

DAFTAR PUSTAKA

- Agustina, D. K., Zen, S., Sahrir, S. P. I., Fadhila, F., AK, A., Vertygo, S., dan Arianto, S. (2021). *Teori Biologi Sel*. Yayasan Penerbit Muhammad Zaini.
- Aerni-Flessner, L. B., Otu, M. C., dan Moley, K. H. (2011). The amino acids upstream of NH (2)-terminal dileucine motif play a role in regulating the intracellular sorting of the Class III transporters GLUT8 and GLUT12. *Molecular membrane biology*, 28(1), 30-41.
- Ahsan, R., Arshad, M., Khushtar, M., Ahmad, M. A., Muazzam, M., Akhter, M. S., dan Muzahid, M. (2020). A comprehensive review on physiological effects of curcumin. *Drug Research*, 70(10), 441-447.
- Al-Saud, N. B. S. (2020). Impact of curcumin treatment on diabetic albino rats. *Saudi Journal of Biological Sciences*, 27(2), 689-694.
- American Diabetes Association. (2021). 2. Classification and diagnosis of diabetes: standards of medical care in diabetes—2021. *Diabetes care*, 44(Supplement_1), S15-S33.
- Aslantürk, Ö. S. (2018). In vitro cytotoxicity and cell viability assays: principles, advantages, and disadvantages. *Genotoxicity-A predictable risk to our actual world*, 2, 64-80.
- Awan, M., Buriak, I., Fleck, R., Fuller, B., Goltsev, A., Kerby, J., dan Stacey, G. N. (2020). Dimethyl sulfoxide: a central player since the dawn of cryobiology, is efficacy balanced by toxicity?. *Regenerative medicine*, 15(3), 1463-1491.
- Aydin, S. (2015). A short history, principles, and types of ELISA, and our laboratory experience with peptide/protein analyses using ELISA. *Peptides*, 72, 4-15.
- Bahuguna, A., Khan, I., Bajpai, V. K., dan Kang, S. C. (2017). MTT assay to evaluate the cytotoxic potential of a drug. ||| *Bangladesh Journal of Pharmacology*|||, 12(2), 115-118.
- Bryant, N. J., dan Gould, G. W. (2020). Insulin stimulated GLUT4 translocation—Size is not everything!. *Current Opinion in Cell Biology*, 65, 28-34.
- Cai, S., Sun, W., Fan, Y., Guo, X., Xu, G., Xu, T., dan Liu, T. (2016). Effect of mulberry leaf (Folium Mori) on insulin resistance via IRS-1/PI3K/Glut-4 signalling pathway in type 2 diabetes mellitus rats. *Pharmaceutical Biology*, 54(11), 2685-2691.
- Chen, S., Zhao, X., Ran, L., Wan, J., Wang, X., Qin, Y., dan Mi, M. (2015). Resveratrol improves insulin resistance, glucose and lipid metabolism in patients with non-alcoholic fatty liver disease: a randomized controlled trial. *Digestive and Liver Disease*, 47(3), 226-232.
- Chen, S. C., Chen, P. Y., Wu, Y. L., Chen, C. W., Chen, H. W., Lii, C. K., dan Liu, K. L. (2016). Long-chain polyunsaturated fatty acids amend palmitate-induced inflammation and insulin resistance in mouse C2C12 myotubes. *Food dan function*, 7(1), 270-278.

- Chiu, Y. J., Lo, Y. H., Yang, J. S., Kuo, S. C., dan Tsai, S. C. (2021). Curcumin derivative MTH-3 regulates palmitate-induced insulin resistance in mouse myoblast C2C12 cells. *in vivo*, 35(6), 3181-3191.
- Choi, E., dan Yu, H. (2018). Spindle checkpoint regulators in insulin signaling. *Frontiers in Cell and Developmental Biology*, 6, 161.
- Choi, M., Mukherjee, S., dan Yun, J. W. (2022). Curcumin stimulates UCP1-independent thermogenesis in 3T3-L1 white adipocytes but suppresses in C2C12 muscle cells. *Biotechnology and Bioprocess Engineering*, 27(6), 961-974.
