

REFERENCES

Absorption of Amino Acid and Peptides. n.d. [online] Available at: http://www.vivo.colostate.edu/hbooks/pathphys/digestion/smallgut/absorb_aacids.html [Accessed 19 November 2017]

Abu-Salem, F. M. et al., 2014. *Levels of Some Antinutritional Factors in Tempeh Produced From Some Legumes and Jojobas Seeds*. International Journal of Nutrition and Food Engineering, pp. 296-301

Accessdata fda.gov, 2017. *CFR-Code of Federal Regulations Title 21*, s.1.: s.n.

Adeyemo, S. M. and Onilude, A. A., 2013. *Enzymatic Reduction of Anti-nutritional Factors in Fermenting Soybeans by Lactobacillus plantarum Isolates from Fermenting Cereals*. Nigerian Food Journal, vol. 31 (2), pp. 84-90

Alonso, R., et al., 2000. *Effect of Extrusion Cooking on Structure and Functional Properties of Pea and Kidney Bean Proteins*. J. Sci Food Agric, vol. 80, pp. 397-403

Andriani, M., Baskoro, K., Nurhartadi, E., 2014. *Studies on Physicochemical and Sensory Characteristics of Overripe Tempeh Flour as Food Seasoning*. Academic Research International, vol. 5, pp. 36-45

Araújo, M. M., Fanaro, G. B. and Villavicencio, A. L. C. H., 2013. *Soybean and Isoflavones-From Farm to Fork*. INTECH. pp. 1-21

Astuti, S. M., et al., 2011. *Determination of Saponin Content from Anredera cordifolia (Ten) Steenis Plant (Binahong) to Potential Treatment for Several Diseases*. Journal of Agricultural Science, vol. 3, pp. 224-232

Babu, P. D., Bhakyaraj, R. and Vidhyalakshmi, R., 2009. *A Low Cost Nutritious Food "Tempeh" - A Review*. World Journal of Dairy & Food Sciences, vol. 4, pp. 22-27

Barampama, Z. & Simard, R. E., 1994. *Oligosaccharides, Antinutritional Factors and Protein Digestibility of Dry Beans as Affected by Processing*. Journal of Food Science, vol. 59, pp. 833-838

Barroga, C. F., et al., 1985. *Polyphenols in Mung Bean (Vigna radiata (L.) Wilczek): Determination and Removal*. Journal of Agricultural and Food Chemistry, vol. 33, pp. 1006-1009

Barth, C.A., Lunding, B., Schumitz, M., and Hagemestr, H., 1993. *Soybean trypsin inhibitors reduce absorption of exogenous in miniature pigs*. J. Nutrition, vol. 123, pp 2195-2200

Bartkiene, E., et al., 2014. *Solid State Fermentation with Lactic Acid Bacteria to Improve The Nutritional Quality of Lupin and Soya Bean*. J. Sci Food Agric, vol. 95, pp. 1336-1342

Berghofer, E., et al., 1998. *Antioxidative properties of faba bean, soybean and oat tempeh*. International Journal of Food Sciences and Nutrition, vol. 49, pp. 45–54

Bolívar-Monsalve, J., et al., 2017. *Reduction in Saponin Content and Production of Gluten-Free Cream Soup Base Using Quinoa Fermented with Lactobacillus plantarum*. J. Food Process Preserve., pp. 1-10

Bonner, J. and Varner, J. E., 1965. *The Tannins in Plant Biochemistry*. Academic Press, New York, pp. 555-556

Brouns, F., 2002. *Soya isoflavones: a new and promising ingredient for the health foods sector*. Food Research International, vol. 35, p.187-193

BSN, 2012. *Tempe: Persembahan Indonesia untuk Dunia*. [online] Available at: http://www.bsn.go.id/uploads/download/Booklet_tempe-printed21.pdf [Accessed 27 October 2017]

Chen, L. et al., 2013. *Value - Added Products from Soybean: Removal of Anti-Nutritional Factors via Bioprocessing*, Soybean - Bio-Active Compounds, Prof. Hany

Chung, K. T. et al., 1998. *Tannins and human health: a review*. Crit Rev Food Sci Nutr, vol. 38, pp. 421-464

Coulibaly, A., et al., (2011). *Phytic Acid in Cereal Grains: Structure, Healthy or Harmful Ways to Reduce Phytic Acid in Cereal Grains and Their Effects on Nutritional Quality*. American Journal of Plant Nutrition and Fertilization Technology, vol. 1, pp. 1-22

Dika, P. A., 2014. *Microbial and Chemical Characterization of Tempeh From Locally Produced Legumes*. BS THESIS. Department of Food Technology: Swiss German University.

