

Notes

Introduction: A Letter of Hope

1. Dunaief D, Fuhrman J, Dunaief J, Ying G. Glycemic and cardiovascular parameters improved in type 2 diabetes with the high nutrient density (HND) diet. *Open Journal of Preventive Medicine* 2012; 2: 364–71. doi: 10.4236/ojpm.2012.23053.

Chapter 1: The First Step—Understanding Diabetes

1. Larsson SC, Orsini N, Wolk A. Diabetes mellitus and risk of colorectal cancer: a meta-analysis. *J Natl Cancer Inst* 2005; 97(22): 1679–87.

2. Economic costs of diabetes in the U.S in 2007. *Diabetes Care* 2008; 31(3): 596–615.

3. The United States of Diabetes: Challenges and opportunities in the decade ahead. United Health Center for Health Reform and Modernization. Working Paper 5, Nov 2010. http://www.unitedhealthgroup.com/hrm/UNH_Working-Paper5.pdf.

4. Type 2 diabetes—time to change our approach. *Lancet* 2010; 375(9733): 2193.

5. Zoler ML. Insulin may boost cardiovascular risk in type 2 diabetes patients. *Family Practice News* May 15, 2001: 6.

6. Madonna R, et al. Insulin enhances vascular cell adhesion molecule-1 expression in human cultured endothelial cells through a pro-atherogenic pathway mediated by p38 mitogen-activated protein-kinase. *Diabetologia* 2004; 47: 532–6. Taegtmeyer H. Insulin resistance and atherosclerosis, common roots for two common diseases? *Circulation* 1996; 93: 177.

7. Experts call for further research into the relationship between insulin therapy and cancer. http://www.eurekalert.org/pub_releases/2010-03/w-ecf030210.php. Pollak M, Russell-Jones D. Insulin analogues and cancer risk: cause for concern or cause célèbre? *Int J Clin Pract* 2010 Apr; 64(5): 628–36.

8. Akbaraly TN, Kivimäki M, Brunner EJ, et al. Association between metabolic syndrome and depressive symptoms in middle-aged adults. *Diabetes Care* 2009; 32(3): 499–504. Harish K, Dharmalingam M, Himanshu M. Study protocol: insulin and its role in cancer. *BMC Endocr Disord* 2007; 7: 10.

9. Laitinen JH, Ahola IE, Sarkkinen ES, et al. Impact of intensified dietary therapy on energy and nutrient intakes and fatty acid composition of serum lipids in patients with recently diagnosed noninsulin-dependent diabetes mellitus. *J Am Diet Assoc* 1993; 93: 276–83. Eilat-Adar S, Xu J, Zephier E, et al. Adherence to dietary recommendations for saturated fat, fiber, and sodium is low in American Indians and other U.S. adults with diabetes. *J Nutr* 2008; 138(9): 1699–704.

Chapter 2: Don't Medicate, Eradicate

1. Monash University. Critical link between obesity and diabetes discovered. *Science Daily* 9 July 2009. 16 August 2009 <http://www.sciencedaily.com/releases/2009/07/090708090917.htm>.

2. Yang Q, Graham TE, Mody N, et al. Serum retinol binding protein 4 contributes to insulin resistance in obesity and type 2 diabetes. *Nature* 2005; 436(7049): 356–62.

3. Risérus U, Willett WC, Hu FB. Dietary fats and prevention of type 2 diabetes. *Prog Lipid Res* 2009; 48(1): 44–51.

4. Williamson DF, Thompson TJ, Thun M, et al. Intentional weight loss and mortality among overweight individuals with diabetes. *Diabetes Care* 2000; 23(10): 1499–1504.

5. Carter P, Gray LJ, Troughton J, et al. Fruit and vegetable intake and incidence of type 2 diabetes mellitus: systematic review and meta-analysis. *BMJ* 2010; 341: c4229.

6. Ruige JB, Mertens I, Considine RV, et al. Opposite effects of insulin-like molecules and leptin in coronary heart disease of type 2 diabetes preliminary data. *Int J Cardiol* 2006 Jul 28; 111(1): 19–25.

7. Zoler ML. Insulin may boost cardiovascular risk in type II diabetes patients. *Family Practice News* May 15, 2001: 6. Cao W, Ning J, Yang X, Liu Z. Excess exposure to insulin is the primary cause of insulin resistance and its associated atherosclerosis. *Curr Mol Pharmacol* 2011 Nov; 4(3): 154–66.

8. Harish K, Dharmalingam M, Himanshu M. Study protocol: insulin and its role in cancer. *BMC Endocr Disord* 2007; 7: 10. Bowker SL, Majumdar SR, Veugelers P, Johnson JA. Increased cancer-related mortality for patients with type 2 diabetes who use sulfonylureas or insulin. *Diabetes Care* 2006; 29(2): 254–8.

9. Tzoulaki I, Molokhia M, Curcin V, et al. Risk of cardiovascular disease and all cause mortality among patients with type 2 diabetes prescribed oral anti-diabetes drugs: retrospective cohort study using UK general practice research database. *BMJ* 2009; 339: b4731.

10. Jancin B. Sulphonylureas may cause increased mortality risk. *Family Practice News* Aug 2012; 34.
11. Schauer PR, Burguera B, Ikramuddin S, et al. Effect of laparoscopic Roux-en-Y gastric bypass on type 2 diabetes mellitus. *Ann Surg* 2003; 238(4): 467–84; discussion 84–85.
12. Harder H, Dinesen B, Astrup A. The effect of a rapid weight loss on lipid profile and glycemic control in obese type 2 diabetic patients. *Int J Obes Relat Metab Disord* 2004; 28(1): 180–2.

Chapter 3: Standard American Diet Versus a Nutritarian Diet

1. Kanauchi M, Tsujimoto N, Hashimoto T, et al. Advanced glycation end products in non-diabetic patients with coronary artery disease. *Diabetes Care* 2001; 24(9): 1620–3. Krajcovicova-Kudlackova M, Sebekova K, Schinzel R, et al. Advanced glycation end products and nutrition. *Physiol Res* 2002; 51: 313–6.
2. Grundy SM, Cleeman JI, Merz CN, Brewer HB Jr, Clark LT, Hunninghake DB, et al. Implications of recent clinical trials for the National Cholesterol Education Program Adult Treatment Panel III guidelines. *Circulation* 2004; 110: 227–39. American Dietetic Association. Hyperlipidemia Medical Nutrition Therapy Protocol. Chicago: American Dietetic Association, 2001. U.S. Preventive Services Task Force. Behavioral counseling in primary care to promote a healthy diet: recommendations and rationale. *Am J Prev Med* 2003; 24: 93–100.
3. Atkinson FS, Foster-Powell K, Brand-Miller JC. International tables of glycemic index and glycemic load values: 2008. *Diabetes Care* 2008 Dec; 31(12): 2281–3.
4. Raben A. Should obese patients be counseled to follow a low-glycaemic index diet? *No. Obes Rev* 2002 Nov; 3(4): 245–56.
5. Raatz SK, Torkelson CJ, Redmon JB, et al. Reduced glycemic index and glycemic load diets do not increase the effects of energy restriction on weight loss and insulin sensitivity in obese men and women. *J Nutr* 2005 Oct; 135(10): 2387–91.
6. Jenkins DJ, Kendall CW, Popovich DG, et al. Effect of a very-high-fiber vegetable, fruit, and nut diet on serum lipids and colonic function. *Metabolism* 2001; 50(4): 494–503.

