

DAFTAR PUSTAKA

1. Gulcin İ. Antioxidants and antioxidant methods: an updated overview. Vol. 94, Archives of Toxicology. 2020. 651–715 p.
2. At Apak R, Mustafa †, Zyü Rek Ö, Gü Ç Lü K, Ç Apanoğ Lu E. Antioxidant Activity/Capacity Measurement. 1. Classification, Physicochemical Principles, Mechanisms, and Electron Transfer (ET)-Based Assays. 2016 [cited 2022 Jan 11];
3. Carocho M, Ferreira ICFR. A review on antioxidants, prooxidants and related controversy: Natural and synthetic compounds, screening and analysis methodologies and future perspectives. Food Chem Toxicol. 2013;51(1):15–25.
4. Sharifi-Rad M, Anil Kumar N V., Zucca P, Varoni EM, Dini L, Panzarini E, et al. Lifestyle, Oxidative Stress, and Antioxidants: Back and Forth in the Pathophysiology of Chronic Diseases. Front Physiol. 2020;11(July):1–21.
5. Hayes JD, Dinkova-Kostova AT, Tew KD. Oxidative Stress in Cancer. Cancer Cell [Internet]. 2020;38(2):167–97.
6. Chow CK. Cellular Antioxidant Defense Mechanisms. Cellular Antioxidant Defense Mechanisms. 2019.
7. Boskabady M, Marefati N, Farkhondeh T, Shakeri F, Farshbaf A, Boskabady MH. The effect of environmental lead exposure on human health and the contribution of inflammatory mechanisms, a review. Environ Int [Internet]. 2018;120(April):404–20.
8. Flora G, Gupta D, Tiwari A. Toxicity of lead: A review with recent updates. Interdiscip Toxicol. 2012;5(2):47–58.
9. Patra RC, Rautray AK, Swarup D. Oxidative stress in lead and cadmium toxicity and its amelioration. Vet Med Int. 2011;2011.
10. Ayala A, Muñoz MF, Argüelles S. Lipid peroxidation: Production, metabolism, and signaling mechanisms of malondialdehyde and 4-hydroxy-2-nonenal. Oxid Med Cell Longev. 2014;2014.
11. Kumar S, Krishna Chaitanya R, Preedy VR. Assessment of Antioxidant Potential of Dietary Components [Internet]. HIV/AIDS: Oxidative Stress and Dietary Antioxidants. Elsevier Inc.; 2017. 239–253 p.
12. Rita RS, Sy E. Syzygium cumini leaves extract from West Sumatra Indonesia alleviate oxidative stress by decreasing malondialdehyde level and enhancing catalase activity in rat induced by lead acetate. Pharmacogn J. 2021;13(6):1408–12.

13. Stanner S, Weichselbaum E. Antioxidants. *Encycl Hum Nutr.* 2012;1–4:88–99.
14. Reang J, Sharma PC, Thakur VK, Majeed J. Understanding the therapeutic potential of ascorbic acid in the battle to overcome cancer. *Biomolecules.* 2021;11(8).
15. Haider K, Haider R, Neha K, Yar MS. *European Journal of Medicinal Chemistry* Free radical scavengers : An overview on heterocyclic advances and medicinal prospects. 2020;204.
16. Akram NA, Shafiq F, Ashraf M. Ascorbic acid-a potential oxidant scavenger and its role in plant development and abiotic stress tolerance. *Front Plant Sci.* 2017;8(April).
17. Kaźmierczak-Barańska J, Boguszevska K, Adamus-Grabicka A, Karwowski BT. Two faces of vitamin c—antioxidative and pro-oxidative agent. *Nutrients.* 2020;12(5).
18. Mumtaz S, Ali S, Khan R, Shakir HA, Tahir HM, Mumtaz S, et al. Therapeutic role of garlic and vitamins C and E against toxicity induced by lead on various organs. *Environ Sci Pollut Res.* 2020;27(9):8953–64.
19. Sy E, Kadri H, Yerizel E. Efek Pemberian Vitamin C Terhadap Aktifitas Katalase Hati Tikus Galur Wistar yang Terpapar Ion Pb. *J Kesehat Andalas.* 2015;4(1):279–85.
20. Subramanian R, Ramaraj J. Profile of bioactive compounds in *Syzygium cumini* – a review Profile of bioactive compounds in *Syzygium cumini* – a review. 2012;(May 2012).
21. Swami SB, Thakor NSJ, Patil MM, Haldankar PM. Jamun (<i>Syzygium cumini </i>(L.)): A Review of Its Food and Medicinal Uses. *Food Nutr Sci.* 2012;03(08):1100–17.
22. Katiyar D, Singh V, Ali M. Recent advances in pharmacological potential of *Syzygium cumini*: A review. *Adv Appl Sci Res.* 2016;7(3):1–12.
23. Gidlow DA. Lead toxicity. *Occup Med (Chic Ill).* 2015;65(5):348–56.
24. Youhoun KP, Mi C, Kim K. Myricetin : biological activity related to human health. *Appl Biol Chem.* 2016;
25. Forman HJ, Zhang H. Targeting oxidative stress in disease: promise and limitations of antioxidant therapy. *Nat Rev Drug Discov [Internet].* 2021;20(9):689–709.
26. Kotha RR, Tareq FS, Yildiz E, Luthria DL. Oxidative Stress and Antioxidants—A Critical Review on In Vitro Antioxidant Assays.

