

REFERENSI

- Adedapo, A. A., Etim, U., Falayi, O. O., Ogunpolu, B. S., Omobowale, T. O., Oyagbemi, A. A., & Oguntibeju, O. O. (2020). Methanol stem extract of *Moringa oleifera* mitigates glycerol-induced acute kidney damage in rats through modulation of KIM-1 and NF- κ B signaling pathways. *Scientific African*, *9*. <https://doi.org/10.1016/j.sciaf.2020.e00493>
- Ali Redha, A., Perna, S., Riva, A., Petrangolini, G., Peroni, G., Nichetti, M., Iannello, G., Naso, M., Faliva, M. A., & Rondanelli, M. (2021). Novel insights on anti-obesity potential of the miracle tree, *Moringa oleifera*: A systematic review. In *Journal of Functional Foods* (Vol. 84). Elsevier Ltd. <https://doi.org/10.1016/j.jff.2021.104600>
- Amalia, R., Pramono, A., Afifah, D. N., Noer, E. R., Muniroh, M., & Kumoro, A. C. (2022). Mangrove fruit (*Bruguiera gymnorrhiza*) increases circulating GLP-1 and PYY, modulates lipid profiles, and reduces systemic inflammation by improving SCFA levels in obese wistar rats. *Heliyon*, *8*(10), e10887. <https://doi.org/10.1016/j.heliyon.2022.e10887>
- A.Sahra Salsabilla, Asrini Safitri, Rezky Pratiwi L.Basri, Aryanti Bamahry R, & Dian Fahmi Utami. (2024). The Effect of Dangke on Changes in Total Cholesterol and Triglyceride Levels in Obesity White Rats. *JURNAL KEPERAWATAN DAN FISIOTERAPI (JKF)*, *6*(2), 357-365. <https://doi.org/10.35451/jkf.v6i2.2025>
- Asgari-Kafrani, A., Fazilati, M., & Nazem, H. (2020). Hepatoprotective and antioxidant activity of aerial parts of *Moringa oleifera* in prevention of non-alcoholic fatty liver disease in Wistar rats. *South African Journal of Botany*, *129*, 82-90. <https://doi.org/10.1016/j.sajb.2019.01.014>
- Balusamy, S. R., Perumalsamy, H., Ranjan, A., Park, S., & Ramani, S. (2019). A dietary vegetable, *Moringa oleifera* leaves (drumstick tree) induced fat cell apoptosis by inhibiting adipogenesis in 3T3-L1 adipocytes. *Journal of Functional Foods*, *59*, 251-260. <https://doi.org/10.1016/j.jff.2019.05.029>
- Blüher, M. (2020). Metabolically healthy obesity. In *Endocrine Reviews* (Vol. 41, Issue 3, pp. 405-420). Endocrine Society. <https://doi.org/10.1210/edrv/bnaa004>
- Chuang, W.-T., Liu, Y.-T., Huang, C.-S., Lo, C.-W., Yao, H.-T., Chen, H.-W., & Lii, C.-K. (2019). Benzyl Isothiocyanate and Phenethyl Isothiocyanate Inhibit Adipogenesis and Hepatosteatosis in Mice with Obesity Induced by a High-Fat Diet. *Journal of Agricultural and Food Chemistry*, *67*(25), 7136-7146. <https://doi.org/10.1021/acs.jafc.9b02668>
- Dhakad, A. K., Ikram, M., Sharma, S., Khan, S., Pandey, V. V., & Singh, A. (2019). Biological, nutritional, and therapeutic significance of *Moringa oleifera* Lam. In *Phytotherapy Research* (Vol. 33, Issue 11, pp. 2870-2903). John Wiley and Sons Ltd. <https://doi.org/10.1002/ptr.6475>
- Fejér, J., Gruřová, D., & Kron, I. (2025). Testing the Antioxidant Activity of Different Leaf Extracts and the Phenolic Content of Young *Moringa oleifera* Lam. Plants Grown in a Temperate Climate Zone. *International*

- Journal of Plant Biology*, 16(1), 11. <https://doi.org/10.3390/ijpb16010011>
- Hardjo, Hamid, Hardjo, Ibrahim, Azis, Muis, & Kadir. (2025). Antioxidant and Anti-Obesity Potentials of *Moringa oleifera* Roots in High-Fat Diet-Induced Obesity in Rats. *Tropical Journal of Natural Product Research*, 2024. <https://doi.org/10.26538/tjnpr/v9i5.21>
- Kementerian Kesehatan Indonesia. (2022). *Ayo Bersatu Kita Cegah dan Obati Obesitas*.
