

REFERENCES

- American Heart Association. (2007). AHA statistical update: heart disease and stroke statistics. *Circulation*, 115, e69-e171.
- Anderson, J. W., Johnstone, B. M. and Cook-Newell, M. E. (1995). Meta-analysis of the effects of soy protein intake on serum lipids. *New England Journal of Medicine*, 333(5), 276-282.
- Barnes, S., Peterson. T .G., Coward, L. (1995). Rationale for the use of genistein containing soy matrices in chemoprevention trials for breast and prostate cancer. *J Cell Biochem Suppl.* 22, 181–7.
- Chang, L.-H. and Chang, C.-M. J. (2007). Continuous hot pressurized fluids extraction of isoflavones and soyasaponins from defatted soybean flakes. *Journal of the Chinese Institute of Chemical Engineers*, 38(3–4), 313-319.
- Cho, S. Y., Lee, Y. N. and Park, H. J. (2009). Optimization of ethanol extraction and further purification of isoflavones from soybean sprout cotyledon. *Food Chemistry*, 117(2), 312-317.
- Crouzet, J. and Chassagne, D. (1999). Glycosidically bound volatiles in plants. In R. Ikan (Ed.), *Naturally Occuring Glycosides* (pp. 225-274). Canada: John Wiely & Sons.
- Crozier, A., Jaganath, I. B., and Clifford, M. N. (2009). Dietary phenolics: chemistry, bioavailability and effects on health. *Natural Product Reports*. 26, 1001–1043.

Dalais, F., Rice, G., Wahlqvist, M., Grehar, M., Murkies, A., Medley, G., Ayton, R. and Strauss, B. (1998). Effects of dietary phytoestrogens in postmenopausal women. *Climacteric*, 1(2), 124-129.

Di Mauro, A., Arena, E., Fallico, B., Passerini, A. and Maccarone, E. (2002). Recovery of anthocyanins from pulp wash of pigmented oranges by concentration on resins. *Journal of Agricultural and Food Chemistry*, 50(21), 5968-5974.

Eliana P.N., Jorge N.N., Laurival D.L., Paulo T., Anaglória P. and Ivete D. (2004). Benefits of soy germ isoflavones in postmenopausal women with contraindication for conventional hormone replacement therapy. *j.maturitas*. 48, 372-380.

Han, K. K., Soares Jr, J. M., Haidar, M. A., Rodrigues de Lima, G. and Baracat, E. C. (2002). Benefits of soy isoflavone therapeutic regimen on menopausal symptoms. *Obstetrics & Gynecology*, 99(3), 389-394.

Hargreaves, D. F., Potten, C. S., Harding, C., Shaw, L. E., Morton, M. S., Roberts, S. A., Howell, A. and Bundred, N. J. (1999). Two-week dietary soy supplementation has an estrogenic effect on normal premenopausal breast 1. *The Journal of Clinical Endocrinology & Metabolism*, 84(11), 4017-4024.

Hendrich, S. (2002). Bioavailability of isoflavones. *J Chromatog B* . 777, 203–210.

Hutchins, A.M., Slavin, J.L. and Lampe, J.W. (1995). Urinary isoflavonoid phytoestrogen and lignin excretion after consumption of fermented and unfermented soy products. *J Amer Diet Assoc* .95, 545–551.

Izumi, T., Piskula, M. K., Osawa, S., Obata, A., Tobe, K., Saito, M., Kataoka, S., Kubota, Y. and Kikuchi, M. (2000). Soy isoflavone aglycones are absorbed faster and in higher amounts than their glucosides in humans. *The Journal of Nutrition*, 130(7), 1695-1699.

Klejdus, B., Mikelová, R., Petrlová, J., Potěšil, D., Adam, V., Stiborová, M., Hodek, P., Vacek, J., Kizek, R. and Kubáň, V. (2005). Determination of isoflavones in soy bits by fast column high-performance liquid chromatography coupled with UV-visible diode-array detection. *Journal of Chromatography A*, 1084(1–2), 71-79.