- Christy, T. W., dan Showiantari, S. (2017). *Pembentukan Mikropartikel Senyawa Kurkumin Dalam Ekstrak Temulawak Menggunakan Co2 Superkritis Sebagai Anti-Solvent* (Doctoral dissertation, Institut Teknologi Sepuluh Nopember).
- Cruz-Concepción, B., Flores-Cortez, Y. A., Barragán-Bonilla, M. I., Mendoza-Bello, J. M., dan Espinoza-Rojo, M. (2023). Insulin: A connection between pancreatic β cells and the hypothalamus. *World Journal of Diabetes*, 14(2), 76.
- Deng, Y. T., Chang, T. W., Lee, M. S., dan Lin, J. K. (2012). Suppression of free fatty acid-induced insulin resistance by phytopolyphenols in C2C12 mouse skeletal muscle cells. *Journal of agricultural and food chemistry*, 60(4), 1059-1066.
- DiPiro, B. G. W. J. T., dan DiPiro, T. L. S. C. V. (2015). *Pharmacotherapy Handbook Ninth Edition, Barbara G. Wells, PharmD, FASHP, FCCP, 2015 by McGraw-Hill Education*. McGraw-Hill Education.
- Ditz, T., Schnapka-Hille, L., Noack, N., Dorow, J., Ceglarek, U., Niederwieser, D., ... dan Cross, M. (2019). Phospholipase A2 products predict the hematopoietic support capacity of horse serum. *Differentiation*, 105, 27-32.
- Duarte Rojas, J. M., Restrepo Múnera, L. M., dan Estrada Mira, S. (2024). Comparison between Platelet Lysate, Platelet Lysate Serum, and Fetal Bovine Serum as Supplements for Cell Culture, Expansion, and Cryopreservation. *Biomedicines*, 12(1), 140.
- Dzigandzli, G., Askaripour, M., Rajabi, S., dan Shahmoradi, M. K. (2024). Effects of Curcumin on GLUT4, Era and Insulin Resistance Genes Expression in Polycystic Ovary Syndrome Rats. *GMJ Medicine*, 3(1), 31-35.
- Eizirik, D. L., Pasquali, L., dan Cnop, M. (2020). Pancreatic β -cells in type 1 and type 2 diabetes mellitus: different pathways to failure. *Nature Reviews Endocrinology*, 16(7), 349-362.
- Filho, T. J. D., Oliveira, D. H. I. P. D., Moura, I. D. S., Medeiros, L. K. D. S., Gonzaga, A. K. G., Brasil, V. L. M., dan Queiroz, L. M. G. (2015). Importance of GLUT1 in differential diagnosis of vascular anomalies. *Jornal Vascular Brasileiro*, 14, 168-176.
- Fu, W. C., Li, H. Y., Li, T. T., Yang, K., Chen, J. X., Wang, S. J., dan Zhang, W. (2021). Pentadecanoic acid promotes basal and insulin-stimulated glucose uptake in C2C12 myotubes. *Food dan nutrition research*, 65.
- Galicia-Garcia, U., Benito-Vicente, A., Jebari, S., Larrea-Sebal, A., Siddiqi, H., Uribe, K. B., dan Martín, C. (2020). Pathophysiology of type 2 diabetes mellitus. *International journal of molecular sciences*, 21(17), 6275.

- Ge, G., Yang, D., Tan, Y., Chen, Y., Jiang, D., Jiang, A., dan Zhu, L. (2019). miR-10b-5p regulates C2C12 myoblasts proliferation and differentiation. *Bioscience, biotechnology, and biochemistry*, 83(2), 291-299.
- Haghani, K., Pashaei, S., Vakili, S., Taheripak, G., dan Bakhtiyari, S. (2015). TNF- α knockdown alleviates palmitate-induced insulin resistance in C2C12 skeletal muscle cells. *Biochemical and Biophysical Research Communications*, 460(4), 977-982.
- Han, H. S., Kang, G., Kim, J. S., Choi, B. H., dan Koo, S. H. (2016). Regulation of glucose metabolism from a liver-centric perspective. *Experimental dan molecular medicine*, 48(3), e218-e218.
