## DAFTAR PUSTAKA


Aini, W. 2023. *Effect of Mentawai Taro (Colocasia esculenta L., Araceae) Corm on Blood Sugar and Histopathology of Pancreas in Alloxan-Induced Diabetic Mice*. Skripsi Sarjana Biologi FMIPA Universitas Andalas. Padang.

Alcantara, R. 2013. The Nutritional Value and Phytochemical Components of Taro [*Colocasia esculenta* (L.) Schott] Powder and its Selected Processed Foods. *Journal of Nutrition & Food Sciences*, 3.

Allen, D. A., Yaqoob, M. M., & Harwood, S. M. 2005. Mechanisms of High Glucose-Induced Apoptosis and Its Relationship to Diabetic Complications. *Journal of Nutritional Biochemistry*, 16.

American Diabetes Association. 2014. Diagnosis and Classification of Diabetes Mellitus. *Diabetes Care*, *37*(1).

Anderson, J. W., Baird, P., Davis, R. H., Ferreri, S., Knudtson, M., Koraym, A., Waters, V., & Williams, C. L. 2009. Health Benefits of Dietary Fiber. *Nutrition Reviews*, 67.

Aprianita, A., Vasiljevic, T., Bannikova, A., & Kasapis, S. 2014. Physicochemical Properties of Flours and Starches Derived from Traditional Indonesian Tubers and Roots. *Journal of Food Science and Technology*, 51(12).

Arora, K., Tomar, P. C., & Mohan, V. 2021. Diabetic Neuropathy: An Insight on The Transition from Synthetic Drugs to Herbal Therapies. *Journal of Diabetes and Metabolic Disorders*, 20.

Bates, D., Carsten Schultheis, B., Hanes, M. C., Jolly, S. M., Chakravarthy, K. V., Deer, T. R., Levy, R. M., & Hunter, C. W. 2019. A Comprehensive Algorithm for Management of Neuropathic Pain. *Pain Medicine*, 20.

Boulton, A. J. M. 2012. Diabetic Neuropathy: Is Pain God's Greatest Gift to Mankind? *Seminars in Vascular Surgery*, *25*(2).

Brownlee, I. 2014. The Impact of Dietary Fibre Intake on The Physiology and Health of The Stomach and Upper Gastrointestinal Tract. *Bioactive Carbohydrates and Dietary Fibre*, 4.

Brownlee, M. 2005. The Pathobiology of Diabetic Complications: A Unifying Mechanism. *Diabetes*, *54*(6).

Chen, G., & Goeddel, D. V. 2002. TNF-R1 Signaling: A Beautiful Pathway. *Science*, 296.

Cheng, Z., & Li, Y. 2007. What is Responsible for The Initiating Chemistry of Iron-Mediated Lipid Peroxidation: An Update. *Chemical Reviews*, 107.

Cobley, J. N., Fiorello, M. L., & Bailey, D. M. 2018. 13 Reasons Why the Brain Is Susceptible to Oxidative Stress. *Redox Biology*, Vol. 15.

Darvishi-Khezri, H., Salehifar, E., Kosaryan, M., Karami, H., Alipour, A., Shaki, F., & Aliasgharian, A. 2017. The Impact of Silymarin on Antioxidant and Oxidative Status in Patients With B-Thalassemia Major: A Crossover, Randomized Controlled Trial. *Complementary Therapies in Medicine*, *35*.

Davinelli, S., Nielsen, M. E., & Scapagnini, G. 2018. Astaxanthin in Skin Health, Repair, and Disease: A Comprehensive Review. *Nutrients*, 10.

De Gregorio, C., Contador, D., Campero, M., Ezquer, M., & Ezquer, F. 2018. Characterization of Diabetic Neuropathy Progression in A Mouse Model of Type 2 Diabetes Mellitus. *Biology Open*, *7*(9).

DeBoer, T., Wewerka, S., Bauer, P. J., Georgieff, M. K., & Nelson, C. A. 2005. Explicit Memory Performance in Infants of Diabetic Mothers At 1 Year of Age. *Developmental Medicine and Child Neurology*, *47*(8).

