

DAFTAR PUSTAKA

- Alizadeh, F., Javadi, M., Karami, A. A., Gholaminejad, F., Kavianpour, M., & Haghighian, H. K. (2018). Curcumin nanomicelle improves semen parameters, oxidative stress, inflammatory biomarkers, and reproductive hormones in infertile men: A randomized clinical trial. *Phytotherapy Research*, 32(3), 514–521. <https://doi.org/10.1002/ptr.5998>
- Alizadeh, M., & Kheirouri, S. (2019). Curcumin reduces malondialdehyde and improves antioxidants in humans with diseased conditions: A comprehensive meta-analysis of randomized controlled trials. *BioMedicine (Taiwan)*, 9(4), 10–22. <https://doi.org/10.1051/bmdcn/2019090423>
- Alyani, F. S., Yulianti, R., & Thadeus, M. S. (2021). The Effect of Roselle (*Hibiscus sabdariffa*) Extract on Malondialdehyde Level in Rat Liver. *Jurnal Gizi Dan Pangan*, 16(1), 57–62. <https://doi.org/10.25182/jgp.2021.16.1.57-62>
- Anggraini, W., Rousdy, D. W., & Wardoyo, E. R. P. (2021). Nilai Malondialdehid Hepar Mencit Yang Diinduksi Parasetamol Pada Pemberian Ekstrak Metanol Kulit Kayu Vitex Pubescens Vahl. *Jurnal Protobiont*, 10(1), 6–11.
- Ayala, A., Muñoz, M. F., & Argüelles, S. (2014). Lipid peroxidation: Production, metabolism, and signaling mechanisms of malondialdehyde and 4-hydroxy-2-nonenal. *Oxidative Medicine and Cellular Longevity*, 2014. <https://doi.org/10.1155/2014/360438>
- Bansal, & Khalili. (2022). *Orlistat*. <https://www.ncbi.nlm.nih.gov/books/NBK542202/>.
- Dai, C., Li, D., Gong, L., Xiao, X., & Tang, S. (2016). Curcumin ameliorates furazolidone-induced DNA damage and apoptosis in human hepatocyte L02 cells by inhibiting ROS production and mitochondrial pathway. *Molecules*, 21(8). <https://doi.org/10.3390/molecules21081061>
- Depkes RI. (2017). Farmakope Herbal Indonesia. *Pills and the Public Purse*. <https://doi.org/10.2307/jj.2430657.12>
- Dewi, N. P. K. S., & Santika, I. W. M. (2023). Mekanisme Anti-Hipertensi dari Bunga Rosela (*Hibiscus sabdariffa* L.) dalam Pengobatan Berbasis Bahan Alam: A Systematic Review. *Prosiding Workshop Dan Seminar Nasional Farmasi*, 2, 184–195. <https://doi.org/10.24843/wsnf.2022.v02.p15>