- Hantzidiamantis, P. J., dan Lappin, S. L. (2019). Physiology, glucose. *Treasure Island (FL)*. <https://europepmc.org/article/NBK/nbk545201>.
- Hartogh, D. J., Gabriel, A., dan Tsiani, E. (2020). Antidiabetic properties of curcumin I: Evidence from in vitro studies. *Nutrients*, 12(1), 118.
- He, S., Peng, W. B., & Zhou, H. L. (2018). Combination treatment of deep sea water and fucoidan attenuates high glucose-induced insulin-resistance in HepG2 hepatocytes. *Marine Drugs*, 16(2), 48.
- Heffernan, C., Ukrainczyk, M., Gamidi, R. K., Hodnett, B. K., dan Rasmuson, Å. C. (2017). Extraction and purification of curcuminoids from crude curcumin by a combination of crystallization and chromatography. *Organic Process Research dan Development*, 21(6), 821-826.
- Huang, B., Jiao, Y., Zhu, Y., Ning, Z., Ye, Z., Li, Q. X., dan Wang, C. (2021). Mdfi promotes C2C12 cell differentiation and positively modulates fast-to-slow-twitch muscle fiber transformation. *Frontiers in Cell and Developmental Biology*, 9, 605875.
- Huang, S., dan Czech, M. P. (2007). The GLUT4 glucose transporter. *Cell metabolism*, 5(4), 237-252.
- Hsieh, S. K., Lin, H. Y., Chen, C. J., Jhuo, C. F., Liao, K. Y., Chen, W. Y., dan Tzen, J. T. (2020). Promotion of myotube differentiation and attenuation of muscle atrophy in murine C2C12 myoblast cells treated with teaghrelin. *Chemico-biological interactions*, 315, 108893.
- Hyun, S. W., Kim, B. R., Lin, D., Hyun, S. A., Yoon, S. S., dan Seo, J. W. (2018). The effects of gentamicin and penicillin/streptomycin on the electrophysiology of human induced pluripotent stem cell-derived cardiomyocytes in manual patch clamp and multi-electrode array system. *Journal of Pharmacological and Toxicological Methods*, 91, 1-6.
- International Diabetes Federation, 2021, *IDF Diabetes Atlas*, 10th Edition, IDF, Belgium.
- Issac, P. K., Guru, A., Chandrakumar, S. S., Lite, C., Saraswathi, N. T., Arasu, M. V., ... & Arockiaraj, J. (2020). Molecular process of glucose uptake and glycogen storage due to hamamelitannin via insulin signalling cascade in glucose metabolism. *Molecular Biology Reports*, 47(9), 6727-6740.
- Jung, T. W., Hwang, H. J., Hong, H. C., Yoo, H. J., Baik, S. H., dan Choi, K. M. (2015). BAIBA attenuates insulin resistance and inflammation induced by palmitate or a high fat diet via an AMPK-PPAR δ -dependent pathway in mice. *Diabetologia*, 58, 2096-2105.

- Katz, E. B., Stenbit, A. E., Hatton, K., DePinhot, R., dan Charron, M. J. (1995). Cardiac and adipose tissue abnormalities but not diabetes in mice deficient in GLUT4. *Nature*, 377(6545), 151-155.
- Kementerian Kesehatan Republik Indonesia. (2020). Infodatin 2020 Diabetes Melitus Pusat Data dan Informasi Kementerian Kesehatan RI. *P2PTM Kemenkes RI*.
- Kumar, P., Nagarajan, A., dan Uchil, P. D. (2018). Analysis of cell viability by the MTT assay. *Cold spring harbor protocols*, 2018(6), pdb-prot095505.
- Lacham-Kaplan, O., Camera, D. M., dan Hawley, J. A. (2020). Divergent regulation of myotube formation and gene expression by E2 and EPA during in-vitro differentiation of C2C12 myoblasts. *International Journal of Molecular Sciences*, 21(3), 745.
- Le, N. H., Chu, D. T., dan Yu, R. (2024). A method for growing and differentiating the C2C12 muscle cell line in the laboratory. *HPU2 Journal of Science: Natural Sciences and Technology*, 3(1), 13-19.
