

## ALCOHOL - reduce

Chiuvè SE, Giovannucci EL, Hankinson SE et al. Alcohol intake and methylenetetrahydrofolate reductase polymorphism modify the relation of folate intake to plasma homocysteine. *Am J Clin Nutr*. 2005. 82(1):155-62.

## CAFFEINE - Reduce

Rapuri P.B., Gallagher J.C., Knezetic J.A., Kinyamu H.K., Ryschon K.L., (2004). Association between Vitamin D receptor polymorphisms and the rate of bone loss in elderly women-importance of adjusting for dietary and lifestyle factors. *Jour. Steroid Biochem. Molec. Bio* 89-90; 503-503

Rapuri PB, Gallagher JC, Kinyamu HK, Ryschon KL. Caffeine intake increases the rate of bone loss in elderly women and interacts with vitamin D receptor genotypes. *Am J Clin Nutr*. 2001;74:694-700

Kotsopoulos J, Ghadirian P, El-Soheemy A, Lynch HT, Snyder C, Daly M, Domchek S, Randall S, Karlan B, Zhang P, Zhang S, Sun P, Narod SA., The CYP1A2 genotype modifies the association between coffee consumption and breast cancer risk among BRCA1 mutation carriers., *Cancer Epidemiol Biomarkers Prev*. 2007 May;16(5):912-6.

Ghotbi R, Christensen M, Roh HK, Ingelman-Sundberg M, Aklillu E, Bertilsson L., Comparisons of CYP1A2 genetic polymorphisms, enzyme activity and the genotype-phenotype relationship in Swedes and Koreans., *Eur J Clin Pharmacol*. 2007 Jun;63(6):537-46. Epub 2007 Mar 17

Cornelis MC, El-Soheemy A, Kabagambe EK, Campos H., Coffee, CYP1A2 genotype, and risk of myocardial infarction., *JAMA*. 2006 Mar 8;295(10):1135-41.

Grosso LM, Bracken MB., Caffeine metabolism, genetics, and perinatal outcomes: a review of exposure assessment considerations during pregnancy., *Ann Epidemiol*. 2005 Jul;15(6):460-6.

Cornelis MC, El-Soheemy A, Campos H., Genetic polymorphism of CYP1A2 increases the risk of myocardial infarction., *J Med Genet*. 2004 Oct;41(10):758-62.

## NICKEL - Reduce

de Jongh CM, John SM, Bruynzeel DP, Calkoen F, van Dijk FJ, Khrenova L, Rustemeyer T, Verberk MM, Kezic S., Cytokine gene polymorphisms and susceptibility to chronic irritant contact dermatitis. *Contact Dermatitis*. 2008 May;58(5):269-77.

Blömeke B, Brans R, Dickel H, Bruckner T, Erdmann S, Heesen M, Merk HF, Coenraads PJ. Association between TNFA-308 G/A polymorphism and sensitization to para-phenylenediamine: a case-control study. *Allergy*. 2008 Mar 29. 10.1111/j.1398-9995.2008.01704.x [Epub ahead of print]

Brans R, Dickel H, Bruckner T, Coenraads PJ, Heesen M, Merk HF, Blömeke B. MnSOD polymorphisms in sensitized patients with delayed-type hypersensitivity reactions to the chemical allergen para-phenylene diamine: a case-control study. *Toxicology*. 2005 Sep 1;212(2-3):148-54.

Dai Y, Leng S, Li L, Niu Y, Huang H, Cheng J, Zheng Y. Genetic polymorphisms of cytokine genes and risk for trichloroethylene-induced severe generalized dermatitis: a case-control study. *Biomarkers*. 2004 Nov-Dec;9(6):470-8.

Westphal GA, Schnuch A, Moessner R, König IR, Kränke B, Hallier E, Ziegler A, Reich K., Cytokine gene polymorphisms in allergic contact dermatitis. *Contact Dermatitis*. 2003 Feb;48(2):93-8.

Lutz W, Tarkowski M, Nowakowska E., Genetic polymorphism of glutathione s-transferase as a factor predisposing to allergic dermatitis., *Med Pr*. 2001;52(1):45-51

Westphal GA, Schnuch A, Schulz TG, Reich K, Aberer W, Brasch J, Koch P, Wessbecher R, Szliska C, Bauer A, Hallier E., Homozygous gene deletions of the glutathione S-transferases M1 and T1 are associated with thimerosal sensitization., *Int Arch Occup Environ Health*. 2000 Aug;73(6):384-8

Wang BJ, Shiao JS, Chen CJ, Lee YC, Guo YL., Tumour necrotizing factor-alpha promoter and GST-T1 genotype predict skin allergy to chromate in cement workers in Taiwan., *Contact Dermatitis*. 2007 Nov;57(5):309-15.

Fleming CJ, Burden AD, Forsyth A., The genetics of allergic contact hypersensitivity to nickel., *Contact Dermatitis*. 1999 Nov;41(5):251-3.

Schram SE, Warshaw EM., Genetics of nickel allergic contact dermatitis., *Dermatitis*. 2007 Sep;18(3):125-33.

Nacak M, Erbagci Z, Buyukafsar K, Yurtsever AS, Tiftik RN., Association of angiotensin-converting enzyme gene insertion/deletion polymorphism with allergic contact dermatitis. ,*Basic Clin Pharmacol Toxicol*. 2007 Aug;101(2):101-3.

Scholzen TE, Ständer S, Riemann H, Brzoska T, Luger TA., Modulation of cutaneous inflammation by angiotensin-converting enzyme., *J Immunol*. 2003 Apr 1;170(7):3866-73.

## **REFINED CARBOHYDRATE / SUGARS - Reduce**

Temelkova-Kurktschiev T, Hanefeld M, Chinetti G et al. Ala12Ala genotype of the peroxisome proliferator-activated receptor gamma2 protects against atherosclerosis. *J Clin Endocrinol Metab*. 2004. 89:4238-42.

Vaccaro O, Lapice E, Monticelli A et al. Pro12Ala polymorphism of the PPARgamma2 locus modulates the relationship between energy intake and body weight in type 2 diabetic patients. *Diabetes Care*. 2007. 30(5):1156-61.

Altshuler, D., Hirschhorn, J. N., Klannemark, M., Lindgren, C. M., Vohl, M. C., Nemesh, J., Lane, C. R., Schaffner, S. F., Bolk, S., Brewer, C., et al. (2000). The common PPARgamma Pro12Ala polymorphism is associated with decreased risk of type 2 diabetes. *Nat Genet* 26, 76-80.

Stumvoll, M., and Haring, H. (2002). The peroxisome proliferator-activated receptor-gamma2 Pro12Ala polymorphism. *Diabetes* 51, 2341-2347.

Dengel DR, Brown MD, Ferrell RE et al. Exercise-induced changes in insulin action are associated with ACE gene polymorphisms in older adults. *Physiol Genomics*. 2002. 11(2):73-80.

Jones A, Montgomery HE, Woods DR. Human performance: a role for the ACE genotype? *Exerc Sport Sci Rev*. 2002. 30:184-90.

Winnicki M, Accurso V, Hoffmann M, Pawlowski R, Dorigatti F, Santonastaso M, Longo D, Krupa-Wojciechowska B, Jeunemaitre X, Pessina AC, Somers VK, Palatini P; Physical activity and angiotensin-converting enzyme gene polymorphism in mild hypertensives. HARVEST Study Group. *Am J Med Genet A*. 2004 Feb 15;125(1):38-44.

Perticone, F., Ceravolo, R., Iacopino, S., Cloro, C., Ventura, G., Maio, R., Gulletta, E., Perrotti, N., and Mattioli, P. L. (2001). Relationship between angiotensin-converting enzyme gene polymorphism and insulin resistance in never-treated hypertensive patients. *J Clin Endocrinol Metab* 86, 172-178.

Dhamrait SS, James L, Brull DJ, Myerson S, Hawe E, Pennell DJ, World M, Humphries SE, Haddad F, Montgomery HE. Cortical bone resorption during exercise is interleukin-6 genotype-dependent. *Eur J Appl Physiol*. 2003 Mar;89(1):21-5

Rankinen T, Rice T, Pérusse L et al. NOS3 Glu298Asp genotype and blood pressure response to endurance training: the HERITAGE family study. *Hypertension* 2000. 36:885-9.

Nelson TL, Fingerlin TE, Moss LK, Barmada MM, Ferrell RE, Norris JM. (2007). Association of the peroxisome proliferator-activated receptor gamma gene with type 2 diabetes mellitus varies by physical activity among non-Hispanic whites from Colorado. *Metabolism*. 2007 Mar;56(3):388-93

## **SALT - Reduce**

Giner V, Poch E, Bragulat E et al. Renin-angiotensin system genetic polymorphisms and salt sensitivity in essential hypertension. *Hypertension*. 2000. 35:512-7.

Li Y, Zagato L, Kuznetsova T et al. Angiotensin-converting enzyme I/D and alpha-adducin Gly460Trp polymorphisms: from angiotensin-converting enzyme activity to cardiovascular outcome. *Hypertension*. 2007. 49:1291-7.

Poch E, Gonzalez D, Giner V et al. Molecular basis of salt sensitivity in human hypertension. Evaluation of renin-angiotensin-aldosterone system gene polymorphisms. *Hypertension*. 2001. 38(5):1204-9.

Kuznetsova T, Staessen JA, Stolarz K, Ryabikov A, Tikhonoff V, Olszanecka A, Bianchi G, Brand E, Casiglia E, Dominiczak A, Fagard R, Malyutina S, Nikitin Y, Kawecka-Jaszcz K Relationship between left ventricular mass and the ACE D/I polymorphism varies according to sodium intake. European Project On Genes in Hypertension (EPOGH) Investigators. *J Hypertens*. 2004 Feb;22(2):287-95.

Zhang L, Miyaki K, Araki J, Song Y, Kimura T, Omae K, Muramatsu M. Interaction of angiotensin I-converting enzyme insertion-deletion polymorphism and daily salt intake influences hypertension in Japanese men. *Hypertens Res*. 2006 Oct;29(10):751-8.

