

## DAFTAR PUSTAKA

- Abe, Y. O., Yoshitane, H., Kim, D. W., Kawakami, S., Koebis, M., Nakao, K., *et al.*, 2022. Rhythmic transcription of *Bmal1* stabilizes the circadian timekeeping system in mammals. *Nature Communications*, 13(1), 4652. doi:10.1038/s41467-022-32326-9
- Ahmed, S., Shah, P., Ahmed, O., 2023. *Biochemistry, Lipids*. NCBI Bookshelf. URL <https://www.ncbi.nlm.nih.gov/books/NBK525952/>
- Ahn, T., Bae, C.-S., & Yun, C.-H., 2016. Acute stress-induced changes in hormone and lipid levels in mouse plasma. *Veterinari medicina*, 61(2), pp. 57–64. Available at: <https://doi.org/10.17221/8718-vetmed>.
- Akiki, P., Delamotte, P., Montagne, J., 2024. Lipid metabolism in relation to carbohydrate metabolism. *Preprints*. doi:10.20944/preprints202406.1790.v1
- Alam, Y.H., Kim, R., Jang, C., 2022. Metabolism and Health Impacts of Dietary Sugars. *Journal of lipid and atherosclerosis*, 11, 20–38. <https://doi.org/10.12997/jla.2022.11.1.20>
- Alberts, B., Johnson, A., Lewis, J., 2002. The Lipid Bilayer. *Molecular Biology of the Cell*. 4th edition. New York: Garland Science. URL: <https://www.ncbi.nlm.nih.gov/books/NBK26871/>
- Angela Bechthold, B., 2014. Food Energy Density and Body Weight. *Ernahrungs Umschau*, 61(1), 2–11. <https://doi.org/10.4455/eu.2014.002>
- Artiss, J. D., Zak, B. *Measurement of Cholesterol Concentration*. In: Rifai, N., Warnick G. R., and Dominiczak, M. H., Eds., *Handbook of Lipoprotein Testing*, Washington: AACC Press, 1997: pp. 99-114.
- Badimon, L., Chiva-Blanch, G., 2018. Lipid metabolism in dyslipidemia and familial hypercholesterolemia. In *The Molecular Nutrition of Fats* (pp. 307–322). Elsevier. <https://doi.org/10.1016/B978-0-12-811297-7.00024-X>
- Badimon, L., Vilahur, G., 2012. LDL-cholesterol versus HDL-cholesterol in the atherosclerotic plaque: inflammatory resolution versus thrombotic chaos. *Ann. N. Y. Acad. Sci.* 1254, 18e32. <https://doi.org/10.1111/j.1749-6632.2012.06480.x>
- Baranwal, N., K. Yu, P., Siegel, N.S., 2023. Sleep physiology, pathophysiology, and sleep hygiene. *Progress in Cardiovascular Diseases*, 77, 59–69. <https://doi.org/10.1016/j.pcad.2023.02.005>

- Barclay, J.L. *et al.*, 2012. Circadian desynchrony promotes metabolic disruption in a mouse model of shiftwork. *PLoS one*, 7(5), p. e37150. Available at: <https://doi.org/10.1371/journal.pone.0037150>.
- Bartlang, M., Savelyev, S., Johansson, A., Reber, S., Helfrich-Förster, C., Lundkvist, G., 2014. Repeated psychosocial stress at night, but not day, affects the central molecular clock. *Chronobiology International*, 31(9), 996–1007. <https://doi.org/10.3109/07420528.2014.940085>
- Basciano, H., Federico, L., Adeli, K., 2005. Fructose, insulin resistance, and metabolic dyslipidemia. *Nutrition & Metabolism*, 2, 1–14. <https://doi.org/10.1186/1743-7075-2-5>
- Bass, J., 2012. Circadian topology of metabolism. In *Nature* (Vol. 491, Issue 7424, pp. 348–356). <https://doi.org/10.1038/nature11704>
- Belete, R., Ataro, Z., Abdu, A., Sheleme, M., 2021. Global prevalence of metabolic syndrome among patients with type I diabetes mellitus: a systematic review and meta-analysis. *Diabetology & metabolic syndrome*, 13(1), 25. <https://doi.org/10.1186/s13098-021-00641-8>
- Bhargava, S., de la Puente-Secades, S., Schurgers, L., Jankowski, J., 2022. Lipids and lipoproteins in cardiovascular diseases: a classification. *Trends in Endocrinology and Metabolism: TEM*, 33(6), 409–423. doi:10.1016/j.tem.2022.02.001
- Blaton, V., 2007. How is the Metabolic Syndrome Related to the Dyslipidemia? *EJIFCC* 18, 15–22.
