

DAFTAR PUSTAKA

- Anh Ha,T.V, Saehoen Kim, Yeri Choi, Hae Soo Kwak Sung, Je Lee, JingYuan Wen, Indrawaty Oey, SangHoon Ko., 2015. “Antioxidant and Bioaccessibility of Size Different Nanoemulsion For Lycopene- Enriched Tomato Extract, “*Food Chemistry*, 178 (2015), 115-121
- Agarwal S, dan Rao A.V. 2000. Role of Antioxidant Lycopene in cancer and rats diseases. *Journal of the American Collage of Nutrion*. Vol. 19 (5): 563-569.
- Aghel N, Ramezani Z dan Amir Fakhrian S. 2011 “Isolation and Quantification of Lycopene From Tomato Cultivater in Dezfool, Iran ”, *Jundishapur Journal of Natural Pharmaceutical Products*, 6(1), 9-15.
- Agoes., G., 2008, *Pengembangan Sediaan Farmasi.*, Bandung, ITB-Press. Hal 337-352.
- Arifulloh, Ika Oktavianawati, I Nyoman Adi Winata. 2016. “*Ekstraksi Likopen Dari Buah Tomat (Lycopersicon Esculentum) Dengan Berbagai Komposisi Pelarut.* Jurusan Kimia, Fakultas MIPA, Universitas Jember (UNEJ).
- Balgosklonny.M.V, 2021, P53 : an Ubiquitous Target of Anticancer Drugs, *International Journal of Cancer*, <http://doi.org/10.1002/igc.1058>.
- Bouchemal, K, Briancon,S., Perrier, E., and Fessi, H, 2004, Nanoemulsion Formulation Using Spontaneous Emulsification; Solvent, Oil and Surfactant Optimisation, *International Journal of Pharmaceutic*, 280: 241-251
- Chairunnisa, ririn. 2012. *Pengaruh Jumlah Pasta Tomat Terhadap Penurunan Kadar Gula Darah Pada Mencit Diabetes*. Fakultas Teknologi Industri Pertanian, Pasca Unand.
- Chapdelaine, J. M. 2006. MTT Reduction-A Tetrazolium-based Calorimetric Assay for Cells Survival and Proliferation. *Pharmacon Research International, Inc. Maxline Microplate Reader*. 2 (3): 273-281.
- Chauhan, K., S. Sharma, N. Agarwal and B. Chauhan. 2011. Lycopene of Tomato Fame: Its Role in Health and Disease. Review Article. *International Journal of Pharmaceutical Sciences Review and Research*. Vol. 10. Pp: 99-115

- Chaudhary S, Aqil M, Sultana Y, Kalam MA. Self-nanoemulsifying drug delivery system of nabumetone improved its oral bioavailability and anti-inflammatory effects in rat model. *J Drug Deliv Sci Technol*, 2019;51:736–45. <https://doi.org/10.1016/j.jddst.2018.04.009>
- C. A. Lipinski., 2000., “Drug-like properties and the causes of poor solubility and poor permeability,” *J. Pharmacol. Toxicol. Methods*, vol. 44, no. 1, pp. 235–249.
- Canene-Adams K., Clinton, S. K., King, J. L., Lindshield, B. L., Wharton C., Jeffery, E. & Erdman, J. W. Jr. 2004. The growth of the Dunning R-3327H transplantable prostate adenocarcinoma in rats fed diets containing tomato, broccoli, lycopene, or receiving finasteride treatment. *FASEB J.* 18(591):4.
- Chen.H., Khehtong.C.Yang., X.Chang, X.and Gao J, 2010., Nanomization Strategis for Poorly Water Soluble Drugs, *Drug Discovery Today*, 16 (7-8): 354-360
- Christianty D, Tarigan,S.F, Masyitah, Z. 2015. Kristalisasi Likopen dari Buah Tomat (*Lycopersicon esculentum*) menggunakan Antisolvent. *Jurnal Teknik Kimia USU*, Vol. 4, No. 4
- Depkes RI, 2000 . *Parameter Standar Umum Ekstrak Tumbuhan Obat, Departemen Kesehatan Republik Indonesia* : Jakarta. pp. 10-11.
- Depkes RI, 1995 . *Farmakope Indonesia edis IV, Departemen Kesehatan Republik Indonesia* : Jakarta. pp.
- Dewi, P. dan Jumini. 2012. Pertumbuhan dan Hasil Dua Varietas Tomat Akibat Perlakuan Jenis Pupuk. *Jurnal Floratek*.7:76-84.
- Di Mascio, P ., Kaiser, S., Sies, H., *Lycopene as The Most Efficient Biological Carotenoid Singlet Oxygen Quencher. Archives of Biochemistry and Biophysics*. 1989.
- Ezzati Nazhad Dolatabadi J, Hamishehkar H, Valizadeh H. Development of dry powder inhaler formulation loaded with alendronate solid lipid nanoparticles: solid-state characterization and aerosol dispersion performance. *Drug Dev Ind Pharm* 2015;41:1431–7. <https://doi.org/10.3109/03639045.2014.956111>.
- Gupta, S.,2010, Pharmaceutical Nanotechnology Novel Nanoemulsion-High Energy Emulsification Preparation, Evaluation and Application, *The Pharma Research*, 3. 117-138