Yamagishi K, Tanigawa T, Cui R, Tabata M, Ikeda A, Yao M, Shimamoto T, Iso H High sodium intake strengthens the association of ACE I/D polymorphism with blood pressure in a community. *Am J Hypertens*. 2007 Jul;20(7):751-7

## **SATURATED FATS - Reduce**

Garenc C, Perusse L, Bergeron J et al. Evidence of LPL gene-exercise interaction for body fat and LPL activity: the HERITAGE Family Study. *J Appl Physiol*. 2001. 91(3):1334-40.

Nettleton JA, Steffen LM, Ballantyne CM et al. Associations between HDL-cholesterol and polymorphisms in hepatic lipase and lipoprotein lipase genes are modified by dietary fat intake in African American and White adults. *Atherosclerosis*. 2007. 194(2):e131-40.

Lopez-Miranda J, Cruz G, Gomez P, Marin C, Paz E, Perez-Martinez P, Fuentes FJ, Ordovas JM, Perez-Jimenez F. The influence of lipoprotein lipase gene variation on postprandial lipoprotein metabolism. *J Clin Endocrinol Metab*. 2004 Sep;89(9):4721-8.

Clee, S. M., Loubser, O., Collins, J., Kastelein, J. J., and Hayden, M. R. (2001). The LPL S447X cSNP is associated with decreased blood pressure and plasma triglycerides, and reduced risk of coronary artery disease. *Clin Genet* 60, 293-300.

Brown S, Ordovas JM, Campos H. Interaction between the APOC3 gene promoter polymorphisms, saturated fat intake and plasma lipoproteins. *Atherosclerosis*. 2003. 170(2):307-13.

Salas J, Jansen S, Lopez-Miranda J et al. The SstI polymorphism of the apolipoprotein C-III gene determines the insulin response to an oral-glucose-tolerance test after consumption of a diet rich in saturated fats. *Am J Clin Nutr*. 1998. 68(2):396-401.

Dullaart RP, Hoogenberg K, Riemens SC, et al. Cholesteryl ester transfer protein gene polymorphism is a determinant of HDL cholesterol and of the lipoprotein response to a lipid-lowering diet in type 1 diabetes. *Diabetes*. 1997. 46(12):2082-2087.

Li TY, Zhang C, Asselbergs FW et al. Interaction between dietary fat intake and the cholesterol ester transfer protein TaqIB polymorphism in relation to HDL-cholesterol concentrations among US diabetic men. *Am J Clin Nutr*. 2007. 86(5):1524-9.

Wallace AJ, Mann JI, Sutherland WHF et al. Variants in the cholesterol ester transfer protein and lipoprotein lipase genes are predictors of plasma cholesterol response to dietary change. *Atherosclerosis*. 2000. 152(2):327-36.

Bendlova B, Vejrazkova D, Vcelak J et al. PPARgamma2 Pro12Ala polymorphism in relation to free fatty acids concentration and composition in lean healthy Czech individuals with and without family history of diabetes type 2. *Physiol Res*. 2008. 57 Suppl 1:S77-90.

Perez-Martinez P, Gomez P, Paz E, Marin C, Gavilan Moral E, Lopez-Miranda J, Ordovas JM, Fernandez de la Puebla RA, Perez-Jimenez F. Interaction between smoking and the SstI polymorphism of the apo C-III gene determines plasma lipid response to diet, *Nutr Metab Cardiovasc Dis*. 2001 Aug;11(4):237-43

Komurcu-Bayrak E, Onat A, Poda M et al. The S447X variant of lipoprotein lipase gene is associated with metabolic syndrome and lipid levels among Turks. *Clin Chim Acta*. 2007. 383(1-2):110-5.

## **TOBACCO / URBAN POLLUTION - Reduce**

Corella D, Guillén M, Sáiz C, et al. Associations of *LPL* and *APOC3* gene polymorphisms on plasma lipids in a Mediterranean population: interaction with tobacco smoking and the *APOE* locus. *J Lipid Res*. 2002;43:416-427.

Lodovici M, Luceri C, Guglielmi F et al. Benzo(a)pyrene diolepoxide (BPDE)-DNA adduct levels in leukocytes of smokers in relation to polymorphism of CYP1A1, GSTM1, GSTP1, GSTT1, and mEH. *Cancer Epidemiol Biomarkers Prev*. 2004. 1342-8.

Jerrard-Dunne P, Sitzler M, Risley P, Buehler A, von Kegler S, Markus HS. Inflammatory gene load is associated with enhanced inflammation and early carotid atherosclerosis in smokers. *Stroke*. 2004 Nov;35(11):2438-43.

Yang J, Ambrosone CB, Hong CC et al. Relationships between polymorphisms in NOS3 and MPO genes, cigarette smoking and risk of post-menopausal breast cancer. *Carcinogenesis*. 2007. 28(6):1247-53.

Lee CR, North KE, Bray MS, Avery CL, Mosher MJ, Couper DJ, Coresh J, Folsom AR, Boerwinkle E, Heiss G, Zeldin DC., NOS3 polymorphisms, cigarette smoking, and cardiovascular disease risk: the Atherosclerosis Risk in Communities study, *Pharmacogenet Genomics*. 2006 Dec;16(12):891-9

## **ANTIOXIDANTS - increase**

Ambrosone CB, Freudenheim JL, Thompson PA et al. Manganese superoxide dismutase (MnSOD) genetic polymorphisms, dietary antioxidants, and risk of breast cancer. *Cancer Res*. 1999. 59(3):602-6.

Cai Q, Shu XO, Wen W et al. Genetic polymorphism in the manganese superoxide dismutase gene, antioxidant intake, and breast cancer risk: results from the Shanghai Breast Cancer Study. *Breast Cancer Res*. 2004. 6(6):R647-55.

Li H, Kantoff PW, Giovannucci E, et al. Manganese superoxide dismutase polymorphism, prediagnostic antioxidant status, and risk of clinical significant prostate cancer. *Cancer Res*. 2005;65:2498-2504.

Palli D, Masala G, Peluso M, et al. The effects of diet on DNA bulky adduct levels are strongly modified by GSTM1 genotype: a study on 634 subjects. *Carcinogenesis*. 2004. 25:577-584.

Tsai YY, McGlynn KA, Hu Y et al. Genetic susceptibility and dietary patterns in lung cancer. *Lung Cancer*. 2003. 41(3):269-81.

Kang D, Lee KM, Park SK et al. Functional variant of manganese superoxide dismutase (SOD2 V16A) polymorphism is associated with prostate cancer risk in the prostate, lung, colorectal, and ovarian cancer study. *Cancer Epidemiol Biomarkers Prev*. 2007. 16(8):1581-6.

St. Clair D. Manganese superoxide dismutase: genetic variation and regulation. *J Nutr.* 2004. 134(11):3190S-3191S.

Palli D, Masala G, Peluso M, et al. The effects of diet on DNA bulky adduct levels are strongly modified by GSTM1 genotype: a study on 634 subjects. *Carcinogenesis.* 2004. 25:577-584.

Tsai YY, McGlynn KA, Hu Y et al. Genetic susceptibility and dietary patterns in lung cancer. *Lung Cancer.* 2003. 41(3):269-81.

## **CALCIUM / VITAMIN D - Increase**

Eisman JA. Pharmacogenetics of the vitamin D receptor and osteoporosis. *Drug Metab Dispos.* 2001. 29:505-12.

Ralston SH, Uitterlinden AG, Brandi ML, et al. Large-scale evidence for the effect of the COL1A1 Sp1 polymorphism on osteoporosis outcomes: the GENOMOS study. *PLoS Med.* 2006;3:e90.

Mann, V., and Ralston, S. H. (2003). Meta-analysis of COL1A1 Sp1 polymorphism in relation to bone mineral density and osteoporotic fracture. *Bone* 32, 711-717

Fontova R, Gutierrez C, Vendrell J et al. Bone mineral mass is associated with interleukin 1 receptor autoantigen and TNF-alpha gene polymorphisms in post-menopausal Mediterranean women. *J. Endocrinol Invest.* 2002. 25:684-690.

Brown MA, Haughton MA, Grant SF et al. Genetic control of bone density and turnover: role of the collagen 1alpha1, estrogen receptor, and vitamin D receptor genes. *J Bone Miner Res.* 2001. 16(4):758-64.

Eisman JA. Pharmacogenetics of the vitamin D receptor and osteoporosis. *Drug Metab Dispos.* 2001. 29:505-12.

Rapuri P.B., Gallagher J.C., Knezetic J.A., Kinyamu H.K., Ryschon K.L., (2004). Association between Vitamin D receptor polymorphisms and the rate of bone loss in elderly women-importance of adjusting for dietary and lifestyle factors. *Jour. Steroid Biochem. Molec. Bio* 89-90; 503-503

Rapuri PB, Gallagher JC, Kinyamu HK, Ryschon KL. Caffeine intake increases the rate of bone loss in elderly women and interacts with vitamin D receptor genotypes. *Am J Clin Nutr.* 2001;74:694-700

Ferrari SL, Karasik D, Liu J, Karamohamed S, Herbert AG, Cupples LA, Kiel DP., Interactions of interleukin-6 promoter polymorphisms with dietary and lifestyle factors and their association with bone mass in men and women from the Framingham Osteoporosis Study., *J Bone Miner Res.* 2004 Apr;19(4):552-9. Epub 2004 Jan 5

## **CRUCIFEROUS - Increase**

Brennan P, Hsu CC, Moullan N et al. Effect of cruciferous vegetables on lung cancer in patients stratified by genetic status: a mendelian randomisation approach. *Lancet.* 2005. 366(9496):1558-60.

Lampe JW, Peterson S. Brassica, biotransformation and cancer risk: genetic polymorphisms alter the preventive effects of cruciferous vegetables. *J Nutr.* 2002. 132:2991-2994.

Palli D, Masala G, Peluso M, et al. The effects of diet on DNA bulky adduct levels are strongly modified by GSTM1 genotype: a study on 634 subjects. *Carcinogenesis.* 2004. 25:577-584.

Tsai YY, McGlynn KA, Hu Y et al. Genetic susceptibility and dietary patterns in lung cancer. *Lung Cancer.* 2003. 41(3):269-81.

## **EXERCISE - Increase**

Temelkova-Kurktschiev T, Hanefeld M, Chinetti G et al. Ala12Ala genotype of the peroxisome proliferator-activated receptor gamma2 protects against atherosclerosis. *J Clin Endocrinol Metab.* 2004. 89:4238-42.