- Burgeiro, A., Cerqueira, M. G., Varela-Rodríguez, B. M., Nunes, S., Neto, P., Pereira, F. C., *et al.*, 2017. Glucose and Lipid Dysmetabolism in a Rat Model of Prediabetes Induced by a High-Sucrose Diet. *Nutrients*, 9(6), 638. <https://doi.org/10.3390/nu9060638>
- Brunzell, J. D., & Hokanson, J. E., 1999. Dyslipidemia of central obesity and insulin resistance. *Diabetes Care*, 22.
- Cagampang, F.R., Bruce, K.D., 2012. The role of the circadian clock system in nutrition and metabolism. *British Journal of Nutrition*, 108, 381–392. <https://doi.org/10.1017/s0007114512002139>
- Chan, T.Y. & Tang, P.L., 1995. Effect of melatonin on the maintenance of cholesterol homeostasis in the rat. *Endocrine research*, 21(3), pp. 681–696. Available at: <https://doi.org/10.1080/07435809509030483>.

- Chandel, N. S., 2021. Lipid metabolism. *Cold Spring Harbor Perspectives in Biology*, 13(9).  
<https://doi.org/10.1101/CSHPERSPECT.A040576>
- Chaudhry, R., Varacallo, M., 2023. *Biochemistry, Glycolysis*. NCBI Bookshelf. URL  
<https://www.ncbi.nlm.nih.gov/books/NBK482303/>
- Chen, H. J., Chuang, S. Y., Chang, H. Y., Pan, W. H., 2019. Energy intake at different times of the day: Its association with elevated total and LDL cholesterol levels. *Nutrition, Metabolism and Cardiovascular Diseases*, 29(4), 390–397.  
<https://doi.org/10.1016/j.numecd.2019.01.003>
- Chen, J., Fang, Z., Luo, Q. *et al*, 2024. Unlocking the mysteries of VLDL: exploring its production, intracellular trafficking, and metabolism as therapeutic targets. *Lipids Health Dis* 23, 14. <https://doi.org/10.1186/s12944-023-01993-y>
- Christie, S., Vincent, A.D., Li, H., 2018. A rotating light cycle promotes weight gain and hepatic lipid storage in mice. *Physiology-Gastrointestinal and Liver Physiology*, 315.
- Clarkson, J. M., Martin, J. E., McKeegan, D. E. F. 2022. A review of methods used to kill laboratory rodents: issues and opportunities. In *Laboratory Animals* (Vol. 56, Issue 5, pp. 419–436). SAGE Publications Ltd. <https://doi.org/10.1177/00236772221097472>
- Correa, C.S., Teixeira, B.C., Bittencourt, A., Reischak-Oliveira, Á., 2014. Effects of strength training on blood lipoprotein concentrations in postmenopausal women. *Jornal Vascular Brasileiro*, 13, 312–317. <https://doi.org/10.1590/1677-5449.0083>
- Costanzo, L. S., 2018. *Physiology* (6th ed.). Elsevier - Health Sciences Division.
- Conour, L.A., Murray, K.A., Brown, M.J., 2006. Preparation of Animals for Research—Issues to Consider for Rodents and Rabbits. *ILAR Journal* 47, 283–293.  
<https://doi.org/10.1093/ilar.47.4.283>
- Cox, R.A., García-Palmieri, M.R., 1990. Cholesterol, Triglycerides, and Associated Lipoproteins. *Clinical Methods: The History, Physical, and Laboratory Examinations*. 3rd edition. Chapter 31. Available from:  
<https://www.ncbi.nlm.nih.gov/books/NBK351/>
- Csoma, B., Bikov, A., 2023. The Role of the Circadian Rhythm in Dyslipidaemia and Vascular Inflammation Leading to Atherosclerosis. *International journal of molecular sciences*, 24, 14145. <https://doi.org/10.3390/ijms241814145>
- Cummings, D. E., Purnell, J. Q., Frayo, R. S., Schmidova, K., Wisse, B. E., dan Weigle, D. S., 2001. A preprandial rise in plasma ghrelin levels suggests a role in meal initiation in humans. *Diabetes*, 50(8), 1714–1719. <https://doi.org/10.2337/diabetes.50.8.1714>

- Davis, L.E., 2023. How Sleep Cycles Affect Your Mind and Body. *National Council on Aging*.
