



McDougall Newsletter

Volume 6 Issue 3

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When Friends Ask: "Why Don't You Drink Milk?"

Nutritionally speaking, dairy foods are essentially "liquid meats"—but worse, because people drink milk, and eat cheese, guiltlessly—often thinking "milk makes my bones unbreakable, helps me lose weight, and makes my skin as soft and beautiful as a baby's tush." In their haste to sell products, the dairy industry has created an obsession over calcium that has become, in effect, a major contributor to the suffering and death of more than one billion people annually on Planet Earth from diseases of overnutrition—obesity, heart disease, stroke, arthritis, and diabetes.

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Defending the McDougall Diet—If I Must

Headlines are made worldwide when a study is published that suggests people can continue to indulge in lobster drawn in butter, bloody-raw tri-tip beefsteaks, and crispy fried cheese. How can a single study be so convincing? The answer is simple: People love to hear good news about their bad habits. "Now I don't have to eat more vegetables."

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Report on the "Amazing" Costa Rica Trip

When people try to describe their time with us this past February 2007 on the Pacific Coast of Costa Rica most exclaim "amazing." Arranging such a diversity of experiences would be beyond the wildest dreams for most people. Travelers found themselves face to face with giant mantas, whales, tropical fish, bats, iguanas, butterflies, and a variety of monkeys while river rafting, horseback riding, wagon riding, kayaking, motor boating, walking, and swinging through the treetops—all in 7 days. Plus, they were not once confronted with "the food challenge."

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Featured Recipes

- **Cheezy Baked Macaroni**
- **Hash Browns**
- **Fat Free Golden Gravy**
- **Walnut Dressing**
- **Festive Dal Soup**
- **Mediterranean Garbanzos**

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Unprecedented Spring Sale for McDougall DVDs

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When Friends Ask: "Why Don't You Drink Milk?"

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In the late 1970s when I was developing the McDougall Diet—after reading the bulk of the nutritional science published since the early 1900s—I came to the conclusion that starches, vegetables and fruits were ideal for human nutrition. I then asked myself, what would be gained and lost by adding other food categories (dairy, meats, poultry, fish, free-oils, sugars, etc.) to this elemental foundation? In the case of dairy foods, I quickly eliminated the "calcium advantage" because Nature packaged her foods so efficiently that developing a disease due to calcium deficiency is nearly impossible on a diet of plant foods (See last month's newsletter—February 2007).

After almost three years of exhaustive research I concluded: adding dairy foods to my original plant-food-based diet would only supply more calories, fat, animal protein, cholesterol, sodium, microbes, and chemical contamination—ingredients that were making most of my patients ill in the first place. In the final analysis, I found myself unable to discover any reasons to add dairy into the McDougall Diet—the hazards weighed heavily and any benefits were overstated, or blatantly falsified. Yet the drone from the dairy industry's propaganda continues three decades later. I am the uncommon voice out there in the wilderness; people tired of listening without questioning will find my analysis of some of the dairy industry's most familiar messages refreshing.

Dairy Products Taste Delicious—Actually the Additives Do

The National Dairy Council refers to their products as "Nutritious and Delicious." Undoubtedly, consumers love ice cream, cheese, yogurt, and butter. But the reason is, they are loaded with sugar and salt; otherwise no one would eat them. The National Dairy Council knows the importance of adding sugar and other flavorings, reporting, "Studies show that elementary school kids drink 28 percent more milk when offered in "cool" flavors and packages."¹ When I was a child, my school required all students to drink milk daily. A small carton of white milk was 2 cents and chocolate was 3 cents. I always splurged, because I gagged from the taste of white milk. The reason plain milk is at all palatable is because it naturally contains about 30% of its calories as sugar (lactose). Chocolate, strawberry, and other flavored milks contain additional sugar. The more sugar, the greater the attraction to dairy; witness ice cream with 52% of the calories as sugar.

My patients taught me how really disgusting basic dairy foods taste. During my residence training in the mid-1970s, I cared for people with kidney failure, who were required to be on very salt-restricted diets. One of my duties was to recommend they eat salt-less butter and salt-less cheese. Their response was, "Doc, I can't eat a glob of greasy lard." Without the salt, these yellow blocks of fat are unpalatable.

	Sodium: mg/100 calories	Sugar: grams/100 calories
Whole milk	80	8
Chocolate milk	72	12
Yogurt (plain)	76	8
Yogurt (fruit flavor)	53	17
Chocolate ice cream	35	13
Cheese (American)	383	1
Cheese (cheddar)	144	0
Cottage cheese (1%)	560	4
Butter (regular)	114	0
Unsalted butter	0	0

Adding salt and/or sugar to enhance the taste of potatoes, beans, rice, vegetables and fruits would be a much healthier and tastier choice, rather than mixing it with all that fat found in dairy products.

Dairy Products Build Bones - Actually They Damage Them, Too

The National Dairy Council writes, "A large body of scientific research collected in recent decades demonstrates that an adequate intake of nutrients (e.g., calcium) from dairy foods such as milk, cheese, or yogurt positively affects bone health by increasing bone acquisition during growth, slowing age-related bone loss, and reducing osteoporotic fragility fractures."² The truth is dairy products *can* have bone-growth-stimulating effects.

The primary biologic purpose of cow's milk is to cause growth—from a 60 pound calf to a 600 pound cow in less than 8 months. This "miracle-grow" fluid has several qualities that help accomplish this feat. Cow's milk is 50% fat, providing 600 "growth-supporting" calories per quart.³ Cow's milk also has high concentrations of protein, potassium, sodium, calcium, and other nutrients to sustain rapid growth. (In comparison, these nutrients are at a three to four times lower concentration in human milk than cow's milk.³)

Dairy foods increase growth hormones: In addition to calories and nutrients to support growth, cow's milk increases hormones that directly stimulate the growth of the calf. The most powerful of these hormones is called *insulin-like growth factor-1 (IGF-1)*. When cow's milk is fed to people, IGF-1 levels also increase. Studies funded by the dairy industry show a 10% increase in IGF-1 levels in adolescent girls from one pint daily and the same 10% increase for postmenopausal women from 3 servings per day of nonfat milk or 1% milk.^{4,5} This rise in IGF-1 level is an important reason for the "bone-building" effects of cow's milk.

