Lycopene

url: https://medlineplus.gov/druginfo/natural/554.html  
  
  
Lycopene  
What is it?  
Lycopene is a type of organic pigment called a carotenoid. It is related to beta-carotene and gives some vegetables and fruits (e.g., tomatoes) a red color.  
  
Lycopene is a powerful antioxidant that might help protect cells from damage. It's found in tomato, watermelon, red orange, pink grapefruit, apricot, rose hip, and guava.   
  
Lycopene is used for high blood pressure, high cholesterol, cancer, and many other conditions, but there is no good scientific evidence to support most of these uses.  
  
  
  
  
How effective is it?  
Natural Medicines Comprehensive Database rates effectiveness based on scientific evidence according to the following scale: Effective, Likely Effective, Possibly Effective, Possibly Ineffective, Likely Ineffective, Ineffective, and Insufficient Evidence to Rate.The effectiveness ratings for LYCOPENE are as follows:Possibly effective for...  
Prostate cancer. Taking lycopene by mouth might slightly reduce the risk of developing prostate cancer. It might also slightly reduce the risk of prostate cancer returning.   
Possibly ineffective for...  
Bladder cancer. People who eat more lycopene in their diet don't seem to have a lower risk for bladder cancer.  
Diabetes. People who eat more lycopene in their diet don't seem to have a lower risk of developing diabetes. Also, people with diabetes who eat more lycopene don't seem to have a lower risk of dying from heart disease.   
  
  
There is interest in using lycopene for a number of other purposes, but there isn't enough reliable information to say whether it might be helpful.  
  
  
  
Is it safe?  
When taken by mouth: Lycopene is commonly consumed in certain fruits and vegetables. When taken in supplements, doses of 15-45 mg daily have been safely used for up to 6 months.  
  
  
Special precautions & warnings:  
Pregnancy and breast-feeding: Lycopene is likely safe during pregnancy and breast-feeding when eaten in typical food amounts. There isn't enough reliable information to know if lycopene supplements are safe to use when pregnant or breast-feeding. Stay on the safe side and stick to food amounts.  
Surgery: Lycopene might slow blood clotting. It might increase the risk of bleeding during and after surgery. Stop using lycopene supplements at least 2 weeks before a scheduled surgery.  
  
  
Are there interactions with medications?  
ModerateBe cautious with this combination.Medications that slow blood clotting (Anticoagulant / Antiplatelet drugs)Lycopene might slow blood clotting. Taking lycopene along with medications that also slow blood clotting might increase the risk of bruising and bleeding.  
  
  
Are there interactions with herbs and supplements?  
Beta-caroteneTaking beta-carotene along with lycopene may alter the amount of lycopene that is absorbed from the gut.CalciumTaking calcium along with lycopene may decrease the amount of lycopene that is absorbed from the gut.Herbs and supplements that might slow blood clottingLycopene might slow blood clotting and increase the risk of bleeding. Taking it with other supplements with similar effects might increase the risk of bleeding in some people. Examples of supplements with this effect include garlic, ginger, ginkgo, nattokinase, and Panax ginseng.LuteinTaking lutein along with lycopene may alter the amount of lycopene that is absorbed from the gut.  
  
  
Are there interactions with foods?  
Fat substitutes such as olestra might reduce the amount of lycopene that is absorbed by the body. Olestra seems to lower lycopene levels in healthy people by about 30%.  
  
  
How is it typically used?  
Lycopene is commonly found in many fruits and vegetables, but particularly in tomato products, including fresh tomatoes, tomato sauce, ketchup, and tomato juice. A 130 gram serving of fresh tomatoes contains 4-10 mg of lycopene. Ketchup contains 3.3 mg per tablespoon.   
  
Lycopene supplements are also available. Lycopene has most often been used by adults in doses of 15-45 mg by mouth daily for up to 6 months. Speak with a healthcare provider to find out what dose might be best for a specific condition.  
  
  
  
Other names  
All-Trans Lycopene, All-Trans Lycop ne, Cis-Lycop ne, Licopeno, Lycop ne, Lycopenes, Lycop nes, Psi-Psi-Carotene, Psi-Psi-Carot ne, (6E,8E,10E,12E,14E,16E,18E,20E,22E,24E,26E)-2,6,10,14,19,23,27,31-octamethyldotriaconta-2,6,8,10,12,14,16,18,20,22,24,26,30-tridecaene.  
  
  
Methodology  
  
 To learn more about how this article was written, please see the Natural Medicines Comprehensive Database methodology.   
   
  
  