- Lee, D. Y., Chun, Y. S., Kim, J. K., Lee, J. O., Lee, Y. J., Ku, S. K., dan Shim, S. M. (2021). Curcumin ameliorated oxidative stress and inflammation-related muscle disorders in C2C12 myoblast cells. *Antioxidants*, 10(3), 476.
- Levitan, I. B., dan Kaczmarek, L. K. (2015). *The neuron: cell and molecular biology*. Oxford University Press, USA.
- Li, H. B., Yang, Y. R. Y., Mo, Z. J., Ding, Y., dan Jiang, W. J. (2015). Silibinin improves palmitate-induced insulin resistance in C2C12 myotubes by attenuating IRS-1/PI3K/Akt pathway inhibition. *Brazilian Journal of Medical and Biological Research*, 48, 440-446.
- Mafruchati, M. (2024). *Motilitas dan Kontraktilitas Sel, DNA, Kromosom, dan Nukleus Sebagai Dasar Teori Pada Perkembangan Embrio Hewan*. Zifatama Jawa.
- Marino, K., Bones, J., Kattla, J. J., dan Rudd, P. M. (2010). A systematic approach to protein glycosylation analysis: a path through the maze. *Nature chemical biology*, 6(10), 713-723.
- Marton, L. T., Pescinini-e-Salzedas, L. M., Camargo, M. E. C., Barbalho, S. M., Haber, J. F. D. S., Sinatora, R. V., dan Cincotto dos Santos Bueno, P. (2021). The effects of curcumin on diabetes mellitus: a systematic review. *Frontiers in endocrinology*, 12, 669448.
- Matsuzaka, T., dan Shimano, H. (2011). Molecular mechanisms involved in hepatic steatosis and insulin resistance. *Journal of diabetes investigation*, 2(3), 170-175.
- Meijden, K., Bravenboer, N., Dirks, N. F., Heijboer, A. C., Den Heijer, M., De Wit, G. M. J., ... dan Jaspers, R. T. (2016). Effects of 1, 25 (OH) 2D3 and 25 (OH) D3 on C2C12 myoblast proliferation, differentiation, and myotube hypertrophy. *Journal of Cellular Physiology*, 231(11), 2517-2528.
- Mohiti-Ardekani, J., Asadi, S., Ardakani, A. M., Rahimifard, M., Baeceri, M., dan Momtaz, S. (2019). Curcumin increases insulin sensitivity in C2C12 muscle cells via AKT and AMPK signaling pathways. *Cogent Food dan Agriculture*, 5(1), 1577532.

- Moustogiannis, A., Philippou, A., Taso, O., Zevolis, E., Pappa, M., Chatzigeorgiou, A., dan Koutsilieris, M. (2021). The effects of muscle cell aging on myogenesis. *International journal of molecular sciences*, 22(7), 3721.
- Mueckler, M., dan Thorens, B. (2013). The SLC2 (GLUT) family of membrane transporters. *Molecular aspects of medicine*, 34(2-3), 121-138.
- Na, L. X., Zhang, Y. L., Li, Y., Liu, L. Y., Li, R., Kong, T., dan Sun, C. H. (2011). Curcumin improves insulin resistance in skeletal muscle of rats. *Nutrition, Metabolism and Cardiovascular Diseases*, 21(7), 526-533.
- Nakamura, R., Nakajima, D., Sato, H., Endo, Y., Ohara, O., dan Kawashima, Y. (2021). A simple method for in-depth proteome analysis of mammalian cell culture conditioned media containing fetal bovine serum. *International Journal of Molecular Sciences*, 22(5), 2565.
- Nakashima, Y., Nahar, S., Miyagi-Shiohira, C., Kinjo, T., Kobayashi, N., Saitoh, I., dan Noguchi, H. (2018). A liquid chromatography with tandem mass spectrometry-based proteomic analysis of cells cultured in DMEM 10% FBS and chemically defined medium using human adipose-derived mesenchymal stem cells. *International journal of molecular sciences*, 19(7), 2042.
- National Center for Biotechnology Information, 2023, PubChem Compound Summary for CID 969516, *Curcumin*, diakses pada tanggal 4 Oktober 2023 pukul 20.00 WIB, <https://pubchem.ncbi.nlm.nih.gov/compound/Curcumin>.
