

DAFTAR PUSTAKA

- American Diabetes Association. 2017. Classification and Diagnosis of Diabetes. *Diabetes Care* vol 40(1): S11–S24. doi: <https://doi.org/10.2337/dc17-S005>.
- Arjana, A. A. G., & Budiasa, K. 2016. *Peran Imunomodulator Dalam Mengaktifkan Respon Imun Terhadap Infeksi Virus*. 30.
- Aryanti, N., Abidin, Y. 2015. Ekstraksi Glukomanan Dari Porang Lokal (Amorphophallus oncophyllus dan Amorphophallus muerelli blume). *Metana - Media Komunikasi Rekayasa Proses Dan Teknologi Tepat Guna* vol 11(01): 21-30. doi: 10.14710/metana.v11i01.13037.
- Bao, P., Liu, G., & Wei, Y. 2015. Association between IL-6 and related risk factors of metabolic syndrome and cardiovascular disease in young rats. *International Journal of Clinical and Experimental Medicine* vol 8(8): 13491–13499.
- Behera, S. S., & Ray, R. C. 2016. Konjac glucomannan, a promising polysaccharide of Amorphophallus konjac K. Koch in health care. *International Journal of Biological Macromolecules*, 92, 942–956. <https://doi.org/10.1016/j.ijbiomac.2016.07.098>
- Bhatt, H., Saklani, S., & Upadhyay, K. 2016. Anti-oxidant and anti-diabetic activities of ethanolic extract of Primula Denticulata Flowers. *Indonesian Journal of Pharmacy* vol 27(2): 74–79. doi: <https://doi.org/10.14499/indonesianjpharm27iss2pp74>.
- Bhatt, H., Saklani, dan Upadhyay, K. 2016. Anti-Oxidant And Anti-Diabetic Activities Of Ethanolic Extract Of Primula Denticulata Flowers. *Indonesian Journal of Pharmacy* vol 27(2): 74–79. doi: [10.14499/indonesianjpharm27iss2pp74](https://doi.org/10.14499/indonesianjpharm27iss2pp74).
- Cani, P. D., Everard, A., & Duparc, T. 2013. Gut microbiota, enteroendocrine functions and metabolism. *Current Opinion in Pharmacology* vol 13(6): 935–940. doi: <https://doi.org/10.1016/j.coph.2013.09.008>.
- Cheang, K.-U., Chen, C. M., Oliver Chen, C. Y., Liang, F. Y., Shih, C. K., Li, S. C. 2017. Effects Of Glucomannan Noodle On Diabetes Risk Factors In Patients With Metabolic Syndrome: A Double-Blinded, Randomized Crossover Controlled Trial. *Journal of Food and Nutrition Research* vol 5(8): 622–628. doi: [10.12691/jfnr-5-8-13](https://doi.org/10.12691/jfnr-5-8-13).
- Connolly, M. L., Lovegrove, J. A., & Tuohy, K. M. 2010. Konjac glucomannan hydrolysate beneficially modulates bacterial composition and activity

