

Bibliography Updated 6-19-13 George Yu, M.D.

Calorie Restriction, Glucose and Cancer

Boden G, Sargrad K, Homko C, Mozzoli M, Stein TP. Effect of a low-carbohydrate diet on appetite, blood glucose levels, and insulin resistance in obese patients with type 2 diabetes. Ann Int Med. 2005 Mar 15;142(6):403-11.

Cleary MP, Hu X, Grossmann ME, Juneja SC, Dogan S, Grande JP, Maihle NJ. Prevention of mammary tumorigenesis by intermittent calorie restriction: does calorie intake during refeeding modulate the response? Exp Biol Med (Maywood). 2007 Jan;232(1):70-80. PubMed PMID 17202587

Davison Z, de Blacquièrre GE, Wheatley BR, May FE. Insulin-like growth factor-dependent proliferation and survival of triple-negative breast cancer cells: implications for therapy. Neoplasia. 2011 Jun; 13(6):504-15. PubMed PMID 21677874

De Lorenzo MS, Baljinnnyam,E, Vatner DE, Abarzua P, Vatner SF, Rabson AB. Calorie restriction reduces growth of mammary tumors and metastases. Carcinogenesis. 2011 Sep;32(9):1381-7.doi: 10.1093/CARCIN/BGR107. Epub 2011 June 10. PubMed PMID 21665891

Fine, EJ, Miller A, Quadros EV, Sequeira JM, Feinman RD. Acetoacetate reduces growth and ATP concentration in cancer cell lines which over-express uncoupling protein 2. Cancer Cell Int. 2009 May 29;9:14. doi: 10.1186/1475-2867-9-14. PubMed PMID 19480693

Fine EJ, Segal-Isaacson CJ, Feinman R, Sparano J: Carbohydrate restriction in patients with advanced cancer: a protocol to assess safety and feasibility with an accompanying hypothesis. Commun Oncol 2008, 5:22–26.

Fine EJ, Segal-Isaacson CJ, Feinman RD, Herszkopf S, Romano MC, Tomuta N, Bontempo AF, Negassa A, Sparano JA. Targeting insulin inhibition as a metabolic therapy in advanced cancer: a pilot safety and feasibility dietary trial in 10 patients. Nutrition. 2012 Oct;28(10):1028-35. doi: 10.1016/j.nut.2012.05.001. Epub 2012 Jul 26. PubMed PMID 22840388

Fontana L, Weiss, Ep, Villareal DT, Klein S, Holloszy JO. Long-term effects of calorie or protein restriction on serum IGF-1 and IGFBP-3 concentration in humans. Aging Cell. 2008 Oct;7(5):681-7. PubMed PMID 18843793

Fontana L, Klein S, Holloszy JO. Long-term low-protein, low-calorie diet and endurance exercise modulate metabolic factors associated with cancer risk. Am J Clin Nutr. 2006 Dec;84(6):1456-62. PubMed PMID 17158430

Fu PP, Dooley KL, Von Tungeln LS, Bucci T, Hart RW, Kadlubar FF. Calorie restriction profoundly inhibits liver tumor formation after initiation by 6-nitrochrysene in male mice. Carcinogenesis 1994 Feb; 15(2):159-61. PubMed PMID 8313502

Gonzalez-Angulo AM, Meric-Bernstam F. Metformin: a therapeutic opportunity in breast cancer. Clin Cancer Res. 2010 Mar 15;16(6):1695-700. doi: 10.1158/1078-0432.CCR-09-1805. Epub 2010 Mar 9. Review. PubMed PMID 20215559

Hursting SD, Smith SM, Lashinger LM, Harvey AE, Perkins SN. Calories and carcinogenesis: lessons learned from 30 years of calorie restriction research. Carcinogenesis. 2010 Jan;31(1):83-9. doi: 10.1093/carcin/bgp280. Epub 2009 Dec 7 PubMed PMID 19969554

