

DAFTAR PUTAKA

- Ambarwati, A. P., & Mulyati. (2011). Pengaruh *Arthrospira maxima* Setchell et Gardner dan *Chlorella vulgaris*. Beijerinck terhadap kadar ALT dan bilirubin serta hepatosit tikus (*Rattus norvegicus* Berkenhout, 1769) galur wistar hiperglikemia. *Skripsi*. Fakultas Biologi UGM. Yogyakarta. p.1-98
- Aronoff, S. L., Berkowitz, K., Shreiner, B., & Want, L. (2004). Glucose metabolism and regulation: Beyond insulin and glucagon. *Diabetes Spectrum*, 17(3), 183–190
- Baker, H. J., Lindsey, R. J., Weisbroth, S. H., & Wesibroth, S. H. (2013). *The laboratory rat: Biology and diseases*. New York: Academic Press. p.38
- Balitbangtan. (2016). *Penggunaan dan penanganan hewan coba rodensia dalam penelitian sesuai dengan kesejahteraan hewan*. Perpustakaan Nasional. p.1-10
- Barrett, K., Barman, S., Yuan, J., & Brooks, H. (2019). *Ganong's review of medical physiology* (26th ed.). McGraw Hill.
- Brahmachari, G. (2011). Bio-Flavonoids with promising antidiabetic potentials: A critical survey. *Research Signpost*, 87-212
- Bremer, A. A., Mietus-Snyder, M., & Lustig, R. H. (2012). Toward a unifying hypothesis of metabolic syndrome. *Pediatrics*, 129(3), 557-570
- Coman, C., Rugina, O. D., & Socaciu, C. (2012). Plants and natural compounds with antidiabetic action. *Notulae Botanicae Horti Agrobotanici Cluj-Napoca*, 40(1), 314-325
- Depkes RI. (2000). *Parameter standar umum ekstrak tumbuhan obat*. Cetakan Pertama. Jakarta: Departemen Kesehatan dan Kesejahteraan Republik Indonesia. p. 20-40
- Depkes RI. (2005). *Pharmaceutical care untuk penyakit diabetes melitus*. Jakarta: Departemen Kesehatan dan Kesejahteraan Republik Indonesia. p. 24-48
- Devkota, H. P., Paudel, K. R., Hassan, M. M., Dirar, A. I., Das, N., Adhikari-Devkota, A., Echeverría, J., Logesh, R., Jha, N. K., Singh, S. K., Hansbro, P. M., Chan, Y., Chellappan, D. K., & Dua, K. (2021). Bioactive compounds from *Zingiber montanum* and their

pharmacological activities with focus on zerumbone. *Applied Sciences*,

11(10205), 1-24

Dimitriadis, G., Mitrou, P., Lambadiari, V., Maratou, E., & Raptis, S. A. (2011). Insulin effects in muscle and adipose tissue. *Diabetes Research and Clinical Practice*, 93, 52–59

Dipiro, J. T., Talbert, R. L., Yee, G. C., Matzke, G. R., Wells, B. G., & Posey, L. M. (2005). *Pharmacotherapy a pathophysiologic approach*. New York: McGraw-Hil. p. 1333, 1343, 1353

Elekofehintini, O. O., Kamdem, J. P., Kade, I. J., Adanlawo, I. B., dan Rocha, J. B. T. (2013). Saponins from *Solanum anguivi* Lam. fruit exhibit in vitro and in vivo antioxidant activities in alloxan-induced oxidative stress. *Asian Journal of Pharmaceutical and Clinical Research*, 6(2), 249-253

Ferreira, L. M., Hochman, B., & Barbosa, M. V. J. (2005). Modelos experimentais em pesquisa. *Acta Cirurgica Brasileira*, 20(suppl 2), 28-34

Ford, A. M., Abe, H., Bonen, A., & Chabowski, A. (2006). *Focus on diabetes mellitus research* (1st ed.). New York: Nova Science Pub Inc. p. 178

Gauthier, E. L. (2014). *Streptozotocin: Uses, mechanism of action and side effects (New Developments in Medical Research)* (1st ed.). New York: Nova Science Pub Inc

Gong, L., Goswami, S., Giacomini, K. M., Altman, R. B., & Klein, T. E. (2012). Metformin pathways: Pharmacokinetics and pharmacodynamics. *Pharmacogenetics and Genomics*, 22(11), 820-827

Guo, L. P., Jiang, T. F., Lv, Z. H., & Wang, Y. H. (2010). Screening α-glucosidase inhibitors from traditional Chinese drugs by capillary electrophoresis with electrophoretically mediated microanalysis. *Journal of Pharmaceutical and Biomedical Analysis*, 53(5), 1250-1253

Hankenson, F. C. (2014). *Critical care management for laboratory mice and rats*. Boca Raton: CRC Press. p. 113.

