

DAFTAR PUSTAKA

1. Irwan. Epidemiologi penyakit tidak menular. ed 1. Yogyakarta: Deepublish; 2016.
2. WHO. Noncommunicable diseases country profiles 2018. World health organization. 2018.
3. GA Roth, D Abate, KH Abate, SM Abay, C Abbafati, N Abbasi, et al. Global, regional, and national disability-adjusted life-years (DALYs) for 359 diseases and injuries and healthy life expectancy (HALE) for 195 countries and territories, 1990-2017: A systematic analysis for the Global Burden of Disease Study 2017. *Lancet*. 2018.
4. Forouzanfar MH, Alexander L, Bachman VF, Biryukov S, Brauer M, Casey D, et al. Global, regional, and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks in 188 countries, 1990-2013: A systematic analysis for the Global Burden of Disease Study 2013. *Lancet*. 2015.
5. WHO (2018). Unhealthy diet. https://www.who.int/gho/ncd/risk_factors/unhealthy_diet_text/en/- Diakses pada 13 April 2020.
6. Siswanto, dkk, editors. Buku Survei Konsumsi Makanan Individu dalam Studi Diet Total 2014. Jakarta: Lembaga Penerbitan Badan Penelitian dan Pengembangan Kesehatan Kementerian Kesehatan RI; 2014.
7. Putri IN. Pengaruh Paparan Gelombang Elektromagnetik Terhadap Kadar Kolesterol Total dan Trigliserida Serum. *J Major*. 2015; 4(7): (halaman).
8. Brownlee M. Biochemistry and molecular cell biology of diabetic complications. *Nature*. 2001.
9. Hess-Fischl A. Hyperglycemia: When your blood glucose too high. *hyperglycemia. Endocrineweb*. 2016.
10. Panchal SK, Poudyal H, Iyer A, Nazer R, Alam A, Diwan V. High-Carbohydrate High-Fat Diet-Induced Metabolic Syndrome and Cardiovascular Remodeling in Rats. *Journal Of Cardiovascular Pharmacology*. 2011;57(1):51-64.
11. Kusmiyati Tjahjono, DK. Pengaruh pemberian asam lemak trans terhadap mediator proinflamasi, kadar glukosa darah dan infiltrasi netrofil pada pulau langerhans. Skripsi. Semarang. Universitas Diponegoro; 2013.
12. Winarsih, Ekstrak Daun Kapulaga Menurunkan Indeks Aterogenik Dan Kadar Gula Darah Tikus Diabetes Induksi Alloxan (Cardamom Extract Leaves Decreased Atherogenic Indices and Blood Glucose Level of Diabetes Rats Alloxan-Induced). *Agritech*. 2013.
13. Shashikala E, Motgi S, V RRBN, Sattar MA. *IJBCP International Journal of Basic & Clinical Pharmacology Original Research Article Study of lipid lowering effects of oral antidiabetic drugs in type 2 diabetes mellitus patients*. 2020;7(1):126–32.
14. Nurmalinda AT, Wahyuni T, Bahtiar A. Effects of metformin on high-fat diet-induced hyperlipidemic rats. *Toxicology International*. 2020 Jan 1;26(1):1-7.

15. Dhalimi, A. Permasalahan gambir(*Uncaria gambir*) di Sumatera Barat dan alternatif pemecahannya, Balai Besar Pengkajian dan Pengembangan Teknologi Pertanian,2006; 5(1): 46-57.
16. Isnawati A, Raini M, Sampurno OD, Mutiatikum D, Widowati L, Gitawati R. Karakteristik tiga jenis ekstrak gambir (*Uncaria gambir* Roxb) dari Sumatera Barat. *Bul Penelit Kesehatan*. 2012;40(4):201-8.
17. Kurniatri AA, Sulistyaningrum N, Rustanti L. Purifikasi Katekin dari Ekstrak Gambir (*Uncaria gambir* Roxb.). *Media Penelitian dan Pengembangan Kesehatan*. 2019.
