Favorite Five Articles From Recent Medical Journals

Few Benefits from Mammography, Yet Physicians Are Forced to Prescribe It

Effect of Screening Mammography on Breast-Cancer Mortality in Norway by Mette Kalager published in the September 23, 2010 issue of the *New England Journal of Medicine* found, "The reduction in mortality between the current and historical groups that could be attributed to screening alone was 2.4 deaths per 100,000 person-years, or a third of the total reduction of 7.2 deaths."[1] The remainder of the reduction (4.8 deaths) may have been due to an increased awareness over the past two decades of the importance of promptly seeking care for breast abnormalities and the widespread use of adjuvant hormone and chemotherapy. An accompanying editorial by H. Gilbert Welch, M.D., M.P.H made this point, "The 10-year risk of breast-cancer death for a 50-year-old woman in the United States is now about 4 per 1000 women.[2] If we assume that this risk already incorporates the benefit of screening mammography, the risk estimate without mammography would be about 4.4 per 1000 women" (a 10% relative benefit). This is an absolute benefit of 0.4 deaths per 1000 women who have routine mammograms over 10 years. In other words, 2500 women would need to have a mammogram every other year to save one life. On the side of harm, with this effort for "early detection,"1000 women would also have a false positive result and require further testing and evaluation. Even worse is the over-diagnosis problem: according to Dr. Welch, "Between 5 and 15 women would be expected to be needlessly treated for a condition that was never going to bother them, with all the accompanying harms." In other words to save one life, you essentially destroy 5 to 15 women and their families.

Comment: Failure to diagnose, or a delay in the diagnosis of breast cancer, is the second most prevalent and expensive source of litigation against physicians (exceeded only by claims related to neurologically impaired infants). As a result your doctor is likely afraid to offer a science-based prescription for screening for cancers, especially for recommendations for mammography. Doctors practice "fear-based medicine." They are afraid of being sued and they are afraid of criticism from their colleagues. Doctors worry that patients will interpret their reservation to order extensive testing as incompetence. If they do not order sufficient numbers of mammograms, their "physician's report card" will receive low marks. Medicare and health maintenance organizations (HMOs) track and measure physicians' behaviors by the number of exams they order.

Therefore, even though the science has been clear for at least two decades that the benefits of mammography as a screening method are overrated and the harms are understated, the malpractice continues. Money drives this trend. The American Cancer Society once told women, "If you haven't had a mammogram, you need more than your breasts examined." With fear mongering like this it is no wonder that this society is the world's wealthiest nonprofit organization, with a large portion of its budget coming from industries, including the pharmaceutical industries.

I recommend against routine screening mammography for women of all age groups. I also recommend against doing routine breast self-examination (as does the Canadian Task Force on Preventive Health Care and the US Preventative Services Task Force).[3,4] The reason is because these practices cause more harm than good. So how do you find out if you have breast cancer? Casual examinations (without unnecessary anxiety) performed by a woman, say while showering will suffice. If an abnormality (a lump) is found, then further investigation should be done.

In almost all cases, if this investigation leads to a diagnosis of breast cancer then the appropriate treatment is the removal of the lump only (the specimen's margins should be free of cancer). I have been recommending this approach for more than 30 years, and modern medical practices are just starting to catch up with me. In general, I do not recommend lymph node dissection, radiation, or chemotherapy. I mildly recommend hormone treatments (removal of the ovaries, tamoxifen, or aromatase inhibitors). I strongly recommend that women eat a low-fat starch-based diet, do regular exercise, and lose weight. After the initial treatment is complete, then I recommend no routine follow up doctors' visits, mammograms, or any other unnecessary meddling.

1) Kalager M, Zelen M, Langmark F, Adami HO. Effect of Screening Mammography on Breast-Cancer Mortality in Norway. *N Engl J Med.* 2010 Sep 23;363(13):1203-10.

2) Welch HG. Screening Mammography—A Long Run for a Short Slide? *N Engl J Med.* 2010 Sep 23;363(13):1276-8.

3) US Preventive Services Task Force. Screening for breast cancer: U.S. Preventive Services Task Force recommendation statement. *Ann Intern Med.* 2009 Nov 17;151(10):716-26, W-236. [http://www.annals.org/content/151/10/716.full.pdf+html]

4) Baxter N; Canadian Task Force on Preventive Health Care. Preventive health care, 2001 update: should women be routinely taught breast self-examination to screen for breast cancer? *CMAJ.* 2001 Jun 26;164(13):1837-46.