Kritz, S., Von, M., Barrett, C., Bressel, M. (2003). Isoflavones and cognitive function in older women: the Soy and Postmenopausal Health In Aging (SOPHIA) Study. *Journal of The North American Menopause Society*. 10(3),196-202.

Kuan, I. C., Lo, Y.C., Su, N. W., Chou, C. C. and Cheng, K. C. (2012). Enrichment of Two Isoflavone Aglycones in Black Soymilk by Immobilized β -Glucosidase on Solid Carriers. *Journal of Agricultural and Food Chemistry*. 60, 12540–12546.

Kuo, L.-C., Cheng, W.-Y., Wu, R.-Y., Huang, C.-J. and Lee, K.-T. (2006). Hydrolysis of black soybean isoflavone glycosides by *Bacillus subtilis* natto. *Applied Microbiology and Biotechnology*, 73(2), 314-320.

Lee, J.H. and Choung, M.G. (2011). Determination of optimal acid hydrolysis time of soybean isoflavones using drying oven and microwave assisted methods. *Food Chem.* 129, 577-582.

Leejeerajumnean, A. (2003). Thua nao: alkali fermented soybean from *Bacillus subtilis*. *Silpakorn University International Journal*, 3, 277-292.

Li, A., Zhang, Q., Chen, J., Fei, Z., Long, C. and Li, W. (2001). Adsorption of phenolic compounds on Amberlite XAD-4 and its acetylated derivative MX-4. *Reactive and Functional Polymers*, 49(3), 225-233.

Luciana, C.G., Amanda, A.M., Geni, S.V., José, M., Gontijo M., Josemeye, B.S., Elza, II. and Mara, Lúcia LR. (2014). Soybean β -Glucosidase Immobilised on Chitosan Beads and its Application in Soy Drink Increase the Aglycones. *Braz. Arch. Bio. Technol.* 57 n.5 , 766-773.

Macko, S.A. and Estep, M.L.F. (1984). Microbial alteration of stable nitrogen and carbon isotopic compositions of organic matters. *Org. Geochem.* 6,787-790.

Marjorie, G.B., Jeffcoat, A.R., Bloedon, L.T., Koch, M.A., Black, T., Dix, K.J., Heizer W. D., Brian, F.T., Judith, M.H., Crowell, J.A. and Zeisel, S.H. (2002). Clinical characteristics and pharmacokinetics of purified soy isoflavones: single-dose administration to healthy men. *Am J Clin Nutr.* 75,126–36.

Mauricio, A.R., P, Miguel and G.B, Carmelo. (2003). Ultrasound-assisted extraction of soy isoflavones. *Journal of Chromatography A.* 1012: 119-128.

Messina, M. (2007). Role of Soy in Promoting Health. Food focus Thailand magazine for F&B professionals.

Messina, M. J. (1999). Legumes and soybeans: overview of their nutritional profiles and health effects. *The American Journal of Clinical Nutrition,* 70(3), 439-450.

Murphy, P. A., Barua, K. and Hauck, C. C. (2002). Solvent extraction selection in the determination of isoflavones in soy foods. *Journal of Chromatography B,* 777(1–2), 129-138.

Nahas, E.P., Jorge, N.N., Laurival, D.L., Paulo, T., Anaglória, P. and Ivete, D. (2004). Benefits of soy germ isoflavones in postmenopausal women with contraindication for conventional hormone replacement therapy. *Maturitas.* 48 , 372–380.