References  
Tanaka A, Miyauchi T, Kitamura S, Iwata H, Hata H, Ujiie H. Carotenoderma due to lycopenemia: A case report and evaluation of lycopene deposition in the skin. J Dermatol 2022;49:1320-1324. View abstract.  
Karimian B, Soleimani A, Mohammadsharifi G, et al. Effect of lycopene supplementation on some cardiovascular risk factors and markers of endothelial function in Iranian patients with ischemic heart failure: A Randomized Clinical Trial. Cardiol Res Pract 2022;2022:2610145. View abstract.  
Manas A, Venkateswararao CH, Vaid S, Dhakray Khanna V, Muhaseena M, Alvi S. Assessment of utility of lycopene, selenium, and vitamin E in management of oral leukoplakia. J Pharm Bioallied Sci 2022;14(Suppl 1):S233-S235. View abstract.  
Qiu Z, Chen X, Geng T, et al. Associations of serum carotenoids with risk of cardiovascular mortality among individuals with type 2 diabetes: Results from NHANES. Diabetes Care 2022;45:1453-1461. View abstract.  
Zhang W, Li W, Du J. Association between dietary carotenoid intakes and the risk of asthma in adults: a cross-sectional study of NHANES, 2007-2012. BMJ Open 2022;12:e052320. View abstract.  
Kang T, Liu Y, Chen X, et al. Dietary carotenoid intake and risk of developing preeclampsia: a hospital-based case-control study. BMC Pregnancy Childbirth 2022;22:427. View abstract.  
Meeta M, Sharma S, Unni J, Khandelwal S, Choranur A, Malik S. Cardiovascular and osteoporosis protection at menopause with lycopene: A placebo-controlled double-blind randomized clinical trial. J Midlife Health 2022;13:50-56. View abstract.  
Sengngam K, Hoc TH, Hang DV, Tran Ngoan L. Trans-Lycopene and -Cryptoxanthin Intake and Stomach Cancer in Vietnamese Men: A Pilot Case-Control Study. Asian Pac J Cancer Prev 2022;23:861-865. View abstract.  
Asgary S, Soltani R, Daraei F, Salehizadeh L, Vaseghi G, Sarrafzadegan N. The effect of lycopene on serum level of cardiac biomarkers in patients undergoing elective percutaneous coronary intervention: A randomized controlled clinical trial. ARYA Atheroscler 2021;17:1-7. View abstract.  
Xu X, Li S, Zhu Y. Dietary Intake of Tomato and Lycopene and Risk of All-Cause and Cause-Specific Mortality: Results From a Prospective Study. Front Nutr 2021;8:684859. View abstract.  
Lu Y, Edwards A, Chen Z, et al. Insufficient Lycopene Intake Is Associated With High Risk of Prostate Cancer: A Cross-Sectional Study From the National Health and Nutrition Examination Survey (2003-2010). Front Public Health 2021;9:792572. View abstract.  
Inoue T, Yoshida K, Sasaki E, Aizawa K, Kamioka H. Effects of lycopene intake on HDL-cholesterol and triglyceride levels: A systematic review with meta-analysis. J Food Sci 2021;86:3285-3302. View abstract.  
Kan B, Guo D, Yuan B, et al. Dietary carotenoid intake and osteoporosis: the National Health and Nutrition Examination Survey, 2005-2018. Arch Osteoporos 2021;17:2. View abstract.  
Crowe-White KM, Voruganti VS, Talevi V, et al. Variation of Serum Lycopene in Response to 100% Watermelon Juice: An Exploratory Analysis of Genetic Variants in a Randomized Controlled Crossover Study. Curr Dev Nutr. 2020;4:nzaa102. View abstract.  
Tierney AC, Rumble CE, Billings LM, George ES. Effect of Dietary and Supplemental Lycopene on Cardiovascular Risk Factors: A Systematic Review and Meta-Analysis. Adv Nutr. 2020;11:1453-1488. View abstract.  
Takagi T, Hayashi R, Nakai Y, et al. Dietary Intake of Carotenoid-Rich Vegetables Reduces Visceral Adiposity in Obese Japanese men-A Randomized, Double-Blind Trial. Nutrients. 2020;12:2342. View abstract.  
Sadeghian M, Asadi M, Rahmani S, Sadeghi N, Hosseini SA, Zare Javid A. Lycopene Does Not Affect Prostate-Specific Antigen in Men with Non-Metastatic Prostate Cancer: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. Nutr Cancer. 2020:1-12. View abstract.  
Rattanavipanon W, Nithiphongwarakul C, Sirisuwansith P, et al. Effect of tomato, lycopene and related products on blood pressure: A systematic review and network meta-analysis. Phytomedicine. 2021:153512. View abstract.  
Nouri M, Nasr-Esfahani MH, Tarrahi MJ, Amani R. The Effect of Lycopene Supplementation on Mood Status and Quality of Life in Infertile Men: A Randomized, Double-Blind, Placebo-Controlled Clinical Trial. Int J Fertil Steril. 2020;14:17-22. View abstract.  
Guo J, Xie H, Wu H, Liang M. Efficacy of Lycopene in the Treatment of Oral Submucous Fibrosis: A Meta-analysis of Randomized Controlled Trials. J Evid Based Dent Pract. 2020;20:101471. View abstract.  
Bavarsad N, Mapar MA, Safaezadeh M, Latifi SM. A double-blind, placebo-controlled randomized trial of skin-lightening cream containing lycopene and wheat bran extract on melasma. J Cosmet Dermatol. 2020. View abstract.  
Yuan C, Fondell E, Ascherio A, et al. Long-Term Intake of Dietary Carotenoids Is Positively Associated with Late-Life Subjective Cognitive Function in a Prospective Study in US Women. J Nutr. 2020;150:1871-1879. View abstract.  
Wolak T, Sharoni Y, Levy J, Linnewiel-Hermoni K, Stepensky D, Paran E. Effect of Tomato Nutrient Complex on Blood Pressure: A Double Blind, Randomized Dose?Response Study. Nutrients. 2019;11. pii: E950. View abstract.  
Piyush P, Mahajan A, Singh K, Ghosh S, Gupta S. Comparison of therapeutic response of lycopene and curcumin in oral submucous fibrosis: A randomized controlled trial. Oral Dis. 2019;25:73-79. View abstract.  
Nishimura M, Tominaga N, Ishikawa-Takano Y, Maeda-Yamamoto M, Nishihira J. Effect of 12-Week Daily Intake of the High-Lycopene Tomato (Solanum Lycopersicum), A Variety Named "PR-7", on Lipid Metabolism: A Randomized, Double-Blind, Placebo-Controlled, Parallel-Group Study. Nutrients. 2019;11. pii: E1177. View abstract.  
Chernyshova MP, Pristenskiy DV, Lozbiakova MV, Chalyk NE, Bandaletova TY, Petyaev IM. Systemic and skin-targeting beneficial effects of lycopene-enriched ice cream: A pilot study. J Dairy Sci. 2019;102:14-25. View abstract.  
Cheng HM, Koutsidis G, Lodge JK, Ashor AW, Siervo M, Lara J. Lycopene and tomato and risk of cardiovascular diseases: A systematic review and meta-analysis of epidemiological evidence. Crit Rev Food Sci Nutr. 2019;59:141-158. View abstract.  
Nieman DC, Capps CL, Capps CR, Shue ZL, McBride JE. Effect of 4-Week Ingestion of Tomato-Based Carotenoids on Exercise-Induced Inflammation, Muscle Damage, and Oxidative Stress in Endurance Runners. Int J Sport Nutr Exerc Metab 2018;28:266-73. doi: 10.1123/ijsnem.2017-0272. View abstract.  
Rowles JL 3rd, Ranard KM, Smith JW, An R, Erdman JW Jr. Increased dietary and circulating lycopene are associated with reduced prostate cancer risk: a systematic review and meta-analysis. Prostate Cancer Prostatic Dis 2017;20:361-77. doi: 10.1038/pcan.2017.25. Epub 2017 Apr 25. View abstract.  
Saran G, Umapathy D, Misra N, et al. A comparative study to evaluate the efficacy of lycopene and curcumin in oral submucous fibrosis patients: A randomized clinical trial. Indian J Dent Res 2018;29:303-12. doi: 10.4103/ijdr.IJDR\_551\_16. View abstract.  
Wang X, Yang HH, Liu Y, Zhou Q, Chen ZH. Lycopene Consumption and Risk of Colorectal Cancer: A Meta-Analysis of Observational Studies. Nutr Cancer. 2016;68:1083-96. View abstract.  
Cheng HM, Koutsidis G, Lodge JK, Ashor A, Siervo M, Lara J. Tomato and lycopene supplementation and cardiovascular risk factors: A systematic review and meta-analysis. Atherosclerosis. 2017;257:100-108. 95777View abstract.  
Borel P, Desmarchelier C, Dumont U, et al. Dietary calcium impairs tomato lycopene bioavailability in healthy humans. Br J Nutr. 2016;116:2091-2096. View abstract.  
Tyssandier V, Cardinault N, Caris-Veyrat C, et al. Vegetable-borne lutein, lycopene, and beta-carotene compete for incorporation into chylomicrons, with no adverse effect on the medium-term (3-wk) plasma status of carotenoids in humans. Am J Clin Nutr 2002;75:526-34. View abstract.  
Faulks RM, Southon S. Challenges to understanding and measuring carotenoid bioavailability. Biochim Biophys Acta 2005;1740:95-100. View abstract.  
Sawardekar SB, Patel TC, Uchil D. Comparative evaluation of antiplatelet effect of lycopene with aspirin and the effect of their combination on platelet aggregation: an in vitro study. Indian J Pharmacol 2016;48:26-31. View abstract.  
Singh P, Goyal GK. Dietary lycopene: its properties and anticarcinogenic effects. Comp Rev Food Sci Food Safety 2008;7:255-70.   
Agarwal S, Rao AV. Tomato lycopene and its role in human health and chronic diseases. CMAJ 2000;163:739-44. View abstract.  
Belludi SA, Verma S, Banthia R, et al. Effect of lycopene in the treatment of periodontal disease: a clinical study. J Contemp Dent Pract 2013;14:1054-9. View abstract.  
Biddle MJ, Lennie TA, Bricker GV, et al. Lycopene dietary intervention: a pilot study in patients with heart failure. J Cardiovasc Nurs 2015;30:205-12. View abstract.  
Story EN, Kopec RE, Schwartz SJ, Harris GK. An update on the health effects of tomato lycopene. Annu Rev Food Sci Technol 2010;1:189-210. View abstract.  
Coulson S, Rao A, Beck SL, et al. A phase II randomized double-blind placebo-controlled clinical trial investigating the efficacy and safety of ProstateEZE Max: a herbal medicine preparation for the management of symptoms of benign prostatic hypertrophy. Compl Ther Med 2013;21:172-9. View abstract.  
Takeda A, Nyssen OP, Syed A, et al. Vitamin A and carotenoids and the risk of Parkinson's disease: a systematic review and meta-analysis. Neuroepidemiology. 2014;42:25-38. View abstract.  
Ge XX, Xing MY, Yu LF, et al. Carotenoid intake and esophageal cancer risk: a meta-analysis. Asian Pac J Cancer Prev. 2013;14:1911-8. View abstract.  
Fitzgerald KC, O'Reilly J, Fondell E, et al. Intakes of vitamin C and carotenoids and risk of amyotrophic lateral sclerosis: pooled results from 5 cohort studies. Ann Neurol. 2013;73:236-45. View abstract.  
Morgia G, Russo G, Voce S, et al. Serenoa repens, lycopene and selenium versus tamsulosin for the treatment of LUTS/BPH. An Italian multicenter double-blinded randomized study between single or combination therapy (PROCOMB trial). Prostate 2014;74:1471-80. View abstract .  
Marini A, Jaenicke T, Grether-Beck S, Le Floc'h C, Cheniti A, Piccardi N,Krutmann J. Prevention of polymorphic light eruption by oral administration of a nutritional supplement containing lycopene, -carotene, and Lactobacillus johnsonii: results from a randomized, placebo-controlled, double-blinded study. Photodermatol Photoimmunol Photomed. 2014;30:189-94. View abstract.  
 Schuman LM, - not at Bastyr, Radke A, and et al. Some selected features of the epidemiology of prostatic cancer: Minneapolis-St. Paul, Minnesota case-control study, 1976-1979. In: Knut M. Trends in Cancer Incidence: Causes and Practical Implications. Washington: Hemisphere Publishing Corp;1982.  
 Cerhan J, Chiu B, Putnam S, and et al. A cohort study of diet and prostate cancer risk. Cancer Epidem Biomark Preven 1998;7:175.  
 Li Y, Elie M, Blaner WS, and et al. Lycopene, smoking and lung cancer. Proc Am Assoc Cancer Res 1997;38:113.  
 Sakamoto H, Mori H Ojima F et al. Elevation of serum carotenoids after continual ingestion of tomato juice. J Jpn Soc Nutr Food Sci 1994;47:93-99.  
 Flood V, Smith W, Wang JJ, and et al. Dietary antioxidant intake and incidence of early age-related maculopathy. Ophthalmology 2002;109:2272-2278.  
 Rao AV and Agarwal S. Role of lycopene as antioxidant carotenoid in the prevention of chronic diseases: a review. Nutrit Research 1999;19:305-323.  
 Levy J and Sharoni Y. Lycopene interferes in vivo and in vitro with the IGF system. Brit Med J 2001;54:46.  
 Clinton SK, Emenhiser C, Giovannucci EL, and et al. Cis-trans isomers of lycopene in the human prostate: a role in cancer prevention? FASEB J 1995;9:A442.  
 Rao AV and Agarwal S. Effect of diet and smoking on serum lycopene and lipid peroxidation. Nutrit Research 1998;18:713-721.  
 Corridan BM, O'Donoghue M, Hughes DA, and et al. Low-dose supplementation with lycopene or beta-carotene does not enhance cell-mediated immunity in healthy free-living elderly humans. Eur J Clin Nutr 2001;55:627-635.  
 Mordente A, Guantario B Meucci E Silvestrini A Lombardi E Martorana GE Giardina B B hm V. Lycopene and cardiovascular diseases: an update. Curr Med Chem. 2011;18:1146-1163.  