- Dashty, M., 2013. A quick look at biochemistry: Carbohydrate metabolism. In *Clinical Biochemistry* (Vol. 46, Issue 15, pp. 1339–1352).  
<https://doi.org/10.1016/j.clinbiochem.2013.04.027>
- Delezie, J., Dumont, S., Dardente, H., Oudart, H., Gréchez-Cassiau, A., Klosen, P., *et al.*, 2012. The nuclear receptor REV-ERB $\alpha$  is required for the daily balance of carbohydrate and lipid metabolism. *FASEB Journal: Official Publication of the Federation of American Societies for Experimental Biology*, 26(8), 3321–3335. doi:10.1096/fj.12-208751
- Dholariya, S.J., Orrick, J.A., 2022. *Biochemistry, Fructose Metabolism*. NCBI Bookshelf. URL <https://www.ncbi.nlm.nih.gov/books/NBK576428/>
- Dutheil, F., Baker, J. S., Mermillod, M., De Cesare, M., Vidal, A., Moustafa, F., *et al.*, 2020. Shift work, and particularly permanent night shifts, promote dyslipidaemia: A systematic review and meta-analysis. *Atherosclerosis*, 313, 156–169.  
<https://doi.org/10.1016/j.atherosclerosis.2020.08.015>
- Eleftheriadou, I., Grigoropoulou, P., Katsilambros, N., Tentolouris, N., 2008. The Effects of Medications Used for the Management of Diabetes and Obesity on Postprandial Lipid Metabolism. *Current Diabetes Reviews*, 4(4), 340–356.  
<https://doi.org/10.2174/157339908786241133>
- Fahy, E., Cotter, D., Sud, M., & Subramaniam, S., 2011. Lipid classification, structures and tools. *Biochimica et Biophysica Acta*, 1811(11), 637–647.  
doi:10.1016/j.bbaliip.2011.06.009
- Fan, X., Chen, D., Wang, Y., Tan, Y., Zhao, H., Zeng, J., *et al.*, 2022. Light intensity alters the effects of light-induced circadian disruption on glucose and lipid metabolism in mice. *American Journal of Physiology-Endocrinology and Metabolism*, 322, E1–E9.  
<https://doi.org/10.1152/ajpendo.00025.2021>
- Fatima, N., Sonkar, G.K., Singh, S., 2022. Circadian mechanism disruption is associated with dysregulation of inflammatory and immune responses: a systematic review. *Beni-Suef University Journal of Basic and Applied Sciences*, 11, 1–12.  
<https://doi.org/10.1186/s43088-022-00290-4>
- Feingold, K.R., 2021. *Introduction to Lipids and Lipoproteins*. NCBI Bookshelf. URL <https://www.ncbi.nlm.nih.gov/books/NBK305896/>

- Ferrell, J.M., & Chiang, J.Y.L., 2017. Short-term circadian disruption impairs bile acid and lipid homeostasis in mice. *Cellular and molecular gastroenterology and hepatology*, 1(6), pp. 664–677. Available at: <https://doi.org/10.1016/j.jcmgh.2015.08.003>.