Decroli, E., Manaf, A., Syahbuddin, S., Syafrita, Y., & Dillasamola, D. 2019. The Correlation Between Malondialdehyde and Nerve Growth Factor Serum Level with Diabetic Peripheral Neuropathy Score. *Macedonian Journal of Medical Sciences*, *7*(1).

Dikeman, C. L., & Fahey, G. C. 2006. Viscosity As Related to Dietary Fiber: A Review. *Critical Reviews in Food Science and Nutrition*, 46.

Eichberg, J. 2002. Protein Kinase C Changes in Diabetes: Is The Concept Relevant to Neuropathy?. *International Review of Neurobiology*, 50: 61-82.

El-Baz, F. K., Salama, A., Salama, R. A. A., & Gabr, M. 2020. *Dunaliella salina* Attenuates Diabetic Neuropathy Induced by STZ in Rats: Involvement of Thioredoxin. *BioMed Research International*.

Faizal, M., & Khan, A. A. 2017. Effect of experimentally-induced diabetes on the cerebellum of albino rats: a histological and histomorphometric study. *British J Med Health Res*, 4:10–25.

Fajrin, F.A., Nurrochmad, A., Nugroho, A.E., & Susilowati, R. 2017. Optimization of Mice Model of Painful Diabetic Neuropathy (PDN). *J Med Sci*, 49 (3): 7-105.

Fang, P., An, J., Tan, X., Zeng, L. L., Shen, H., Qiu, S., & Hu, D. 2017. Changes in The Cerebellar and Cerebro-Cerebellar Circuit in Type 2 Diabetes. *Brain Research Bulletin*, *130*, 95-100.

Feld, L. D., & Shusterman, A. 2015. Into The Pressure Cooker: Student Stress in College Preparatory High Schools. *Journal of Adolescence*, *41*(1), 31–42.

Feldman, E. L., Nave, K. A., Jensen, T. S., & Bennett, D. L. H. 2017. New Horizons in Diabetic Neuropathy: Mechanisms, Bioenergetics, and Pain. *Neuron*, 93.

Fernyhough, P., & McGavock, J. 2014. Mechanisms of Disease: Mitochondrial Dysfunction in Sensory Neuropathy and Other Complications in Diabetes. In *Handbook of Clinical Neurology*, 126.

Gardoni, F., Kamal, A., Bellone, C., Biessels, G. J., Ramakers, G. M. J., Cattabeni, F., Gispen, W. H., & Di Luca, M. 2002. Effects of Streptozotocin-Diabetes on The Hippocampal NMDA Receptor Complex in Rats. *Journal of Neurochemistry*, *80*(3).

Gaur, S., Gaur, S., Singhal, S., Mishra, R., & Surabhi Bajpai. 2022. Astaxanthin Ameliorates Diabetic Neuropathy Via Modulating the Inflammatory Cytokines in STZ Induced Diabetic Mice. *Int. J. Adv. Res.*, 10(3): 371-378.

Goldstein, D. J., Lu, Y., Detke, M. J., Lee, T. C., & Iyengar, S. 2005. Duloxetine vs. Placebo in Patients with Painful Diabetic Neuropathy. *Pain*, *116*(1–2).

Gonzalez-Gonzalez, S., Cazevieille, C. & Caumes, B. 2020. Resveratrol Treatment Reduces Neuromotor Impairment and Hearing Loss in a Mouse Model of Diabetic Neuropathy and Nerve Injury. *J Diabetes Clin Res*, 2.

Grillo, C. A., Piroli, G. G., Rosell, D. R., Hoskin, E. K., McEwen, B. S., & Reagan, L. P. 2003. Region Specific Increases in Oxidative Stress and Superoxide Dismutase in The Hippocampus of Diabetic Rats Subjected to Stress. *Neuroscience*, *121*(1).

Grundy, M. M. L., Edwards, C. H., Mackie, A. R., Gidley, M. J., Butterworth, P. J., & Ellis, P. R. 2016. Re-Evaluation of the Mechanisms of Dietary Fibre and Implications for Macronutrient Bioaccessibility, Digestion and Postprandial Metabolism. *British Journal of Nutrition*, *116*(5).

Guilford, B. L., Ryals, J. M., & Wright, D. E. 2011. Phenotypic Changes in Diabetic Neuropathy Induced by A High-Fat Diet in Diabetic C57Bl/6 Mice. *Experimental Diabetes Research*.