National Statistical Office, Thailand. (2007). Report on the 2007 survey of the older persons in Thailand [Internet]. [cited 2015 Dec 17]. Available from: http://service.nso.go.th/nso/nsopublish/service/survey/rep_older50.pdf

National Statistical Office, Thailand. (2007). Report on the 2007 survey of the older persons in Thailand [Internet]. [cited 2015 Dec 17]. Available from: http://service.nso.go.th/nso/nsopublish/service/survey/rep_older50.pdf

Ohta, A., Uehara, M., Sakai, K., Takasaki, M., Adlercreutz, H., Morahashi, T., & Ishimi, Y. (2002). A combination of dietary fructooligosaccharides and isoflavone conjugates increases femoral bone mineral density and equol production in ovariectomized mice. *Journal of Nutrition*. 132, 2048–2054.

Orrhage, K. and Nord, C.E. (2000). Bifidobacteria and lactobacilli in human health. *Drugs Exp Clin Res*. 26, 95–111.

Park, D.J., Yong S. L. and Yong, L. C. (2013). Characterization of a Cold-Active β -Glucosidase from *Paenibacillus xylanilyticus* KJ-03 Capable of Hydrolyzing Isoflavones Daidzin and Genistin. *Protein J*. 32, 579–584.

Park, K.-Y., Jung, K.-O., Rhee, S.-H. and Choi, Y. H. (2003). Antimutagenic effects of doenjang (Korean fermented soypaste) and its active compounds. *Mutation Research/Fundamental and Molecular Mechanisms of Mutagenesis*, 523, 43-53.

Phongphisuthinant, R., Wiriyacharee, P., Preunglampoo, S., Leelapat, P., Kanjanakeeretumrong, P. and Lamyong, S. (2015). Selection of *Bacillus* spp. for Isoflavone Aglycones Enriched Thua-nao, A Traditional Thai Fermented Soybean. *Journal of pure and applied microbiology*. 9(Spl. Edn. 2), 59-68.

Playne, M.J. (2002). The health benefits of probiotics. *Food Aust*. 54, 71–74.

Pu, Z., Wang, J., Lua, C., Xua, Y. and Sun, Z. (2013). Immobilized β -glucosidase on magnetic chitosan microspheres for hydrolysis of straw cellulose. *Process Biochemistry*. 48, 683-687.

Quella, S. K., Loprinzi, C. L., Barton, D. L., Knost, J. A., Sloan, J. A., LaVasseur, B. I., Swan, D., Krupp, K. R., Miller, K. D. and Novotny, P. J. (2000). Evaluation of soy phytoestrogens for the treatment of hot flashes in breast cancer survivors: a North Central Cancer Treatment Group Trial. *Journal of Clinical Oncology*, 18(5), 1068-1068.

Richelle, M., Pridmore-Merten, S., Bodenstab, S., Enslen, M. and Offord. (2002). Hydrolysis of isoflavone glycosides to aglycones by b-glycosidase doesnot alter plasma and urine isoflavone pharmacokinetics in postmenopausal women. *J Nutr.* 132, 2587-2592.

Rostagno, M. A., Araújo, J. M. A. and Sandi, D. (2002). Supercritical fluid extraction of isoflavones from soybean flour. *Food Chemistry*, 78(1), 111-117.

Rostagno, M. A., Palma, M. and Barroso, C. G. (2004). Pressurized liquid extraction of isoflavones from soybeans. *Analytica Chimica Acta*, 522(2), 169-177.

Sarkar, P., Hasenack, B. and Nout, M. (2002). Diversity and functionality of *Bacillus* and related genera isolated from spontaneously fermented soybeans (Indian Kinema) and locust beans (African Soumbala). *International Journal of Food Microbiology*, 77(3), 175-186.

Scordino, M., Di Mauro, A., Passerini, A. and Maccarone, E. (2003). Adsorption of flavonoids on resins: hesperidin. *Journal of Agricultural and Food Chemistry*, 51(24), 6998-7004.

Scordino, M., Di Mauro, A., Passerini, A. and Maccarone, E. (2004). Adsorption of flavonoids on resins: cyanidin 3-glucoside. *Journal of Agricultural and Food Chemistry*, 52(7), 1965-1972.