- Kumbhare, M., Guleha, V., & Sivakumar, T. (2012). Estimation of total phenolic content, cytotoxicity and in-vitro antioxidant activity of stem bark of *Moringa oleifera*. *Asian Pacific Journal of Tropical Disease*, 2(2), 144-150. [https://doi.org/10.1016/S2222-1808\(12\)60033-4](https://doi.org/10.1016/S2222-1808(12)60033-4)
- Liu, T.-T., Liu, X.-T., Chen, Q.-X., & Shi, Y. (2020). Lipase Inhibitors for Obesity: A Review. *Biomedicine & Pharmacotherapy*, 128, 110314. <https://doi.org/10.1016/j.biopha.2020.110314>
- Masenga, S. K., Kabwe, L. S., Chakulya, M., & Kirabo, A. (2023). Mechanisms of Oxidative Stress in Metabolic Syndrome. *International Journal of Molecular Sciences*, 24(9), 7898. <https://doi.org/10.3390/ijms24097898>
- Matheny, M., Shapiro, A., Tümer, N., & Scarpace, P. J. (2011). Region-specific diet-induced and leptin-induced cellular leptin resistance includes the ventral tegmental area in rats. *Neuropharmacology*, 60(2-3), 480-487. <https://doi.org/10.1016/j.neuropharm.2010.11.002>
- Metwally, F. M., Rashad, H. M., Ahmed, H. H., Mahmoud, A. A., Abdol Raouf, E. R., & Abdalla, A. M. (2017). Molecular mechanisms of the anti-obesity potential effect of *Moringa oleifera* in the experimental model. *Asian Pacific Journal of Tropical Biomedicine*, 7(3), 214-221. <https://doi.org/10.1016/j.apjtb.2016.12.007>
- Nahar, S., Faisal, F., Iqbal, J., Rahman, Md., & Yusuf, Md. (2016). Antiobesity activity of *Moringa oleifera* leaves against high fat diet-induced obesity in rats. *International Journal of Basic and Clinical Pharmacology*, 1263-1268. <https://doi.org/10.18203/2319-2003.ijbcp20162427>
- Nofianti, T., Nurmayasari, S., Priatna, M., Ruswanto, R., & Nurfatwa, M. (2019). The Effect of the Ethanolic Extract of Asam Jawa Leaf (*Tamarindus Indica* L.) in Total Cholesterol, Triglyceride, LDL and HDL Concentration on Male Sprague Dawley Rats. *Journal of Physics: Conference Series*, 1179(1), 012175. <https://doi.org/10.1088/1742-6596/1179/1/012175>
- Novelli, E. L. B., Diniz, Y. S., Galhardi, C. M., Ebaid, G. M. X., Rodrigues, H. G., Mani, F., Fernandes, A. A. H., Cicogna, A. C., & Novelli Filho, J. L. V. B. (2007a). Anthropometrical parameters and markers of obesity in rats. *Laboratory Animals*, 41(1), 111-119. <https://doi.org/10.1258/002367707779399518>
- Novelli, E. L. B., Diniz, Y. S., Galhardi, C. M., Ebaid, G. M. X., Rodrigues, H. G., Mani, F., Fernandes, A. A. H., Cicogna, A. C., & Novelli Filho, J. L. V. B. (2007b). Anthropometrical parameters and markers of obesity in rats. *Laboratory Animals*, 41(1), 111-119. <https://doi.org/10.1258/002367707779399518>