Guo, J., Yan, E., He, L., Wang, Y., Xiang, Y., Zhang, P., Liu, X., & Yin, J. 2023. Dietary Supplementation with Lauric Acid Improves Aerobic Endurance in Sedentary Mice via Enhancing Fat Mobilization and Glyconeogenesis. *Nutrient*

*Physiology, Metabolism, and Nutrient-Nutrient Interactions*, 1553(11): 3207-3219.

Hall, J. E. 2015. Guyton and Hall Textbook of Medical Physiology, 13th ed. *Elsevier Health Sciences*.

Harvey, T., Ghan, J. R., Kao-Jao, T. H. C., Nakayama, T. O. M. 2006. Anthocyanin Composition of Taro. *Journal of Food Science*, 42(1): 19-21.

Hasibuan, Dirga S.A., Bhima., Lintang, S.K., Dhanardhono & Tuntas. 2013. *Pengaruh Pemberian Ekstrak Jamur Psilocybe Cubensis Dosis Bertingkat Terhadap Keseimbangan Motorik dan Koordinasi Mencit Swiss Webster dengan Metode Balance Beam*. Tesis. Universitas Diponegoro. Semarang.

Hirwanto, S. D. 2022. *Efek Talas Mentawai (Colocasia esculenta; Araceae) dalam Pakan Berlemak Tinggi Terhadap Indikator Obesitas dan Kadar Lipid Plasma pada Mencit*. Skripsi Sarjana Biologi FMIPA Universitas Andalas. Padang.

Jang, H. N., & Oh, T. J. 2023. Pharmacological and Nonpharmacological Treatments for Painful Diabetic Peripheral Neuropathy. *Diabetes and Metabolism Journal*, 47.

Khaksary, M. M., Erfani, M. N., Bahrami T. M., & Mazaheri, Y. 2021. Evaluating the Effects of *Aloe vera* Gel on Cerebellum Histomorphometrical Changes in Diabetic Male Rats. *Zahedan Journal of Research in Medical Sciences*, 23(3).

Klein, J. P., & Waxman, S. G. 2003. The Brain in Diabetes: Molecular Changes in Neurons and Their Implications for End-Organ Damage. *Lancet Neurology*, 2.

Kleinridders, A., Ferris, H. A., Cai, W., & Kahn, C. R. 2014. Insulin Action in Brain Regulates Systemic Metabolism and Brain Function. *Diabetes*, 63(7).

Kothary, R. 2014. *Use of The Pen Test (Balance Beam) to Assess Motor Balance and Coordination in Mice*. Treat NMD Neuromuscular Network.

Kumawat, N. S., Chaudhari, S. P., Wani, N. S., Deshmukh, T. A., & Patil, V. R. 2010. Antidiabetic Activity of Ethanol Extract of Colocasia Esculenta Leaves in Alloxan Induced Diabetic Rats. *International Journal of PharmTech Research*, 2(2).

Kwai, N. C. G., Arnold, R., Poynten, A. M., & Krishnan, A. V. 2016. Association Between Glycemic Variability and Peripheral Nerve Dysfunction in Type 1 Diabetes. *Muscle and Nerve*, 54(5).

Lackey, E. P., Heck, D. H., & Sillitoe, R. V. 2018. Recent Advances in Understanding the Mechanisms of Cerebellar Granule Cell Development and Function and Their Contribution to Behavior. *F1000 Research*, 7: 1142-1154.

Lenzhen, S. 2008. The mechanisms of alloxan- and streptozotocin-induced diabetes. *Diabetologia*, 51.

Lestari, L. A., Emy, H., & Yustinus, M. 2017. The Developent of Low Glycemic Index Cookie Bars from Foxtail Millet (*Setaria italia*), Arrowroot (*Maranta arundinaceae*) Flour, and Kidney Beans *Phaseolus vulgaris*). *J Food Sci Technol*, 54(6): 1406-1413.

Lin, W. N., Win, Y. T., & Tsai, R. K. 2018. Neuroprotective Effect of Astaxanthin in A Rat Model of Anterior Ischemic Optic Neuropathy. *Investigative Ophthalmology & Visual Science*, 59: 2498.

