

DAFTAR PUSTAKA

- Abd-elsalam, H. H., Al-ghobashy, M. A., Zaazaa, H. E., & Ibrahim, M. A. (2014). Stability of catechins in green tea nutraceutical products : Application of solid phase extraction – thin layer chromatography densitometry. *Food Chemistry*, *156*, 94–99. <https://doi.org/10.1016/j.foodchem.2014.01.103>
- Alam, N., & Bristi, N. J. (2013). Review on in vivo and in vitro methods evaluation of antioxidant activity. *Saudi Pharmaceutical Journal*, *21*(2), 143–152. <https://doi.org/10.1016/j.jsps.2012.05.002>
- AOAC International. (2013). AOAC Official Methods of Analysis - Appendix K: Guidelines for Dietary Supplements and Botanicals, 32. Retrieved from http://www.eoma.aoac.org/app_k.pdf
- Ayyildiz, S. S., Karadeniz, B., Sagcan, N., Bahar, B., Abdullah, A., & Alasalvar, C. (2018). Food and Bioproducts Processing Optimizing the extraction parameters of epigallocatechin gallate using conventional hot water and ultrasound assisted methods from green tea. *Food and Bioproducts Processing*, *111*, 37–44. <https://doi.org/10.1016/j.fbp.2018.06.003>
- Bannan, C. C., Kyu, D. Y., & Mobley, D. L. (2017). HHS Public Access, *12*(8), 4015–4024. <https://doi.org/10.1021/acs.jctc.6b00449>. Calculating
- Biesaga, M., & Pyrzynska, K. (2012). Screening of the antioxidant properties and polyphenol composition of aromatised green tea, (October 2011). <https://doi.org/10.1002/jsfa.5611>
- Chiret, A. S., Bazin, M.-A., Lancelot, J.-C., & Rault, S. (2007). Synthesis of New L-Ascorbic Ferulic Acid Hybrids, 2533–2545.
- Dai, F., Chen, W., & Zhou, B. (2008). Antioxidant synergism of green tea polyphenols with a -tocopherol and L -ascorbic acid in SDS micelles, *90*, 1499–1505. <https://doi.org/10.1016/j.biochi.2008.05.007>
- Das, P. R., & Eun, J. B. (2018). A comparative study of ultra-sonication and agitation extraction techniques on bioactive metabolites of green tea extract. *Food Chemistry*, *253* (July 2017), 22–29. <https://doi.org/10.1016/j.foodchem.2018.01.080>
- Davinelli, S., Sapere, N., Zella, D., Bracale, R., Intrieri, M., & Scapagnini, G. (2012). Pleiotropic Protective Effects of Phytochemicals in Alzheimer ' s Disease, (May 2014). <https://doi.org/10.1155/2012/386527>
- Du, G., Zhang, Z., Wen, X., Yu, C., Calway, T., Yuan, C., & Wang, C. (2012). Epigallocatechin Gallate (EGCG) Is the Most Effective Cancer Chemopreventive Polyphenol in Green Tea, 1679–1691. <https://doi.org/10.3390/nu4111679>
- Fangueiro, J. F., Parra, A., Silva, A. M., Egea, M. A., Souto, E. B., Garcia, M. L., & Calpena, A. C. (2014). Validation of a high performance liquid chromatography method for the stabilization of epigallocatechin gallate. *International Journal of Pharmaceutics*, *475*(1–2). <https://doi.org/10.1016/j.ijpharm.2014.08.053>
- Granja, A., Frias, I., Neves, A. R., Pinheiro, M., & Reis, S. (2017). Therapeutic Potential of Epigallocatechin Gallate Nanodelivery Systems, 2017.