IGF-1 promotes undesirable growth too—like cancer growth and accelerated aging. IGF-1 is one of the most powerful promoters of cancer growth ever discovered for cancers of the breast, prostate, lung, and colon.⁶ Overstimulation of growth by IGF-1 leads to premature aging too—and reducing

IGF-1 levels is “anti-aging.”⁷

Dairy Foods Raise Estrogen: The message that estrogen builds fracture-resistant bones (prevents osteoporosis) has been hammered into women’s minds over the past 4 decades by the pharmaceutical industry, selling HRT formulas, such as Premarin and Prempro. Food also raises estrogen levels in a person’s body—and dairy foods account for about 60 to 70% of the estrogen that comes from food.⁸ The main source of this estrogen is the modern factory farming practice of continuously milking cows throughout pregnancy.^{8,9} As gestation progresses the estrogen content of milk increases from 15 pg/ml to 1000 pg/ml.

Estrogen (estrone) production

Non-pregnant:	15 pg/ml
First half of pregnancy:	151 pg/ml
Last days of pregnancy:	1000 pg/ml

Well-recognized consequences of excess estrogen are cancers of the breast, uterus, and prostate.

The overall effect of the Western diet is bone damage: The National Dairy Council would like you to believe, “There is no evidence that protein-rich foods such as dairy foods adversely impact calcium balance or bone health.”¹⁰ But these same dairy people know this is untrue and they state elsewhere, “Excess dietary protein, particularly purified proteins, increases urinary calcium excretion. This calcium loss could potentially cause negative calcium balance, leading to bone loss and osteoporosis. These effects have been attributed to an increased endogenous acid load created by the metabolism of protein, which requires neutralization by alkaline salts of calcium from bone.”¹¹

Thus, dairy products have bone-building effects—IGF-1 and estrogen; and bone-destroying effects—dietary acid and protein. The net result depends upon the final balance of these accumulative effects. (Note that calcium consumed results in little of either a positive or a negative change for the health of the bones. See the February 2007 McDougall Newsletter for details). A common practice of researchers designing studies to show dairy is beneficial to bone health is to first neutralize the dietary acids with lots of fruits and vegetables or add antacids (like Citracal) to the experiment.¹² By this means, the positive effects, like bone growth stimulation from IGF-1, will dominate.

Consistently, when populations of people who eat different diets are compared, rates of hip fractures increase with increasing animal protein consumption (including dairy products). For example, people from the USA, Canada, Norway, Sweden, Australia, and New Zealand have the highest rates of osteoporosis.^{14,15} The lowest rates are among people who eat the fewest animal-derived foods (these people are also on lower calcium diets)—like the people from rural Asia and rural Africa.^{14,15} Dietary protein correlates directly with the dietary acids consumed.

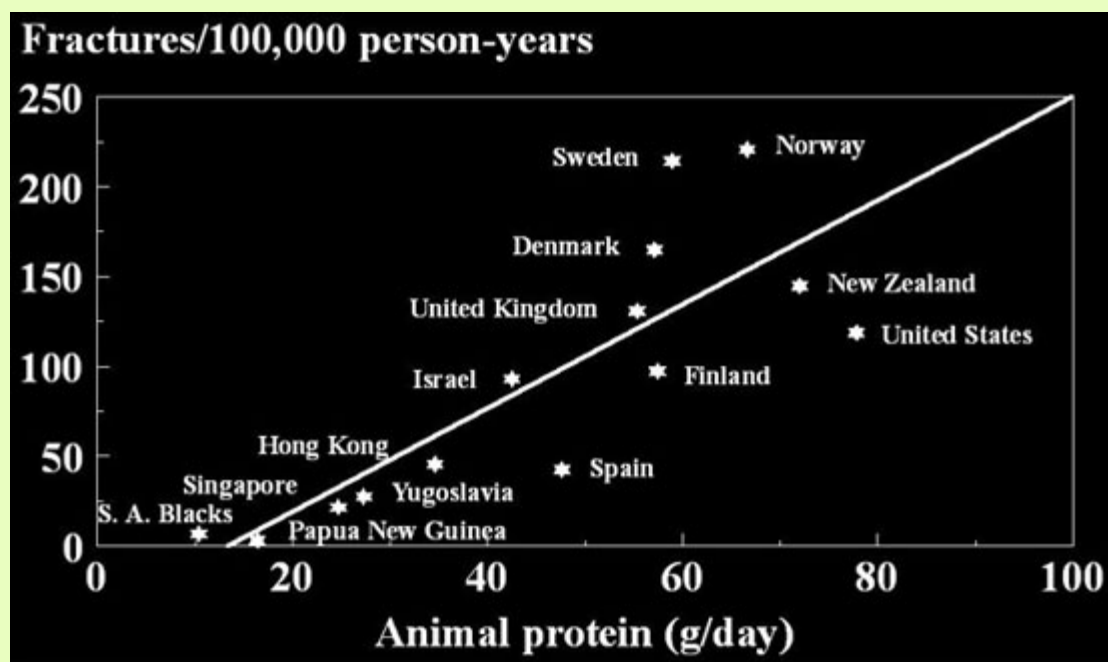
Compare the acid load of various foods:^{3,13}

Please Notice: The Dairy Industry
Sells High-Acid Cheese for Bone
Health—Watch Their
Advertisements

(Renal Acid Load per 100 calories)

Cheddar Cheese	10.0
Fish (Cod)	9.3
Chicken	7.0
Beef	6.3
Peas	1.0
Wheat flour	1.0
Potato	-5.0
Apples	-5.0
Banana	-6.0
Tomatoes	-18.0
Spinach	-56.0

(A positive value indicates acidic, whereas a negative value indicates alkaline.)



This incontestable evidence shows the more protein a population consumes the greater the risk of hip fractures.^{14,15}

Dairy Products Make People Trim—That's Not What They Tell Each Other

The National Dairy Council writes, "A growing body of research indicates that enjoying 3-A-Day of Dairy as part of a reduced calorie diet can give adults better results when it comes to trimming the waistline than cutting calories alone."¹⁶

The dairy industry promotes dairy consumption for weight loss, even though they know their campaign is false. Consider the conclusion of a review article they funded that was published in a 2003 issue of the *Journal of Nutrition*, "Nine studies of dairy product supplementation were located: In seven, no significant differences in the change in body weight or composition were detected between treatment and control groups. However, two studies conducted in older adults observed significantly greater weight gain in the dairy product groups."¹⁷ At the *Dairy Product Components and Weight Regulation Symposium* held on April 21, 2002 in New Orleans, LA. Dr. Susan Barr (who frequently works for the dairy industry), said "In conclusion, the data available from randomized trials of dairy product or calcium supplementation provide little support for an effect in reducing body weight or fat mass."¹⁷ See, they know the truth, but fail to share it with the customers. Research published since this review has been supported largely by the dairy industry and fabricated to support their profitable weight loss campaign.

