

## DAFTAR PUSTAKA

- Abidin, Z., Putri, U. A., & Widiastuti, H. (2020). Potensi Anti-inflamasi Fraksi Etil Asetat Ranting Patah Tulang (*Euphorbia tirucalli* L.) dengan Uji Penghambatan Denaturasi Protein. *Ad-Dawaa' Journal of Pharmaceutical Sciences*, 2(2), 49–54. <https://doi.org/10.24252/djps.v2i2.11549>
- Ahmad N. (2018). Ekstraksi Senyawa Bahan Alam. Yogyakarta. Penerbit Deepublish. Hal : 36-38.
- Anita, Eka. (2021). Penetapan Kadar Protein Pada Susu Kedelai yang Dijual di Pajak Sore Padang Bulan Medan Secara Spektrofotometri UV-Vis. *Tugas Akhir*. Universitas Sumatera Utara.
- Anwar, S., Almatroudi, A., Allemailem, K. S., Joseph, R. J., Khan, A. A., & Rahmani, A. H. (2020). Protective effects of ginger extract against glycation and oxidative stress-induced health complications: An in vitro study. *Processes*, 8(4). <https://doi.org/10.3390/PR8040468>
- Anyasor, G. N., Okanlawon, A. A., & Ogunbiyi, B. (2019). Evaluation of antiinflammatory activity of *Justicia secunda* Vahl leaf extract using in vitro and in vivo inflammation models. *Clinical Phytoscience*, 5(1). <https://doi.org/10.1186/s40816-0190137-8>
- AOAC. 2012. Official methods of analysis, Association of official analytical chemist 19<sup>th</sup> edition, Washington D.C., USA.
- Bailey-shaw, Y. A., Williams, L. A. D., Green, C. E., Rodney, S., & Smith, A. M. (2017). In-Vitro Evaluation of the Anti-Inflammatory Potential of Selected Jamaican Plant Extracts using the Bovine Serum Albumin Protein Denaturation Assay. *International Journal of Pharmaceutical Sciences Review and Research*, 47(1), 145–153.
- BSN (2011). SNI 3141.1:2011 Susu segar-Bagian 1: Sapi. *Standar Nasional Indonesia*, 1–4.
- BSN (2005). SNI 01.7087.2005. Jahe Untuk Bahan Baku Obat. *Standar Nasional Indonesia*.
- Chandra, S., Chatterjee, P., Dey, P., & Bhattacharya, S. (2012). Evaluation of in vitro anti-inflammatory activity of coffee against the denaturation of protein. *Asian Pacific Journal of Tropical Biomedicine*, 2(1), S178– S180. [https://doi.org/10.1016/S22211691\(12\)60154-3](https://doi.org/10.1016/S22211691(12)60154-3)

- Chen, L., Deng, H., Cui, H., Fang, J., Zuo, Z., Deng, J., Li, Y., Wang, X., & Zhao, L. (2018). Inflammatory responses and inflammation-associated diseases in organs. *Oncotarget*, 9(6), 7204–7218. <https://doi.org/10.18632/oncotarget.23208>
- Davoodi, S. H., Shahbazi, R., Esmaeili, S., Sohrabvandi, S., Mortazavian, A. M., Jazayeri, S., & Taslimi, A. (2016). Health-related aspects of milk proteins. *Iranian Journal of Pharmaceutical Research*, 15(3), 573–591. <https://doi.org/10.22037/ijpr.2016.1897>
- Departemen Kesehatan RI. 2000. *Parameter Standar Umum Ekstrak Tumbuhan Obat*. Jakarta: Bakti Husada
- Departemen Kesehatan RI. 2020. *Farmakope Indonesia Edisi VI*. Jakarta: Kementerian Kesehatan RI.
- Departemen Kesehatan RI. 2017. *Farmakope Herbal Edisi 2*. Jakarta : Kementerian Kesehatan RI.
- Dwi, Koko Pratoko, Firdha, Aprillia Wardhani, Nia, Kristiningrum, Fifteen, Aprila Fajrin, Dian, Agung Pangaribowo. (2018). Kadar Fenolat dan Flavonoid Total serta Kapasitas Antioksidan Ekstrak Etanol dan Fraksi Jahe Merah (*Zingiber officinale* var. Rubrum). *Al-Kimia*. Vol. 6, No. 2, Juli-Desember 2018. 1-16.
- Estiasih, T., dkk. (2016). *Kimia dan Fisik Pangan*. Bumi Aksara. Jakarta.
- Fang, Q., Sun, J., Cao, D., Tuo, Y., Jiang, S., & Mu, G. (2017). Experimental and modelling study of the denaturation of milk protein by heat treatment. *Korean Journal for Food Science of Animal Resources*, 37(1), 44–51. <https://doi.org/10.5851/kosfa.2017.37.1.44>
- Farrel, Rizki, Aulawi, Tahrir, Darmawi, Ahmad. (2020). Analisis Mutu Simplisia Rimpang Jahe Merah (*Zingiber officinale* Var.Rubrum) dengan Suhu Pengeringan yang Berbeda. *Jurnal Pertanian Tropik*. Vol.7. No.1. April 2020 (18) 136- 143. DOI: 10.32734/jpt.v7i1,April.3866.
- Fohely, F., Suardi, N. (2018). Study the Characterization of Spectral Absorbance on Irradiated Milk Protein. *Journal of Physics : Conference Series*, 995 (1), <https://iopscience.iop.org/article/10.1088/1742-6596/995/1/012056>
- Gonzalez, A.G. Herrador,M.A., 2007. A Practical Guide to Analytical Method Validation, including Measurement Uncertainty and Accuracy Profiles. *Trends in Analytical Chemistry*, 26 (3). 227-238
- Guyton AC, Hall JE. (2016). *Buku Ajar Fisiologi Kedokteran*. Edisi 11. Jakarta: EGC.
- Hanani, E. (2015). *Analisis Fitokimia*. Jakarta: EGC.

