

## DAFTAR PUSTAKA

- Adnan, M., Mulyati, T., dan Isworo, JT. 2013. Hubungan Indeks massa tubuh (IMT) dengan kadar gula darah penderita diabetes melitus (DM) tipe 2 rawat jalan di RS tugurejo semarang. *Jurnal Gizi Muhammadiyah Semarang*.
- American Diabetes Association (ADA). 2020. Introduction : Standards of medical care in diabetes. *Diabetes Care*, 44, 1–2. <https://doi.org/10.2337/dc21-Sint>.
- Aronoff, S.L., Berhowitz, K., Shreiner B., dan Want L. 2004. metabolism and regulation insulin and glucagon. *Diabetes Spectrum*. 17(3):183-190
- Berridge, M.J. 2012. *Cell Signalling Biology Module 7*. Portland Press Limited. [www.cellsignallingbiology.org](http://www.cellsignallingbiology.org) diakses 26.09.2021
- Besten, G., Eunen, K., Groen, A., Venema, K., Reijngoud, D., dan Bakker, B. 2013. The role of short-chain fatty acids in the interplay between diet, gut microbiota, and host energy metabolism. *Journal of Lipid Research* ;54:2325-40.
- Bhattacharya, S., Uttam, Maji., Gausal, A. Khan., Rahul, Das., Asru, K. Sinha., Chandradipa, Ghosh., dan Smarajit, Maiti. 2019. Antidiabetic Role of A Novel Protein From Garlic Via NO in Expression of Glut-4/Insulin in Liver of Alloxan Induced Diabetic Mice. *Biomedicine & Pharmacotherapy*, (111):1302–1314. <https://doi.org/10.1016/j.biopha.2019.01.036>.
- Bozzetto, L., Costabile, G., Della pepa, G., Ciciola, P., Veterani, C., Vitale, M. dan Annuzzi, G. 2018. Dietary fiber as a unifying remedy for the whole spectrum of obesity-associated cardiovascular risk. *Nutrient*. 10(7), 943. Doi: 10.3390/nu10070943.
- Burke, SJ., Batdorf, HM., Martin, TM., Burk, DH., Noland, RC., Cooley, CR., Karlstad, MD., Johnson, WD., dan Collier, JJ. 2018. Liquid Sucrose Consumption Promotes

Obesity and Impairs Glucose Tolerance Without Altering Circulating Insulin Levels. *Obesity (Silver Spring)*. Jul;26(7):1188-1196. doi: 10.1002/oby.22217. Epub 2018 Jun 14. PMID: 29901267; PMCID: PMC6014929.

Catherwood, DJ., GP., Savage, SM., Masonand JJ., dan Scheffer. In press. 2007. Oxalate content of cormels of japanese taro corns (*Colocasia esculente* (L). Schott) and the effect of cooking. *Journal of Food Composition and Analysis* 2000; 20: 147–151.

Damayanti, E., Poeloengasih, C., dan Warakasih, I. Komposisi Nutrien Dan Kandungan Senyawa Bioaktif Pati Ganyong (*Canna edulis* Ker.) Kultivar Lokal Gunungkidul. *UPT BPPTK LIPI* ; Yogyakarta.

Deepa, M., Anjana, R.M. dan Mohan, V. 2017. Role of lifestyle factors in the epidemic of diabetes: lessons learnt from India. *European journal of clinical nutrition*. 71(7): 825-831. doi: 10.1038/ejcn

Fuji, H., Iwasel, M., Ohkuma, T., Ogata—Kaizu, S., Ide, H., Kikuchi, Y., Idewaki, Y., Joudai, T., Hirakawa, Y., Uchida, K, Sasaki, S., Nakamura, U., dan T Kitazono, T. 2013. Impact of dietary fiber intake on glycemic control, cardiovascular risk factors and chronic kidney disease in Japanese patients with type 2 diabetes mellitus: the Fukuoka Diabetes Registry. *Nutrition Journal*, (12):159.