 Kucuk, O et al. Lycopene supplementation in men with localized prostate cancer (Pca) modulates grade and volume of prostatic intraepithelial neoplasia (PIN) and tumor, level of serum PSA and biomarkers of cell growth, differentiation and apoptosis. Proc Amer Assoc Cancer Res 1999;40  
 Porrini, M., Riso, P., and Testolin, G. Absorption of lycopene from single or daily portions of raw and processed tomato. Br.J Nutr 1998;80:353-361. View abstract.  
 Aebischer, C. P., Schierle, J., and Schuep, W. Simultaneous determination of retinol, tocopherols, carotene, lycopene, and xanthophylls in plasma by means of reversed-phase high-performance liquid chromatography. Methods Enzymol. 1999;299:348-362. View abstract.  
 Agarwal, S. and Rao, A. V. Tomato lycopene and low density lipoprotein oxidation: a human dietary intervention study. Lipids 1998;33:981-984. View abstract.  
 Steinberg, F. M. and Chait, A. Antioxidant vitamin supplementation and lipid peroxidation in smokers. Am J Clin Nutr 1998;68:319-327. View abstract.  
 Kantesky, P. A., Gammon, M. D., Mandelblatt, J., Zhang, Z. F., Ramsey, E., Dnistrian, A., Norkus, E. P., and Wright, T. C., Jr. Dietary intake and blood levels of lycopene: association with cervical dysplasia among non-Hispanic, black women. Nutr.Cancer 1998;31:31-40. View abstract.  
 Stahl, W., Junghans, A., de Boer, B., Driomina, E. S., Briviba, K., and Sies, H. Carotenoid mixtures protect multilamellar liposomes against oxidative damage: synergistic effects of lycopene and lutein. FEBS Lett. 5-8-1998;427:305-308. View abstract.  
 Giovannucci, E. and Clinton, S. K. Tomatoes, lycopene, and prostate cancer. Proc.Soc.Exp.Biol.Med 1998;218:129-139. View abstract.  
 Sies, H. and Stahl, W. Lycopene: antioxidant and biological effects and its bioavailability in the human. Proc.Soc.Exp.Biol.Med 1998;218:121-124. View abstract.  
 Johnson, E. J. Human studies on bioavailability and plasma response of lycopene. Proc.Soc.Exp.Biol.Med 1998;218:115-120. View abstract.  
 Nguyen, M. L. and Schwartz, S. J. Lycopene stability during food processing. Proc.Soc.Exp.Biol.Med 1998;218:101-105. View abstract.  
 O'Neill, M. E. and Thurnham, D. I. Intestinal absorption of beta-carotene, lycopene and lutein in men and women following a standard meal: response curves in the triacylglycerol- rich lipoprotein fraction. Br.J Nutr 1998;79:149-159. View abstract.  
 Clinton, S. K. Lycopene: chemistry, biology, and implications for human health and disease. Nutr Rev. 1998;56(2 Pt 1):35-51. View abstract.  
 Okajima, E., Tsutsumi, M., Ozono, S., Akai, H., Denda, A., Nishino, H., Oshima, S., Sakamoto, H., and Konishi, Y. Inhibitory effect of tomato juice on rat urinary bladder carcinogenesis after N-butyl-N-(4-hydroxybutyl)nitrosamine initiation. Jpn.J Cancer Res. 1998;89:22-26. View abstract.  
 Dorgan, J. F., Sowell, A., Swanson, C. A., Potischman, N., Miller, R., Schussler, N., and Stephenson, H. E., Jr. Relationships of serum carotenoids, retinol, alpha-tocopherol, and selenium with breast cancer risk: results from a prospective study in Columbia, Missouri (United States). Cancer Causes Control 1998;9:89-97. View abstract.  
 Comstock, G. W., Alberg, A. J., Huang, H. Y., Wu, K., Burke, A. E., Hoffman, S. C., Norkus, E. P., Gross, M., Cutler, R. G., Morris, J. S., Spate, V. L., and Helzlsouer, K. J. The risk of developing lung cancer associated with antioxidants in the blood: ascorbic acid, carotenoids, alpha-tocopherol, selenium, and total peroxyl radical absorbing capacity. Cancer Epidemiol.Biomarkers Prev. 1997;6:907-916. View abstract.  
 Pierce, J. P., Faerber, S., Wright, F. A., Newman, V., Flatt, S. W., Kealey, S., Rock, C. L., Hryniuk, W., and Greenberg, E. R. Feasibility of a randomized trial of a high-vegetable diet to prevent breast cancer recurrence. Nutr Cancer 1997;28:282-288. View abstract.  
 Vogel, S., Contois, J. H., Tucker, K. L., Wilson, P. W., Schaefer, E. J., and Lammi-Keefe, C. J. Plasma retinol and plasma and lipoprotein tocopherol and carotenoid concentrations in healthy elderly participants of the Framingham Heart Study. Am J Clin Nutr 1997;66:950-958. View abstract.  
 Agudo, A., Esteve, M. G., Pallares, C., Martinez-Ballarin, I., Fabregat, X., Malats, N., Machengs, I., Badia, A., and Gonzalez, C. A. Vegetable and fruit intake and the risk of lung cancer in women in Barcelona, Spain. Eur.J Cancer 1997;33:1256-1261. View abstract.  
 Zhang, S., Tang, G., Russell, R. M., Mayzel, K. A., Stampfer, M. J., Willett, W. C., and Hunter, D. J. Measurement of retinoids and carotenoids in breast adipose tissue and a comparison of concentrations in breast cancer cases and control subjects. Am J Clin Nutr 1997;66:626-632. View abstract.  
 Okajima, E., Ozono, S., Endo, T., Majima, T., Tsutsumi, M., Fukuda, T., Akai, H., Denda, A., Hirao, Y., Okajima, E., Nishino, H., Nir, Z., and Konishi, Y. Chemopreventive efficacy of piroxicam administered alone or in combination with lycopene and beta-carotene on the development of rat urinary bladder carcinoma after N-butyl-N-(4-hydroxybutyl)nitrosamine treatment. Jpn J Cancer Res 1997;88:543-552. View abstract.  
 Nomura, A. M., Stemmermann, G. N., Lee, J., and Craft, N. E. Serum micronutrients and prostate cancer in Japanese Americans in Hawaii. Cancer Epidemiol.Biomarkers Prev. 1997;6:487-491. View abstract.  
 Franceschi, S., Favero, A., La Vecchia, C., Negri, E., Conti, E., Montella, M., Giacosa, A., Nanni, O., and Decarli, A. Food groups and risk of colorectal cancer in Italy. Int J Cancer 7-3-1997;72:56-61. View abstract.  
 Hughes, D. A., Wright, A. J., Finglas, P. M., Peerless, A. C., Bailey, A. L., Astley, S. B., Pinder, A. C., and Southon, S. Comparison of effects of beta-carotene and lycopene supplementation on the expression of functionally associated molecules on human monocytes. Biochemical Society Transactions 1997;25:206S. View abstract.  
 Fuhrman, B., Elis, A., and Aviram, M. Hypocholesterolemic effect of lycopene and beta-carotene is related to suppression of cholesterol synthesis and augmentation of LDL receptor activity in macrophages. Biochem.Biophys.Res.Commun. 4-28-1997;233:658-662. View abstract.  
 Khachik, F., Spangler, C. J., Smith, J. C., Jr., Canfield, L. M., Steck, A., and Pfander, H. Identification, quantification, and relative concentrations of carotenoids and their metabolites in human milk and serum. Anal.Chem 5-15-1997;69:1873-1881. View abstract.  
 Jarvinen, R., Knekt, P., Seppanen, R., and Teppo, L. Diet and breast cancer risk in a cohort of Finnish women. Cancer Lett. 3-19-1997;114(1-2):251-253. View abstract.  
 Sharoni, Y., Giron, E., Rise, M., and Levy, J. Effects of lycopene-enriched tomato oleoresin on 7,12-dimethyl- benz[a]anthracene-induced rat mammary tumors. Cancer Detect.Prev. 1997;21:118-123. View abstract.  
 Gerster, H. The potential role of lycopene for human health. J Am Coll.Nutr 1997;16:109-126. View abstract.  
 Kristenson, M., Zieden, B., Kucinskiene, Z., Elinder, L. S., Bergdahl, B., Elwing, B., Abaravicius, A., Razinkoviene, L., Calkauskas, H., and Olsson, A. G. Antioxidant state and mortality from coronary heart disease in Lithuanian and Swedish men: concomitant cross sectional study of men aged 50. BMJ 3-1-1997;314:629-633. View abstract.  
 Sanderson, M. J., White, K. L., Drake, I. M., and Schorah, C. J. Vitamin E and carotenoids in gastric biopsies: the relation to plasma concentrations in patients with and without Helicobacter pylori gastritis. Am J Clin Nutr 1997;65:101-106. View abstract.  
 Stahl, W. and Sies, H. Lycopene: a biologically important carotenoid for humans? Arch Biochem Biophys. 12-1-1996;336:1-9. View abstract.  
 Helzlsouer, K. J., Alberg, A. J., Norkus, E. P., Morris, J. S., Hoffman, S. C., and Comstock, G. W. Prospective study of serum micronutrients and ovarian cancer. J Natl.Cancer Inst. 1-3-1996;88:32-37. View abstract.  
 Bruemmer, B., White, E., Vaughan, T. L., and Cheney, C. L. Nutrient intake in relation to bladder cancer among middle-aged men and women. Am J Epidemiol. 9-1-1996;144:485-495. View abstract.  
 Breslow, R. A., Alberg, A. J., Helzlsouer, K. J., Bush, T. L., Norkus, E. P., Morris, J. S., Spate, V. E., and Comstock, G. W. Serological precursors of cancer: malignant melanoma, basal and squamous cell skin cancer, and prediagnostic levels of retinol, beta- carotene, lycopene, alpha-tocopherol, and selenium. Cancer Epidemiol.Biomarkers Prev. 1995;4:837-842. View abstract.  
 Muscat, J. E. and Huncharek, M. Dietary intake and the risk of malignant mesothelioma. Br.J Cancer 1996;73:1122-1125. View abstract.  
 Parker, R. S. Absorption, metabolism, and transport of carotenoids. FASEB J 1996;10:542-551. View abstract.  
 Miller, N. J., Sampson, J., Candeias, L. P., Bramley, P. M., and Rice-Evans, C. A. Antioxidant activities of carotenes and xanthophylls. FEBS Lett. 4-22-1996;384:240-242. View abstract.  
 Levy, J., Bosin, E., Feldman, B., Giat, Y., Miinster, A., Danilenko, M., and Sharoni, Y. Lycopene is a more potent inhibitor of human cancer cell proliferation than either alpha-carotene or beta-carotene. Nutr Cancer 1995;24:257-266. View abstract.  
 Brady, W. E., Mares-Perlman, J. A., Bowen, P., and Stacewicz-Sapuntzakis, M. Human serum carotenoid concentrations are related to physiologic and lifestyle factors. J Nutr 1996;126:129-137. View abstract.  
 Khachik, F., Beecher, G. R., and Smith, J. C., Jr. Lutein, lycopene, and their oxidative metabolites in chemoprevention of cancer. J Cell Biochem Suppl 1995;22:236-246. View abstract.  
 Ramon, J. M., Serra, L., Cerdo, C., and Oromi, J. Dietary factors and gastric cancer risk. A case-control study in Spain. Cancer 3-1-1993;71:1731-1735. View abstract.  
 Mangels, A. R., Holden, J. M., Beecher, G. R., Forman, M. R., and Lanza, E. Carotenoid content of fruits and vegetables: an evaluation of analytic data. J Am Diet.Assoc. 1993;93:284-296. View abstract.  
 Steinmetz, K. A., Potter, J. D., and Folsom, A. R. Vegetables, fruit, and lung cancer in the Iowa Women's Health Study. Cancer Res 2-1-1993;53:536-543. View abstract.  
 Batieha, A. M., Armenian, H. K., Norkus, E. P., Morris, J. S., Spate, V. E., and Comstock, G. W. Serum micronutrients and the subsequent risk of cervical cancer in a population-based nested case-control study. Cancer Epidemiol.Biomarkers Prev. 1993;2:335-339. View abstract.  
 Le Marchand, L., Hankin, J. H., Kolonel, L. N., Beecher, G. R., Wilkens, L. R., and Zhao, L. P. Intake of specific carotenoids and lung cancer risk. Cancer Epidemiol.Biomarkers Prev. 1993;2:183-187. View abstract.  
 Mayne, S. T., Janerich, D. T., Greenwald, P., Chorost, S., Tucci, C., Zaman, M. B., Melamed, M. R., Kiely, M., and McKneally, M. F. Dietary beta carotene and lung cancer risk in U.S. nonsmokers. J Natl.Cancer Inst. 1-5-1994;86:33-38. View abstract.  
 Sowell, A. L., Huff, D. L., Yeager, P. R., Caudill, S. P., and Gunter, E. W. Retinol, alpha-tocopherol, lutein/zeaxanthin, beta-cryptoxanthin, lycopene, alpha-carotene, trans-beta-carotene, and four retinyl esters in serum determined simultaneously by reversed-phase HPLC with multiwavelength detection. Clin Chem 1994;40:411-416. View abstract.  
 Potischman, N., Hoover, R. N., Brinton, L. A., Swanson, C. A., Herrero, R., Tenorio, F., de Britton, R. C., Gaitan, E., and Reeves, W. C. The relations between cervical cancer and serological markers of nutritional status. Nutr Cancer 1994;21:193-201. View abstract.  
 Franceschi, S., Bidoli, E., La Vecchia, C., Talamini, R., D'Avanzo, B., and Negri, E. Tomatoes and risk of digestive-tract cancers. Int.J Cancer 10-15-1994;59:181-184. View abstract.  
 Parfitt, V. J., Rubba, P., Bolton, C., Marotta, G., Hartog, M., and Mancini, M. A comparison of antioxidant status and free radical peroxidation of plasma lipoproteins in healthy young persons from Naples and Bristol. Eur.Heart J 1994;15:871-876. View abstract.  
 Nagasawa, H., Mitamura, T., Sakamoto, S., and Yamamoto, K. Effects of lycopene on spontaneous mammary tumour development in SHN virgin mice. Anticancer Res. 1995;15:1173-1178. View abstract.  
 Ribaya-Mercado, J. D., Garmyn, M., Gilchrest, B. A., and Russell, R. M. Skin lycopene is destroyed preferentially over beta-carotene during ultraviolet irradiation in humans. J Nutr 1995;125:1854-1859. View abstract.  