- Filipski, E., Delaunay, F., King, V. M., Wu, M. W., Claustrat, B., Gréchez-Cassiau, A., Guettier, C., *et al.*, 2004. Effects of chronic jet lag on tumor progression in mice. *Cancer research*, 64(21), 7879–7885. <https://doi.org/10.1158/0008-5472.CAN-04-0674>
- Foretz, M., Guichard, C., Ferré, P., Foufelle, F., 1999. Sterol regulatory element binding protein-1c is a major mediator of insulin action on the hepatic expression of glucokinase and lipogenesis-related genes. *Proceedings of the National Academy of Sciences of the United States of America*, 96(22), 12737–12742. <https://doi.org/10.1073/pnas.96.22.12737>
- Frank, S., Gonzalez, K., Lee-Ang, L., Young, M. C., Tamez, M., dan Mattei, J., 2017. Diet and Sleep Physiology: Public Health and Clinical Implications. *Frontiers in neurology*, 8, 393. <https://doi.org/10.3389/fneur.2017.00393>
- Fried, S.K., Rao, S.P., 2003. Sugars, hypertriglyceridemia, and cardiovascular disease. *The American Journal of Clinical Nutrition*, 78, 873S-880S. <https://doi.org/10.1093/ajcn/78.4.873s>
- Geidl-Flueck, B., Hochuli, M., Németh, Á., Eberl, A., Derron, N., Köfeler, H. C., *et al.*, 2021. Fructose- and sucrose- but not glucose-sweetened beverages promote hepatic de novo lipogenesis: A randomized controlled trial. *Journal of hepatology*, 75(1), 46–54. <https://doi.org/10.1016/j.jhep.2021.02.027>
- Gomes, S., Ramalheite, C., Ferreira, I., Bicho, M., Valente, A., 2023. Sleep Patterns, Eating Behavior and the Risk of Noncommunicable Diseases. *Nutrients*, 15. <https://doi.org/10.3390/nu15112462>
- Guan, D., Lazar, M.A., 2021. Interconnections between circadian clocks and metabolism. *The Journal of Clinical Investigation*, 131. <https://doi.org/10.1172/JCI148278>
- Gugliucci, A., 2023. Sugar and Dyslipidemia: A Double-Hit, Perfect Storm. *Journal of clinical medicine*, 12, 5660. <https://doi.org/10.3390/jcm12175660>
- Gurr, M. I., Harwood, J. L., Frayn, K. N., 2002. *Lipid Biochemistry: An Introduction*. 5th ed. Philadelphia, PA: Blackwell Science.
- Hall, J.E., 2016. *Guyton and Hall Textbook of Medical Physiology*, Edition E-Book. Elsevier Health Sciences.

- Han, H. S., Kang, G., Kim, J. S., Choi, B. H., Koo, S. H., 2016. Regulation of glucose metabolism from a liver-centric perspective. In *Experimental and Molecular Medicine* (Vol. 48, Issue 3). Nature Publishing Group. <https://doi.org/10.1038/emm.2015.122>
- Harmer, S. L., Panda, S., & Kay, S. A., 2001. Molecular bases of circadian rhythms. *Annual Review of Cell and Developmental Biology*, 17(1), 215–253. doi:10.1146/annurev.cellbio.17.1.215
- Harris, R.B.S., 2021. Consuming sucrose solution promotes leptin resistance and site specifically modifies hypothalamic leptin signaling in rats. *American Journal of Physiology-Regulatory, Integrative and Comparative Physiology*, 320, R182–R194. <https://doi.org/10.1152/ajpregu.00238.2020>
- He, C., Shen, W., Chen, C., Wang, Q., Lu, Q., Shao, W., *et al.*, 2021. Circadian Rhythm Disruption Influenced Hepatic Lipid Metabolism, Gut Microbiota and Promoted Cholesterol Gallstone Formation in Mice. *Frontiers in endocrinology*, 12, 723918. <https://doi.org/10.3389/fendo.2021.723918>
- Hemmerlyckx, B., Van Hove, C. E., Fransen, P., Emmerechts, J., Kauskot, A., Bult, H., *et al.*, 2011. Progression of the prothrombotic state in aging Bmal1-deficient mice. *Arteriosclerosis, Thrombosis, and Vascular Biology*, 31(11), 2552–2559. doi:10.1161/ATVBAHA.111.229062
- Hong, S. H., Kim, J. 2024. Melatonin and Metabolic Disorders: Unraveling the Interplay With Glucose and Lipid Metabolism, Adipose Tissue, and Inflammation. *Sleep Medicine Research*, 15(2), 70–80. <https://doi.org/10.17241/smr.2024.02159>
- Hedayatnia, M., Asadi, Z., Zare-Feyzabadi, R., Yaghooti-Khorasani, M., Ghazizadeh, H., Ghaffarian-Zirak, R., *et al.*, 2020. Dyslipidemia and cardiovascular disease risk among the MASHAD study population. *Lipids in health and disease*, 19(1), 42. <https://doi.org/10.1186/s12944-020-01204-y>
- Hill, M.F., Bordoni, B., 2023. *Hyperlipidemia*. NCBI Bookshelf.