Galicia-Garcia, U., Benito-Vicente, A., Jebari, S., Larrea-Sebal, A., Siddiqi, H., Uribe, K. B., Ostolaza, H., dan Martín, C. (2020). Pathophysiology of Type 2 Diabetes Mellitus. *International journal of molecular sciences*, 21(17), 6275. <https://doi.org/10.3390/ijms21176275>

Galisteo, M., Duarte, J., dan Zarzuelo, A. 2008. Effects of Dietary Fibers on Disturbances Clustered in The Metabolic Syndrome. *The Journal of nutritional biochemistry*. 19(2):71-84.

- Gao, M., Ma, Y., dan Liu, D. 2015. High-fat diet-induced adiposity, adipose inflammation, hepatic steatosis and hyperinsulinemia in outbred CD-1 mice. *PLoS One*. 10(3):e0119784; doi:10.1371/journal.pone.0119784
- Gill, SK., Rossi, M., Bajka, B., Whelan, K. 2021. Dietary fibre in gastrointestinal health and disease. *Nature reviews gastroenterology & hepatology*. doi: 10.1038/s41575-020-00375-4. PMID: 33208922.
- Global Biodiversity Information Facility (GBIF). 2021. *Canna edulis*. 0. Diakses tanggal 15 September 2021.
- Global Biodiversity Information Facility (GBIF). 2021. *Colocasia esculenta*. <https://www.gbif.org/species/171777482>. Diakses tanggal 15 September 2021.
- Global Biodiversity Information Facility (GBIF). 2021. *Maranta arudinacea*. <https://www.gbif.org/species/2761352>. Diakses tanggal 15 September 2021.
- Global Biodiversity Information Facility (GBIF). *Pachyrhizus erosus* 2021. <https://www.gbif.org/species/11093044>. Diakses tanggal 15 September 2021.
- Goyal, R., dan Jialal, I. 2020. Diabetes Mellitus Type 2. *In: StatPearls* [Internet]. Treasure Island (FL): StatPearls Publishing.
- Handayani, W., Rudijanto, A., dan Rasjad, M. 2009. Susu Kedelai Menurunkan Resistensi Insulin pada Rattus norvegicus Model Diabetes Melitus tipe 2. *Jurnal Kedokteran Brawijaya*, vol. xxv.
- Harmayani, E., Murdiati, A., dan Griyaningsih. 2011. Karakterisasi Pati Ganyong (*Canna Edulis*) Dan Pemanfaatannya Sebagai Bahan Pembuatan Cookies Dan Cendol. *Jurnal Agritech*; 31(4).
- Hudak., dan Galo. 2011. *Keperawatan Kritis : Pendekatan Asuhan Holistik*. Edisi VIII. EGC. Jakarta.

- Internasional Diabetes Federation (IDF). 2019. *Diabetes Atlas Sixth Edition*, (online) [https://www.idf.org/sites/default/files/Atlas-poster-2014\\_EN.pdf](https://www.idf.org/sites/default/files/Atlas-poster-2014_EN.pdf). Diakses pada tanggal 26 Januari 2021.
- Imai, S.; Fukui, M.; Kajiyama, S. 2014. Effect of eating vegetables before carbohydrates on glucose excursions in patients with type 2 diabetes. *Journal of Clinical Biochemistry and Nutrition*. 54, 7–11, doi:10.3164/jcbrn.13-67.
- Jusuf, M., Marzempi., dan Yohanes. 1996. Status of Taro Genetic Resources in West Sumatera and Research Accomplishment. Makalah tidak dipublikasikan
- Kadek, E., Dewi, Jamaluddin, A., Rell, F. 2018. Uji Aktivitas Ekstrak Etanol Kulit Pisang Mas (*Musa Acuminata* (Aa Group)) Terhadap Penurunan Kadar Glukosa Darah Mencit (*MusMusculus*) Yang Diinduksi Aloksan. *As-Syifaa Vol 10 (02) : Hal. 190-204*
- Kahn, S. E., Cooper, M. E., dan Del Prato, S. (2014). Pathophysiology and treatment of type 2 diabetes: perspectives on the past, present, and future. *Lancet (London, England)*, 383(9922), 1068–1083. [https://doi.org/10.1016/S0140-6736\(13\)62154-6](https://doi.org/10.1016/S0140-6736(13)62154-6)
- Kusmiyati, M. 2013. Karakteristik Morfologi Garut (*Marantha arundinacea* L) Di Kabupaten Gunung Kidul Dan Kulon Progo D.I.Y. *Skripsi Program Studi Biologi Fakultas SAINS dan Teknologi Universitas Islam Negeri Sunan Gunung Kalijaga*; Yogyakarta.
- Li, X., Guo, J., Ji, K., dan Zhang, P. 2016. Bamboo shoot fiber prevents obesity in mice by modulating the gut microbiota. *Scientific Reports*, 6.
- Longnecker., dan Daniel, S. 2021. Anatomy and Histology of the Pancreas. *Pancreapedia: Exocrine Pancreas Knowledge Base*, Doi: 10.3998/panc.2021.01
- Lozano, I., Van, der, Werf, R., Bietiger, W., Seyfritz, E., Peronet, C., Pinget, M., Jeandidier, N., Maillard, E., Marchioni, E., Sigrist, S., dan Dal, S. 2016. High-