- Dipiro, J. T., Yee, G. C., Haines, L. M. P. S. T., Nolin, T. D., & Ellingrod, V. (2020). Pharmacotherapy: A Pathophysiologic Approach, Eleventh Edition. In *American Journal of Health-System Pharmacy* (Vol. 54, Issue 14). American Journal of Health-System Pharmacy. <https://doi.org/10.1345/aph.1h160>
- Djalalinia, S., Qorbani, M., Peykari, N., & Kelishadi, R. (2015). Health impacts of obesity. *Pakistan Journal of Medical Sciences*, 31(1), 239–242. <https://doi.org/10.12669/pjms.311.7033>
- Dragano, N. R. V., Fernø, J., Diéguez, C., López, M., & Milbank, E. (2020). Recent Updates on Obesity Treatments: Available Drugs and Future Directions. *Neuroscience*, 437, 215–239. <https://doi.org/10.1016/j.neuroscience.2020.04.034>
- Ejaz, A., Wu, D., Kwan, P., & Meydani, M. (2009). Curcumin inhibits adipogenesis in 3T3-L1 adipocytes and angiogenesis and obesity in C57/BL mice. *Journal of Nutrition*, 139(5), 919–925. <https://doi.org/10.3945/jn.108.100966>
- Esgalhado, M., Stockler-Pinto, M. B., De França Cardozo, L. F. M., Costa, C., Barboza, J. E., & Mafra, D. (2015). Effect of acute intradialytic strength physical exercise on oxidative stress and inflammatory responses in hemodialysis patients. *Kidney Research and Clinical Practice*, 34(1), 35–40. <https://doi.org/10.1016/j.krcp.2015.02.004>
- Febrina, L., & Rijai, L. (2016). J. Trop. Pharm. Chem. 2016. Vol 3. No. 4277p- ISSN: 2087-7099; e-ISSN: 2407-6090 profil Kadar Malondialdehida, Glukosa Dan Kolesterol Pada Tikus Putih Yang Terpapar Asap Rokok No Title. *J. Trop. Pharm. Chem.*, 3(4), 277–282.
- Furukawa, S., Fujita, T., Shimabukuro, M., Iwaki, M., Yamada, Y., Nakajima, Y., Nakayama, O., Makishima, M., Matsuda, M., & Shimomura, I. (2004). Increased oxidative stress in obesity and its impact on metabolic syndrome. *Journal of Clinical Investigation*, 114(12), 1752–1761. <https://doi.org/10.1172/JCI21625>
- Gabriele, P., Natasha, I., Mariapaola, C., Giovanni, P., Federica, M., Vincenzo, A., Francesco, S., Domenica, A., & Alessandra, B. (2017). *Oxidative Stress: Harms and Benefits for Human Health*. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5551541/>.
- Inggrid, M., Hartanto, Y., & Widjaja, J. F. (2018). Karakteristik Antioksidan pada Kelopak Bunga Rosella (*Hibiscus sabdariffa* Linn.). *Jurnal Rekayasa Hijau*, 2(3). <https://doi.org/10.26760/jrh.v2i3.2517>
- Ismanto, H. (2019). Hubungan Kadar Timbal (Pb) dengan Kadar Malondialdehid (MDA) dalam Darah pada Ibu Hamil di Wilayah Pantai Kabupaten Brebes. *Media Kesehatan Masyarakat Indonesia*, 18(2), 28–34. <https://doi.org/10.14710/mkmi.18.2.28-34>

- Kamoda, A. P. M. D., Maria Nindatu, Indrawanti Kusadhiani, Eka Astuty, Halidah Rahawarin, & Elpira Asmin2. (2021a). Uji Aktivitas Antioksidan Alga Cokelat Saragassum Sp. Dengan Metode 1,1- Difenil-2-Pikrihidrasil (Dpph). *PAMERI: Pattimura Medical Review*, 3(1), 60–62.
- Kamoda, A. P. M. D., Maria Nindatu, Indrawanti Kusadhiani, Eka Astuty, Halidah Rahawarin, & Elpira Asmin2. (2021b). Uji Aktivitas Antioksidan Alga Cokelat Saragassum Sp. Dengan Metode 1,1- Difenil-2-Pikrihidrasil (DPPH). *PAMERI: Pattimura Medical Review*, 3(1), 60–62. <https://ojs3.unpatti.ac.id/index.php/pameri/article/view/3742/2902>
- Kemenkes RI. (2019). *Tabel Batas Ambang indeks Massa tubuh (IMT)*. Penyakit Tidak Menular Indonesia. <https://p2ptm.kemkes.go.id/infographicp2ptm/obesitas/tabel-batas-ambang-indeks-massa-tubuh-imt>
- Kementrian RI. (2018). *Laporan Riskesdas 2018*.
- Kobi, J. B. B. S., Matias, A. M., Gasparini, P. V. F., Torezani-Sales, S., Madureira, A. R., da Silva, D. S., Correa, C. R., Garcia, J. L., Haese, D., Nogueira, B. V., de Assis, A. L. E. M., Lima-Leopoldo, A. P., & Leopoldo, A. S. (2023). High-fat, high-sucrose, and combined high-fat/high-sucrose diets effects in oxidative stress and inflammation in male rats under presence or absence of obesity. *Physiological Reports*, 11(7), 1–13. <https://doi.org/10.14814/phy2.15635>
- Kurniasari, S., Yanti, A. H., & Setyawati, T. R. (2017). Kadar Malondialdehyde Induk dan Struktur Morfologis Fetus Mencit (*Mus musculus*) yang Diperdengarkan Muroltal dan Musik Rock pada Periode Gestasi. *Jurnal Protobiont*, 6(2), 89–97.
- Kusumastuti, I. R. (2014). Hibiscus Sabdariffa Linn) Effects On Lowering Blood Pressure as A Treatment For. *Hypertension J MAJORITY* |, 3, 70.
- Liem, S., & Levita, J. (2017). Review Hepatoprotektor Rosela (Hibiscus sabdariffa): Aktivitas, Mekanisme Aksi dan Toksisitas. *Jurnal Farmasi Galenika (Galenika Journal of Pharmacy) (e-Journal)*, 3(2), 103–117. <https://doi.org/10.22487/j24428744.0.v0.i0.8610>
- Lin, X., Bai, D., Wei, Z., Zhang, Y., Huang, Y., Deng, H., & Huang, X. (2019). Curcumin attenuates oxidative stress in RAW264.7 cells by increasing the activity of antioxidant enzymes and activating the Nrf2-Keap1 pathway. *PLoS ONE*, 14(5), 1–13. <https://doi.org/10.1371/journal.pone.0216711>
- Mai, B. H., & Yan, L. J. (2019). The negative and detrimental effects of high fructose on the liver, with special reference to metabolic disorders. *Diabetes, Metabolic Syndrome and Obesity*, 12, 821–826. <https://doi.org/10.2147/DMSO.S198968>

