast food items, such as potato chips, increases the risk of obesity, while adding yogurt to the diet helps prevent age-related weight gain in humans. In this study, researchers at Massachusetts Institute of Technology (MIT) in Cambridge, tested the effects of adding pro-

biotics, in this case *Lactobacillus reuteri*, to the diets of mice fed Westernized diets high in fat. Results showed that the probiotics were sufficient to change the pro-inflammatory immune cell profile and prevent abdominal fat accumulation, as well as weight gain, in the mice regardless of their dietary intake.

*Poutahidis T, Kleiweiefeld M, Smillie C, et al: Microbial reprogramming inhibits Wester diet-associated obesity. PLoS One 2013;8:e68596.*

## Probiotics: The Anti-Allergy Treatment

Babies whose mothers consumed probiotics during pregnancy and were fed probiotic supplements early in life might be at lower risk for allergies, according to a study from the University of Miami. In this meta-analysis of 25 studies on supplements given during pregnancy and/or within the first year of a child's life, the researchers found that babies exposed to probiotics in the womb and who then received supplements after birth had a 12% lower risk of developing allergies in the following months or years compared to kids who were not exposed to probiotics. Allergy risk was not reduced when babies were started on probiotics after birth only.

In a study from Kaiser Permanente Southern California, researchers report that overweight and obese kids are up to 37% more likely to battle asthma than

are kids of normal weight

**IN PERSPECTIVE:** *The University of Miami study adds weight to the "hygiene hypothesis." The "hygiene hypothesis" states that in the past, exposure in early life to a wide array of bacteria helped the immune system learn how to self-regulate and recognize what to fight and what not to fight. In today's cleaner environments, babies are not exposed to microbes at the same concentrations, which has led to an increase in allergies and asthma. Reintroducing healthy probiotics may be the solution to living clean, yet also living healthy.*

*Elazab N, Mendy A, Gasana J, et al: Probiotic administration in early life, atopy, and asthma. Pediatrics 2013;August 19th.*

*Black M, Zhou H, Takayanagi M, et al: Increased asthma risk and asthma-related health care complications associated with childhood obesity. American Journal of Epidemiology 2013;August 6th.*

## A Bit of Good News

The number of obese teens leveled off and the rate of overweight teens dropped slightly between 2005-2006 and 2009-2010, state researchers at the National Institute of Child Health and Human Development in Bethesda, Maryland. Students in grades six to ten were recruited during the 2001-20012, 2005-2006, and 2009-2010 school years and were assessed for BMI, physical activity, and dietary patterns. Results showed that teens reported eating more fruits and vegetables, eating breakfast on weekdays more often, and being more active. They also ate fewer sweets, drank less sweetened beverages, and spent less time watching TV (no data was given on time spent on smart phones or computers). In the earliest group, 14.9% were overweight and 10.3% were obese. By the second time period, those numbers had risen to 17% and 12.7%, respectively. But, by the third time period, the rate of overweight teens dropped slightly to 16.6% and the rate of obesity leveled off at 12.7%.

**IN PERSPECTIVE:** *Obviously, we have a long way to go when it comes to caring for our children's health. But, this study does give a small ray of hope that perhaps the message is beginning to sink in that caring for your children and yourself starts at conception and is a commitment for life.*

*Iannotti R, Wang J: Trends in physical activity, sedentary behavior, diet, and BMI among US adolescents, 2001-2009. Pediatrics 2013;132:606-614.*

## Vitamins Are Eye Candy

Seniors who load the plate with vitamin C- and vitamin E-rich fruits and vegetables have the lowest risk for developing cataracts, according to a study from the London School of Hygiene and Tropical Medicine. Dietary intakes and risk for cataracts was compared in 599 seniors. Plasma levels of vitamin C, vitamin E, and carotenoids also were gathered. Results showed that as fruit and vegetable intake increased, cataract risk decreased. Cataract

risk also diminished as vitamin C intakes increased above 107 milligrams a day. A protective effect was noted when vitamin E intakes were 8 milligrams or higher each day.

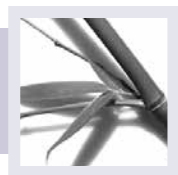
The carotenoids, lutein and zeaxanthin, concentrate in ocular tissue. Increased dietary intake is associated with reduced risk for vision loss from cataracts and macular degeneration. Researchers at Trinity College in Dublin report that low

levels of these carotenoids in ocular tissues is also associated with lower cognitive function in seniors.