- Negi, P. S., Jayaprakasha, G. K., Jagan Mohan Rao, L., dan Sakariah, K. K. (1999). Antibacterial activity of turmeric oil: a byproduct from curcumin manufacture. *Journal of agricultural and food chemistry*, 47(10), 4297-4300.
- Page, L., Ullmann, A. J., Schadt, F., Wurster, S., dan Samnick, S. (2020). In vitro evaluation of radiolabeled amphotericin B for molecular imaging of mold infections. *Antimicrobial agents and chemotherapy*, 64(7), 10-1128.
- Peng, Y., Ao, M., Dong, B., Jiang, Y., Yu, L., Chen, Z., dan Xu, R. (2021). Anti-inflammatory effects of curcumin in the inflammatory diseases: Status, limitations and countermeasures. *Drug design, development and therapy*, 4503-4525.
- Perkumpulan Endokrinologi Indonesia, 2021, *Pedoman Pengelolaan dan Pencegahan Diabetes Melitus Tipe 2 di Indonesia*, 6-12, PB. PEKRENI, Jakarta.
- Pintor, A. V. B., Queiroz, L. D., Barcelos, R., Primo, L. S. G., Maia, L. C., dan Alves, G. G. (2020). MTT versus other cell viability assays to evaluate the biocompatibility of root canal filling materials: a systematic review. *International Endodontic Journal*, 53(10), 1348-1373.
- Pivari, F., Mingione, A., Brasacchio, C., dan Soldati, L. (2019). Curcumin and type 2 diabetes mellitus: prevention and treatment. *Nutrients*, 11(8), 1837.
- Priyadarsini, K. I. (2014). The chemistry of curcumin: from extraction to therapeutic agent. *Molecules*, 19(12), 20091-20112.
- Purcell, S. H., Aerni-Flessner, L. B., Willcockson, A. R., Diggs-Andrews, K. A., Fisher, S. J., dan Moley, K. H. (2011). Improved insulin sensitivity by GLUT12 overexpression in mice. *Diabetes*, 60(5), 1478-1482.

- Rahman, M. S., Hossain, K. S., Das, S., Kundu, S., Adegoke, E. O., Rahman, M. A., ... dan Pang, M. G. (2021). Role of insulin in health and disease: an update. *International journal of molecular sciences*, 22(12), 6403.
- Riss, T. L., Moravec, R. A., Niles, A. L., Duellman, S., Benink, H. A., Worzella, T. J., dan Minor, L. (2016). Cell viability assays. *Assay guidance manual*. <https://www.ncbi.nlm.nih.gov/books/NBK144065/?report=reader>.
- Röder, P. V., Wu, B., Liu, Y., dan Han, W. (2016). Pancreatic regulation of glucose homeostasis. *Experimental dan molecular medicine*, 48(3), e219-e219.
- Röhling, M., Herder, C., Stemper, T., dan Müssig, K. (2016). Influence of acute and chronic exercise on glucose uptake. *Journal of diabetes research*, 2016(1), 2868652.
- Sadeghi, A., Rostamirad, A., Seyyedebrahimi, S., dan Meshkani, R. (2018). Curcumin ameliorates palmitate-induced inflammation in skeletal muscle cells by regulating JNK/NF- κ B pathway and ROS production. *Inflammopharmacology*, 26, 1265-1272.
- Salucci, S., Battistelli, M., Burattini, S., Squillace, C., Canonico, B., Gobbi, P., dan Falcieri, E. (2010). C2C12 myoblast sensitivity to different apoptotic chemical triggers. *Micron*, 41(8), 966-973.
- Sanvee, G. M., Bouitbir, J., dan Krähenbühl, S. (2021). C2C12 myoblasts are more sensitive to the toxic effects of simvastatin than myotubes and show impaired proliferation and myotube formation. *Biochemical Pharmacology*, 190, 114649.
- Sawano, S., Baba, K., Sonoda, Y., Wakamatsu, J. I., Tomonaga, S., Furuse, M., dan Mizunoya, W. (2020). Beef extract supplementation promotes myoblast proliferation and myotube growth in C2C12 cells. *European Journal of Nutrition*, 59, 3735-3743.