Djunaidi, S., 2016. *Application of Quick Tempeh Technology In Accelerating the Production Time of Override Tempeh*. BS THESIS. Department of Food Technology: Swiss German University

Dourado, L. R. B., et al., 2011. *Soybeans (Glycine Max) and Soybean Products in Poultry and Swine Nutrition*. Recent Trends of Recent Trends for Enhancing the Diversity and Quality of Soybean Products, Prof. Dora Krezhova (Ed.), ISBN: 978-953-307-533-4, InTech, [online] Available at: <http://www.intechopen.com/books/recent-trends-for-enhancing-the-diversity-and-quality-of-soybean-products/soybeans-glycine-max-and-soybean-products-in-poultry-and-swine-nutrition> [Accessed 9th November 2017]

Dwinaningsih, E., 2010. *Karakteristik Kimia dan Sensori Tempe dengan Variasi Bahan Baku Kedelai/Beras dan Penambahan Angkak Serta Variasi Lama Fermentasi*, Surakarta: Universitas Sebelas Maret

Egounlety, M. & Aworh, O. C., 2003. *Effect of soaking, dehulling, cooking and fermentation with Rhizopus oligosporus on the oligosaccharides, trypsin inhibitor, phytic acid and tannins of soybean (Glycine max Merr.), cowpea (Vigna unguiculata*

L. Walp) and groundbean (Macrotyloma geocarpa Harms). Journal of Food Engineering, vol. 56, pp. 249-254

El-Shemy (Ed.), InTech, DOI: 10.5772/52993. [online] Available at: <https://www.intechopen.com/books/soybean-bio-active-compounds/value-added-products-from-soybean-removal-of-anti-nutritional-factors-via-bioprocessing> [Accessed 9th November 2017]

El-Shemy, H. et al., 2000. *Comparison of Nutritional and Antinutritional Factors in Soybean and Fababeans Seeds with or without Cortex*. Soil Sci. Plant Nutr, vol. 46, pp. 515-524

Fagbemi, T. N., et al., 2005. *Processing Effects on Some Antinutritional Factors and In Vitro Multienzyme Protein Digestibility (IVPD) of Three Tropical Seeds: Breadnut (Artocarpus altilis), Cashewnut (Anacardium occidentale) and Fluted Pumpkin (Telfairia occidentalis)*. Pakistan Journal of Nutrition, vol. 4 (4), pp. 250-256

Fenwick, D. E. & Oakenfull, D., (1983). *Saponin Content of Food Products and Prepared Foods*. J. Sci. Food Agric, vol. 34, pp. 186-191

Gestetner, B., et al., 1968. *Soybean Saponins: Fate of Ingested Soybean Saponins and the Physiological Aspect of their Hemolytic Activity*. J. Agric. Food Chem., vol. 16, pp. 1031-1035

Graffham, A. J., et al., 1995, *Nutrition of Tempe Moulds*. Letters in Applied Biology, vol. 21, pp. 223-227

Green, N. M., 1953. *Competition Among Trypsin Inhibitor*. J. Biol. Chem, vol. 205, pp. 535-551

Grumezescu, A. M. & Holban, A. M., 2017. *The Importance of Microbial and Enzymatic Bioconversions of Isoflavones in Bioactive Compounds*. Handbook of Food Bioengineering, vol. 2, pp. 55-94

Gu, C., et al., 2010. *Effect of Soybean Variety on Anti-Nutritional Factors Content, and Growth Performance and Nutrients Metabolism in Rat*. International Journal of Molecular Sciences, vol. 11, pp. 1048-1056

Hagerman A.E., 1989. *Chemistry of Tannin-Protein Complexation*. In: Hemingway R.W., Karchesy J.J., Branham S.J. (eds) Chemistry and Significance of Condensed Tannins. Springer, Boston, MA, pp. 323-333

Haron, H., et al., 2009. *Daidzein and genestein contents in tempeh and selected soy products*. Food Chemistry, vol. 115, pp.1350-1356

Haslam, E., 1996. *Chemistry of Vegetable Tannins*. Academic Press, New York, pp. 14-58, 91-122

Hedger, J. N., 1982. Production of Tempe, an Indonesian Fermented Food. The Society for General Microbiology, pp. 597-602.

Herbert, V., 1988. *Vitamin B12: plant sources, requirements, and assay*. Am.

J.Clin.Nutr, vol. 48, pp. 852-858

Hill, G. D., 2003. *Plant Antinutritional Factors-Characteristics*. Encyclopedia of Food Sciences and Nutrition. 2nd ed, pp. 4578-4587

Huisman, J., 1990. *Antinutritional Effects of Legume Seeds in Piglets, Rats and Chickens*.