- Setchell, K. D. (2000). Absorption and metabolism of soy isoflavones—from food to dietary supplements and adults to infants. *The Journal of Nutrition*, 130(3), 654S-655S.
- Setchell, K. D. and Cassidy, A. (1999). Dietary isoflavones: biological effects and relevance to human health. *The Journal of Nutrition*, 129(3), 758S-767S.
- Setchell, K. D., Brown, N. M., Zimmer-Nechemias, L., Brashear, W. T., Wolfe, B. E., Kirschner, A. S. and Heubi, J. E. (2002). Evidence for lack of absorption of soy isoflavone glycosides in humans, supporting the crucial role of intestinal metabolism for bioavailability. *The American Journal of Clinical Nutrition*, 76(2), 447-453.
- Shimoni, E. (2004). Stability and shelf life of bioactive compounds during food processing and storage: soy isoflavones. *Journal of Food Science*, 69(6), R160-R166.
- Slavin, J.L., Karr, S.C., Hutchins, A.M. and Lampe, J.W. (1998). Influence of soybean processing, habitual diet, and soy dose on urinary isoflavonoid excretion. *Amer J Clin Nutr*. 68, 1492–1495.
- Song, J. Z., Mo, S. F., Yip, Y. K., Qiao, C. F., Han, Q. B. and Xu, H. X. (2008). Development of microwave assisted extraction for the simultaneous determination of isoflavonoids and saponins in Radix Astragali by high performance liquid chromatography. *Journal of Separation Science*, 30(6), 819-824.
- Song, X., Xue, Y., Wang, Q. and Wu, X. (2011). Comparison of three thermostable β -glucosidases for application in the hydrolysis of soybean isoflavone glycosides. *J. Agr. Food Chem.* 59, 1954-1961.

Steinkraus, K. (1995). *Handbook of Indigenous Fermented Foods, revised and expanded*: CRC Press.

Steinkraus, K. H. (1992). African alkaline fermented foods in other parts of the world. in Westby, A. and Reilly, P. J. A. (eds), *Proceedings of Regional Workshop on Traditional African Food-quality and nutrition*. International Foundation for Science, Stockholm. 87-92.

Tsangalis, D. and Shah, N.P. (2004). Metabolism of oligosaccharides and aldehydes and production of organic acids in soya milk by probiotic bifidobacteria. *Int J Food Sci Technol.* 39, 541–554.

Tsangalis, D., Ashton, J.F., McGill, A.E.J. and Shah, N.P. (2002). Enzymic transformation of isoflavone phytoestrogens in soya milk by β -glucosidase-producing bifidobacteria. *J Food Sci.* 67, 3104–3113.

Tsangalis, D., Ashton, J.F., McGill, A.E.J. and Shah, N.P. (2003). Biotransformation of isoflavones by bifidobacteria in fermented soya milk supplemented with D-glucose and L-cysteine. *J Food Sci.* 68, 623–631.

Tsangalis, D., Ashton, J.F., Stojanovska, L., Wilcox, G. and Shah, N.P. (2004). Development of an isoflavone aglycones enriched soya milk using soy germ, soy protein isolate and bifidobacteria. *Food Res Int.* 37, 301–312.

Tunjor, S., Kunchit, J. and Puwastien, P. (2010). Inulin and oligosaccharide for health. *Journal of the nutrition association of Thailand.* 45, 2 July–December 2010.

Turner, N.J., Thomson, B.M. and Shaw, I.C. (2003). Bioactive isoflavones in functional foods: the importance of gut microflora on bioavailability. *Nutr Rev.* 61, 204–213.

Wei, Q. K., Chen, T. R. and Chen, J. T. (2008). Use of *Bacillus subtilis* to enrich isoflavone aglycones in fermented natto. *Journal of the Science of Food and Agriculture*, 88(6), 1007-1011.

Wiriyacharee, P. (2012). Experimental Design. Faculty of Agro-industry. Chiang Mai university.

Wiriyacharee, P. (2002). Sensory Evaluation. Faculty of Agro-industry of Chiang Mai University.