Recommending Dairy is Racist

The National Dairy Council says, "Minorities who have experienced gastrointestinal problems consuming milk are learning new strategies to enjoy milk and other dairy foods. This means that minorities (and non-minorities) with lactose intolerance no longer need to miss out on essential nutrients provided by dairy foods. The health consequences of avoiding dairy foods, the major source of dietary calcium, may be especially serious for African Americans, Hispanics, Asians, and Native American Indians. Many minorities are at high risk of hypertension, stroke, colon cancer, and osteoporosis

– diseases in which a low calcium intake can be a contributing factor.”¹⁸ This is fear-mongering at its worst.

White people have a high tolerance for the sugar found in milk, known as lactose. Non-whites commonly have a normal, natural “intolerance” to milk sugars, and such sugars consumed after the weaning-time cause them intestinal distress with flatulence, cramps and diarrhea. Milk makes 60 to 90 percent of these people sick.

An editorial from the October 2006 issue of the *British Medical Journal* addresses this, “Furthermore, we need to ask the question of whether we are doing children a disservice by encouraging them to meet recommendations. Childhood obesity is on the rise in westernized countries, and dairy products—the main source of calcium recommended by nutrition guidelines—contribute greatly to the intake of fat and sugar in children. Nearly three quarters of the world's population are estimated to be lactose intolerant after the age of weaning and therefore do not tolerate the consumption of milk and other dairy products well. In addition, some studies suggest that the consumption of cow's milk increases the risk of some types of cancer.”¹⁹ Dairy products do essentially nothing to help prevent or treat hypertension either—at best, a review funded by the dairy industry showed a reduction of 1.44 mmHg systolic and 0.84 mmHg diastolic.²⁰ (By comparison, our results from the McDougall residential center show a 23/14 mmHg decrease in blood pressure in people with high blood pressure (150/90 mmHg or greater) in less than 10 days; and almost all of these people were taken off all of their blood pressure medication during the 10 days.)

Dairy foods are high in calories, fat and cholesterol; contributing to the cause of heart disease, strokes, type-2 diabetes, and obesity. They are high on the food chain so they accumulate, in sometimes dangerous amounts, environmental chemicals. Dairy protein is the number one cause of food allergies and can cause more serious forms of “food allergy” called autoimmune diseases. Dairy products are also known to be infected with life-threatening microbes, including E. Coli, listeria, salmonella, staphylococci, tuberculosis, bovine leukemia viruses, and bovine AIDS viruses. A more complete discussion of the hazards of cow's milk is found in my May 2003 newsletter article, “Marketing Milk and Disease.”

The Dairy Industry Remains Unaccountable

Because of their financial power and political connections, the people in the dairy industry can say whatever they want and no one can stop them. Questioning consumers, however, might ask themselves, “Why are humans the only animals that drink milk of another species, and continue to drink it after normal weaning-time?” And “Why would Nature (or our Creator) design us so that in order to get a necessary nutrient, calcium, we must risk our lives?”

With a \$206.5 million annual budget dedicated to confusing people and covering up the truth for the sake of profits, and with the current political climate, there is no hope of regulating the dairy industry—or more appropriately for such a hazardous substance, outlawing these cow products for human consumption.²¹ Fortunately, thinking people are freeing themselves and their families from sickness and obesity by learning that human nutritional needs are far removed from those of baby cows.

References:

1) Add flavorings to milk:

http://www.nationaldairycouncil.org/nationaldairycouncil/health/materials/Wanted_Stronger_Bones.pdf

2) Dairy positively affects bone health by:

<http://www.nationaldairycouncil.org/NationalDairyCouncil/Health/Digest/dcd75-3Page1.htm>

3) J Pennington. Bowes & Church's Food Values of Portions Commonly Used. 17th Ed. Lippincott. Philadelphia- New York. 1998.

- 4) [Cadogan J, Eastell R, Jones N, Barker ME.](#) Milk intake and bone mineral acquisition in adolescent girls: randomised, controlled intervention trial. *BMJ*. 1997 Nov 15;315(7118):1255-60.
- 5) [Heaney RP, McCarron DA, Dawson-Hughes B, Oparil S, Berga SL, Stern JS, Barr SI, Rosen CJ.](#) Dietary changes favorably affect bone remodeling in older adults. *J Am Diet Assoc*. 1999 Oct;99(10):1228-33.
- 6) [Moschos SJ, Mantzoros CS.](#) The role of the IGF system in cancer: from basic to clinical studies and clinical applications. *Oncology*. 2002;63(4):317-32.
- 7) [Rincon M, Rudin E, Barzilai N.](#) The insulin/IGF-1 signaling in mammals and its relevance to human longevity. *Exp Gerontol*. 2005 Nov;40(11):873-7.
- 8) Sharpe R. Are oestrogens involved in falling sperm counts and disorders of the male reproductive tract? *Lancet* 341:1392, 1993.
- 9) Janowski T. Mammary secretion of oestrogens in the cow. *Domest Anim Endocrinol*. 2002 Jul;23(1-2):125-37.
- 10) No evidence dairy foods adversely impact calcium balance or bone health:
<http://www.nationaldairycouncil.org/NationalDairyCouncil/Health/Digest/dcd69-1Page1.htm>
- 11) Excess dietary protein, particularly purified proteins:
<http://www.nationaldairycouncil.org/NationalDairyCouncil/Health/Digest/dcd74-5Page1.htm>
- 12) New SA. Calcium, protein, and fruit and vegetables as dietary determinants of bone health. *Am J Clin Nutr*. 2003 May;77(5):1340-1.
- 13)) Remer T. Potential renal acid load of foods and its influence on urine pH. *J Am Diet Assoc*. 1995 Jul;95(7):791-7.
- 14) Abelow B. Cross-cultural association between dietary animal protein and hip fracture: a hypothesis. *Calcific Tissue Int* 50:14-8, 1992.
- 15) Frassetto LA . Worldwide incidence of hip fracture in elderly women: relation to consumption of animal and vegetable foods. *J Gerontol A Biol Sci Med Sci*. 2000 Oct;55(10):M585-92.
- 16) 3-A-Day of Dairy as part of a reduced calorie diet:
<http://www.nationaldairycouncil.org/nationaldairycouncil/healthyweight>
- 17) [Barr SI.](#) Increased dairy product or calcium intake: is body weight or composition affected in humans? *J Nutr*. 2003 Jan;133(1):245S-248S.
- 18) Minorities who have experienced gastrointestinal problems:
<http://www.nationaldairycouncil.org/nationaldairycouncil/nutrition/lactose/lactoseIntolerance.pdf>
- 19) Lanou AJ. Bone health in children. *BMJ*. 2006 Oct 14;333(7572):763-4.
- 20) [Griffith LE, Guyatt GH, Cook RJ, Bucher HC, Cook DJ.](#) The influence of dietary and nondietary calcium supplementation on blood pressure: an updated metaanalysis of randomized controlled trials. *Am J Hypertens*. 1999 Jan;12(1 Pt 1):84-92.
- 21) Dairy Industry Spends 206.5 million: <http://www.dairycheckoff.com/NR/rdonlyres/>