Chapter 4: Reversing Diabetes Is All About Understanding Hunger

1. Vives-Bauza C, Anand M, Shirazi AK, et al. The age lipid A2E and mitochondrial dysfunction synergistically impair phagocytosis by retinal pigment epithelial cells.
2. Patel, C, Husam G, Shreyas R, et al. Prolonged reactive oxygen species generation and nuclear factor-B activation after a high-fat, high-carbohydrate meal in the obese. *J Clin Endocrinology & Metabolism* 2007; 92(11): 4476–9.
3. Peairs AT, Rankin JW. Inflammatory response to a high-fat, low-carbohydrate weight loss diet: effect of antioxidants. *Obesity* 2008; 16(7): 1573–8.
4. Scanlan N. Compromised hepatic detoxification in companion animals and its correction via nutritional supplementation and modified fasting. *Altern Med Rev* 2001; 6 Suppl: S24–37.
5. Levi F, Schibler U. Circadian rhythms: mechanisms and therapeutic implications. *Annu Rev Pharmacol Toxicol* 2007; 47: 593–628.
6. Patel C, Husam G, Shreyas R, et al. Prolonged reactive oxygen species generation and nuclear factor-b activation after a high-fat, high-carbohydrate meal in the obese. *J Clin Endocrinology & Metabolism* 2007; 92(11): 4476–9.
7. Peairs AT, Rankin JW. Inflammatory response to a high-fat, low-carbohydrate weight loss diet: effect of antioxidants. *Obesity* 2008; 16(7): 1573–8.
8. Fuhrman J, Sarter B, Glaser D, Acocella S. Changing perceptions of hunger on a high nutrient density diet. *Nutrition Journal* 2010; 9:51.

Chapter 5: High-Protein, Low-Carb Counterattack

1. Best TH, Franz DN, Gilbert DL, et al. Cardiac complications in pediatric patients on the ketogenic diet. *Neurology* 2000; 54(12): 2328–30.
2. Best TH, Franz DN, Gilbert DL, et al. Cardiac complications in pediatric patients on the ketogenic diet. *Neurology* 2000; 54(12): 2328–30.
3. Stevens A, Robinson DP, Turpin J, et al. Sudden cardiac death of an adolescent during (Atkins) dieting. *Southern Medical Journal* 2002; 95: 1047.
4. Newgard CB, An J, Bain JR, et al. A branched-chain amino acid-related metabolic signature that differentiates obese and lean humans and contributes to insulin resistance. *Cell Metabolism* 2009; 9(4): 311–26.
5. Sluijs I, Beulens JWJ, Van Der A DL, et al. Dietary intake of total animal and vegetable protein and risk of type 2 diabetes in the European prospective investigation into cancer and nutrition (EPIC)-NL study. *Diabetes Care* 2010; 33: 43–48.

6. Tonstad S, Butler T, Yan R, Fraser GE. Type of vegetarian diet, body weight, and prevalence of type 2 diabetes. *Diabetes Care* 2009; 32: 791–6.
7. Jenkins DJ, Kendall CW, Popovich DG, et al. Effect of a very-high-fiber vegetable, fruit, and nut diet on serum lipids and colonic function. *Metabolism* 2001 Apr; 50(4): 494–503.
8. Fleming RM. The effect of high-protein diets on coronary blood flow. *Angiology* 2000; 51(10): 817–26.
9. Lagiou P, Sandin S, Lof M, et al., Low carbohydrate–high protein diet and incidence of cardiovascular diseases in Swedish women: prospective cohort study. *BMJ* 2012; 344: e406.
10. Knight EL, Stampfer MJ, Hankinson SE, et al. The impact of protein on renal function decline in women with normal renal function or mild renal insufficiency. *Ann Int Med* 2003; 138: 460–7.
11. Atkins diet raises concerns. *Cortland Forum* 2004 (April): 22.
12. American Kidney Fund press release, April 25, 2002, <http://www.kidneyfund.org/AboutAKF/newsroom-020425.htm>.
13. Kaushik M, Mozaffarian D, Spiegelman D, et al. Long-chain omega-3 fatty acids, fish intake, and the risk of type 2 diabetes mellitus. *Am J Clin Nutr* 2009; 90: 613–20.
14. Qi L, Van Dam RN, Rexrodek, Hu FB. Heme iron from diet as a risk factor for coronary heart disease in woman with type 2 diabetes. *Diabetes Care* 2007; 30(1): 101–6.
15. Hu FB. Associations of dietary protein with disease and mortality in a prospective study of postmenopausal women. *Am J Epidemiol* 2005; 161(3): 239–49. Kelemen LE, Kushi LH, Jacobs DR, Cerhan JR. Plant-based foods and prevention of cardiovascular disease: an overview. *Am J Clin Nutr* 2003; 78(3 Suppl): 544S–551S.
16. Lutsey PL, Steffen LM, Stevens J. Dietary intake and the development of the metabolic syndrome. the atherosclerosis risk in communities study. *Circulation* 2008; 117: 754–61.
17. Gardner CD, Coulston A, Chatterjee L, et al. The effect of a plant-based diet on plasma lipids in hypercholesterolemic adults: a randomized trial. *Ann Intern Med* 2005; 142(9): 725–33. Tucker KL, Hallfrisch J, Qiao N, et al. The combination of high fruit and vegetable and low saturated fat intakes is more protective against mortality in aging men than is either alone: the Baltimore Longitudinal Study of Aging. *J Nutr* 2005; 135(3): 556–61. Campbell TC, Parpia B, Chen J. Diet, lifestyle, and the etiology of coronary artery disease: the Cornell China study. *Am J Cardiol* 1998 Nov 26; 82(10B): 18T–21T.

18. Diousse L, Gaziano JM, Buring JC, et al. Egg consumption and risk of type 2 diabetes in men and women. *Diabetes Care* 2008; 10: 2337/1271.
19. Nettleton JA, Steffen LM, Loehr LE, et al. Incident heart failure is associated with lower whole-grain intake and greater high fat dairy and egg intake in the atherosclerosis risk in communities (ARIC) study. *J Am Dietetic Assoc* 2008; 108(11): 1881–7.
20. Hu FB, Stampfer MJ, Rimm EB, et al. A prospective study of egg consumption and risk of cardiovascular disease in men and women. *JAMA* 1999; 281: 1387–94.
21. Trichopoulou A, Psaltopoulou T, Orfanos P, et al. Diet and physical activity in relation to overall mortality amongst adult diabetics in a general population cohort. *J Intern Med* 2006; 259: 583–91.
22. Spence JD, Eliasziw M, DiCicco M, et al. Carotid plaque area: a tool for targeting and evaluating vascular preventive therapy. *Stroke* 2002; 33: 2916–22.
23. Djousse L, Gaziano JM, Buring JE, et al. Egg consumption and risk of type 2 diabetes in men and women. *Diabetes Care* 2009; 32: 295–300. Richman EL, Kenfield SA, Stampfer MJ, et al. Egg, red meat, and poultry intake and risk of lethal prostate cancer in the prostate-specific antigen-era: incidence and survival. *Cancer Prev Res (Phila)* 2011; 4: 2110–21.
24. Helman AD, Darnton-Hill I, Craig WJ, et al. Iron status of vegetarians. *Am J Clin Nutr* 1994; 59 (suppl 5): 1203S–1212S.
25. Rose W. The amino acid requirements of adult man. *Nutritional Abstracts and Reviews* 1957; 27: 631.
26. Hardage M. Nutritional studies of vegetarians. *Journal of the American Dietetic Association* 1966; 48: 25.
27. Bartke A. Minireview: role of the growth hormone/insulin-like growth factor system in mammalian aging. *Endocrinology* 2005; 146(9): 3718–23.
28. Laron Z. The GH-IGF1 axis and longevity: the paradigm of IGF1 deficiency. *Hormones (Athens)* 2008; 7(1): 24–27. Berryman DE, et al. Role of the GH/IGF-1 axis in lifespan and healthspan: lessons from animal models. *Growth Horm IGF Res* 2008; 18(6): 455–71. Van Bunderen CC, et al. The association of serum insulin-like growth factor-i with mortality, cardiovascular disease, and cancer in the elderly: a population-based study. *J Clin Endocrinol Metab* 2010.
29. Kraemer WJ, Ratamess NA. Hormonal responses and adaptations to resistance exercise and training. *Sports Med* 2005; 35(4): 339–61. Allen NE, et al. Lifestyle determinants of serum insulin-like growth-factor-I (IGF-I), C-peptide and hormone binding protein levels in British women. *Cancer Causes Control* 2003; 14(1): 65–74.

