

## DAFTAR PUSTAKA

1. Dietrich S, Jacobs S, Zheng JS, Meidtner K, Schwingshackl L, Schulze MB. Gene-lifestyle interaction on risk of type 2 diabetes: A systematic review. *Obes Rev* [Internet]. 2019;20(11):1557–71. Available from: <https://pubmed.ncbi.nlm.nih.gov/31478326/>
2. World Health Organization. Diabetes [Internet]. 2022 [cited 2023 Feb 2]. Available from: [https://www.who.int/health-topics/diabetes#tab=tab\\_1](https://www.who.int/health-topics/diabetes#tab=tab_1)
3. International Diabetes Federatioin. Diabetes around the world in 2021 [Internet]. 2021 [cited 2023 Feb 8]. Available from: <https://diabetesatlas.org/#:~:text=Diabetes%20around%20the%20world%20in%202021%3A,-and%20middle-income%20countries>
4. Kementerian Kesehatan RI. Tetap Produktif, Cegah, dan Atasi Diabetes Melitus. Pusat Data dan Informasi Kementerian Kesehatan RI. 2020.
5. Lembaga Penerbit Badan Penelitian dan Pengembangan Kesehatan. Riset Kesehatan Dasar Provinsi Sumatera Barat Tahun 2018 [Internet]. Laporan Riskesdas Nasional 2018. 2019. 1–478 p. Available from: <https://repository.badankebijakan.kemkes.go.id/id/eprint/3906/>
6. Padhi S, Nayak AK, Behera A. Type II diabetes mellitus: a review on recent drug based therapeutics. *Biomed Pharmacother* [Internet]. 2020;131:110708. Available from: <https://doi.org/10.1016/j.biopha.2020.110708>
7. Vergès B. Dyslipidemia in Type 1 Diabetes: A Masked Danger. *Trends Endocrinol Metab* [Internet]. 2020;31(6):422–34. Available from: <https://doi.org/10.1016/j.tem.2020.01.015>
8. Kane JP, Pullinger CR, Goldfine ID, Malloy MJ. Dyslipidemia and diabetes mellitus: Role of lipoprotein species and interrelated pathways of lipid metabolism in diabetes mellitus. *Curr Opin Pharmacol* [Internet]. 2021;61:21–7. Available from: <https://doi.org/10.1016/j.coph.2021.08.013>
9. Jilal I, Singh G. Management of diabetic dyslipidemia: An update. *World J Diabetes* [Internet]. 2019;9358(5). Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6522756/>
10. ZA M, Gayatri SW, Pramono SD. Hubungan antara Dislipidemia dengan Diabetes Melitus Tipe 2 di Rumah Sakit Ibnu Sina Makassar. *Fakumi Med*

- [Internet]. 2022;2(5):359–67. Available from:  
<https://fmj.fk.umi.ac.id/index.php/fmj/article/view/122>
11. Kementrian Pertanian. Gambir, Tanaman Spesifik Sumatera Barat [Internet]. 2019 [cited 2023 Feb 2]. Available from:  
[http://www.litbang.pertanian.go.id/tahukah-anda/83/#:~:text=Tanaman%20Gambir%20\(Uncaria%20gambir%20Roxb,%20Gambir%20biasanya%20digunakan%20untuk%20menyirih.](http://www.litbang.pertanian.go.id/tahukah-anda/83/#:~:text=Tanaman%20Gambir%20(Uncaria%20gambir%20Roxb,%20Gambir%20biasanya%20digunakan%20untuk%20menyirih.)
12. Suryani E, Nurmansyah. Informasi Teknologi Tanaman Rempah dan Obat: Teknologi Budidaya dan Pasca Panen Tanaman Gambir (*Uncaria gambir* (Hunter) Roxb). Balai Penelit Tanam Rempah dan Obat [Internet]. 2019;1–13. Available from:  
<https://repository.pertanian.go.id/server/api/core/bitstreams/01b142a4-97d7-49d8-a9e9-31c97f37db10/content>
13. Sebayang L, Hardyani MA. The Morphology Characteristics of Plant Gambir (*Uncaria gambir* Roxb.) in Pakpak Barat District. J Pertan Trop [Internet]. 2020;7(2):213–8. Available from:  
<https://jurnal.usu.ac.id/index.php/Tropik%0APengaruh>
14. Parwata MOA. Antioksidan. Kim Terap Progr Pascasarj Univ Udayana [Internet]. 2016;(April):1–54. Available from:  
[https://simdos.unud.ac.id/uploads/file\\_pendidikan\\_1\\_dir/75b8895f814f85fe9ae5ce91dc5411b1.pdf](https://simdos.unud.ac.id/uploads/file_pendidikan_1_dir/75b8895f814f85fe9ae5ce91dc5411b1.pdf)
15. Prawitasari DS. Diabetes Melitus dan Antioksidan. KELUWIH J Kesehat dan Kedokt [Internet]. 2019;1(1):48–52. Available from:  
<https://journal.ubaya.ac.id/index.php/kesdok/article/view/2496>
16. Adelina R. Mekanisme Katekin Sebagai Obat Antidislipidemia (Uji In Silico). Bul Penelit Kesehat [Internet]. 2018;46(3):147–54. Available from:  
<https://garuda.kemdikbud.go.id/documents/detail/1689159>
17. Kadri H, A'raaf M, Julizar. The Effect of Kawa Daun Gambir (*Uncaria gambir* Roxb.) on the Malondialdehyde (MDA) Level of Heart Alloxan Induced Hyperglycemia Mice. 2019; Available from:  
<http://repository.pppnp.ac.id/635/>
18. Ansori FA, Lipoeto NI, Julizar. Pengaruh Pemberian Kawa Daun Gambir terhadap Kadar Malondialdehid Jaringan Hati Mencit Diabetes yang