Wiriyacharee, P., Pruenglampoo, S., Phongphisutthinant, R., Leelapat, P. and Chaipoot, S. (2012). Isoflavones (Daidzein and Genistein) Production from Biobean, 2nd phase. Department of Science and Technology Research Institute of Chiang Mai University.

Wiriyacharee, P., Pruenglampoo, S., Phongphisutthinant, R., Leelapat, P. and Chaipoot, S. (2013). Isoflavones Aglycones Production from Biobean, 3rd phase: The Bioreactor Design for Isoflavones Production by Using Starter Culture Technology. Department of Science and Technology Research Institute of Chiang Mai University.

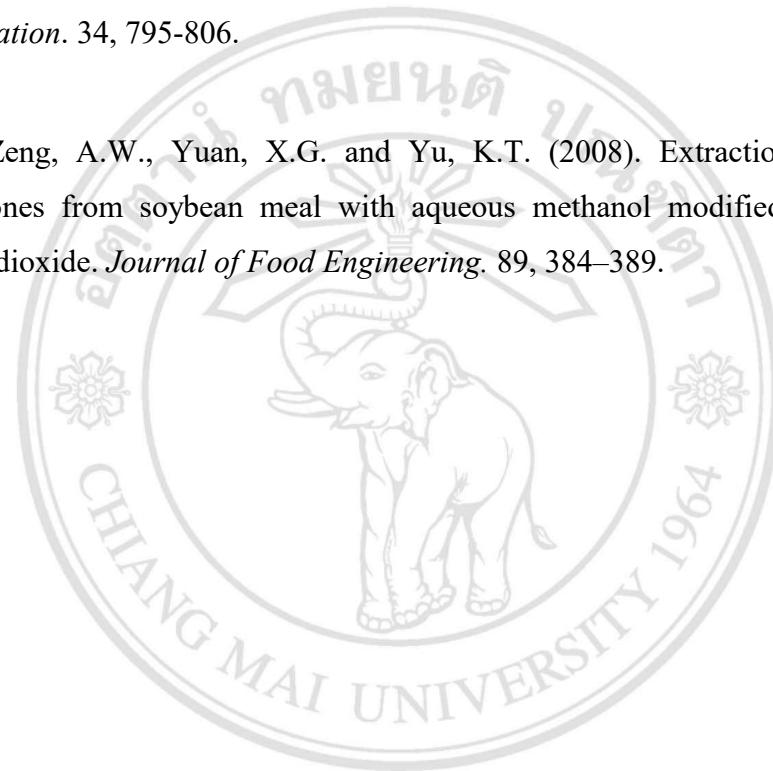
Wiriyacharee, P., Pruenglampoo, S., Phongphisutthinant, R., Leelapat, P. and Kanjanakireethamrong, P. (2011). Isoflavones (Daidzein and Genistein) Production from Biobean, 1st phase. Department of Science and Technology Research Institute of Chiang Mai University.

Wu, C. Y. and Lai, S. M. (2007). Preparative isolation of isoflavones from defatted soy flakes. *Journal of Liquid Chromatography & Related Technologies*, 30(11), 1617-1640.

Wu, Y., Wang, X. and Fan, E. (2012). Optimisation of ultrasound-assisted extraction of puerarin and total isoflavones from puerariae lobatae radix (*Pueraria lobata* (Wild.) Ohwi) with response surface methodology. *Phytochemical Analysis*, 23(5), 513-519.

Yue, X., Abdallah, A.M. and Xu, Z. (2009). Distribution of isoflavones and antioxidant activities of soybean cotyledon, coat and germ. *Journal of food processing and preservation*. 34, 795-806.

Zuo, Y.B., Zeng, A.W., Yuan, X.G. and Yu, K.T. (2008). Extraction of soybean isoflavones from soybean meal with aqueous methanol modified supercritical carbon dioxide. *Journal of Food Engineering*. 89, 384–389.



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