*Pastor-Valero M: Fruit and vegetable intake and vitamins C and E are associated with a reduced prevalence of cataracts in a large, population-based sample of older adults. BMC Ophthalmology 2013;13:52.*

*Feeney J, Finucane C, Savva G, et al: Low macular pigment optical density is associated with lower cognitive performance in a large, population-based sample of older adults. Neurobiology of Aging 2013;34:2449-2456.*

*Marshall L, Roach J: Prevention and treatment of age-related macular degeneration. The Consultant Pharmacists 2013;28:723-737.*



## Obesity's Death Toll Seriously Under-rated

According to a study from Columbia University, the death toll from this nation's obesity epidemic has been grossly underestimated. In this study, researchers broke down the population into "cohorts" or

generations, and studied the effects of obesity on deaths for those age groups. In contrast to previous estimates that placed obesity-related deaths at about 5% of all US mortalities, this study found

the number to be more than three times that or 18%. Earlier estimates mistakenly overlooked generational differences in the way the obesity epidemic has affected our population. Younger generations today are exposed longer to risk factors for obesity, and are at even greater risk of becoming overweight or obese and suffering the onslaught of health problems as a result. "A 5-year-old growing up today is living in an environment where obesity is much more the norm than was the case for a 5-year-old a generation or two ago," says the co-author on the study, Dr. B Link. "So, it stands to reason that we won't see the worst of the epidemic until the current generation of children grows old."

According to the Centers for Disease Control and Prevention using most recent data from the National Health and Nutrition Examination Survey (NHANES, 2011-2012), 35% of Americans are not just overweight, they are obese, with middle-aged adults ranking highest (almost 40% of them are obese).

*Masters R, Reither E, Powers D, et al: The impact of obesity on US mortality levels. American Journal of Public Health 2013; August 15th.*

*Ogden C, Carroll M, Kit B, et al: Prevalence of obesity among adults. NCHS Data Brief 2013; Oct.(131):1-8.*

### What Works for Weight Loss?

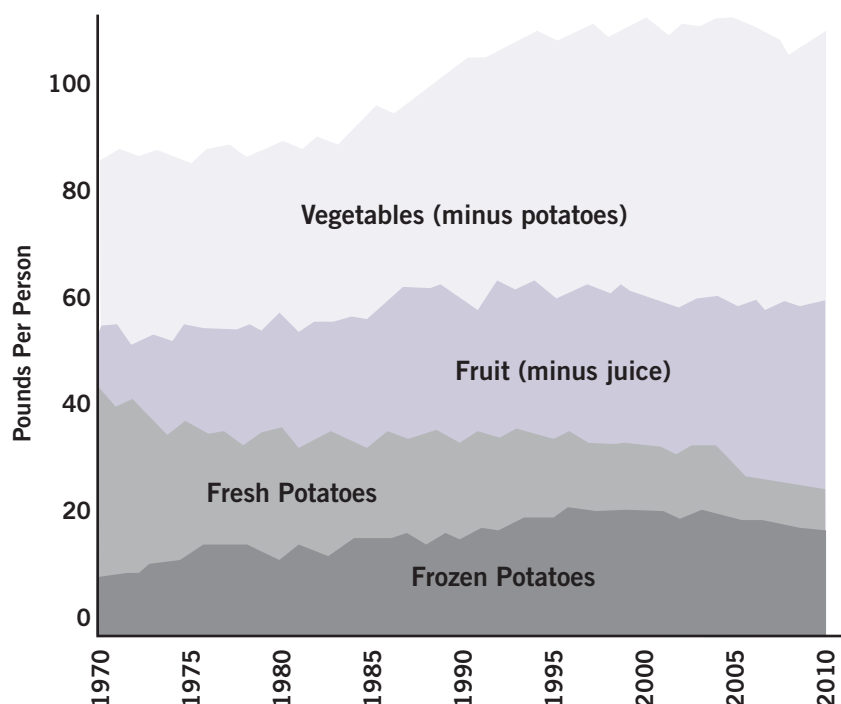
There is no one-size-fits-all for weight loss. Researchers at the Pennsylvania State University found that a variety of dietary practices can do the trick. In a crossover design, 59 adults ate breakfast, lunch, and dinner in the laboratory once a week for four weeks. The entrees were either standard in energy density or were reduced in energy density by 20% using one of three methods: lower fat, more fruits and vegetables, or increased water. Each meal included a manipulated entree along with unmanipulated side dishes, and all foods were consumed ad libitum.