- Midah, Z., Fajriansyah, F., Makmun, A., & Rasfahyana, R. (2021). Hubungan Obesitas dan Stress Oksidatif. *UMI Medical Journal*, 6(1), 62–69. <https://doi.org/10.33096/umj.v6i1.140>
- Mulianto, N. (2020). *Malondialdehid sebagai Penanda Stres Oksidatif pada Berbagai Penyakit Kulit*.
- Nugroho, R. A. (2018). *Mengenal Mencit Sebagai Hewan*.
- Ojulari, O. V., Lee, S. G., & Nam, J. O. (2019). Beneficial Effects of Natural Bioactive Compounds from *Hibiscus sabdariffa* L. On obesity. *Molecules*, 24(1), 1–14. <https://doi.org/10.3390/molecules24010210>
- Oktapiya, T. R., Pratama, N. P., & Purnamaningsih, N. (2022). Analisis fitokimia dan kromatografi lapis tipis ekstrak etanol daun rosella (*Hibiscus sabdariffa* L.). *Sasambo Journal of Pharmacy*, 3(2), 105–110. <https://doi.org/10.29303/sjp.v3i2.181>
- Othman, Z. A., Zakaria, Z., Suleiman, J. B., Ghazali, W. S. W., & Mohamed, M. (2021). Anti-atherogenic effects of orlistat on obesity-induced vascular oxidative stress rat model. *Antioxidants*, 10(2), 1–16. <https://doi.org/10.3390/antiox10020251>
- Pangaribuan, L. (2016). Pemanfaatan Masker Bunga Rosela Untuk Pencerahan Kulit Wajah. *Jurnal Keluarga Sehat Sejahtera*, 14(28), 46–58.
- Pantaria Saputri, A., Augustina, I., & Fatmaria. (2020). Uji Aktivitas Antioksidan Ekstrak Air Kulit Pisang Kepok (*Musa acuminata* x *Musa balbisiana* (ABB cv)) Dengan Metode ABTS (2,2 azinobis (3-etilbenzotiazolin)-6-asam sulfonat) Pada Berbagai Tingkat Kematangan. *Jurnal Kedokteran Universitas Palangka Raya*, 8(1), 973–980. <https://doi.org/10.37304/jkupr.v8i1.1502>
- Pereira, R. M., Botezelli, J. D., da Cruz Rodrigues, K. C., Mekary, R. A., Cintra, D. E., Pauli, J. R., da Silva, A. S. R., Ropelle, E. R., & de Moura, L. P. (2017). Fructose consumption in the development of obesity and the effects of different protocols of physical exercise on the hepatic metabolism. *Nutrients*, 9(4), 1–21. <https://doi.org/10.3390/nu9040405>
- Pierro, F. Di, Bressan, A., & Ranaldi, D. (2015). Role of bioavailable curcumin in weight loss and omental adipose tissue decrease: preliminary data of a randomized, controlled trial in overweight people with *Eur Rev Med*, 19, 4195–4202. <https://www.europeanreview.org/wp/wp-content/uploads/4195-4202.pdf> <https://www.ncbi.nlm.nih.gov/pubmed/26592847>
- Pizzino, G., Irrera, N., Cucinotta, M., Pallio, G., Mannino, F., Arcoraci, V., Squadrito, F., Altavilla, D., & Bitto, A. (2017). Oxidative Stress: Harms and Benefits for Human Health. *Oxidative Medicine and Cellular Longevity*, 2017. <https://doi.org/10.1155/2017/8416763>