- Harmita, 2004. Petunjuk Pelaksanaan Validasi Metode dan Cara Perhitungannya. *Majalah Kefarmasian*. Departemen Farmasi FMIPA-UI. Vol.1, No.3 Desember 2004.117-135.
- Ifora, I., Fauziah, F., & Mayora, S. A. (2020). Aktivitas Anti-inflamasi dan Daya Hambat Siklooksigenase-2 Ekstrak Etanol Daun Tembelekan ( *Lantana camara L.* ). *Jurnal Farmasi Higea*, 12(1), 32–39.
- Katzung, B. G. (2006). *Farmakologi Dasar Dan Klinis Edisi 6*. Jakarta: EGC.
- Kemkes RI. (2018). Laporan\_Nasional\_RKD2018\_FINAL.pdf. In *Badan Penelitian dan Pengembangan Kesehatan* (p. 198).  
[http://labdata.litbang.kemkes.go.id/images/download/laporan/RKD/2018/Laporan\\_Nasional\\_RKD2018\\_FINAL.pdf](http://labdata.litbang.kemkes.go.id/images/download/laporan/RKD/2018/Laporan_Nasional_RKD2018_FINAL.pdf)
- Kristianti, Ayu. (2020) Uji antipiretik patch ekstrak etanol jahe merah dengan enhancer asam oleat terhadap temperatur dan jumlah neutrofil pada tikus putih. *Undergraduate thesis*. Faculty of Pharmacy Widya Mandala Catholic University Surabaya
- Kumar, D., & Ali, A. (2019). Antiglycation and antiaggregation potential of thymoquinone. *Natural Volatiles and Essential Oils*, 6(1), 25–33.
- Lovell, A. R., & Ernst, M. E. (2017). Drug-Induced Hypertension: Focus on Mechanisms and Management. *Current Hypertension Reports*, 19(5), 39.  
<https://doi.org/10.1007/s11906-017-0736-z>
- Lutfiana, (2013). Uji Aktivitas Antiinflamasi Ekstrak Daun Kelor (*Moringa oleifera* Lam.) Dengan Metode Stabilisasi Membran Sel Darah Merah Secara In Vitro. *Skripsi*. Fakultas Kedokteran dan Ilmu Kesehatan. Program Studi Farmasi. UIN Syarif Hidayatullah Jakarta.
- Mahendran, G., Manoj, M., Rajendra Prasad, K. J., & Narmatha Bai, V. (2015). Antioxidants, antiproliferative, anti-inflammatory, antidiabetic and antimicrobial effects of isolated compounds from *Swertia corymbosa* (Grieb.)Wight ex C.B. Clark – An in vitro approach. *Food Science and Human Wellness*, 4(4), 169–179.  
<https://doi.org/10.1016/j.fshw.2015.08.003>
- Marangoni, F., Pellegrino, L., Verduci, E., Ghiselli, A., Bernabei, R., Calvani, R., Cetin, I., Giampietro, M., Perticone, F., Piretta, L., Giacco, R., La Vecchia, C., Brandi, M. L., Ballardini, D., Banderali, G., Bellentani, S., Canzone, G., Cricelli, C., Faggiano, P., ... Poli, A. (2019). Cow's Milk Consumption and Health: A Health Professional's Guide. *Journal of the American College of Nutrition*, 38(3), 197–208.  
<https://doi.org/10.1080/07315724.2018.1491016>
- Mardiyah, R., Fauzi, A., & Syam, A. F. (2017). Diagnosis dan Tata Laksana Enteropati akibat Obat Anti Inflamasi Non Steroid (OAINS). *Jurnal Penyakit Dalam Indonesia*, 2(3), 190. <https://doi.org/10.7454/jpdi.v2i3.84>
- Muliati, Finti. (2014). Uji Aktivitas Antiinflamasi Ekstrak Daun Paku *Pyrrosia lanceolata* (L.) Farw. Terhadap Penghambatan Denaturasi Protein Secara In Vitro. Fakultas Kedokteran dan Ilmu Kesehatan. Program Studi Farmasi UIN Jakarta.