fructose and high-fat diet-induced disorders in rats: impact on diabetes risk, hepatic and vascular complications. *Nutrition & Metabolism (Lond)*. Doi: 10.1186/s12986-016-0074-1. PMID: 26918024; PMCID: PMC4766713.

Maejima, Y., Rita, R.S., Santoso, P., Aoyama, M., Hiraoka Y., Nishimori K., Gantulga D., Shimomura K., dan Yada T. 2015. Nasal Oxytocin Administration Reduces Food Intake Without Affecting Locomotor Activity and Glycemia with c-Fos Induction in Limited Brain Areas. *Neuroendocrinology*. 101:35–44

Mawarti, H., Ratnawati, R., dan Lyrawati, D. 2012. Epigallocatechin Gallate Menghambat Resistensi Insulin pada Tikus dengan Diet Tinggi Lemak. *Jurnal Kedokteran Brawijaya*, vol 27 (1).

Mishra, T., Goyal, A.K., Middha, S.K., dan Sen, A. 2011. Antioxidative Properties of *Canna edulis* Ker-Gawl. *Indian Journal of Natural Products and Resources* : Vol. 2(3).

Moreno-Fernández, S., Garcés-Rimón, M., Vera, G., Astier, J., Landrier, J. F., dan Miguel, M. 2018. High Fat/High Glucose Diet Induces Metabolic Syndrome in an Experimental Rat Model. *Nutrients*, 10 (10), 1502. <https://doi.org/10.3390/nu10101502>.

Mobasser, M., Shirmohammadi, M., Amiri, T., Vahed, N., Hosseini Fard, H., dan Ghojzadeh, M. 2020. Prevalence and incidence of type 1 diabetes in the world: a systematic review and meta-analysis. *Health promotion perspectives*, 10(2), 98–115. <https://doi.org/10.34172/hpp.2020.18>

Murray, R.K. 2003. *Biokimia Klinik (4th ed)*. EGC. Jakarta.

Nair, A., Nair, R., Nair, A., Nair, A. S., Thyagarajan, S., Johnson, A. J., Baby, S. 2020. Antidiabetic constituents, cycloartenol and 24-methylenecycloartanol, from *Ficus krishnae*. *PloS One*. 15(6):235221.