Ibrahim, S. S., et al., 2002. *Effect of Soaking, Germination, Cooking and Fermentation on Antinutritional Factors in Cowpea*. Food, vol. 46 (2), pp. 92-95

Jaffe, G., 1981. *Phytic Acid in Soybean*. Journal of the American Oil Chemists' Society, vol. 58, pp. 493-495

Kadam, S. S., et al., 1987. *Effects of Heat Treatments of Antinutritional Factors and Quality of Proteins in Winged Beans*. Journal of the Science and Food Agriculture, vol. 39, pp. 267-275

Kakade, M. L., et al., 1974. *Determination of Trypsin Inhibitor Activity of Soy Products: A Collaborative Analysis of an Improved Procedure*. American Association of Cereal Chemists, pp. 376-382

Karyadi, D., 2001. *The development of tempeh across the continents*. In: AGRANOFF, J. (ed.) *The complete handbook of tempeh: the unique fermented soyfood of Indonesia*. 2nd ed. Singapore: American Soybean Association, Liat Towers, pp. 21-25.

Keuth, S. and Bisping, B., 1994. *Vitamin B12 Production by Citrobacterfreundii or Klebsiellapneumoniae during Tempeh Fermentation and Proof of Enterotoxin Absence by PCR*. Applied and Environmental Microbiology, pp. 1495-1499

Krämer, R. P., et al. 1984. *Antifungal Activity of Soybean and Chickpea Isoflavones and their Reduced Derivatives*. Phytochemistry, vol. 23, pp. 2203-2205

Kristianti, F. 2017. *Impact of GDL Acidification Towards Nutrient Properties of Tempe and Overripe Tempe*. BS THESIS. Department of Food Technology: Swiss German University

Kumar, A. and Patra, S., 2017. *Qualitative and Quantitative Analysis of Secondary Phytochemical in Gymnema sylvestre*. Indian J. Sci Res, vol. 12, pp. 150-156

Lai, L. R., et al., 2013. *Effect of Lactic Fermentation on the Total Phenolic, Saponin and Phytic Acid Contents As Well As Anti-Colon Cancer Cell Proliferation Activity of Soymilk*. Journal of Bioscience and Bioengineering, vol. 115, pp. 552-556

Liang, J., et al., 2008. *Effects of Soaking, Germination and Fermentation on Phytic Acid, Total and In Vitro Soluble Zinc in Brown Rice*. Food Chemistry, vol. 110, pp. 821-828

Liggins, J., et al., 1998. *Extraction and quantification of daidzein and genistein in food*. Analytical Biochemistry, vol. 264, pp.1-7

Liggins, J., et al., 2000. *Daidzein and genistein contents of vegetables*. British Journal of Nutrition, vol. 84, pp. 717-725

Mangan, J. L. 1988. *Nutritional Effects of Tannins in Animal Feeds*. Nutrition Research Reviews, vol. 1, pp. 209-231

Marfo E. K., et al., 1990. *Effect of local food processing on phytate levels in cassava, cocoyam, yam, maize, sorghums, rice, cowpea and soybean*. J. of Agricultural and Food Chemistry. vol. 38, pp. 1580–1585.

Nakajima, N., et al., 2005. *Analysis of isoflavone content in tempeh, a fermented soybean, and preparation of a new isoflavone-enriched tempeh*. Journal of Bioscience and Bioengineering, vol. 100, pp. 685–687

Nelson, D. & Cox, M., 2008. *Lehninger Principles of Biochemistry*. 5th ed. New York: W.H. Freeman

Nout, M. J. R., and Kiers, J. L., 2005. *Tempe Fermentation, Innovation and Functionality: Update Into the Third Millenium*. Journal of Applied Microbiology, vol. 98, pp. 789-805

Oakenfull, D., 1981. *Saponins in Food-A Review*. Food Chem., vol. 7, pp. 19-40

Omnes, M.-H., et al., 2017. *Effects of Dietary Tannin on Growth, Feed Utilization and Digestibility, and Carcass Composition in Juvenile European Seabass (Dicentrarchus labrax L.)*. Aquaculture Reports, vol. 6, pp. 21-27

Osawa, R. O., 1992. *Tannin-Protein Complex-Degrading Enterobacteria Isolated From the Alimentary Tracts of Koalas and a Selective Medium for Their Enumeration*. Applied and Environmental Microbiology, vol. 58, pp. 1754-1759

Osman, M. A., 2011. *Effect of Traditional Fermentation Process on the Nutrient and Antinutrient Contents of Pearl Millet During Preparation of Lohoh*. Journal of the Saudi Society of Agricultural Sciences, vol. 10, pp. 1-6

Paredes-Lopez, O. & Harry, G. I., 1989. *Changes in Selected Chemical and Antinutritional Components During Tempeh Preparation Using Fresh and Hardened Common Beans*. J. Food. Sci., vol. 54, pp. 968-970

Pocker, Y. & Green, E., 1973. *Hydrolysis of D-Glucono- δ -lactone. I. General Acid-Base Catalysis, Solvent Deuterium Isotope Effects, and Transition State Characterization*. J. Am. Chem. Soc, vol. 95 (1), pp. 113-119.