Statins Fail to Save Lives

Statins and all-cause mortality in high-risk primary prevention: a meta-analysis of 11 randomized controlled trials involving 65,229 participants by Kausik K. Ray published in the June 28, 2010 issue of the *Archives of Internal Medicine* concluded that, "This literature-based meta-analysis did not find evidence for the benefit of statin therapy on all-cause mortality in a high-risk primary prevention setup."[1] The average characteristics of the participants were: age 62 years, systolic blood pressure (top number) of 141 mmHg, and an LDL ("bad" cholesterol) of 138 mg/dL. The average length of treatment with the statin drug was 3.7 years.

An accompanying article, Cholesterol lowering, cardiovascular diseases, and the rosuvastatin-JUPITER controversy: a critical reappraisal by Michel de Lorgeril, launched the strongest critique of any medication that I have ever seen in a respected medical journal.[2] The authors made these statements about this well publicized study (JUPITER) of the cholesterol-lowering medication Crestor (rosuvastatin):

"The trial was flawed."

"The JUPITER trial involved multiple conflicts of interest."

"It was conducted by a sponsor with obvious commercial interests."

"Nine of 14 authors of the JUPITER article have financial ties to the sponsor."

"These failures strongly suggest that the presumed preventive effects of cholesterol-lowering drugs have been considerably exaggerated."

The authors also took this important position: "The emphasis on pharmaceuticals for the prevention of CHD (heart disease) diverts individual and public health attention away from the proven efficacy of adopting a healthy lifestyle, including regular physical activity, not smoking, and a Mediterranean-style diet."

Comment: Statins are among the top-selling medications worldwide. Lipitor and Crestor are the two most heavily promoted drugs in this class. The initial findings of the JUPITER study were released November 10, 2008. That day I sent you my critical report of this study. Two years later, even with all of the negative publicity, Crestor remains a solid profit generator for its maker, AstraZeneca.

Cholesterol-lowering medications do have value. Statins have been shown to reduce the risk of death among individuals with strong clinical histories of coronary heart disease: patients who have had heart attacks, angioplasties, and/or bypass surgeries. Because these patients are at a very high risk of having

another event in the very near future, benefits can be seen in this group from statins. However, for people with a lower risk of an impending heart tragedy (the average American with elevated blood cholesterol levels), cholesterol-lowering medications are so ineffective that benefits cannot be detected. Plus any benefits present may be overshadowed by the harms caused by these drugs.

The arteries, and the rest of the body, are diseased from the toxic effects of the "free" vegetable oils and animal-foods (meat, dairy, eggs, fish, etc.) consumed by affluent people. The Western diet also lacks the health-supporting ingredients found in plants that allow the body to heal and stay healthy. Cholesterol-lowering drugs do simply that: they lower blood cholesterol levels. But they do not correct the underlying disease (the atherosclerosis). The end result is that people suffer and die with better looking numbers. The sick arteries stay sick until the cause is removed. Changing to a starch-based (no-cholesterol, low-fat) diet supports the natural health and healing capabilities of the body.

1) Ray KK, Seshasai SR, Erqou S, Sever P, Jukema JW, Ford I, Sattar N. Statins and all-cause mortality in high-risk primary prevention: a meta-analysis of 11 randomized controlled trials involving 65,229 participants. *Arch Intern Med.* 2010 Jun 28;170(12):1024-31.

2) de Lorgeril M, Salen P, Abramson J, Dodin S, Hamazaki T, Kostucki W, Okuyama H, Pavy B, Rabaeus M. Cholesterol lowering, cardiovascular diseases, and the rosuvastatin-JUPITER controversy: a critical reappraisal. *Arch Intern Med*. 2010 Jun 28;170(12):1032-6.