 Peng, Y. M., Peng, Y. S., Lin, Y., Moon, T., Roe, D. J., and Ritenbaugh, C. Concentrations and plasma-tissue-diet relationships of carotenoids, retinoids, and tocopherols in humans. Nutr Cancer 1995;23:233-246. View abstract.  
 Bohm, F., Tinkler, J. H., and Truscott, T. G. Carotenoids protect against cell membrane damage by the nitrogen dioxide radical. Nat.Med 1995;1:98-99. View abstract.  
 Sies, H. and Stahl, W. Vitamins E and C, beta-carotene, and other carotenoids as antioxidants. Am J Clin Nutr 1995;62(6 Suppl):1315S-1321S. View abstract.  
 Kvale, G., Bjelke, E., and Gart, J. J. Dietary habits and lung cancer risk. Int J Cancer 4-15-1983;31:397-405. View abstract.  
 Colditz, G. A., Branch, L. G., Lipnick, R. J., Willett, W. C., Rosner, B., Posner, B. M., and Hennekens, C. H. Increased green and yellow vegetable intake and lowered cancer deaths in an elderly population. Am J Clin Nutr 1985;41:32-36. View abstract.  
 Correa, P., Fontham, E., Pickle, L. W., Chen, V., Lin, Y. P., and Haenszel, W. Dietary determinants of gastric cancer in south Louisiana inhabitants. J Natl.Cancer Inst. 1985;75:645-654. View abstract.  
 Ziegler, R. G., Mason, T. J., Stemhagen, A., Hoover, R., Schoenberg, J. B., Gridley, G., Virgo, P. W., and Fraumeni, J. F., Jr. Carotenoid intake, vegetables, and the risk of lung cancer among white men in New Jersey. Am J Epidemiol 1986;123:1080-1093. View abstract.  
 Bond, G. G., Thompson, F. E., and Cook, R. R. Dietary vitamin A and lung cancer: results of a case-control study among chemical workers. Nutr Cancer 1987;9(2-3):109-121. View abstract.  
 Mills, P. K., Beeson, W. L., Abbey, D. E., Fraser, G. E., and Phillips, R. L. Dietary habits and past medical history as related to fatal pancreas cancer risk among Adventists. Cancer 6-15-1988;61:2578-2585. View abstract.  
 Brown, L. M., Blot, W. J., Schuman, S. H., Smith, V. M., Ershow, A. G., Marks, R. D., and Fraumeni, J. F., Jr. Environmental factors and high risk of esophageal cancer among men in coastal South Carolina. J Natl.Cancer Inst. 12-21-1988;80:1620-1625. View abstract.  
 La Vecchia, C., Negri, E., Decarli, A., D'Avanzo, B., and Franceschi, S. A case-control study of diet and gastric cancer in northern Italy. Int J Cancer 10-15-1987;40:484-489. View abstract.  
 Di Mascio, P., Kaiser, S., and Sies, H. Lycopene as the most efficient biological carotenoid singlet oxygen quencher. Arch.Biochem.Biophys. 11-1-1989;274:532-538. View abstract.  
 Helzlsouer, K. J., Comstock, G. W., and Morris, J. S. Selenium, lycopene, alpha-tocopherol, beta-carotene, retinol, and subsequent bladder cancer. Cancer Res. 11-1-1989;49:6144-6148. View abstract.  
 Mills, P. K., Beeson, W. L., Phillips, R. L., and Fraser, G. E. Cohort study of diet, lifestyle, and prostate cancer in Adventist men. Cancer 8-1-1989;64:598-604. View abstract.  
 Burney, P. G., Comstock, G. W., and Morris, J. S. Serologic precursors of cancer: serum micronutrients and the subsequent risk of pancreatic cancer. Am J Clin Nutr 1989;49:895-900. View abstract.  
 Le Marchand, L., Yoshizawa, C. N., Kolonel, L. N., Hankin, J. H., and Goodman, M. T. Vegetable consumption and lung cancer risk: a population-based case- control study in Hawaii. J Natl.Cancer Inst. 8-2-1989;81:1158-1164. View abstract.  
 Sarkar, P. D., Gupt, T., and Sahu, A. Comparative analysis of lycopene in oxidative stress. J Assoc Physicians India 2012;60:17-19. View abstract.  
 Lennie, T. A., Moser, D. K., Biddle, M. J., Welsh, D., Bruckner, G. G., Thomas, D. T., Rayens, M. K., and Bailey, A. L. Nutrition intervention to decrease symptoms in patients with advanced heart failure. Res Nurs.Health 2013;36:120-145. View abstract.  
 Wang, X. D. Lycopene metabolism and its biological significance. Am J Clin Nutr 2012;96:1214S-1222S. View abstract.  
 Stahl, W. and Sies, H. beta-Carotene and other carotenoids in protection from sunlight. Am J Clin Nutr 2012;96:1179S-1184S. View abstract.  
 Sharoni, Y., Linnewiel-Hermoni, K., Zango, G., Khanin, M., Salman, H., Veprik, A., Danilenko, M., and Levy, J. The role of lycopene and its derivatives in the regulation of transcription systems: implications for cancer prevention. Am J Clin Nutr 2012;96:1173S-1178S. View abstract.  
 Graham, S., Haughey, B., Marshall, J., Brasure, J., Zielezny, M., Freudenheim, J., West, D., Nolan, J., and Wilkinson, G. Diet in the epidemiology of gastric cancer. Nutr Cancer 1990;13(1-2):19-34. View abstract.  
 Micozzi, M. S., Beecher, G. R., Taylor, P. R., and Khachik, F. Carotenoid analyses of selected raw and cooked foods associated with a lower risk for cancer. J Natl.Cancer Inst. 2-21-1990;82:282-285. View abstract.  
 Wood, L. G., Garg, M. L., Smart, J. M., Scott, H. A., Barker, D., and Gibson, P. G. Manipulating antioxidant intake in asthma: a randomized controlled trial. Am J Clin Nutr 2012;96:534-543. View abstract.  
 Carmody, J. F., Olendzki, B. C., Merriam, P. A., Liu, Q., Qiao, Y., and Ma, Y. A novel measure of dietary change in a prostate cancer dietary program incorporating mindfulness training. J Acad Nutr Diet. 2012;112:1822-1827. View abstract.  
 Shidfar, F., Agah, S., Ekhlasi, G., Salehpour, A., and Ghourchian, S. Lycopene an adjunctive therapy for Helicobacter pylori eradication: a quasi-control trial. J Complement Integr.Med 2012;9:Article. View abstract.  
 Gee, A. C., Kiraly, L., McCarthy, M. S., and Martindale, R. Nutrition support and therapy in patients with head and neck squamous cell carcinomas. Curr Gastroenterol.Rep 2012;14:349-355. View abstract.  
 Ilic, D. and Misso, M. Lycopene for the prevention and treatment of benign prostatic hyperplasia and prostate cancer: a systematic review. Maturitas 2012;72:269-276. View abstract.  
 Chandra, R. V., Sandhya, Y. P., Nagarajan, S., Reddy, B. H., Naveen, A., and Murthy, K. R. Efficacy of lycopene as a locally delivered gel in the treatment of chronic periodontitis: smokers vs nonsmokers. Quintessence.Int 2012;43:401-411. View abstract.  
 Thies, F., Masson, L. F., Rudd, A., Vaughan, N., Tsang, C., Brittenden, J., Simpson, W. G., Duthie, S., Horgan, G. W., and Duthie, G. Effect of a tomato-rich diet on markers of cardiovascular disease risk in moderately overweight, disease-free, middle-aged adults: a randomized controlled trial. Am J Clin Nutr 2012;95:1013-1022. View abstract.  
 Potischman, N., McCulloch, C. E., Byers, T., Nemoto, T., Stubbe, N., Milch, R., Parker, R., Rasmussen, K. M., Root, M., Graham, S., and . Breast cancer and dietary and plasma concentrations of carotenoids and vitamin A. Am J Clin Nutr 1990;52:909-915. View abstract.  
 Chole, R. H., Gondivkar, S. M., Gadbail, A. R., Balsaraf, S., Chaudhary, S., Dhore, S. V., Ghonmode, S., Balwani, S., Mankar, M., Tiwari, M., and Parikh, R. V. Review of drug treatment of oral submucous fibrosis. Oral Oncol 2012;48:393-398. View abstract.  
 Ilic, D., Forbes, K. M., and Hassed, C. Lycopene for the prevention of prostate cancer. Cochrane.Database.Syst.Rev. 2011;:CD008007. View abstract.  
 Riccioni, G., Scotti, L., Di, Ilio E., Bucciarelli, V., Ballone, E., De, Girolamo M., D' Orazio, N., Martini, F., Aceto, A., and Bucciarelli, T. Lycopene and preclinical carotid atherosclerosis. J.Biol.Regul.Homeost.Agents 2011;25:435-441. View abstract.  
 Ferris-Tortajada, J., Berbel-Tornero, O., Garcia-Castell, J., Ortega-Garcia, J. A., and Lopez-Andreu, J. A. [Dietetic factors associated with prostate cancer: protective effects of Mediterranean diet]. Actas Urol.Esp. 2012;36:239-245. View abstract.  
 van Breemen, R. B., Sharifi, R., Viana, M., Pajkovic, N., Zhu, D., Yuan, L., Yang, Y., Bowen, P. E., and Stacewicz-Sapuntzakis, M. Antioxidant effects of lycopene in African American men with prostate cancer or benign prostate hyperplasia: a randomized, controlled trial. Cancer Prev.Res.(Phila) 2011;4:711-718. View abstract.  
 Kristal, A. R., Till, C., Platz, E. A., Song, X., King, I. B., Neuhouser, M. L., Ambrosone, C. B., and Thompson, I. M. Serum lycopene concentration and prostate cancer risk: results from the Prostate Cancer Prevention Trial. Cancer Epidemiol.Biomarkers Prev. 2011;20:638-646. View abstract.  
 Kim, J. Y., Paik, J. K., Kim, O. Y., Park, H. W., Lee, J. H., Jang, Y., and Lee, J. H. Effects of lycopene supplementation on oxidative stress and markers of endothelial function in healthy men. Atherosclerosis 2011;215:189-195. View abstract.  
 Ried, K. and Fakler, P. Protective effect of lycopene on serum cholesterol and blood pressure: Meta-analyses of intervention trials. Maturitas 2011;68:299-310. View abstract.  
 Rizwan, M., Rodriguez-Blanco, I., Harbottle, A., Birch-Machin, M. A., Watson, R. E., and Rhodes, L. E. Tomato paste rich in lycopene protects against cutaneous photodamage in humans in vivo: a randomized controlled trial. Br.J.Dermatol. 2011;164:154-162. View abstract.  
 Stangl, V., Kuhn, C., Hentschel, S., Jochmann, N., Jacob, C., Bohm, V., Frohlich, K., Muller, L., Gericke, C., and Lorenz, M. Lack of effects of tomato products on endothelial function in human subjects: results of a randomised, placebo-controlled cross-over study. Br.J.Nutr. 2011;105:263-267. View abstract.  
 Kristal, A. R., Arnold, K. B., Neuhouser, M. L., Goodman, P., Platz, E. A., Albanes, D., and Thompson, I. M. Diet, supplement use, and prostate cancer risk: results from the prostate cancer prevention trial. Am.J.Epidemiol. 9-1-2010;172:566-577. View abstract.  
 Beilby, J., Ambrosini, G. L., Rossi, E., de Klerk, N. H., and Musk, A. W. Serum levels of folate, lycopene, beta-carotene, retinol and vitamin E and prostate cancer risk. Eur.J.Clin.Nutr. 2010;64:1235-1238. View abstract.  
 Mackinnon, E. S., Rao, A. V., Josse, R. G., and Rao, L. G. Supplementation with the antioxidant lycopene significantly decreases oxidative stress parameters and the bone resorption marker N-telopeptide of type I collagen in postmenopausal women. Osteoporos.Int. 2011;22:1091-1101. View abstract.  
 Negri, E., La Vecchia, C., Franceschi, S., D'Avanzo, B., and Parazzini, F. Vegetable and fruit consumption and cancer risk. Int J Cancer 5-30-1991;48:350-354. View abstract.  
 Morgia, G., Mucciardi, G., Gali, A., Madonia, M., Marchese, F., Di, Benedetto A., Romano, G., Bonvissuto, G., Castelli, T., Macchione, L., and Magno, C. Treatment of chronic prostatitis/chronic pelvic pain syndrome category IIIA with Serenoa repens plus selenium and lycopene (Profluss) versus S. repens alone: an Italian randomized multicenter-controlled study. Urol.Int. 2010;84:400-406. View abstract.  
 Puri, T., Goyal, S., Julka, P. K., Nair, O., Sharma, D. N., and Rath, G. K. Lycopene in treatment of high-grade gliomas: a pilot study. Neurol.India 2010;58:20-23. View abstract.  
 VanEenwyk, J., Davis, F. G., and Bowen, P. E. Dietary and serum carotenoids and cervical intraepithelial neoplasia. Int J Cancer 4-22-1991;48:34-38. View abstract.  
 Harris, R. W., Key, T. J., Silcocks, P. B., Bull, D., and Wald, N. J. A case-control study of dietary carotene in men with lung cancer and in men with other epithelial cancers. Nutr Cancer 1991;15:63-68. View abstract.  
 Markovits, N., Ben, Amotz A., and Levy, Y. The effect of tomato-derived lycopene on low carotenoids and enhanced systemic inflammation and oxidation in severe obesity. Isr.Med.Assoc.J. 2009;11:598-601. View abstract.  
 Le Marchand, L., Hankin, J. H., Kolonel, L. N., and Wilkens, L. R. Vegetable and fruit consumption in relation to prostate cancer risk in Hawaii: a reevaluation of the effect of dietary beta-carotene. Am J Epidemiol. 2-1-1991;133:215-219. View abstract.  
 Haseen, F., Cantwell, M. M., O'Sullivan, J. M., and Murray, L. J. Is there a benefit from lycopene supplementation in men with prostate cancer? A systematic review. Prostate Cancer Prostatic.Dis. 2009;12:325-332. View abstract.  
 Franceschi, S., Bidoli, E., Baron, A. E., Barra, S., Talamini, R., Serraino, D., and La Vecchia, C. Nutrition and cancer of the oral cavity and pharynx in north-east Italy. Int J Cancer 1-2-1991;47:20-25. View abstract.  
 Ziegler, R. G. Vegetables, fruits, and carotenoids and the risk of cancer. Am J Clin Nutr 1991;53(1 Suppl):251S-259S. View abstract.  