- Septisetyani, E. P., Santoso, A., Wisnuwardhani, P. H., dan Prasetyaningrum, P. W. (2020, February). Cytotoxic effects of chemopreventive agents curcumin, naringin and epigallocatechin-3-gallate in C2C12 myoblast cells. In *IOP Conference Series: Earth and Environmental Science* (Vol. 439, No. 1, p. 012062). IOP Publishing.
- Sethi, G., Sung, B., dan Aggarwal, B. B. (2009). The role of curcumin in modern medicine. *Herbal Drugs: Ethnomedicine to modern medicine*, 97-113.
- Sharifi-Rad, J., Rayess, Y. E., Rizk, A. A., Sadaka, C., Zgheib, R., Zam, W., dan Martins, N. (2020). Turmeric and its major compound curcumin on health: bioactive effects and safety profiles for food, pharmaceutical, biotechnological and medicinal applications. *Frontiers in pharmacology*, 11, 550909.
- Song, Z., Wang, H., Zhu, L., Han, M., Gao, Y., Du, Y., dan Wen, Y. (2015). Curcumin improves high glucose-induced INS-1 cell insulin resistance via activation of insulin signaling. *Food dan function*, 6(2), 461-469.
- Standl, E., Khunti, K., Hansen, T. B., dan Schnell, O. (2019). The global epidemics of diabetes in the 21st century: Current situation and perspectives. *European Journal of Preventive Cardiology*, 26(2_suppl), 7-14.
- Stockert, J. C., Horobin, R. W., Colombo, L. L., dan Blázquez-Castro, A. (2018). Tetrazolium salts and formazan products in Cell Biology: Viability

- assessment, fluorescence imaging, and labeling perspectives. *Acta histochemica*, 120(3), 159-167.
- Stuart, C. A., Howell, M. E., Zhang, Y., dan Yin, D. (2009). Insulin-stimulated translocation of glucose transporter (GLUT) 12 parallels that of GLUT4 in normal muscle. *The Journal of Clinical Endocrinology dan Metabolism*, 94(9), 3535-3542.
- Suganuma, N., Segade, F., Matsuzu, K., dan Bowden, D. W. (2007). Differential expression of facilitative glucose transporters in normal and tumour kidney tissues. *BJU international*, 99(5), 1143-1149.
- Świdarska, E., Strycharz, J., Wróblewski, A., Szemraj, J., Drzewoski, J., dan Śliwińska, A. (2018). Role of PI3K/AKT pathway in insulin-mediated glucose uptake. *Blood glucose levels*, 1, 1-18.
- Teixeira-Lemos, E., Nunes, S., Teixeira, F., dan Reis, F. (2011). Regular physical exercise training assists in preventing type 2 diabetes development: focus on its antioxidant and anti-inflammatory properties. *Cardiovascular diabetology*, 10, 1-15.
- Tonder, A., Joubert, A. M., dan Cromarty, A. D. (2015). Limitations of the 3-(4, 5-dimethylthiazol-2-yl)-2, 5-diphenyl-2H-tetrazolium bromide (MTT) assay when compared to three commonly used cell enumeration assays. *BMC research notes*, 8, 1-10.
- Tønnesen, H. H., dan Karlsen, J. (1985). Studies on curcumin and curcuminoids. VI. Kinetics of curcumin degradation in aqueous solution. *Zeitschrift für Lebensmittel-untersuchung und-forschung*, 180(5), 402-404.
- Tripathy, S., Verma, D. K., Thakur, M., Patel, A. R., Srivastav, P. P., Singh, S., dan Utama, G. L. (2021). Curcumin extraction, isolation, quantification and its application in functional foods: a review with a focus on immune enhancement activities and COVID-19. *Frontiers in Nutrition*, 8, 747956.
- Tsuchiya, Y., Hatakeyama, H., Emoto, N., Wagatsuma, F., Matsushita, S., dan Kanzaki, M. (2010). Palmitate-induced down-regulation of sortilin and impaired GLUT4 trafficking in C2C12 myotubes. *Journal of Biological Chemistry*, 285(45), 34371-34381.