Glucosamine and Chondroitin Do Not Help Arthritis

Effects of glucosamine, chondroitin, or placebo in patients with osteoarthritis of hip or knee: network meta-analysis by Simon Wandel, published in the September 22, 2010 issue of *the British Medical Journal* concluded, "Compared with placebo, glucosamine, chondroitin, and their combination do not reduce joint pain or have an impact on narrowing of joint space. Health authorities and health insurers should not cover the costs of these preparations, and new prescriptions to patients who have not received treatment should be discouraged."[1] They went on to say, "Our network meta-analysis of all 10 available large scale patient blind randomised trials in 3803 patients with knee or hip osteoarthritis showed no clinically relevant effect of chondroitin, glucosamine, or their combination on perceived joint pain."

Comment: The most common form of arthritis afflicting humans is osteoarthritis, often referred to as degenerative arthritis, because the joints slowly deteriorate as a result of "normal wear and tear associated with aging." Doctors commonly advise people to lose weight, especially if they have disease of the joints of the lower extremities, and to avoid prolonged and strenuous use of the affected joints. Nonsteroidal anti-inflammatory drugs (NSAIDs), such as Motrin and Advil, are commonly taken for pain relief. Paradoxically, these NSAIDs also accelerate the loss of cartilage in the joints and delay bone healing.[2,3] This then worsens the osteoarthritis.

Taking cartilage constituents, such as glucosamine and chondroitin, has been recommended for osteoarthritis, and many studies support its use. In my April 2004 newsletter I recommended glucosamine for arthritis based on the research I had available then. However, in the past six years I can recall no patients telling me of pain relief or improved mobility that they have achieved from taking this cartilage supplement. Therefore, I am changing my recommendation. Because of the low cost and few side effects, you may still wish to do your own personal trial with glucosamine, but I can no longer tell you that I believe it is beneficial. (I reserve the right to change my opinions on all medications and supplements because the research is always changing and most of it cannot be trusted as reliable in the first place. In case you are wondering, I will not be changing my opinion on the best diet for you.) I have never recommended chondroitin because it is derived from cow cartilage. This cow matter may contain infectious microbes, such as those that have been found to cause mad cow disease.[4]

The overall benefits of a healthier diet and weight loss for osteoarthritis are well established.[5] Three-

hundred and sixteen older, overweight or obese, sedentary men and women with x-ray evidence of knee osteoarthritis were randomly assigned to one of four 18-month treatments: healthy lifestyle control, diet-induced weight loss, exercise, and diet plus exercise. Those who lost weight due to an improved diet showed a decrease in inflammation measured by a variety of tests. Exercise did not seem to make a positive difference in this study.

I recommend people with osteoarthritis take very good care of their diseased joints. This means in many cases that they should avoid certain exercise. Someone with disease of their hips, knees, or ankles should not be running, and maybe should limit their walking. Instead, exercise for them should be bicycling, swimming, and/or rowing. The best diet for weight loss and overall joint health is the McDougall diet.

1) Wandel S, J¸ni P, Tendal B, N¸esch E, Villiger PM, Welton NJ, Reichenbach S, Trelle S. Effects of glucosamine, chondroitin, or placebo in patients with osteoarthritis of hip or knee: network meta-analysis. *BMJ.* 2010 Sep 16;341:c4675. doi: 10.1136/bmj.c4675.

2) Vuolteenaho K, Moilanen T, Moilanen E. Non-steroidal anti-inflammatory drugs, cyclooxygenase-2 and the bone healing process. *Basic Clin Pharmacol Toxicol*. 2008 Jan;102(1):10-4.

3) Ding C, Cicuttini F, Jones G. Do NSAIDs affect longitudinal changes in knee cartilage volume and knee cartilage defects in older adults? *Am J Med*. 2009 Sep;122(9):836-42.

4) Mad cow disease and chondroitin sulfate. *Harv Health Lett.* 2001 May;26(7):3.

5) Nicklas BJ. Diet-induced weight loss, exercise, and chronic inflammation in older, obese adults: a randomized controlled clinical trial. *Am J Clin Nutr.* 2004 Apr;79(4):544-51.

Better Moods from a Vegetarian Diet

Vegetarian diets are associated with healthy mood states: a cross-sectional study in Seventh Day Adventist adults by Bonnie L Beezhold published in the June 2010 issue of the *Nutrition Journal* found, "The vegetarian diet profile does not appear to adversely affect mood despite low intake of long-chain omega-3 fatty acids."[1] Vegetarians reported significantly less negative emotion than omnivores, as measured by two tests of emotional state: the Depression Anxiety Stress Scale (DASS), and the Profile of Mood States (POMS) questionnaires. The authors note that, "Emerging evidence suggests that fish consumption has a protective effect on mental health due to the long-chain omega-3 fatty acid content." However, vegetarians have low intakes of these omega-3 fats (EPA and DHA) because they do not eat fish, and yet were found in this study to have better moods. But vegetarians do have a high intake of the basic omega-3 fat, alpha linolenic acid (ALA), which is the precursor to all of the long chain omega-3 fats, most important being eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA).