- Huang, P.L., 2009. A comprehensive definition for metabolic syndrome. *Disease models & mechanisms*, 2, 231–7. <https://doi.org/10.1242/dmm.001180>
- Huang, Z.L., 2014. Roles of Adenosine and Its Receptors in Sleep–Wake Regulation. *ScienceDirect*.
- Huff, T., Boyd, B., Jialal, I., 2023. *Physiology, Cholesterol*. NCBI Bookshelf. <https://www.ncbi.nlm.nih.gov/books/NBK470561/>

- Institute for Health Metrics and Evaluation, 2021. Global Burden Disease for Cardiovascular Diseases. *Global Burden Disease*.
- Ismail, A., Tanasova, M., 2022. Importance of GLUT Transporters in Disease Diagnosis and Treatment. *International journal of molecular sciences*, 23, 8698. <https://doi.org/10.3390/ijms23158698>
- Iswari, N.L.P.A.M., Wahyuni, A.A.S., 2013. Melatonin dan Melatonin Receptor Agonist sebagai Penanganan Insomnia Primer Kronis. *E-Jurnal Medika Udayana* 2, 680–694.
- Janczura, M., Bochenek, G., Nowobilski, R., Dropinski, J., Kotula-Horowitz, K., Laskowicz, B., *et al.*, 2015. The Relationship of Metabolic Syndrome with Stress, Coronary Heart Disease and Pulmonary Function--An Occupational Cohort-Based Study. *PloS one*, 10(8), e0133750. <https://doi.org/10.1371/journal.pone.0133750>
- Joshi, A., Upadhyay, K. K., Vohra, A., Shirsath, K., Devkar, R., 2021. Melatonin induces Nrf2-HO-1 reprogramming and corrections in hepatic core clock oscillations in Non-alcoholic fatty liver disease. *FASEB journal : official publication of the Federation of American Societies for Experimental Biology*, 35(9), e21803. <https://doi.org/10.1096/fj.202002556RRR>
- Jiang, W.G., Li, S., Zhou, S., Sun, Y., Shi, J., Lu, L., 2011. Chronic unpredictable stress induces a reversible change of PER2 rhythm in the suprachiasmatic nucleus. *Brain Research*, 1399, 25–32. [https://doi.org/https://doi.org/10.1016/j.brainres.2011.05.001](https://doi.org/10.1016/j.brainres.2011.05.001)
- Karamitri, A., Jockers, R., 2019. Melatonin in type 2 diabetes mellitus and obesity. In *Nature Reviews Endocrinology* (Vol. 15, Issue 2, pp. 105–125). Nature Publishing Group. <https://doi.org/10.1038/s41574-018-0130-1>
- Kementerian Kesehatan Republik Indonesia, 2019. Laporan Nasional Riskesdas 2018. Badan Penelitian dan Pengembangan Kesehatan, Jakarta.
- Kementerian Kesehatan Republik Indonesia, 2013. Peraturan Menteri Kesehatan Republik Indonesia Nomor 30 Tahun 2013. Menteri Kesehatan Republik Indonesia.
- Kennaway, D. J., Voultsios, A., Varcoe, T. J., & Moyer, R. W., 2002. Melatonin in mice: rhythms, response to light, adrenergic stimulation, and metabolism. <https://doi.org/10.1152/ajpregu.00360.2001>.-There
- Kersten, S., 2001. Mechanisms of nutritional and hormonal regulation of lipogenesis. *EMBO reports*, 2, 282–6. <https://doi.org/10.1093/embo-reports/kve071>

- Kervezee, L., Cuesta, M., Cermakian, N., Boivin, D.B., 2018. Simulated night shift work induces circadian misalignment of the human peripheral blood mononuclear cell transcriptome. *Proceedings of the National Academy of Sciences of the United States of America*, 115, 5540–5545. <https://doi.org/10.1073/pnas.172071911>
- Kettner, N., Mayo, S., Hua, J., Lee, C., Moore, D., 2015. Circadian dysfunction induces Leptin resistance in mice. *Cell metabolism*, 22(3), pp. 448–459. Available at: <https://doi.org/10.1016/j.cmet.2015.06.005>.
- Kim, M.J., Lee, J.H., Duffy, J.F., 2013. Circadian Rhythm Sleep Disorders. *Journal of clinical outcomes management* : JCOM 20, 513–528.
- Kim, P. *et al.*, 2024. Melatonin's role in the timing of sleep onset is conserved in nocturnal mice. *Npj biological timing and sleep*, 1(1), p. 13. Available at: <https://doi.org/10.1038/s44323-024-00013-1>.