Vaccaro O, Lapice E, Monticelli A et al. Pro12Ala polymorphism of the PPARgamma2 locus modulates the relationship between energy intake and body weight in type 2 diabetic patients. *Diabetes Care.* 2007. 30(5):1156-61.

Altshuler, D., Hirschhorn, J. N., Klannemark, M., Lindgren, C. M., Vohl, M. C., Nemesh, J., Lane, C. R., Schaffner, S. F., Bolk, S., Brewer, C., et al. (2000). The common PPARgamma Pro12Ala polymorphism is associated with decreased risk of type 2 diabetes. *Nat Genet* 26, 76-80.

Stumvoll, M., and Haring, H. (2002). The peroxisome proliferator-activated receptor-gamma2 Pro12Ala polymorphism. *Diabetes* 51, 2341-2347.

Shiau, M. Y., Wu, C. Y., Huang, C. N., Hu, S. W., Lin, S. J., and Chang, Y. H. (2003). TNF-alpha polymorphisms and type 2 diabetes mellitus in Taiwanese patients. *Tissue Antigens* 61, 393-397.

Malczewska-Malec, M., Niedbal, S., Naskalski, J. W., and Dembinska-Kiec, A. (2003). The TNF-alpha gene NcoI polymorphism at position -308 of the promoter influences insulin resistance, and increases serum triglycerides after postprandial lipaemia in familiar obesity. *Clin Chem Lab Med* 41, 501-510.

Ortlepp JR, Metrikat J, Albrecht M et al. The vitamin D receptor gene variant and physical activity predicts fasting glucose levels in healthy young men. *Diabet Med.* 2003. 20:451-454.

Reis AF, Hauache OM, Velho G. Vitamin D endocrine system and the genetic susceptibility to diabetes, obesity, and vascular disease. A review of evidence. *Diabetes Metab.* 2005. 31:318-325.

Dengel DR, Brown MD, Ferrell RE et al. Exercise-induced changes in insulin action are associated with ACE gene polymorphisms in older adults. *Physiol Genomics.* 2002. 11(2):73-80.

Jones A, Montgomery HE, Woods DR. Human performance: a role for the ACE genotype? *Exerc Sport Sci Rev.* 2002. 30:184-90.

Winnicki M, Accurso V, Hoffmann M, Pawlowski R, Dorigatti F, Santonastaso M, Longo D, Krupa-Wojciechowska B, Jeunemaitre X, Pessina AC, Somers VK, Palatini P; Physical activity and angiotensin-converting enzyme gene polymorphism in mild hypertensives. HARVEST Study Group. *Am J Med Genet A.* 2004 Feb 15;125(1):38-44.

Perticone, F., Ceravolo, R., Iacopino, S., Cloro, C., Ventura, G., Maio, R., Gulletta, E., Perrotti, N., and Mattioli, P. L. (2001). Relationship between angiotensin-converting enzyme gene polymorphism and insulin resistance in never-treated hypertensive patients. *J Clin Endocrinol Metab* 86, 172-178.

Dhamrait SS, James L, Brull DJ, Myerson S, Hawe E, Pennell DJ, World M, Humphries SE, Haddad F, Montgomery HE. Cortical bone resorption during exercise is interleukin-6 genotype-dependent. *Eur J Appl Physiol.* 2003 Mar;89(1):21-5

Rankinen T, Rice T, Pérusse L et al. NOS3 Glu298Asp genotype and blood pressure response to endurance training: the HERITAGE family study. *Hypertension* 2000. 36:885-9.

Nelson TL, Fingerlin TE, Moss LK, Barmada MM, Ferrell RE, Norris JM. (2007). Association of the peroxisome proliferator-activated receptor gamma gene with type 2 diabetes mellitus varies by physical activity among non-Hispanic whites from Colorado. *Metabolism.* 2007 Mar;56(3):388-93

## **FOLATE, B6, B12, Riboflavin - increase**

Chiuvè SE, Giovannucci EL, Hankinson SE et al. Alcohol intake and methylenetetrahydrofolate reductase polymorphism modify the relation of folate intake to plasma homocysteine. *Am J Clin Nutr.* 2005. 82(1):155-62.

Bathum, L, Petersen I, Christiansen L et al. Genetic and environmental influences on plasma homocysteine: results from a Danish twin study. *Clin Chem.* 2007. 53(5):971-9.

Cravo M. Alcohol, methylenetetrahydrofolate 677C->T genotype, and low folate intake: concurrent causes for hyperhomocysteinemia. *Am J Clin Nutr.* 2005. 82(1):3-4.

Fohr IP, Prinz-Langenohl, Bronstrup A et al. 5,10-Methylenetetrahydrofolate reductase genotype determines the plasma homocysteine-lowering effect of supplementation with 5-methyltetrahydrofolate or folic acid in healthy young women. *Am J Clin Nutr.* 2002. 75(2):275-82.

Silaste ML, Rantala M, Sampi M et al. Polymorphisms of key enzymes in homocysteine metabolism affect diet responsiveness of plasma homocysteine in healthy women. *J Nutr.* 2001. 131(10):2643-7.

Yang Q-H, Botto LD, Gallagher M et al. Prevalence and effects of gene-gene and gene-nutrient interactions on serum folate and serum total homocysteine concentrations in the United States: findings from the third National Health and Nutrition Examination Survey DNA bank. *Am J Clin Nutr.* 2008. 88:232-46.

Ashfield-Watt PA, Pullin CH, Whiting JM, et al. Methylenetetrahydrofolate reductase 677C-->T genotype modulates homocysteine responses to a folate-rich diet or a low-dose folic acid supplement: a randomized controlled trial. *Am J Clin Nutr.* 2002;76:180-186.

Wald, D. S., Law, M. & Morris, J. K. Homocysteine and cardiovascular disease: evidence on causality from a meta-analysis. *BMJ* 325, 1202 (2002).

Dose-dependent effects of folic acid on blood concentrations of homocysteine: a meta-analysis of the randomized trials. *Am J Clin Nutr.* 2005;82:806-812.

Powers HJ, Hill MH, Welfare M, et al. Responses of biomarkers of folate and riboflavin status to folate and riboflavin supplementation in healthy and colorectal polyp patients (the FAB2 Study). *Cancer Epidemiol Biomarkers Prev.* 2007. 16:2128-35.

## **OMEGA 3, PUFA - increase**

Lopez-Miranda J, Jansen S, Ordovas JM. Influence of the SstI polymorphism at the apolipoprotein C-III gene locus on the plasma low-density-lipoprotein-cholesterol response to dietary monounsaturated fat. *Am J Clin Nutr.* 1997. 66(1):97-103.

Högström M, Nordström P, Nordström A. N-3 fatty acids are positively associated with peak bone mineral density and bone accrual in healthy men: the NO2 Study. *Am J Clin Nutr.* 2007;85:803-807.

Leeson CP, Hingorani AD, Mullen MJ et al. Glu298Asp endothelial nitric oxide synthase gene polymorphism interacts with environmental and dietary factors to influence endothelial function. *Circ Res.* 2002. 90(11):1153-8.

Casas, J. P., Bautista, L. E., Humphries, S. E. & Hingorani, A. D. Endothelial nitric oxide synthase genotype and ischemic heart disease: meta-analysis of 26 studies involving 23028 subjects. *Circulation* 109, 1359-1365 (2004).

Fontaine-Bisson B, Wolever T, Chiasson JL et al. Genetic polymorphisms of tumor necrosis factor-alpha modify the association between dietary polyunsaturated fatty acids and fasting HDL-cholesterol and apo A-I concentrations. *Am J Clin Nutr.* 2007. 86(3):768-74.

Calder PC. Polyunsaturated fatty acids and inflammation. *Biochem Soc Trans.* 2005. 33(Pt 2):423-7.

Herbert A, Liu C, Karamohamed S et al. BMI modifies associations of IL-6 genotypes with insulin resistance: the Framingham Study. *Obesity.* 2006. 14(8):1454-61.

Humphries SE, Luong LA, Ogg MS et al. The interleukin-6-174 G/C promoter polymorphism is associated with risk of coronary heart disease and systolic blood pressure in healthy men. *Eur Heart J.* 2001. 22:2243-52.

Huth C, Illig T, Herder C et al. Joint analysis of individual participants' data from 17 studies on the association of the IL6 variant -174G>C with circulating glucose levels, interleukin-6 levels, and body mass index. *Ann Med.* 2008. 27:1-21.

Ozdemir O, Gundogdu F, Karakelleoglu S, et al. Comparison of serum levels of inflammatory markers and allelic variant of interleukin-6 in patients with acute coronary syndrome and stable angina pectoris. *Coron Artery Dis.* 2008. 19:15-9.

Vickers MA, Green FR, Terry C, Mayosi BM, Julier C, Lathrop M, Ratcliffe PJ, Watkins HC, Keavney B., Genotype at a promoter polymorphism of the interleukin-6 gene is associated with baseline levels of plasma C-reactive protein., *Cardiovasc Res* 2002 Mar;53(4):1029-34

Vozarova B, Fernandez-Real JM, Knowler WC, Gallart L, Hanson RL, Gruber JD, Ricart W, Vendrell J, Richart C, Tataranni PA, Wolford JK., The interleukin-6 (-174) G/C promoter polymorphism is associated with type-2 diabetes mellitus in Native Americans and Caucasians., *Hum Genet.* 2003 Apr;112(4):409-13. Epub 2003 Feb 14

Hamid YH, Rose CS, Urhammer SA, Glumer C, Nolsoe R, Kristiansen OP, Mandrup-Poulsen T, Borch-Johnsen K, Jorgensen T, Hansen T, Pedersen O., Variations of the interleukin-6 promoter are associated with features of the metabolic syndrome in Caucasian Danes., *Diabetologia.* 2005 Feb;48(2):251-60. Epub 2005 Jan 11.

Ferrari SL, Garnerio P, Emond S, Montgomery H, Humphries SE, Greenspan SL, A functional polymorphic variant in the interleukin-6 gene promoter associated with low bone resorption in postmenopausal women., *Arthritis Rheum* 2001 Jan;44(1):196-201

Shiau, M. Y., Wu, C. Y., Huang, C. N., Hu, S. W., Lin, S. J., and Chang, Y. H. (2003). TNF-alpha polymorphisms and type 2 diabetes mellitus in Taiwanese patients. **Tissue Antigens** 61, 393-397.