- within the faecal microbiota. *Journal of Functional Foods* vol 2(3): 219–224. doi: <https://doi.org/10.1016/j.jff.2010.05.001>.
- Derosa, G., Maffioli, P., D'Angelo, A., Fogari, E., Bianchi, L., & Cicero, A. F. G. 2011. Acarbose on insulin resistance after an oral fat load: A double-blind, placebo controlled study. *Journal of Diabetes and Its Complications* vol 25(4): 258–266. doi : <https://doi.org/10.1016/j.jdiacomp.2011.01.003>.
- DiNicolantonio, J. J., Bhutani, J., & O'Keefe, J. H. 2015. Acarbose: safe and effective for lowering postprandial hyperglycaemia and improving cardiovascular outcomes. *Open Heart* vol 2(1): e000327. doi: <https://doi.org/10.1136/openhrt-2015-000327>.
- Fatchiyah, F., Nurmasari, D. A., Masruro, N. dan Rohmah, R. N. 2019. Level Of mRNA Insulin Gene And Blood Glucose STZ-Induced Diabetic Rat Are Improved By Glucomannan Of Amorphophallus Muelleri Blume From East Java Forest Indonesia. *Journal of Tropical Life Science* vol 9(2): 163–169. doi: [10.11594/jtls.09.02.05](https://doi.org/10.11594/jtls.09.02.05).
- Fitriatun, E. 2019. Peran Vitamin C, Vitamin E, dan Tumbuhan Sebagai Antioksidan Untuk Mengurangi Penyakit Diabetes Mellitus. *Journal of Chemical Information and Modeling* vol 53(9): 1689–1699. doi: <https://doi.org/10.1017/CBO9781107415324.004>.
- Ghasemi, A., Khalifi, S., & Jedi, S. 2014. Streptozotocin-nicotinamide-induced rat model of type 2 diabetes (review). *Acta Physiologica Hungarica* vol 101(4): 408–420.doi: <https://doi.org/10.1556/APhysiol.101.2014.4.2>.
- Gurusmatika, S., Nishi, K., Harmayani, E., Pranoto, Y., & Sugahara, T. 2017. Immunomodulatory Activity of Octenyl Succinic Anhydride Modified Porang (Amorphophallus oncophyllus) Glucomannan on Mouse Macrophage-Like J774.1 Cells and Mouse Primary Peritoneal Macrophages. *Molecules (Basel, Switzerland)* vol 22(7): 1187. doi: <https://doi.org/10.3390/molecules22071187>.
- Harmayani, E., Aprilia, V. dan Marsono, Y. 2014. Characterization Of Glucomannan From Amorphophallus Oncophyllus And Its Prebiotic Activity In Vivo. *Carbohydrate Polymers* vol 112(1): 475–479. doi: [10.1016/j.carbpol.2014.06.019](https://doi.org/10.1016/j.carbpol.2014.06.019).
- Hidayah, R. 2016. Budidaya Umbi Porang Secara Intensif,. *Univeritas Gajah Mada*, (June). <https://doi.org/10.13140/RG.2.1.3487.9600>
- International Diabetes Federation. 2017. Recommendations for Managing Type 2 Diabetes In Primary Care. Belgia. www.idf.org/managing-type2-diabetes.

- Joshi, S. R., Ramachandran, A., Chadha, M., Chatterjee, S., Rathod, R., & Kalra, S. 2014. Acarbose plus metformin fixed-dose combination in the management of type 2 diabetes. *Expert Opinion on Pharmacotherapy* vol 15(11): 1611–1620. doi: <https://doi.org/10.1517/14656566.2014.932771>
- Joshi, S. R., Standl, E., Tong, N., Shah, P., Kalra, S., & Rathod, R. 2015. Therapeutic potential of α -glucosidase inhibitors in type 2 diabetes mellitus: An evidence-based review. *Expert Opinion on Pharmacotherapy* vol 16(13): 1959–1981. doi: <https://doi.org/10.1517/14656566.2015.1070827>
- Kaneto, H., Katakami, N., Matsuhisa, M., & Matsuoka, T. A. 2010. Role of Reactive Oxygen Species in the Progression of Type 2 Diabetes and Atherosclerosis. *Mediators of Inflammation* vol 2010(2): 1-11. doi:<https://doi.org/10.1155/2010/453892>.
- Keithley, J. K. 2013. Safety and efficacy of glucomannan for weight loss in overweight and moderately obese adults. *Journal of Obesity*, 2013. <https://doi.org/10.1155/2013/610908>
- Kementerian Kesehatan RI Badan Penelitian dan Pengembangan. 2018. Hasil Utama Riset Kesehatan Dasar. *Kementerian Kesehatan Republik Indonesia*. 1–100.
- Kerner, W., & Brückel, J. 2014. Definition, classification and diagnosis of diabetes mellitus. *Experimental and Clinical Endocrinology and Diabetes* vol 122(7): 384–386. doi: <https://doi.org/10.1055/s-0034-1366278>.
- Khairani. 2019. Hari Diabetes Sedunia Tahun 2018. *Pusat Data Dan Informasi Kementerian Kesehatan RI*. 1–8.
- Kim, C. H., Park, J., & Kim, M. 2014. Gut Microbiota-Derived Short-Chain Fatty Acids, T Cells, and Inflammation. *Immune Network* vol 14(6): 277. doi: <https://doi.org/10.4110/in.2014.14.6.277>.
- Kim, M. H., Kang, S. G., Park, J. H., Yanagisawa, M., & Kim, C. H. 2013. Short-chain fatty acids activate GPR41 and GPR43 on intestinal epithelial cells to promote inflammatory responses in mice. *Gastroenterology* vol 145(2). doi: <https://doi.org/10.1053/j.gastro.2013.04.056>.
- Lattimer, J. M., & Haub, M. D. 2010. Effects of dietary fiber and its components on metabolic health. *Nutrients* vol 2(12): 1266–1289. doi: <https://doi.org/10.3390/nu2121266>.
- Liu, C., Feng, X., Li, Q., Wang, Y., Huan, M. 2016. Adiponectin, TNF- α And Inflammatory Cytokines And Risk Of Type 2 Diabetes: A systematic