Reducing the energy density of entrees significantly decreased daily calorie intake compared to standard entrees by 396 calories when fat was reduced, 308 calories when fruit and vegetables were increased, and 230 calories when water was added. While daily calorie intake was lowest when fat was decreased compared to the other methods, all three methods helped to lower calories while still being satisfying.

*Williams R, Roe L, Rolls B: Comparison of three methods to reduce energy density. Appetite 2013;66: 75-83.*

### AMERICA'S DIET: FRUITS AND VEGETABLES

If we were to give a grade to our typical intake of fruits and vegetables, the best we could hope for is a C-. Fruit intake hasn't budged since the 1970s, vegetable intake is better but that's because we eat tomatoes as sauce on pizza and iceberg lettuce, which is the nutritional equivalent of crunchy water. At least we aren't eating MORE French fries!



### The Sexy Diet

Women who drop pounds feel sexier, according to a study from the University of Pennsylvania. Half of all women who request bariatric surgery experience signs of sexual dysfunction, yet two years following that surgery, the 106 formerly obese women in this study had lost almost 33% of their former weight and reported increased arousal, lubrication, sexual desire, and overall sexual satisfaction. Blood tests also showed an increase in sex hormones, suggesting that weight loss improves fertility. Women with the poorest quality sex lives prior to surgery reported the most dramatic improvements a year following surgery.

*Sarwer D, Spitzer J, Wadden T, et al: Change in sexual functioning and sex hormone levels in women following bariatric surgery. JAMA Surgery 2013; November 4th.*





## Peanut Butter to the Rescue!

Young girls who eat peanut butter on a regular basis have a lower risk of developing benign breast disease (BBD) later in life, according to a study from Brigham & Women's Hospital and Harvard Medical School. The researchers followed 9,039 young girls between the ages of 9- and 15-years, having them complete dietary recalls annually for 14 years. Results showed that girls who ate peanut butter at least three times a week when they were young lowered their risk for BBD by 39% late in life. Daily servings of peanut butter, peanuts or other nuts, beans, and/or corn

lowered risk by 68%.

**IN PERSPECTIVE:** *BBD is a known risk factor for breast cancer. Prior to menopause, about one in four women have a benign lesion. Depending on the characteristics of that lesion, BBD can increase breast cancer risk three-fold. Of course, BBD is only one risk factor for breast cancer, but lowering any and all risks is important.*

*Berkey C, Willett W, Tamimi R, et al: Vegetable protein and vegetable fat intakes in pre-adolescent and adolescent girls, and risk of benign breast disease in young women. Breast Cancer Research and Treatment 2013;141:299-306.*

## Co-Enzyme Q10 with Statin Medications

Supplementing with co-enzyme Q10 when taking statin medications lowers inflammation and enhances antioxidant status, according to a study from Dongguk University in Seoul. Healthy controls and patients with 50% stenosis of at least one major coronary artery and who were treated with statins for at least a month were given either placebos or supplements of Co-enzyme Q10 (300 milligrams/day).

After 12 weeks, results showed that the supplemented group showed significantly higher blood levels of vitamin E and antioxidant enzyme activity and lowered levels of inflammatory markers, such as tumor necrosis factor-alpha (TNF-alpha) and interleukin-6 (IL-6).

*Lee B, Tseng Y, yen C, et al: Effects of coenzyme Q10 supplementation (300mg/day) on antioxidation and anti-inflammation in coronary artery disease patients during statins therapy. Nutrition Journal 2013;12:142.*

## A Fatal Flaw in Nutrition Research?

Isolating a nutrient to study its effects on health may not always give accurate information. This potential flaw is exemplified in a study from the University of Toronto, where researchers found that magnesium intake may be critical to vitamin D status. Using data from the National Health and Nutrition Examination Survey (NHANES-2001-2006), serum vitamin D levels were used to define vitamin D status and were compared to magnesium intakes. Results showed that high intake of total dietary or supplemental magnesium was independently associated with a significantly lower risk of vitamin D deficiency and insufficiency. The inverse relationship was most notable in people at highest risk for vitamin D deficiency. In addition, the association of serum 25(OH)D with mortality, especially cardiovascular disease and colorectal cancer mortality,

was modified by magnesium intake, and the inverse associations were primarily present among people with magnesium intake above average. The researchers conclude that, "...magnesium intake alone or its interaction with vitamin D intake may contribute to vitamin D status..."

