

## DAFTAR PUSTAKA

- American Diabetes Association. 2019. Standard of Medical Care in Diabetes. *Diabetes Care*, vol 42 (1): 13-15. [www.diabetes.org/diabetescare](http://www.diabetes.org/diabetescare)
- Aouacheri, O. *et al.* 2015. The Investigation of the Oxidative Stress-Related Parameters in Type2 Diabetes Melitus. *Canadian Journal of Diabetes* vol39 (1) : 44–49. doi:10.1016/j.jcjd.2014.03.002.
- Araki, E., dan Nishikawa, T. 2010.Oxidative Stress: A Cause and Therapeutic Target of Diabetic Complications. *Journal of Diabetes Investigation* vol 1(3): 90–96. doi: 10.1111/j.2040-1124.2010.00013.x.
- Astari, L. F., Cahyono, H. A., dan Widjajanto, E. 2017. Correlation of Interleukin-10, Superoxide Dismutase (SOD), and Malondialdehyde (MDA) Levels with HbA1c in Pediatric Type 1 Diabetes Mellitus. *The Journal of Tropical Life Science* vol 7(3) : 286-292. doi: 10.11594/jtls.07.03.15.
- Ayala, A., Munoz, M. F., dan Arguelles, S. 2014. Lipid Peroxidation: Production, Metabolism, and Signaling Mechanisms of Malondialdehyde and 4-Hydroxy-2-Nonenal. *Oxidative Medicine and Cellular Longevity* vol 2014 : 1-31. doi: <http://dx.doi.org/10.1155/2014/360438>.
- Baena-Díez, J. M. *et al.* 2016. Risk of Cause-specific Death in Individuals with Diabetes: A competing risks analysis. *Diabetes Care* vol 39 (11) :1987–1995. doi: 10.2337/dc16-0614.
- Bhutia, Y., Ghosh, A., Sherpa, M. L., Pal, R., danMohanta, P.K. 2011. Serum Malondialdehyde Level: Surrogate Stress Marker in The Sikkimese Diabetics. *Journal of Natural Science, Biology, and Medicine* vol 2 (1) : 107-112. doi: 10.4103/0976-9668.82309: 10.4103/0976-9668.82309.
- Canfora, E. E., Jocken, J. W., dan Blaak, E. E. 2015. Short-chain Fatty Acids in Control of Body Weight and Insulin Sensitivity. *Nature Reviews Endocrinology* vol 2(1) : 1-15. doi: 10.1038/nrendo.2015.128.
- Cho, N. H. *et al.* 2018. IDF Diabetes Atlas: Global Estimates of Diabetes Prevalence for 2017 and Projections for 2045. *Diabetes Research and Clinical Practice* vol 138 (2018): 271–281. doi: 10.1016/j.diabres.2018.02.023.
- El-Marasy, S. A. *et al.*2020. Antidiabetic and Antioxidant Effects of Acteoside from Jacaranda Mimosifolia Family Biognoniaceae in Streptozotocin–Nicotinamide Induced Diabetes in Rats.*Open Access Macedonian Journal of Medical Sciences* vol 8 : 125–133. doi: 10.3889/OAMJMS.2020.3325.

- Ghasemi, A., Khalifi S., dan Jedi, S 2014. *Streptozotocin-Nicotinamide-Induced Rat Model of Type 2 Diabetes. Acta Physiologica Hungarica* Vol 101 (4) : 408–420. doi: 10.1556/APhysiol.101.2014.4.2.
- Giacco, F., dan Brownlee, M. 2010. Oxidative Stress and Diabetic Complications. *Circulation Research*. vol107 (9) : 1058-1070. doi : 10.1161/CIRCRESAHA.110.223545.
- Harijati, N., dan Mastuti, R. 2014. Estimation of Diverse Porang (*Amorphophallus muelleri Blume*) Age in Forest Are Based on Branching Pattern of Leaf Petiolule. *Research Journal Of Life Science* vol 1(1) : 20-26.