- Harborne, J.B, 1996, *Metode Fitokimia*, Cetakan II, diterjemahkan oleh Kosasih Padma Winata dan Iwang Soediro, ITB Press, Bandung, 70-72.
- Huawei, Z., Xiaowen, W., Elshareif, O., Hong L., Qingrui, S. and Lianfu, Z., 2014, "Isomerisation and degradation of lycopene during heat processing in simulated food system.," *International Food Research Journal* 21 (1) : 45-50
- Hwang, S., Joo Weon Lim and Hyeyoung Kim, 2017, "Inhibitory Effect of Lycopene on Amyloid- β -Induced Apoptosis in Neuronal Cells.," *Nutrients*, 9, 883
- Jones, J.B. 2008. *Tomato Plant Culture in the Field, Green House, and HomeGarden*. CRC Press: Taylor and Francis Group. 400 Pages.
- J. Wright, "Nanotechnology: Deliver on a promise," *Scientific American*, vol. 311, no. 1, pp. S12–S13, 2014.
- J. H. Park, G. Saravanakumar, K. Kim, and I. C. Kwon, 2010, "Targeted delivery of low molecular drugs using chitosan and its derivatives," *Adv Drug Deliv Rev*, vol. 62, pp. 28–41.
- J. M. Rabanel, V. Aoun, I. Elkin, M. Mokhtar, and P. Hildgen, 2012, "Drug-loaded nanocarriers: Passive targeting and crossing of biological barriers," *Current Medicinal Chemistry*, vol. 19, no. 19, pp. 3070–3102.
- J. Rautio, H. Kumpulainen, T. Heimbach et al., "Prodrugs: design and clinical applications," *Nature Reviews Drug Discovery*, vol. 7, no. 3, pp. 255–270, 2008.
- Kassem AA, Mohsen AM, Ahmed RS, Essam TM. Self-nanoemulsifying drug delivery system (SNEDDS) with enhanced solubilization of nystatin for treatment of oral candidiasis: Design, optimization, in vitro and in vivo evaluation. *J Mol Liq* 2016;218:219–32. <https://doi.org/10.1016/j.molliq.2016.02.081>.
- Kommuru. T.r., Gurley, B.Khan, M.A, Reddy., I, K, 2001, Self Emulsifying Drug Delivery System (SEDDS) of Coenzym D10 : "Formulation For Enhanced Bioavailability Assesment", *International Journal of Pharmacy*: 212;233-246
- Kim, H.E and Cho, G.W, 2013., Nanoemulsion Contains Vitamin e-acetate Prepared by PIC (Phase Inversion Composition Methodes), Factor Affecting Droplet Sizes, *Journal of Korean Oil Chemist Socation*, Korea