- Novelli, E. L. B., Diniz, Y. S., Galhardi, C. M., Ebaid, G. M. X., Rodrigues, H. G., Mani, F., Fernandes, A. A. H., Cicogna, A. C., & Novelli Filho, J. L. V. B. (2007c). Anthropometrical parameters and markers of obesity in rats. *Laboratory Animals*, *41*(1), 111-119. <https://doi.org/10.1258/002367707779399518>
- Oniki, K., Kawakami, T., Nakashima, A., Miyata, K., Watanabe, T., Fujikawa, H., Nakashima, R., Nasu, A., Eto, Y., Takahashi, N., Nohara, H., Suico, M. A., Kotani, S., Obata, Y., Sakamoto, Y., Seguchi, Y., Saruwatari, J., Imafuku, T., Watanabe, H., ... Shuto, T. (2020). Melinjo seed extract increases adiponectin multimerization in physiological and pathological conditions. *Scientific Reports*, *10*(1), 4313. <https://doi.org/10.1038/s41598-020-61148-2>
- Pan, M.-H., Tung, Y.-C., Yang, G., Li, S., & Ho, C.-T. (2016). Molecular mechanisms of the anti-obesity effect of bioactive compounds in tea and coffee. *Food & Function*, *7*(11), 4481-4491. <https://doi.org/10.1039/C6FO01168C>
- Ramírez-Moreno, E., Arias-Rico, J., Jiménez-Sánchez, R. C., Estrada-Luna, D., Jiménez-Osorio, A. S., Zafra-Rojas, Q. Y., Ariza-Ortega, J. A., Flores-Chávez, O. R., Morales-Castillejos, L., & Sandoval-Gallegos, E. M. (2022). Role of Bioactive Compounds in Obesity: Metabolic Mechanism Focused on Inflammation. *Foods*, *11*(9), 1232. <https://doi.org/10.3390/foods11091232>
- Siddique, F., Ahmad, S., Hussain, A., Firdous, N., Nisar, R., Bilal, M., Najam, A., Salik, A., Zia, M., & Elkhedir, A. E. (2025). Development, physicochemical, and sensory analysis of moringa oleifera L. powder added buffalo milk yoghurt with pharmacological potential. *Scientific Reports*, *15*(1), 31519. <https://doi.org/10.1038/s41598-025-17428-w>
- Surahmat Hamid, Nurfaika hardjo, Sukaeni Ibrahim, Ilhamuddin Azis, Mirna Muis, Ika Yustisia, Syahrjuita Kadir, & Marhaen Hardjo. (2025). Potential of Isothiocyanates from Moringa as Antiobesity: A Review. *Tropical Journal of Natural Product Research*, *7*(9). <https://doi.org/10.26538/tjnpr/v9i7.1>
- Susilawati, E., Riduan Laboratorium Farmakologi, A., & Tinggi Farmasi Bandung Jl Soekarno Hatta No, S. (2017). *AKTIVITAS ANTI OBESITAS EKSTRAK DAUN KATUK (Sauropus androgynus L.Merr) PADA MODEL MENCIT OBESITAS ANTI OBESITY ACTIVITY OF KATUK LEAF EXTRACT (Sauropus androgynus L.Merr) IN MICE MODELS OF OBESITY. 14.*
- Wang, F., Long, S., Zhang, J., Yu, J., Xiong, Y., Zhou, W., Qiu, J., & Jiang, H. (2020). Antioxidant activities and anti-proliferative effects of Moringa oleifera L. extracts with head and neck cancer. *Food Bioscience*, *37*. <https://doi.org/10.1016/j.fbio.2020.100691>