Comment: Hardly a month goes by without a new study on fish or fish oil claiming prevention and/or cure for Alzheimer's disease, arthritis, asthma, cancer, depression, heart disease, obesity, strokes and/or elevated cholesterol and triglycerides. Many doctors, dietitians, scientists, and supplement salespersons tell you that by avoiding fish or fish oils you will risk malnutrition.

In humans, there is research that finds the conversion of ALA to EPA and DHA is small (5-17 percent conversion to EPA and 0.5-0.7 percent to DHA).[2-4] From these findings the claim is made that this is a physiological limitation that means we need to eat high quantities of elongated fats (EPA and DHA) in order to be healthy. However, this theory assumes people, and especially pregnant women, need a high rate of conversion. This is wrong—the conversion rate is sufficient for all men and women. There is no evidence of actual neurological disease (dementia) or any other deficiency condition in populations getting enough ALA (from plants) and low intake of the long chain fats, EPA and DHA, (from fish).[5-8]

To the contrary, research shows that people who never eat fish have a similar risk of developing de-

mentia, including Alzheimer's Disease, as those people who have a high fish intake (on average, one ounce, 29.6 grams, daily).[9,10] Don't be bullied into eating fish or taking fish oil by those who say you risk brain or any other health damage. The truth is avoiding these sea animals and their oil concentrates results in weight loss, lower environmental chemical consumption, and lower cholesterol, as well as many other benefits. The fish are much happier with this smarter decision, too.

1) Beezhold BL, Johnston CS, Daigle DR. Vegetarian diets are associated with healthy mood states: a cross-sectional study in Seventh Day Adventist adults. *Nutr J*. 2010 Jun 1;9:26.

2) Plourde M, Cunnane SC. Extremely limited synthesis of long chain polyunsaturates in adults: implications for their dietary essentiality and use as supplements. *Appl Physiol Nutr Metab*. 2007 Aug;32(4):619-34.

3) Tu WC, Cook-Johnson RJ, James MJ, M¸hlh‰usler BS, Gibson RA. Omega-3 long chain fatty acid synthesis is regulated more by substrate levels than gene expression. *Prostaglandins Leukot Essent Fatty Acids*. 2010 Aug;83(2):61-8.

4) Harnack K, Andersen G, Somoza V. Quantitation of alpha-linolenic acid elongation to eicosapentaenoic and docosahexaenoic acid as affected by the ratio of n6/n3 fatty acids. *Nutr Metab* (Lond). 2009 Feb 19;6:8.

5)Langdon JH. Has an aquatic diet been necessary for hominin brain evolution and functional development? *Br J Nutr.* 2006 Jul;96(1):7-17.

6) Sanders TA. DHA status of vegetarians. *Prostaglandins Leukot Essent Fatty Acids*. 2009 Aug-Sep;81(2-3):137-41.

7) http://www.nap.edu/openbook.php?record_id=10490&page=471

8) Sanders TA. Essential fatty acid requirements of vegetarians in pregnancy, lactation, and infancy. *Am J Clin Nutr.* 1999 Sep;70(3 Suppl):555S-559S.

9) Welch AA, Shakya-Shrestha S, Lentjes MA, Wareham NJ, Khaw KT. Dietary intake and status of n-3 polyunsaturated fatty acids in a population of fish-eating and non-fish-eating meat-eaters, vegetarians, and vegans and the precursor-product ratio of {alpha}-linolenic acid to long-chain n-3 polyunsaturated fatty acids: results from the EPIC-Norfolk cohort. Am J Clin Nutr. 2010 Sep 22. [Epub ahead of print]

10) Krˆger E, Verreault R, Carmichael PH, Lindsay J, Julien P, Dewailly E, Ayotte P, Laurin D. Omega-3 fatty acids and risk of dementia: the Canadian Study of Health and Aging. *Am J Clin Nutr.* 2009 Jul;90(1):184-92.