**IN PERSPECTIVE:** *Three in every four Americans consume diets low in magnesium, a mineral found primarily in real foods, such as legumes, whole grains, nuts, and dark green leafy vegetables. Not only is this study of interest specifically to vitamin D status, but it implies a much larger problem, which is that the vast majority of research, by separating out one nutrient for study, may be missing a much broader picture of how these nutrients interact.*

*Deng X, Song Y, Manson J, et al: Magnesium, vitamin D status and mortality. BMC Medicine 2013;11:187.*

## Diet Linked to Pancreatic Cancer

Even moderate attempts at eating healthy could cut the risk for developing pancreatic cancer, according to a study from the National Cancer Institute in Bethesda, Maryland. Using USDA's Healthy Eating Index, researchers scored the eating habits of 537,218 men and women. Of those, 2,383 developed pancreatic cancer during the subsequent 10.5 follow-up years. People who scored highest on dietary quality were 15% less likely to develop pancreatic cancer compared to those people who scored lowest. Overweight men also had a 28% higher risk compared to leaner men.

**IN PERSPECTIVE:** *The Healthy Eating Index rates food intake according to 10 categories, with a potential optimal score of 10 in each category. Eat perfectly and you score 100%. Keep in mind that American's average only about a "D" rating, or in the 60s when diets are analyzed, so the people in this study did not have to eat all that well to score high enough to see a decrease in cancer risk. Imagine what might happen if people ate really well!*

*Arem H, Reedy J, Sampson J, et al: The Healthy Eating Index 2005 and risk of pancreatic cancer in the NIH-AARP study. Journal fo the National Cancer Institute 2013;August 15th.*

## Vitamin D and Diabetes

Low vitamin D status is common in young people at risk for type 1 diabetes, state researchers at Furman University in South Carolina. An analysis of 1,426 children with an average age of 11.2 years found that 49% of them had low plasma vitamin D levels and 26% were insulin resistant. Children who had higher vitamin D levels of at least 65nmol/L were at lower risk for insulin resistance compared to children with vitamin D levels of 25nmol/L or less. The researchers conclude that, "vitamin D insufficiency is common in individuals with Type 1 diabetes and may increase risk for insulin resistance."

*The N, Crandell J, Laurence J, et al: Vitamin D in youth with Type 1 diabetes. Diabetes Medicine 2013;August 3rd.*



## Eat to Beat Depression

If you are battling the blues, you might want to look first to your diet. According to a study from Laval University in Quebec, people who eat foods that fuel inflammation are also at highest risk for depression. Using dietary intakes from 43,685 women in the Nurses' Health Study who were without depression at the start of the study, researchers compared mood during a 12-year follow-up with a dietary pattern that is related to plasma levels of inflammatory markers, such as C-reactive protein, interleukin-6, and tumor necrosis factor. Results showed that women who consumed diets that increased inflammation had a 41% higher risk for developing depression. The researchers conclude that, "...chronic inflammation may underlie the association between diet and depression."

**IN PERSPECTIVE:** *Inflammatory triggers in the diet include, saturated fats in meat and fatty dairy products, sugar, trans fats in processed and fast foods, refined grains, potatoes, fried foods, palm or coconut oils, pastries, and processed meats like hot dogs (it's the nitrite additives in these luncheon meats that are to blame). Being overweight also is a major contributor to chronic inflammation.*

*Lucas M, Chocano-Bedoya P, Shulze M, et al: Inflammatory dietary pattern and risk of depression among women. Brain Behavior and Immunology 2013;October 1.*