- Harmayani, E. 2018. Goat Milk Kefir Supplemented with Porang Glucomannan Improves Lipid Profile and Haematological Parameter in Rat Fed High Fat and High Fructose Diet. *Romanian Journal of Diabetes Nutrition and Metabolic Diseases* vol 25(1) : 11–21. doi: 10.2478/rjdnmd-2018-0002.
- Herliani, O. 2018. Efek Hipoglikemia *Abelmoschus esculentus* terhadap *Rattus norvegicus* dengan Diabetes Melitus. *Jurnal Ilmiah Kedokteran Wijaya Kusuma* vol 7(2) : 202-208. <https://journal.uwks.ac.id>
- Huang, X. *et al.* 2015. Study on *Dendrobium officinale* O-acetyl-glucomannan (Dendronan): Part VI. Protective Effects Against Oxidative Stress in Immunosuppressed Mice. *Food Research International/Elsevier* vol 72 :168–173. doi: 10.1016/j.foodres.2015.01.035.
- Hulyam Kurt, *et al.* 2015. Comparative Therapeutic Potentials of Acarbose and A Formulated Herbal Extract on Type 2 Diabetic Rats. *African Journal of Pharmacy and Pharmacology* vol 6(29) : 2194–2204. doi: 10.5897/ajpp12.296.
- International Diabetes Federation. 2017. Recommendations for Managing Type 2 Diabetes In Primary Care. Belgia. [www.idf.org/managing-type2-diabetes](http://www.idf.org/managing-type2-diabetes).
- Jaggi, S., dan Yadav, A. S. 2015. Increased Serum Malondialdehyde Levels Among Cigarette Smokers. *The Pharma Innovation Journal* vol 4 (4):94-96. doi: [www.thepharmajournal.com/archives/2015/vol4issue4/PartB/4-4-13](http://www.thepharmajournal.com/archives/2015/vol4issue4/PartB/4-4-13).
- Kassab, A., dan Piwovar, A. 2012. Cell Oxidant Stress Delivery and Cell Dysfunction Onset in Type 2 Diabetes. *Biochimie* vol 94 (9) : 1837-1848. doi : 10.1016/j.biochi.2012.01.020.

- Kaur, N., Lalit, K., dan Anu, K. 2017. Role of Nicotinamide in Streptozotocin Induced Diabetes in Animal Models. *Journal of Endocrinology and Thyroid Research* vol 2(1) : pp. 1–4. doi: 10.19080/jetr.2017.02.555577.
- Keithley, *et al.* 2013. Safety and Efficacy of Glucomannan for Weight Loss in Overweight and Moderately Obese Adults. *Journal of Obesity* Vol 2013 :1-7. doi : <http://dx.doi.org/10.1155/2013/610908>.
- Kurniawan, A. L., N, Ari, F., dan Adi, P. 2015. Pengaruh Pemberian Susu Sapi Bubuk terhadap Kadar MDA Hepar pada Tikus Putih (*Rattus Novergicus* Strain Wistar) Jantan Model Diabetes Melitus Tipe 2. *Jurnal Kedokteran Brawijaya* vol 28(3) : 222–227. doi: 10.21776/ub.jkb.2015.028.03.11.
- Li, B. *et al.* 2015. Health Benefits of Konjac Glucomannan with Special Focus on Diabetes. *Bioactive Carbohydrates and Dietary Fibre* vol 5(2):179–187. doi: 10.1016/j.bcdf.2015.03.007.
- Manila, H. D., Darwin, E., dan Erwani. 2018. Perbedaan Kadar Vitamin C dan Kadar Malondialdehid Antara kejadian Abortus Dengan Kehamilan Normal. *Jurnal Kesehatan Andalas* vol 7 (2) : 44. doi : 10.25077/jka.v7i0.825.