Gulec S, Karabulut H, Ozdemir AO, et al. Glu298Asp polymorphism of the eNOS gene is associated with coronary collateral development. *Atherosclerosis.* 2008;198:354-9.

Nejatizadeh A, Kumar R, Stobdan T, et al. Endothelial nitric oxide synthase gene haplotypes and circulating nitric oxide levels significantly associate with risk of essential hypertension. *Free Radic Biol Med.* 2008;44:1912-8.

Fontova R, Gutierrez C, Vendrell J et al. Bone mineral mass is associated with interleukin 1 receptor autoantigen and TNF-alpha gene polymorphisms in post-menopausal Mediterranean women. *J. Endocrinol Invest.* 2002. 25:684-690.

Rydén M, Amer P. Tumour necrosis factor- $\alpha$  in human adipose tissue – from signaling mechanisms to clinical implications. *J Intern Med.* 2007. 262:431-438.

Wybranska, I., Malczewska-Malec, M., Niedbal, S., Naskalski, J. W., and Dembinska-Kiec, A. (2003). The TNF-alpha gene NcoI polymorphism at position -308 of the promoter influences insulin resistance, and increases serum triglycerides after postprandial lipaemia in familiar obesity. *Clin Chem Lab Med* 41, 501-510.

Grimble, RF, Howell, WM., et al. The ability of fish oil to suppress tumor necrosis factor production by peripheral blood mononuclear cells in healthy men is associated with polymorphisms in genes that influence tumor necrosis factor production. *Am J Clin Nutr* 2002;76:454–9.

<b>ACE</b>	
Dengel DR, Brown MD, Ferrell RE et al. Exercise-induced changes in insulin action are associated with ACE gene polymorphisms in older adults. <i>Physiol Genomics</i> . 2002. 11(2):73-80.	Exercise
Giner V, Poch E, Bragulat E et al. Renin-angiotensin system genetic polymorphisms and salt sensitivity in essential hypertension. <i>Hypertension</i> . 2000. 35:512-7.	Salt
Jones A, Montgomery HE, Woods DR. Human performance: a role for the ACE genotype? <i>Exerc Sport Sci Rev</i> . 2002. 30:184-90.	Exercise
Li Y, Zagato L, Kuznetsova T et al. Angiotensin-converting enzyme I/D and alpha-adducin Gly460Trp polymorphisms: from angiotensin-converting enzyme activity to cardiovascular outcome. <i>Hypertension</i> . 2007. 49:1291-7.	Salt
Poch E, Gonzalez D, Giner V et al. Molecular basis of salt sensitivity in human hypertension. Evaluation of renin-angiotensin-aldosterone system gene polymorphisms. <i>Hypertension</i> . 2001. 38(5):1204-9.	Salt
Kuznetsova T, Staessen JA, Stolarz K, Ryabikov A, Tikhonoff V, Olszanecka A, Bianchi G, Brand E, Casiglia E, Dominiczak A, Fagard R, Malyutina S, Nikitin Y, Kawecka-Jaszcz K Relationship between left ventricular mass and the ACE D/I polymorphism varies according to sodium intake. European Project On Genes in Hypertension (EPOGH) Investigators. <i>J Hypertens</i> . 2004 Feb;22(2):287-95.	Salt
Zhang L, Miyaki K, Araki J, Song Y, Kimura T, Omae K, Muramatsu M. Interaction of angiotensin I-converting enzyme insertion-deletion polymorphism and daily salt intake influences hypertension in Japanese men. <i>Hypertens Res</i> . 2006 Oct;29(10):751-8.	Salt
Yamagishi K, Tanigawa T, Cui R, Tabata M, Ikeda A, Yao M, Shimamoto T, Iso H High sodium intake strengthens the association of ACE I/D polymorphism with blood pressure in a community. <i>Am J Hypertens</i> . 2007 Jul;20(7):751-7	Salt
Winnicki M, Accurso V, Hoffmann M, Pawlowski R, Dorigatti F, Santonastaso M, Longo D, Krupa-Wojciechowska B, Jeunemaitre X, Pessina AC, Somers VK, Palatini P; Physical activity and angiotensin-converting enzyme gene polymorphism in mild hypertensives. HARVEST Study Group. <i>Am J Med Genet A</i> . 2004 Feb 15;125(1):38-44.	Exercise
Perticone, F., Ceravolo, R., Iacopino, S., Cloro, C., Ventura, G., Maio, R., Gulletta, E., Perrotti, N., and Mattioli, P. L. (2001). Relationship between angiotensin-converting enzyme gene polymorphism and insulin resistance in never-treated hypertensive patients. <i>J Clin Endocrinol Metab</i> 86, 172-178.	Exercise

<b>ADH1C</b>	
Agarwal DP. Genetic polymorphisms of alcohol metabolizing enzymes. <i>Pathol Biol</i> . 2001. 49:703-9.	Alcohol
Goldberg DM, Garovic-Kocic V, Diamandis EP et al. Wine: does the colour count? <i>Clin Chim Acta</i> . 1996. 246:183-93.	
Hines LM, Hunter DJ, Stampfer MJ et al. Alcohol consumption and high-density lipoprotein levels: the effect of ADH1C genotype, gender and menopausal status. <i>Atherosclerosis</i> . 2005.182:293-300.	
Hines LM, Stampfer MJ, Ma J, et al. Genetic variation in alcohol dehydrogenase and the beneficial effect of moderate alcohol consumption on myocardial infarction. <i>N Engl J Med</i> . 2001.344:549-55.	
Younis J, Cooper JA, Miller GJ et al. Genetic variation in alcohol dehydrogenase 1C and the beneficial effect of alcohol intake on coronary heart disease risk in the second northwick park heart study. <i>Atherosclerosis</i> . 2005.180:225-32.	

<b>APOC3</b>	
Brown S, Ordovas JM, Campos H. Interaction between the APOC3 gene promoter polymorphisms, saturated fat intake and plasma lipoproteins. <i>Atherosclerosis</i> . 2003. 170(2):307-13.	Saturated Fats
Corella D, Guillén M, Sáiz C, et al. Associations of LPL and APOC3 gene polymorphisms on plasma lipids in a Mediterranean population: interaction with tobacco smoking and the APOE locus. <i>J Lipid Res</i> . 2002;43:416-427.	Smoking
Lopez-Miranda J, Jansen S, Ordovas JM. Influence of the SstI polymorphism at the apolipoprotein C-III gene locus on the plasma low-density-lipoprotein-cholesterol response to dietary monounsaturated fat. <i>Am J Clin Nutr</i> . 1997. 66(1):97-103.	MUFA
Salas J, Jansen S, Lopez-Miranda J et al. The SstI polymorphism of the apolipoprotein C-III gene determines the insulin response to an oral-glucose-tolerance test after consumption of a diet rich in saturated fats. <i>Am J Clin Nutr</i> . 1998. 68(2):396-401.	Saturated Fats
Perez-Martinez P, Gomez P, Paz E, Marin C, Gavilan Moral E, Lopez-Miranda J, Ordovas JM, Fernandez de la Puebla RA, Perez-Jimenez F. Interaction between smoking and the SstI polymorphism of the apo C-III gene determines plasma lipid response to diet, <i>Nutr Metab Cardiovasc Dis</i> . 2001 Aug;11(4):237-43	Saturated Fats Smoking

<b>CETP</b>	
Dullaart RP, Hoogenberg K, Riemens SC, et al. Cholesteryl ester transfer protein gene polymorphism is a determinant of HDL cholesterol and of the lipoprotein response to a lipid-lowering diet in type 1 diabetes. <i>Diabetes</i> . 1997. 46(12):2082-2087.	Saturated Fats
Li TY, Zhang C, Asselbergs FW et al. Interaction between dietary fat intake and the cholesterol ester transfer protein TaqIB polymorphism in relation to HDL-cholesterol concentrations among US diabetic men. <i>Am J Clin Nutr</i> . 2007. 86(5):1524-9.	Saturated Fats
Wallace AJ, Mann JI, Sutherland WHF et al. Variants in the cholesterol ester transfer protein and lipoprotein lipase genes are predictors of plasma cholesterol response to dietary change. <i>Atherosclerosis</i> . 2000. 152(2):327-36.	Saturated Fats

<b>COL1A1</b>	
Brown MA, Houghton MA, Grant SF et al. Genetic control of bone density and turnover: role of the collagen 1alpha1, estrogen receptor, and vitamin D receptor genes. <i>J Bone Miner Res</i> . 2001. 16(4):758-64.	Bone
Eisman JA. Pharmacogenetics of the vitamin D receptor and osteoporosis. <i>Drug Metab Dispos</i> . 2001. 29:505-12.	
Högström M, Nordström P, Nordström A. N-3 fatty acids are positively associated with peak bone mineral density and bone accrual in healthy men: the NO2 Study. <i>Am J Clin Nutr</i> . 2007;85:803-807.	Omega-3
Ralston SH, Uitterlinden AG, Brandi ML, et al. Large-scale evidence for the effect of the COLIA1 Sp1 polymorphism on osteoporosis outcomes: the GENOMOS study. <i>PLoS Med</i> . 2006;3:e90.	
Mann, V., and Ralston, S. H. (2003). Meta-analysis of COL1A1 Sp1 polymorphism in relation to bone mineral density and osteoporotic fracture. <i>Bone</i> 32, 711-717	

<b>CYP1A2</b>	
Bogaards JJP, Verhagen H, Willems MI et al. Consumption of brussels sprouts results in elevated alpha-class glutathione S-transferase levels in human blood plasma. <i>Carcinogenesis</i> . 1994. 15:1073-5.	Caffeine
Cornelis MC, El-Sohemy A, Campos H. Genetic polymorphism of CYP1A2 increases the risk of myocardial infarction. <i>J Med Genet</i> . 2004. 41:758-62.	
Li D, Jiao L, Li Y et al. Polymorphisms of cytochrome P4501A2 and N-acetyltransferase genes, smoking, and risk of pancreatic cancer. <i>Carcinogenesis</i> . 2006. 27:103-11.	
Saebø M, Skjelbred CF, Brekke Li K et al. CYP1A2 164 A-->C polymorphism, cigarette smoking, consumption of well-done red meat and risk of developing colorectal adenomas and carcinomas. <i>Anticancer Res</i> . 2008. 28:2289-95.	
Sachse C, Bhambra U, Smith G et al. Polymorphisms in the cytochrome P450 CYP1A2 gene (CYP1A2) in colorectal cancer patients and controls: allele frequencies, linkage disequilibrium and influence on caffeine metabolism. <i>Br J Clin Pharmacol</i> . 2003. 55:68-76.	
Yang CS, Chhabra SK, Hong JY. Mechanisms of inhibition of chemical toxicity and carcinogenesis by diallyl sulfide (DAS) and related compounds from garlic. <i>J Nutr</i> . 2001. 131:1041S-5S.	