## Sugar Memory Blues

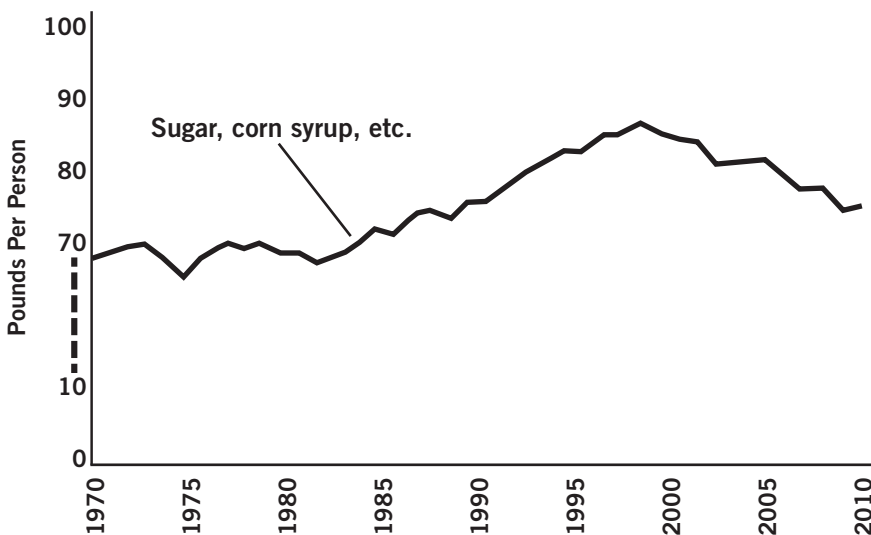
Even a high-normal blood sugar is enough to jeopardize your memory, according to researchers at the University of Halle in Germany. Memory, HbA1c, insulin, and blood sugar levels were assessed in a group of 141 people with an average age of 63 and who did not have diabetes or pre-diabetes. Results showed that people with lower blood sugar levels scored far better on memory and recall tests compared with people with blood sugar levels in the higher range of normal. The size of the

hippocampus, the region of the brain especially important in memory, also was larger in people with lower blood sugar levels. The researchers conclude that, "...chronically higher blood glucose levels exert a negative influence on cognition, possibly mediated by structural changes in learning-relevant brain areas."

*Kerti L, Witte A, Winkler A, et al: Higher glucose levels associated with lower memory and reduced hippocampal microstructure. Neurology 2013;October 23rd.*

### AMERICA'S DIET: ADDED SUGAR

Our sweet tooth has been tamed a bit since the high of 89 pounds back in 1999. But we still average 78 pounds of added sugar yearly for every man, woman, and child. The biggest portion comes from sugary beverages, which are linked to an increased risk for depression, heart disease, obesity, diabetes, and now memory loss.



## Did You Remember to Take PS?

Seniors who supplement with phosphatidylserine (PS) show improvements in memory, according to a study from Enzymotec Ltd. in Israel. Memory and blood tests were administered to 20 seniors with memory complaints who then were supplemented with a soy-derived PS for 12 weeks. Results showed that PS supplementation significantly improved memory recognition, memory recall, executive

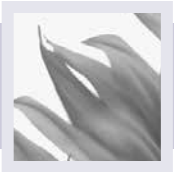
function, and mental flexibility. Total learning and immediate recall also improved significantly. Blood pressures decreased, and there were no adverse side effects.

A combination supplement containing nutrients, such as the omega-3s DHA and EPA, choline, folic acid, selenium, and vitamins B12, B6, C, and E, improves memory function and preserves functional brain network organization in patients

with mild Alzheimer's disease compared to controls, according to researchers at Nutricia Advanced Medical Nutrition in The Netherlands.

*Richter Y, Herzog Y, Lifshitz Y, et al: The effect of soybean-derived phosphatidylserine on cognitive performance in elderly with subjective memory complaints. Clinical Interventions in Aging 2013;8:557-563.*

*Van Wijk N, Broersen L, deWilde M, et al: Targeting synaptic dysfunction in Alzheimer's disease by administering a specific nutrient combination. Journal of Alzheimer's Disease 2013;August 27th.*



## Vitamin E for Premies

A hefty supplemental dose of vitamin E helps raise levels to normal in preterm infants, according to a study from the University of Iowa, Iowa City. Because vitamin E levels are typically low in preterm infants, the researchers supplemented 93 infants (under 27 weeks gestation and

who weighed less than 1000 grams) with either placebos or 50 Units of vitamin E (as dl-alpha tocopheryl acetate) per kilogram body weight. Results showed that after 24 hours, only 30% of infants supplemented with vitamin E had blood levels below 0.5 milligrams/dl, while 62% of the placebo

group were below this level. The researchers conclude, "A 50 IU/kilogram dose of vitamin E raised serum [vitamin E] levels, but to consistently achieve a [vitamin E] level above 0.5 milligrams/kilogram, a higher dose or several doses of vitamin E may be needed."