- Kumar, R. & Soni, G. C. 2017. Formulation development and evaluation of Telmisartan Nanoemulsion. Prajapati, *International Journal of Research and Development in Pharmacy & Life Science*, 4(6), pp. 2711-2719.
- Lavecchia, R. and A. Zuorro. 2008. Enhancement of Lycopene Extraction from Tomato Peels by Enzymatic Treatment. *Chemical Engineering Transactions*. Vol. 14. Pp: 301-308
- L. Brannon-Peppas and J. O. Blanchette, 2012, "Nanoparticle and targeted systems for cancer therapy," *Drug Deliv Rev*, vol. 64.
- Lucida, H., Lili Fitriani, Netty Suharti, 2019, "Pengembangan Potensi Buah Tomat (*Solanum Lycopersicum*) Sebagai Sumber Likopen untuk Calon Bahan Baku Obat dan Kosmetik", *Laporan Penelitian Terapan Unggulan Universitas Andalas*, Klaster Riset-Publikasi Guru Besar, Fakultas Farmasi Universitas Andalas
- Myong Roh, Kyun, Min Hee Jeon, Jin Nam Moon, Woi Sook Moon, Sun Mee Park dan Jae Suk Choi., 2013, *A Simple Method For The Isolation of Lycopene from Lycopersicon esculentum*, *Botanical Sciences*, 91 (2), 187-192.
- Nirmalayanti, N.P.K., Vidya 2021, "Skринing Berbagai Jenis Surfaktan dan Ko Surfaktan Sebagai Dasar Pemilihan Formulasi Nanoemulsi", *Jurnal Ilmu Multidiplin, Volume 1 Nomor 3*
- Nyoman, D. 2016. Uji efektivitas teknik ekstraksi dan dry heat treatment terhadap kesehatan bibit tomat (*Lycopersicum esculentum*. Mill). *Jurnal Agroekoteknologi*. 5 (1) : 2301 – 6515.
- Nuray Z. Unlu1 , Torsten Bohn1 , David M. Francis2 , Haikady N. Nagaraja3 , Steven K. Clinton4 and Steven J. Schwartz1., 2007., "Lycopene from heat-induced cis-isomer-rich tomato sauce is more bioavailable than from all-trans-rich tomato sauce in human subjects"., *British Journal of Nutrition*, 98, 140-146
- Pal.A., Rita Kundu, 2019, Human Papillomavirus E6 and E7;The Cervical Cancer Hallmarks and Targets For therapy, *Frointer Microbiology, Sec.Virology*, Volume. 10-2019, <http://doi.org/10.3389/fmicro.2019.03116>
- Parmar N, Singla N, Amin S, Kohli K, 2011, Study of cosurfactant effect on nanoemulsifying area and development of lercanidipine loaded (SNEDDS) self nanoemulsifying drug delivery system. *Colloids Surf B Biointerfaces*; 86:327–38. <https://doi.org/10.1016/j.colsurfb.2011.04.016>.
- Patel, 2013., Formulation and Evaluation of O/W Nanoemulsion of Ketokenazole, *Pharma Science Monitor*, 4 (4) : 338-351

- Pavia, D.L., Lampman, G.M., and Kriz-jr, G.S. 2009. *Introduction to Spectroscopy: A Guide for Student of Organic Chemistry*. W.B. Saunders Company, Philadelphia, USA
- Puah, Boon Peng, Jalil Juriyati Attiq, Ali Kamisah, Yusof., 2021, New Insights Into Molecular Mechanism Behind Anti-Cancer Activities of Lycopene, *Molecules*, vol 26, Issue 13, page 1-29
- Respati, E., L. Hasanah, S. Wahyuningsih, Sehusman, M. Manurung, Y. Supriyati, dan Rinawati. 2014. *Buletin Konsumsi Pangan. Pusat Data dan Sistem Informasi Pangan*. Vol. 5(4)
- Roh, M. K., Jeon, M. H., Moon, J. N., Moon, W. S., Park, S. M., & Choi, J. S. (2013). A simple method for the isolation of lycopene from *Lycopersicon esculentum*. *Botanical Sciences*, 91(2), 187–192. <https://doi.org/10.17129/botsci.413>
- Rizk, Effat M., Alaa T. El-Kady, and Amany R. El-Bialy. 2014. Characterization of carotenoids (lyco-red) extracted from tomato peels and its uses as natural colorants and antioxidants of ice cream. *Annals of Agricultural Science*. Vol. 59. Pp: 53-61.
- R. E. Serda, B. Godin, E. Blanco, C. Chiappini, and M. Ferrari, “Multi-stage delivery nano-particle systems for therapeutic applications,” *Biochimica et Biophysica Acta - General Subjects*, vol. 1810, no. 3, pp. 317–329, 2011.
- Saraf S, Jeswani G, Kaur CD, Saraf S. Development of novel herbal cosmetic cream with curcuma longa extract loaded transfersomes for antiwrinkle effect. *African journal of pharmacy and pharmacology*. 2011 Aug 1;5(8):1054-62.
- Senapati PC, Sahoo SK, Sahu AN., 2016., Mixed surfactant based (SNEDDS) self-nanoemulsifying drug delivery system presenting efavirenz for enhancement of oral bioavailability. *Biomed Pharmacother*;80:42–51. <https://doi.org/10.1016/j.biopha.2016.02.039>
- Setiawan, A. Budi. 2015. *Induksi Partenokarpi pada Tujuh genotip tomat (Solanum lycopersicum) dengan Giberelin*. Tesis. Yogyakarta: UGM
- Siddiq, J. 2010. *Rahasia, Khasiat dan Manfaat Bumbu Dapur, Rempah-rempah dan Sayuran*. Surya Media. Yogyakarta.
- Silverstein, R. M., Webster, F. X., & Kiemle, D. J. 2012. *Penyidikan Spektrometri Senyawa Organik Edisi IV*. Jakarta : Erlangga.