<b>GSTM1</b>	
Brennan P, Hsu CC, Moullan N et al. Effect of cruciferous vegetables on lung cancer in patients stratified by genetic status: a mendelian randomisation approach. <i>Lancet</i> . 2005. 366(9496):1558-60.	Cruciferous
Lodovici M, Luceri C, Guglielmi F et al. Benzo(a)pyrene diolepoxide (BPDE)-DNA adduct levels in leukocytes of smokers in relation to polymorphism of CYP1A1, GSTM1, GSTP1, GSTT1, and mEH. <i>Cancer Epidemiol Biomarkers Prev</i> . 2004. 1342-8.	smoking
Lampe JW, Peterson S. Brassica, biotransformation and cancer risk: genetic polymorphisms alter the preventive effects of cruciferous vegetables. <i>J Nutr</i> . 2002. 132:2991-2994.	Cruciferous
Palli D, Masala G, Peluso M, et al. The effects of diet on DNA bulky adduct levels are strongly modified by GSTM1 genotype: a study on 634 subjects. <i>Carcinogenesis</i> . 2004. 25:577-584.	Cruciferous Antioxidant fruit / veg
Tsai YY, McGlynn KA, Hu Y et al. Genetic susceptibility and dietary patterns in lung cancer. <i>Lung Cancer</i> . 2003. 41(3):269-81.	Cruciferous Antioxidant fruit / veg

<b>IL-6</b>	
Calder PC. Polyunsaturated fatty acids and inflammation. <i>Biochem Soc Trans</i> . 2005. 33(Pt 2):423-7.	PUFA Omega-3
Grimble, RF, Howell, WM., et al. The ability of fish oil to suppress tumor necrosis factor production by peripheral blood mononuclear cells in healthy men is associated with polymorphisms in genes that influence tumor necrosis factor production. <i>Am J Clin Nutr</i> 2002;76:454-9.	Fish Oil
Herbert A, Liu C, Karamohamed S et al. BMI modifies associations of IL-6 genotypes with insulin resistance: the Framingham Study. <i>Obesity</i> . 2006. 14(8):1454-61.	

Humphries SE, Luong LA, Ogg MS et al. The interleukin-6-174 G/C promoter polymorphism is associated with risk of coronary heart disease and systolic blood pressure in healthy men. <i>Eur Heart J</i> . 2001. 22:2243-52.	
Huth C, Illig T, Herder C et al. Joint analysis of individual participants' data from 17 studies on the association of the IL6 variant -174G>C with circulating glucose levels, interleukin-6 levels, and body mass index. <i>Ann Med</i> . 2008. 27:1-21.	
Ozdemir O, Gundogdu F, Karakelleoglu S, et al. Comparison of serum levels of inflammatory markers and allelic variant of interleukin-6 in patients with acute coronary syndrome and stable angina pectoris. <i>Coron Artery Dis</i> . 2008. 19:15-9.	
Jerrard-Dunne P, Sitzer M, Risley P, Buehler A, von Kegler S, Markus HS. Inflammatory gene load is associated with enhanced inflammation and early carotid atherosclerosis in smokers. <i>Stroke</i> . 2004 Nov;35(11):2438-43.	Smoking
Vickers MA, Green FR, Terry C, Mayosi BM, Julier C, Lathrop M, Ratcliffe PJ, Watkins HC, Keavney B., Genotype at a promoter polymorphism of the interleukin-6 gene is associated with baseline levels of plasma C-reactive protein., <i>Cardiovasc Res</i> 2002 Mar;53(4):1029-34	
Vojarova B, Fernandez-Real JM, Knowler WC, Gallart L, Hanson RL, Gruber JD, Ricart W, Vendrell J, Richart C, Tataranni PA, Wolford JK., The interleukin-6 (-174) G/C promoter polymorphism is associated with type-2 diabetes mellitus in Native Americans and Caucasians., <i>Hum Genet</i> . 2003 Apr;112(4):409-13. Epub 2003 Feb 14	
Hamid YH, Rose CS, Urhammer SA, Glumer C, Nolsoe R, Kristiansen OP, Mandrup-Poulsen T, Borch-Johnsen K, Jorgensen T, Hansen T, Pedersen O., Variations of the interleukin-6 promoter are associated with features of the metabolic syndrome in Caucasian Danes., <i>Diabetologia</i> . 2005 Feb;48(2):251-60. Epub 2005 Jan 11.	
Ferrari SL, Garnero P, Emond S, Montgomery H, Humphries SE, Greenspan SL, A functional polymorphic variant in the interleukin-6 gene promoter associated with low bone resorption in postmenopausal women., <i>Arthritis Rheum</i> 2001 Jan;44(1):196-201	
Ferrari SL, Karasik D, Liu J, Karamohamed S, Herbert AG, Cupples LA, Kiel DP., Interactions of interleukin-6 promoter polymorphisms with dietary and lifestyle factors and their association with bone mass in men and women from the Framingham Osteoporosis Study., <i>J Bone Miner Res</i> . 2004 Apr;19(4):552-9. Epub 2004 Jan 5	Calcium
Dhamrait SS, James L, Brull DJ, Myerson S, Hawe E, Pennell DJ, World M, Humphries SE, Haddad F, Montgomery HE. Cortical bone resorption during exercise is interleukin-6 genotype-dependent. <i>Eur J Appl Physiol</i> . 2003 Mar;89(1):21-5	Exercise

<b>LPL</b>	
Garenc C, Perusse L, Bergeron J et al. Evidence of LPL gene-exercise interaction for body fat and LPL activity: the HERITAGE Family Study. <i>J Appl Physiol</i> . 2001. 91(3):1334-40.	Saturated Fat
Komurcu-Bayrak E, Onat A, Poda M et al. The S447X variant of lipoprotein lipase gene is associated with metabolic syndrome and lipid levels among Turks. <i>Clin Chim Acta</i> . 2007. 383(1-2):110-5.	
Nettleton JA, Steffen LM, Ballantyne CM et al. Associations between HDL-cholesterol and polymorphisms in hepatic lipase and lipoprotein lipase genes are modified by dietary fat intake in African American and White adults. <i>Atherosclerosis</i> . 2007. 194(2):e131-40.	Saturated Fat
Lopez-Miranda J, Cruz G, Gomez P, Marin C, Paz E, Perez-Martinez P, Fuentes FJ, Ordovas JM, Perez-Jimenez F. The influence of lipoprotein lipase gene variation on postprandial lipoprotein metabolism. <i>J Clin Endocrinol Metab</i> . 2004 Sep;89(9):4721-8.	Saturated Fat
Clee, S. M., Loubser, O., Collins, J., Kastelein, J. J., and Hayden, M. R. (2001). The LPL S447X cSNP is associated with decreased blood pressure and plasma triglycerides, and reduced risk of coronary artery disease. <i>Clin Genet</i> 60, 293-300.	Saturated Fat

<b>MTHFR</b>	
Bathum, L, Petersen I, Christiansen L et al. Genetic and environmental influences on plasma homocysteine: results from a Danish twin study. <i>Clin Chem</i> . 2007. 53(5):971-9.	Folate
Chiuvè SE, Giovannucci EL, Hankinson SE et al. Alcohol intake and methylenetetrahydrofolate reductase polymorphism modify the relation of folate intake to plasma homocysteine. <i>Am J Clin Nutr</i> . 2005. 82(1):155-62.	Alcohol Folate
Cravo M. Alcohol, methylenetetrahydrofolate 677C->T genotype, and low folate intake: concurrent causes for hyperhomocysteinemia. <i>Am J Clin Nutr</i> . 2005. 82(1):3-4.	Folate
Fohr IP, Prinz-Langenohl, Bronstrup A et al. 5,10-Methylenetetrahydrofolate reductase genotype determines the plasma homocysteine-lowering effect of supplementation with 5-methyltetrahydrofolate or folic acid in healthy young women. <i>Am J Clin Nutr</i> . 2002. 75(2):275-82.	Folate
Powers HJ, Hill MH, Welfare M, et al. Responses of biomarkers of folate and riboflavin status to folate and riboflavin supplementation in healthy and colorectal polyp patients (the FAB2 Study). <i>Cancer Epidemiol Biomarkers Prev</i> . 2007. 16:2128-35.	Folate riboflavin
Silaste ML, Rantala M, Sampi M et al. Polymorphisms of key enzymes in homocysteine metabolism affect diet responsiveness of plasma homocysteine in healthy women. <i>J Nutr</i> . 2001. 131(10):2643-7.	Folate

Yang Q-H, Botto LD, Gallagher M et al. Prevalence and effects of gene-gene and gene-nutrient interactions on serum folate and serum total homocysteine concentrations in the United States: findings from the third National Health and Nutrition Examination Survey DNA bank. <i>Am J Clin Nutr.</i> 2008. 88:232-46.	Folate
Ashfield-Watt PA, Pullin CH, Whiting JM, et al. Methylenetetrahydrofolate reductase 677C-->T genotype modulates homocysteine responses to a folate-rich diet or a low-dose folic acid supplement: a randomized controlled trial. <i>Am J Clin Nutr.</i> 2002;76:180-186.	Folate
Wald, D. S., Law, M. & Morris, J. K. Homocysteine and cardiovascular disease: evidence on causality from a meta-analysis. <i>BMJ</i> 325, 1202 (2002).	Folate
Dose-dependent effects of folic acid on blood concentrations of homocysteine: a meta-analysis of the randomized trials. <i>Am J Clin Nutr.</i> 2005;82:806-812.	Folate