- Nishaa, S., Vishnupriya, M., Sasikumar, JM., dan Gopalakrishnan, VK. 2013. Phytochemical Screening and GC-MS Analysis of Ethanolic Extract of Rhizomes of *Maranta arundinacea* L. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 4(2); 52
- Noriko, N., dan Pambudi, A. 2014. Diversifikasi Pangan Sumber Karbohidrat *Canna edulis* Kerr. (Ganyong). *Jurnal Al-Azhar Indonesia Seri Sains dan Teknologi*. 2 (4): 248.
- Nuryadi., astuti, tutut dewi., utami, endang sri., Budiantara, M. 2017. *Dasar-dasar Statistik Penelitian*. Gramasurya; Yogyakarta
- Olokoba, A. B., Obateru, O. A., dan Olokoba, L. B. 2012. Type 2 diabetes mellitus: a review of current trends. *Oman medical journal*, 27(4), 269–273. <https://doi.org/10.5001/omj.2012.68>.
- Papathanasopoulos, A., dan Camilleri, M. 2010. Dietary fiber supplements: effects in obesity and metabolic syndrome and relationship to gastrointestinal functions. *Gastroenterology*, 138(1), 65–72.e722. <https://doi.org/10.1053/j.gastro.2009.11.045>.
- Patricia, R., Pereira, A., Joab., T, Silva., A, Mauricio., Verícimo , B., Vânia, M.F. Paschoalin, A. Gerlinde A.P.B. dan Teixeira, B. 2015. Crude extract from taro (*Colocasia esculenta*) as a natural source of bioactive proteins able to stimulate haematopoietic cells in two murine models. *Journal of Functional Foods*. 18: 333
- Park, CJ., Lee, HA., dan Han, JS. 2015. Jicama (*Pachyrhizus erosus*) extract increases insulin sensitivity and regulates hepatic glucose in C57BL/Ksj-db/db mice. *Journal of Clinical Biochemistry Nutrion*. 58(1):56-63. doi: 10.3164/jcfn.15-59.
- Park, CJ., Han, JS. 2015. Hypoglycemic effect of jicama (*Pachyrhizus erosus*) extract on streptozotocin-induced diabetic mice. *Preventive Nutrion Food Science*. 20(2):88-93. <https://doi.org/10.3746/pnf.2015.20.2.88> PMID:26175995

- Park, BW., Sallam, T., Mehrabian, M., Psychogios, N., Hui ST, Norheim F, Castellani LW, Rau CD, Pan C, Phun J, Zhou Z, Yang WP, Neuhaus I, Gargalovic PS, Kirchgessner TG, Graham M, Lee R, Tontonoz P, Gerszten RE, Hevener AL, Lusis AJ. 2015. Genetic architecture of insulin resistance in the mouse. *Cell Metabolism*. Doi: 10.1016/j.cmet.2015.01.002. PMID: 25651185; PMCID: PMC4349439.
- Punthakee, Z., Goldenberg, R., dan Katz, P. 2018. Diabetes Canada Clinical Practice Guidelines Expert Committee. Definition, classification and diagnosis of diabetes, prediabetes and metabolic syndrome. *Canadian Journal of Diabetes*. (suppl 1):S10-S15. doi:10. 1016/j.jcjd.2017.10.003.
- Ramadhani., Muhammad., Bachri., Widyaningsih., dan Wahyu. 2017. Effects of ethanolic extract of arrowroot tubers (*maranta arundinacea l.*) on the level of MDA, SGPT and SGOT in ethanol induced rats. *Jurnal Kedokteran dan Kesehatan Indonesia*. 8. 10-18. 10.20885/JKKI.Vol8.Iss1.art3.
- Rasmika, D. 2008. *Pemeriksaan kadar gula darah sewaktu pada masyarakat dusun samu mambal kabupaten Badung*. Patologi Klinik Fakultas Kedokteran Udayana. Denpasar.
- Reimer, RA., Grover, GJ., Koetzner, L., Gahler, RJ., Lyon, MR., dan Wood, S. 2011. The Soluble Fiber Complex PolyGlycopleX Lowers Serum Triglycerides and Reduces Hepatic Steatosis in High-sucrose-fed Rats. Faculty of Kinesiology and Department of Biochemistry & Molecular Biology, University of Calgary, Calgary, Alberta, Canada T2N 1N4, Department of Physiology and Biophysics, Robert Wood Johnson Medical School, Piscataway, NJ 08854, USA. *Nutrition Research* 31 (2011) 296–301.
- Reeves, Valerie Lynn. 2012. A Diet Enriched In Stearic Acid Protects Against The Progression Of Type 2 Diabetes In Leptin Receptor Deficient Mice (Db/Db). *Theses and Dissertations--Physiology*. 3. [https://uknowledge.uky.edu/physiology\\_etds/3](https://uknowledge.uky.edu/physiology_etds/3).