- Hashimoto, F., Ono, M., Masuoka, C., Ito, Y., Sakata, Y., Shimizu, K., Nohara, T. (2003). Evaluation of the Anti-oxidative Effect (in vitro) of Tea Polyphenols, *67*(2), 396–401.
- Hugo, P. C., Gil-Chávez, J., Sotelo-Mundo, R. R., Namiesnik, J., Gorinstein, S., & González-Aguilar, G. A. (2012). Antioxidant interactions between major phenolic compounds found in “Ataulfo” mango pulp: Chlorogenic, gallic, protocatechuic and vanillic acids. *Molecules*, *17*(11), 12657–12664. <https://doi.org/10.3390/molecules171112657>
- Hung, W., Wang, S., Sang, S., Wan, X., Wang, Y., & Ho, C. (2018). Quantification of ascorbyl adducts of epigallocatechin gallate and gallic acid in bottled tea beverages. *Food Chemistry*, *261*(April), 246–252. <https://doi.org/10.1016/j.foodchem.2018.04.050>
- Jeanmonod, D. J., Rebecca, & Suzuki, K. et al. (2018). We are IntechOpen , the world ' s leading publisher of Open Access books Built by scientists , for scientists TOP 1 % Control of a Proportional Hydraulic System. In *Intech open* (Vol. 2, p. 64). <https://doi.org/10.5772/32009>
- Kim, S., Stebe, M.J., Blin, J.L., dan Pasc, A. (2014). pH-controlled Delivery of Curcumin from a Compartmentalized Solid Lipid Nanoparticle-Mesostructured Silica Matrix. *Journal of Materials Chemistry*, (2), 7910-7917
- Klu, M. W., Addy, B. S., Opong, E. E., & Sakyi, E. S. (2016). Effect Of Storage Conditions On The Stability Of Ascorbic Acid In Some Formulations. *International Journal of Applied Pharmaceutics*, *8*(4), 26–31.
- Kodama, D. H., Elisa, A., Schmidt, D. S., Lajolo, F. M., & Genovese, M. I. (2010). Flavonoids , total phenolics and antioxidant capacity : comparison between commercial green tea preparations, *30*(4), 1077–1082.
- Kosińska, A., & Andlauer, W. (2014). Antioxidant Capacity of Tea. Effect of Processing and Storage. *Processing and Impact on Antioxidants in Beverages*, 109–120. <https://doi.org/10.1016/B978-0-12-404738-9.00012-X>
- Krupkova, O., Ferguson, S. J., & Wuertz-Kozak, K. (2016). Stability of (-)-epigallocatechin gallate and its activity in liquid formulations and delivery systems. *Journal of Nutritional Biochemistry*, *37*, 1–12. <https://doi.org/10.1016/j.jnutbio.2016.01.002>
- Kumara, P., Sunil, K., & B, A. K. (2018). Natural Products Chemistry & Determination of DPPH Free Radical Scavenging Activity by RP-HPLC , Rapid Sensitive Method for the Screening of Berry Fruit Juice Freeze Dried Extract, *6*(5). <https://doi.org/10.4172/2329-6836.1000341>
- Li, N., Taylor, L. S., Ferruzzi, M. G., & Mauer, L. J. (2012). Kinetic Study of Catechin Stability: Effects of pH, Concentration, and Temperature.
- Li, W., Wu, J., & Tu, Y. (2010). Synergistic effects of tea polyphenols and ascorbic acid on, *11*(6), 458–464. <https://doi.org/10.1631/jzus.B0900355>
- Lung, J. K. S., & Destiani, D. P. (2014). Uji Aktivitas Antioksidan Vitamin A, C, E dengan Metode DPPH. *Farmaka*, *14*, 1–10.
- Manai, J., Nishiyama, K., & Tsukagoshi, K. (2017). Microfluidic Analytical System with On-Line Luminol Chemiluminescence Detection Based on Annular Flow of Phase