- Nikolaidis, A., & Moschakis, T. (2017). Studying the denaturation of bovine serum albumin by a novel approach of difference-UV analysis. *Food Chemistry*, 215(August), 235–244. <https://doi.org/10.1016/j.foodchem.2016.07.133>
- Irianti, N. D., & Nasution, A. M. (n.d.). *Characterization of spectral absorbance for determining the reduction in protein's contents due to heating (study case of cow's milk)*. [http://personal.its.ac.id/files/pub/3576-anasution-epBME Days 2010.pdf](http://personal.its.ac.id/files/pub/3576-anasution-epBME%20Days%202010.pdf)
- Parbuntari, H., Prestica, Y., Gunawan, R., Nurman, M. N., Adella. 2018. Preliminary Phytochemical Screening (Qualitative Analysis) of Cacao Leaves (*Theobroma cacao* L.). *Eksata*. 19(2): 40-45. DOI : 10.24036/eksakta/vol19iss02/142
- Prasad, S., & Tyagi, A. K. (2015). Ginger and its constituents: Role in prevention and treatment of gastrointestinal cancer. *Gastroenterology Research and Practice*, 2015. <https://doi.org/10.1155/2015/142979>
- Purnomo, H. Studi tentang stabilitas protein dan dendeng selama penyimpanan. Laporan Penelitian Fakultas Peternakan Universitas Brawijaya : Malang, 2007.
- Putri, S., Nusantara, F., & Putri, S. (2017). Aplikasi Pendekatan Metabolomik untuk Ilmu Pangan dan Mikrobiologi. *Bunga Rampai Forum Peneliti Muda Indonesia, March 2018*. <https://doi.org/10.1177/1461444810365020>
- Quasie, O., Zhang, Y. M., Zhang, H. J., Luo, J., & Kong, L. Y. (2016). Four new steroid saponins with highly oxidized side chains from the leaves of *Vernonia amygdalina*. *Phytochemistry Letters*, 15, 16–20. <https://doi.org/10.1016/j.phytol.2015.11.002>
- Rahmadani, Santi, Siti Sa'diah, Sri Wardatun. (2018). *Optimasi Ekstraksi Jahe Merah (Zingiber officinale Roscoe) dengan Metode Maserasi*. *Teknologi Pangan*. Vol.1, No.2, 1-8.
- Ramandani, D., L.E. Radiati dan Purwadi. (2015). Quality of Pasteurized Milk Using Microwave. *Skripsi*. Fakultas Peternakan Univeristas Brawijaya.
- Ratnawati L, Denilasari D, L E Yulianti, D Kristanti. (2020). The effect of particle size and breing time of Ginger (*Zingiber officinale*) poder to the characteristic and acceptance of the herbal product. *The 6<sup>th</sup> International Symposium on Applie Chemistry (ISAC) 2020*. <https://doi.org/10.1088/1757-899X/1011/1/012032>
- Resi, A. W., Sugani, A. (2009). Flavonoida (Quersetin) dalam Makalah Kimia Organik. Program S2 Kimia. Makasar : Universitas Hassanudin Indonesia.
- Rifai, A., Asy'ari, M., & Aminin, A. L. N. (2020). Anti-aggregation effect of Ascorbic Acid and Quercetin on aggregated Bovine Serum Albumin Induced by Dithiothreitol: Comparison of Turbidity and Soluble Protein Fraction Methods. *Jurnal Kimia Sains dan Aplikasi*, 23(4), 129-134. <https://doi.org/10.14710/jksa.23.4.129-134>