 Tomita, L. Y., Longatto, Filho A., Costa, M. C., Andreoli, M. A., Villa, L. L., Franco, E. L., and Cardoso, M. A. Diet and serum micronutrients in relation to cervical neoplasia and cancer among low-income Brazilian women. Int.J.Cancer 2-1-2010;126:703-714. View abstract.  
 Cho, H., Kim, M. K., Lee, J. K., Son, S. K., Lee, K. B., Lee, J. M., Lee, J. P., Hur, S. Y., and Kim, J. H. Relationship of serum antioxidant micronutrients and sociodemographic factors to cervical neoplasia: a case-control study. Clin.Chem.Lab Med. 2009;47:1005-1012. View abstract.  
 Banerjee, S., Jeyaseelan, S., and Guleria, R. Trial of lycopene to prevent pre-eclampsia in healthy primigravidas: results show some adverse effects. J.Obstet.Gynaecol.Res. 2009;35:477-482. View abstract.  
 Zhang, L. X., Cooney, R. V., and Bertram, J. S. Carotenoids enhance gap junctional communication and inhibit lipid peroxidation in C3H/10T1/2 cells: relationship to their cancer chemopreventive action. Carcinogenesis 1991;12:2109-2114. View abstract.  
 Di Giacomo, C., Acquaviva, R., Sorrenti, V., Vanella, A., Grasso, S., Barcellona, M. L., Galvano, F., Vanella, L., and Renis, M. Oxidative and antioxidant status in plasma of runners: effect of oral supplementation with natural antioxidants. J.Med.Food 2009;12:145-150. View abstract.  
 Ellinger, S., Ellinger, J., Muller, S. C., and Stehle, P. [Tomatoes and lycopene in prevention and therapy--is there an evidence for prostate diseases?]. Aktuelle Urol. 2009;40:37-43. View abstract.  
 Hu, J. F., Liu, Y. Y., Yu, Y. K., Zhao, T. Z., Liu, S. D., and Wang, Q. Q. Diet and cancer of the colon and rectum: a case-control study in China. Int J Epidemiol. 1991;20:362-367. View abstract.  
 Gonzalez, C. A., Sanz, J. M., Marcos, G., Pita, S., Brullet, E., Saigi, E., Badia, A., and Riboli, E. Dietary factors and stomach cancer in Spain: a multi-centre case- control study. Int J Cancer 10-21-1991;49:513-519. View abstract.  
 Hozawa, A., Jacobs, D. R., Jr., Steffes, M. W., Gross, M. D., Steffen, L. M., and Lee, D. H. Circulating carotenoid concentrations and incident hypertension: the Coronary Artery Risk Development in Young Adults (CARDIA) study. J.Hypertens. 2009;27:237-242. View abstract.  
 Perabo, F. G., von Low, E. C., Siener, R., Ellinger, J., Muller, S. C., and Bastian, P. J. [A critical assessment of phytotherapy for prostate cancer]. Urologe A 2009;48:270-283. View abstract.  
 Schwenke, C., Ubrig, B., Thurmann, P., Eggersmann, C., and Roth, S. Lycopene for advanced hormone refractory prostate cancer: a prospective, open phase II pilot study. J.Urol. 2009;181:1098-1103. View abstract.  
 Paran, E., Novack, V., Engelhard, Y. N., and Hazan-Halevy, I. The effects of natural antioxidants from tomato extract in treated but uncontrolled hypertensive patients. Cardiovasc.Drugs Ther. 2009;23:145-151. View abstract.  
 Itsiopoulos, C., Hodge, A., and Kaimakamis, M. Can the Mediterranean diet prevent prostate cancer? Mol.Nutr.Food Res. 2009;53:227-239. View abstract.  
 Knekt, P., Jarvinen, R., Seppanen, R., Rissanen, A., Aromaa, A., Heinonen, O. P., Albanes, D., Heinonen, M., Pukkala, E., and Teppo, L. Dietary antioxidants and the risk of lung cancer. Am J Epidemiol. 9-1-1991;134:471-479. View abstract.  
 Fedorowicz, Z., Chan Shih-Yen, E., Dorri, M., Nasser, M., Newton, T., and Shi, L. Interventions for the management of oral submucous fibrosis. Cochrane.Database.Syst.Rev. 2008;:CD007156. View abstract.  
 Riboli, E., Gonzalez, C. A., Lopez-Abente, G., Errezola, M., Izarzugaza, I., Escolar, A., Nebot, M., Hemon, B., and Agudo, A. Diet and bladder cancer in Spain: a multi-centre case-control study. Int J Cancer 9-9-1991;49:214-219. View abstract.  
 Boeing, H., Jedrychowski, W., Wahrendorf, J., Popiela, T., Tobiasz-Adamczyk, B., and Kulig, A. Dietary risk factors in intestinal and diffuse types of stomach cancer: a multicenter case-control study in Poland. Cancer Causes Control 1991;2:227-233. View abstract.  
 Devaraj, S., Mathur, S., Basu, A., Aung, H. H., Vasu, V. T., Meyers, S., and Jialal, I. A dose-response study on the effects of purified lycopene supplementation on biomarkers of oxidative stress. J.Am.Coll.Nutr. 2008;27:267-273. View abstract.  
 Hernandez-Valero, M. A., Thomson, C. A., Hernandez, M., Tran, T., Detry, M. A., Theriault, R. L., Hajek, R. A., Pierce, J. P., Flatt, S. W., Caan, B. J., and Jones, L. A. Comparison of baseline dietary intake of Hispanic and matched non-Hispanic white breast cancer survivors enrolled in the Women's Healthy Eating and Living study. J.Am.Diet.Assoc. 2008;108:1323-1329. View abstract.  
 Denniss, S. G., Haffner, T. D., Kroetsch, J. T., Davidson, S. R., Rush, J. W., and Hughson, R. L. Effect of short-term lycopene supplementation and postprandial dyslipidemia on plasma antioxidants and biomarkers of endothelial health in young, healthy individuals. Vasc.Health Risk Manag. 2008;4:213-222. View abstract.  
 Baghurst, P. A., McMichael, A. J., Slavotinek, A. H., Baghurst, K. I., Boyle, P., and Walker, A. M. A case-control study of diet and cancer of the pancreas. Am J Epidemiol. 7-15-1991;134:167-179. View abstract.  
 Grainger, E. M., Schwartz, S. J., Wang, S., Unlu, N. Z., Boileau, T. W., Ferketich, A. K., Monk, J. P., Gong, M. C., Bahnson, R. R., DeGroff, V. L., and Clinton, S. K. A combination of tomato and soy products for men with recurring prostate cancer and rising prostate specific antigen. Nutr Cancer 2008;60:145-154. View abstract.  
 Wood, L. G., Garg, M. L., Powell, H., and Gibson, P. G. Lycopene-rich treatments modify noneosinophilic airway inflammation in asthma: proof of concept. Free Radic.Res. 2008;42:94-102. View abstract.  
 Chandra, R. V., Prabhuji, M. L., Roopa, D. A., Ravirajan, S., and Kishore, H. C. Efficacy of lycopene in the treatment of gingivitis: a randomised, placebo-controlled clinical trial. Oral Health Prev.Dent 2007;5:327-336. View abstract.  
 Schwarz, S., Obermuller-Jevic, U. C., Hellmis, E., Koch, W., Jacobi, G., and Biesalski, H. K. Lycopene inhibits disease progression in patients with benign prostate hyperplasia. J Nutr 2008;138:49-53. View abstract.  
 Vaishampayan, U., Hussain, M., Banerjee, M., Seren, S., Sarkar, F. H., Fontana, J., Forman, J. D., Cher, M. L., Powell, I., Pontes, J. E., and Kucuk, O. Lycopene and soy isoflavones in the treatment of prostate cancer. Nutr Cancer 2007;59:1-7. View abstract.  
 Blum, A., Monir, M., Khazim, K., Peleg, A., and Blum, N. Tomato-rich (Mediterranean) diet does not modify inflammatory markers. Clin.Invest Med. 2007;30:E70-E74. View abstract.  
 Kawashima, A., Madarame, T., Koike, H., Komatsu, Y., and Wise, J. A. Four week supplementation with mixed fruit and vegetable juice concentrates increased protective serum antioxidants and folate and decreased plasma homocysteine in Japanese subjects. Asia Pac.J.Clin.Nutr. 2007;16:411-421. View abstract.  
 Schmitz, H. H., Poor, C. L., Wellman, R. B., and Erdman, J. W., Jr. Concentrations of selected carotenoids and vitamin A in human liver, kidney and lung tissue. J Nutr 1991;121:1613-1621. View abstract.  
 Steinmetz, K. A. and Potter, J. D. Vegetables, fruit, and cancer. II. Mechanisms. Cancer Causes Control 1991;2:427-442. View abstract.  
 Jacob, K., Periago, M. J., Bohm, V., and Berruezo, G. R. Influence of lycopene and vitamin C from tomato juice on biomarkers of oxidative stress and inflammation. Br.J.Nutr. 2008;99:137-146. View abstract.  
 Shen, Y. C., Chen, S. L., and Wang, C. K. Contribution of tomato phenolics to antioxidation and down-regulation of blood lipids. J.Agric.Food Chem. 8-8-2007;55:6475-6481. View abstract.  
 Silaste, M. L., Alfthan, G., Aro, A., Kesaniemi, Y. A., and Horkko, S. Tomato juice decreases LDL cholesterol levels and increases LDL resistance to oxidation. Br.J.Nutr. 2007;98:1251-1258. View abstract.  
 Bunker, C. H., McDonald, A. C., Evans, R. W., de la, Rosa N., Boumosleh, J. M., and Patrick, A. L. A randomized trial of lycopene supplementation in Tobago men with high prostate cancer risk. Nutr Cancer 2007;57:130-137. View abstract.  
 Potischman, N., Herrero, R., Brinton, L. A., Reeves, W. C., Stacewicz-Sapuntzakis, M., Jones, C. J., Brenes, M. M., Tenorio, F., de Britton, R. C., and Gaitan, E. A case-control study of nutrient status and invasive cervical cancer. II. Serologic indicators. Am J Epidemiol. 12-1-1991;134:1347-1355. View abstract.  
 Goyal, A., Chopra, M., Lwaleed, B. A., Birch, B., and Cooper, A. J. The effects of dietary lycopene supplementation on human seminal plasma. BJU.Int 2007;99:1456-1460. View abstract.  
 Bose, K. S. and Agrawal, B. K. Effect of lycopene from cooked tomatoes on serum antioxidant enzymes, lipid peroxidation rate and lipid profile in coronary heart disease. Singapore Med.J. 2007;48:415-420. View abstract.  
 Unlu, N. Z., Bohn, T., Francis, D. M., Nagaraja, H. N., Clinton, S. K., and Schwartz, S. J. Lycopene from heat-induced cis-isomer-rich tomato sauce is more bioavailable than from all-trans-rich tomato sauce in human subjects. Br J Nutr 2007;98:140-146. View abstract.  
 Jatoi, A., Burch, P., Hillman, D., Vanyo, J. M., Dakhil, S., Nikcevich, D., Rowland, K., Morton, R., Flynn, P. J., Young, C., and Tan, W. A tomato-based, lycopene-containing intervention for androgen-independent prostate cancer: results of a Phase II study from the North Central Cancer Treatment Group. Urology 2007;69:289-294. View abstract.  
 Bose, K. S. and Agrawal, B. K. Effect of long term supplementation of tomatoes (cooked) on levels of antioxidant enzymes, lipid peroxidation rate, lipid profile and glycated haemoglobin in Type 2 diabetes mellitus. West Indian Med.J. 2006;55:274-278. View abstract.  
 Unlu, N. Z., Bohn, T., Francis, D., Clinton, S. K., and Schwartz, S. J. Carotenoid absorption in humans consuming tomato sauces obtained from tangerine or high-beta-carotene varieties of tomatoes. J Agric Food Chem 2-21-2007;55:1597-1603. View abstract.  
 Kumar, A., Bagewadi, A., Keluskar, V., and Singh, M. Efficacy of lycopene in the management of oral submucous fibrosis. Oral Surg Oral Med Oral Pathol Oral Radiol.Endod. 2007;103:207-213. View abstract.  
 Blum, A., Merei, M., Karem, A., Blum, N., Ben-Arzi, S., Wirsansky, I., and Khazim, K. Effects of tomatoes on the lipid profile. Clin.Invest Med. 2006;29:298-300. View abstract.  
 Bosetti, C., Scotti, L., Maso, L. D., Talamini, R., Montella, M., Negri, E., Ramazzotti, V., Franceschi, S., and La Vecchia, C. Micronutrients and the risk of renal cell cancer: a case-control study from Italy. Int J Cancer 2-15-2007;120:892-896. View abstract.  
 Paterson, E., Gordon, M. H., Niwat, C., George, T. W., Parr, L., Waroonphan, S., and Lovegrove, J. A. Supplementation with fruit and vegetable soups and beverages increases plasma carotenoid concentrations but does not alter markers of oxidative stress or cardiovascular risk factors. J.Nutr. 2006;136:2849-2855. View abstract.  
 Barber, N. J., Zhang, X., Zhu, G., Pramanik, R., Barber, J. A., Martin, F. L., Morris, J. D., and Muir, G. H. Lycopene inhibits DNA synthesis in primary prostate epithelial cells in vitro and its administration is associated with a reduced prostate-specific antigen velocity in a phase II clinical study. Prostate Cancer Prostatic.Dis 2006;9:407-413. View abstract.  
 O'Kennedy, N., Crosbie, L., van, Lieshout M., Broom, J. I., Webb, D. J., and Duttaroy, A. K. Effects of antiplatelet components of tomato extract on platelet function in vitro and ex vivo: a time-course cannulation study in healthy humans. Am.J.Clin.Nutr. 2006;84:570-579. View abstract.  
 O'Kennedy, N., Crosbie, L., Whelan, S., Luther, V., Horgan, G., Broom, J. I., Webb, D. J., and Duttaroy, A. K. Effects of tomato extract on platelet function: a double-blinded crossover study in healthy humans. Am.J.Clin.Nutr. 2006;84:561-569. View abstract.  
 Edinger, M. S. and Koff, W. J. Effect of the consumption of tomato paste on plasma prostate-specific antigen levels in patients with benign prostate hyperplasia. Braz.J Med Biol Res 2006;39:1115-1119. View abstract.  