### NOS3

Gulec S, Karabulut H, Ozdemir AO, et al. Glu298Asp polymorphism of the eNOS gene is associated with coronary collateral development. <i>Atherosclerosis.</i> 2008;198:354-9.	
Leeson CP, Hingorani AD, Mullen MJ et al. Glu298Asp endothelial nitric oxide synthase gene polymorphism interacts with environmental and dietary factors to influence endothelial function. <i>Circ Res.</i> 2002. 90(11):1153-8.	Omega3 Smoking
Nejatizadeh A, Kumar R, Stobdan T, et al. Endothelial nitric oxide synthase gene haplotypes and circulating nitric oxide levels significantly associate with risk of essential hypertension. <i>Free Radic Biol Med.</i> 2008;44:1912-8.	
Rankinen T, Rice T, Pérusse L et al. NOS3 Glu298Asp genotype and blood pressure response to endurance training: the HERITAGE family study. <i>Hypertension</i> 2000. 36:885-9.	Exercise
Yang J, Ambrosone CB, Hong CC et al. Relationships between polymorphisms in NOS3 and MPO genes, cigarette smoking and risk of post-menopausal breast cancer. <i>Carcinogenesis.</i> 2007. 28(6):1247-53.	Smoking
Lee CR, North KE, Bray MS, Avery CL, Mosher MJ, Couper DJ, Coresh J, Folsom AR, Boerwinkle E, Heiss G, Zeldin DC., NOS3 polymorphisms, cigarette smoking, and cardiovascular disease risk: the Atherosclerosis Risk in Communities study, Pharmacogenet Genomics. 2006 Dec;16(12):891-9	Smoking
Casas, J. P., Bautista, L. E., Humphries, S. E. & Hingorani, A. D. Endothelial nitric oxide synthase genotype and ischemic heart disease: meta-analysis of 26 studies involving 23028 subjects. <i>Circulation</i> 109, 1359-1365 (2004).	Omega3 Smoking

### PPARG

Bendlova B, Vejrazkova D, Vcelak J et al. PPARgamma2 Pro12Ala polymorphism in relation to free fatty acids concentration and composition in lean healthy Czech individuals with and without family history of diabetes type 2. <i>Physiol Res.</i> 2008. 57 Suppl 1:S77-90.	Saturated Fats PUFA / MUFA
Temelkova-Kurktschiev T, Hanefeld M, Chinetti G et al. Ala12Ala genotype of the peroxisome proliferator-activated receptor gamma2 protects against atherosclerosis. <i>J Clin Endocrinol Metab.</i> 2004. 89:4238-42.	
Vaccaro O, Lapice E, Monticelli A et al. Pro12Ala polymorphism of the PPARgamma2 locus modulates the relationship between energy intake and body weight in type 2 diabetic patients. <i>Diabetes Care.</i> 2007. 30(5):1156-61.	
Altshuler, D., Hirschhorn, J. N., Klannemark, M., Lindgren, C. M., Vohl, M. C., Nemesh, J., Lane, C. R., Schaffner, S. F., Bolk, S., Brewer, C., et al. (2000). The common PPARgamma Pro12Ala polymorphism is associated with decreased risk of type 2 diabetes. <i>Nat Genet</i> 26, 76-80.	
Stumvoll, M., and Haring, H. (2002). The peroxisome proliferator-activated receptor-gamma2 Pro12Ala polymorphism. <i>Diabetes</i> 51, 2341-2347.	
Nelson TL, Fingerlin TE, Moss LK, Barmada MM, Ferrell RE, Norris JM. (2007). Association of the peroxisome proliferator-activated receptor gamma gene with type 2 diabetes mellitus varies by physical activity among non-Hispanic whites from Colorado. <i>Metabolism.</i> 2007 Mar;56(3):388-93	Exercise

### SLC6A4 aka 5HTTLPR

Psychiatr Genet. 2007 Dec;17(6):351-4. Association between serotonin transporter genotype and extraversion. Gillihan SJ, Farah MJ, Sankoorikal GM, Breland J, Brodtkin ES.	Stress
Psychiatr Hung. 2006;21(5):379-85. Links [Relationship between serotonin transporter gene 5HTTLPR polymorphism and the symptoms of neuroticism in a healthy population] Gonda X, Bagdy G.	
Neuropsychobiology. 2006;53(1):1-8. Epub 2005 Nov 24. Neuroticism mediates the association of the serotonin transporter gene with lifetime major depression. Munafò MR, Clark TG, Roberts KH, Johnstone EC.	

Behav Genet. 2007 Mar;37(2):294-301. Family based association analyses between the serotonin transporter gene polymorphism (5-HTTLPR) and neuroticism, anxiety and depression. Middeldorp CM, de Geus EJ, Beem AL, Lakenberg N, Hottenga JJ, Slagboom PE, Boomsma DI.	
J Affect Disord. 2008 Jun 3. [Epub ahead of print] Links Depression and the serotonin transporter 5-HTTLPR polymorphism: A review and a hypothesis concerning gene-environment interaction. Brown GW, Harris TO.	
Mol Psychiatry. 2008 Jul;13(7):654. MET BDNF protects against morphological S allele effects of 5-HTTLPR. Pezawas L, Meyer-Lindenberg A, Goldman AL, Verchinski BA, Chen G, Kolachana BS, Egan MF, Mattay VS, Hariri AR, Weinberger DR.	
Mol Psychiatry. 2008 Jul;13(7):654, 709-16. Epub 2008 Mar 18. Evidence of biologic epistasis between BDNF and SLC6A4 and implications for depression. Pezawas L, Meyer-Lindenberg A, Goldman AL, Verchinski BA, Chen G, Kolachana BS, Egan MF, Mattay VS, Hariri AR, Weinberger DR.	
Mol Psychiatry. 2007 Aug;12(8):748-55. Epub 2007 Mar 27. The risk for depression conferred by stressful life events is modified by variation at the serotonin transporter 5-HTTLPR genotype: evidence from the Spanish PREDICT-Gene cohort. Cervilla JA, Molina E, Rivera M, Torres-González F, Bellón JA, Moreno B, Luna JD, Lorente JA, Mayoral F, King M, Nazareth I; PREDICT Study Core Group, Gutiérrez B.	
J Child Psychol Psychiatry. 2006 Mar-Apr;47(3-4):226-61. Links Gene-environment interplay and psychopathology: multiple varieties but real effects. Rutter M, Moffitt TE, Caspi A.	
Br J Psychiatry. 2006 Mar;188:210-5. Links Comment in: Br J Psychiatry. 2006 Mar;188:199-201. Life events, first depression onset and the serotonin transporter gene. Wilhelm K, Mitchell PB, Niven H, Finch A, Wedgwood L, Scimone A, Blair IP, Parker G, Schofield PR.	
Arch Gen Psychiatry. 2005 May;62(5):529-35. Links The interaction of stressful life events and a serotonin transporter polymorphism in the prediction of episodes of major depression: a replication. Kendler KS, Kuhn JW, Vittum J, Prescott CA, Riley B.	
Psychosomatic Medicine 69:614-620 (2007) The Long and the Short of It: Associations Between 5-HTT Genotypes and Coping With Stress Kay Wilhelm, MD, Jennifer E. Siegel, GRAD DIP Sc (Psych), Adam W. Finch, GRAD DIP Sc (Psych), Dusan Hadzi-Pavlovic, BSc, MPsychology, Philip B. Mitchell, MD, Gordon Parker, MD, PhD, DSc and Peter R. Schofield, DSc, PhD	
Psychosomatic Medicine 69:762-768 (2007) Serotonin Transporter Gene Polymorphism (5-HTTLPR) and Anxiety Reactivity in Daily Life: A Daily Process Approach to Gene-Environment Interaction Kathleen C. Gunthert, PhD, Tamlin S. Conner, PhD, Stephen Armeli, PhD, Howard Tennen, PhD, Jonathan Covault, MD, PhD and Henry R. Kranzler, MD	
Psychosomatic Medicine 69:614-620 (2007) The Long and the Short of It: Associations Between 5-HTT Genotypes and Coping With Stress Kay Wilhelm, MD, Jennifer E. Siegel, GRAD DIP Sc (Psych), Adam W. Finch, GRAD DIP Sc (Psych), Dusan Hadzi-Pavlovic, BSc, MPsychology, Philip B. Mitchell, MD, Gordon Parker, MD, PhD, DSc and Peter R. Schofield, DSc, PhD	
Science 18 July 2003: Vol. 301. no. 5631, pp. 386 - 389 Influence of Life Stress on Depression: Moderation by a Polymorphism in the 5-HTT Gene Avshalom Caspi,1,2 Karen Sugden,1 Terrie E. Moffitt,1,2* Alan Taylor,1 Ian W. Craig,1 HonaLee Harrington,2 Joseph McClay,1 Jonathan Mill,1 Judy Martin,3 Antony Braithwaite,4 Richie Poulton3	
Curr Drug Targets. 2006 Dec;7(12):1659-69. Serotonin transporter gene variants and behavior: a comprehensive review. Serretti A, Calati R, Mandelli L, De Ronchi D.	
Int J Neuropsychopharmacol. 2007 Aug;10(4):437-47. Epub 2006 Jun 7. Interaction between serotonin transporter gene, catechol-O-methyltransferase gene and stressful life events in mood disorders. Mandelli L, Serretti A, Marino E, Pirovano A, Calati R, Colombo C.	
Psychosom Med. 2007 Sep-Oct;69(7):621-4. Epub 2007 Aug 31. Sleep quality varies as a function of 5-HTTLPR genotype and stress. Brummett BH, Krystal AD, Ashley-Koch A, Kuhn CM, Züchner S, Siegler IC, Barefoot JC, Ballard EL, Gwyther LP, Williams RB.	
Biol Psychiatry. 2007 Mar 1;61(5):609-16. Epub 2006 Aug 22. Interactive effects of the serotonin transporter 5-HTTLPR polymorphism and stressful life events on college student drinking and drug use. Covault J, Tennen H, Armeli S, Conner TS, Herman AI, Cillessen AH, Kranzler HR.	