Ma, J., Stevens, J. E., Cukier, K., Maddox, A. F., Wishart, J. M., Jones, K. L., Clifton, P. M., Horowitz, M., & Rayner, C. K. 2009. Effects of A Protein Preload on Gastric Emptying, Glycemia, And Gut Hormones After A Carbohydrate Meal in Diet-Controlled Type 2 Diabetes. *Diabetes Care*, 32(9).

Maideliza, T., Taufiq A., & Amelia A. 2018. Genetic Diversity of Cultivated Taro by Mentawai's Indigenous Community in Indonesia. *Scholars Acad Journal of Bioscience*, 1(18).

Malik, R. A., Andag-Silva, A., Dejthevaporn, C., Hakim, M., Koh, J. S., Pinzon, R., Sukor, N., & Wong, K. S. 2020. Diagnosing Peripheral Neuropathy in South-East Asia: A Focus on Diabetic Neuropathy. *Journal of Diabetes Investigation*, 11.

Mao, X. Y., Cao, D. F., Li, X., Yin, J. Y., Wang, Z. Bin, Zhang, Y., Mao, C. X., Zhou, H. H., & Liu, Z. Q. 2014. Huperzine A Ameliorates Cognitive Deficits in Streptozotocin-Induced Diabetic Rats. *International Journal of Molecular Sciences*, 15(5).

Marviano, F. R. 2023. *Efek Neuroprotektif Umbi Talas Mentawai (Colocasia esculenta; Araceae) Terhadap Mencit yang Diberi Pakan Berlemak Tinggi.* Skripsi Sarjana Biologi FMIPA Universitas Andalas. Padang.

Matthews, P. J. 2004. Genetic Diversity in Taro, and the Preservation of Culinary Knowledge. *Ethnobotany Research and Applications*, 2.

McEwen, B. S., Magariños, A. M., & Reagan, L. P. 2002. Studies of Hormone Action in The Hippocampal Formation: Possible Relevance to Depression and Diabetes. *Journal of Psychosomatic Research*, 53(4).

Miao, C., Chen, H., Li, Y., Guo, Y., Xu, F., Chen, Q., Zhang, Y., Hu, M., & Chen, G. 2021. Curcumin and Its Analog Alleviate Diabetes-Induced Damages by Regulating Inflammation and Oxidative Stress in Brain of Diabetic Rats. *Diabetology and Metabolic Syndrome*, 13(1).

Muramatsu, K. 2020. Diabetes Mellitus-Related Dysfunction of The Motor System. *International Journal of Molecular Science*, 21.

Nahar, N., Mohamed, S., Mustapha, N. M., & Fong, L. S. 2022. Protective Effects of *Labisia pumila* Against Neuropathy in A Diabetic Rat Model. *Journal of Diabetes and Metabolic Disorders*, 21(1).

Nangoy, B. V., Kalangi, S. J. R., & Pasiak, T. F. 2019. Gambaran Mikrokopik Serebelum pada Hewan Coba Postmortem. *Jurnal Biomedik (JBM)*, 11(1).

Niyomchan, A., Sricharoenvej, S., Lanlua, P., & Baimai, S. 2019. Cerebellar Synaptopathy in Streptozotocin-Induced Diabetic Rats. *International Journal of Morphology*, 37(1).

Oates, P. 2008. Aldose Reductase, still a Compelling Target for Diabetic Neuropathy. *Current Drug Targets*, 9(1).

Ostovar, M., A. Akbari, A. Anbardar, M. Iraji, S. H. Salmanpour, M. Ghoran, M. Heydari, & Shams. 2019. Effects of *Citrullus colocynthis* L. in A Rat Model of Diabetic Neuropathy. *Journal of Integrative Medicine.*

Pandhare, R. B., Sangameswaran, B., Mohite, P. B., & Khanage, S. G. 2012. Attenuating Effect of Seeds of *Adenanthera pavonina* Aqueous Extract in Neuropathic Pain in Streptozotocin-Induced Diabetic Rats: An Evidence of Neuroprotective Effects. *Revista Brasileira de Farmacognosia*, 22(2).

Pang, L., Lian, X., Liu, H., Zhang, Y., Li, Q., Cai, Y., Ma, H., & Yu, X. 2020. Understanding Diabetic Neuropathy: Focus on Oxidative Stress. *Oxidative Medicine and Cellular Longevity*.

