

## REFERENCES

- Abraham, S.K., and Graf, U. (1996). Protection by coffee against somatic genotoxicity in *Drosophila*: Role of bioactivation capacity. *Food Chem. Toxicol.*, 34(1), 1-14.
- Abraham, S.K., Singh, S.P., and Kesavan, P.C. (1998). *In vivo* antigenotoxicity effects of dietary agents and beverages co-administered with urethane: assessment of the role of glutathione *S*-transferase activity. *Mutat. Res.*, 413(2), 103-110.
- Abraham, S.K. (1994). Antigenotoxicity of coffee in the *Drosophila* assay for somatic mutation and recombination. *Mutagenesis*, 9, 383-6.
- Akanitapichat, P., Phraibung, K., Nuchklang, K., and Prompitakkul, S. (2010). Antioxidant and hepatoprotective activities of five eggplant varieties. *Food Chem. Toxicol.*, 48, 3017-21.
- Amarowicz, R., Pegg, R.B., Rahimi, M.P., Barl, B., and Weil, J.A. (2004). Free radical scavenging capacity and antioxidant activity of selected plant species from the Canadian prairies. *Food Chem.*, 84, 551-62.
- American Cancer Society. (1984). Nutrition and cancer: caution and prevention. An American Cancer Society Special Report. *CA: Cancer J. Clin.*, 34, 5-10.
- American Diabetes Association, (ADA). <<http://vgs.diabetes.org/recipe/viewRecipeDisplay.jsp?SizedRecipeId=758&CategoryID=11>> (accessed December, 2011).
- Anter, J., Campos-Sánchez, J., Hamss, R.E., Rojas-Molina, M., Munoz-Serrano, A., Analla, M., et al. (2010). Modulation of genotoxicity by extra-virgin olive oil and some of its distinctive components assessed by use of the *Drosophila* wing-spot test. *Mutat. Res.*, 703, 137-42.
- Arun, R., Prakash, M. V., Abraham, S. K., and Premkumar, K. (2011). Role of *Syzygium cumini* seed extract in the chemoprevention of *in vivo* genomic damage and oxidative stress. *J. Ethnopharmacol.*, 134, 329-33.

- Aunanan, A., and Kangsadalampai, K. (2008). Effect of Preparation and Temperature Treatments on Antimutagenicity against Urethane in *Drosophila melanogaster* and Antioxidant Activity of Three *Allium* Members. *Thai J. Toxicol.*, 23(2), 108-16.
- Awad, A.B., Williams, H., and Fink, C.S. (2001a). Phytosterols reduce in vitro metastatic ability of MDA-MB-231 human breast cancer cells. *Nutr. Cancer*, 11, 191-221.
- Awad, A.B., Fink, C.S., Williams, H., and Kim, U. (2001b). *In vitro* and *in vivo* (SCID mice) effects of phytosterols on the growth and dissemination of human prostate cancer PC-3 cells. *Eur. J. Cancer Prev.*, 10, 507-13.
- Azevedo, L., Alves de Lima, P.L., Gomes, J.C., Stringheta, P.C., Ribeiro, D.A., and Salvadori, D.M.F. (2007). Differential response related to genotoxicity between eggplant (*Solanum melanogena*) skin aqueous extract and its main purified anthocyanin (delphinidin) *in vivo*. *Food Chem. Toxicol.*, 45, 852-8.
- Becker, H.J. (1976). Mitotic recombination. In: Ashburner, M., Novitski, E., editor. *The genetics and biology of Drosophila* (Vol. 1), pp. 1019-2087. 1<sup>st</sup> ed. London: Academic Press.
- Benzie, I.F.F., and Strain, J.J. (1996). The ferric reducing ability of plasma (FRAP) as a measure of "antioxidant power": the FRAP assay. *Anal. Biochem.*, 239, 70-6.
- Benzie, I.F.F., Wai, Y., and Strain, J.J. (1999). Antioxidant (reducing) efficiency of ascorbate in plasma is not affected by concentration. *J. Nutr. Biochem.*, 10, 146-50.
- Berenblum, I. (1982). Sequential aspects of chemical carcinogenesis: skin. In: Becker, F., editor. *Cancer*, pp. 415-84. New York: Plenum Press.
- Blessington, T. (2005). The effects of cooking, storage, and ionizing irradiation on carotenoids, antioxidant activity, and phenolics in Potato (*Solanum tuberosum* L.). (M.S. Thesis in Science). Texas: A&M University
- Block, G., Patterson, B., and Subar, A. (1992). Fruit, vegetables, and cancer prevention: A review of the epidemiological evidence. *Nutr. Cancer*, 18, 1-29.