Defending the McDougall Diet—If I Must

Headlines are made worldwide when a study is published that suggests people can continue to indulge in lobster drawn in butter, bloody-raw tri-tip beefsteaks, and crispy fried cheese. How can a single study be so convincing? The answer is simple: People love to hear good news about their bad habits. "Now I don't have to eat more vegetables."

Those of us who follow a healthy diet and have experienced the benefits know the truth. What is disturbing to me, and must be to you, is how intelligent researchers can come to conclusions so contrary to ours. Money is at the root of many of these studies, but often there is no apparent financial conflict of interest. The dinner table is a common source of confusion. Even the most honest scientific researchers are befuddled when in their right hand they hold a forkful of bacon and eggs and in their left hand they hold a study saying heart disease is caused by eating foods high in cholesterol and fat. Subconsciously, their right to gluttonous eating is defended at all costs—even in the design and interpretation of their research. From experience, most of us know how threatened people become over a vegetarian (vegan) diet.

So how do I really feel about research appearing as national headlines that contradicts my beliefs and findings? I love it! Finally, these subjects are being discussed. Throughout my career, my enemy has been being ignored. I have been silenced by shunning. Now, attention given to these matters of human nutrition will bring the facts to light and they can be debated. Eventually, the truth will be known and commonly practiced.

In the past few weeks three headline-grabbers have gained worldwide attention. Each one deserves consideration, but their overall findings do not change the bulk of the scientific research, common sense, and what I have taught for the past four decades. Allow me to explain these studies and give you my viewpoint.

Vegans Have More Fractures

Comparative fracture risk in vegetarians and nonvegetarians in EPIC-Oxford by Paul N Appleby published in the *European Journal of Clinical Nutrition* found a 30% increased risk of fractures in vegans compared to people following other diets and concluded, "In this population, fracture risk was similar for meat eaters, fish eaters and vegetarians. The higher fracture risk in the vegans appeared to be a consequence of their considerably lower mean calcium intake."¹

Meat eaters were the fattest (the highest mean BMI) and tended to be the least active group, with vegans having the lowest mean BMI and reported the highest levels of walking, cycling and vigorous exercise. The causes of the fractures for all groups were falls, traffic accidents, other accidents, and unspecified or multiple causes. More than 70% of the fractures were caused by a fall. The most common fracture sites were wrist/arm and ankle. Current use of hormones (HRT) was highest in the female meat eaters. The difference in age between the meat eaters and vegans was nearly 11 years, with the vegans younger.

For vegan subjects who consumed at least 525 mg/day calcium, there was no increase in fractures rates. As a result, the authors suggested vegans should consume for extra calcium more almonds, sesame seeds, tahini (sesame paste), calcium-set tofu, calcium-fortified drinks and low-oxalate leafy green vegetables, such as kale.

Additional Information directly from the authors:

I communicated with one of the lead authors, Tim Key, about this well-publicized study.

Dear Dr. McDougall,

Thank you for your e-mail and interest in our recent paper. Paul (Appleby) and I have just discussed your questions. As you point out, the optimal intake of calcium for preventing fractures has been controversial and the evidence is somewhat conflicting. In our data, the only nutrient clearly associated with fracture risk is calcium, with a high risk among people with an intake below the UK EAR of 525 mg/d. In the current paper, the vegans eating at least 525 mg/d of calcium did not have an increase in fracture risk (risk ratio 1.00). The calcium comes from a range of foods and it is hard to single out any particular foods as the major sources for vegans (in contrast to non-vegans where dairy products are the major source). We don't think that our results should be taken as an argument to eat dairy products; simply that vegans do need to eat enough calcium. Would you agree with the UK EAR of 525 mg/d as a reasonable minimum?

With best wishes, Tim Key

In another communication, Mr. Key felt his research methods accounted for the differences in age, HRT use, and activity. He wrote, "The fact that we saw no increase in fracture risk in vegans with calcium of at least 525 suggests that this is likely to be the explanation for the overall findings...For physical activity the measurements are not as good, and vegans did report more activity which increases the risk for accidents, but we have adjusted for this as well as we can."

I asked Mr. Key, "In general, how do you explain your findings in face of world population data showing populations worldwide with the lowest calcium intakes have the fewest fractures – and the exact opposite results for protein?^{2,3} His answer was, "As you know this is complex and controversial. The ecological comparisons need to consider other factors too, like vitamin D, height, weight, environment, completeness of statistics, and weight-bearing physical activity."

Comments:

The reason I believe this study found more fractures in the vegan group is these healthier, younger people were far more active and as a result sustained more injuries. Their increased physical activity leading to more fractures is noted by the fact that they were on average 11 years younger, were less fat (lower BMI), and were reported to walk, cycle and do other vigorous activities more than the meat, fish, and dairy groups.

The most serious kind of fracture caused by weak bones (osteoporosis) is a broken hip. In this study the vegans had no hip fractures, compared to 30 in the meat eaters, 9 in the fish eaters, and 14 in the vegetarians (dairy). The observation that the fractures were of the wrist, arm, and ankle, and not the hip, to me, means the fractures were due to trauma caused by physical activity and not due to weakened bones.

The average intake of calcium for the vegans was 603 mg/day for men and 586 mg/day for women—these levels exceeded those intakes of populations where osteoporosis is rare to unknown—like in rural Asian and African populations where intakes are commonly 400 to 500 mg daily.^{2,3} Since the vegans frequently participated in outdoor activities it is highly unlikely they had any deficiency of vitamin D—made from sunlight.