- Antioxidants. 2022;11(12).
27. Mitra P, Sharma S, Purohit P, Sharma P. Clinical and molecular aspects of lead toxicity: An update. *Crit Rev Clin Lab Sci* [Internet]. 2017;54(7–8):506–28.
 28. Ahamed M, Siddiqui MKJ. Low level lead exposure and oxidative stress: Current opinions. *Clin Chim Acta*. 2007;383(1–2):57–64.
 29. Abadin H, Ashizawa A, Stevens Y-W, Lladós F, Diamond G, Sage G, et al. Toxicological profile for lead. 2020;(August):582.
 30. Ammendolia DA, Bement WM, Brumell JH. Plasma membrane integrity : implications for health and disease. 2021;1–30.
 31. Buckner CA, Lafrenie RM, Dénommée JA, Caswell JM, Want DA, Gan GG, et al. We are IntechOpen , the world ' s leading publisher of Open Access books Built by scientists , for scientists TOP 1 % . Intech [Internet]. 2016;11(tourism):13.
 32. Jideani AIO, Silungwe H, Takalani T, Omolola AO, Udeh HO, Anyasi TA. Antioxidant-rich natural fruit and vegetable products and human health. *Int J Food Prop* [Internet]. 2021;24(1):41–67.
 33. Ali SS, Ahsan H, Zia MK, Siddiqui T, Khan FH. Understanding oxidants and antioxidants: Classical team with new players. *J Food Biochem*. 2020;44(3):1–13.
 34. Hu X, Dong D, Xia M, Yang Y, Wang J, Su J, et al. Oxidative stress and antioxidant capacity: Development and prospects. *New J Chem*. 2020;44(27):11405–19.
 35. de Oliveira Silva E, Batista R. Ferulic Acid and Naturally Occurring Compounds Bearing a Feruloyl Moiety: A Review on Their Structures, Occurrence, and Potential Health Benefits. *Compr Rev Food Sci Food Saf*. 2017;16(4):580–616.
 36. Chhikara N, Kaur R, Jaglan S, Sharma P, Gat Y, Panghal A. Bioactive compounds and pharmacological and food applications of: *Syzygium cumini*-a review. *Food Funct*. 2018;9(12):6096–115.
 37. Ansari AS, Thakuri U, Kunwar RM, Bussmann RW, Paniagua-Zambrana NY. *Syzygium cumini* (L.) Skeels Myrtaceae. 2021;(January):1955–66.
 38. Ayyanar M, Subash-Babu P. *Syzygium cumini* (L.) Skeels: A review of its phytochemical constituents and traditional uses. *Asian Pac J Trop Biomed* [Internet]. 2012;2(3):240–6.
 39. Kumar S, Sharma S, Kumar V, Sharma A, Kaur R. *Industrial Crops &*

Products Jamun (*Syzygium cumini* (L .) Skeels): The conventional underutilized multifunctional plant-an exotic gleam into its food and functional significance. *Ind Crop Prod* [Internet]. 2023;191(PA):115873.

40. Zhi PR, Liang LZ, Yi ML. Evaluation of the antioxidant activity of *Syzygium cumini* leaves. *Molecules*. 2008;13(10):2545–56.
41. Ahmed R, Tariq M, Hussain M, Andleeb A, Masoud MS, Ali I, et al. Phenolic contents-based assessment of therapeutic potential of *Syzygium cumini* leaves extract. *PLoS One*. 2019;14(8):1–16.
42. National Library of Medicine. Ascorbic Acid | HC6H7O6 | CID 54670067 - PubChem [Internet]. [cited 2023 Jul 1].
43. Carr AC, Maggini S. Vitamin C and immune function. *Nutrients*. 2017;9(11):1–25.
44. Foyer CH, Noctor G. Ascorbate and glutathione: The heart of the redox hub. *Plant Physiol*. 2011;155(1):2–18.
45. Qian HF, Peng XF, Han X, Ren J, Zhan KY, Zhu M. The stress factor, exogenous ascorbic acid, affects plant growth and the antioxidant system in *Arabidopsis thaliana*. *Russ J Plant Physiol*. 2014;61(4):467–75.
46. Vissers MCM, Das AB. Potential mechanisms of action for vitamin C in cancer: Reviewing the evidence. *Front Physiol*. 2018;9(JUL):1–13.
47. Morales M, Munné-Bosch S. Malondialdehyde: Facts and artifacts. *Plant Physiol*. 2019;180(3):1246–50.
48. Zeb A, Ullah F. A Simple Spectrophotometric Method for the Determination of Thiobarbituric Acid Reactive Substances in Fried Fast Foods. 2016;2016.
49. Reitznerová A, Uleková M, Nagy J, Marcinčák S, Semjon B, Čertík M, et al. Lipid peroxidation process in meat and meat products: A comparison study of malondialdehyde determination between modified 2-thiobarbituric acid spectrophotometric method and reverse-phase high-performance liquid chromatography. *Molecules*. 2017;22(11).
50. WHO. General Guidelines for Methodologies on Research and Evaluation of Traditional Medicine World Health Organization. 2000;1–73.
51. Stewart WC, Jackson AL, Jenkins JN. Dropout rates for intent-to-treat and per protocol analyses. *Am J Ophthalmol*. 2004;137(4):639–45.
52. Sastroasmoro S, Ismael S. *Dasar-Dasar Metodologi Penelitian Klinis*. 5th ed. Jakarta: Sagung Seto; 2014. 522 p.
53. BPOM. Peraturan Badan Pengawas Obat Dan Makanan Nomor 18 Tahun