- Brown, C.R., Wrolstad, R., Clevidence, B., and Edwards, C.G. (2000). Potato as a functional food. 17-23. In: Fresh perspectives: proceedings of the Pacific Northwest vegetable association annual convention and trade show. November 13-14. Pasco, Washington.
- Burg, P., and Fraile, P. (1995). Vitamin C destruction during the cooking of a potato dish. *Lebensm.-Wiss. U.-Technol.*, 28(5), 506-14.
- Cai, Y., Luo, Q., Sun, M., and Corke, H. (2004). Antioxidant activity and phenolic compounds of 112 traditional Chinese medicinal plants associated with anticancer. *Life Sci.*, 74, 2157-84.
- Canas, B.J., Havery, D.C., Robinson, L.R., Sullivan, M.P., Joe Jr, F.L., and Diachenko, G.W. (1989). Ethyl carbamate levels in selected fermented foods and beverages. *J. A.O.A.C.*, 72, 873-6.
- Cederberg, H., and Ramel, C. (1989). Modification of effect bleomycin in the somatic mutation and recombination test in *Drosophila melanogaster*. *Mutat. Res.*, 214, 69-80.
- Chen, R.Y., Wu, J.J., Tsai, M.J., and Liu, M.S. (2000). Effects of storage and thermal treatment on antioxidant activity of tomato fruits. *Taiwan. J. Agric. Chem. Food Sci.*, 38, 353-60.
- Chuah, A.M., Lee, Y.C., Yamaguchi, T., Takamura, H., Yin, L.J., and Matoba, T. (2008). Effect of cooking on the antioxidant properties of coloured peppers. *Food Chem.*, 111, 20-8.
- Cui, X., Dai, X.G., Li, W.B., Zhang, B.L., and Fang, Y.Z. (1999). Effects of Lu Duo Wei capsule on prolonging life span of housefly and *Drosophila melanogaster*. *Am. J. Chin. Med.*, 27, 407-13.
- Dahl, G.A., Miller, J.A., and Miller, E.C. (1978). Vinyl carbamate as a promutagen and a more carcinogenic analog of ethyl carbamate. *Cancer Res.*, 38, 3793-804.
- Debnath, S., Bhat, K.K., and Rastogi, N.K. (2003). Effect of pre-drying on kinetics of moisture loss and oil uptake during deep fat frying of chickpea flour-based snack food. *Lebensm.-Wiss. U.-Technol.*, 36, 91-8.

- Dewanto, V., Wu, X., Adom, K. K., and Liu, R. H. (2002a). Thermal processing enhances the nutritional value of tomatoes by increasing total antioxidant activity. *J. Agric. Food Chem.*, 50(10), 3010-4.
- Dewanto, V., Wu, X., and Liu, R. H. (2002b). Processed sweet corn has higher antioxidant activity. *J. Agric. Food Chem.*, 50(17), 4959-64.
- Doijode, S. D. (2001). Seed storage of horticultural crops. pp 157. Haworth Press.
- Edenharder, R., Leopold, C., and Kries, M. (1995). Modifying action of solvent extracts from fruit and vegetable residue on 2-amino-3-methylimidazo[4,5-f]quinoline (IQ) and 2-amino-3,4-dimethylimidazo[4,5-f]quinoxaline (MeIQx) induced mutagenesis in *Salmonella typhimurium* TA98. *Mutat. Res.*, 341(4), 303-18.
- Field, K.J., and Lang, C.M. (1988). Hazards of urethane (ethyl carbamate): a review of the literature. *Lab Anim.*, 22(3), 255-62.
- Frei, H., and Würgler, F.E. (1988). Statistical methods to decide whether mutagenicity test data from *Drosophila* assay indicate a positive, negative, or inconclusive result. *Mutat. Res.*, 203, 297-308.
- Frölich, A., and Würgler, F.E. (1988). Validation of an efficient *in vivo* genotoxicity test with somatic cells of *Drosophila*. *Mutat. Res.*, 203, 211-7.
- Frölich, A., and Würgler, F.E. (1990a). *Drosophila* wing-spot test: improved detectability of genotoxicity of polycyclic aromatic hydrocarbons. *Mutat. Res.*, 234(2), 71-80.
- Frölich, A., and Würgler, F.E. (1990b). Genotoxicity of ethyl carbamate in the *Drosophila* wing spot test: dependence on genotype-controlled metabolic capacity. *Mutat. Res.*, 244(3), 201-8.
- Fukumoto, L.R., and Mazza, G. (2000). Assessment antioxidant and pro-oxidant activity of phenolic compounds. *J. Agric. Food Chem.*, 48, 3597-604.
- Gahler, S., Otto, K., and Böhm, V. (2003). Alterations of vitamin C, total phenolics, and antioxidant capacity as affected by processing tomatoes to different products. *J. Agric. Food Chem.*, 51(27), 7962-8.
- Gao, X.M., Xu, Z.M., and Li, Z.W. (2000). Traditional Chinese Medicines. People's Health Publishing House, Beijing.