The conclusion of this study that the lack of calcium was the reason for the increased fractures in the vegans is in direct conflict with the bulk of the scientific research.⁴ For example, results of two excellent studies reported in 2006 in leading medical journals found no reduction in fractures following the use of large doses of calcium supplements.^{5,6} In the Women's Health Initiative study of 36,282 postmenopausal women taking 1000 mg of calcium daily, and in a double-blind, placebo-controlled study of elderly women receiving an extra 1200 mg of calcium daily, fractures were not prevented by even these extraordinary intakes.

In contrast to these studies, and most others, on the lack of influence of calcium intake on fracture risk, the authors of this study conclude calcium is the problem and this is based on findings in only 74 people with fractures following a vegan diet. You should be asking, how could such meager and contradictory evidence be so influential? Answer: People love to hear good news about their bad habits.

- 1) [Appleby P, Roddam A, Allen N, Key T.](#) Comparative fracture risk in vegetarians and nonvegetarians in EPIC-Oxford. *Eur J Clin Nutr.* 2007 Feb 7; [Epub ahead of print]
- 2) Abelow B. Cross-cultural association between dietary animal protein and hip fracture: a hypothesis. *Calcific Tissue Int* 50:14-8, 1992.
- 3) Frassetto LA . Worldwide incidence of hip fracture in elderly women: relation to consumption of animal and vegetable foods. *J Gerontol A Biol Sci Med Sci.* 2000 Oct;55(10):M585-92.
- 4) Lanou AJ. Bone health in children. *BMJ.* 2006 Oct 14;333(7572):763-4.
- 5) [Wactawski-Wende J, Kotchen JM, Anderson GL, Assaf AR, Brunner RL, O'Sullivan MJ, Margolis KL,](#) et al. Calcium plus vitamin D supplementation and the risk of fractures. *N Engl J Med.* 2006 Feb 16;354(7):669-83.
- 6) [Prince RL, Devine A, Dhaliwal SS, Dick IM.](#) Effects of calcium supplementation on clinical fracture and bone structure: results of a 5-year, double-blind, placebo-controlled trial in elderly women. *Arch Intern Med.* 2006 Apr 24;166(8):869-75.

Atkins Is Better Than Ornish, Stanford Study Says

Comparison of the Atkins, Zone, Ornish, and LEARN diets for change in weight and related risk factors among overweight premenopausal women: the A TO Z* Weight Loss Study: a randomized trial by Christopher Gardner in the March 7, 2007 issue of the *Journal of the American Medical Association* found, 'In this study, premenopausal overweight and obese women assigned to follow the Atkins diet, which had the lowest carbohydrate intake, lost more weight and experienced more favorable overall metabolic effects at 12 months than women assigned to follow the Zone, Ornish, or LEARN diets.¹ While questions remain about long-term effects and mechanisms, a low-carbohydrate, high-protein, high-fat diet may be considered a feasible alternative recommendation for weight loss.'

*The "A to Z" stands for the four diets investigated: Atkins, Traditional (LEARN), Ornish, and Zone.

This twelve-month randomized trial was conducted in the United States from February 2003 to October 2005 among 311 free-living, overweight or obese, nondiabetic, premenopausal women, who were divided into four equal groups. Participants were recruited from the community by media (like the newspaper) advertisements. They were given one of four books: *Dr. Atkins' Diet Revolution*, *Enter the Zone*, *The LEARN Manual for Weight Management*, *Eat More, Weigh Less*. Each group attended a one hour weekly class headed by a dietitian for eight weeks. The Zone and the LEARN diets had specific goals for calorie restriction, while the Atkins and Ornish groups had no specific energy restriction goals. The weight losses after one year were Atkins 10.3 pounds (-4.7 kg), Zone 3.5 pounds (-1.6 kg), LEARN 5.7 pounds (-2.6 kg), and Ornish 4.8 pounds (-2.2 kg). For me, a 3 to 10 pound weight loss for overweight and obese women after a year of dieting is not very impressive.

Comments:

Twenty-four years ago, when I started windsurfing, 500,000 more people worldwide were sailors than there are today. Why is the popularity of this sport falling when it provides an unsurpassed adrenaline rush of traveling 32 miles per hour across the water's surface while standing on a two-inch thick foam board? The answer is: the learning curve is huge. I remember how it took me six agonizing days before I got my first ride. Once past the difficulty of learning days, windsurfing has meant 24 years of fun

and great exercise for me.

Whether or not someone follows a diet depends upon how easy it is to learn. The Atkins Diet is the easiest to follow—you simply drive by a fast food window, order a burger, throw away the bun, and scrape off the pickles and ketchup, and you're on the diet. The Ornish (like the McDougall Diet) is much harder to learn. The foods are unfamiliar. They can take time and effort to prepare. The social stigma associated with being a vegetarian is daunting. With such a steep learning curve few people succeed. This conclusion is substantiated by the observation that at 12 months the group on the Ornish diet (a diet of 10% of the calories as fat) was actually consuming 29.8% fat.

So what this study really means is changing eating habits is difficult and the majority of people are unwilling or unable to make meaningful dietary changes for any length of time. We need no more studies like this one to remind us of the fact that "diets fail" for most people—but not for everyone. How about for those people who have gotten past the learning phase and adopted a diet for a lifetime? I, for example, have discovered that a healthy plant-food based diet is the most delicious and the healthiest way to eat (kind of like windsurfing is a really fun exercise).

Studies of successful dieters needed

What we now need are studies that look at the long-term results for people who do follow various diets. (It may be difficult to find people who follow low carbohydrate diets long-term. Atkins, himself, could not follow his own recommendations—when he died he was reported to be obese with heart and artery disease.²)

The first place food affects the body is the bowels. Future investigations need to report the results of the effects of a McDougall-Ornish type diet and the Atkins Diet on bowel movements. In his own research Robert Atkins reported 70% of people following his diet are constipated.³ Anyone following the McDougall Diet knows the effects on bowel movements (often 3 times daily, easy to pass, and large).