Hidayaturrahmah, H., Santoso, H. B., & Nurlely, N. (2017). Profil glukosa darah tikus putih setelah pemberian ekstrak minyak ikan patin

- (*Pangasius hypophthalmus*) sebagai alternatif antidiabetes. *Jurnal Pharmascience*, 4(2), 219-226
- Hossain, M. A., & Pervin, R. (2018). Current antidiabetic drugs. *Nutritional and Therapeutic Interventions for Diabetes and Metabolic Syndrome*, 455–473
- Hostettmann, K., & A. Marston. (1995). *Saponins*. Cambridge: Cambridge University Press
- Hundal, R. S., & Inzucchi, S. E. (2003). Metformin: New understandings, new uses. *Drugs*, 63(18), 1879–1894
- International Diabetes Federation. (2019). *Diabetes Atlas*. 9th ed. Retrieved from <https://www.diabetesatlas.org/en/resources/>
- ITIS. (2017). *Rattus norvegicus* (Berkenhout, 1769). Retrieved from https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=180363#null
- ITIS. (2021). *Zingiber montanum (J.Koenig) Link ex A.Dietr.* Retrieved from https://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=817992#null
- Kaliste, E. (2007). *The welfare of laboratory animals* (2004th ed.). Netherlands: Springer. p. 154-155
- Kato, E., Kubo, M., Okamoto, Y., Matsunaga, Y., Kyo, H., Suzuki, N., Uebaba, K., & Fukuyama, Y. (2018). Safety assessment of bangle (*Zingiber purpureum* Rosc.) rhizome extract: Acute and chronic studies in rats and clinical studies in human. *ACS Omega*, 3(11), 15879–15889
- Kumari, M., & Jain, S. (2012). Tannins : An antinutrient with positive effect to manage diabetes. *Research Journal of Recent Science*, 1(12), 70-1
- Koontongkae, S., Poachanukoon, O., Sireeratawong, S., Ayudhya, T. D. N., Khonsung, P., Jaijoy, K., Soawakontha, R., & Chanchai, M. (2014). Safety evaluation of *Zingiber cassumunar* Roxb. rhizome extract: Acute and chronic toxicity studies in rats. *International Scholarly Research Notices*, 2014, 1-14
- Meliani, N., Amie, M. E., Allali, H., & Tabti, B. (2011). Hypoglycaemic effect of *Berberis vulgaris* L. in normal and streptozotocin-induced diabetic

rats. *Asian Pacific Journal of Tropical Biomedicine*, 1(6), 468 – 471

- Mongi, R. E., Simbala, H. E. I., De queljoe, E. (2019). Aktivitas penurunan kadar gula darah ekstrak etanol daun pinang yaki (*Areca vestiaria*) terhadap tikus putih jantan galur wistar (*Rattus norvegicus*) yang diinduksi aloksan. *Jurnal Ilmiah Farmasi*, 8(3), 34-41
- Noventi, I., Rusdianingseh, R., & Khafid, M. (2019). Prevalensi, karakteristik dan faktor resiko prediabetes di wilayah pesisir, pegunungan dan perkotaan. *Jurnal Ners Dan Kebidanan*, 6(3), 371–381
- Nugroho, A. E. (2006). Review: Animal models of diabetes mellitus: Pathology and mechanism of some diabetogenics. *Biodiversitas Journal of Biological Diversity*, 7(4), 378-382
- P, S., Zinjarde, S. S., Bhargava, S. Y., & Kumar, A. R. (2001). Potent α -amylase inhibitory activity of Indian Ayurvedic medicinal plants. *BMC Complementary and Alternative Medicine*, 11(5), 1-10
- Padmasari, P.D., Astuti, K. W.,& Warditiani, N. K. (2013). Skrining fitokimia ekstrak etanol 70% rimpang bangle (*Zingiber purpureum Roxb.*). *Jurnal Farmasi Udayana*. 2(4), 1-4
- Plownan, P.N. (1987). *Endocrinology and metabolic disease*. Toronto: John Wiley and Sons
- Qaid, M. M., & Abdelrahman, M. M. (2016). Role of insulin and other related hormones in energy metabolism: A review. *Cogent Food & Agriculture*, 2(1), 1-18
- Rabasa, C., & Dickson, S. L. (2016). Impact of stress on metabolism and energy balance. *Current Opinion in Behavioral Sciences*, 9, 71–77
- Reece, J. B., Urry, L. A., Cain, M. L., Wasserman, S. A., Minorsky, P., V., & Jackson, R. B. (2019). *Campbell Biology* (10th ed.). Pearson. p. 53-56
- Riwu, M., Subarnas, A., & Lestari, K. (2015). The correlation of age factor, administration, and metformin dose against risk of side effect on type 2 diabetes mellitus. *Indonesian Journal of Clinical Pharmacy*, 4(3), 151–161
- Rotblatt, M., & Ziment, I. (2001). *Evidence-Based Herbal Medicine* (1st ed.). Hanley & Belfus
- Sarian, M. N., Ahmed, Q. U., Mat So'ad, S. Z., Alhassan, A. M., Murugesu, S.,