- review and meta-analysis. *Cytokine* vol 86(10): 100–109. doi: 10.1016/j.cyto.2016.06.028.
- Lugt . 2018. Dietary advanced glycation endproducts induce an inflammatory response in human macrophages in vitro. *Nutrients* vol 10(12): 1–10. doi: <https://doi.org/10.3390/nu10121868>.
- Minamii, T., Nogami, M., & Ogawa, W. 2018. Mechanisms of metformin action: In and out of the gut. *Journal of Diabetes Investigation* vol 9(4): 701–703. doi: <https://doi.org/10.1111/jdi.12864>
- Mo, D. et al. 2019. Effects of Acarbose and metformin on the inflammatory state in newly diagnosed type 2 diabetes patients: A one-year randomized clinical study. *Drug Design, Development and Therapy* vol 13(3): 2769–2776. doi: <https://doi.org/10.2147/DDDT.S208327>.
- Nakajima, N., & Matsuurat, Y. 2012. Purification and characterization of konjac glucomannan degrading enzyme from anaerobic human intestinal bacterium, clostridium butyricum–clostvidium beijerinckii group. *Bioscience, Biotechnology and Biochemistry* vol 61(10): 1739–1742. doi: <https://doi.org/10.1271/bbb.61.1739>.
- Nurdiantin. 2017. Pengaruh Pemberian Tepung Porang (*Amorphophallus muelleri* Blume) terhadap Kadar HDL pada Tikus (*Rattus novergicus*) Strain Wistar DM Tipe 2. *Journal Nursing News* vol 2(1): 511–523. doi: <https://doi.org/10.1021/BC049898Y>.
- Oliver, J. 2013. Suplementasi Tepung Porang (*Amorphophallus Muelleri* Blume) Sebagai Nutraceutical Dalam Manajemen Diabetes Mellitus Tipe 2 Nurlaili. *Journal Of Chemical Information And Modeling* vol 53(9): 1689–1699. doi: 10.1017/CBO9781107415324.004.
- Orlandi, I., Alberghina, L., & Vai, M. 2020. Nicotinamide, nicotinamide riboside and nicotinic acid—Emerging roles in replicative and chronological aging in yeast. *Biomolecules* vol 10(4): 1–14. doi: <https://doi.org/10.3390/biom10040604>.
- Ozougwu, O. 2013. The pathogenesis and pathophysiology of type 1 and type 2 diabetes mellitus. *Journal of Physiology and Pathophysiology* vol 4(4): 46–57. doi: <https://doi.org/10.5897/jpap2013.0001>.
- Papathanasopoulos, A., & Camilleri, M. 2010. Dietary Fiber Supplements: Effects in Obesity and Metabolic Syndrome and Relationship to Gastrointestinal Functions. *Gastroenterology* vol 138(1): 65-72.e2. doi:<https://doi.org/10.1053/j.gastro.2009.11.045>.