Paul, A., Kumar, M., Das, P., Guha, N., Rudrapal, M., & Zaman, M. K. 2022. Drug Repurposing – A Search for Novel Therapy for The Treatment of Diabetic Neuropathy. *Biomedicine and Pharmacotherapy*, 156.

Prabawati, R. K., Ratnawati, R., Rahayu, M., & Prakosa, A. G. 2019. Effect Anthocyanin of Purple Potato Gunung Kawi on MDA Levels, Expression of Caspase-3, and Spatial Memory Function on Diabetic Wistar Rats. *Malang Neurology Journal*, *5*(1).

Prana, M. S. & Kuswara, T. 2002. *Budidaya Talas*. Madikom Pustaka Mandiri.

Priambada, A. R. 2023. *Preventive Effect of Mentawai Taro (Colocasia esculenta; Araceae) Against Inflammation and Oxidative Stress in Colon of Mice Fed with High-Fat Diet.* Skripsi Sarjana Biologi FMIPA Universitas Andalas. Padang.

Rahmadanti, E. 2022. *Efek Serat Beberapa Tanaman Umbi dan Rimpang dalam Pakan Berlemak Tinggi terhadap Gula Darah dan Kadar Insulin pada Mencit (Mus musculus)*. Skripsi Sarjana Biologi FMIPA Universitas Andalas. Padang.

Ramadhani, V. 2023. *Efek Sediaan Umbi Talas Mentawai (Colocasia esculenta L., Araceae) Terhadap Struktur dan Fungsi Ginjal Pada Mencit Putih Diabetes Melitus.* Skripsi Sarjana Biologi FMIPA Universitas Andalas. Padang.

Rashmi, D. R., Raghu, N., Gopenath, T. S., Palanisamy, P., Bakthavatchalam, P., Karthikeyan, M., Gnanasekaran, A., & Basalingappa, K. M. 2018. Taro (*Colocasia esculenta*): An Overview. *Journal of Medicinal Plants Studies*, 6(4).

Razi, E. M., Ghafari, S., & Golalipour, M. J. 2015. Effect of Gestational Diabetes on Purkinje and Granule Cells Distribution of The Rat Cerebellum In 21 And 28 Days of Postnatal Life. *Basic and Clinical Neuroscience*, 6(1).

Reynolds, A. N., Akerman, A. P., Mann, J. 2020. Dietary fibre and whole grains in diabetes management: Systematic review and meta-analyses. *PLoS Med*,17.

Saeedi, P., Petersohn, I., Salpea, P., Malanda, B., Karuranga, S., Unwin, N., Colagiuri, S., Guariguata, L., Motala, A. A., Ogurtsova, K., Shaw, J. E., Bright, D., & Williams, 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*, 157.

Salim, S. 2017. Oxidative Stress and The Central Nervous System. *Journal of Pharmacology and Experimental Therapeutics*, 360.

Santoso, P. 2022. *Ragam Khasiat Serat Pangan*. Yogyakarta: Penerbit Karya Bakti Makmur (KBM) Indonesia.

Santoso, P. & Maliza, R. 2020. *Isolasi dan Uji Khasiat Serat Bengkuang*. Yogyakarta: K-Media.

Setiasih, A. 2011. *Pemanfaatan Talas (Colocasia esculenta L. schott) Sebagai Bahan Baku Pembuatan Bioetanol*. Tugas Akhir Fakultas Teknik, Program Studi Diploma III Teknik Kimia Universitas Diponegoro, Semarang.

Shalaby, A. M., Aboregela, A. M., Alabiad, M. A., & Sadek, M. T. M. 2021. The Effect of Induced Diabetes Mellitus on the Cerebellar Cortex of Adult Male Rat and the Possible Protective Role of Oxymatrine: A Histological,

Immunohistochemical and Biochemical Study. *Ultrastructural Pathology*, 45(3): 182–196.

Sharifi, S., Golalipour, M., Ghafari, S., Safari, R., & Golalipour, M. J. 2023. Effect of induced diabetes on morphometric indexes of the cerebellar cortex and gene expression in C57BL mice. *Iran J Basic Med Sci*, 26(12):1444-1448.