- Ribeiro Pereira, P., Bertozzi de Aquino Mattos, É., Nitzsche Teixeira Fernandes Corrêa, A. C., Afonso Vericimo, M., dan Margaret Flosi Paschoalin, V. 2020. Anticancer and Immunomodulatory Benefits of Taro (*Colocasia esculenta*) Corms, an Underexploited Tuber Crop. *International journal of molecular sciences*, 22(1), 265. <https://doi.org/10.3390/ijms22010265>.
- Ridwan, A., dan Heri, P, P. 2012. Hubungan Pengetahuan Tentang Diet Diabetes Mellitus dengan Perilaku Diet Penderita Diabetes Mellitus. *Jurnal Akper Pemenang Pare Kediri*. <http://lppm.akperpamenang.ac.id/wp-content/uploads/2015/05/0502.pdf>
- Röder, P. V., Wu, B., Liu, Y., dan Han, W. (2016). Pancreatic regulation of glucose homeostasis. *Experimental & molecular medicine*, 48(3), e219. <https://doi.org/10.1038/emm.2016.6>
- Ruba, A. A., dan Mohan, V. R. 2013. Evaluation Of Total Phenolic And Flavonoid Contents And In Vitro Antioxidant Activity Of Rhizome Of Maranta Arundinacea L. *Pharma Science Monitor*. 4. 3914-3928.
- Saisho, Y. 2016. Pancreas Volume and Fat Deposition in Diabetes and Normal Physiology. Consideration of the Interplay Between Endocrine and Exocrine Pancreas. *The Review of Diabetic studies*, 13:2-3
- Santoso, P., Astri, A., dan Resti, R. 2019. Jicama (*Pachyrhizus erosus*) fiber prevents excessive blood glucose and body weight increase without affecting food intake in mice fed with high-sugar diet. *Journal Of Advanced Veterinary And Animal Research* 6(2) : 222–230
- Santoso, P., Maliza, R., Rahayu, R., dan Amelia, A. 2020. Pancreoprotective Effect of Jicama (*Pachyrhizus erosus*, Fabaceae) Fiber against High-Sugar Diet in Mice. *Macedonian Journal of Medical Sciences*, 8(A), 326-332. <https://doi.org/10.3889/oamjms.2020.4528>.



- Santoso, Putra., dan Maliza, Rita. 2021. *Isolasi dan Uji Khasiat Serat Bengkoang*. Penerbit K-Media; Yogyakarta
- Santoso, P., Maliza, R., Insani, S., Fadhila, Q., dan Rahayu, R. 2021. Preventive effect of jicama fiber against diabetes development in mice fed with high-fat diet. *Journal of Applied Pharmaceutical Science*. 11. 137-143. 10.7324/JAPS.2021.110116.
- Saeedi, P. Petersohn, I. Salpea, P. Malanda, B. Karuranga, S. Unwin, N. Colagiuri, S. Guariguata, L. Motala, AA. Ogurtsova, K. Shaw, JE. Bright, D. dan Williams, R. On behalf of the IDF Diabetes Atlas Committee 1. Global and regional diabetes prevalence estimates for 2019 and projections for 2030 and 2045: Results from the International Diabetes Federation Diabetes Atlas, 9th edition. *Journal Diabetes Research and Clinical Practice*, 157: 107843. <https://doi.org/10.1016/j.diabres.2019.107843>
- Sherwood L. 2012. *Fisiologi Manusia dari Sel ke Sistem (6th ed)*. Jakarta: EGC.
- Shuxian Hu, Rei Kuwabara, Bart J. de Haan, Alexandra M. Smink and Paul de Vos.2020. Acetate and Butyrate Improve  $\beta$ -cell Metabolism and Mitochondrial Respiration under Oxidative Stress. *International Journal of Molecular Sciences*. 21, 1542; doi:10.3390/ijms21041542
- Speakman, J. R. 2019. Use Of High-Fat Diets To Study Rodent Obesity As A Model Of Human Obesity. *International Journal of Obesity*. 43: 1491–1492.
- Su, J., Wang, H., Ma, C., Lou, Z., Liu, C., Tanver Rahman, M., dan Nie, R. 2015. Anti-diabetic activity of peony seed oil, a new resource food in STZ-induced diabetic mice. *Food & Function*, 6(9), 2930–2938. doi:10.1039/c5fo00507h
- Sunarti., Rini, S.L., Rubi, D.S., Miftakhussolikah ., Ariani, D., dan Sinorita, H. 2019. Fiber Increases Endogenous Insulin and Reduces Insulin Resistance in Diabetes. *Pakistan Journal of Nutrition*, 18: 895-899., 18: 895-899. Doi: 10.3923/pjn.2019.895.899