- Gawlik-Dziki, U. (2008). Effect of hydrothermal treatment on the antioxidant properties of broccoli (*Brassica oleracea* var. botrytis italica) florets. *Food Chem.*, 109(2), 393-401.
- Graf, U., and Singer, D. (1989). Somatic mutation and recombination test in *Drosophila melanogaster* (wing spot test): effects of extracts of airborne particulate matters from fire-exposed and non fire-exposed building ventilation filters. *Chemosphere*, 19, 1094-7.
- Graf, U., and van Schaik, N. (1992). Improved high bioactivation cross for the wing somatic mutation and recombination test in *Drosophila melanogaster*. *Mutat. Res.*, 271, 59-67.
- Graf, U., and Würgler, F.E. (1986). The present status of validation of the wing spot test in *Drosophila*. *Genetic Toxicol. Environ. Chem.*, pp. 391-98. Part B: Genetic Effects and Applied Mutagenesis. Alan R. Liss, Inc.
- Graf, U., Würgler, F.E., Katz, A.J., Frei, H., Juon, H., Hall, C.B., et al. (1984). Somatic mutation and recombination test in *Drosophila melanogaster*. *Environ. Mutagen.*, 6, 153-88.
- Graf, U., Frei, H., Kagi, A., Katz, A.J., and Würgler, F.E. (1989). Thirty compounds tested in the *Drosophila* wing spot test. *Mutat. Res.*, 222, 359-73.
- Griffin, S.P., and Bhagooli, R. (2004). Measuring antioxidant potential in corals using the FRAP assay. *J. Exp. Mar. Bio. Ecol.*, 302, 201-11.
- Gorinstein, S., Leontowicz, H., Leontowicz, M., Jastrzebski, Z., Najman, K., et al. (2010). The Influence of Raw and Processed Garlic and Onions on Plasma Classical and Non-classical Atherosclerosis Indices: Investigations *In Vitro* and *In Vivo*. *Phytother. Res.*, 24, 706-14.
- Guengerich, F.P., and Kim, D.H. (1991). Enzymatic oxidation of ethyl carbamate and its role as an intermediate in the formation of 1, *N*<sup>6</sup>-ethenoadenosine. *Chem. Res. Toxicol.*, 4(4), 413-21.
- Guengerich, F.P., Kim, D.H., and Iwasaki, M. (1991). Role of human cytochrome P-450 2E1 in the oxidation of many low molecular weight cancer suspects. *Chem. Res. Toxicol.*, 4, 168-79.

- Hager, A., Howard, L. R., Prior, R. L., and Brownmiller, C. (2008). Processing and Storage effects on monomeric anthocyanins, percent polymeric color, and antioxidant capacity of processed black raspberry products. *J. Food Sci.*, 73, 139-43.
- Halliwell, B., Aeschbach, R., Loliger, J., and Aruoma, O.I. (1995). The characterization of antioxidants. *Food Chem. Toxicol.*, 601-17.
- Hamss, R.El., Idaomar, M., Alonso-Moraga, A., and Munoz Serrano, A. (2003). Antimutagenic properties of bell and black peppers. *Food Chem. Toxicol.*, 41, 41-7.
- Harbourne, N., Jacquier, J. C., Morgan, D. J., and Lyng, J. G. (2008). Determination of the degradation kinetics of anthocyanins in a model juice system using isothermal and non-isothermal methods. *Food Chem.*, 111(1), 204-08.
- Ho, C.T., Osawa, T., Huang, M.T., and Rosen, R.T. (1994). Food Phytochemicals for Cancer Prevention II: Teas, Spices, and Herbs. American Chemical Society, Washington, DC.
- Hoffler, U., El-masri, H.A., and Ghnayem, B.I. (2003). Cytochrome P450 2E1 (cyp2E1) is the principal enzyme responsible for urethane metabolism: comparative studies using cyp 2E1-null and wild type mice. *J. Pharmacol. Exp. Ther.*, 305, 557-64.
- Holst, B., and Williamson, G. (2004). A critical review of the bioavailability of glucosinolates and related compounds. *Nat. Prod. Rep.*, 21, 425-47.
- Howard, L. A., Wong, A. D., Perry, A. K., and Klein, B. P. (1999). Beta-carotene and ascorbic acid retention in fresh and processed vegetables. *J. Food Sci.*, 64(5), 929-36.
- IARC (International agency for research on cancer). (1974). Vinyl chloride: *IARC monographs on the evaluation of the carcinogenic risks of chemicals to humans, some anti-thyroid and related substance, nitrofurans and industrial chemicals*. IARC Lyon 7, 291-305.
- Igwe, S.A., Akunyili, D.N., and Ogbogu, C., (2003). Effects of *Solanum melongena* (garden egg) on some visual functions of visually active Igbos of Nigeria. *J. Ethnopharmacol.*, 86, 135-8.