- Rohman, A. (2007). *Kimia Farmasi Analisis*. Yogyakarta. Pustaka Pelajar.
- Rusli, Zaldy, Lusi A. S. (2020). *Modifikasi Metode Analisis Daya Hambat terhadap Proses Denaturasi Protein yang Diinduksi oleh Panas*. CHEESA : Chemical Engineering Research Article. <http://e-journal.unipama.ac.id/index.php/cheesa>.
- Setyawan, A. D., Wiryanto, W., Suranto, S., Bermawie, N., & Sudarmono, S. (2015). Short Communication: Comparisons of isozyme diversity in local Java cardamom (*Amomum compactum*) and true cardamom (*Elettaria cardamomum*). *Nusantara Bioscience*, 6(1), 86–93.  
<https://doi.org/10.13057/nusbiosci/n060114>
- Shahrajabian, M. H., Sun, W., & Cheng, Q. (2019). Clinical aspects and health benefits of ginger (*Zingiber officinale*) in both traditional Chinese medicine and modern industry. *Acta Agriculturae Scandinavica Section B: Soil and Plant Science*, 69(6), 546–556.  
<https://doi.org/10.1080/09064710.2019.1606930>
- Sharif, M. F., & Bennett, M. T. (2016). The effect of different methods and solvents on the extraction of polyphenols in ginger (*Zingiber officinale*). *Jurnal Teknologi*, 78(11–2), 49–54. <https://doi.org/10.11113/jt.v78.9943>
- Shen, Chang-Hui. (2019). Quantification and Analysis of Proteins. Diagnostic Molecular Biology. Academic Press. Pages 167-185, ISBN 9780128028230. <https://doi.org/10.1016/B978-0-12-802823-0.00007-9>
- Singletary, K. 2010 : Ginger, An overview of health benefits. *Food Science*. Volume 45. Issue 4. Page : 171-183.  
<https://agris.fao.org/agrissearch/search.do?recordID=US201900379277>
- Skoog, D.A., Holler, F. J., and Crouch, S. R., (2007). Principles of Instrumental Analysis Sixth Edition. Canada: Thomson Corporation, pp. 367-390.
- Srikandi, Mira Humairoh, RTM Sutamihardja. (2020). Kandungan Gingerol dan Shogaol dari Ekstrak Jahe Merah (*Zingiber officinale Roscoe*) Dengan Metode Maserasi Bertingkat. Al-Kimiya. *Jurnal Ilmu Kimia dan Terapan*. Vol. 7. No. 2 (75-81) Desember 2020. Bandung : UIN Sunan Gunung Djati Bandung.
- Supu, R. D., Diantini, A., & Levita, J. (2019). Red Ginger (*Zingiber officinale* var. *Rubrum*): It's Chemical Constituents, Pharmacological Activities And Safety. *FITOFARMAKA: Jurnal Ilmiah Farmasi*, 8(1), 23–29.  
<https://doi.org/10.33751/jf.v8i1.1168>
- Susanti, Sanny. 2010. Penetapan Kadar Formaldehid Pada Tahu Yang Dijual Di Pasar Ciputat Dengan Metode Spektrofotometri UV-Vis Disertai Kolorimetri Menggunakan Pereaksi NASH. *Skripsi*. Jakarta. UIN

- Tjay, T. H., & Rahardja, K. 2007. *Obat-Obat Penting: Khasiat, penggunaan dan efek-efek sampingnya Edisi keenam*. Jakarta: PT Elexmedia Komputindo Kelompok Gramedia.
- Tosif, M.M.; Najda, A.; Bains, A.; Krishna, T.C.; Chawla, P.; Dyduch-Siemin´ska, M.; Klepacka, J.; Kaushik, R. A Comprehensive Review on the Interaction of Milk Protein Concentrates with Plant-Based Polyphenolics. *Int. J. Mol. Sci.* 2021, 22, 13548. <https://doi.org/10.3390/ijms222413548>
- Ware, M. 2017. Ginger: Health Benefits and Dietary Tips. *Medical news today*. <https://www.medicalnewstoday.com/articles/265990.php>.
- Whittaker, J. A., & Vogler, B. (2008). *The in vitro Anti-denaturation Effects Induced by Natural Products and Non-steroidal Compounds in Heat Treated ( Immunogenic ) Bovine Serum Albumin is Proposed as a Screening Assay f ... The in vitro Anti-denaturation Effects Induced by Natural Products . October.* <https://doi.org/10.1215/9780822388630-010>
- Winarno, F. G. dan I. E. Fernandez. 2007. *Susu dan Produk Fermentasinya*. Bogor: M-BRIO Press.
- Zhou, Y., Hong, Y., & Huang, H. (2016). Triptolide Attenuates Inflammatory Response in Membranous Glomerulo-Nephritis Rat via Downregulation of NF-κB Signaling Pathway. *Kidney and Blood Pressure Research*, 41(6), 901–910. <https://doi.org/10.1159/000452591>
- Zhou, S., S. Seo., I. Alli and Y.W. Chang. 2015. Interactions of Caseins with Phenolic Acids Found in Chocolate. *Food Research International*. 74 : 177-184.