- Wang, Z.Q., Zuberi, A. Zhang., X.H. Macgowan., J. Ye., QX. Son, L., dan Wu, Q. Lian, K. dan Cefalu, W. 2009. Effects of Dietary Fibers on Weight Gain, Carbohydrate Metabolism and Gastric Ghrelin Gene Expression in High Fat Diet Fed Mice. *NIH Public Access*. PMC273018
- Wang, ZQ., Yu, Y., Zhang, XH., Floyd, EZ., Bourdreau, A., Lian, K., dan Cefalu, WT. 2012. Comparing the effects of nano-sized sugarcane fiber with cellulose and psyllium on hepatic cellular signaling in mice. *International Journal of Nanomedicine*; 7:2999–3012; doi:10.2147/IJN.S30887
- Weiskirchen, S., K. Weiper, R. H. Tolba dan R. Weiskirchen. 2020. All You Can Feed: Some Comments on Production of Mouse Diets Used in Biomedical Research with Special Emphasis on Non Alcoholic Fatty Liver Disease Research. *Nutrients*. 12(163): 1-41.
- Wu, Y., Ding, Y., Tanaka, Y., dan Zhang, W. 2014. Risk factors contributing to type 2 diabetes and recent advances in the treatment and prevention. *International journal of medical sciences*, 11(11), 1185–1200. <https://doi.org/10.7150/ijms.10001>
- Wu, Y., Liu, C., Sun, H., Vijayakumar, A., Giglou, P. R., Qiao, R., Oppenheimer, J., Yakar, S., dan Leroith, D. 2011. Growth Hormone Receptor Regulates B Cell Hyperplasia And Glucose-Stimulated Insulin Secretion In Obese Mice. *The Journal of Clinical Investigation*, 6(12).
- Yang, ZH., Miyahara, H., Takeo, J., dan Katayama, M. 2012. Diet high in fat and sucrose induces rapid onset of obesity-related metabolic syndrome partly through rapid response of genes involved in lipogenesis, insulin signalling and inflammation in mice. *Diabetology & Metabolic Syndrome*. doi: 10.1186/1758-5996-4-32. PMID: 22762794; PMCID: PMC3407732.
- Zhang, Y., Sun, S., Jia, H., Qi, Y., Zhang, J., Lin, L., Chen, Y., Wang, W., dan Ning, G. 2020. The Optimized Calculation Method for Insulin Dosage in an Insulin Tolerance

Test (ITT): A Randomized Parallel Control Study. *Frontiers in endocrinology*, 11, 202. <https://doi.org/10.3389/fendo.2020.00202>.

Zhuge, F., Ni, Y., Wan, C., Liu, F., dan Fu, Z. 2021. Anti-diabetic effects of astaxanthin on an STZ-induced diabetic model in rats. *Endocrine Journal* , 28;68(4):451-459. doi: 10.1507/endocrj.EJ20-0699