- Stahl & Sies, 1996. *Oxidative stress and male infertility—a clinical perspective*. <http://humupd.oxfordjournals.org/cgi/content/full/dmn004v1.1> April 2009.
- Sunarmani, Kun Tanti, D., 2008, *Parameter Likopen Dalam Standardisasi Konsentrat Buah Tomat*, Penelitian Balai Besar dan Pengembangan Pascapanen Pertanian, Jakarta.
- Sanjiv Agarwal Akkinappally, Venketeshwer Rao, 2000., *Tomato Lycopene and Its Role in Human Health and Chronic Diseases*, Faculty of Medicine, University of Toronto.
- Shafiq, S. et al. 2007. Development and bioavailability assessment of ramipril nanoemulsion formulation., *Eur J Pharm Biopharm*; 66:227-243.
- Socaci, S. A., Socaciu, C., Mureşan, C., Fărcaş, A., Tofană, M., Vicaş, S., & Pintea, A. (2014). Chemometric discrimination of different tomato cultivars based on their volatile fingerprint in relation to lycopene and total phenolics content. *Phytochemical Analysis*, 25(2), 161–169. <https://doi.org/10.1002/pca.2483>
- Soares, N.C.P. Clara.L.M, Bruno.B.T, Ingrid.C.C.L, Etel.R.P.G, Anderson.J.T, Christina.T, Radovan.B, 2017., “ Lycopene Extract from Different Tomato-Based Food Products Induce Apoptosis in Cultured Human Primary Prostate Cancer Cell and Regulate TP53, Bax and Bcl-2 Transcript Expression”., *Asian Pasific Journal of Cancer Prevention*, Vol 18.,
- Stephanie, 2005, *Pengaruh Variasi Fase Minyak Virgin Coconut Oil dan Medium Chain Triglicerida Oil Terhadap Stabilitas Fisik Nanoemulsi Minyak Biji Delima dengan Kombinasi Surfaktan, Tween 80 dan Kosurfaktan PEG 400*, Universitas Sanata Dharma Yogyakarta.
- Talegaonkar. S., Azeom.A., Ahmad FJ., Khar RK, Plathar SA, Khan Zi, 2008, Microemulsion, A Novel Approach to Enhanced Drug Delivery, *Recent Patent on Drug Delivery & Formulation*, 238-257
- Tarigan,S.F, Christianty D, Masyitah, Z. 2016. Ekstraksi Likopen dari Buah Tomat (*Lycopersicum Esculentum*) Menggunakan Pelarut Tunggal dengan Metode Kristalisasi Antisolvent. *Jurnal Teknik Kimia USU*, Vol. 5, No. 2: 9-14
- Teodoro.A.J., Felipe L.O., Nathalia.B.M., Guiherme de Azevedo Maia., Renata.B.M., Rodovan Borojevic., 2012., Effect of Lycopene on Cell Viability and Cell Cycle Progression in Human Cancer Cell Lines, Primary Research, *Cancer Cell International* 12:36
- Thomas.W.M., Boileau, Amy C Boileau, and Jhon.W.Erdman.J., 2002., “Bioavailability of All-Trans and Cis Isomer of Lycopene”. copy from *Society For Experimental Biology and Medicine*,

- Trott O & Olson AJ.2010. AutoDock Vina : improving the speed and accuracy of docking with a new scoring function, efficient optimizing and multithreading, *Journal of Computational Chemistry* 31 (2010)
- Vatsraj, S. et al. 2014. Formulation of a novel nanoemulsion system for enhanced solubility of a sparingly water soluble antibiotic, Clarithromycin. *Journal of Nanoscience* 2014: 1-7.
- V. J. Wachter, L. Salphati, and L. Z. Benet, 2001, "Active secretion and enterocytic drug metabolism barriers to drug absorption," *Advanced Drug Delivery Reviews*, vol. 46, no. 1-3, pp. 89–102,
- Voight, R., 1995, *Buku Pelajaran Teknologi Farmasi*, diterjemahkan oleh Soendani.N.S, UGM Press, Yogyakarta.
- Weerapreeyakul N, Nonpunya A, Barustux S, Thitimetharoch T, Sripanidkulchai B. 2012. Evaluation of the anticancer potential of six herbs against a hepatoma cell line., *Chinese Medical Journal*. 7(15): 1-7
- Wenli, Y., Z. Yaping., X. Zhen., J. Hui dan W. Dapur, 2001, *The antioxidant properties of lycopene concentrate extracted from tomato paste* www.wikipedia.com.
- Wang F, Liigand J, Tian S, Arndt D, Greiner R, and Wishart D., 2021, CFM-ID 4.0: More Accurate ESI MS/MS Spectral Prediction and Compound Identification. *Analytical Chemistry* 202193 (34), 11692-11700 DOI: 10.1021/acs.analchem.1c01465