- Diiinduksi Aloksan. J Ilmu Kesehat Indones [Internet]. 2020;1(1):1–6.  
Available from: <https://doi.org/10.25077/jikesi.v1i1.18>
19. Rauf A, Rahmawaty, Siregar AZ. The Condition of Uncaria Gambir Roxb. as One of Important Medicinal Plants in North Sumatra Indonesia. Procedia Chem [Internet]. 2015;14:3–10. Available from:  
<http://dx.doi.org/10.1016/j.proche.2015.03.002>
20. Kurniawan RT. Identifikasi Dan Karakterisasi Morfologi Gambir Liar (Uncaria Gambir (Hunter) Roxb.) Di Kota Pekanbaru. Univ Islam Negeri Sultan Syarif Kasim Riau [Internet]. 2020; Available from:  
<http://repository.uin-suska.ac.id/34876/>
21. Marlinda. Identifikasi Kadar Katekin pada Gambier (Uncaria Gambier Roxb). J Optim [Internet]. 2018;4(1):47–53. Available from:  
<http://jurnal.utu.ac.id/joptimalisasi/article/view/1474>
22. Viena V, Nizar M. Studi Kandungan Fitokimia Ekstrak Etanol Daun Gambir Asal Aceh Tenggara Sebagai Anti Diabetes. J Serambi Eng [Internet]. 2018;3(1):240–7. Available from:  
<https://ojs.serambimekkah.ac.id/index.php/jse/article/view/352>
23. Mahendra I, Azhar M. Ekstraksi dan Karakterisasi Katekin Dari Gambir. Chem J Univ Negeri Padang [Internet]. 2022;11(1):5–7. Available from:  
<https://ejournal.unp.ac.id/index.php/kimia/article/view/113262>
24. Fadhilah ZH, Perdana F, Syamsudin RAMR. Review: Telaah Kandungan Senyawa Katekin dan Epigalokatekin Galat (EGCG) sebagai Antioksidan pada Berbagai Jenis Teh. J Pharmascience [Internet]. 2021;8(1):31. Available from:  
<https://ppjp.ulm.ac.id/journal/index.php/pharmascience/article/view/9122>
25. National Center for Biotechnology Information (2023). Cathecin C<sub>15</sub>H<sub>14</sub>O<sub>6</sub> [Internet]. PubChem Compound Summary. 2023 [cited 2023 May 6]. Available from: <https://pubchem.ncbi.nlm.nih.gov/compound/Catechin>
26. Deswati, Afriani T, Salsabila NP. Manfaat Antioksidan dari Tanaman Gambir (Uncaria gambir Roxb) untuk Kesehatan, Kosmetik, dan Pangan (Literature Review). J Ilmu Kesehat 'Afiyah [Internet]. 2022;IX(2):6–13. Available from:

- [https://scholar.google.com/citations?view\\_op=view\\_citation&hl=id&user=stowixeaaaaj&citation\\_for\\_view=stowixeaaaaj:d1gkvwhdpl0c](https://scholar.google.com/citations?view_op=view_citation&hl=id&user=stowixeaaaaj&citation_for_view=stowixeaaaaj:d1gkvwhdpl0c)
27. Defri I, Yuliana ND, Palupi NS, Wahyudi ST. Karakterisasi Fisikokimia dan Sensori Minuman Kawa Daun Secara In Vitro dan In Silico. MT - Agric Technol [2170] [Internet]. 2021; Available from: <https://repository.ipb.ac.id/handle/123456789/106307>
28. Novita R, Kasim A, Anggraini T, Putra DP. Kahwa daun: traditional knowledge of a coffee leaf herbal tea from West Sumatera, Indonesia. J Ethn Foods [Internet]. 2018;5(4):286–91. Available from: <https://doi.org/10.1016/j.jef.2018.11.005>
29. Lazuardina BA, Farah D, Purba W, Rusindiyanto, Defri I. Pemanfaatan Limbah Daun Kopi Sebagai Minuman Kesehatan di Desa Suberrejo, Jawa Timur. J Pengabdi Masy Tek Mesin [Internet]. 2022;2(1):72–80. Available from: <https://www.ejournal.upnjatim.ac.id/index.php/abdimesin/article/view/26>
30. Petersmann A, Müller-Wieland D, Müller UA, Landgraf R, Nauck M, Freckmann G, et al. Definition, Classification and Diagnosis of Diabetes Mellitus. Exp Clin Endocrinol Diabetes [Internet]. 2019;127(Suppl 1):S1–7. Available from: <https://pubmed.ncbi.nlm.nih.gov/31860923/>
31. Adler A, Bennett P, Colagiuri Chair S, Gregg E, Venkat Narayan K, Inês Schmidt M, et al. Reprint of: Classification of Diabetes Mellitus. Diabetes Res Clin Pract [Internet]. 2021;108972. Available from: <https://doi.org/10.1016/j.diabres.2021.108972>
32. Van Wilpe R, Hulst AH, Siegelaar SE, DeVries JH, Preckel B, Hermanides J. Type 1 and other types of diabetes mellitus in the perioperative period. What the anaesthetist should know. J Clin Anesth [Internet]. 2023;84(June 2022):111012. Available from: <https://doi.org/10.1016/j.jclinane.2022.111012>
33. Zheng Y, Ley SH, Hu FB. Global aetiology and epidemiology of type 2 diabetes mellitus and its complications. Nat Rev Endocrinol [Internet]. 2018;14(2):88–98. Available from: <http://dx.doi.org/10.1038/nrendo.2017.151>

34. Kachikis A, Eckert LO, Walker C, Oteng-Ntim E, Guggilla R, Gupta M, et al. Gestational diabetes mellitus: Case definition & guidelines for data collection, analysis, and presentation of immunization safety data. *Vaccine* [Internet]. 2017;35(48):6555–62. Available from: <https://doi.org/10.1016/j.vaccine.2017.01.043>
35. H. Ley S, B. Meigs J. Epidemiology and Risk Factors of Type 2 Diabetes. Springer Int Publ AG [Internet]. 2018;55–80. Available from: [https://link.springer.com/referenceworkentry/10.1007/978-3-319-27317-4\\_5-1](https://link.springer.com/referenceworkentry/10.1007/978-3-319-27317-4_5-1)
36. American Diabetes Association. Introduction: Standards of medical Care in Diabetes-2018. *Diabetes Care* [Internet]. 2018;41(January):S1–2. Available from: [https://diabetesjournals.org/care/article/41/Supplement\\_1/S1/29751/Introduction-Standards-of-Medical-Care-in-Diabetes](https://diabetesjournals.org/care/article/41/Supplement_1/S1/29751/Introduction-Standards-of-Medical-Care-in-Diabetes)
37. Rui L. Energy Metabolism in the Liver. *Physiol Behav* [Internet]. 2017;176(5):139–48. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4050641/>
38. Jiang S, Young JL, Wang K, Qian Y, Cai L. Diabetic-induced alterations in hepatic glucose and lipid metabolism: The role of type 1 and type 2 diabetes mellitus (Review). *Mol Med Rep* [Internet]. 2020;22(2):603–11. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7339764/>
39. Wang C, Zhang Y, Li F, Wei Y. Conserved roles of glucose in suppressing reactive oxygen species-induced cell death and animal survival. *Aging* (Albany NY) [Internet]. 2019;11(15):5726–43. Available from: <https://pubmed.ncbi.nlm.nih.gov/31403933/>
40. DiMeglio LA, Evans-Molina C, Oram RA. Type 1 Diabetes. HHS Public Access. *Lancet* (London, England) [Internet]. 2019;176(3):139–48. Available from: <https://pubmed.ncbi.nlm.nih.gov/29916386/>
41. Suh J, Choi Y, Oh JS, Song K, Choi HS, Kwon A, et al. Association between early glycemic management and diabetes complications in type 1 diabetes mellitus: A retrospective cohort study. *Prim Care Diabetes* [Internet]. 2023;17(1):60–7. Available from: <https://doi.org/10.1016/j.pcd.2022.12.006>