 Koushik, A., Hunter, D. J., Spiegelman, D., Anderson, K. E., Buring, J. E., Freudenheim, J. L., Goldbohm, R. A., Hankinson, S. E., Larsson, S. C., Leitzmann, M., Marshall, J. R., McCullough, M. L., Miller, A. B., Rodriguez, C., Rohan, T. E., Ross, J. A., Schatzkin, A., Schouten, L. J., Willett, W. C., Wolk, A., Zhang, S. M., and Smith-Warner, S. A. Intake of the major carotenoids and the risk of epithelial ovarian cancer in a pooled analysis of 10 cohort studies. Int J Cancer 11-1-2006;119:2148-2154. View abstract.  
 Clark, P. E., Hall, M. C., Borden, L. S., Jr., Miller, A. A., Hu, J. J., Lee, W. R., Stindt, D., D'Agostino, R., Jr., Lovato, J., Harmon, M., and Torti, F. M. Phase I-II prospective dose-escalating trial of lycopene in patients with biochemical relapse of prostate cancer after definitive local therapy. Urology 2006;67:1257-1261. View abstract.  
 Misra, R., Mangi, S., Joshi, S., Mittal, S., Gupta, S. K., and Pandey, R. M. LycoRed as an alternative to hormone replacement therapy in lowering serum lipids and oxidative stress markers: a randomized controlled clinical trial. J Obstet Gynaecol Res 2006;32:299-304. View abstract.  
 de Vet, H. C., Knipschild, P. G., Grol, M. E., Schouten, H. J., and Sturmans, F. The role of beta-carotene and other dietary factors in the aetiology of cervical dysplasia: results of a case-control study. Int J Epidemiol. 1991;20:603-610. View abstract.  
 Riso, P., Visioli, F., Grande, S., Guarnieri, S., Gardana, C., Simonetti, P., and Porrini, M. Effect of a tomato-based drink on markers of inflammation, immunomodulation, and oxidative stress. J Agric Food Chem 4-5-2006;54:2563-2566. View abstract.  
 Bueno de Mesquita, H. B., Maisonneuve, P., Runia, S., and Moerman, C. J. Intake of foods and nutrients and cancer of the exocrine pancreas: a population-based case-control study in The Netherlands. Int J Cancer 6-19-1991;48:540-549. View abstract.  
 Tavani, A., Longoni, E., Bosetti, C., Maso, L. D., Polesel, J., Montella, M., Ramazzotti, V., Negri, E., Franceschi, S., and La Vecchia, C. Intake of selected micronutrients and the risk of surgically treated benign prostatic hyperplasia: a case-control study from Italy. Eur Urol 2006;50:549-554. View abstract.  
 Forman, M. R., Yao, S. X., Graubard, B. I., Qiao, Y. L., McAdams, M., Mao, B. L., and Taylor, P. R. The effect of dietary intake of fruits and vegetables on the odds ratio of lung cancer among Yunnan tin miners. Int J Epidemiol. 1992;21:437-441. View abstract.  
 Watzl, B., Kulling, S. E., Moseneder, J., Barth, S. W., and Bub, A. A 4-wk intervention with high intake of carotenoid-rich vegetables and fruit reduces plasma C-reactive protein in healthy, nonsmoking men. Am.J.Clin.Nutr. 2005;82:1052-1058. View abstract.  
 Schroder, F. H., Roobol, M. J., Boeve, E. R., de Mutsert, R., Zuijdgeest-van Leeuwen, S. D., Kersten, I., Wildhagen, M. F., and van Helvoort, A. Randomized, double-blind, placebo-controlled crossover study in men with prostate cancer and rising PSA: effectiveness of a dietary supplement. Eur Urol 2005;48:922-930. View abstract.  
 Hsiao, G., Wang, Y., Tzu, N. H., Fong, T. H., Shen, M. Y., Lin, K. H., Chou, D. S., and Sheu, J. R. Inhibitory effects of lycopene on in vitro platelet activation and in vivo prevention of thrombus formation. J Lab Clin Med 2005;146:216-226. View abstract.  
Bub, A., Barth, S. W., Watzl, B., Briviba, K., and Rechkemmer, G. Paraoxonase 1 Q192R (PON1-192) polymorphism is associated with reduced lipid peroxidation in healthy young men on a low-carotenoid diet supplemented with tomato juice. Br J Nutr 2005;93:291-297. View abstract.  
 Falk, B., Gorev, R., Zigel, L., Ben Amotz, A., and Neuman, I. Effect of lycopene supplementation on lung function after exercise in young athletes who complain of exercise-induced bronchoconstriction symptoms. Ann Allergy Asthma Immunol 2005;94:480-485. View abstract.  
 Porrini, M., Riso, P., Brusamolino, A., Berti, C., Guarnieri, S., and Visioli, F. Daily intake of a formulated tomato drink affects carotenoid plasma and lymphocyte concentrations and improves cellular antioxidant protection. Br.J.Nutr. 2005;93:93-99. View abstract.  
 Tuyns, A. J., Kaaks, R., Haelterman, M., and Riboli, E. Diet and gastric cancer. A case-control study in Belgium. Int J Cancer 4-22-1992;51:1-6. View abstract.  
 Rao, A. V. Processed tomato products as a source of dietary lycopene: bioavailability and antioxidant properties. Can.J.Diet.Pract.Res. 2004;65:161-165. View abstract.  
 Ansari, M. S. and Gupta, N. P. Lycopene: a novel drug therapy in hormone refractory metastatic prostate cancer. Urol.Oncol. 2004;22:415-420. View abstract.  
 Collins, J. K., Arjmandi, B. H., Claypool, P. L., Perkins-Veazie, P., Baker, R. A., and Clevidence, B. A. Lycopene from two food sources does not affect antioxidant or cholesterol status of middle-aged adults. Nutr.J. 9-15-2004;3:15. View abstract.  
 Briviba, K., Kulling, S. E., Moseneder, J., Watzl, B., Rechkemmer, G., and Bub, A. Effects of supplementing a low-carotenoid diet with a tomato extract for 2 weeks on endogenous levels of DNA single strand breaks and immune functions in healthy non-smokers and smokers. Carcinogenesis 2004;25:2373-2378. View abstract.  
 Riso, P., Visioli, F., Erba, D., Testolin, G., and Porrini, M. Lycopene and vitamin C concentrations increase in plasma and lymphocytes after tomato intake. Effects on cellular antioxidant protection. Eur.J.Clin.Nutr. 2004;58:1350-1358. View abstract.  
 Tyssandier, V., Feillet-Coudray, C., Caris-Veyrat, C., Guilland, J. C., Coudray, C., Bureau, S., Reich, M., Amiot-Carlin, M. J., Bouteloup-Demange, C., Boirie, Y., and Borel, P. Effect of tomato product consumption on the plasma status of antioxidant microconstituents and on the plasma total antioxidant capacity in healthy subjects. J.Am.Coll.Nutr. 2004;23:148-156. View abstract.  
 Kim, H. S., Bowen, P., Chen, L., Duncan, C., Ghosh, L., Sharifi, R., and Christov, K. Effects of tomato sauce consumption on apoptotic cell death in prostate benign hyperplasia and carcinoma. Nutr.Cancer 2003;47:40-47. View abstract.  
Watzl, B., Bub, A., Briviba, K., and Rechkemmer, G. Supplementation of a low-carotenoid diet with tomato or carrot juice modulates immune functions in healthy men. Ann Nutr Metab 2003;47:255-261. View abstract.  
 Candelora, E. C., Stockwell, H. G., Armstrong, A. W., and Pinkham, P. A. Dietary intake and risk of lung cancer in women who never smoked. Nutr Cancer 1992;17:263-270. View abstract.  
 Stahl, W. and Sies, H. Uptake of lycopene and its geometrical isomers is greater from heat- processed than from unprocessed tomato juice in humans. J Nutr 1992;122:2161-2166. View abstract.  
 London, S. J., Stein, E. A., Henderson, I. C., Stampfer, M. J., Wood, W. C., Remine, S., Dmochowski, J. R., Robert, N. J., and Willett, W. C. Carotenoids, retinol, and vitamin E and risk of proliferative benign breast disease and breast cancer. Cancer Causes Control 1992;3:503-512. View abstract.  
 Block, G., Patterson, B., and Subar, A. Fruit, vegetables, and cancer prevention: a review of the epidemiological evidence. Nutr Cancer 1992;18:1-29. View abstract.  
 Ansari, M. S. and Gupta, N. P. A comparison of lycopene and orchidectomy vs orchidectomy alone in the management of advanced prostate cancer. BJU.Int 2003;92:375-378. View abstract.  
 Visioli, F., Riso, P., Grande, S., Galli, C., and Porrini, M. Protective activity of tomato products on in vivo markers of lipid oxidation. Eur.J Nutr. 2003;42:201-206. View abstract.  
 Gupta, N. P. and Kumar, R. Lycopene therapy in idiopathic male infertility--a preliminary report. Int Urol Nephrol. 2002;34:369-372. View abstract.  
 Sharma, J. B., Kumar, A., Kumar, A., Malhotra, M., Arora, R., Prasad, S., and Batra, S. Effect of lycopene on pre-eclampsia and intra-uterine growth retardation in primigravidas. Int J Gynaecol.Obstet. 2003;81:257-262. View abstract.  
 Hadley, C. W., Clinton, S. K., and Schwartz, S. J. The consumption of processed tomato products enhances plasma lycopene concentrations in association with a reduced lipoprotein sensitivity to oxidative damage. J Nutr 2003;133:727-732. View abstract.  
 Huang, H. Y., Alberg, A. J., Norkus, E. P., Hoffman, S. C., Comstock, G. W., and Helzlsouer, K. J. Prospective study of antioxidant micronutrients in the blood and the risk of developing prostate cancer. Am J Epidemiol. 2-15-2003;157:335-344. View abstract.  
 Bowen, P., Chen, L., Stacewicz-Sapuntzakis, M., Duncan, C., Sharifi, R., Ghosh, L., Kim, H. S., Christov-Tzelkov, K., and van Breemen, R. Tomato sauce supplementation and prostate cancer: lycopene accumulation and modulation of biomarkers of carcinogenesis. Exp.Biol.Med (Maywood.) 2002;227:886-893. View abstract.  
 Holick, C. N., Michaud, D. S., Stolzenberg-Solomon, R., Mayne, S. T., Pietinen, P., Taylor, P. R., Virtamo, J., and Albanes, D. Dietary carotenoids, serum beta-carotene, and retinol and risk of lung cancer in the alpha-tocopherol, beta-carotene cohort study. Am J Epidemiol. 9-15-2002;156:536-547. View abstract.  
 Porrini, M., Riso, P., and Oriani, G. Spinach and tomato consumption increases lymphocyte DNA resistance to oxidative stress but this is not related to cell carotenoid concentrations. Eur.J.Nutr. 2002;41:95-100. View abstract.  
 Offord, E. A., Gautier, J. C., Avanti, O., Scaletta, C., Runge, F., Kramer, K., and Applegate, L. A. Photoprotective potential of lycopene, beta-carotene, vitamin E, vitamin C and carnosic acid in UVA-irradiated human skin fibroblasts. Free Radic.Biol.Med 6-15-2002;32:1293-1303. View abstract.  
 Gianetti, J., Pedrinelli, R., Petrucci, R., Lazzerini, G., De Caterina, M., Bellomo, G., and De Caterina, R. Inverse association between carotid intima-media thickness and the antioxidant lycopene in atherosclerosis. Am Heart J 2002;143:467-474. View abstract.  
 Chen, L., Stacewicz-Sapuntzakis, M., Duncan, C., Sharifi, R., Ghosh, L., van Breemen, R., Ashton, D., and Bowen, P. E. Oxidative DNA damage in prostate cancer patients consuming tomato sauce- based entrees as a whole-food intervention. J Natl.Cancer Inst. 12-19-2001;93:1872-1879. View abstract.  
 Maruyama, C., Imamura, K., Oshima, S., Suzukawa, M., Egami, S., Tonomoto, M., Baba, N., Harada, M., Ayaori, M., Inakuma, T., and Ishikawa, T. Effects of tomato juice consumption on plasma and lipoprotein carotenoid concentrations and the susceptibility of low density lipoprotein to oxidative modification. J.Nutr.Sci.Vitaminol.(Tokyo) 2001;47:213-221. View abstract.  
 Cronin, K. A., Krebs-Smith, S. M., Feuer, E. J., Troiano, R. P., and Ballard-Barbash, R. Evaluating the impact of population changes in diet, physical activity, and weight status on population risk for colon cancer (United States). Cancer Causes Control 2001;12:305-316. View abstract.  
 Simon, M. S., Djuric, Z., Dunn, B., Stephens, D., Lababidi, S., and Heilbrun, L. K. An Evaluation of Plasma Antioxidant Levels and the Risk of Breast Cancer: A Pilot Case Control Study. Breast J 2000;6:388-395. View abstract.  
 Stahl, W., Heinrich, U., Wiseman, S., Eichler, O., Sies, H., and Tronnier, H. Dietary tomato paste protects against ultraviolet light-induced erythema in humans. J Nutr 2001;131:1449-1451. View abstract.  
 Fuhrman, B., Volkova, N., Rosenblat, M., and Aviram, M. Lycopene synergistically inhibits LDL oxidation in combination with vitamin E, glabridin, rosmarinic acid, carnosic acid, or garlic. Antioxid.Redox.Signal. 2000;2:491-506. View abstract.  
Bub, A., Watzl, B., Abrahamse, L., Delincee, H., Adam, S., Wever, J., Muller, H., and Rechkemmer, G. Moderate intervention with carotenoid-rich vegetable products reduces lipid peroxidation in men. J Nutr 2000;130:2200-2206. View abstract.  
 De Stefani, E., Oreggia, F., Boffetta, P., Deneo-Pellegrini, H., Ronco, A., and Mendilaharsu, M. Tomatoes, tomato-rich foods, lycopene and cancer of the upper aerodigestive tract: a case-control in Uruguay. Oral Oncol. 2000;36:47-53. View abstract.  
 Carroll, Y. L., Corridan, B. M., and Morrissey, P. A. Lipoprotein carotenoid profiles and the susceptibility of low density lipoprotein to oxidative modification in healthy elderly volunteers. Eur.J.Clin.Nutr. 2000;54:500-507. View abstract.  
 Upritchard, J. E., Sutherland, W. H., and Mann, J. I. Effect of supplementation with tomato juice, vitamin E, and vitamin C on LDL oxidation and products of inflammatory activity in type 2 diabetes. Diabetes Care 2000;23:733-738. View abstract.  