18. Yunarto N, Elya B, Konadi L. Potensi Fraksi Etil Asetat Ekstrak Daun Gambir(*Uncaria gambir* Roxb.) sebagai Antihiperlipidemia. *Jurnal Kefarmasian Indonesia*. 2015
19. Alioes Y, Sukma RR, Sekar SL. Effect of Gambir Catechin Isolate (*Uncaria Gambir* Roxb.) Against Rat Triacylglycerol Level (*Rattus norvegicus*). In: IOP Conference Series: Earth and Environmental Science. 2019;217(1):(halman)
20. Zebua EA, Silalahi J, Julianti E. Hypoglycemic activity of gambier (*Uncaria gambir* roxb.) drinks in alloxan-induced mice. In: IOP Conference Series: Earth and Environmental Science. 2018;122(1):(halaman)
21. Martini A. Efek Pemberian Bersama antara Dexamethason dan Teh Hijau (*Camellia Sinensis* l.) terhadap Kadar Gula Darah dan Histopatologi Pankreas. Skripsi. Yogyakarta. Universitas Ahmad Dahlan Yogyakarta. 2020.
22. Husni AA. Pengaruh Pemberian Isolat Katekin Gambir (*Uncaria gambir* Roxb) terhadap Kadar Malondialdehid (MDA) Jaringan Hati Tikus (*Rattus Norvegicus*) Galur Wistar dengan Induksi Diet Tinggi Lemak. Skripsi. Padang: Universitas Andalas; 2020.
23. Murray RK, Granner, DK, Rodwell, VW . *Biokimia Harper* Edisi 27. Igarss 2014. 2009.
24. Hartono A. *Terapi Gizi dan Diet Rumah Sakit* Edisi 2. Buku Kedokteran EGC. Jakarta : 2006; 140-147
25. Almatier, S. *Prinsip Dasar Ilmu Gizi*. Jakarta : PT Gramedia Pustaka Utama; 2009.
26. Adam, JMF. *Dislipidemia*. editors. *Buku Ilmu Penyakit Dalam* Jilid 3. 5th ed. Jakarta: Departemen Ilmu Penyakit Dalam Fakultas Kedokteran Universitas Indonesia .2009.
27. Nurmeilis, Aprilia CA, Pradana MS, Suryanto I, Waloya T, Nuri Andarwulan dan, et al. Penentuan Profil Lipid-Kolesterol Setelah Pemberian Ekstrak Herba Kumis Kucing (*Orthosiphon staminus*). *Alchemy*. 2017.
28. Adam JMF .*Dislipidemia*. In Setiati dkk (ed). *Buku Ajar Ilmu Penyakit Dalam* Jilid II Edisi VI. Jakarta: Fakultas Kedokteran Universitas Indonesia. 2014. h. 2323-7.
29. Sudoyo AW, dkk. *Insulin: Mekanisme Sekresi dan Aspek Metabolisme*. Dalam: Asman Manaf. *Buku Ajar Ilmu Penyakit Dalam*. Edisi V, Jilid III. Jakarta: Internal Publishing; 2010.h.1896-9.

30. Kwiterovich PO. The metabolic pathways of high-density lipoprotein, low-density lipoprotein, and triglycerides: A current review. *Am J Cardiol.* 2000; 86(12):5-10.
31. Rader DJ, Hobbs HH. Disorders of lipoprotein metabolism. In: Fauci AS, Braunwald E, Kasper DL, Hauser SL, Longo DL, Jameson JL, Loscalzo J, editors. *Harrison's Principles of Internal Medicine.* New York: McGraw Hill Medical, 2008; p.2416-28.
32. Soelistijo SA, Lindarto D, Decroli E, Permana H, Sucipto KW, Kusnadi Y, et al. *Pedoman pengelolaan dan pencegahan diabetes melitus tipe 2 dewasa di Indonesia 2019.*
33. Nabyl, RA. *Cara Mudah Mencegah dan Mengobati Diabetes Melitus.* Yogyakarta. Genius Printika; 2009.
34. Ding XS, Wu SS, Chen H, Zhao XQ, Li HW. High admission glucose levels predict worse short-term clinical outcome in non-diabetic patients with acute myocardial infraction: A retrospective observational study. *BMC Cardiovasc Disord.* 2019;19:163.
35. Chawla, Jasvinder MD M. *Hyperglycemia and Hypoglycemia in Stroke* Medscape. 2018.
36. Van Lieverloo JHM, de Roode M, Fox MB, Zwietering MH, Wells-Bennik MHJ. Multiple regression model for thermal inactivation of *Listeria monocytogenes* in liquid food products. *Food Control.* 2013.
37. Harsa MS. Effect Of Intaking High-Fat Diet On White Rat's (*Rattus norvegicus*) Blood Lipid Profil. *J Ilmu Kedokteran Wijaya Kusuma.* 2017.
38. Mawarti H, Ratnawati R, Lyrawati D. Epigallocatechin Gallate Menghambat Resistensi Insulin pada Tikus dengan Diet Tinggi Lemak. *J Kedokt Brawijaya.* 2012.