30. Gualberto A, Pollak M. Emerging role of insulin-like growth factor receptor inhibitors in oncology: early clinical trial results and future directions. *Oncogene* 2009; 28(34): 3009–21.
31. Salvioli S, et al. Why do centenarians escape or postpone cancer? the role of IGF-1, inflammation and p53. *Cancer Immunol Immunother* 2009; 58(12): 1909–17. Chitnis MM, et al. The type 1 insulin-like growth factor receptor pathway. *Clin Cancer Res* 2008; 14(20): 6364–70.
32. Rinaldi S, et al. IGF-I, IGFBP-3 and breast cancer risk in women: the European prospective investigation into cancer and nutrition (EPIC). *Endocr Relat Cancer* 2006; 13(2): 593–605.
33. Hankinson SE, et al. Circulating concentrations of insulin-like growth factor-I and risk of breast cancer. *Lancet* 1998; 351(9113): 1393–6.
34. Lann D, LeRoith D. The role of endocrine insulin-like growth factor-I and insulin in breast cancer. *J Mammary Gland Biol Neoplasia* 2008; 13(4): 371–9. Allen NE, et al. A prospective study of serum insulin-like growth factor-I (IGF-I), IGF-II, IGF-binding protein-3 and breast cancer risk. *Br J Cancer* 2005; 92(7): 1283–7. Fletcher O, et al. Polymorphisms and circulating levels in the insulin-like growth factor system and risk of breast cancer: a systematic review. *Cancer Epidemiol Biomarkers Prev* 2005; 14(1): 2–19. Renehan AG, et al. Insulin-like growth factor (IGF)-I, IGF binding protein-3, and cancer risk: systematic review and meta-regression analysis. *Lancet* 2004; 363(9418): 1346–53. Shi R, et al. IGF-I and breast cancer: a meta-analysis. *Int J Cancer* 2004; 111(3): 418–23. Sugumar A, et al. Insulin-like growth factor (IGF)-I and IGF-binding protein 3 and the risk of premenopausal breast cancer: a meta-analysis of literature. *Int J Cancer* 2004; 111(2): 293–7. Baglietto L, et al. Circulating insulin-like growth factor-I and binding protein-3 and the risk of breast cancer. *Cancer Epidemiol Biomarkers Prev* 2007; 16(4): 763–8.
35. Davies M, et al. The insulin-like growth factor system and colorectal cancer: clinical and experimental evidence. *Int J Colorectal Dis* 2006; 21(3): 201–8. Sandhu MS, Dunger DB, Giovannucci EL. Insulin, insulin-like growth factor-I (IGF-I), IGF binding proteins, their biologic interactions, and colorectal cancer. *J Natl Cancer Inst* 2002; 94(13): 972–80.
36. Rowlands MA, et al. Circulating insulin-like growth factor peptides and prostate cancer risk: a systematic review and meta-analysis. *Int J Cancer* 2009; 124(10): 2416–29.
37. Hirano S, et al. Clinical implications of insulin-like growth factors through the presence of their binding proteins and receptors expressed in gynecological cancers. *Eur J Gynaecol Oncol* 2004; 25(2): 187–91. Menu E, et al. The role of the insulin-like growth factor 1 receptor axis in multiple myeloma. *Arch Physiol Biochem* 2009; 115(2): 49–57. Rikhof B, et al. The insulin-like

growth factor system and sarcomas. *J Pathol* 2009; 217(4): 469–82. Parker AS, et al. High expression levels of insulin-like growth factor-I receptor predict poor survival among women with clear-cell renal cell carcinomas. *Hum Pathol* 2002; 33(8): 801–5.

38. Giovannucci E, et al. Nutritional predictors of insulin-like growth factor I and their relationships to cancer in men. *Cancer Epidemiol Biomarkers Prev* 2003; 12(2): 84–9. Thissen JP, Ketelslegers JM, Underwood LE. Nutritional regulation of the insulin-like growth factors. *Endocr Rev* 1994; 15(1): 80–101.

39. Qin LQ, He K, Xu JY. Milk consumption and circulating insulin-like growth factor-I level: a systematic literature review. *Int J Food Sci Nutr* 2009; 60 Suppl 7: 330–40. Lu FR, Shen L, Qin Y, et al. Clinical observation on trigonella foenum-graecum L. total saponins in combination with sulfonylureas in the treatment of type 2 diabetes mellitus. *Chin J Integr Med* 2008, 14:56–60.

40. Fontana L, et al. Long-term effects of calorie or protein restriction on serum IGF-1 and IGFBP-3 concentration in humans. *Aging Cell* 2008; 7(5): 681–7. Mudra M, Ercan-Fang N, Zhong L, et al. Influence of mulberry leaf extract on the blood glucose and breath hydrogen response to ingestion of 75 g sucrose by type 2 diabetic and control subjects. *Diabetes Care* 2007, 30:1272–74. Judy WV, Hari SP, Stogsdill WW, et al. Antidiabetic activity of a standardized extract (Glucosol) from *Lagerstroemia speciosa* leaves in Type II diabetics. A dose-dependence study. *J Ethnopharmacol* 2003, 87:115–117.

41. Kaaks R. Nutrition, insulin, IGF-1 metabolism and cancer risk: a summary of epidemiological evidence. *Novartis Found Symp* 2004; 262: 247–60; discussion 260–68. McCarty MF. Vegan proteins may reduce risk of cancer, obesity, and cardiovascular disease by promoting increased glucagon activity. *Med Hypotheses* 1999; 53(6): 459–85. Cannata D, et al. Type 2 diabetes and cancer: what is the connection? *Mt Sinai J Med* 2010; 77(2): 197–213. Venkateswaran V, et al. Association of diet-induced hyperinsulinemia with accelerated growth of prostate cancer (LNCaP) xenografts. *J Natl Cancer Inst* 2007; 99(23): 1793–800.

Chapter 6: The Phenomenal Fiber in Beans

1. Omiea I, Lazcano-Ponce E, Sanchez-Zamorano LM, et al. Carbohydrates and the risk of breast cancer among Mexican women. *Cancer Epidemiol Biomarkers Prev* 2004; 13: 1283–9.

2. Finley JW, Burrell JB, Reeves PG, et al. Pinto bean consumption changes SCFA profiles in fecal fermentations, bacterial populations of the lower bowel, and lipid profiles in blood of humans. *J Nutr* 2007; 137(11): 2391–8.

3. Robertson MD, Currie JM, Morgan LM, et al. Prior short-term consumption of resistant starch enhances postprandial insulin sensitivity in healthy subjects. *Diabetologia* 2003; 46(5): 659–65.
4. Higgins JA, Higbee DR, Donahoo WT, et al. Resistant starch consumption promotes lipid oxidation. *Nutrition & Metabolism* 2004; 1:8doi:10.1186/1743-7075-1-8.
5. Carter P, Gray LJ, Troughton J, et al. Fruit and vegetable intake and incidence of type 2 diabetes mellitus: systematic review and meta-analysis. *BMJ* 2010; 341: c4229.
6. Behall KM, Howe JC. Effect of long-term consumption of amylose vs amylopectin starch on metabolic variables in human subjects. *American Journal of Clinical Nutrition* 1995; 61: 334–40. Jenkins DJ, Vuksan V, Kendall CW, et al. Physiological effects of resistant starches on fecal bulk, short chain fatty acids, blood lipids and glycemic index. *Journal of the American College of Nutrition* 1998; 17: 609–16.
7. Lanza E, Hartman TJ, Albert PS, et al. High dry bean intake and reduced risk of advanced colorectal adenoma recurrence among participants in the polyp prevention trial. *J Nutr* 2006; 136(7): 1896–903.
8. Singh PN, Fraser GE. Dietary risk factors for colon cancer in a low-risk population. *Am J Epidem* 1988; 148: 761–74. Aune D, De Stefani E, Ronco A, et al. Legume intake and the risk of cancer: a multisite case-control study in Uruguay. *Cancer Causes Control* 2009; 20(9): 1605–15. Agurs-Collins T, Smoot D, Afful J, et al. Legume intake and reduced colorectal adenoma risk in African-Americans. *J Natl Black Nurses Assoc* 2006; 17(2): 6–12. Lanza E, Hartman TJ, Albert PS, et al. High dry bean intake and reduced risk of advanced colorectal adenoma recurrence among participants in the polyp prevention trial. *J Nutr* 2006; 136(7): 1896–903.
9. Blackberry I, Kouris-Blazos A, Wahlqvist ML, et al. Legumes: the most important dietary predictor of survival in older people of different ethnicities. *Asia Pac J Clin Nutr* 2004; 13(Suppl): S126.
10. Wu AH, Yu MC, Tseng CC, Pike MC. Epidemiology of soy exposures and breast cancer risk. *Br J Cancer* 2008; 98(1): 9–14.
11. Bednar GE, Patil AR, Murray SM, Grieshop CM, Merchen NR, Fahey GC Jr. Starch and fiber fractions in selected food and feed ingredients affect their small intestinal digestibility and fermentability and their large bowel fermentability in vitro in a canine model. *J Nutr* 2001 Feb; 131(2): 276–86. Muir JG, O’Dea K. Validation of an in vitro assay for predicting the amount of starch that escapes digestion in the small intestine of humans. *Am J Clin Nutr* 1993 Apr; 57(4): 540–6.