- Inoue, T., Morita, K., and Kada, T. (1981). Purification and properties of a plant desmutagenic factor for the mutagenic principle of tryptophan pyrolysate. *Agric. Biol. Chem.*, 45, 345-53.
- Ishii, R., Yoshikawa, K., Minakata, H., Komura, H., and Kada, T. (1984). Specificities of bio-antimutagens in plant kingdom. *Agric. Biol. Chem.*, 48, 2587-91.
- Javanmardi, J., Stushnoff, C., Locke, E., and Vivanco, J.M. (2003). Antioxidant activity and total phenolic content of *Iranian Ocimum* accessions. *Food Chem.*, 83, 547-50.
- Jenkins, D.J., Kendall, C.W., Marchie, A., Faulkner, D.A., Wong, J.M., De Souza, R., et al. (2003). Effects of a dietary vs. lovastatin on serum lipid and C-reactive protein. *J.A.M.A.*, 290, 502-10.
- Kaneyuki, T., Noda, Y., Traber, M.G., Mori, A., and Packer, L. (1999). Superoxide anion and hydroxyl radical scavenging activities of vegetable extracts measured using electron spin resonance. *Biochem. Mol. Biol. Int.*, 47, 979-89.
- Kemper, R.A., Myers, S.R., and Hurst, H.E. (1995). Detoxification of Vinyl Carbamate Epoxide by Glutathione: Evidence for Participation of Glutathione S-transferases in Metabolism of Ethyl Carbamate. *Toxicol. Appl. Pharmacol.*, 135(1), 110-18.
- Khachik, F., Goli, M.B., Beecher, G.R., Holden, J., Lusby, W.R., Tenario, M.D., et al. (1992). Effect of food preparation on qualitative and quantitative distribution of major carotenoid constituents of tomatoes and several green vegetables. *J. Agric. Food Chem.*, 40, 390-8.
- Kidmose, U., Yang, R.Y., Thilsted, S.H., Christensen, L.P., and Brandt, K. (2006). Content of carotenoids in commonly consumed Asian vegetables and stability and extractability during frying. *J. Food. Compos. Anal.*, 19, 562-71.
- Kijja, S. (2002). Antimutagenicity of raw and cooked *Brassica oleracea* vegetables using somatic mutation and recombination test. (M.S. Thesis in Food and Nutritional Toxicology). Bangkok: Faculty of Graduate Studies, Mahidol University.

- Kruawan, K., and Kangsadalampai, K. (2006). Antioxidant activity, phenolic compound contents and antimutagenic activity of some water extract of herbs. *Thai J. Pharm. Sci.*, 30, 28-35.
- Kwon, Y.I., Apostolidis, E., and Shetty, K. (2008). *In vitro* studies of eggplant (*Solanum melongena*) phenolics as inhibitors of key enzymes relevant for type 2 diabetes and hypertension. *Bioresour. Technol.*, 99, 2981-8.
- Lee, K.R., Kozukue, N., Han, J.S., Park, J.H., Chang, E.Y., Baek, E.J., et al. (2004). Glycoalkaloids and Metabolites Inhibit the Growth of Human Colon (HT29) and Liver (HepG2) Cancer Cells. *J. Agric. Food Chem.*, 52, 2832-9.
- Leithauser, M.T., Liem, A., Stewart, B.C., Miller, E.C., and Miller, J.A. (1990). 1,  $N^6$ -ethenoadenosine formation, mutagenicity and murine tumor induction as indicators of the generation of an electrophilic epoxide metabolite of the closely related carcinogens ethyl carbamate (urethane) and vinyl carbamate. *Carcinogenesis*, 11(3), 463-73.
- Leong, S.Y., and Oey, I. (2012). Effects of processing on anthocyanins, carotenoids and vitamin C in summer fruits and vegetables. *Food Chem.*, 133, 1577-87.
- Li, Y.M., Chan, H.Y.E., Yao, X.Q., Huang, Y., and Chen, Z.Y. (2008). Green tea catechins and broccoli reduce fat-induced mortality in *Drosophila melanogaster*. *J. Nutr. Biochem.*, 19, 376-83.
- Lieber CS. (1988). Biochemical and molecular basis of alcohol-induced injury to liver and other tissues. *N. Engl. J. Med.*, 319, 1639-50.
- Lieber CS. (1990). Interaction of alcohol with other drugs and nutrients. Implication for the therapy of alcoholic liver disease. *Drug*, 40, 23-44.
- Limpichaisopon, K. (2002). Antimutagenicity of different unprocessed and processed bananas on urethane induced somatic mutation and recombination in *Drosophila melanogaster*. (M.S. Thesis in Food and Nutritional Toxicology). Bangkok: Faculty of Graduate Studies, Mahidol University.
- Lindsley, D.L., and Zimm, G.G., editor. (1992). The genome of *Drosophila melanogaster*. pp. 1133. San Diego (CA): Academic Press.