2021 Tentang Pedoman Uji Farmakodinamik Praktikum Obat Tradisional. Badan Pengawas Obat dan Makanan RI. 2021;(1):15–24.

54. Heidarian E, Rafieian-Kopaei M. Protective effect of artichoke (*Cynara scolymus*) leaf extract against lead toxicity in rat. *Pharm Biol.* 2013;51(9):1104–9.
55. Mani MS, Joshi MB, Shetty RR, DSouza VL, Swathi M, Kabekkodu SP, et al. Lead exposure induces metabolic reprogramming in rat models. *Toxicol Lett [Internet]*. 2020;335(August):11–27.
56. Kumar A, Kumar A, Cabral-Pinto M, Chaturvedi AK, Shabnam AA, Subrahmanyam G, et al. Lead toxicity: Health hazards, influence on food Chain, and sustainable remediation approaches. *Int J Environ Res Public Health.* 2020;17(7).
57. Matović V, Buha A, Dukić-Ćosić D, Bulat Z. Insight into the oxidative stress induced by lead and/or cadmium in blood, liver and kidneys. *Food Chem Toxicol [Internet]*. 2015;78:130–40.
58. Aliyu Haruna Sani, Musa Amanabo. Lead: A concise review of its toxicity, mechanism and health effect. *GSC Biol Pharm Sci.* 2021;15(1):055–62.
59. Amriza MZ, Rita RS, Sy E. Java Plum (*Syzygium cumini* (L .) Skeels) Leaf Extract Lowers Serum Urea Levels in Lead-Acetate-Induced Rats Ekstrak Daun Jamblang (*Syzygium cumini* (L .) Skeels) menurunkan Kadar Ureum Serum Tikus yang Diinduksi Timbal Asetat. 2023;19(02):274–81.
60. Rita RS, Sy E. Jamblang (*Syzygium cumini*) leaf extract decreased hydrogen peroxide in lead acetate-induced rats. 2022;1–4.
61. Arafa ESA, Hassan W, Murtaza G, Buabeid MA. *Ficus carica* and *Syzygium cumini* Regulate Glucose and Lipid Parameters in High-Fat Diet and Streptozocin-Induced Rats. *J Diabetes Res.* 2020;2020.
62. Robbani S, Elya B, Iswandana R. Alpha-glucosidase and DPP-IV Inhibitory Activities of Ethanol Extract from *Caesalpinia sappan*, *Andrographis paniculata*, and *Syzygium cumini*. *Pharmacogn J.* 2022;14(3):702–9.
63. Haridy M, Al-Amgad Z, Sakai H, Mohi-Eldin M. Ameliorating effects of garlic, calcium, and vitamin C on chronic lead toxicity in albino rats. *Comp Clin Path.* 2014;23(5):1215–23.
64. Pawlowska E, Szczepanska J, Blasiak J. Pro- And antioxidant effects of Vitamin C in cancer in correspondence to its dietary and pharmacological concentrations. *Oxid Med Cell Longev.* 2019;2019.
65. Macan AM, Kraljević TG, Raić-malić S. Therapeutic perspective of vitamin C and its derivatives. *Antioxidants.* 2019;8(8).

66. Carr AC, Vissers MCM. Synthetic or food-derived vitamin C-Are they equally bioavailable? *Nutrients*. 2013;5(11):4284–304.
67. Kim TJ, Byun JS, Kwon HS, Kim DY. Cellular toxicity driven by high-dose vitamin C on normal and cancer stem cells. *Biochem Biophys Res Commun* [Internet]. 2018;497(1):347–53.
68. Qamar M, Akhtar S, Ismail T, Wahid M, Ali S, Nazir Y, et al. Anti-Inflammatory , Acute and Subacute Toxicity Assessment. *J Ethnopharmacol* [Internet]. 2022;287(January):114919.
69. Sun R, Liu L, Qian T, Zhao M, Che W, Hou X, et al. Protection of Vitamin C on Oxidative Damage Caused by Long-Term Excess Iodine Exposure in Wistar Rats. *Nutrients*. 2022;14(24).