12. Sluijjs I, et al. Carbohydrate quantity and quality and risk of type 2 diabetes in the European Prospective Investigation into Cancer and Nutrition–Netherlands (EPIC–NL) study. *Am J Clin Nutr* 2010; 92(4): 905–11. Barclay AW, et al. Glycemic index, glycemic load, and chronic disease risk—a meta-analysis of observational studies. *Am J Clin Nutr* 2008; 87(3): 627–37. Gnagnarella P, et al. Glycemic index, glycemic load, and cancer risk: a meta-analysis. *Am J Clin Nutr* 2008; 87(6): 1793–801. Sieri S, et al. Dietary glycemic load and index and risk of coronary heart disease in a large Italian cohort: the EPICOR study. *Arch Intern Med* 2010; 170(7): 640–7.
13. Buyken AE, Toeller M, Heitkamp G, et al. Glycemic index in the diet of European outpatients with type 1 diabetes: relations to glycated hemoglobin and serum lipids. *Am J Clin Nutr* 2001; 73(3): 574–81.
14. Halton T, Willett WC, Liu S, et al. Potato and french fry consumption and risk of type 2 diabetes in women. *Am J Clin Nutr* 2006; 83(2): 284–90.
15. Hodge AM, et al. Dietary patterns and diabetes incidence in the Melbourne collaborative cohort study. *Am J Epidemiol* 2007; 165(6): 603–10. Van Dam, RM, et al. Dietary patterns and risk for type 2 diabetes mellitus in U.S. men. *Ann Intern Med* 2002; 136(3): 201–9.
16. Atkinson FS, Foster-Powell K, Brand-Miller JC. International tables of glycemic index and glycemic load values 2008. *Diabetes Care* 2008 Dec; 31(12): 2281–3. Foster-Powell K, Holt SH, Brand-Miller JC. International table of glycemic index and glycemic load values: 2002. *Am J Clin Nutr* 2002 Jul; 76(1): 5–56.

Chapter 7: The Truth About Fat

1. Hu FB, Willett WC. Optimal diets for prevention of coronary heart disease. *JAMA* 2002; 288(20): 2569–78. Sabaté J. Nut consumption, vegetarian diets, ischemic heart disease risk, and all-cause mortality: evidence from epidemiologic studies. *American Journal of Clinical Nutrition*, Vol. 70, No. 3, 500S–503S, September 1999.
2. Hu FB, Stampfer MJ. Nut consumption and risk of coronary heart disease: a review of epidemiologic evidence. *Curr Atheroscler Rep* 1999 Nov; 1(3): 204–209.
3. Mukuddem-Petersen J, Oosthuizen W, Jerling JC. A systematic review of the effects of nuts on blood lipid profiles in humans. *J Nutr* 2005; 135(9): 2082–9.
4. Lamarche B, Desroche S, Jenkins DJ, et al. Combined effects of a dietary portfolio of plant sterols, vegetable protein, viscous fiber and almonds on LDL particle size. *Br J Nutr* 2004; 92(4): 654–63.
5. Cerdá B, Tomás-Barberán FA, Espín JC. Metabolism of antioxidant and chemopreventive ellagitannins from strawberries, raspberries, walnuts, and oak-

aged wine in humans: identification of biomarkers and individual variability. *J Agric Food Chem* 2005; 53(2): 227–35.

6. Ros E, Naatez I, Perez-Heras A, et al. A walnut diet improves endothelial function in hypercholesterolemic subjects: a randomized crossover trial. *Circulation* 2004; 109(13): 1609–14.

7. Ellsworth JL, Kushi LH, Folsom AR. Frequent nut intake and risk of death from coronary heart disease and all causes in postmenopausal women: the Iowa Women's Health Study. *Nutr Metab Cardiovasc Dis* 2001 Dec; 11(6): 372–7. Li TY, Brennan AM, Wedick NM, et al. Regular consumption of nuts is associated with a lower risk of cardiovascular disease in women with type 2 diabetes. *J Nutr* 2009; 139(7): 1333–8.

8. Albert CM, Gaziano JM, Willett WC, Manson JE. Nut consumption and decreased risk of sudden cardiac death in the Physicians' Health Study. *Arch Intern Med* 2002 Jun 24; 162(12): 1382–7. Fraser GE, Sabaté J, Beeson WL, Strahan TM. A possible protective effect of nut consumption on risk of coronary heart disease. The Adventist Health Study. *Arch Intern Med* 1992 Jul; 152(7): 1416–24. Hu FB, Stampfer MJ, Manson JE, et al. Frequent nut consumption and risk of coronary heart disease in women: prospective cohort study. *BMJ* 1998 Nov 14; 317(7169): 1341–5. Brown L, Rosner B, Willett WC, Sacks F. Nut consumption and risk of recurrent coronary heart disease. *FASEB J* 1999; 13: A538. Ellsworth JL, Kushi LH, Folsom AR. Frequent nut intake and risk of death from coronary heart disease and all causes in postmenopausal women: the Iowa Women's Health Study. *Nutr Metab Cardiovasc Dis* 2001 Dec; 11(6): 372–7.

9. Zelman KM. It's full of fat and helps you lose weight. WebMD. <http://www.webmd.com/diet/features/its-full-of-fat-and-helps-you-lose-weight>.

10. Yuen AW, Sander JW. Is omega-3 fatty acid deficiency a factor contributing to refractory seizures and SUDEP? a hypothesis. *Seizure* 2004 Mar; 13(2): 104–7.

11. Coates AM, Howe PR. Edible nuts and metabolic health. *Curr Opin Lipidol* 2007; 18(1): 25–30. Segura R, Javierre C, Lizarraga MA, Ros E. Other relevant components of nuts: phytosterols, folate and minerals. *Br J Nutr* 2006; 96 Suppl 2: S36–44.

12. Rajaram S, Sabat AJ. Nuts, body weight and insulin resistance. *Br J Nutr* 2006; 96 Suppl 2: S79–86. Sabat AJ. Nut consumption and body weight. *Am J Clin Nutr* 2003; 78(3 Suppl): 647S–650S. Bes-Rastrollo M, Sabat AJ, Gamez-Garcia E, et al. Nut consumption and weight gain in a Mediterranean cohort: the SUN study. *Obesity* 2007; 15(1): 107–16. Garcia-Lorda P, Megias Rangil I, Salas-Salvada J. Nut consumption, body weight and insulin resistance. *Eur J Clin Nutr* 2003; 57 Suppl 1: S8–11. Megias-Rangil I, Garcia-Lorda P, Torres-Moreno M, et al. Nutrient content and health effects of nuts. *Arch Latinoam Nutr* 2004; 54(2 Suppl 1): 83–6.