42. Sies H, Berndt C, P. Jones D. Oxidative Stress. *Annu Rev Biochem* [Internet]. 2017; Available from:  
<https://www.annualreviews.org/doi/abs/10.1146/annurev-biochem-061516-045037>
43. Lushchak VI. Environmentally induced oxidative stress in aquatic animals. *Aquat Toxicol* [Internet]. 2011;101(1):13–30. Available from:  
<http://dx.doi.org/10.1016/j.aquatox.2010.10.006>
44. Lushchak VI, Storey KB. Oxidative stress concept updated: Definitions, classifications, and regulatory pathways implicated. *EXCLI J* [Internet]. 2021;20:956–67. Available from:  
<http://www.ncbi.nlm.nih.gov/pubmed/34267608%0Ahttp://www.ncbi.nlm.nih.gov/articlerender.fcgi?artid=PMC8278216>
45. Christian J.A Tapehe, Douglas N. Parea, Selvana Tulandi NOP. Uji Aktivitas Antidiabetes Ekstrak Daun Epazote (*Dysphania ambrosioides* L.) Pada Tikus Putih (*Rattus norvegicus*) Yang Diinduksi Aloksan. *Trop J Biopharm* [Internet]. 2022;5(2):148–54. Available from:  
<https://journal.fmipaikit.ac.id/index.php/jbt/article/view/392>
46. National Center for Biotechnology Information (2023). Alloxan C4H2N2O4 [Internet]. PubChem Compound Summary. 2023 [cited 2023 May 6]. Available from: <https://pubchem.ncbi.nlm.nih.gov/compound/Alloxan>
47. Giustarini D, Tsikas D, Colombo G, Milzani A, Dalle- I, Fanti P, et al. Pitfalls in the analysis of the physiological antioxidant glutathione (GSH) and its disulfide (GSSG) in biological samples: An elephant in the room. *HHS Public Access* [Internet]. 2017;15(1019):8–21. Available from:  
<https://pubmed.ncbi.nlm.nih.gov/26905452/>
48. Madihah M, Alfina F, Gani YY. Blood Glucose Level and Pancreas Histological Section of Mice ( *Mus musculus* L.) Induced By Alloxan After Treatment of Curcuma mangga Val. Rhizome Extract. *J Biol Udayana* [Internet]. 2016;20(2):64. Available from:  
<https://ojs.unud.ac.id/index.php/BIO/article/view/28509>
49. Ighodaro OM. Molecular pathways associated with oxidative stress in diabetes mellitus. *Biomed Pharmacother* [Internet]. 2018;108(August):656–