Psychosom Med. 2008 Jan;70(1):32-9. Epub 2007 Dec 24. Childhood socioeconomic status and serotonin transporter gene polymorphism enhance cardiovascular reactivity to mental stress. Williams RB, Marchuk DA, Siegler IC, Barefoot JC, Helms MJ, Brummett BH, Surwit RS, Lane JD, Kuhn CM, Gadde KM, Ashley-Koch A, Svenson IK, Schanberg SM.	
Prog Neuropsychopharmacol Biol Psychiatry. 2007 Apr 13;31(3):683-9. Epub 2007 Jan 16. Meta-analysis of the association of serotonin transporter gene polymorphism with obsessive-compulsive disorder. Lin PY.	
Am J Med Genet B Neuropsychiatr Genet. 2005 Feb 5;133(1):79-84. Meta-analysis of the association of a functional serotonin transporter promoter polymorphism with alcohol dependence. Feinn R, Nellisery M, Kranzler HR.	
Am J Med Genet B Neuropsychiatr Genet. 2004 May 15;127(1):85-9. Meta-analysis of the association between a serotonin transporter promoter polymorphism (5-HTTLPR) and anxiety-related personality traits. Sen S, Burmeister M, Ghosh D.	

<b>SOD2</b>	
Ambronsone CB, Freudenheim JL, Thompson PA et al. Manganese superoxide dismutase (MnSOD) genetic polymorphisms, dietary antioxidants, and risk of breast cancer. <i>Cancer Res</i> . 1999. 59(3):602-6.	Antioxidants
Cai Q, Shu XO, Wen W et al. Genetic polymorphism in the manganese superoxide dismutase gene, antioxidant intake, and breast cancer risk: results from the Shanghai Breast Cancer Study. <i>Breast Cancer Res</i> . 2004. 6(6):R647-55.	Antioxidants
Kang D, Lee KM, Park SK et al. Functional variant of manganese superoxide dismutase (SOD2 V16A) polymorphism is associated with prostate cancer risk in the prostate, lung, colorectal, and ovarian cancer study. <i>Cancer Epidemiol Biomarkers Prev</i> . 2007. 16(8):1581-6.	
St. Clair D. Manganese superoxide dismutase: genetic variation and regulation. <i>J Nutr</i> . 2004. 134(11):3190S-3191S.	
Li H, Kantoff PW, Giovannucci E, et al. Manganese superoxide dismutase polymorphism, prediagnostic antioxidant status, and risk of clinical significant prostate cancer. <i>Cancer Res</i> . 2005;65:2498-2504.	Antioxidants

<b>TNFA</b>	
Fontaine-Bisson B, Wolever T, Chiasson JL et al. Genetic polymorphisms of tumor necrosis factor-alpha modify the association between dietary polyunsaturated fatty acids and fasting HDL-cholesterol and apo A-I concentrations. <i>Am J Clin Nutr</i> . 2007. 86(3):768-74.	PUFA Omega3
Fontova R, Gutierrez C, Vendrell J et al. Bone mineral mass is associated with interleukin 1 receptor autoantigen and TNF-alpha gene polymorphisms in post-menopausal Mediterranean women. <i>J Endocrinol Invest</i> . 2002. 25:684-690.	
Grimble RF, Howell WM, O'Reilly G et al. The ability of fish oil to suppress tumor necrosis factor alpha production by peripheral blood mononuclear cells in healthy men is associated with polymorphisms in genes that influence tumor necrosis factor alpha production. <i>Am J Clin Nutr</i> . 2002. 76(2):454-9.	Fish oil Omega3 PUFA
Rydén M, Amer P. Tumour necrosis factor-a in human adipose tissue – from signaling mechanisms to clinical implications. <i>J Intern Med</i> . 2007. 262:431-438.	
Wybranska, I., Malczewska-Malec, M., Niedbal, S., Naskalski, J. W., and Dembinska-Kiec, A. (2003). The TNF-alpha gene NcoI polymorphism at position -308 of the promoter influences insulin resistance, and increases serum triglycerides after postprandial lipaemia in familial obesity. <i>Clin Chem Lab Med</i> 41, 501-510.	
Shiau, M. Y., Wu, C. Y., Huang, C. N., Hu, S. W., Lin, S. J., and Chang, Y. H. (2003). TNF-alpha polymorphisms and type 2 diabetes mellitus in Taiwanese patients. <b>Tissue Antigens</b> 61, 393-397.	

<b>VDR</b>	
Brown MA, Houghton MA, Grant SF et al. Genetic control of bone density and turnover: role of the collagen 1alpha1, estrogen receptor, and vitamin D receptor genes. <i>J Bone Miner Res</i> . 2001. 16(4):758-64.	
Eisman JA. Pharmacogenetics of the vitamin D receptor and osteoporosis. <i>Drug Metab Dispos</i> . 2001. 29:505-12.	
Ortlepp JR, Metrikat J, Albrecht M et al. The vitamin D receptor gene variant and physical activity predicts fasting glucose levels in healthy young men. <i>Diabet Med</i> . 2003. 20:451-454.	
Reis AF, Hauache OM, Velho G. Vitamin D endocrine system and the genetic susceptibility to diabetes, obesity, and vascular disease. A review of evidence. <i>Diabetes Metab</i> . 2005. 31:318-325.	

Rapuri P.B., Gallagher J.C., Knezetic J.A., Kinyamu H.K., Ryschon K.L., (2004). Association between Vitamin D receptor polymorphisms and the rate of bone loss in elderly women-importance of adjusting for dietary and lifestyle factors. <i>Jour. Steroid Biochem. Molec. Bio</i> 89-90; 503-503	Caffeine
Rapuri PB, Gallagher JC, Kinyamu HK, Ryschon KL. Caffeine intake increases the rate of bone loss in elderly women and interacts with vitamin D receptor genotypes. <i>Am J Clin Nutr.</i> 2001;74:694-700	Caffeine

1: Monsuur AJ, de Bakker PI, Zhernakova A, Pinto D, Verduijn W, Romanos J, Auricchio R, Lopez A, van Heel DA, Crusius JB, Wijmenga C.

Effective detection of human leukocyte antigen risk alleles in celiac disease using tag single nucleotide polymorphisms.

PLoS ONE. 2008 May 28;3(5):e2270.

PMID: 18509540 [PubMed - indexed for MEDLINE]

2: Wolters VM, Verbeek WH, Zhernakova A, Onland-Moret C, Schreurs MW, Monsuur AJ, Verduijn W, Wijmenga C, Mulder CJ.

The MYO9B gene is a strong risk factor for developing refractory celiac disease.

Clin Gastroenterol Hepatol. 2007 Dec;5(12):1399-405, 1405.e1-2. Epub 2007 Oct 29.

PMID: 17967566 [PubMed - indexed for MEDLINE]

3: Monsuur AJ, Wijmenga C.

Understanding the molecular basis of celiac disease: what genetic studies reveal.

Ann Med. 2006;38(8):578-91. Review.

PMID: 17438672 [PubMed - indexed for MEDLINE]

4: Wapenaar MC, Monsuur AJ, Poell J, van 't Slot R, Meijer JW, Meijer GA, Mulder CJ, Mearin ML, Wijmenga C.

The SPINK gene family and celiac disease susceptibility.

Immunogenetics. 2007 May;59(5):349-57. Epub 2007 Feb 27.

PMID: 17333166 [PubMed - indexed for MEDLINE]

5: Curley CR, Monsuur AJ, Wapenaar MC, Rioux JD, Wijmenga C.

A functional candidate screen for coeliac disease genes.

Eur J Hum Genet. 2006 Nov;14(11):1215-22. Epub 2006 Jul 12.

PMID: 16835590 [PubMed - indexed for MEDLINE]

6: Megiorni F, Mora B, Bonamico M, Barbato M, Nenna R, Maiella G, Lulli P, Mazzilli MC.

HLA-DQ and risk gradient for celiac disease.

Hum Immunol. 2009 Jan;70(1):55-9. Epub 2008 Nov 21.

PMID: 19027045 [PubMed - in process]

7: Megiorni F, Mora B, Bonamico M, Barbato M, Montuori M, Viola F, Trabace S, Mazzilli MC.

HLA-DQ and susceptibility to celiac disease: evidence for gender differences and parent-of-origin effects.

Am J Gastroenterol. 2008 Apr;103(4):997-1003. Epub 2008 Jan 2.

PMID: 18177450 [PubMed - indexed for MEDLINE]

8: Nenna R, Mora B, Megiorni F, Mazzilli MC, Magliocca FM, Tiberti C, Bonamico M.

HLA-DQB1\*02 dose effect on RIA anti-tissue transglutaminase autoantibody levels and clinicopathological expressivity of celiac disease.

J Pediatr Gastroenterol Nutr. 2008 Sep;47(3):288-92.

PMID: 18728523 [PubMed - indexed for MEDLINE]

9: Megiorni F, Mora B, Bonamico M, Nenna R, Di Pierro M, Catassi C, Drago S, Mazzilli MC.

A rapid and sensitive method to detect specific human lymphocyte antigen (HLA) class II alleles associated with celiac disease.

Clin Chem Lab Med. 2008;46(2):193-6.  
PMID: 18076355 [PubMed - indexed for MEDLINE]

10: Latiano A, Mora B, Bonamico M, Megiorni F, Mazzilli MC, Cucchiara S, Palmieri O, Valvano MR, Annese V.  
Analysis of candidate genes on chromosomes 5q and 19p in celiac disease.  
J Pediatr Gastroenterol Nutr. 2007 Aug;45(2):180-6.  
PMID: 17667713 [PubMed - indexed for MEDLINE]

11: Bonamico M, Ferri M, Mariani P, Nenna R, Thanasi E, Luparia RP, Picarelli A, Magliocca FM, Mora B, Bardella MT, Verrienti A, Fiore B, Uccini S, Megiorni F, Mazzilli MC, Tiberti C.  
Serologic and genetic markers of celiac disease: a sequential study in the screening of first degree relatives.  
J Pediatr Gastroenterol Nutr. 2006 Feb;42(2):150-4.  
PMID: 16456406 [PubMed - indexed for MEDLINE]

12: Hunt KA, Zhernakova A, Turner G, Heap GA, Franke L, Bruinenberg M, Romanos J, Dinesen LC, Ryan AW, Panesar D, Gwilliam R, Takeuchi F, McLaren WM, Holmes GK, Howdle PD, Walters JR, Sanders DS, Playford RJ, Trynka G, Mulder CJ, Mearin ML, Verbeek WH, Trimble V, Stevens FM, O'Morain C, Kennedy NP, Kelleher D, Pennington DJ, Strachan DP, McArdle WL, Mein CA, Wapenaar MC, Deloukas P, McGinnis R, McManus R, Wijmenga C, van Heel DA.  
Newly identified genetic risk variants for celiac disease related to the immune response.  
Nat Genet. 2008 Apr;40(4):395-402. Epub 2008 Mar 2.  
PMID: 18311140 [PubMed - indexed for MEDLINE]