Pratiwi, Y. K. et al., 2013. *Pengaruh Suhu Perendaman Terhadap Koefisien Difusi Air dan Sifat Fisik Kedelai (Glycine max Merrill)*. Jurnal Teknik Pertanian Lampung, vol. 2 (2), pp. 59-66

PRIDE, C. 1984. *Tempeh cookery*. Summertown: ebook Publishing Co, pp.127

Rackis, J. J. & McGhee, J. E., 1975. *Biological Threshold Levels of Soybean Trypsin Inhibitors by Rat Bioassay*. American Association of of Cereal Chemists, vol. 52, pp. 85-92

Reddy, N. R. & Pierson, M. D., 1994. *Reduction in Antinutritional and Toxic Components in Plant Food by Fermentation*. Food Research International, vol. 27, pp. 281-290

Sariri, A. K., et al., 2018. *The Utilization of Microbes As a Fermentation Agent to Reduce Saponin in Trembesi Leaves (Samanea saman)*. IOP Conference Series: Earth and Environmental Science, vol. 142, pp. 1-5

Savage, G. P., 2003. *Saponins*. Encyclopedia of Food Sciences and Nutrition, ed. 2, pp. 5095-5098

Sessa, D. J. and Wolf, W. J. 2001. *Bowman-Birk Inhibitor in Soybean Seed Coats*. Industrial Crops and Products, vol. 14, pp. 73-83

Setchell, K.D.R., et al., 2001. *Bioavailability of pure isoflavones in healthy humans and analysis of commercial soy isoflavone supplements*. Journal of Nutrition, vol. 131, pp. 1362S-1375S

Sharma, A. and Sehgal, S., 1992. *Effect of processing and cooking on the antinutritional factors of faba bean (Vicia faba)*. Food Chemistry, vol. 43, pp. 383-385

Shiraiwa, M., et al., 1991. *Composition and Content of Saponins in Soybean Seed According to Variety, Cultivation Year and Maturity*. Agricultural and Biological Chemistry, vol. 52, pp. 323-331

Shurtleff, W., & Aoyagi, A. 2001. *Tofu and Soymilk Production (The Book of Tofu Vol II)*. Lafayette: New Age Food Study.

Torre, M. and Rodriguez, A. R. 1991. *Effects of Dietary Fiber and Phytic Acid on Mineral Availability*. Critical Reviews in Food Science and Nutrition, vol. 1, pp. 1-22

Valencia-Chamorro, S. A., 2003. *Quinoa*. Encyclopedia of Food Sciences and Nutrition, ed. 2, pp. 4895-4902

Van der Poel, A. F. B., et al., 1991. *Effect of Different Processing Methods On Tannin Content and In Vitro Protein Digestibility of Faba Bean (Vicia faba L.)*. Anim Feed Sci Technol, vol. 33, pp. 49-58

Vijayakumari, P., et al., 1998. *Effect of Soaking and Heat Processing on the Levels of Antinutrients and Digestible Proteins in Seeds of Vigna aconitifolia and Vigna sinensis*. Food Chem, vol. 63, pp. 259-264

Wang G., et al., 1990. *A simplified HPLC method for the determination of phytoestrogens in soybean and its processed products*. J Agric Food Chem, vol. 38, pp. 190-194

Wijaya, C. H., 2014. *SOLUSI MASALAH MUTU, LINGKUNGAN DAN EKONOMI DENGAN TEKNOLOGI TEMPE CEPAT*. Risalah Kebijakan Pertanian dan Lingkungan, vol. 1 (2), pp. 67-72

Wijaya, C. H., Nurjanah, S., Utama, Q. D., 2015. *Implementasi dan Analisis*

Keuntungan Teknologi Back-Slopping pada Pembuatan “Quick Tempe” Skala Industri Rumah Tangga. PANGAN, vol. 24, pp. 49-62

Yauvina, 2010. *Studi Trypsin Inhibitor Pada Pohon Sengon (Paraserianthes falcataria (L) Nielsen) Provenan Kediri, Solomon dan Subang.* Bogor: Institut Pertanian Bogor

Yudianto M., 1997. *Pemilihan kondisi proses pembuatan dan karakterisasi tepung tempe bosok [Selection of conditions for production process and characterization of tempe bosok powder]* [Dissertation]. Yogyakarta: Universitas Gadjah Mada. [Bahasa Indonesia]