62. Available from: <https://doi.org/10.1016/j.biopha.2018.09.058>
50. Fuller GG, Kim JK. Compartmentalization and metabolic regulation of glycolysis. *J Cell Sci* [Internet]. 2021;134(20). Available from: <https://pubmed.ncbi.nlm.nih.gov/34668544/>
51. Agatis T, Khasanah NAH, Romaidha I. Gambaran Kadar Trigliserida Pada Konsumen Kopi Tubruk Berdasarkan Frekuensi Dan Lama Konsumsi. *J Borneo Cendekia* [Internet]. 2022;6(1):46. Available from: <https://journal.stikesborneocendekiamedika.ac.id/index.php/jbc/article/download/275/304>
52. National Center for Biotechnology Information (2023). Triglyceride C<sub>6</sub>H<sub>8</sub>O<sub>6</sub> [Internet]. PubChem Compound Summary. 2023 [cited 2023 May 6]. Available from: <https://pubchem.ncbi.nlm.nih.gov/compound/Triglyceride>
53. David E. Cohen and Edward A. Fisher. Lipoprotein Metabolism, Dyslipidemia and Nonalcoholic Fatty Liver Disease. NIH Public Access [Internet]. 2013;33(4):380–8. Available from: <https://pubmed.ncbi.nlm.nih.gov/24222095/>
54. Athyros VG, Doumas M, Imprialos KP, Stavropoulos K, Georgianou E, Katsimardou A, et al. Diabetes and lipid metabolism. *Hormones* [Internet]. 2018;17(1):61–7. Available from: <https://pubmed.ncbi.nlm.nih.gov/29858856/>
55. WHO. General Guidelines for Methodologies on Research and Evaluation of Traditional Medicine World Health Organization [Internet]. 2000 [cited 2023 May 6]. p. 1–73. Available from: [http://apps.who.int/iris/bitstream/10665/66783/1/WHO\\_EDM\\_TRM\\_2000.1.pdf](http://apps.who.int/iris/bitstream/10665/66783/1/WHO_EDM_TRM_2000.1.pdf)
56. Sastroasmoro S, Ismael S. Dasar-dasar Metodologi Penelitian Klinis. 5th ed. Jakarta : Sagung Seto, 2016.
57. Munjati NE. Pengaruh Pemberian Streptozotocin Dosis Tunggal terhadap Kadar Glukosa Tikus Wistar (*Rattus norvegicus*). *Meditory J Med Lab* [Internet]. 2021;9(1):62–7. Available from: <https://ejournal.poltekkes-denpasar.ac.id/index.php/M/article/view/1330>

58. Wardhani FM, Tanjung FA. Kadar Serum Lipid Model Tikus Wistar Diabetik Dengan Terapi Ekstrak Kunyit Putih. *J Indones Med Assoc* [Internet]. 2021;71(3):116–23. Available from: <https://mki-ojs.idionline.org/jurnal/article/download/325/203>
59. Bacharach AL, Laurence DR. Preface. In: *Evaluation of Drug Activities* [Internet]. Elsevier; 1964. p. ix–xii. Available from: <https://linkinghub.elsevier.com/retrieve/pii/B9781483228457500049>
60. Lv Z, Guo Y. Metformin and Its Benefits for Various Diseases. *Front Endocrinol (Lausanne)* [Internet]. 2020;11(April):1–10. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7212476/>
61. Mohebbati R, Khajavi Rad A, Naser Shafei M, Soukhtanloo M, Hosseiniyan S, Beheshti F, et al. The Effects of Vitamin C on Adriamycin-Induced Hypercholesterolemia in Rat. *Curr Nutr Food Sci* [Internet]. 2015;11(4):309–14. Available from: <http://www.ingentaconnect.com/content/ben/cnf/2015/00000011/00000004/art00011?crawler=true>
62. Mahdi C, Citrawati P, Hendrawan VF. The Effect of Rice Bran on Triglyceride Levels and Histopathologic Aorta in Rat (*Rattus norvegicus*) of High Cholesterol Dietary Model. *IOP Conf Ser Mater Sci Eng* [Internet]. 2020;833(1). Available from: <https://iopscience.iop.org/article/10.1088/1757-899X/833/1/012022>
63. Huang R, Lu Y, Xie Z, Yang X, Ou Y. A bovine milk-derived peptide ameliorates alloxan-injured pancreatic  $\beta$  cells through IRS2/PI3K/Akt signaling. *Life Sci* [Internet]. 2022;308. Available from: <https://www.sciencedirect.com/science/article/pii/S0024320522006075>
64. Rodrigues PV, Lemos BMS, Silva MV da, de Campos Lima T, Santos D de O, Lemes JBP, et al. Alloxan as a better option than streptozotocin for studies involving painful diabetic neuropathy. *J Pharmacol Toxicol Methods* [Internet]. 2021;112(February). Available from: <https://www.sciencedirect.com/science/article/abs/pii/S1056871921001428>
65. Bernatoniene J, Kopustinskiene DM. The Role of Catechins in Cellular Responses to Oxidative Stress. *Molecules* [Internet]. 2018;23(4):1–11.

- Available from: <https://pubmed.ncbi.nlm.nih.gov/29677167/>
66. Rahal A, Kumar A, Singh V, Yadav B, Tiwari R, Chakraborty S, et al. Oxidative stress, prooxidants, and antioxidants: The interplay. *Biomed Res Int* [Internet]. 2014;2014(761264). Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3920909/>
67. Yasin YS, Hashim WS, Qader SM. Evaluation of metformin performance on alloxan-induced diabetic rabbits. *J Med Life* [Internet]. 2022;15(3):405–7. Available from: <https://pubmed.ncbi.nlm.nih.gov/35450001/>