- Separation Multiphase Flow, 29–39. <https://doi.org/10.4236/jasmi.2017.72003>
- Mendes, R. M. (2012). Quantification of catechins and caffeine from green tea (*Camellia sinensis*) infusions, extract, and ready-to-drink beverages, 32(1), 163–166.
- Mereles, D., & Hunstein, W. (2011). Epigallocatechin-3-gallate (EGCG) for Clinical Trials: More Pitfalls than Promises?, 5592–5603. <https://doi.org/10.3390/ijms12095592>
- Ning, J., Li, D., Luo, X., Ding, D., Song, Y., Zhang, Z., & Wan, X. (2016). Stepwise Identification of Six Tea (*Camellia sinensis* (L.)) Categories Based on Catechins, Caffeine, and Theanine Contents Combined with Fisher Discriminant Analysis. *Food Analytical Methods*, 9(11), 3242–3250. <https://doi.org/10.1007/s12161-016-0518-2>
- Orona, V. U., & Medina, G. N. (2019). Changes in phenolics and antioxidant capacity during short storage of ready-to-drink green tea (*Camellia sinensis*) beverage at commercial conditions, 141–145.
- Panggalih, A. I. (2010). *Pengaruh jenis kemasan dan suhu penyimpanan pada umur simpan teh hijau*. Institut Pertanian Bogor, 20–21.
- Pereira, V. ., Knor, F. ., Velloso, J. C. ., & Beltrame, F. (2014). Determination of phenolic compounds and antioxidant activity of green, black and white teas of *Camellia sinensis* (L.) Kuntze, Theaceae. *Rev. Bras. Pl. Med., Campinas*, 16, 490–498. https://doi.org/10.1590/1983-084X/13_061
- Rady, I., Mohamed, H., Rady, M., Siddiqui, I. A., & Mukhtar, H. (2018). Cancer preventive and therapeutic effects of EGCG, the major polyphenol in green tea. *Egyptian Journal of Basic and Applied Sciences*, 5(1), 1–23. <https://doi.org/10.1016/j.ejbas.2017.12.001>
- Rock, L., & Brunswick, N. (2005). Standardized Methods for the Determination of Antioxidant Capacity and Phenolics in Foods and Dietary Supplements, 4290–4302.
- Saadeh, R., Al-jabari, M., Abdoh, A., & Al-bawab, A. (2009). Stability Study of Green Tea Natural Extract in Aqueous Solutions and its Chemical Kinetics, 36(1), 62–75.
- Sang, S., Lambert, J. D., Ho, C., & Yang, C. S. (2011). The chemistry and biotransformation of tea constituents. *Pharmacological Research*, 64(2), 87–99. <https://doi.org/10.1016/j.phrs.2011.02.007>
- Sang, S., Lee, M. J., Hou, Z., Ho, C. T., & Yang, C. S. (2005). Stability of tea polyphenol (-)-epigallocatechin-3-gallate and formation of dimers and epimers under common experimental conditions. *Journal of Agricultural and Food Chemistry*, 53(24), 9478–9484. <https://doi.org/10.1021/jf0519055>
- Scalia, S., Marchetti, N., & Bianchi, A. (2013). Comparative Evaluation of Different Co-Antioxidants on the Photochemical- and Functional-Stability of Epigallocatechin-3-gallate in Topical Creams Exposed to Simulated Sunlight, 574–587. <https://doi.org/10.3390/molecules18010574>
- Shebis, Y., Iluz, D., Kinel-Tahan, Y., Dubinsky, Z., & Yehoshua, Y. (2013). Natural Antioxidants: Function and Sources. *Food and Nutrition Sciences*, 04(06), 643–649. <https://doi.org/10.4236/fns.2013.46083>
- Sherma, J., & Fried, B. (2003). *Handbook of Thin-Layer Chromatography* (Third Edit). New