- Luthria, D.L., and Mukhopadhyay, S. (2006). Influence of sample preparation on assay of phenolic acids from Eggplant. *J. Agri. Food Chem.*, 54, 41-7.
- Manzocco, L., Anese, M., and Nicoli, M.C. (1998). Antioxidant properties of tea extracts as affected by processing. *Lebensm.-Wiss. U.-Technol.*, 31, 694-8.
- Matsubara, K., Kaneyuki, T., Miyake, T., and Mori, M. (2005). Antiangiogenic activity of nasunin, an antioxidant anthocyanin, in eggplant peels. *J. Agric. Food Chem.*, 53, 6272-5.
- MAYOCLINIC. <[www.mayoclinic.com/print/healthy-recipes/NU00445](http://www.mayoclinic.com/print/healthy-recipes/NU00445)> (accessed December, 2011).
- Miean, K.H., and Mohamed, S. (2001). Flavonoid (Myricetin, Quercetin, Kaempferol, Luteolin, and Apigenin) Content of Edible Tropical Plants. *J. Agric. Food Chem.*, 49, 3106-12.
- Miller, J.A., and Miller, E.C. (1983). The metabolic activation and nucleic acid adducts of naturally occurring carcinogens: recent results with ethyl carbamate and the spice flavors safrole and estragole. *Br. J. Cancer*, 48(1), 1-15.
- Miller, M.S., Brendel, K., Burks T.F., and I.G. S. (1983). Interaction of capsinoids with drug metabolizing systems. *Biochem. Pharmacol.*, 32, 547-51.
- Minussi, R.C., Rossi, M., Bologna, L., Cordi, L., Rotilio, D., Pastore, G.M., et al. (2003). Phenolic compounds and total antioxidant potential of commercial wines. *Food Chem.*, 82, 409-16.
- Mirvish, S.S. (1968). The carcinogenic action and metabolism of urethane and *N*-hydroxyurethane. *Adv. Cancer Res.*, 11, 1-42.
- Morita, H., Hara, M., and Kada, T. (1978). Studies on natural desmutagens; Screening for vegetable and fruit factors active in inactivation of mutagenic pyrolysis products from amino acid. *Agric. Biol. Chem.*, 42, 1235-8.
- Murcia, M.A., Lopez-Ayerra, B., Martinez-Tome, M., Vera, A.M., and Garcia-Carmona, F. (2000). Evolution of ascorbic acid and peroxidase during industrial processing of broccoli. *J. Sci. Food Agri.*, 80(13), 1882-6.
- Naczki, M., and Shahidi, F. (1989). The effect of methanol-ammonia-water treatment on the content of phenolic acids of canola. *Food Chem.*, 31, 159-64.