- Perumal, V., & Latip, J. (2017). Antioxidant and antidiabetic effects of flavonoids: A structure-activity relationship based study. *BioMed research international*, 2017, 1-14
- Scheen, A. J., & Paquot, N. (2013). Metformin revisited: A critical review of the benefit-risk balance in at-risk patients with type 2 diabetes. *Diabetes & Metabolism*, 39(3), 179–190
- Shulman, G. I. (2000). Cellular mechanism of insulin resistance. *Journal of Clinical Investigation*, 106, 171-76
- Si, M. M., Lou, J. S., Zhou, C. X., Shen, J. N., Wu, H. H., Yang, B., He, Q. J., & Wu, H. S. (2010). Insulin releasing and alpha-glucosidase inhibitory activity of ethyl acetate fraction of *Acorus calamus* in vitro and in vivo. *Journal of Ethnopharmacology*, 128(1), 154–159
- Skyler, J. S., Bakris, G. L., Bonifacio, E., Darsow, T., Eckel, R. H., Groop, L., Groop, P. H., Handelsman, Y., Insel, R. A., Mathieu, C., McElvaine, A. T., Palmer, J. P., Pugliese, A., Schatz, D. A., Sosenko, J. M., Wilding, J. P., & Ratner, R. E. (2016). Differentiation of diabetes by pathophysiology, natural history, and prognosis. *Diabetes*, 66(2), 241–255
- Song, R. (2016). Mechanism of metformin: A tale of two sites. *Diabetes Care*, 39(2), 187–189
- Soobrattee M. A., Neergheen V. S., Luximon-Ramma A., Aruoma O. I., & Bahorun T. (2005). Phenolics as potential antioxidant therapeutic agents: Mechanism and actions. *Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis*. 579(1-2), 200–213
- Szkudelski, T. (2001). The Mechanism of alloxan and streptozotocin action in B cells of the rat pancreas. *Physiology Research*, 50, 536-546
- Twyman, R. M. (2009). *Encyclopedia of neuroscience*. Cambridge: Academic Press. p: 1201-1206
- Vinayagam, R., & Xu, B. (2015). Antidiabetic properties of dietary flavonoids: a cellular mechanism review. *Nutrition & Metabolism*, 12(60), 1-20
- Viollet, B., & Foretz, M. (2013). Revisiting the mechanisms of metformin action in the liver. *Annales d'Endocrinologie*, 74(2), 123–129
- Wahyudi, A. (2011). Ekstraksi dan uji aktivitas antibakteri minyak atsiri dari

rimpang bangle (*Zingiber cassumunar Roxb.*). *Tesis. Program Pasca Sarjana, Universitas Indonesia.* p. 18

Wall J. (2000). Antioxidants in prevention of reperfusion damage vascular endothelium. *The Trinity Student Medical Journal.* 1, 67–71.

Wicox, G. (2005). Insulin and insuline resistance. *Clinical Biochemist Reviews,* 26, 19-39

Widowaty, W. 2008. Potensi Antioksidan Sebagai Antidiabetes. *Jurnal Kesehatan Masyarakat,* 7(2), 6-7

Yan, L. J., & Wu, J. (2015). Streptozotocin-induced type 1 diabetes in rodents as a model for studying mitochondrial mechanisms of diabetic β cell glucotoxicity. *Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy,* 2015(8), 181-188

Yokuzawa, T., Cho E. J., Park C. H., & Kim, H. J. (2012). Review article: Protective effect of proanthocyanidin against diabetic oxidative stress. *Evidence-Based Complementary and Alternative Medicine,* 2012, 1-11

Yuniarto, A.,& Selifiana, N. (2018). Aktivitas inhibisi enzim alfa-glukosidase dari ekstrak rimpang bangle (*Zingiber cassumunar Roxb.*) secara in vitro. *Media Pharmaceutica Indonesiana.* 2(1), 22-25

Zhang, L., Fletcher, A. G. L., Cheung, V., Winston, F., & Stargell, L. A. (2008). Spn1 regulates the recruitment of Spt6 and the Swi/Snf complex during transcriptional activation by RNA polymerase II. *Molecular and Cellular Biology,* 28(4), 1393–1403

Zulkarnain. (2013). Perubahan kadar glukosa darah puasa pada tikus sprague dawley. *Jurnal Kedokteran Syiah Kuala,* 13(2), 71-76