39. Chen Y, Cruzat VF, Newsholme P. β -Cell Metabolism, Insulin Production and Secretion: Metabolic Failure Resulting in Diabetes. In: *Molecular Nutrition and Diabetes: A Volume in the Molecular Nutrition Series.* 2016.
40. Opie LH. Cardiac Metabolism in Health and Disease. In: *Cellular and Molecular Pathobiology of Cardiovascular Disease.* 2014.
41. Sudoyo, A.W. Setiyohadi B., Alwi I., Simadibrata M., Setiati S., *Ilmu Penyakit Dalam.* Jakarta: Departemen Ilmu Penyakit Dalam Fakultas Kedokteran Universitas Indonesia. 2009.
42. Wilcox G. 1-20 Insulin and Insulin. *Clin Biochem Rev.* 2005;26(2):19-39.
43. Prabawati RK. Mekanisme Seluler dan Molekuler Resistensi Insulin. 2012.
44. Boden, G, Laakso M. Lipids and glucose in type 2 diabetes: What is the cause and effect? *Diabetes Care.* 2004;27(9):2253-2259.
45. Thorens B, Mueckler M. Glucose transporters in the 21st Century. *American Journal of Physiology - Endocrinology and Metabolism.* 2010;298(2)(halaman).
46. Sunaryo H, Rahmania RA, Dwitiyanti, Siska. Aktivitas Antioksidan Kombinasi Ekstrak Jahe Gajah (*Zingiber officinale* Rosc.) dan Zink Berdasarkan Pengukuran MDA, SOD dan Katalase pada Mencit Hiperkolesterolemia dan Hiperglikemia dengan Penginduksi Streptozotisin. *J Ilmu Kefarmasian Indones.* 2015

47. Kaunang HCP, Wangko S. Glut4 Jaringan Adiposa Fungsi Dan Disfungsi. *J Biomedik*. 2013.
48. Griendling KK, Touyz RM, Zweier JL, Dikalov S, Chilian W, Chen YR, et al. Measurement of Reactive Oxygen Species, Reactive Nitrogen Species, and Redox-Dependent Signaling in the Cardiovascular System: A Scientific Statement from the American Heart Association. *Circulation Research*. 2016.
49. Ameta C, Kumawat P, Tripathi A. Oxidation. In: *Microwave-Assisted Organic Synthesis: A Green Chemical Approach*. 2014.
50. Khaira K. Menangkal Radikal Bebas dengan AntiOksidan. STAIN Batusangkar Sumatera Barat. 2010.
51. Widayati, Eni. Oxidasi Biologi, Radikal Bebas, dan Antioxidant Eni. *Maj Ilm Sultan Agung*. 2012.
52. Mega P, Wulansari T, Widyaningsih T, Jaya M. Aktivitas Antioksidan Suplemen Herbal Daun Sirsak (*Annona muricata L.*) dan Kulit Manggis (*Garcinia mangostana L.*): Kajian Pustaka. *J Pangan dan Agroindustri*. 2016.
53. Susantiningsih T. Obesitas dan Stres Oksidatif Obesity and Oxidative Stress. *J Kesehat Unila*. 2015.
54. Schönfeld P, Wojtczak L. Fatty acids as modulators of the cellular production of reactive oxygen species. *Free Radical Biology and Medicine*. 2008;45(3):231-41.
55. Shinmura K. Effects of caloric restriction on cardiac oxidative stress and mitochondrial bioenergetics: Potential role of cardiac sirtuins. *Oxidative Medicine and Cellular Longevity*. 2013.
56. Kawahito S, Kitahata H, Oshita S. Problems associated with glucose toxicity: Role of hyperglycemia-induced oxidative stress. *World Journal of Gastroenterology*. 2009.
57. Syarif RA, Muhajir M, Ahmad AR, Malik A. Identifikasi Golongan Senyawa Antioksidan Dengan Menggunakan Metode Peredaman Radikal Dpph Ekstrak Etanol Daun *Cordia myxa L.* *J Fitofarmaka Indones*. 2016.
58. Kumalaningsih S. *Antioksidan Alami*. Surabaya: Trubus Agrisarana; 2006.
59. Werdhasari A. Peran Antioksidan Bagi Kesehatan. *J Biomedik Medisiana Indonesia*. 2014;3(2):59-68.
60. Droge W. Free radicals in the physiological control of cell function. *Physiol Rev*. 2002;82(1):47-95.
61. Turan B. Role of Antioxidants in Redox Regulation of Diabetic Cardiovascular Complications. *Curr Pharm Biotechnol*. 2010.