- Negishi, T., Arimoto, S., Nishizaki, C., and Hayatsu, H. (1989). Inhibitory effect of chlorophyll on the genotoxicity of 3-amino-1-methyl-5H-pyrido[4,3-b]indole (Trp-P-2). *Carcinogenesis*, 10, 145-9.
- Nicoli, M.C., Anese, M., and Parpinel, M. (1999). Influence of processing on the antioxidant properties of fruit and vegetables. *Trends Food Sci. Technol.*, 10, 94-100.
- NIH (National Institute of Health), National Diabetes Education Program on NIH. [http://ndep.nih.gov/media/eat\\_fruits\\_and\\_veggies\\_508.pdf](http://ndep.nih.gov/media/eat_fruits_and_veggies_508.pdf) (accessed December, 2011).
- Nisha, P., Abdul Nazar, P., and Jayamurthy, P. (2009). A comparative study on antioxidant activities of different varieties of *Solanum melongena*. *Food Chem. Toxicol.*, 47, 2640-4.
- Noda, Y., Kaneyuki, T., Igarashi, K., Mori, A., and Packer, L. (2000). Antioxidant activity of nasunin, an anthocyanin in eggplant peels. *Toxicology*, 148, 119-23.
- Nomura, T., and Kurokawa, N. (1997). Comparative study on germ cell mutation induced by urethane (ethyl carbamate) gas and X-rays in *Drosophila melanogaster*. *Cancer Res.*, 88, 461-7.
- Ough, C.S. (1976). Ethyl carbamate in fermented beverages and foods: I. Naturally occurring ethyl carbamate. *J. Agric. Food Chem.*, 24, 323-8.
- Owen, R.W., Giacosa, A., Hull, W.E., Haubner, R., Spiegelhalder, B., and Bartsch, H. (2000). The antioxidant/anticancer potential of phenolic compounds isolated from olive oil. *Eur. J. Cancer*, 36 (10), 1235-47.
- Park, K.K., Liem, A., Stewart, B.C., and Miller, J.A. (1993). Vinyl carbamate epoxide, a major strong electrophilic, mutagenic and carcinogenic metabolite of vinyl carbamate and ethyl carbamate (urethane). *Carcinogenesis*, 14, 441-50.
- Pietta, P., Simonetti, P., and Mauri, P. (1988). Antioxidant activity of selected medicinal plants. *J. Agric. Food Chem.*, 46, 4487-90.
- Rao, M.A., Lee, C.Y., Katz, J., and Cooley, H.J. (1981). A kinetic study of the loss of vitamin C, color, and firmness during thermal processing of canned peas. *J. Food Sci.*, 46, 636-7.

- Re, R., Bramley, P.M., and Rice-Evans, C. (2002). Effects of food processing on flavonoids and lycopene status in a mediterranean tomato variety. *Free Radic Res.*, 36 (7), 803-10.
- Roberts, D.B. (1986). Basic *Drosophila* care and technique, in: Roberts, D.B. (Eds.), *Drosophila; A practical approach*. IRL Press, Oxford, pp. 1-38.
- Rock, C.L., Loalvo, J.L., Emenhiser, C., Ruffin, M.T., Flatt, S.W., and Schwartz, S.J. (1998). Bioavailability of beta-carotene is lower in raw than in processed carrots and spinach in women. *J. Nutr.*, 128, 913-16.
- Roginsky, V., and Lissi, E.A. (2005). Review of methods to determine chain-breaking antioxidant activity in food. *Food Chem.*, 92, 235-54.
- Romert, L., Magnusson, J., and Ramel, C. (1990). The importance of glutathione and glutathione transferase for somatic mutations in *Drosophila melanogaster* induced *in vivo* by 1,2-dichloroethane. *Carcinogenesis*, 11(8), 1399-402.
- Roy, M.K., Juneja, L.R., Isobe, S., and Tsushida, T. (2009). Steam processed broccoli (*Brassica oleracea*) has higher antioxidant activity in chemical and cellular assay systems. *Food Chem.*, 114, 263-9.
- Roy, M.K., Takenaka, M., Isobe, S., and Tsushida, T. (2007). Antioxidant potential, anti-proliferative activities, and phenolic content in water-soluble fractions of some commonly consumed vegetables: Effects of thermal treatment. *Food Chem.*, 103, 106-14.
- Sadilova, E., Stintzing, F.C., and Carle, R., (2006). Anthocyanins, colour and antioxidant properties of eggplant (*Solanum melongena* L.) and violet pepper (*Capsicum annuum* L.) peel extracts. *Z. Naturforsch.*, 61, 527-35.
- Sahlin, E., Savage, G.P., and Lister, C.E. (2004). Investigation of the antioxidant properties of tomatoes after processing. *J. Food Comp. Anal.*, 17, 635-47.
- Samaru, Y. (1989) Anticarcinogenic effects of green or yellow vegetables. *Jpn. Food Sci.*, 3, 76-81.
- Santana-Rios, G., Orner G.A., Amantana, A., Provost, C., Wu, S.Y., and Dashwood, R.H. (2001). Potent antimutagenic activity of white tea in comparison with green tea in the *Salmonella* assay. *Mutat. Res.*, 495(1-2), 61-74.