13. Lovejoy JC. The impact of nuts on diabetes and diabetes risk. *Curr Diab Rep* 2005; 5(5): 379–84. Jiang R, Manson JE, Stampfer MJ, Liu S, Willett WC, Hu FB. Nut and peanut butter consumption and risk of type 2 diabetes in women. *JAMA* 2002; 288(20): 2554–60.
14. Barnard ND, Cohen J, Jenkins DJ, et al. A low-fat vegan diet improves glycemic control and cardiovascular risk factors in a randomized clinical trial in individuals with type 2 diabetes. *Diabetes Care* 2006; 29(8): 1777–83. Ford ES, Mokdad AH. Fruit and vegetable consumption and diabetes mellitus incidence among U.S. adults. *Prev Med* 2001; 32(1): 33–39. Montonen J, Knekt P, Harkanen T, et al. Dietary patterns and the incidence of type 2 diabetes. *Am J Epidem* 2004; 161(3): 219–27.
15. Barnard ND, Scialli AR, Bertron P, et al. Effectiveness of a low-fat vegetarian diet in altering serum lipids in healthy premenopausal women. *Am J Cardiol* 2000 Apr 15; 85(8): 969–72.
16. Jenkins DJ, Kendall CW, Popovich DG, et al. Effect of a very-high-fiber vegetable, fruit, and nut diet on serum lipids and colonic function. *Metabolism* 2001 Apr; 50(4): 494–503.
17. Tsai CJ, Leitzmann MF, Hu FB, Willett WC, Giovannucci EL. Frequent nut consumption and decreased risk of cholecystectomy in women. *Am J Clin Nutr* 2004; 80(1): 76–81.
18. Tsai CJ, Leitzmann MF, Hu FB, et al. A prospective cohort study of nut consumption and the risk of gallstone disease in men. *Am J Epid* 2004; 160(10): 961–8.
19. Brown MJ, Ferruzzi MG, Nguyen ML, et al. Carotenoid bioavailability is higher from salads ingested with full-fat than with fat-reduced salad dressings as measured with electrochemical detection. *Am J Clin Nutr* 2004; 80(2): 396–403.
20. Fraser GE, Shavlik DJ. Ten years of life: is it a matter of choice? *Arch Intern Med* 2001; 161(13): 1645–52.
21. Novotny JA, Gebauer SK, Baer DJ. Discrepancy between the Atwater factor predicted and empirically measured energy values of almonds in human diets. *Am J Clin Nutr* 2012; 96(2): 296–301.

Chapter 8: The Nutritarian Diet in Action

1. Stengle J. Diabetes: some beat it, but are they cured? *Seattle Times*, April 20, 2009. http://seattletimes.com/html/health/2009084495_apmedbeatingdiabetes.html.
2. Link LB, Potter JD. Raw versus cooked vegetables and cancer risk. *Cancer Epidemiol Biomarkers Prev* 2004; 13(9): 1422–35.

3. Miller AB. Nutritional aspects of human carcinogenesis. *IARC Sci Publ* 1982; (39): 177–92.
4. Carter P, Gray LJ, Troghon J, et al. Fruit and vegetable intake and incidence of type 2 diabetes mellitus: systematic review and meta-analysis. *BMJ* 2010; 341: c4229.
5. Liu X, Lv K. Cruciferous vegetables intake is inversely associated with risk of breast cancer: a meta-analysis. *Breast* 2012 Aug 6. Liu B, Mao Q, Cao M, Xie L. Cruciferous vegetables intake and risk of prostate cancer: a meta-analysis. *Int J Urol* 2012 Feb; 19(20): 134–41. doi: 10.1111/j.1442-2042.2011.02906.x. World Cancer Research Fund/American Institute for Cancer Research. Food, nutrition, physical activity, and the prevention of cancer: a global perspective. Washington, DC: AICR, 2007. Zhang CX, Ho SC, Chen YM, Fu, JH, Cheng SZ, Lin FY. Greater vegetable and fruit intake is associated with a lower risk of breast cancer among Chinese women. *Int J Cancer* 2009 Jul 1; 125(1): 181–8.
6. Michaud DS, Spiegelman D, Clinton SK. Fruit and vegetable intake and incidence of bladder cancer in a male prospective cohort. *J Natl Cancer Inst* 1999; 91(7): 605–13.
7. Gamet-Payrastré L, Lumeau S, Cassar G. Sulforaphane, a naturally occurring isothiocyanate, induces cell cycle arrest and apoptosis in HT29 human colon cancer cells. *Cancer Research* 2000; 60(5): 1426–33.
8. Cohen JH, Kristal AR, Stanford JL. Fruit and vegetable intake and prostate cancer risk. *J Nat Can Inst* 2000; 92(1): 61–68.
9. Zakkar M, Van der Heiden K, Anh Luong Le, et al. Activation of Nrf2 in endothelial cells protects arteries from exhibiting a proinflammatory state. *Arteriosclerosis Thrombosis and Vascular Biology*. Published online before print September 3, 2009, doi: 10.1161/ATVBAHA.109.193375.
10. Seddon JM, Ajani UA, Sperduto RD, et al. Dietary carotenoids, vitamins A, C, and E, and advanced age-related macular degeneration. *JAMA* 1994; 272: 1413–20.
11. Dwyer JH, Navab M, Dwyer KM, et al. Oxygenated carotenoid lutein and progression of early atherosclerosis: the Los Angeles Atherosclerosis Study. *Circulation* 2001; 103(24): 2922–7.
12. Bellisle F. Impact of the daily meal pattern on energy balance. *Scandinavian Journal of Nutrition* 2004; 48: 114–18. Marmonier C, Chapelot D, Fantino M, Louis-Sylvestre J. Snack consumed in a non hungry state has poor satiating efficiency: influence of snack composition on substrate utilization and hunger. *American Journal of Clinical Nutrition* 2002; 76: 518–28. Favero A, Franceschi S, La Vecchia C, et al. Meal frequency and coffee intake in colon cancer. *Nutr Cancer* 1998; 30(3): 182–5. Stote KS, Baer DJ, Spears K, et al. GKA controlled

trial of reduced meal frequency without caloric restriction in healthy, normal-weight, middle-aged adults. *Am J Clin Nutr* 2007; 85(4): 981–8. Bertéus FH, Torgerson JS, Sjöström L, Lindroos AK. Snacking frequency in relation to energy intake and food choices in obese men and women compared to a reference population. *International Journal of Obesity* 2005; 29(6): 711–9.

13. Figueiredo JC, Grau MV, Haile RW, et al. Folic acid and risk of prostate cancer: results from a randomized clinical trial. *J Natl Cancer Inst* 2009; 101(6): 432–5. Ebbing M, Bonna KH, Arnesen E, et al. Cancer incidence and mortality after treatment with folic acid and vitamin B₁₂. *JAMA* 2009; 302(19): 2119–26. Charles D, Ness AR, Campbell D, et al. Taking folate in pregnancy and risk of maternal breast cancer. *BMJ* 2004; 329: 1375–6. Fife J, Raniga S, Hider PN, Frizelle FA. Folic acid supplementation and colorectal cancer risk; a meta-analysis. *Colorectal Dis* 2011; 13(2): 132–7. Stolzenberg-Solomon RZ, Chang S, Leitzmann MF, et al. Folate intake, alcohol use, and postmenopausal breast cancer risk in the prostate, lung, colorectal, and ovarian cancer screening trial. *Am J Clin Nutr* 2006; 83(4): 895–904. Yi K. Does a high folate intake increase the risk of breast cancer? *Nutr Rev* 2006; 64(10PT1): 468–75. Cole B, Baron J, Sandler R, et al. Folic acid for the prevention of colorectal adenomas. *JAMA* 2007; 297(21): 2351–9. Smith AD, Kim Y, et al. Is folic acid good for everyone? *Am J Clin Nutr* 2008; 87(3): 517. Kim Y. Role of folate in colon cancer development and progression. *J Nutr* 2003 133(11 Suppl): 3731S–3739S. Guelpen BV, Hultdin J, Johansson I, et al. Low folate levels may protect against colorectal cancer. *Gut* 2006; 55: 1461–6.