PB. PERKENI 2015 *Konsensus Pengelolaan dan Pencegahan Diabetes Melitus Tipe II di Indonesia*. Jakarta.

Pencegahan, P. D. A. N., & Indonesia, D. I. 2015. *Pengelolaan dan pencegahan diabetes melitus tipe 2 di indonesia 2015*.

Qu, D., Liu, J., Lau, C. W., & Huang, Y. (2014). IL-6 in diabetes and cardiovascular complications. *British Journal of Pharmacology*, 171(15), 3595–3603. <https://doi.org/10.1111/bph.12713>

Rabbani, S. I., Devi, K., & Khanam, S. 2010. Pioglitazone, a PPAR- γ ligand inhibited the nicotinamide- streptozotocin induced sperm abnormalities in type-2 diabetic wistar rats. *Pakistan Journal of Pharmaceutical Sciences* vol 23(3): 326-331.

Ramana, K. V. 2011. Aldose reductase: New insights for an old enzyme. *Biomolecular Concepts* vol 2(1–2): 103–114. doi: <https://doi.org/10.1515/bmc.2011.002>.

Rehman, K., Akash, M. S. H., Liaqat, A., Kamal, S., Qadir, M. I., & Rasul, A. 2017. Role of interleukin-6 in development of insulin resistance and type 2 diabetes mellitus. *Critical Reviews in Eukaryotic Gene Expression* vol 27(3): 229–236. doi: <https://doi.org/10.1615/CritRevEukaryotGeneExpr.2017019712>.

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* vol 4(3): 151–161. doi: <https://doi.org/10.15416/ijcp.2015.4.3.151>.

Rodrigues, K. F., Pietrani, N. T., Bosco, A. A., Campos, F. M. F., Sandrim, V. C. dan Gomes, K. B. 2017. IL-6, TNF- α , And IL-10 Levels/ Polymorphisms And Their Association With Type 2 Diabetes Mellitus And Obesity In Brazilian Individuals. *Archives Of Endocrinology And Metabolism* vol 61(5): 438–446. doi: 10.1590/2359-3997000000254.

Rosak, C., dan Mertes, G. 2012. Critical Evaluation of The Role Of Acarbose In The Treatment Of Diabetes: Patient Considerations. *Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy* vol 5(2): 357–367. doi: 10.2147/dmso.s28340.

Saeedi, P ., Petersohn, I., Salpea, P., Malanda, B., Karuranga, S., Unwin, N., Colagiuri, S., Guariguata, L., Motala, A., Ogurtsova A., Shaw, J., Bright, J., William, R. 2019. Global And Regional Diabetes Prevalence Estimates For 2019 And Projections For 2030 and 2045: Results From The International Diabetes Federation Diabetes Atlas, 9th edition. *Diabetes*