- Sarikaya, R., and Cakir, S. (2005). Genotoxicity testing of four food preservatives and their combinations in the *Drosophila* wing spot test. *Environ. Toxicol. Pharmacol.*, 40, 424-30.
- Sarker, R.H., Yesmin, S., and Hoque, M.I. (2006). Multiple shoot formation in eggplant (*Solanum melongena* L.). *Plant Tissue Cult. Biotech.*, 16, 53-61.
- Scalzo, R.L., Fibiani, M., Mennella, G., Rotino, G.L., Sasso, M.D., Culici, M., Spallino, A., and Braga, P.C. (2010). Thermal treatment of eggplant (*Solanum melongena* L.) increases the antioxidant content and the inhibitory effect on human neutrophil burst. *J. Agric. Food Chem.*, 58, 3371-9.
- Schlatter, J., and Luitz, W.K. (1990). The carcinogenic potential of ethyl carbamate (urethane): risk assessment at human dietary exposure levels. *Food Chem. Toxicol.*, 28, 205-211.
- Shale, T.L., Stirk, W.A., and van Staden, J. (1999). Screening of medicinal plants used in Lesotho for anti-bacterial and anti-inflammatory activity. *J. Ethnopharmacol.*, 67, 347-54.
- Shih, P.H., Yeh, C.T., and Yen, G.C. (2007). Anthocyanins induce the activation of phase II enzymes through the antioxidant response element pathway against oxidative stress induced apoptosis. *J. Agric. Food Chem.*, 55, 9427-35.
- Shih, P.H., Yeh, C.T., and Yen, G.C. (2005). Effects of anthocyanidin on the inhibition of proliferation and induction of apoptosis in human gastric adenocarcinoma cells. *Food Chem. Toxicol.*, 55, 1557-66.
- Shinohara, K. (1992) Mechanism of cancer prevention of vegetables. *Noukyuen*, 67, 210-6.
- Singleton, V.L., and Rossi, J.A., (1965). Colorimetry of total phenolic with phosphomolybdate–phosphotungstic acid reagent. *Am. J. Enol. Vitic.*, 16, 144-58.

- Song, L., and Thornalley, P.J. (2007). Effect of storage, processing and cooking on glucosinolate content of *Brassica* vegetables. *Food Chem. Toxicol.*, 45, 216-24.
- Stavric, B. (1994). Antimutagens and anticarcinogens in food. *Food Chem. Toxicol.*, 32(1), 79-90.
- Steinmetz, K.A., and Plotter, J.D. (1991). Vegetables, fruit and cancer. I. *Epidemiol. Cancer Causes Control*, 2, 325-57.
- Stommel, J. R., and Whitaker, B. D. (2003). Phenolic acid content and composition of eggplant fruit in a germplasm core subset. *J. Am. Soc. Hort. Sci.*, 128, 704-10.
- Stookey, L.L. (1970). Ferrozine- a new spectrophotometric reagent for iron. *Anal. Chem.*, 42, 779-83.
- Sudheesh, S., Sandhya, C., Asha, S.K., and Vijayalakshmi, N.R., (1999). Antioxidant activity of flavonoids from *Solanum melongena*. *Phytother. Res.*, 13, 393-6.
- Swain, T., and Hillis, W.E. (1959). The phenolic constituents of *Prunus domestica*. I- the quantitative analysis of phenolic constituents. *J. Sci. Food Agric.*, 10, 63-8.
- Szabad, J., Soos, I., Polgar, G., and Hejja, G. (1983). Testing the mutagenicity of malondialdehyde and formaldehyde by the *Drosophila* mosaic and the sex-linked recessive lethal tests. *Mutat. Res.*, 113, 117-33.
- Takamura, H., Yamaguchi, T., Terao, J. and Matoba, T. (2002). Change in radical-scavenging activity of spices and vegetables during cooking, in: Lee, T.C., Ho, C.T. (Eds)., *Bioactive Compounds in Foods: Effects of Processing and Storage*. American Chemical Society, Washington, D.C., pp. 34-43.
- Tanruk, S. (2003). Effect of *Lycopersicon esculentum*, *Solanum melongena*, *Solanum aculeatissimum* and *Solanum torvum* on mutagenicity of urethane in *Drosophila melanogaster*. (M.S. Thesis in Food and Nutritional Toxicology). Bangkok: Faculty of Graduate Studies, Mahidol University.
- Tapiero, H., Tew, K.D., Ba, N., and Mathe', G. (2002). Polyphenols: do they play a role in the prevention of human pathologies? *Biomed. Pharmacother.*, 56 (4), 200-7.