**IN PERSPECTIVE:** *Preterm births account for 10% of all births in the world and is a large contributor to poor infant-related outcomes. The third trimester of pregnancy is a critical time for accumulating nutrients, such as calcium, iron, essential fats, and fat-soluble vitamins such as vitamin E. This study emphasizes the importance of providing supplemental vitamin E to preterm infants to correct this deficiency, thus potentially reducing the risk for anemia, intracranial hemorrhage, and the retinopathy of prematurity.*

*Bell E, Hansen N, Brion L, et al: Serum tocopherol levels in very preterm infants after a single dose of vitamin E at birth. Pediatrics 2013;November 11th.*

## Calcium and Your Bones

Both calcium and milk protect bones from osteoporosis, according to a study from the School of Medicine Konkuk University in Seoul, Korea. Using survey data from the Korean National Health and Nutrition Examination Survey (KNHANES) for adults (3,819 males, 5,625 females) ages 20 years-old and older, researchers compared intakes of dietary calcium, milk, and dairy products along with blood levels of vitamin D to bone mineral density. The results showed that osteoporosis risk significantly decreased as calcium intake increased. In addition, the risk for osteoporosis significantly decreased as the ratio of calcium to phosphorus increased and as blood vitamin D levels increased. The researchers advocate

an increase in calcium, milk, and dairy product intake, and that blood vitamin D levels be maintained within optimal levels for the maintenance of bone health and the prevention of osteoporosis.

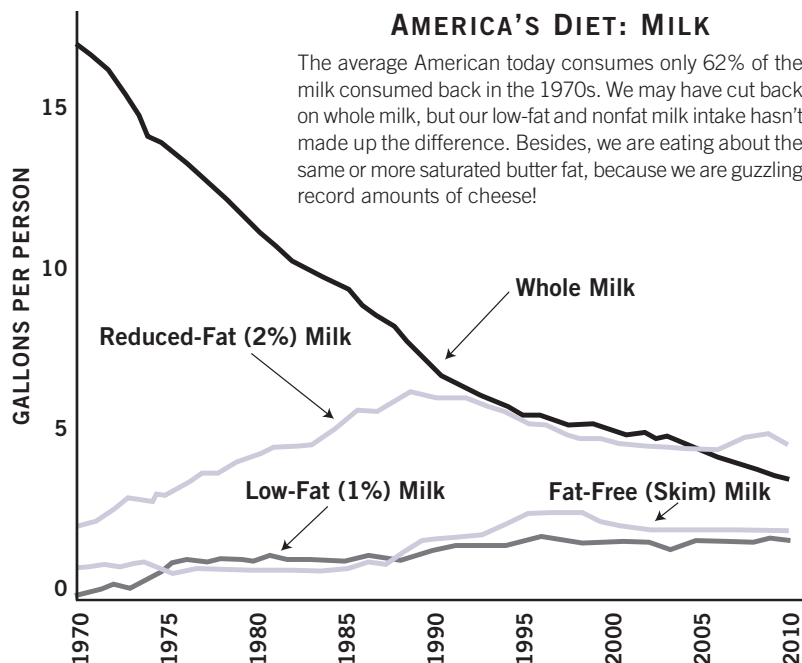
Adequate calcium and vitamin D intake, regular weight-bearing exercising, and possibly supplementation with B vitamins, omega-3 fatty acids, and soy are a few of the factors associated with prevention of osteoporosis, according to researchers at Johns Hopkins Hospital in Baltimore.

*Hong H, Kim E, Lee J: Effects of calcium intake, milk and dairy product intake, and blood vitamin D level on osteoporosis risk in Korean adults. Nutrition Research and Practice 2013;7:409-417.*

*Christianson M, Shen W: Osteoporosis prevention and management. Clinical Obstetrics and Gynecology 2013;56:703-710.*

## IN THE NEWS

- Researchers at the John Ochsner Heart and Vascular Institute in New Orleans report that people who drink four or more cups of coffee a day are more likely to die early compared to others.
- Babies that are breastfed have a lower chance of being obese as they grow up compared to babies who are bottled fed, according to a report published in the journal JAMA Pediatrics.
- Children born to overweight mothers are likely to die earlier than those born to healthy-weight mothers, according to a report from Scotland.
- A healthy diet and moderate alcohol consumption could help type 2 diabetics reduce their risk for kidney disease, or at least slow the progression, according to a study reported in JAMA Internal Medicine.
- Low levels of vitamin D are common in people who suffer traumatic bone fractures, according to a study reported at the American Academy of Orthopaedic Surgeons annual meeting.







## HOT TOPICS

**1** Using data from 16,008 adults, researchers at Columbia University found that several antioxidant supplements lowered cancer and/or mortality risk, with vitamin C in particular showing a dose-response decrease in both. *Cancer Epidemiology, Biomarkers & Prevention* 2013;August 8th.