14. Mayne ST. Beta-carotene, carotenoids, and disease prevention in humans. *FASEB* 1996; 10(7): 690–701. Goodman GE. Prevention of lung cancer. *Current Opinion in Oncology* 1998; 10(2): 122–6. Kolata G. Studies find beta carotene, taken by millions, can't forestall cancer or heart disease. *New York Times*, Jan 19, 1996. Omenn GS, Goodman GE, Thornquist MD, et al. Effects of a combination of beta carotene and vitamin a on lung cancer and cardiovascular disease. *New England Journal of Medicine* 1996; 334(18): 1150–5. Hennekens CH, Buring JE, Manson JE, et al. Lack of effect of long-term supplementation with beta carotene on the incidence of malignant neoplasms and cardiovascular disease. *New England Journal of Medicine* 1996; 334(18): 1145–9. Albanes D, Heinonen OP, Taylor PR, et al. Alpha-tocopherol and beta-carotene supplements and lung cancer incidence in the alpha-tocopherol, beta-carotene cancer prevention study: effects of base-line characteristics and study compliance. *Journal of the National Cancer Institute* 1996; 88(21): 1560–70. Rapola JM, Virtamo J, Ripatti S, et al. Randomized trial of alpha-tocopherol and beta-carotene supplements on incidence of major coronary events in men with previous myocardial infarction. *Lancet* 1997; 349(9067): 1715–20.

15. Omenn GS, Goodman GE, Thornquist MD, et al. Effects of a combination of beta carotene and vitamin A on lung cancer and cardiovascular disease. *New England Journal of Medicine* 1996; 334(18): 1145–9.
16. Lawson KA, Wright ME, Subar A, et al. Multivitamin use and risk of prostate cancer in the National Institutes of Health-AARP Diet and Health Study. *J Natl Cancer Inst* 2007 May 16; 99(10): 754–64.
17. Bjelakovic G, Nikolava D, Gluud LL, et al. Antioxidant supplements for prevention of mortality in healthy participants and patients with various diseases. *Cochrane Database Syst Rev* 2008 Apr 16; (2): CD007176.
18. Hennekens CH, Buring JE, Manson JE, et al. Lack of effect of long-term supplementation with beta carotene on the incidence of malignant neoplasms and cardiovascular disease. *New England Journal of Medicine* 1996; 334(18): 1145–9. Albanes D, Heinonen OP, Taylor PR, et al. Alpha-tocopherol and beta-carotene supplements and lung cancer incidence in the alpha-tocopherol, beta-carotene cancer prevention study: effects of base-line characteristics and study compliance. *Journal of the National Cancer Institute* 1996; 88(21): 1156–1570. Rapola JM, Viramo J, Ripatti S, et al. Randomized trial of alpha-tocopherol and beta-carotene supplements on incidence of major coronary events in men with previous myocardial infarction. *Lancet* 1997; 349(9067): 1715–20.
19. Melhus H, Michaelson K, Kindmark A, et al. Excessive dietary intake of vitamin A is associated with reduced bone mineral density and increased risk of hip fracture. *Ann Intern Med* 1998; 129(10): 770–8.
20. Bjelakovic G, Nikolava D, Gluud LL, et al. Antioxidant supplements for prevention of mortality in healthy participants and patients with various diseases. *Cochrane Database Syst Rev* 2008 Apr; 16(2): CD007176.
21. Brewer GJ. Iron and copper toxicity in diseases of aging, particularly atherosclerosis and Alzheimer's disease. *Exp Biol Med* 2007; 232(2): 323.
22. Brewer GJ. Iron and copper toxicity in diseases of aging, particularly atherosclerosis and Alzheimer's disease. *Exp Biol Med* 2007; 232(2): 323. Morris MC, et al. Dietary copper and high saturated and trans fat intakes associated with cognitive decline. *Archives of Neurology* 2006; 63: 1085–8.
23. Vinceti M, Wei ET, Malagoli C, et al. Adverse health effects of selenium in humans. *Rev Environ Health* 2001; 16(4): 233–51. Mueller AS, Mueller K, Wolf NM, Pallauf J. Selenium and diabetes: an enigma? *Free Radic Res* 2009; 8:1–31. Laclaustra M, Navas-Acien A, Stranges S, et al. Serum selenium concentrations and diabetes in U.S. adults: National Health and Nutrition Examination Survey (NHANES) 2003–2004. *Environ Health Perspect* 2009; 117(9): 1409–13. Navas-Acien A, Bleys J, Guallar E. Selenium intake and cardiovascular risk: what is new? *Curr Opin Lipidol* 2008; 19(1): 43–9. Stranges S, Laclaustra M,

- Ji C, et al. Higher selenium status is associated with adverse blood lipid profile in British adults. *J Nutr* 2010; 140(1): 81–7. Chan JM, Oh WK, Xie W, et al. Plasma selenium, manganese superoxide dismutase, and intermediate- or high-risk prostate cancer. *J Clin Oncol* 2009; 27(22): 3577–83.
24. Hunt JR. Bioavailability of iron, zinc, and other trace minerals from vegetarian diets. *Am J Clin Nutr* 2003; 78(suppl): 633S–639S. De Bortoli MC, Cozzolino SM. Zinc and selenium nutritional status in vegetarians. *Biol Trace Elem Res* 2009; 127(3): 228–33. Frassinetti S, Bronzetti G, Caltavuturo L, et al. The role of zinc in life: a review. *J Environ Pathol Toxicol Oncol* 2006; 25(3): 597–610.
25. Mitri J, Muraru MD, Pittas AG. Vitamin D and type 2 diabetes: a systematic review. *Eur J Clin Nutr* 2011 Sep; 65(9): 1005–15.
26. Zoler ML. High vitamin D intake linked to reduced fractures. *Family Practice News* 2010 (November 16, 2010). <http://www.familypracticenews.com/news/diabetes-endocrinology-metabolism/single-article/high-vitamin-d-intake-linked-to-reduced-fractures/61811559c684d1757cd4985ba2c57fc5.html>. Bolland MJ, Avenell A, Baron JA, et al. Effect of calcium supplements on risk of myocardial infarction and cardiovascular events: meta-analysis. *BMJ* 2010 Jul 29; 341: c3691. Wang L, Manson JE, Sesso HD. Calcium intake and risk of cardiovascular disease: a review of prospective studies and randomized clinical trials. *Am J Cardiovasc Drugs* 2012 Apr 1; 12(2): 105–16.
27. Martins JG. EPA but not DHA appears to be responsible for the efficacy of omega-3 long chain polyunsaturated fatty acid supplementation in depression: evidence from a meta-analysis of randomized controlled trials. *J Am Coll Nutr* 2009 Oct; 28(5): 525–42.
28. McEwen B, Morel-Kopp MC, Tofler G, Ward C. Effect of omega-3 fish oil on cardiovascular risk in diabetes. *Diabetes Educ* 2010 Jul–Aug; 36(4): 565–84. Von Schacky C. The omega-3 index as a risk factor for cardiovascular diseases. *Prostaglandins Other Lipid Mediat* 2011 Nov; 96(1–4): 94–8.
29. De Luis DA, Conde R, Aller R, et al. Effect of omega-3 fatty acids on cardiovascular risk factors in patients with type 2 diabetes mellitus and hypertriglyceridemia: an open study. *Eur Rev Med Pharmacol Sci* 2009 Jan–Feb; 13(1): 51–5. Hartweg J, Farmer AJ, Holman RR, Neil A. Potential impact of omega-3 treatment on cardiovascular disease in type 2 diabetes. *Curr Opin Lipidol* 2009 Feb; 20(1): 30–8. Hartweg J, Perera R, Montori V, et al. Omega-3 polyunsaturated fatty acids (PUFA) for type 2 diabetes mellitus. *Cochrane Database Syst Rev* 2008 Jan 23; (1): CD003205.