Next investigators should look at calcium balance and see what happens to the bones on these high-protein, high-acid diets, like Atkins, the Zone, and South Beach. As a first phase, this can be simply done by measuring the amount of calcium excreted in the urine over 24 hours. Research consistently shows that a decrease in animal protein decreases loss of calcium from the bones into the urine.⁴ Next biochemical markers of bone turnover can be measured in the urine. These reflect the rate at which bone material is being lost. High protein diets have been shown to increase bone turnover based on these markers.⁵

Decreases in blood sugar, cholesterol, and triglycerides have been found with the Atkins Diet, but these changes are a result of suppression of appetite, followed by semi-starvation, which are the underlying mechanisms of this ketogenic diet. Similar blood chemistry results can be accomplished by giving patients cancer chemotherapy, which causes them to lose their appetite and starve—the same as the Atkins Diet.⁶

Rather than checking risk factors, like cholesterol and triglycerides, more direct measurements of the effect of diet on the heart and blood vessels needs to be made. For example, a relevant measure would be the compliance of the artery walls, which is determined by ultrasound measurements over the ascending aorta (the large artery leading from the heart) and the right carotid artery (neck). Previous results show a 27% decrease in arterial compliance after a single meal consisting of 67% of the calories as fat.⁷ Reduction in blood flow in the heart arteries is also seen after one high-fat meal by use of a PET scan.⁸ Immediate effects of a single high-fat meal can be seen by a visual examination of the eye (conjunctival capillaries) and the oxygen content of the arterial blood. Research has shown that a diet high in fat (67% of the calories) fed to people causes the circulation in the eye to visually sludge, along with a decrease in the oxygen content of the blood by 20%.^{9,10}

Long-term effects on the heart arteries would require months and years to assess. Reversal of atherosclerosis has been demonstrated by angiograms and PET scans after following the Ornish Diet for 12 months and longer.¹¹ The only study of patients on the Atkins Diet has shown a worsening of blood flow at one year from all that saturated fat and cholesterol with an overall cumulative progression of artery disease (atherosclerosis) of 39.7%.¹²

I believe the trend has shifted away from the popularity of high-protein diets of the 90s and the first half of this decade. People have tried to lose weight eating all meat and cheese—they felt sick and were constipated, and their weight loss was temporary and trivial. In addition, we are learning that one of the planet's greatest sources of pollution is livestock—so even if these high animal-food diets were good for humans—and they are not—they are undeniably killing our planet.

1) Christopher D. Gardner; Alexandre Kiazand; Sofiya Alhassan; Soowon Kim; Randall S. Stafford; Raymond R. Balise; Helena C. Kraemer; Abby C. King. Comparison of the Atkins, Zone, Ornish, and LEARN Diets for Change in Weight and Related Risk Factors Among Overweight Premenopausal Women: The A TO Z Weight Loss Study: A Randomized Trial. *JAMA*. 2007;297:969-977.

2) McDougall Newsletter. Atkins Was Grossly Overweight and Sick– But the Media Loves the Dead Guy. February 2004.

3) Yancy WS Jr, Olsen MK, Guyton JR, Bakst RP, Westman EC. A Low-Carbohydrate, Ketogenic Diet versus a Low-Fat Diet To Treat Obesity and Hyperlipidemia: A Randomized, Controlled Trial. *Ann Intern Med*. 2004 May 18;140(10):769-777.

4) [Giannini S, Nobile M, Sartori L, Dalle Carbonare L, Ciuffreda M, Corro P, D'Angelo A, Calo L, Crepaldi G](#). Acute effects of moderate dietary protein restriction in patients with idiopathic hypercalciuria and calcium nephrolithiasis. *Am J Clin Nutr*. 1999 Feb;69(2):267-71.

5) [Harrington M, Bennett T, Jakobsen J, Ovesen L, Brot C, Flynn A, Cashman KD](#). The effect of a high-protein, high-sodium diet on calcium and bone metabolism in postmenopausal women and its interaction with vitamin D receptor genotype. *Br J Nutr*. 2004 Jan;91(1):41-51.

6) McDougall Newsletter. Proof that the Atkins Diet Works Like Chemotherapy By Sickness-Induced Starvation. September 2003.

7) Nestel P. Post-prandial remnant lipids impair arterial compliance. *J Am Coll Cardiol* 37:1929-35, 2001.

8) [Cook B, Cooper D, Fitzpatrick D, Smith S, Tierney D, Mehry S](#). The Influence of a High Fat Meal Compared to an Olestra Meal on Coronary Artery Endothelial Dysfunction by Rubidium (Rb)-82 Positron Emission Tomography (PET) and on Post Prandial Serum Triglycerides. *Clin Positron Imaging*. 2000 Jul;3(4):150.

9) Friedman M. Serum Lipids and conjunctival circulation after fat ingestion in men exhibiting type-A behavior pattern. *Circulation* 29:874, 1964.

10) Kuo P. The effect of lipemia upon coronary and peripheral arterial circulation in patients with essential hyperlipemia. *Am J Med* 26:68, 1959.

11) [Ornish D, Scherwitz LW, Billings JH, Brown SE, Gould KL, Merritt TA, Sparler S, Armstrong WT](#), Intensive lifestyle changes for reversal of coronary heart disease. *JAMA*. 1998 Dec 16;280(23):2001-7.

12) [Fleming RM](#). The effect of high-protein diets on coronary blood flow. *Angiology*. 2000

Oct;51(10):817-26.

Fish Is Now Health Food for Pregnant Women

Maternal seafood consumption in pregnancy and neurodevelopmental outcomes in childhood (ALSPAC study): an observational cohort study by Joseph R. Hibbeln in the February 17, 2007 issue of the *Lancet* reported, "Maternal seafood consumption of less than 340 g per week in pregnancy did not protect children from adverse outcomes; rather, we recorded beneficial effects on child development with maternal seafood intakes of more than 340 g per week, suggesting that advice to limit seafood consumption could actually be detrimental. These results show that risks from the loss of nutrients were greater than the risks of harm from exposure to trace contaminants in 340 g seafood eaten weekly."

The study examined 11,875 pregnant women living in Bristol, UK, who completed a food frequency questionnaire assessing seafood consumption at 32 weeks gestation. Outcomes of the children from age 6 months to 8 years were reported in women consuming none, some (1-340 g per week), and >340 g per week.

This study reported that the women in the high seafood group compared to the low seafood group were: more likely to breast feed (87% vs. 72%), have higher incomes (49% vs. 30%), own their homes (87% vs. 70%), and be non smokers (77% vs. 61%). All these factors tell about a better educated, more successful group of people who have come to believe through instructive messages that eating fish is healthful. These same advantaged people rear children with measurably better development compared to the children of disadvantaged people.