13: van Heel DA, Franke L, Hunt KA, Gwilliam R, Zhernakova A, Inouye M, Wapenaar MC, Barnardo MC, Bethel G, Holmes GK, Feighery C, Jewell D, Kelleher D, Kumar P, Travis S, Walters JR, Sanders DS, Howdle P, Swift J, Playford RJ, McLaren WM, Mearin ML, Mulder CJ, McManus R, McGinnis R, Cardon LR, Deloukas P, Wijmenga C.  
A genome-wide association study for celiac disease identifies risk variants in the region harboring IL2 and IL21.  
Nat Genet. 2007 Jul;39(7):827-9. Epub 2007 Jun 10.  
PMID: 17558408 [PubMed - indexed for MEDLINE]

14: Romanos J, Barisani D, Trynka G, Zhernakova A, Bardella MT, Wijmenga C.  
Six new coeliac disease loci replicated in an Italian population confirm association with coeliac disease.  
J Med Genet. 2009 Jan;46(1):60-3. Epub 2008 Sep 19.  
PMID: 18805825 [PubMed - in process]

15: Troncone R, Ivarsson A, Szajewska H, Mearin ML; Members of European Multistakeholder Platform on CD (CDEUSSA).  
Review article: future research on coeliac disease - a position report from the European multistakeholder platform on coeliac disease (CDEUSSA).  
Aliment Pharmacol Ther. 2008 Jun 1;27(11):1030-43. Epub 2008 Feb 29. Review.  
PMID: 18315588 [PubMed - indexed for MEDLINE]

16: Wolters VM, Wijmenga C.  
Genetic background of celiac disease and its clinical implications.

Am J Gastroenterol. 2008 Jan;103(1):190-5. Review.  
PMID: 18184122 [PubMed - indexed for MEDLINE]

17: Hadithi M, von Blomberg BM, Crusius JB, Bloemena E, Kostense PJ, Meijer JW, Mulder CJ, Stehouwer CD, Peña AS.  
Accuracy of serologic tests and HLA-DQ typing for diagnosing celiac disease.  
Ann Intern Med. 2007 Sep 4;147(5):294-302. Summary for patients in: Ann Intern Med. 2007 Sep 4;147(5):l34.  
PMID: 17785484 [PubMed - indexed for MEDLINE]

18: Fraser JS, King AL, Ellis HJ, Moodie SJ, Bjarnason I, Swift J, Ciclitira PJ.  
An algorithm for family screening for coeliac disease.  
World J Gastroenterol. 2006 Dec 28;12(48):7805-9.  
PMID: 17203524 [PubMed - indexed for MEDLINE]

19: Karinen H, Kärkkäinen P, Pihlajamäki J, Janatuinen E, Heikkinen M, Julkunen R, Kosma VM, Naukkarinen A, Laakso M.  
HLA genotyping is useful in the evaluation of the risk for coeliac disease in the 1st-degree relatives of patients with coeliac disease.  
Scand J Gastroenterol. 2006 Nov;41(11):1299-304.  
PMID: 17060123 [PubMed - indexed for MEDLINE]

20: Karinen H, Kärkkäinen P, Pihlajamäki J, Janatuinen E, Heikkinen M, Julkunen R, Kosma VM, Naukkarinen A, Laakso M.  
Gene dose effect of the DQB1\*0201 allele contributes to severity of coeliac disease.  
Scand J Gastroenterol. 2006 Feb;41(2):191-9.  
PMID: 16484124 [PubMed - indexed for MEDLINE]

21: Kaukinen K, Partanen J, Mäki M, Collin P.  
HLA-DQ typing in the diagnosis of celiac disease.  
Am J Gastroenterol. 2002 Mar;97(3):695-9.  
PMID: 11922565 [PubMed - indexed for MEDLINE]

22: de Bakker PI, McVean G, Sabeti PC, Miretti MM, Green T, Marchini J, Ke X, Monsuur AJ, Whittaker P, Delgado M, Morrison J, Richardson A, Walsh EC, Gao X, Galver L, Hart J, Hafler DA, Pericak-Vance M, Todd JA, Daly MJ, Trowsdale J, Wijmenga C, Vyse TJ, Beck S, Murray SS, Carrington M, Gregory S, Deloukas P, Rioux JD.  
A high-resolution HLA and SNP haplotype map for disease association studies in the extended human MHC.  
Nat Genet. 2006 Oct;38(10):1166-72. Epub 2006 Sep 24.  
PMID: 16998491 [PubMed - indexed for MEDLINE]

23: Murray JA, Moore SB, Van Dyke CT, Lahr BD, Dierkhising RA, Zinsmeister AR, Melton LJ 3rd, Kroning CM, El-Yousseff M, Czaja AJ.  
HLA DQ gene dosage and risk and severity of celiac disease.  
Clin Gastroenterol Hepatol. 2007 Dec;5(12):1406-12. Epub 2007 Oct 24.  
PMID: 17919990 [PubMed - indexed for MEDLINE]

24: Jores RD, Frau F, Cucca F, Grazia Clemente M, Orrù S, Rais M, De Virgiliis S, Congia M.

HLA-DQB1\*0201 homozygosis predisposes to severe intestinal damage in celiac disease.

Scand J Gastroenterol. 2007 Jan;42(1):48-53.

PMID: 17190762 [PubMed - indexed for MEDLINE]

25: Vermeulen BA, Hogen Esch CE, Yuksel Z, Koning F, Verduijn W, Doxiadis II, Schreuder GM, Mearin ML.

Phenotypic variance in childhood coeliac disease and the HLA-DQ/DR dose effect.

Scand J Gastroenterol. 2009;44(1):40-5.

PMID: 18932050 [PubMed - in process]

Clin Chim Acta. 2007 Nov-Dec;386(1-2):7-11. Epub 2007 Jul 19.

[Lactase persistence/non-persistence variants, C/T\\_13910 and G/A\\_22018, as a diagnostic tool for lactose intolerance in IBS patients.](#)  
Bernardes-Silva CF, Pereira AC, de Fátima Alves da Mota G, Krieger JE, Laudanna AA.

Clin Chim Acta. 2007 Aug;383(1-2):91-6. Epub 2007 May 10.

[Hydrogen breath testing versus LCT genotyping for the diagnosis of lactose intolerance: a matter of age?](#)  
Kerber M, Oberkanins C, Kriegshäuser G, Kollerits B, Dossenbach-Glaninger A, Fuchs D, Ledochowski M.

Clin Chim Acta. 2007 Nov-Dec;386(1-2):7-11. Epub 2007 Jul 19.

[Lactase persistence/non-persistence variants, C/T\\_13910 and G/A\\_22018, as a diagnostic tool for lactose intolerance in IBS patients.](#)  
Bernardes-Silva CF, Pereira AC, de Fátima Alves da Mota G, Krieger JE, Laudanna AA.

J Gastrointestin Liver Dis. 2008 Jun;17(2):135-9

[Concordance of genetic and breath tests for lactose intolerance in a tertiary referral centre.](#)  
Krawczyk M, Wolska M, Schwartz S, Gruenhagen F, Terjung B, Portincasa P, Sauerbruch T, Lammert F.

Journal of the New Zealand Medical Association, 09-November-2007, Vol 120 No 1265

[A simple gene test for lactose intolerance/adult hypolactasia](#)  
Jeff Upton

Clin Chem Lab Med. 2008;46(7):980-4.

[Genetic testing for adult-type hypolactasia in Italian families.](#)  
Mottes M, Belpinati F, Milani M, Saccomandi D, Petrelli E, Calacoci M, Chierici R, Pignatti PF, Borgna-Pignatti C.

Eur J Clin Nutr. 2007 Oct;61(10):1220-5. Epub 2007 Feb 21

[Genetic testing improves the diagnosis of adult type hypolactasia in the Mediterranean population of Sardinia.](#)  
Schirru E, Corona V, Usai-Satta P, Scarpa M, Oppia F, Loriga F, Cucca F, De Virgiliis S, Rossino R, Macis MD, Jores RD, Congia M.

Gut. 2004 Nov;53(11):1571-6

[A genetic test which can be used to diagnose adult-type hypolactasia in children.](#)  
Rasinperä H, Savilahti E, Enattah NS, Kuokkanen M, Tötterman N, Lindahl H, Järvelä I, Kolho KL.

Eur J Gastroenterol Hepatol. 2005 Mar;17(3):371-6

[Evaluation of a new DNA test compared with the lactose hydrogen breath test for the diagnosis of lactase non-persistence.](#)  
Högenauer C, Hammer HF, Mellitzer K, Renner W, Krejs GJ, Toplak H.

J Biomol Screen. 2007 Aug;12(5):733-9. Epub 2007 May 3.

[Genotyping of the lactase-phlorizin hydrolase c/-13910 polymorphism by means of a new rapid denaturing high-performance liquid chromatography-based assay in healthy subjects and colorectal cancer patients.](#)  
Piepoli A, Schirru E, Mastroianni A, Gentile A, Cotugno R, Quitadamo M, Merla A, Congia M, Usai Satta P, Perri F.

Am J Hum Genet. 2004 Jun;74(6):1102-10. Epub 2004 Apr 20.

[The T allele of a single-nucleotide polymorphism 13.9 kb upstream of the lactase gene \(LCT\) \(C-13.9kbT\) does not predict or cause the lactase-persistence phenotype in Africans.](#)  
Mulcare CA, Weale ME, Jones AL, Connell B, Zeitlyn D, Tarekegn A, Swallow DM, Bradman N, Thomas MG.

Nat Genet. 2002 Feb;30(2):233-7. Epub 2002 Jan 14.

§ [Related Articles, Links](#)  
[Identification of a variant associated with adult-type hypolactasia.](#)  
Enattah NS, Sahi T, Savilahti E, Terwilliger JD, Peltonen L, Järvelä I.

Am J Hum Genet. 2004 Jun;74(6):1111-20. Epub 2004 Apr 26.

[Genetic signatures of strong recent positive selection at the lactase gene.](#)  
Bersaglieri T, Sabeti PC, Patterson N, Vanderploeg T, Schaffner SF, Drake JA, Rhodes M, Reich DE, Hirschhorn JN.

atients.