Isselbacher KJ. Increased uptake of amino acids and 2-deoxy-D-glucose by virus-transformed cells in culture. Proc Natl Acad Sci U S A. 1972 Mar;69(3):585-9. PubMed PMID 4335068

Jiralerspong S, Palla SL, Giordano SH, Meric-Bernstam F, Liedtke C, Barnett CM, Hsu L, Hung MC, Hortobagyi GN, Gonzalez-Angulo AM. Metformin and pathologic complete responses to neoadjuvant chemotherapy in diabetic patients with breast cancer. J Clin Oncol. 2009 Jul 10;27(20):3297-302. doi: 10.1200/JCO.2009.19.6410. Epub 2009 Jun 1. PubMed PMID 19487376

Kalaany NY, Sabatini DM. Tumours with P13K activation are resistant to dietary restriction. Nature. 2009 Apr 9; 458(7239):725-31. doi: 10.1038/nature07782. Epub 2009 Mar 11. PubMed PMID 19279572

Koroljow S. Two cases of malignant tumors with metastases apparently treated successfully with hypoglycemic coma. Psychiatr Q. 1962 Apr;36:261-70, PubMed PMID 14458502

Kunkel M, Reichert TE, Benz P, Lehr HA, Jeong JH, Wieand S, Bartenstein P, Wagner W, Whiteside TL. Overexpression of Glut-1 and increased glucose metabolism in tumors are associated with a poor prognosis in patients with oral squamous cell carcinoma. Cancer. 2003 Feb 15; 97(4):1015-24. PubMed PMID 12569601

Lanza IR, Nair KS. Mitochondrial function as a determinant of life span. Pflugers Arch. 2010 Jan;459(2):277-89. doi: 10.1007/s00424-009-0724-5. Epub 2009 Sep 11. PubMed PMID 19756719

Longo VD, Fontana L. Calorie restriction and cancer prevention: Metabolic and molecular mechanisms. Trends Pharmacol Sci. 2010 Feb;31(2):89-98. doi: 10.1016/j.tips.2009.11.004. Epub 2010 Jan 25. Review. PubMed PMID 20097433

McGirt MJ, Chaichana KL, Gathinji M, Attenello F, Than, K, Ruiz AJ, Olivi A, Quinones-Hinojosa A. Persistent outpatient hyperglycemia is independently associated

with decreased survival after primary resection of malignant brain astrocytomas. Neurosurgery. 2008 Aug;63(2):286-91; discussion 291. doi: 10.1227/01.NEU.0000315282.61035.48 PubMed PMID 18797358

Mendivil-Perez M, Jimenez-Del-Rio M, Velez-Pardo C. Glucose starvation induces apoptosis in a model of acute T leukemia dependent on caspase-3 and apoptosis-inducing factor: a therapeutic strategy. Nutr Cancer. 2013;65(1):99-109. doi: 10.1080/01635581.2013.741751

Mukherjee, P, Sotnikov AV, Mangian HJ, Zhou JR, Visek WJ, Clinton SK. Energy intake and prostate tumor growth, angiogenesis, and vascular endothelial growth factor expression. J Natl Cancer Inst. 1999 Mar 17; 91(6):512-23. PubMed PMID 10088621

Mulrooney TJ, Marsh J, Urits I, Seyfried TN, Mukherjee P. Influence of calorie restriction on constitutive expression of NF-kB in an experimental mouse astrocytoma. PLoS One. 2011 Mar 30;6(3):e18085. doi: 10.1371/journal.pone.0018085. PubMed PMID 21479220

Rossi-Fanelli F, Franchi F, Mulieri M, Cangiano C, Cascino A, Ceci F, Muscaritoli M, Seminara P, Bonomo L. Effect of energy substrate manipulation on tumour cell proliferation in parenterally fed cancer patients. Clin Nutr. 1991 Aug;10(4):228-32. PubMed PMID 16839923