11) Devore EE, Grodstein F, van Rooij FJ, Hofman A, Rosner B, Stampfer MJ, Witteman JC, Breteler MM. Dietary intake of fish and omega-3 fatty acids in relation to long-term dementia risk. *Am J Clin Nutr.* 2009 Jul;90(1):170-6.

Calcium Supplements Are Harmful

Effect of calcium supplements on risk of myocardial infarction and cardiovascular events: meta-analysis by Mark J Bolland published in the July 2010 issue of the *British Medical Journal* found, "Calcium supplements (without coadministered vitamin D) are associated with an increased risk of myocardial infarction. As calcium supplements are widely used these modest increases in risk of cardiovascular disease might translate into a large burden of disease in the population. A reassessment of the role of calcium supplements in the management of osteoporosis is warranted."[1] This analysis consisted of 12,000 par-

ticipants from 11 randomized controlled trials. Calcium supplements were associated with about a 30% relative increase in the incidence of myocardial infarction and small increases in the risk of stroke and overall mortality. The authors' simplified summary of the effects was, "treatment of 1000 people with calcium for five years would cause an additional 14 myocardial infarctions, 10 strokes, and 13 deaths, and prevent 26 fractures."

Comment: Calcium supplements, given alone, improve bone mineral density, but have little benefit in reducing the risk of fractures and might even increase the risk of fractures.[2,3] Likely any benefits that they do provide are because of the alkalinizing effects of the supplement.[4] For example, a commonly consumed supplement for bone health is the antacid TUMS, which is calcium carbonate. Rather than the benefits coming from the calcium (the cation), they are from the carbonate (the anion). The carbonate neutralizes the loads of dietary acids that are consumed from the Western diet in the form of meats, poultry, fish, and cheese. These dietary acids would, if not for the antacid supplement, dissolve the bones (to release alkaline materials) and eventually cause osteoporosis. Other antacids, without calcium, such a sodium bicarbonate and aluminum hydroxide, would have similar benefits on neutralizing dietary acids and preventing bone loss.

In addition to being ineffective for preventing fractures, this study suggests taking calcium supplements would increase your risk of disease and death. There is no plausible explanation for why this would occur; however, there is circumstantial evidence that this may be the case. Primary hyperparathyroidism, a condition in which serum calcium levels are raised, is associated with an increased risk of cardiovascular events and death. Most concerning is the finding that calcium supplements accelerate blood vessel calcification and increase mortality in patients with renal failure.[5-7]

Certainly, taking isolated concentrated minerals, such as calcium, creates physiological imbalances in the body. Immediately after consuming calcium supplements the calcium in the blood increases. Thereafter, the body must adjust to this large burden of minerals. One of the adverse effects appears to be artery damage. Multiple studies have demonstrated taking isolated concentrated nutrients, such as vitamins (beta-carotene, folic acid, and vitamin E), increases the risk of cancer, heart disease, and death. Just to be on the safe side, my recommendation is to consume calcium only from its most natural sources: plants. (Calcium originates in the ground, and then is taken up by various plants. Cows and people get their calcium from plants.)

1) Bolland MJ, Avenell A, Baron JA, Grey A, MacLennan GS, Gamble GD, Reid IR. Effect of calcium supplements on risk of myocardial infarction and cardiovascular events: meta-analysis. *BMJ.* 2010 Jul 29;341:c3691. doi: 10.1136/bmj.c3691 [http://www.bmj.com/content/341/bmj.c3691.long]

2. Tang BM, Eslick GD, Nowson C, Smith C, Bensoussan A. Use of calcium or calcium in combination with vitamin D supplementation to prevent fractures and bone loss in people aged 50 years and older: a meta-analysis. *Lancet.* 2007 Aug 25;370(9588):657-66.

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6) Block GA, Raggi P, Bellasi A, Kooienga L, Spiegel DM. Mortality effect of coronary calcification and phosphate binder choice in incident hemodialysis patients. *Kidney Int.* 2007;71:438-41.

7) Russo D, Miranda I, Ruocco C, Battaglia Y, Buonanno E, Manzi S, et al. The progression of coronary artery calcification in predialysis patients on calcium carbonate or sevelamer. *Kidney Int.* 2007;72:1255-61.