30. Djoussé L, Gaziano JM, Buring JE, Lee IM. Dietary omega-3 fatty acids and fish consumption and risk of type 2 diabetes. *Am J Clin Nutr* 2011 Jan; 93(1): 143–50. Brostow DP, Odegaard AO, Koh WP, et al. Omega-3 fatty acids and incident type 2 diabetes: the Singapore Chinese Health Study. *Am J Clin Nutr* 2011 Aug; 94(2): 520–6.
31. Kaushik M, Mozaffarian D, Spiegelman D, et al. Long-chain omega-3 fatty acids, fish intake, and the risk of type 2 diabetes mellitus. *Am J Clin Nutr* 2009 Sep; 90(3): 613–20.
32. Thornalley PJ, Babaei-Jadidi R, Al Ali H. High prevalence of low plasma thiamine concentration in diabetes linked to a marker of vascular disease. *Diabetologia* 2007 Oct; 50(10): 2164–70. Vindedzis SA, Stanton KG, Sherriff JL, Dhaliwal SS. Thiamine deficiency in diabetes—is diet relevant? *Diab Vasc Dis Res* 2008 Sep; 5(3): 215.
33. Page GL, Laight D, Cummings MH. Thiamine deficiency in diabetes mellitus and the impact of thiamine replacement on glucose metabolism and vascular disease. *Int J Clin Pract* 2011 Jun; 65(6): 684–90.
34. Thornalley PJ. The potential role of thiamine (vitamin B₁) in diabetic complications. *Curr Diabetes Rev* 2005 Aug; 1(3): 287–98. Page GL, Laight D, Cummings MH. Thiamine deficiency in diabetes mellitus and the impact of thiamine replacement on glucose metabolism and vascular disease. *Int J Clin Pract* 2011 Jun; 65(6): 684–90.
35. Arora S, Lidor A, Abullarrage CJ, et al. Thiamine (vitamin B₁) improves endothelium-dependent vasodilatation in the presence of hyperglycemia. *Ann Vasc Surg* 2006 Sep; 20(5): 653–8. Wong CY, Qiuwaxi J, Chen H, et al. Daily intake of thiamine correlates with the circulating level of endothelial progenitor cells and the endothelial function in patients with type II diabetes. *Mol Nutr Food Res* 2008 Dec; 52(12): 1421–7. Vindedzis SA, Stanton KG, Sherriff JL, Dhaliwal SS. Thiamine deficiency in diabetes—is diet relevant? *Diab Vasc Dis Res* 2008 Sep; 5(3): 215.
36. Luong KV, Nguyen LT. The impact of thiamine treatment in the diabetes mellitus. *J Clin Med Res* 2012 Jun; 4(3): 153–60. Babaei-Jadidi R, Karachalias N, Ahmed N, et al. Prevention of incipient diabetic nephropathy by high-dose thiamine and benfotiamine. *Diabetes* 2003 Aug; 52(8): 2110–20. Rabbani N, Alam SS, Riaz S, et al. High-dose thiamine therapy for patients with type 2 diabetes and microalbuminuria: a randomised, double-blind placebo-controlled pilot study. *Diabetologia* 2009 Feb; 52(2): 208–12. Rabbani N, Thornalley PJ. Emerging role of thiamine therapy for prevention and treatment of early-stage diabetic nephropathy. *Diabetes Obes Metab* 2011 Jul; 13(7): 577–83. Stracke H, Gaus W, Achenbach U, et al. Benfotiamine in Diabetic Polyneuropathy (BENDIP): results of a randomised, double blind, placebo-controlled clinical

- study. *Exp Clin Endocrinol Diabetes* 2008 Nov; 116(10): 600–605. Hammes HP, Du X, Edelstein D, et al. Benfotiamine blocks three major pathways of hyperglycemic damage and prevents experimental diabetic retinopathy. *Nat Med* 2003 Mar; 9(3): 294–9.
37. Nahas R, Moher M. Complementary and alternative medicine for the treatment of type 2 diabetes. *Can Fam Physician* 2009 Jun; 55(6): 591–6. Davis PA, Yokoyama W. Cinnamon intake lowers fasting blood glucose: meta-analysis. *J Med Food* 2011 Sep; 14(9): 884–9.
38. Kumar SN, Mani UV, Mani I. An open label study on the supplementation of gymnema sylvestre in type 2 diabetics. *J Diet Suppl* 2010 Sep; 7(3): 273–82. Nahas R, Moher M. Complementary and alternative medicine for the treatment of type 2 diabetes. *Can Fam Physician* 2009 Jun; 55(6): 591–6.
39. Nahas R, Moher M. Complementary and alternative medicine for the treatment of type 2 diabetes. *Can Fam Physician* 2009 Jun; 55(6): 591–6.
40. Nahas R, Moher M. Complementary and alternative medicine for the treatment of type 2 diabetes. *Can Fam Physician* 2009 Jun; 55(6): 591–6. Fuangchan A, Sonthisombat P, Seubnukarn T, et al. Hypoglycemic effect of bitter melon compared with metformin in newly diagnosed type 2 diabetes patients. *J Ethnopharmacol* 2011 Mar 24; 134(2): 422–8. Minich DM, Lerman RH, Darland G, et al. Hop and acacia phytochemicals decreased lipotoxicity in 3T3-L1 Adipocytes, Db/Db mice, and individuals with metabolic syndrome. *J Nutr Metab* 2010; 2010. pii: 467316. Bacardi-Gascon M, Dueñas-Mena D, Jimenez-Cruz A. Lowering effect on postprandial glycaemic response of nopales added to Mexican breakfasts. *Diabetes Care* 2007 May; 30(5): 1264–5.
41. Weingartner O, Bohm M, Laufs U. Controversial role of plant sterol esters in the management of hypercholesterolaemia. *Eur Heart J* 2009 Feb; 30(4): 404–409. Federal Register. Title 21: Food and Drugs. Part 101—Food Labeling. Subpart E—Specific Requirements for Health Claims. 101.83 Health claims: plant sterol/stanol esters and risk of coronary heart disease (CHD). <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr;sid=502078d8634923edc695b394a357d189;rgn=div8;view=text;node=21%3A2.0.1.1.2.5.1.14;idno=21;cc=ecfr>.
42. Weingartner O, Bohm M, Laufs U. Controversial role of plant sterol esters in the management of hypercholesterolaemia. *Eur Heart J* 2009 Feb; 30(4): 404–409. Federal Register. Title 21: Food and Drugs. Part 101—Food Labeling. Subpart E—Specific Requirements for Health Claims. 101.83 Health claims: plant sterol/stanol esters and risk of coronary heart disease (CHD). <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr;sid=502078d8634923edc695b394a357d189;rgn=div8;view=text;node=21%3A2.0.1.1.2.5.1.14;idno=21;cc=ecfr>.