Comments:

There are no greater emotional issues than the unborn and children; not surprisingly this article received much attention in the press. Unfortunately, the interpretation as reported in national headlines was incorrect. This study actually showed women who eat less fish have lower incomes, less education, and more difficult living conditions in general—and their offspring suffer proportionally. During pregnancy, these women also eat a less nutritious diet (more junk and fewer plants). A study published in 1998 by these same investigators of these same women found, "Women with greater difficulty in affording food had lower intakes of protein, fibre, vitamin C, niacin, pyridoxine, iron, zinc, magnesium and potassium than did women with little or no difficulty. They were more likely to use cooking and spreading fats with a high saturates content, and less likely to eat fish, fruit, vegetables and salad." These investigators took on an impossible task of separating fish intake out from all the other variables in these women's life and came to an erroneous conclusion.

The primary explanation given in this study for why women who ate fish had children with higher levels of mental and emotional function was because they received a higher quality of fat before birth from their mothers eating more fish. These omega-3 "good" fats are found in high quantities in fatty fish. However, it is important to understand that animal systems lack the ability to synthesize omega-3 fats, thus fish cannot make essential fats. Sea weeds and algae synthesize these fats which are then stored in the fish flesh; along with contaminants, cholesterol, animal protein, and calories. The human body has no difficulty converting plant-derived omega-3 fat, alpha linolenic acid, into DHA or other n-3 fatty acids, supplying our needs even during gestation and infancy.³

Therefore, the wise consume will choose plant foods as their source of essential fats and other nutrients and avoid all the harmful ingredients of animal products higher up on the food chain.

There are many adverse consequences from consuming fish. The focus of recommendations by two US government agencies—the US Department of Health and Human services, and the US Environmental Protection Agency—to limit fish intake by pregnant women to less than 340 grams (10 ounces) a week was based on contamination of the fish with environmental chemicals, especially methylmercury (a

known neurotoxin).¹ Fish also causes a rise in blood cholesterol levels similar to the rise caused by beef and pork.⁴ Their highly-acidic animal proteins accelerate calcium loss,⁵ contributing to osteoporosis and kidney stones. No dietary fiber or digestible carbohydrates are present in fish—thus having a negative impact on bowel function and endurance. Although omega-3 fats “thin” the blood, preventing thrombus formation (heart attacks); this same anticoagulant activity can increase the risk of bleeding.⁶ These fats also have antiinflammatory properties, which can be beneficial (reducing arthritis pain) as well as deleterious (causing immune suppression, increasing the risk of cancer and infection).⁷ Fatty fish, commonly recommended salmon for example, is half fat and loaded with calories, adding to one’s risk for developing obesity and type-2 diabetes. Furthermore, omega-3 fats inhibit the action of insulin, thereby increasing blood sugar levels and aggravating diabetes.⁸

Finally, let’s not forget the environmental consequences of telling people they need to eat more fish. Since I was a child (fifty years ago) 90% of the large fish that swam in the oceans have been eaten—these big ones are the ones that make little ones. Soon there will be no fish left and then people will have to seek the truth about where to obtain essential fats and other nutrients for their health. They will discover plants are the sources of these life-giving substances. Unfortunately, by then, billions of people will have suffered needlessly and damage to the environment will be unrecoverable.

References:

- 1) [Hibbeln JR, Davis JM, Steer C, Emmett P, Rogers I, Williams C, Golding J](#). Maternal seafood consumption in pregnancy and neurodevelopmental outcomes in childhood (ALSPAC study): an observational cohort study. *Lancet*. 2007 Feb 17;369(9561):578-85.
- 2) [Rogers I, Emmett P, Baker D, Golding J](#). Financial difficulties, smoking habits, composition of the diet and birthweight in a population of pregnant women in the South West of England. ALSPAC Study Team. Avon Longitudinal Study of Pregnancy and Childhood. *Eur J Clin Nutr*. 1998 Apr;52(4):251-60.
- 3) [Langdon JH](#). Has an aquatic diet been necessary for hominin brain evolution and functional development? *Br J Nutr*. 2006 Jul;96(1):7-17.
- 4) Davidson MH, Hunninghake D, Maki KC, Kwiterovich PO Jr, Kafonek S. Comparison of the effects of lean red meat vs lean white meat on serum lipid levels among free-living persons with hypercholesterolemia: a long-term, randomized clinical trial. *Arch Intern Med*. 1999 Jun 28;159(12):1331-8.
- 5) [Robertson WG, Heyburn PJ, Peacock M, Hanes FA, Swaminathan R](#). The effect of high animal protein intake on the risk of calcium stone-formation in the urinary tract. *Clin Sci (Lond)*. 1979 Sep;57(3):285-8.
- 6) [Dyerberg J, Bang HO](#). Haemostatic function and platelet polyunsaturated fatty acids in Eskimos. *Lancet*. 1979 Sep 1;2(8140):433-5.
- 7) [Meydani SN, Lichtenstein AH, Cornwall S, Meydani M, Goldin BR, Rasmussen H, Dinarello CA, Schaefer EJ](#). Immunologic effects of national cholesterol education panel step-2 diets with and without fish-derived N-3 fatty acid enrichment. *J Clin Invest*. 1993 Jul;92(1):105-13.
- 8) Hendra TJ, Britton ME, Roper DR, et al. Effects of fish oil supplements in NIDDM subjects. Controlled study. *Diabetes Care*. 1990 Aug;13(8):821-9.

Report on the “Amazing” Costa Rica Trip

When people try to describe their time with us this past February 2007 on the Pacific Coast of Costa Rica most exclaim "amazing." Arranging such a diversity of experiences would be beyond the wildest dreams for most people. Travelers found themselves face to face with giant mantas, whales, tropical fish, bats, iguanas, butterflies, and a variety of monkeys while river rafting, horseback riding, wagon riding, kayaking, motor boating, walking, and swinging through the treetops—all in 7 days. Plus, they were not once confronted with "the food challenge."



I am always overwhelmed by how we are able to attract such nice people every time we travel. They are not only kind to Mary and me, but they are very friendly with each other at mealtimes and on the adventures every day. My guess is that

this much fun and adventure brings out the best in people.

Let them tell you in their own words about their trip: [2007](#) and [2006](#).

Since we have been having similar successes over the past 10 years, taking over 1000 people to the same destination, there is every reason to believe we will be able to put on another winner this July 11 to 18. For more information go to this section of our web site: [Link] and write to Carol (she was on the February 2007 trip) at carol@drmcdougall.com or call and talk to her personally at (800) 941-7111 or (616) 874-8155.