 Breinholt, V., Lauridsen, S. T., Daneshvar, B., and Jakobsen, J. Dose-response effects of lycopene on selected drug-metabolizing and antioxidant enzymes in the rat. Cancer Lett. 6-30-2000;154:201-210. View abstract.  
 Voorrips, L. E., Goldbohm, R. A., Brants, H. A., van Poppel, G. A., Sturmans, F., Hermus, R. J., and van den Brandt, P. A. A prospective cohort study on antioxidant and folate intake and male lung cancer risk. Cancer Epidemiol.Biomarkers Prev. 2000;9:357-365. View abstract.  
 Pellegrini, N., Riso, P., and Porrini, M. Tomato consumption does not affect the total antioxidant capacity of plasma. Nutrition 2000;16:268-271. View abstract.  
 Porrini, M. and Riso, P. Lymphocyte lycopene concentration and DNA protection from oxidative damage is increased in women after a short period of tomato consumption. J Nutr 2000;130:189-192. View abstract.  
 Shi, J. and Le Maguer, M. Lycopene in tomatoes: chemical and physical properties affected by food processing. Crit Rev.Food Sci Nutr 2000;40:1-42. View abstract.  
 Cohen, L. A., Zhao, Z., Pittman, B., and Khachik, F. Effect of dietary lycopene on N-methylnitrosourea-induced mammary tumorigenesis. Nutr Cancer 1999;34:153-159. View abstract.  
 Sengupta, A. and Das, S. The anti-carcinogenic role of lycopene, abundantly present in tomato. Eur.J Cancer Prev. 1999;8:325-330. View abstract.  
 Rehman, A., Bourne, L. C., Halliwell, B., and Rice-Evans, C. A. Tomato consumption modulates oxidative DNA damage in humans. Biochem.Biophys.Res.Commun. 9-7-1999;262:828-831. View abstract.  
 Sutherland, W. H., Walker, R. J., De Jong, S. A., and Upritchard, J. E. Supplementation with tomato juice increases plasma lycopene but does not alter susceptibility to oxidation of low-density lipoproteins from renal transplant recipients. Clin Nephrol. 1999;52:30-36. View abstract.  
 Dugas, T. R., Morel, D. W., and Harrison, E. H. Dietary supplementation with beta-carotene, but not with lycopene, inhibits endothelial cell-mediated oxidation of low-density lipoprotein. Free Radic.Biol.Med 1999;26(9-10):1238-1244. View abstract.  
 Rao, A. V., Fleshner, N., and Agarwal, S. Serum and tissue lycopene and biomarkers of oxidation in prostate cancer patients: a case-control study. Nutr Cancer 1999;33:159-164. View abstract.  
 Amir, H., Karas, M., Giat, J., Danilenko, M., Levy, R., Yermiahu, T., Levy, J., and Sharoni, Y. Lycopene and 1,25-dihydroxyvitamin D3 cooperate in the inhibition of cell cycle progression and induction of differentiation in HL-60 leukemic cells. Nutr Cancer 1999;33:105-112. View abstract.  
 Riso, P., Pinder, A., Santangelo, A., and Porrini, M. Does tomato consumption effectively increase the resistance of lymphocyte DNA to oxidative damage? Am J Clin Nutr 1999;69:712-718. View abstract.  
 Kim MK, Ahn SH Lee-Kim. Relationship of serum alpha-tocopherol, carotenoids and retinol with the risk of breast cancer. Nutr Res 2001;21:797-809.  
 Lyle, B. J., Mares-Perlman, J. A., Klein, B. E., Klein, R., Palta, M., Bowen, P. E., and Greger, J. L. Serum carotenoids and tocopherols and incidence of age-related nuclear cataract. Am J Clin Nutr 1999;69:272-277. View abstract.  
 Rock, C. L., Flatt, S. W., Wright, F. A., Faerber, S., Newman, V., Kealey, S., and Pierce, J. P. Responsiveness of carotenoids to a high vegetable diet intervention designed to prevent breast cancer recurrence. Cancer Epidemiol.Biomarkers Prev. 1997;6:617-623. View abstract.  
 Ros, M. M., Bueno-de-Mesquita, H. B., Kampman, E., Aben, K. K., Buchner, F. L., Jansen, E. H., van Gils, C. H., Egevad, L., Overvad, K., Tjonneland, A., Roswall, N., Boutron-Ruault, M. C., Kvaskoff, M., Perquier, F., Kaaks, R., Chang-Claude, J., Weikert, S., Boeing, H., Trichopoulou, A., Lagiou, P., Dilis, V., Palli, D., Pala, V., Sacerdote, C., Tumino, R., Panico, S., Peeters, P. H., Gram, I. T., Skeie, G., Huerta, J. M., Barricarte, A., Quiros, J. R., Sanchez, M. J., Buckland, G., Larranaga, N., Ehrnstrom, R., Wallstrom, P., Ljungberg, B., Hallmans, G., Key, T. J., Allen, N. E., Khaw, K. T., Wareham, N., Brennan, P., Riboli, E., and Kiemeney, L. A. Plasma carotenoids and vitamin C concentrations and risk of urothelial cell carcinoma in the European Prospective Investigation into Cancer and Nutrition. Am J Clin Nutr 2012;96:902-910. View abstract.  
 Azqueta, A. and Collins, A. R. Carotenoids and DNA damage. Mutat.Res 5-1-2012;733(1-2):4-13. View abstract.  
 Bohm, F., Edge, R., and Truscott, T. G. Interactions of dietary carotenoids with singlet oxygen (1O2) and free radicals: potential effects for human health. Acta Biochim.Pol. 2012;59:27-30. View abstract.  
 Farges, M. C., Minet-Quinard, R., Walrand, S., Thivat, E., Ribalta, J., Winklhofer-Roob, B., Rock, E., and Vasson, M. P. Immune status is more affected by age than by carotenoid depletion-repletion in healthy human subjects. Br J Nutr 12-14-2012;108:2054-2065. View abstract.  
 Thyagarajan, B., Meyer, A., Smith, L. J., Beckett, W. S., Williams, O. D., Gross, M. D., and Jacobs, D. R., Jr. Serum carotenoid concentrations predict lung function evolution in young adults: the Coronary Artery Risk Development in Young Adults (CARDIA) study. Am.J.Clin.Nutr. 2011;94:1211-1218. View abstract.  
 Kabat, G. C., Kim, M., Adams-Campbell, L. L., Caan, B. J., Chlebowski, R. T., Neuhouser, M. L., Shikany, J. M., and Rohan, T. E. Longitudinal study of serum carotenoid, retinol, and tocopherol concentrations in relation to breast cancer risk among postmenopausal women. Am.J.Clin.Nutr. 2009;90:162-169. View abstract.  
 Dherani, M., Murthy, G. V., Gupta, S. K., Young, I. S., Maraini, G., Camparini, M., Price, G. M., John, N., Chakravarthy, U., and Fletcher, A. E. Blood levels of vitamin C, carotenoids and retinol are inversely associated with cataract in a North Indian population. Invest Ophthalmol.Vis.Sci. 2008;49:3328-3335. View abstract.  
 Parsons, J. K., Newman, V. A., Mohler, J. L., Pierce, J. P., Flatt, S., and Marshall, J. Dietary modification in patients with prostate cancer on active surveillance: a randomized, multicentre feasibility study. BJU.Int. 2008;101:1227-1231. View abstract.  
 Kiokias, S. and Gordon, M. H. Dietary supplementation with a natural carotenoid mixture decreases oxidative stress. Eur.J Clin.Nutr. 2003;57:1135-1140. View abstract.  
 Eichler, O., Sies, H., and Stahl, W. Divergent optimum levels of lycopene, beta-carotene and lutein protecting against UVB irradiation in human fibroblastst. Photochem.Photobiol. 2002;75:503-506. View abstract.  
 Chopra, M., O'Neill, M. E., Keogh, N., Wortley, G., Southon, S., and Thurnham, D. I. Influence of increased fruit and vegetable intake on plasma and lipoprotein carotenoids and LDL oxidation in smokers and nonsmokers. Clin.Chem. 2000;46:1818-1829. View abstract.  
 Hughes, D. A., Wright, A. J., Finglas, P. M., Polley, A. C., Bailey, A. L., Astley, S. B., and Southon, S. Effects of lycopene and lutein supplementation on the expression of functionally associated surface molecules on blood monocytes from healthy male nonsmokers. J Infect.Dis 2000;182 Suppl 1:S11-S15. View abstract.  
 Levi, F., La Vecchia, C., Gulie, C., and Negri, E. Dietary factors and breast cancer risk in Vaud, Switzerland. Nutr Cancer 1993;19:327-335. View abstract.  
 Cook-Mozaffari, P. J., Azordegan, F., Day, N. E., Ressicaud, A., Sabai, C., and Aramesh, B. Oesophageal cancer studies in the Caspian Littoral of Iran: results of a case-control study. Br.J Cancer 1979;39:293-309. View abstract.  
 Buiatti, E., Palli, D., Decarli, A., Amadori, D., Avellini, C., Bianchi, S., Biserni, R., Cipriani, F., Cocco, P., Giacosa, A., and . A case-control study of gastric cancer and diet in Italy. Int J Cancer 10-15-1989;44:611-616. View abstract.  
 Zheng, W., Blot, W. J., Shu, X. O., Gao, Y. T., Ji, B. T., Ziegler, R. G., and Fraumeni, J. F., Jr. Diet and other risk factors for laryngeal cancer in Shanghai, China. Am J Epidemiol. 7-15-1992;136:178-191. View abstract.  
 Ried, K., Frank, O. R., and Stocks, N. P. Dark chocolate or tomato extract for prehypertension: a randomised controlled trial. BMC.Complement Altern.Med. 2009;9:22. View abstract.  
 Ziouzenkova, O., Winklhofer-Roob, B. M., Puhl, H., Roob, J. M., and Esterbauer, H. Lack of correlation between the alpha-tocopherol content of plasma and LDL, but high correlations for gamma-tocopherol and carotenoids. J Lipid Res 1996;37:1936-1946. View abstract.  
 Centonze, S., Boeing, H., Leoci, C., Guerra, V., and Misciagna, G. Dietary habits and colorectal cancer in a low-risk area. Results from a population-based case-control study in southern Italy. Nutr Cancer 1994;21:233-246. View abstract.  
 Freudenheim, J. L., Graham, S., Marshall, J. R., Haughey, B. P., and Wilkinson, G. A case-control study of diet and rectal cancer in western New York. Am J Epidemiol. 1990;131:612-624. View abstract.  
 Bidoli, E., Franceschi, S., Talamini, R., Barra, S., and La, Vecchia C. Food consumption and cancer of the colon and rectum in north-eastern Italy. Int J Cancer 1-21-1992;50:223-229. View abstract.  
 Hsing, A. W., Comstock, G. W., Abbey, H., and Polk, B. F. Serologic precursors of cancer. Retinol, carotenoids, and tocopherol and risk of prostate cancer. J Natl.Cancer Inst. 6-6-1990;82:941-946. View abstract.  
 Eliassen, A. H., Hendrickson, S. J., Brinton, L. A., Buring, J. E., Campos, H., Dai, Q., Dorgan, J. F., Franke, A. A., Gao, Y. T., Goodman, M. T., Hallmans, G., Helzlsouer, K. J., Hoffman-Bolton, J., Hulten, K., Sesso, H. D., Sowell, A. L., Tamimi, R. M., Toniolo, P., Wilkens, L. R., Winkvist, A., Zeleniuch-Jacquotte, A., Zheng, W., and Hankinson, S. E. Circulating carotenoids and risk of breast cancer: pooled analysis of eight prospective studies. J Natl.Cancer Inst. 12-19-2012;104:1905-1916. View abstract.  
 Aune, D., Chan, D. S., Vieira, A. R., Navarro Rosenblatt, D. A., Vieira, R., Greenwood, D. C., and Norat, T. Dietary compared with blood concentrations of carotenoids and breast cancer risk: a systematic review and meta-analysis of prospective studies. Am J Clin Nutr 2012;96:356-373. View abstract.  
 Gallicchio, L., Boyd, K., Matanoski, G., Tao, X. G., Chen, L., Lam, T. K., Shiels, M., Hammond, E., Robinson, K. A., Caulfield, L. E., Herman, J. G., Guallar, E., and Alberg, A. J. Carotenoids and the risk of developing lung cancer: a systematic review. Am.J.Clin.Nutr. 2008;88:372-383. View abstract.  
 Chong, E. W., Wong, T. Y., Kreis, A. J., Simpson, J. A., and Guymer, R. H. Dietary antioxidants and primary prevention of age related macular degeneration: systematic review and meta-analysis. BMJ 10-13-2007;335:755. View abstract.  
 Mannisto, S., Yaun, S. S., Hunter, D. J., Spiegelman, D., Adami, H. O., Albanes, D., van den Brandt, P. A., Buring, J. E., Cerhan, J. R., Colditz, G. A., Freudenheim, J. L., Fuchs, C. S., Giovannucci, E., Goldbohm, R. A., Harnack, L., Leitzmann, M., McCullough, M. L., Miller, A. B., Rohan, T. E., Schatzkin, A., Virtamo, J., Willett, W. C., Wolk, A., Zhang, S. M., and Smith-Warner, S. A. Dietary carotenoids and risk of colorectal cancer in a pooled analysis of 11 cohort studies. Am J Epidemiol. 2-1-2007;165:246-255. View abstract.  
Briviba, K., Schnabele, K., Rechkemmer, G., and Bub, A. Supplementation of a diet low in carotenoids with tomato or carrot juice does not affect lipid peroxidation in plasma and feces of healthy men. J Nutr 2004;134:1081-1083. View abstract.  
 Heinrich, U., Gartner, C., Wiebusch, M., Eichler, O., Sies, H., Tronnier, H., and Stahl, W. Supplementation with beta-carotene or a similar amount of mixed carotenoids protects humans from UV-induced erythema. J Nutr 2003;133:98-101. View abstract.  
 Greul, A. K., Grundmann, J. U., Heinrich, F., Pfitzner, I., Bernhardt, J., Ambach, A., Biesalski, H. K., and Gollnick, H. Photoprotection of UV-irradiated human skin: an antioxidative combination of vitamins E and C, carotenoids, selenium and proanthocyanidins. Skin Pharmacol Appl.Skin Physiol 2002;15:307-315. View abstract.  
 Burri, B. J., Neidlinger, T. R., and Clifford, A. J. Serum carotenoid depletion follows first-order kinetics in healthy adult women fed naturally low carotenoid diets. J Nutr 2001;131:2096-2100. View abstract.  