- Pratiwi, A. T. (2018). Pengaruh Ekstrak Rosella (Hibiscus Kadar Gula Darah untuk Diabetes Melitus. *Jurnal Ilmiah Mahasiswa Kedokteran Indonesia (JIMKI)*, 6(2), 138–142.
- Rodrigues, D. F., Henriques, M. C. do C., Oliveira, M. C., Menezes-Garcia, Z., Marques, P. E., Souza, D. da G., Menezes, G. B., Teixeira, M. M., & Ferreira, A. V. M. (2014). Acute intake of a high-fructose diet *alters* the balance of adipokine concentrations and induces neutrophil influx in the liver. *Journal of Nutritional Biochemistry*, 25(4), 388–394. <https://doi.org/10.1016/j.jnutbio.2013.11.012>
- Sa'adah, N., Fauziah, C., & Nugraha, Y. (2020). Pengaruh Ekstrak Kelopak Bunga Rosella (Hibiscus sabdariffa) Terhadap Motilitas Spermatozoa Tikus Jantan (Rattus norvegicus) Galur Wistar dengan Paparan Asap Rokok. *Seminar Nasional Riset Kedokteran*, 1–8.
- Septiyanti, S., & Seniwati, S. (2020). Obesity and Central Obesity in Indonesian Urban Communities. *Jurnal Ilmiah Kesehatan (JIKA)*, 2(3), 118–127. <https://doi.org/10.36590/jika.v2i3.74>
- Serang, Y., & Laili, V. (2021a). Measuring the Antioxidant Effect of Limnocharis Flava on Malondialdehyde Activities in Livers of Alloxan-induced Diabetic Rats. *Jurnal Info Kesehatan*, 19(2), 181–186. <https://doi.org/10.31965/infokes.vol19.iss2.534>
- Serang, Y., & Laili, V. (2021b). Measuring the Antioxidant Effect of Limnocharis Flava on Malondialdehyde Activities in Livers of Alloxan-induced Diabetic Rats. *Jurnal Info Kesehatan*, 19(2), 181–186. <https://doi.org/10.31965/infokes.vol19.iss2.534>
- Sukandar, E. Y., Kurniati, N. F., & Nurdianti, A. N. (2016). Antiobesity effect of ethanol extract of Anredera cordifolia (Ten) steenis leaves on obese male wistar rats induced by high-carbohydrate diet. *International Journal of Pharmacy and Pharmaceutical Sciences*, 8(4), 171–173.
- Susantiningsih, T. (2015). *Obesitas dan Stres Oksidatif*.
- United States Department of Agriculture. (2014). *Hibiscus sabdariffa L.* Natural Resources Conservation Service. <https://plants.usda.gov/home/plantProfile?symbol=HISA2>
- WHO. (2021). *Obesity and overweight*. <https://www.who.int/news-room/fact-sheets/detail/Obesity-and-Overweight>.
- WHO. (2023). *World Health Statistics 2023 Monitoring health for the SDGs Sustainable Development Goals HEALTH FOR ALL*. <https://www.who.int/publications/book-orders>.
- Yahya, M. A., & Nurrosyidah, I. H. (2020). Antioxidant activity ethanol extract of gotu kola (Centella asiatica (L.) Urban) with DPPH method (2,2-Diphenyl-1-

Pikrilhidrazil). *Journal of Halal Product and Research*, 3(2), 106.
<https://doi.org/10.20473/jhpr.vol.3-issue.2.106-112>

Zofania, T. A., Yulianti, R., Hardini, N., Patologi, D., Kedokteran, A., Upn, F. K., Veteran, ", Jakarta, ", & Fatmawati, J. R. (2020). Efek Antioksidan Ekstrak Bunga Rosella (*Hibiscus sabdariffa* L.) Terhadap Proteksi Hepar Tikus Putih Galur Wistar Yang Diinduksi Etanol 20%. In *Efek Antioksidan Ekstrak ... Journal of Pharmacopolium* (Vol. 3, Issue 2).