- Research and Clinical Practice* vol 157(11): 107843. doi: 10.1016/j.diabres.2019.107843.
- Safitri, A. H., Tyagita, N., & Nasihun, T. 2017. Porang glucomannan supplementation improves lipid profile in metabolic syndrome induced rats. *Journal of Natural Remedies* vol 17(4): 131–143. doi: <https://doi.org/10.18311/jnr/2017/18125>.
- Sari, R., & Suhartati. 2015. Tumbuhan Porang: Prospek Budidaya Sebagai Salah Satu Sistem Agroforestry. *Info Teknis EBONI* vol 12(2): 97–110.
- Shita, A. D. P. 2015. Perubahan Level TNF- α Dan IL-1 Pada Kondisi Diabetes Mellitus. *Which Is the Most Widely Used Test And Is An Easy Initial Screening Test* vol 1(1): 1-7. doi: 10.1017/CBO9781107415324.004.
- Susantiningsih, T., & Mustafa, S. 2018. Ekspresi IL-6 dan TNF- α Pada Obesitas. *JK Unila* vol 2(2), 174–180.
- Szkudelski, T. 2012. Streptozotocin–nicotinamide-induced diabetes in the rat. Characteristics of the experimental model. *Experimental Biology and Medicine*, 237(5) vol 481–490.doi: <https://doi.org/10.1258/ebm.2012.011372>.
- Tan, J. Mckenzie, C., Potamitis, M., Thorburn, A., Mackay, C., Macia, L. 2014. The Role of Short-Chain Fatty Acids in Health and Disease. *In Advances in Immunology* vol 121(1): 91-119. doi: <https://doi.org/10.1016/B978-0-12-800100-4.00003-9>.
- Tanaka, T., & Kishimoto, T. 2012. Targeting interleukin-6: All the way to treat autoimmune and inflammatory diseases. *International Journal of Biological Sciences* vol 8(9):1227–1236. doi: <https://doi.org/10.7150/ijbs.4666>.
- Tanaka, T., Narazaki, M., & Kishimoto, T. 2014. IL-6 in Inflammation, Immunity, and Disease. *Cold Spring Harbour Perspectives In Biolog* vol 6(1989): 1–16.
- Tsalamandris, S., Antonopoulos, A., Oikonomou, E., Papamikroulis, G., Vogiatzi, G., Papaioannou, S., Deftereos, S., Tousoulis, D. 2019. The Role Of Inflammation In Diabetes: Current Concepts And Future Perspectives. *European Cardiology Review* vol 14(1): 50–59. doi: [10.15420/ecr.2018.33.1](https://doi.org/10.15420/ecr.2018.33.1).
- Wardhani, D. H., Aryanti, N., Murvianto, F. dan Yogananda, K. D. 2016. Peningkatan Kualitas Glukomanan Dari Amorphophallus oncophyllus Secara Enzimatis dengan a-amilase. *Inovasi Teknik Kimia* vol 1(1): 71–77. doi: [10.31942/inteka.v1i2.1651](https://doi.org/10.31942/inteka.v1i2.1651).

- Wang, Y. W . 2017. Metformin: A review of its potential indications. *Drug Design, Development and Therapy* vol 11(2): 2421–2429. doi: <https://doi.org/10.2147/DDDT.S141675>.
- Wigoeno, Y. A. 2013. Analisis kadar glukomanan pada umbi porang. *Jurnal Biotropika* vol 1(5): 231–235.
- Yao, X ., Huang, J.,Zhong, H., Shen, N., Faggioni, R., Fung, M., Yao, Y. 2014. Targeting interleukin-6 in inflammatory autoimmune diseases and cancers. *Pharmacology and Therapeutics* vol 141(2): 125–139. doi: <https://doi.org/10.1016/j.pharmthera.2013.09.004>.
- Yuniarti, E. 2014. Pengaruh Latihan Submaksimal Terhadap Kadar Interleukin-6 Pada Siswa Pusat Pendidikan Latihan Pelajar Sumatera Barat. *Jurnal Sainstek* vol 6(2): 189–192.
- Zamaa, A. S dan Sainudin. 2019. Hubungan Kepatuhan Pengobatan Dengan Kadar Gula Darah Sewaktu Pada Pasien Diabetes Melitus Tipe II. *Journal Of Chemical Information And Modeling* vol 53(9): 1689–1699. doi: [10.1017/CBO9781107415324.004](https://doi.org/10.1017/CBO9781107415324.004).
- Zhang, Q. 2013. Acarbose Reduces Blood Glucose by Activating miR-10a 5p and miR-664 in Diabetic Rats. *Plos One* vol 8(11) : 1–9. doi: [10.1371/journal.pone.0079697](https://doi.org/10.1371/journal.pone.0079697).