[For more information visit the McDougall Adventure section of our website.](#)



Featured Recipes



Cheezy Baked Macaroni

I have had many requests for a macaroni & cheese substitute, mainly from people with children. This recipe was developed with the children in mind, but Heather and I really like it, too.

Preparation Time: 15 minutes

Cooking Time: 30 minutes

Servings: 6-8

12 ounces uncooked macaroni

1 ¼ cups raw cashews

1 ¼ cups water

¼ cup nutritional yeast

2 ½ tablespoons chopped pimientos

1 tablespoon lemon juice

2 teaspoons white miso

1 teaspoon onion powder

¼ teaspoon salt

¼ to 1/3 cup whole wheat bread crumbs

Preheat oven to 350 degrees.

Place a large pot of water on to boil. Drop in the pasta and cook until just tender, about 6 minutes, depending on the kind of pasta used. Drain and set aside in a large bowl.

Meanwhile, place the cashews in a food processor with half of the water. Process until fairly smooth, then add the remaining ingredients, except the bread crumbs, and process for several minutes until mixture is VERY smooth. Pour the mixture over the pasta and stir to combine. Transfer to a covered casserole dish, sprinkle the bread crumbs over the top, cover and bake for 30 minutes.

Hints: Use any of your family's favorite tubular pasta in this recipe. The initial cooking time may have to be adjusted slightly depending on which type of pasta you choose. Cook until just tender, do not over-cook because the pasta will cook again while baking.

This may be prepared ahead of time and refrigerated until ready to bake. Add about 10 minutes to the baking time.

Hash Browns

Preparation Time: 2 minutes

Cooking Time: 15-20 minutes

Servings: 2

4-5 cups shredded potatoes

Preheat a non-stick pan for 30 seconds, then add the potatoes to the dry pan. Flatten slightly, cover with a lid, and cook over medium-high heat for 5-8 minutes before turning. (Fresh shredded potatoes will cook faster than frozen shredded potatoes.) Then turn over and cook for another 7-10 minutes on the other side, turning as often as you like for even browning.

Hints: Shredded potatoes may be purchased in supermarkets and natural food stores, either frozen or fresh. Check to make sure there are no added oils. Or you can easily shred your own potatoes using a food processor. Chopped onions and peppers also make a delicious addition to Hash Brown potatoes.

Fat Free Golden Gravy

This is a delicious fat-free healthy version of the creamy Golden Gravy from last month's newsletter. You'll never miss the tahini and you can serve this one every night of the week! Try this on the Hash Browns listed above.

Preparation Time: 5 minutes

Cooking Time: 10 minutes

Servings: makes 2 ¼ cups

1 ½ cups vegetable broth

½ cup water

¼ cup soy sauce

½ teaspoon onion powder

1/3 cup brown rice flour

Place the broth and water in a saucepan. Stir in the soy sauce and onion powder. Bring to a boil. Add the brown rice flour a tablespoon at a time and stir in well. Cook and stir until thickened.

Walnut Dressing

This dressing is from Ann Crile Esselstyn in the book [Prevent and Reverse Heart Disease](#) by Caldwell B. Esselstyn Jr. MD. She calls it Miraculous Walnut Sauce. [Order the book here.](#)

This is a simple, delicious dressing that is wonderful on almost everything. Use sparingly because of the walnuts and a little goes a long way because it is very flavorful! Try it on steamed greens or salads.

Preparation Time: 5 minutes

Servings: makes 2 cups

1 cup walnut pieces

1 cup water

2 cloves garlic

2-4 tablespoons low sodium soy sauce

Combine all ingredients in a food processor and process until VERY smooth. Add more soy sauce according to your individual taste.

Store in a covered container in the refrigerator.

Hints: Ann says this is delicious on kale, and the best way to cook kale is to boil it in lots of water until just tender. We agree. This sauce really makes kale special!

Note: There are many more delicious recipes in the book listed above and they all fit the McDougall Program perfectly. I highly recommend it.

Festive Dal Soup

This soup is a beautiful red and green color and it is so delicious and easy to make that it has become a lunchtime favorite in our home.

Preparation Time: 10 minutes

Cooking Time: 60 minutes

Servings: 4

3 ¼ cups water

1 onion, chopped

2 cloves garlic, crushed

1 ½ teaspoons grated fresh ginger

¾ teaspoon smoked paprika

¼ teaspoon ground cumin

freshly ground black pepper

1 cup red lentils

1 15 ounce can garbanzos, drained and rinsed

1 14.5 ounce can diced tomatoes

1 tablespoon lemon juice

1 teaspoon chili paste (Sambal Oelek)

2 cups fresh chopped spinach

Place ¼ cup of the water in a large soup pot. Add the onion and garlic. Cook, stirring occasionally for 3-4 minutes, until softened. Add the ginger, paprika, cumin and several twists of freshly ground pepper. Mix in well, then add the remaining water, the lentils, garbanzos and tomatoes. Bring to a boil, reduce heat, cover and simmer for 50 minutes, until lentils are tender. Add lemon juice, chili paste and spinach. Cook for an additional 5 minutes. Season with a bit of sea salt, if desired. Serve hot.

Mediterranean Garbanzos

I developed this recipe on the same day that I made the Cheezy Baked Macaroni, thinking that our grandson, Jaysen, would love the pasta and that this dish would be too spicy for him. Well, he proved me wrong, and ate 6 bowls of this dish and only a few bites of the pasta. So I just never know which foods will appeal to which people since we all have different tastes.

Preparation Time: 15 minutes

Cooking time: 40 minutes

Servings: 6-8

2 onions, chopped

3 cloves garlic, minced

¼ cup vegetable broth

2 15 ounce cans garbanzo beans, drained and rinsed

1 28 ounce can crushed tomatoes with basil

1 large fresh tomato, chopped

1 teaspoon oregano

1 teaspoon crushed red pepper flakes

2 tablespoon lemon juice

4 cups packed chopped fresh spinach

freshly ground black pepper

Place the onion and garlic in a large pot with the vegetable broth. Cook, stirring occasionally until onion is tender, about 4 minutes. Add beans, tomatoes, oregano and red pepper flakes. Mix well, bring to a boil, reduce heat, cover and cook for 30 minutes, stirring occasionally. Add the lemon juice, spinach and several twists of freshly ground pepper. Cook for an additional 5 minutes, until spinach is tender. Serve over hot brown rice or whole wheat couscous.