- Tsuka, S., Aonuma, F., Higashi, S., Ohsumi, T., Nagano, K., Mizokami, A., dan Takeuchi, H. (2015). Promotion of insulin-induced glucose uptake in C2C12 myotubes by osteocalcin. *Biochemical and biophysical research communications*, 459(3), 437-442.
- Twarużek, M., Zastempowska, E., Soszczyńska, E., dan Alryn, I. (2019). The use of in vitro assays for the assessment of cytotoxicity on the example of MTT test.
- Vasiljević, J., Torkko, J. M., Knoch, K. P., dan Solimena, M. (2020). The making of insulin in health and disease. *Diabetologia*, 63, 1981-1989.
- Waller, A. P., George, M., Kalyanasundaram, A., Kang, C., Periasamy, M., Hu, K., dan Lacombe, V. A. (2013). GLUT12 functions as a basal and insulin-independent glucose transporter in the heart. *Biochimica et Biophysica Acta (BBA)-Molecular Basis of Disease*, 1832(1), 121-127.
- Whelan, A., dan Woodley, M. (1995). Pedoman Pengobatan. *Diterjemahkan oleh: Santoso, B., Baiquni.*

- Wong, C. Y., Al-Salami, H., dan Dass, C. R. (2020). C2C12 cell model: its role in understanding of insulin resistance at the molecular level and pharmaceutical development at the preclinical stage. *Journal of Pharmacy and Pharmacology*, 72(12), 1667-1693.
- Wood, I. S., dan Trayhurn, P. (2003). Glucose transporters (GLUT and SGLT): expanded families of sugar transport proteins. *British journal of nutrition*, 89(1), 3-9.
- Xia, M., Ye, Z., Shi, Y., Zhou, L., dan Hua, Y. (2018). Curcumin improves diabetes mellitus-associated cerebral infarction by increasing the expression of GLUT1 and GLUT3. *Molecular medicine reports*, 17(1), 1963-1969.
- Yamamoto, N., Ueda-Wakagi, M., Sato, T., Kawasaki, K., Sawada, K., Kawabata, K., dan Ashida, H. (2015). Measurement of glucose uptake in cultured cells. *Current protocols in pharmacology*, 71(1), 12-14.
- Yao, T., dan Asayama, Y. (2017). Animal-cell culture media: History, characteristics, and current issues. *Reproductive medicine and biology*, 16(2), 99-117.
- Yu, T., Dohl, J., Elenberg, F., Chen, Y., dan Deuster, P. (2019). Curcumin induces concentration-dependent alterations in mitochondrial function through ROS in C2C12 mouse myoblasts. *Journal of Cellular Physiology*, 234(5), 6371-6381.
- Zawacka-Pankau, J., Grinkevich, V. V., Hüntten, S., Nikulenkov, F., Gluch, A., Li, H., dan Selivanova, G. (2011). Inhibition of glycolytic enzymes mediated by pharmacologically activated p53: targeting Warburg effect to fight cancer. *Journal of Biological Chemistry*, 286(48), 41600-41615.
- Zhang, Q., Kong, X., Yuan, H., Guan, H., Li, Y., dan Niu, Y. (2019). Mangiferin improved palmitate-induced-insulin resistance by promoting free fatty acid metabolism in HepG2 and C2C12 cells via PPAR α : Mangiferin improved insulin resistance. *Journal of Diabetes Research*, 2019(1), 2052675.
- Zhao, D., Pan, Y., Yu, N., Bai, Y., Ma, R., Mo, F., dan Gao, S. (2021). Curcumin improves adipocytes browning and mitochondrial function in 3T3-L1 cells and obese rodent model. *Royal Society open science*, 8(3), 200974.
- Zhao, Q., Yang, S. T., Wang, J. J., Zhou, J., Xing, S. S., Shen, C. C., dan Song, Y. H. (2015). TNF alpha inhibits myogenic differentiation of C2C12 cells through NF- κ B activation and impairment of IGF-1 signaling pathway. *Biochemical and biophysical research communications*, 458(4), 790-795.