**2** A vitamin D daily intake of more than 400 IU was associated with a lower risk for lung cancer in postmenopausal women who had never smoked, according to a study from the Fred Hutchinson Cancer Research Center in Seattle. *American Journal of Clinical Nutrition* 2013;August 21st.

**3** Researchers at Maastricht University in The Netherlands report that the most effective diet for weight loss is one that is low in saturated fat, with a moderate increase in protein, a replacement of refined grains with whole grains that have a low glycemic index, and little or no sweetened beverages. *Thrombosis and Haemostasis* 2013;August 15th;110(4).

**4** If you toss foods based on the “sell-by” or the “best-before” dates on the package, you could be throwing out perfectly good foods. A study from Harvard Law School and the Natural Resources Defense Council found that dates printed on packaged foods are inconsistent and lead to billions of pounds of perfectly good food being thrown out each year. Those dates refer to freshness, not safety. <http://www.nrdc.org/food/files/dating-game-report.pdf>

**5** More Americans today are taking supplements, especially supplements of vitamin D, folic acid, and fish oil, compared to consumption back in the mid 1980s. Supplement use of vitamins A, C, and E has decreased during that same time period, according to a study from Harvard School of Public Health. *Journal of the Academy of Nutrition and Dietetics* 2013;October 9th.

**6** People who are overweight prior to a diagnosis of pancreatic cancer are likely to die two to three months sooner than those of normal weight, according to a study from Harvard School of Public Health. *Journal of Clinical Oncology* 2013;October 21st.

**7** Here is a No-Brainer Study: Heart attack survivors who adopt healthy diets are less likely to die early from any cause compared to people who return to poor eating habits, state researchers at Harvard School of Public Health. *JAMA Internal Medicine* 2013;173:1808-1819/*American Journal of Clinical Nutrition* 2013;October 30th.

**8** Coffee drinking lowered risk for liver cancer in two studies, one from the Institute of Research Pharmacology in Milan, Italy and one from the National Cancer Institute in Bethesda, Maryland. *Clinical Gastroenterology and Hepatology* 2013;11:1413-1421/*British Journal of Cancer* 2013;109:1344-1351.

**9** P-coumaric acid, a phenolic acid found in beans, garlic, peanuts, tomatoes, and carrots, shows antioxidant capabilities as strong as vitamins C and E, state researchers at Trakya University in Turkey. *Spectrochimica Acta* 2013;115:719-724.

**10** Americans average less than half the recommended daily fiber intake of 25 to 38 grams and that low intake is associated with up to a 34% increased risk for metabolic syndrome, inflammation, and obesity, state researchers at Brigham and Women’s Hospital in Boston. *American Journal of Medicine* 2013;October 9th.

**11** Women who consume the most fruits and vegetables, especially citrus, green leafy vegetables, and beta-carotene- and vitamin C-rich produce, have a lower risk of developing heart disease, state researchers at Yong Loo Lin School of Medicine in Singapore. *American Journal of Clinical Nutrition* 2013;October 2nd.

**12** Snacking on nuts at least twice a week lowers a woman’s risk for pancreatic cancer, according to a study from Brigham and Women’s Hospital and Harvard Medical School. *British Journal of Cancer* 2013;October 22nd.

**13** The pesticides, beta-hexachlorocyclohexane and mirex might increase risk for endometriosis by up to 70%, according to a study from Fred Hutchinson Cancer Research Center in Seattle. *Environmental Health Perspectives* 2013;November 4th.

**14** Young men who are obsessed with their appearance are at high risk for eating disorders that also can involve drugs and supplements, according to a study from Boston Children’s Hospital. *JAMA Pediatrics* 2013;November 4th.

**15** Dropping excess pounds around the middle and cutting out processed foods and other dietary sources of phosphorus reduces the risk of kidney disease, according to a study from Johns Hopkins University in Baltimore. *American Journal of Kidney Diseases* 2013;November 1st.

**16** Researchers at the Pennsylvania State University state that the overwhelming evidence supporting the need for the omega-3s, EPA and DHA, for heart health and more justify the need for the Institute of Medicine to establish a dietary reference intake (DRI) for these fats. *Nutrition Review* 2013;71:692-707.