York: Marcel Dekker, Inc. 62-64

- Shimamura, T., Sumikura, Y., Yamazaki, T., Tada, A., Kashiwagi, T., Ishikawa, H., ... UKeda, H. (2014). Applicability of the DPPH Assay for Evaluating the Antioxidant Capacity of Food Additives – Inter-laboratory Evaluation Study –, *30*(July).
- Shuang, S., Ye-wei, H., Yang, T., Xuan-jun, W., & Jun, S. (2014). Mechanism of action of (–)-epigallocatechin-3-gallate: auto-oxidation-dependent activation of extracellular signal-regulated kinase 1 / 2 in Jurkat cells. *Chinese Journal of Natural Medicines*, *12*(9), 654–662. [https://doi.org/10.1016/S1875-5364\(14\)60100-X](https://doi.org/10.1016/S1875-5364(14)60100-X)
- Shukla, A. S., Jha, A. K., Kumari, R., Rawat, K., Syeda, S., & Shrivastava, A. (2018). *Role of Catechins in Chemosensitization. Role of Nutraceuticals in Chemoresistance to Cancer* (1st ed., Vol. 2). Elsevier Inc. 169-198. <https://doi.org/10.1016/B978-0-12-812373-7.00009-7>
- Sigma Aldrich. (n.d.). Product Information of EGCG. (hal. 1-2)
- Spangenberg, B., Poole, C., & Weins, C. (2011). *Quantitative Thin-Layer Chromatography*. (Springer, Ed.). London. <https://doi.org/10.1007/978-3-642-10729-0>
- Truffault, V., Fry, S. C., Stevens, R. G., & Gautier, H. (2017). Ascorbate degradation in tomato leads to accumulation of oxalate, threonate and oxalyl threonate. *Plant Journal*, *89*(5), 996–1008. <https://doi.org/10.1111/tpj.13439>
- Tsao, R. (2015). *13 - Synergistic interactions between antioxidants used in food preservation. Handbook of Antioxidants for Food Preservation*. Elsevier Ltd. <https://doi.org/10.1016/B978-1-78242-089-7.00013-0>
- USP 40. (2017). Validation Of Compendial Procedures. (hal. 1–6).
- Vasisht, K., Sharma, P. D., Karan, M., Rakesh, D. D., Vyas, S., Sethi, S., & Manktala, R. (2003). *Study to Promote the Industrial Exploitation of Green Tea Polyphenols in India*. Trieste, Italia: The United Nations Industrial Development Organization (UNIDO) or the International Centre for Science and High Technology (ICS).
- Worsfold, P. J., & Kingdom, U. (2017). *Spectrophotometry: Overview ☆. Encyclopedia of Analytical Science 3rd edition* (3rd ed.). Elsevier Inc. <https://doi.org/10.1016/B978-0-12-409547-2.14265-9>
- Wu, J., Chiang, M., Chang, Y., Chen, J., Yang, H., Lii, C., Yao, H. (2011). Correlation of Major Components and Radical Scavenging Activity of Commercial Tea Drinks in Taiwan, *19*(3), 289–300
- Wulandari, L. (2011). *Kromatografi Lapis Tipis* (Pertama). Jember: PT Taman Kampus Presindo
- Xu, Y. Q., Ji, W. Bin, Yu, P., Chen, J. X., Wang, F., & Yin, J. F. (2018). Effect of extraction methods on the chemical components and taste quality of green tea extract. *Food Chemistry*, *248*(December 2017), 146–154. <https://doi.org/10.1016/j.foodchem.2017.12.060>
- Zeng, J., Xu, H., Cai, Y., Xuan, Y., Liu, J., Gao, Y., & Luan, Q. (2018). The Effect of Ultrasound, Oxygen and Sunlight on the Stability of (–)-Epigallocatechin Gallate.

Molecules, 23, 1–13. <https://doi.org/10.3390/molecules23092394>

Zeng, L., Ma, M., Li, C., & Luo, L. (2017). Stability of tea polyphenols solution with different pH at different temperatures. *International Journal of Food Properties*, 20(1), 1–18. <https://doi.org/10.1080/10942912.2014.983605>