 Hininger, I. A., Meyer-Wenger, A., Moser, U., Wright, A., Southon, S., Thurnham, D., Chopra, M., van den, Berg H., Olmedilla, B., Favier, A. E., and Roussel, A. M. No significant effects of lutein, lycopene or beta-carotene supplementation on biological markers of oxidative stress and LDL oxidizability in healthy adult subjects. J Am Coll Nutr 2001;20:232-238. View abstract.  
 Tinkler, J. H., Bohm, F., Schalch, W., and Truscott, T. G. Dietary carotenoids protect human cells from damage. J Photochem.Photobiol.B 1994;26:283-285. View abstract.  
Koonsvitsky BP, Berry DA, Jones MB, et al. Olestra affects serum concentrations of alpha-tocopherol and carotenoids but not vitamin D or vitamin K status in free-living subjects. J Nutr 1997;127(8 Suppl):1636S-45S. View abstract.  
Ribaya-Mercado JD, Ordovas JM, Russell RM. Effect of beta-carotene supplementation on the concentrations and distribution of carotenoids, vitamin E, vitamin A, and cholesterol in plasma lipoprotein and non-lipoprotein fractions in healthy older women. J Am Coll Nutr 1995;14:614-20. View abstract.  
Nierenberg DW, Dain BJ, Mott LA, et al. Effects of 4 y of oral supplementation with beta-carotene on serum concentrations of retinol, tocopherol, and five carotenoids. Am J Clin Nutr 1997;66:315-9. View abstract.  
Micozzi MS, Brown ED, Edwards BK, et al. Plasma carotenoid response to chronic intake of selected foods and beta- carotene supplements in men. Am J Clin Nutr 1992;55:1120-5. View abstract.  
Wahlqvist ML, Wattanapenpaiboon N, Macrae FA, et al. Changes in serum carotenoids in subjects with colorectal adenomas after 24 mo of beta-carotene supplementation. Australian Polyp Prevention Project Investigators. Am J Clin Nutr 1994;60:936-43. View abstract.  
Aust O, Stahl W, Sies H, et al. Supplementation with tomato-based products increases lycopene, phytofluene, and phytoene levels in human serum and protects against UV-light-induced erythema. Int J Vitam Nutr Res 2005;75:54-60. View abstract.  
Belcaro G, Cesarone MR, Cornelli U, et al. MF Afragil(R) in the treatment of 34 menopause symptoms: a pilot study. Panminerva Med 2010;52:49-54. View abstract.  
Sesso HD, Buring JE, Zhang SM, et al. Dietary and plasma lycopene and the risk of breast cancer. Cancer Epidemiol Biomarkers Prev 2005;14:1074-81. View abstract.  
Nkondjock A, Ghadirian P, Johnson KC, Krewski D. Dietary intake of lycopene is associated with reduced pancreatic cancer risk. Canadian Cancer Registries Epidemiology Research Group. J Nutr 2005;135:592-97. View abstract.  
Sesso HD, Buring JE, Norkus EP, Gaziano JM. Plasma lycopene, other carotenoids, and retinol and the risk of cardiovascular disease in women. Am J Clin Nutr 2004;79:47-53. View abstract.  
Singh M, Krishanappa R, Bagewadi A, Keluskar V. Efficacy of oral lycopene in the treatment of oral leukoplakia. Oral Oncol 2004;40:591-6. View abstract.  
Wang L, Liu S, Manson JE, et al. The consumption of lycopene and tomato-based food products is not associated with the risk of type 2 diabetes in women. J Nutr 2006;136:620-5. View abstract.  
Engelhard YN, Gazer B, Paran E. Natural antioxidants from tomato extract reduce blood pressure in patients with grade-1 hypertension: a double-blind, placebo-controlled pilot study. Am Heart J 2006;151:100. View abstract.  
Mohanty NK, Saxena S, Singh UP, et al. Lycopene as a chemopreventive agent in the treatment of high-grade prostate intraepithelial neoplasia. Urol Oncol 2005;23:383-5. View abstract.  
Kirsh VA, Mayne ST, Peters U, et al. A prospective study of lycopene and tomato product intake and risk of prostate cancer. Cancer Epidemiol Biomarkers Prev 2006;15:92-8. View abstract.  
Olmedilla B, Granado F, Southon S, et al. A European multicentre, placebo-controlled supplementation study with alpha-tocopherol, carotene-rich palm oil, lutein or lycopene: analysis of serum responses. Clin Sci (Lond) 2002;102:447-56. View abstract.  
Cho E, Seddon JM, Rosner B, et al. Prospective study of intake of fruits, vegetables, vitamins, and carotenoids and risk of age-related maculopathy. Arch Ophthalmol 2004;122:883-92. View abstract.  
Montonen J, Knekt P, Jarvinen R, Reunanen A. Dietary antioxidant intake and risk of type 2 diabetes. Diabetes Care 2004;27:362-6. View abstract.  
Forbes K, Gillette K, Sehgal I. Lycopene increases urokinase receptor and fails to inhibit growth or connexin expression in a metastatically passaged prostate cancer cell line: a brief communication. Exp Biol Med (Maywood) 2003;228:967-71. View abstract.  
Etminan M, Takkouche B, Caamano-Isorna F. The role of tomato products and lycopene in the prevention of prostate cancer: a meta-analysis of observational studies. Cancer Epidemiol Biomarkers Prev 2004;13:340-5. . View abstract.  
Sedjo RL, Papenfuss MR, Craft NE, Guiliano AR. Effect of plasma micronutrients on clearance of oncogenic human papillomavirus (HPV) infection (United States). Cancer Causes Control 2003;14:319-26. View abstract.  
Boileau TW, Liao Z, Kim S, et al. Prostate carcinogenesis in N-methyl-N-nitrosourea (NMU)-testosterone-treated rats fed tomato powder, lycopene, or energy-restricted diets. J Natl Cancer Inst 2003;95:1578-86.. View abstract.  
Gann PH, Khachik F. Tomatoes or lycopene versus prostate cancer: is evolution anti-reductionist? J Natl Cancer Inst 2003;95:1563-5.   
Obermuller-Jevic UC, Olano-Martin E, Corbacho AM, et al. Lycopene inhibits the growth of normal human prostate epithelial cells in vitro. J Nutr 2003;133:3356-60. View abstract.  
Eye Disease Case-Control Study Group. Antioxidant status and neovascular age-related macular degeneration. Arch Ophthalmol 1993;111:104-9.. View abstract.  
Freudenheim JL, Marshall JR, Vena JE, et al. Premenopausal breast cancer risk and intake of vegetables, fruits, and related nutrients. J Natl Cancer Inst 1996;88:340-8.. View abstract.  
Sesso HD, Liu S, Gaziano JM, Buring JE. Dietary lycopene, tomato-based food products and cardiovascular disease in women. J Nutr 2003;133:2336-41.. View abstract.  
Yeum KJ, Ahn SH, Rupp de Paiva SA, et al. Correlation between carotenoid concentrations in serum and normal breast adipose tissue of women with benign breast tumor or breast cancer. J Nutr 1998;128:1920-6.. View abstract.  
Cramer DW, Kuper H, Harlow BL, Titus-Ernstoff L. Carotenoids, antioxidants and ovarian cancer risk in pre- and postmenopausal women. Int J Cancer 94:128-34.. View abstract.  
Kim MK, Ahn SH, Lee-Kim. Relationship of serum alpha-tocopherol, carotenoids and retinol with the risk of breast cancer. Nutr Res 2001;21:797-809.  
Hak AE, Stampfer MJ, Campos H, et al. Plasma carotenoids and tocopherols and risk of myocardial infarction in a low-risk population of US male physicians. Circulation 2003;108:802-7.. View abstract.  
Neuman I, Nahum H, Ben-Amotz A. Reduction of exercise-induced asthma oxidative stress by lycopene, a natural antioxidant. Allergy 2000;55:1184-9. View abstract.  
Kohlmeier L, Kark JD, Gomez-Gracia E, et al. Lycopene and myocardial infarction risk in the EURAMIC Study. Am J Epidemiol 1997;146:618-26. View abstract.  
Arab L, Steck S. Lycopene and cardiovascular disease. Am J Clin Nutr 2000;71:1691S-5S. View abstract.  
Norrish AE, Jackson RT, Sharpe SJ, Skeaff CM. Prostate cancer and dietary carotenoids. Am J Epidemiol 2000;151:119-23. View abstract.  
Matlaga BR, Hall MC, Stindt D, Torti FM. Response of hormone refractory prostate cancer to lycopene. J Urol 2001;166:613. View abstract.  
Lu QY, Hung JC, Heber D, et al. Inverse associations between plasma lycopene and other carotenoids and prostate cancer. Cancer Epidemiol Biomarkers Prev 2001;10:749-56. View abstract.  
Giovannucci E, Rimm EB, Liu Y, et al. A prospective study of tomato products, lycopene, and prostate cancer risk. J Natl Cancer Inst 2002;94:391-8. View abstract.  
Kucuk O, Sarkar FH, Sakr W, et al. Phase II randomized clinical trial of lycopene supplementation before radical prostatectomy. Cancer Epidemiol Biomarkers Prev 2001;10:861-8. View abstract.  
Watzl B, Bub A, Blockhaus M, et al. Prolonged tomato juice consumption has no effect on cell-mediated immunity of well-nourished elderly men and women. J Nutr 2000;130:1719-23. View abstract.  
Mares-Perlman JA, Brady WE, Klein R, et al. Serum antioxidants and age-related macular degeneration in a population-based case-control study. Arch Ophthalmol 1995;113:518-23. View abstract.  
Seddon JM, Ajani UA, Sperduto R, et al. Dietary carotenoids, vitamins A, C, and E, and advanced age-related macular degeneration. JAMA 1994;272:1413-20. View abstract.  
Key TJ, Silcocks PB, Davey GK, et al. A case-control study of diet and prostate cancer. Br J Cancer 1997;76:678-87. View abstract.  
Slattery ML, Benson J, Curtin K, et al. Carotenoids and colon cancer. Am J Clin Nutr 2000;71:575-82. View abstract.  
Chasan-Taber L, Willett WC, Seddon JM, et al. A prospective study of carotenoid and vitamin A intakes and risk of cataract extraction in US women. Am J Clin Nutr 1999;70:509-16. View abstract.  
Brown L, Rimm EB, Seddon JM, et al. A prospective study of carotenoid intake and risk of cataract extraction in US men. Am J Clin Nutr 1999;70:517-24. View abstract.  
Michaud DS, Feskanich D, Rimm EB, et al. Intake of specific carotenoids and risk of lung cancer in 2 prospective US cohorts. Am J Clin Nutr 2000;72:990-7. View abstract.  
Giovannucci E. Tomatoes, tomato-based products, lycopene, and cancer: review of the epidemiologic literature. J Natl Cancer Inst 1999;91:317-31. View abstract.  
Giovannucci E, Ascherio A, Rimm EB, et al. Intake of carotenoids and retinol in relation to risk of prostate cancer. J Natl Cancer Inst 1995;87:1767-76. View abstract.  
Tzonou A, Signorello LB, Lagiou P, et al. Diet and cancer of the prostate: a case-control study in Greece. Int J Cancer 1999;80:704-8. View abstract.  
Johnson EJ, Qin J, Krinsky NI, Russell RM. Ingestion by men of a combined dose of beta-carotene and lycopene does not affect the absorption of beta-carotene but improves that of lycopene. J Nutr 1997;127:1833-7. View abstract.  
Rao AV, Agarwal S. Bioavailability and in vivo antioxidant properties of lycopene from tomato products and their possible role in the prevention of cancer. Nutr Cancer 1998;31:199-203. View abstract.  
Rao AV, Agarwal S. Role of antioxidant lycopene in cancer and heart disease. J Am Coll Nutr 2000;19:563-9. View abstract.  
USDA. NCC Carotenoid Database for U.S. Foods. 1998. Available at: http://www.nal.usda.gov/fnic/foodcomp/Data/car98/car98.html.  
Paetau I, Khachik F, Brown ED, et al. Chronic ingestion of lycopene-rich tomato juice or lycopene supplements significantly increases plasma concentrations of lycopene and related tomato carotenoids in humans. Am J Clin Nutr 1998;68:1187-95. View abstract.  
Gartner C, Stahl W, Sies H. Lycopene is more bioavailable from tomato paste than from fresh tomatoes. Am J Clin Nutr 1997;66:116-22. View abstract.  
Clinton SK, Emenhiser C, Schwartz SJ, et al. Cis-trans lycopene isomers, carotenoids, and retinol in the human prostate. Cancer Epidemiol Biomarkers Prev 1996;5:823-33. View abstract.  
Ascherio A, Rimm EB, Hernan MA, et al. Relation of consumption of vitamin E, vitamin C, and carotenoids to risk for stroke among men in the United States. Ann Intern Med 1999;130:963-70. View abstract.  
Gann PH, Ma J, Giovannucci E, et al. Lower prostate cancer risk in men with elevated plasma lycopene levels: results of a prospective analysis. Cancer Res 1999;59:1225-30. View abstract.  
Klipstein-Grobusch K, Launer LJ, Geleijnse JM, et al. Serum carotenoids and atherosclerosis. The Rotterdam Study. Atherosclerosis 2000;148:49-56. View abstract.  
Zhang S, Hunter DJ, Forman MR, et al. Dietary carotenoids and vitamins A, C, and E and risk of breast cancer. J Natl Cancer Inst 1999;91:547-56. View abstract.  
Newall CA, Anderson LA, Philpson JD. Herbal Medicine: A Guide for Healthcare Professionals. London, UK: The Pharmaceutical Press, 1996.  
Tyler VE. Herbs of Choice. Binghamton, NY: Pharmaceutical Products Press, 1994.  
Blumenthal M, ed. The Complete German Commission E Monographs: Therapeutic Guide to Herbal Medicines. Trans. S. Klein. Boston, MA: American Botanical Council, 1998.  
Monographs on the medicinal uses of plant drugs. Exeter, UK: European Scientific Co-op Phytother, 1997.