43. Berger A, Jones P, Abumweis S. Plant sterols: factors affecting their efficacy and safety as functional ingredients. *Lipids in Health and Disease* 2004 3: 5 <http://www.lipidworld.com/content/3/1/5>.
44. Woyengo TA, Ramprasath VR, Jones PJ. Anticancer effects of phytosterols. *Eur J Clin Nutr* 2009 Jul; 63(7): 813–20. Mendilaharsu M, De Stefani E, Deneo-Pellegrini H, et al. Phytosterols and risk of lung cancer: a case study in Uruguay. *Lung Cancer* 1998; 21: 37–45. Ronico A, De Stefani E, Boffetta P, et al. Vegetables, fruits and related nutrients and risk of breast cancer: a case control study in Uruguay. *Nutr Canc* 1999; 35: 111–19. De Stefani E, Brennan P, Boffeta P, et al. Vegetables, fruits, related dietary antioxidants and the risk of squamous cell carcinoma of the esophagus: a case control study in Uruguay. *Nutr Canc* 2000; 38: 23–29. De Stefani E, Boffetta P, Ronco AL, et al. Plant sterols and risk of stomach cancer: a case study in Uruguay. *Nutr Canc* 2000; 37: 140–4.
45. Aviram M, Dornfield L, Rosenblat M, et al. Pomegranate juice consumption reduces oxidative stress, atherogenic modifications to LDL, and platelet aggregation: studies in humans and in atherosclerotic apolipoprotein e-deficient mice. *Am J Clin Nutr* 2000; 71(5): 1062–76. Aviram M, Dornfeld L. Pomegranate juice consumption inhibits serum angiotensin converting enzyme activity and reduces systolic blood pressure. *Atherosclerosis* 2001 Sep; 158(1): 195–8. Aviram M, Rosenblat M, Gaitini D, et al. Pomegranate juice consumption for 3 years by patients with carotid artery stenosis reduces common carotid intima-media thickness, blood pressure and LDL oxidation. *Clin Nutr* 2004 Jun; 23(3): 423–33.
46. Jurenka JS. Therapeutic applications of pomegranate (*Punica granatum* L.): a review. *Altern Med Rev* 2008 Jun; 13(2): 128–44.
47. Jurenka JS. Therapeutic applications of pomegranate (*Punica granatum* L.): a review. *Altern Med Rev* 2008 Jun; 13(2): 128–44. Fenercioglu AK, Saler T, Genc E, et al. The effects of polyphenol-containing antioxidants on oxidative stress and lipid peroxidation in type 2 diabetes mellitus without complications. *J Endocrinol Invest* 2010 Feb; 33(2): 118–24. Aviram M, Dornfeld L, Rosenblat M, et al. Pomegranate juice consumption reduces oxidative stress, atherogenic modifications to LDL, and platelet aggregation: studies in humans and in atherosclerotic apolipoprotein E-deficient mice. *Am J Clin Nutr* 2000; 71(5): 1062–76. Aviram M, Dornfeld L. Pomegranate juice consumption inhibits serum angiotensin converting enzyme activity and reduces systolic blood pressure. *Atherosclerosis* 2001 Sep; 158(1): 195–8. Aviram M, Rosenblat M, Gaitini D, et al. Pomegranate juice consumption for 3 years by patients with carotid artery stenosis reduces common carotid intima-media thickness, blood pressure and LDL oxidation. *Clin Nutr* 2004 Jun; 23(3): 423–33.

48. Aviram M, Rosenblat M, Gaitini D, et al. Pomegranate juice consumption for 3 years by patients with carotid artery stenosis reduces common carotid intima-media thickness, blood pressure and LDL oxidation. *Clin Nutr* 2004 Jun; 23(3): 423–33.
49. Balk EM, Tatsioni A, Lichtenstein AH, et al. Effect of chromium supplementation on glucose metabolism and lipids: a systematic review of randomized controlled trials. *Diabetes Care* 2007; 30(8): 2154–63.

Chapter 9: The Six Steps to Achieving Our Health Goals

1. Jancin B. Fitness sharply cut death in high-BMI diabetics. *Family Practice News* 2008; Oct 1: 19.

Chapter 10: For Doctors and Patients

1. American Diabetes Association. Economic costs of diabetes in the U.S. in 2007. *Diabetes Care* 2008; 31: 596–615.
2. Centers for Disease Control and Prevention. 2011 National Diabetes Fact Sheet. http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2011.pdf.
3. Flegal KM, Carroll MD, Kit BK, Ogden CL. Prevalence of obesity and trends in the distribution of body mass index among U.S. adults, 1999–2010. *JAMA* 2012; 307(5): 491–7. Abdullah A, Stoelwinder J, Shortreed S, et al. The duration of obesity and the risk of type 2 diabetes. *Public Health Nutr* 2011; 14(1): 119–26. Kahn SE, Hull RL, Utzschneider KM. Mechanisms linking obesity to insulin resistance and type 2 diabetes. *Nature* 2006; 444(7121): 840–6.
4. Nathan DM, Buse JB, Davidson MB, et al. Medical management of hyperglycemia in type 2 diabetes: a consensus algorithm for the initiation and adjustment of therapy. *Diabetes Care* 2008; 32(1): 193–203.
5. Koro CE, Bowlin SJ, Bourgeois N, et al. Glycemic control from 1988 to 2000 among U.S. adults diagnosed with type 2 diabetes. *Diabetes Care* 2004; 27: 17–20.
6. ADVANCE Collaborative Group. Intensive blood glucose control and vascular outcomes in patients with type 2 diabetes. *NEJM* 2008; 358: 2560–72.
7. Fonseca V. Effect of thiazolidinediones on body weight in patients with diabetes mellitus. *Am J Med* 2003; 115 Suppl 8A: 42S–48S.
8. Russell-Jones D, Khan R. Insulin-associated weight gain in diabetes—causes, effects and coping strategies. *Diabetes Obes Metab* 2007; 9(6): 799–812.
9. Ward S, Lloyd JM, Pandor A, et al. A systematic review and economic evaluation of statins for the prevention of coronary events. *Health Technol Assess* 2007; 11(14): 1–178.

10. Löbner K, Knopff A, Baumgarten A, et al. Predictors of postpartum diabetes in women with gestational diabetes mellitus. *Diabetes* 2006; 55(3): 792–7.

Chapter 11: Frequently Asked Questions

1. Christakis NA, Fowler JH. The spread of obesity in a large social network over 32 years. *NEJM* 2007; 327(4): 370–9.
2. Obarzanek E, Sacks FM, Moore TJ. Dietary approaches to stop hypertension (DASH)—sodium trial. Paper presented at Annual Meeting of the American Society of Hypertension 2000; New York, NY.
3. Itoh R, Syuyama Y. Sodium excretion in relation to calcium and hydroxyproline excretion in a healthy Japanese population. *Am J Clin Nutr* 1996; 63(5): 735–40.
4. Tuomilehto J, Jousilahti P, Rastenyte D. Urinary sodium excretion and cardiovascular mortality in Finland: a prospective study. *Lancet* 2001; (9259): 848–51.
5. Dallongeville J, Marecaux N, Ducmetiere P, et al. Influence of alcohol consumption and various beverages on waist girth and waist-to-hip ratio on a sample of French men and women. *J Obes Relat Metab Disord* 1998; 22(12): 1178–83.
6. Dumitrescu RG, Shields PG. The etiology of alcohol-induced breast cancer. *Alcohol* 2005; 35(3): 213–25.
7. Boyle P, Boffetta P. Alcohol consumption and breast cancer risk. *Breast Cancer Res* 2009; 11 Suppl 3: S3.
8. Chen WY, Rosner B, Hankinson SE, et al. Moderate alcohol consumption during adult life, drinking patterns, and breast cancer risk. *JAMA* 2011; 306(17): 1884–90.
9. Frost L, Vestergaard P. Alcohol and risk of atrial fibrillation or flutter: a cohort study. *Arch Intern Med* 2004; 164(18): 1993–98. Mukamal KJ, Tolstrup JS, Friberg J, et al. Alcohol consumption and risk of atrial fibrillation in men and women: the Copenhagen City Heart Study. *Circulation* 2005; 112(12): 1736–42.
10. Sanderson WT, Talaska G, Zaebs D, et al. Pesticide prioritization for a brain cancer case-control study. *Environ Res* 1997; 74(2): 133–144. Zahm SH, Blair A. Cancer among migrant and seasonal farmworkers: an epidemiologic review and research agenda. *Am J Ind Med* 1993; 24(6): 753–66.
11. Worthington V. Nutritional quality of organic versus conventional fruits, vegetables and grains. *J Alt ComlMed* 2001; 7(2): 161–173. Grindler-Pederson L, Rasmussen SE, Bugel S, et al. Effect of diets based on foods from conven-

tional versus organic production on intake and excretion of flavonoids and markers of antioxidative defense in humans. *J Agric Food Chem* 2003; 51(19): 5671–6.

12. Sari I, Baltaci Y, Bagci C, et al. Effect of pistachio diet on lipid parameters, endothelial function, inflammation, and oxidative status: a prospective study. *Nutrition* 2010; 26(4): 399–404.

13. Bes-Rastrollo M, Wedick NM, Martinez-Gonzalez MA, et al. Prospective study of nut consumption, long-term weight change, and obesity risk in women. *Am J Clin Nutr* 2009; 89(6): 1913–9. Alper CM, Mattes RD. Effects of chronic peanut consumption on energy balance and hedonics. *Int J Obes Relat Metab Disord* 2002; 26(8): 1129–37.