62. Sabarni. Teknik pembuatan gambir (*Uncaria gambir Roxb*) secara tradisional. *J Islam Sci Technol*. 2015;53(1):25-33.
63. Sampurno, Ketut, R., Niniek, S. A., Evie, L., Sidik., Masjihoer., et.al. *Acuan Sediaan Herbal*. Deputi Bidang Pengawasan Obat Tradisional, Kosmetik dan Produk Komplemen. Badan POM RI, Jakarta. 2007.
64. Hernani. Teh Daun Gambir. *Warta Penelitian dan Pengembangan Pertanian*. 2014;36(5):10-11.
65. Damanik, DD, Surbakti, N, Hasibuan, R. Ekstraksi Katekin (*Uncaria Gambir Roxb*) dengan Metode Maserasi. *J Tek Kim USU*. 2014.

66. Andre N. A Review of the Occurrence of Non-Alkaloid Constituents in Uncaria Species and Their Structure-Activity Relationships. *Am J Biomed Life Sci*. 2013.
67. Arakawa H, Masako M, Robuyusi S, Miyazaki. Role of hydrogen peroxide in bactericidal action of catechin. *Biological & Pharmaceutical Bulletin*. 2004; 3227(27):227-8.
68. Adelina R. Mekanisme Katekin Sebagai Obat Antidislipidemia (Uji In Silico). *Buletin Penelitian Kesehatan*. 2018;46(3):147-154.
69. Ajie RB. White dragon fruit (*Hylocereus undatus*) potential as diabetes mellitus treatment. 2015;4:69–72.
70. Stangl V, Dreger H, Stangl K, Lorenz M. Molecular targets of tea polyphenols in the cardiovascular system. *Cardiovascular Research*. 2007;73:348-358.
71. Liu Q, Chen L, Hu L, Guo Y, Shen X. Small molecules from natural sources, targeting signaling pathways in diabetes. *Biochimica et Biophysica Acta - Gene Regulatory Mechanisms*. 2010.
72. Dahlia D, Pangkahila WI, Aman IGM, Pangkahila JA, Suryadhi NT, Iswari IS. Ekstrak Teh Putih (*Camellia sinensis*) Oral Mencegah Dislipidemia pada Tikus (*Rattus norvegicus*) Jantan Galur Wistar yang Diberi Diet Tinggi Lemak. *J Anti Aging Med*. 2017.
73. Babu PV, Liu D. Green Tea Catechins and Cardiovascular Health: An Update. *Curr Med Chem*. 2008;15(18):1840-1850.
74. Braicu C, Lodomery MR, Chedea VS, Irimie A, Berindan-Neagoe I. The relationship between the structure and biological actions of green tea catechins. *Food Chemistry*. 2013.
75. Bernatoniene J, Kucinskiene DM. The Role of Catechins in Cellular Responses to Oxidative Stress. *Molecules*. 2018;23(4):965.
76. T S. Panduan Penelitian Untuk Skripsi Kedokteran dan Kesehatan. In: Salemba Medika. 2009.
77. Charan J, Kantharia AND. How to calculate sample size in animal studies? *J Pharmacol Pharmacother*. 2013;4(4): 303-6.
78. Harahap AS, Herman RB, Yerizel E. Gambaran Glukosa Darah Setelah Latihan Fisik pada Tikus Wistar Diabetes Melitus yang Diinduksi Aloksan. *J Kesehat Andalas*. 2015.
79. Purnamasari E, Yerizel E, Efrida E. Pengaruh Pemberian Aspartam terhadap Kadar Glukosa Darah Tikus Diabetes Melitus Diinduksi Aloksan. *Jurnal Kesehatan Andalas*. 2014.
80. Permana Z. Konsumsi, pencernaan dan performa tikus putih (*Rattus norvegicus*) yang diberi ransum disuplementasi biomineral cairan rumen. *Inst Pertan Bogor*. 2010.
81. Wang CY, Liao JK. A mouse model of diet-induced obesity and insulin resistance. *Methods Mol Biol*. 2012;821:421-433.
82. Buettner R, Schölmerich J, Bollheimer LC. High-fat diets: Modeling the metabolic disorders of human obesity in rodents. *Obesity*. 2007;15(4):798-808.