- Monroy, M., dan Mejia, C. 2013. Oxidative Stress in Diabetes Mellitus and the Role Of Vitamins with Antioxidant Actions. *Oxidative Stress and Chronic Degenerative Diseases A Role for Antioxidant* vol 2013 (9) : 209-232. doi : 10.5772/51788
- Nagarajrao, R. 2014. Study of Trace Elements and Malondialdehyde Levels in Cardiovascular Disease Patients. *International Journal of Advanced Research in Biological Sciences* vol 1 (9) : 25-32.
- Nakhjavani, M., *et al.* 2010. Type 2 Diabetes Mellitus Duration: An Independent Predictor of Serum Malondialdehyde Levels. *Singapore Medical Journal* vol 51(7):582-585. doi:<https://www.researchgate.net/publication/45800816>.
- Nasri, H., dan Kopaei, M. R. 2014. Metformin: Current Knowledge. *Journal of Research in Medical Science*. vol 19 (17) : 658-664.
- Nissa, C., dan Madjid, I. J. 2016. Potensi Glukomanan pada Tepung Porang sebagai Agen Anti-Obesitas pada Tikus dengan Induksi Diet Tinggi Lemak. *Jurnal Gizi Klinik Indonesia* vol 13 (1) : 1 -6. doi: 10.22146/ijcn.22751.

- Nugraheni, B., Cahyani, I. M., dan Herlyanti, K. 2016. Efek Pemberian Glukomanan Umbi Porang (*Amorphophallus Oncophyllus Prain Ex Hook. F.*) terhadap Kadar Kolesterol Total Darah Tikus yang Diberi Diet Tinggi Lemak. *Jurnal Hasil Riset*. doi : jpfarmasidd140448.
- Nurmasitoh, T., Utami, S. Y., dan Kusumawardani, E. 2018. Intermittent Fasting Decreases Oxidative Stress Parameters in Wistar Rats (*Rattus norvegicus*). *Journal of Univ Med* vol 37(1) : 31–38. doi:10.18051/UnivMed.2018.v37.31-38.
- Ozougwu, J. C., Obimba, K. C., Belonwu, C. D., dan Unakalamba, C. B. 2013. The Pathogenesis and Pathophysiology of Type 1 and Type 2 Diabetes Mellitus. *Journal of Physiology and Pathophysiology* vol 4(4): 46-57. doi : 10.5897/jpap2013.0001.
- Papastergiadis, A., Mubiru, E., Van Langenhove, H., dan De Meulenaer, B. 2012. Malondialdehyde Measurement in Oxidized Foods: Evaluation of the Spectrophotometric Thiobarbituric Acid Reactive Substances (TBARS) Test in Various Foods. *Journal of Agricultural and Food Chemistry* vol 60(38): 9589-9594. doi : 10.1021/jf302451c.
- PB. PERKENI (2015) *Konsensus Pengelolaan dan Pencegahan Diabetes Melitus Tipe II di Indonesia*. Jakarta. doi: 10.3406/arch.1977.1322.
- Profil Kesehatan Provinsi Jawa Tengah. 2012. Buku Profil Kesehatan Provinsi Jawa Tengah Tahun 2012. Dinas Kesehatan Provinsi Jawa Tengah : Semarang.
- Repetto, M., Semprine, J., dan Boveris, A. 2012. Lipid Peroxidation: Chemical Mechanism, Biological Implications and Analytical Determination. *Intech* hlm. 3-30. doi : <http://dx.doi.org/10.5772/45943>.
- Sabitha, K., Venugopal, B., Rafi, M., dan Ramana, K. V. 2014. Role of Antioxidant Enzymes in Glucose and Lipid Metabolism in Association with Obesity and Type 2 Diabetes. *American Journal of Medical Sciences and Medicine* vol 2(1) : 21–24. doi: 10.12691/ajmsm-2-1-5.
- Sabitha, V. *et al.* 2012. Investigation Of in Vivo Antioxidant Property of *Abelmoschus esculentus (L) moench*. Fruit Seed and Peel Powders in Streptozotocin-Induced Diabetic Rats. *Journal of Ayurveda and Integrative Medicine* vol 3(4) : 188–193. doi: 10.4103/0975-9476.104432.