Safdie FM, Dorff T, Quinn D, Fontana L, Wei M, Lee C, Cohen P, Longo VD. Fasting And cancer treatment in humans: A case series report. Aging (Albany NY). 2009 Dec 31;1(12):988-1007 PubMed PMID 20157582

Schmidt M, Pfetzner N, Schwab M, Strauss I, Kämmerer U. effects of a ketogenic diet on the quality of life in 16 patients with advanced cancer: A pilot trial. Nutr Metab (Lond). 2011 Jul 27;8(1):54. doi: 10.1186/1743-7075-8-54. PubMed PMID 21794124

Sengupta, S, Peterson TR, Laplante M, Oh S, Sabatini DM. mTORC1 controls fasting-induced ketogenesis and its modulation by ageing. Nature. 2010 Dec 23;468(7327):1100-4 doi: 10.1038/nature09584 PubMed PMID 21179166

Seyfried Thomas N. Cancer as a Metabolic Disease: on the origin, management and prevention of cancer. John Wiley and Sons, Inc. Hoboken, NJ 2012.

Seyfried TN, Sanderson TM, El-Abbadi, MM McGowan R, Mukherjee P. Role of glucose and ketone bodies in the etabolic control of experimental brain cancer. Br J Cancer. 2003 Oct 6;89(7):1375-82.

Shelton LM, Huysentruyt LC, Mukherjee P, Seyfried TN. Calorie restriction as an anti-invasive therapy for malignant brain cancer in the VM mouse. ASN Neuro. 2010 Jul 23;2(3):e00038. doi:10.1042/AN20100002 PubMed PMID 20664705

Stewart JW, Koehler K, Jackson W, Hawley J, Wang W, Au A, Myers R, Birt DF. Prevention of mouse skin tumor promotion by dietary energy restriction requires an intact adrenal gland and glucocorticoid supplementation restores inhibition. *Carcinogenesis* 2005 Jun;26(6):1077-84. E pub Mar 3. PubMed PMID 15746164

Sun B, Liu R, Xiao ZD, Zhu X. c-MET protects breast cancer cells from apoptosis induced by sodium butyrate. *PLoS One*. 2012;7(1):30143. doi: 10.1371/journal.pone.0030143. Epub 2012 Jan 12. PubMed PMID 22253909

Thangaraju M, Cresci GA, Liu K, Ananth S, Gnanaprakasam JP, Browning DD, Mellinger JD, Smith SB, Digby GJ, Lambert NA, Prasad PD, Ganapathy V. GPR109A is a G-protein-coupled receptor for the bacterial fermentation product butyrate and functions as a tumor suppressor in colon. *Cancer Res*. 2009 Apr 1;69(7):2826-32. doi: 10.1158/0008-5472.CAN-08-4466. Epub 2009 Mar 10. PubMed PMID 19276343

Wheatley KE, Williams EA, Smith NC, Dillard A, Park EY, Nunez NP, Hursting SD, Lane MA. Low-carbohydrate diet versus calorie restriction: effects on weight loss, hormones, and colon tumor growth in obese mice. *Nutr Cancer*. 2008;60(1):61-8. doi: 10.1080/01635580701510150 PubMed PMID 18444137

Williams CC, Singleton BA, Llopis SD, Skripnikova EV. Metformin induces a senescence-associated gene signature in breast cancer cells. *J Health Care Poor Underserved*. 2013 Feb;24(1 Suppl):93-103. doi: 10.1353/hpu.2013.0044. PubMed PMID 23395946

Zuccoli G, Marcello N, Pisanello A, Servadei F, Vaccaro S, Mukherjee P, Seyfried TN. Metabolic management of glioblastoma multiforme using standard therapy together with a restricted ketogenic diet: Case Report. *Nutr Metab (Lond)*. 2010 Apr 22;7:33. doi: 10.1186/1743-7075-7-33. PubMed PMID 20412570