83. Pierre-Marie Badin, Isabelle K. Vila, Katie Louche, Aline Mairal, Marie-Adeline Marques, Virginie Bourlier, et al. High-Fat Diet-Mediated Lipotoxicity and Insulin Resistance Is Related to Impaired Lipase Expression in Mouse Skeletal Muscle. *Endocrinology*. 2013;154(4):1444–1453.
84. Haley MJ, Krishnan S, Burrows D, de Hoog L, Thakrar J, Schiessl I, et al. Acute high-fat feeding leads to disruptions in glucose homeostasis and worsens stroke outcome. *J Cereb Blood Flow Metab*. 2019;39(6):1026-1037.
85. Sato A, Kawano H, Notsu T, Ohta M, Nakakuki M, Mizuguchi K, et al. *Diabetes*. 2010; 59(10):2495-504.
86. K. G. M. M. Alberti, R. H. Eckel, S. M. Grundy. Harmonizing the metabolic syndrome: a joint interim statement of the international diabetes federation task force on epidemiology and prevention; National Heart, Lung, and Blood Institute; American Heart Association; World Heart Federation; International Atherosclerosis Society; and International Association for the study of obesity. *Circulation*. 2009;120(16):1640– 1645.
87. Suman RK, Ray Mohanty I, Borde MK, Maheshwari U, Deshmukh YA. Development of an experimental model of diabetes co-existing with metabolic syndrome in rats. *Adv Pharmacol Sci*. 2016.
88. Purnamasari AW, Isnawati M. Pengaruh pemberian jus pare (*Momordica charantia* L.) dan jus jeruk nipis (*Citrus aurantifolia*) terhadap kadar kolesterol total tikus sprague dawley hiperkolesterolemia. *Journal of nutrition college*. 2014;3(4):894-902.
89. Asdaq, S M B, Inamdar, M. N. Potential of *Crocus sativus* (saffron) and its constituent, crocin, as hypolipidemic and antioxidant in rats. *Applied biochemistry and biotechnology*, 2010;162(2):358-372.
90. Salomo, H., Busman., H, Apriliana, E. Pengaruh Pemberian Metformin dan Ekstrak Daun Teh Hijau pada Penurunan Berat Badan Tikus Putih (*Rattus norvegicus*). Galur Sprague Dawley dengan diet tinggi Lemak. *Jurnal Majority*, 2018;7(2):65-7.
91. Roji, Dhia Nurman . *Pengaruh Pemberian Isolat Katekin Gambir (Uncaria gambir Roxb.) terhadap Kadar LDL Tikus Hiperqlikemia yang Diinduksi Aloksan*. Diploma thesis, Universitas Andalas. 2019.
92. Saklar S, Ertas E, Ozdemir IS, Karadeniz B. Effects of different brewing conditions on catechin content and sensory acceptance in Turkish green tea infusions. *J Food Sci Technol*. 2015;52(10):6639-6646.
93. Nurminabari IS. Pengaruh Perbandingan Serbuk Kayu Manis (*Cinnamomum burmannii*) Dengan Cengkeh (*Syzygium aromaticum* L.) Dan Konsentrasi Gula Stevia (*Stevia rebaudiana* B.) Terhadap Karakteristik Teh Celup Daun Mengkudu (*Morinda citrifolia* L.). *Pas Food Technol J*. 2019.
94. Subiyono, Martsiningsih MA, Gabriela DE. Gambaran kadar glukosa darah metode GOD-PAP (Glucose Oksidase – Peroxidase Aminoantipirin) sampel serum dan plasma EDTA (Ethylen Diamin Terta Acetat). *J Teknol Lab*. 2016.
95. Trinder P. Glucose GOD/PAP stable liquid reagent. *J clin pathol*. 2013.

96. Majelis Kehormatan Etik Kedokteran Indonesia. Kode Etik Kedokteran Indonesia. Pengurus Besar Ikatan Dokter Indonesia. 2012.
97. Hendra Stevani, S.Si., M.Kes. A. Pratikum Farmakologi Komprehensif. Jakarta: Kementerian Kesehatan Republik Indonesia; 2016.
98. Sazwi, NN, Nalina T, Z H A. Rahim. Antioxidant and cytoprotective activities of Piper betle, Areca catechu, Uncaria gambirand betel quid with and without calcium hydroxide. *Journal BioMed Central Complementary and Alternative Medicine*. 2013.13 (351):1-12.
99. Inami S, Takano M, Yamamoto M. Tea catechin consumption reduces circulating oxidized low-density lipoprotein. *International Heart Journal*. 2007;48:725-32.