- Safitri, A. H., Tyagita, N., dan Nasihun, T. 2017. Porang Glucomannan Supplementation Improves Lipid Profile in Metabolic Syndrome Induced Rats. *Journal of Natural Remedies*. 17(4): 131-143. doi:10.18311/jnr/2017/18125.
- Salemi, Z., Rafie, E., Goodarzi, M. T., dan Ali, M. 2016. Effect of metformin, Acarbose and Their Combination on The Serum Visfatin Level in Nicotinamide/Streptozocin-induced type 2 diabetic rats. *Iranian Red Crescent Medical Journal* vol 18(3) : 1-7. doi: 10.5812/ircmj.23814.
- Sari, R. dan Suhartati. 2015. Tumbuhan Porang: Prospek Budidaya sebagai Salah Satu Sistem Agroforestry. *Info Teknis EBONI* vol 12(2): 97–110.
- Shah, B.R., *et al.* 2015. Health Benefits of Konjac Glucomannan with Special Focus on Diabetes. *Bioactive Carbohydrates and Dietary Fibre* vol 5(2) : 179–187. doi: 10.1016/j.bcdf.2015.03.007.
- Shi, X. D. *et al.* 2020. Comparative Study on Glucomannans with Different Structural Characteristics: Functional Properties and Intestinal Production of Short Chain Fatty Acids. *International Journal of Biological Macromolecules*. Elsevier B.Vol 164 : 826–835. doi: 10.1016/j.ijbiomac.2020.07.186.
- Shodehinde, S. A., dan Oboh, G. 2013. Antioxidant Properties of Aqueous Extracts of Unripe *Musa paradisiaca* on Sodium Nitroprusside Induced Lipid Peroxidation in Rat Pancreas in Vitro'. *Asian Pacific Journal of Tropical Biomedicine* vol 3(6) : 449–457. doi: 10.1016/S2221-1691(13)60095-7.
- Susanti, N. 2014. Suplementasi Tepung Porang (*Amorphophallus Muelleri* Blume) sebagai Nutraceutical dalam Manajemen Diabetes Mellitus Tipe 2. *El Hayah* vol 5 (1) : 9-16.
- Smalheiser, N. R. 2017. Nonparametric Tests, *Data Literacy* : 157–167. doi: 10.1016/b978-0-12-811306-6.00012-9.
- Sutriningsih, A. *et al.* 2017. Efektivitas Umbi Porang (*Amorphophallus oncophillus*) terhadap Penurunan Kadar Glukosa Darah Penderita Diabetes Mellitus. *Jurnal Care* vol 5(1) : 48–58. doi : 10.33366/cr.v5i1.388.
- Szkudelski, T. 2012. *Streptozotocin*–Nicotinamide-Induced Diabetes in The Rat Characteristics of The Experimental Model. *Experimental Biology and Medicine* vol 237(5) : 481–490.
- Tangkumahat, F. G., Rorong, J. A. dan Fatimah, F. 2017. Pengaruh Pemberian Ekstrak Bunga dan Daun Pepaya (*Carica papaya* L.) terhadap Kadar

- Glukosa Darah Tikus Wistar (*Rattus Norvegicus* L.) yang Hiperlikemik. *Jurnal Ilmiah Sains* vol 17(2) : 144-151. doi: 10.35799/jis.17.2.2017.17681.
- Tsikas, D. 2017. Assessment of Lipid Peroxidation by Measuring Malondialdehyde (MDA) and Relatives in Biological Samples: Analytical and biological challenges. *Analytical Biochemistry* vol 524 (2017) :13-30. doi : 10.1016/j.ab.2016.10.021.
- Urli, T. I., Hariyanto, T., dan Dewi, N. 2017. Pengaruh Pemberian Tepung Porang (*Amorphophallus Muelleri* Blume) terhadap Kadar HDL pada Tikus (*Rattus Novergicus*) Strain Wistar Dm Tipe 2. *Nursing News* vol 2 (2) : 653-664.