Sillitoe, R. V., Fu, Y., & Watson, C. 2012. *Cerebellum. The Mice Nervous System*.

Simatupang, A. S. 2023. *Effect of Andaliman (Zanthoxylum acanthopodium DC., Rutaceae) Fruit Ethanol Extract on Diabetic Neuropathy in Alloxan-Induced DM Mice*. Skripsi Sarjana Biologi FMIPA Universitas Andalas. Padang.

Situmorang, N. & Zulham. 2020. Malondialdehyde (MDA). *Jurnal Keperawatan dan Fisioterapi (JKF)*, 2(2).

Smith, S., Normahani, P., Lane, T., Hohenschurz-Schmidt, D., Oliver, N., & Davies, A. H. 2022. Prevention and Management Strategies for Diabetic Neuropathy. *Life*, 12.

Solmaz, V., Köse Özlece, H., Eroglu, H. A., Aktuğ, H., Erbaş, O., & Taşkiran, D. 2017. Accumulation of α -Synuclein in Cerebellar Purkinje Cells of Diabetic Rats and Its Potential Relationship with Inflammation and Oxidative Stress Markers. *Neurology Research International*.

Sopiko, J. & Marine, D. 2021. *Neuroanatomy, Cerebellum*. StatPearls Publishing.

Soviana, E. & Maenasari, D. 2019. Asupan Serat, Beban Glikemik dan Kadar Glukosa Darah pada Pasien Diabetes Melitus Tipe 2. *Jurnal Kesehatan*, 12(1): 19-29.

Syukri, F. 2021. *Pengaruh Serat Beberapa Tanaman Umbi dan Rimpang dalam Pakan Berlemak Tinggi terhadap Jaringan Adiposa Putih dan Kadar Lipid Plasma Mencit Putih.* Skripsi Sarjana Biologi FMIPA Universitas Andalas. Padang.

Turrens, J. F. 2007. Formation of Reactive Oxygen Species in Mitochondria. *The Journal of Physiology*.

Van Essen, D. C., Donahue, C. J., & Glasser, M. F. 2018. Development and Evolution of Cerebral and Cerebellar Cortex. *Brain, Behavior and Evolution*, 91(3).

Vetrani, C., Bozzetto, L., Giorgini, M., Cavagnuolo, L., Di Mattia, E., Cipriano, P., Mangione, A., Todisco, A., Inghilterra, G., Giacco, A., Annuzzi, G., & Rivellese, A. A. 2019. Fibre-Enriched Buckwheat Pasta Modifies Blood Glucose Response Compared to Corn Pasta in Individuals with Type 1 Diabetes and Celiac Disease: Acute Randomized Controlled Trial. *Diabetes Research and Clinical Practice*, 149.

Vinik, A., Rosenstock, J., Sharma, U., Feins, K., Hsu, C., & Merante, D. 2014. Efficacy and Safety of Mirogabalin (DS-5565) for The Treatment of Diabetic Peripheral Neuropathic Pain: A Randomized, Double-Blind, Placebo- And Active Comparator-Controlled, Adaptive Proof-Of-Concept Phase 2 Study. *Diabetes Care*, 37(12).

Vinokurov, A. Y., Stelmashuk, O. A., Ukolova, P. A., Zherebtsov, E. A., & Abramov, A. Y. 2021. Brain Region Specificity in Reactive Oxygen Species Production and Maintenance of Redox Balance. *Free Radical Biology and Medicine*, 174.

Wild, S., Roglic, G., Green, A., Sicree, R., & King, H. 2004. Global Prevalence of Diabetes: Estimates for the Year 2000 and Projections for 2030. *Diabetes Care*, 27(5).

Yustisia, A., Winaya, I. B. O., Berata, I. K., & Samsuri. 2020. Perubahan Histopatologi Otak Tikus Putih Berupa Kongesti dan Edema Perivaskuler Akibat Pemberian Tambahan Ragi Tape dalam Pakan. *Indonesia Medicus Veterinus*, 9(6).

Zhang, X., Yang, X., Sun, B., & Zhu, C. 2021. Perspectives of Glycemic Variability in Diabetic Neuropathy: A Comprehensive Review. In *Communications Biology*, 4.