**17** Supplementation with the omega-3s DHA and EPA might reduce anger in psychiatric patients taking interferon-alpha therapy, state researchers at the University of Pittsburgh School of Medicine. *Journal of Psychosomatic Research* 2013;75:475-483.

**18** Contrary to recent speculation that calcium supplementation might increase the risk for atherosclerosis and heart disease, researchers at the University of Western Australia found that calcium supplementation reduced carotid atherosclerosis in older women. *Journal of Bone and Mineral Research* 2013;October 23rd.



## Eat Well, Living Long

Women who eat well in their middle years can expect to live longer and healthier than women who take their diets for granted, according to a study from Harvard Medical School. Using the Alternative Healthy Eating Index and the Alternative Mediterranean Diet scores, dietary habits were gathered at baseline on a group of 10,670 women in their late 50s and early 60s. After 15 years, those women who reported eating well had a 34% increased likelihood of being healthy as they aged, with lower risks for chronic disease, major impairments in cognition, or reduced physical or mental function. Those women who ate diets similar to the classic Mediterranean diet had a 46% greater odds of healthy aging. They also were most likely to live past age 70 without heart disease, diabetes, or other chronic diseases. In short, women who took time to eat well not only lived longer, they thrived. The bad news - Only 11% of the women were classified as healthy agers overall.

*Samieri C, Sun Q, Townsend M, et al: The association between dietary patterns at midlife and health in aging. Annals of Internal Medicine 2013;159:584-591.*

## NUTRITION ALERT

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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.

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## REVIEW

# Glycemic Index, Glycemic Load: Which Is It?

I was asked the other day whether or not watermelon was a healthy food, since it has such a high glycemic index. This was an excellent example of how a little information can be misconstrued. I can understand why people are confused, since this is a complicated topic. But, you can rest assured that real foods, such as watermelon, remain good for us despite the glycemic index.

The glycemic index (GI) ranks foods on a scale of 1 to 100 by how quickly they convert to glucose and raise blood sugar levels. For example, pure glucose scores a 100, while peanuts score about 14. The lower the number, the gentler the rise in blood sugar, and the more likely a food will help with weight loss and lower your risk for a host of other ills, including heart disease and diabetes. A diet loaded with high glycemic foods does just the opposite. Many factors influence how fast the body digests a carb-rich food, but in general, the less processed a food, the lower its GI score and the more likely it will improve a person's health risk and help someone lose weight. The GI is complicated, since a food's score will change based on other foods at the meal. GI scores also vary from person to person and even fluctuate enormously in the same person from day to day.

Granted, watermelon has a high GI score of 72, but this natural, unprocessed fruit remains a healthful food because of another factor called the "glycemic load." This factor compares a food's GI score with the amount of calories and carbs in the food. The glycemic load is a much better indicator of a food's ability to prevent or contribute to disease, since a food that has a large amount of carbs AND dramatically raises blood sugar levels obviously increases the chances of weight gain more than a food that might temporarily raise blood sugar levels, but has few calories. A low GL is associated with a lower risk for insulin resistance, metabolic syndrome, and weight gain.

Let's put this information into real terms. A potato or a corn tortilla have high glycemic scores and pack a hefty dose of carbs, while watermelon has a high GI score, but few calories or carbs. The former will increase the chances of those extra calories being funneled into fat cells, but watermelon just fills you up, without filling you out. The same can be said for other healthful foods, such as carrots. In general, a glycemic load of 10 or less is low, 11 to 19 is medium, and 20 or greater is considered high. For comparison sake, a carrot has a GL of 3.5, watermelon has a GL of 3.6, potatoes have a GL of 18, and a corn tortilla has a GL of 25.

All of this is interesting, but in reality, who wants to memorize a bunch of GI or GL scores?! That's even worse than counting fat grams and calories. In fact, nations have considered placing GI or GL information on packaged foods and decided against it, citing concerns that those claims would be misleading. Rather than obsess about the numbers, the simple guideline for eating in tune with blood sugar and waistline is to choose lots of wholesome, natural foods, such as watermelon and other fruits and vegetables, whole grains, nuts, legumes, and seafood, which automatically lower the overall GI score and keep a person healthy throughout life.

*Aziz A, Dumais L, Barber J: Health Canada's evaluation of the use of glycemic index claims on food labels. American Journal of Clinical Nutrition 2013;98:269-274.*

*Lennerz B, Alsop D, Holsen L, et al: Effects of dietary glycemic index on brain regions related to reward and craving in men. American Journal of Clinical Nutrition 2013;98:641-647.*