- Viroonudomphol, D. 2018. Homocysteine and Lipid Peroxidation in Active and Passive Smoking. *Science Journal of Public Health* vol 6(2):1-43. doi: 10.11648/j.sjph.20180602.12.
- Wang-Fischer, Y., dan Garyantes, T. 2018. Improving The Reliability And Utility Of Streptozotocin-Induced Rat Diabetic Model. *Journal of Diabetes Research* vol 2018 doi: 10.1155/2018/8054073.
- Wang, J. dan Ryu, H. K. 2015. The Effects of Momordica Charantia on Obesity and Lipid Profiles of Mice Fed a High-Fat Diet. *Nutrition Research and Practice* vol 9(5): 489–495. doi: 10.4162/nrp.2015.9.5.489.
- Wang, J. S. *et al.* 2011. Effects of Acarbose Versus Glibenclamide on Glycemic Excursion and Oxidative Stress in Type 2 Diabetic Patients Inadequately Controlled by Metformin: A 24-Week, Randomized, Open-Label, Parallel-Group Comparison. *Clinical Therapeutics* vol 33(12) : 1932–1942. doi: 10.1016/j.clinthera.2011.10.014.
- Wigoeno, Y. A. 2013. Analisis Kadar Glukomanan pada Umbi Porang. *Jurnal Biotropika* vol 1(5) : 231–235. <https://biotropika.ub.ac.id>
- Winarsi, H., Wijayanti, S. P. M., dan Purwanto, A. 2012. Aktivitas Enzim Superoksida Dismutase, Katalase, dan Glutation Peroksidase Wanita Penderita Sindrom Metabolik. *Majalah Kedokteran Bandung* vol 44(1): 7–12. doi: 10.15395/mkb.v44n1.75.
- Wulandari, D. Y., Padaga, M. C., dan Herawati. 2014. Kadar Malondialdehida (MDA) dan Gambaran Histopatologi Organ Hati pada Hewan Model Tikus (*Rattus norvegicus*) Hiperkolesterolemia setelah Terapi Ekstrak Air Benalu Mangga (*Dendrophthoe pentandra* L. Miq). *Jurnal Ilmiah* : 5-6.

- Wu, W. T., dan Chen, H. L. 2011. Konjac Glucomannan And Inulin Systematically Modulate Antioxidant Defense In Rats Fed A High-Fat Fiber-Free Diet. *Journal of Agricultural and Food Chemistry* vol 59(17) :9194–9200. doi: 10.1021/jf202060p.
- Wu, W. T., Cheng, H. C., dan Chen, H. L. 2011. Ameliorative Effects of Konjac qGlucomannan on Human Faecal-Glucuronidase Activity, Secondary Bile Acid Levels and Faecal Water Toxicity Towards Caco-2 Cells. *British Journal of Nutrition* vol. 105(4) : 593–600. doi: 10.1017/S0007114510004009.
- Yanuriati, A. *et al.* 2017. Characteristics of Glucomannan Isolated from Fresh Tuber of Porang (*Amorphophallus muelleri* Blume). *Carbohydrate Polymers* vol 156 : 56–63. doi: 10.1016/j.carbpol.2016.08.080.
- Yonny, M. E. *et al.* 2016. Measurement of Malondialdehyde as Oxidative Stress Biomarker in Goat Plasma by HPLC-DAD. *Microchemical Journal* vol 129 (2016) : 281–285. doi: 10.1016/j.microc.2016.07.010.
- Zhang, Q. *et al.* 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.
- Zhao, Y., Jayachandran, M., dan Xu, B. 2020. In Vivo Antioxidant and Anti-Inflammatory Effects of Soluble Dietary Fiber Konjac Glucomannan in Type-2 Diabetic Rats. *International Journal of Biological Macromolecules*. Elsevier B.Vol 159 : 1186–1196. doi: 10.1016/j.ijbiomac.2020.05.105.