- Tsao, and Lo. (2006). Vegetables: Types and Biology. IN: Yiu H. Hui. Handbook of Food Science, Technology, and Engineering. CRC Press.
- Turkmen, N., Poyrazoglu, E.S., Sari, F., and Velioglu, Y.S. (2006). Effects of cooking methods on chlorophylls, pheophytins and colour of selected green vegetables. *Int. J. Food Sci. Technol.*, 41, 281-8.
- Van den Berg, R., Haenen G.R.M.M., van den Berg, H., and Bast, A. (1999). Applicability of an improved Trolox equivalent antioxidant capacity (TEAC) assay for evaluation of antioxidant capacity measurements of mixtures. *Food Chem.*, 66, 511-7.
- Van het Hof, K.H., De Boer, B.C.J., Tijburg, L.B.M., Lucius, B.R.H.M., Zijp, I., West, C.E., et al. (2000a). Carotenoid bioavailability in humans from tomatoes processed in different ways determined from the carotenoid response in the triglyceride-rich lipoprotein fraction of plasma after a single consumption and in plasma after four days of consumption. *J. Nutr.*, 130, 1189-96.
- Van het Hof, K.H., West, C.E., Weststrate, J.A., and Hautvast, J.G.A.J. (2000b). Dietary factors that affect the bioavailability of carotenoids. *J. Nutr.*, 130, 503-6.
- Vinson, J.A., Hao, Y., Su, X., and Zubik, L., (1998). Phenol antioxidant quantity and quality in foods: vegetables. *J. Agric. Food Chem.*, 46, 3630-4.
- Vogel, E.W., and Zijlstra, J. (1987). Mechanistic and methodological aspect of chemically induced somatic mutation and recombination test in *Drosophila melanogaster*. *Mutat. Res.*, 182, 243-64.
- Volden, J., Borge, G.I.A., Bengtsson, G.B., Hansen, M. Thygesen, I.E., Wicklund, T. (2008). Effect of thermal treatment on glucosinolates and antioxidant-related parameters in red cabbage (*Brassica oleracea* L. ssp. capitata f. rubra). *Food Chem.*, 109(3), 595-605.

- Würgler, F.E., Graf, U., and Frölich, A. (1991). *Drosophila* somatic mutation and recombination tests, in: Suttajit, M., Rojanapo, W. (Eds.), Environmental mutagens, carcinogens and teratogens: principles and short-term assays. Proceedings of the second southeast asian workshop on short-term assays for detecting environmental mutagens, carcinogens and teratogens; 1989 february 6-17. Star Press, Bangkok and Chaing Mai, Thailand, pp. 118-36.
- Würgler, F.E., and Vogel, E.W. (1986). *In vivo* mutagenicity testing using somatic cells of *Drosophila melanogaster*, in: De Serres, F.J. (Eds.), Chemical mutagens, principles and methods for their detection, 10. Plenum Press, New York, pp. 1-72.
- Xiao, C.H., Yang, S.S., and Hong, X.K. (2000). The Chemistry of Traditional Chinese Medicines. Shanghai Science and Technology Publishing House, Shanghai.
- Xu, B., and Chang, S.K.C. (2011). Reduction of antiproliferative capacities, cell-based antioxidant capacities and phytochemical contents of common beans and soybeans upon thermal processing. *Food Chem.*, 129, 974-81.
- Yamaguchi, T., Katsuda, M., Oda, Y., Terao, J., Kanazawa, K., Oshima, S., et al. (2003). Influence of Polyphenol and Ascorbate Oxidases during Cooking Process on the Radical-Scavenging Activity of Vegetables. *Food Sci. Technol. Res.*, 9 (1), 79-83.
- Yang, C.S., Landau, J.M., Huang, M.T., and Newmark, H.L. (2001). Inhibition of carcinogenesis by dietary polyphenolic compounds. *Annu. Rev. Nutr.*, 21, 381-406.
- Yoshikawa, K., Mui, K., Ishii, R., Terashita, T., Shishiyama, J., and Kono, M. (1990). Desmutagenic activities of vegetables on broiled fish. *Mem. Facul. Agr. Kinki Univ.*, 23, 55-61.
- Zhang, D., and Hamauzu, Y. (2004). Phenolics, ascorbic acid, carotenoids and antioxidant activity of broccoli and their changes during conventional and microwave cooking. *Food Chem.*, 88, 503-9.
- ชนิกานุจน์ จันทร์มาทอง. (2552). กิจกรรมต้านออกซิเดชันและปริมาณสารต้านออกซิเดชันบางชนิดในผลมะเขือ. วิทยานิพนธ์วิทยาศาสตรมหาบัณฑิต มหาวิทยาลัยเชียงใหม่.

- นันทนา ศรีพันลม และรุ่งทิวา ชิตทอง. (2547). การทดสอบฤทธิ์ต้านออกซิเดชันของสารสกัดจาก  
ผักในเขตเทศบาลเมืองนครปฐม. มหาวิทยาลัยราชภัฏนครปฐม.
- นันทวัน บุญยะประภัศร และ อรนุช โชคชัยเจริญพร. (2542). สมุนไพร ไม้พื้นบ้าน เล่ม 3.  
กรุงเทพฯ. ศูนย์ข้อมูลสมุนไพร คณะเภสัชศาสตร์ มหาวิทยาลัยมหิดล. 521-39.