- Koch, C. E., Begemann, K., Kiehn, J. T., Griewahn, L., Mauer, J., M E Hess, *et al.*, 2020. Circadian regulation of hedonic appetite in mice by clocks in dopaminergic neurons of the VTA. *Nature communications*, 11(1), 3071. <https://doi.org/10.1038/s41467-020-16882-6>
- Koch, C. E., Leinweber, B., Drengberg, B., Blaum, C., Oster, H., 2017. Interaction between circadian rhythms and stress. In *Neurobiology of Stress* (Vol. 6, pp. 57–67). Elsevier Inc. <https://doi.org/10.1016/j.ynstr.2016.09.001>
- Kunihara, M. & Oshima, T., 1985. Effects of epinephrine on plasma cholesterol levels in rats. *The Journal of Lipid Research*, 24(5), pp. 639–644. Available at: [https://doi.org/10.1016/s0022-2275\(20\)37969-4](https://doi.org/10.1016/s0022-2275(20)37969-4).
- Kwiterovich, P. O., 2000. The metabolic pathways of high-density lipoprotein, low-density lipoprotein, and triglycerides: a current review. *The American Journal of Cardiology*, 86(12, Supplement 1), 5–10. [https://doi.org/https://doi.org/10.1016/S0002-9149\(00\)01461-2](https://doi.org/https://doi.org/10.1016/S0002-9149(00)01461-2)
- Lane, M. D., Flores-Riveros, J. R., Hresko, R. C., Kaestner, K. H., Liao, K., Janicot, M., *et al.*, 1990. Insulin-receptor tyrosine kinase and glucose transport. *Diabetes care*, 13(6), 565–575. <https://doi.org/10.2337/diacare.13.6.565>
- Lajoie, P., Aronson, K.J., Day, A., Tranmer, J., 2015. A cross-sectional study of shift work, sleep quality and cardiometabolic risk in female hospital employees. *BMJ Open*.

- Lin, C. F., Chang, Y.-H., Chieh, S.-C., Lin, Y.-H., Yeh, H.-Y., 2018. Epidemiology of Dyslipidemia in the Asia Pacific Region. *International Journal of Gerontology*, 12, 2–6. <https://doi.org/10.1016/j.ijge.2018.02.010>
- Longo, D.L., Fauci, A.S., 2010. *Harrison's Gastroenterology and Hepatology*. McGraw Hill Professional.
- Luchetti, F., Canonico, B., Bartolini, D., Arcangeletti, M., Ciffolilli, S., Murdolo, G., *et al.*, 2014. Melatonin regulates mesenchymal stem cell differentiation: a review. *Journal of pineal research*, 56(4), 382–397. <https://doi.org/10.1111/jpi.12133>
- Ma, D., Liu, T., Chang, L., Rui, C., Xiao, Y., Li, S., *et al.*, 2015. The liver clock controls cholesterol homeostasis through Trib1 protein-mediated regulation of PCSK9/low density lipoprotein receptor (LDLR) axis. *The Journal of Biological Chemistry*, 290(52), 31003–31012. doi:10.1074/jbc.M115.685982
- Marrino, P., Gavish, D., Shafrir, E., Eisenberg, S., 1987. Diurnal variations of plasma lipids, tissue and plasma lipoprotein lipase, and VLDL secretion rates in the rat. A model for studies of VLDL metabolism. *Biochimica et biophysica acta*, 920(3), 277–284. [https://doi.org/10.1016/0005-2760\(87\)90105-6](https://doi.org/10.1016/0005-2760(87)90105-6)
- Moreira, N. C., Hussain, A., Bhowmik, B., Mdala, I., Siddiquee, T., Fernandes, V., *et al.*, 2020. Prevalence of Metabolic Syndrome by different definitions, and its association with type 2 diabetes, pre-diabetes, and cardiovascular disease risk in Brazil. *Diabetes & metabolic syndrome*, 14(5), 1217–1224. <https://doi.org/10.1016/j.dsx.2020.05.043>
- Morenga, L. Te, dan Montez, J. M., 2017. Health effects of saturated and trans-fatty acid intake in children and adolescents: Systematic review and meta-analysis. In *PLoS ONE* (Vol. 12, Issue 11). Public Library of Science. <https://doi.org/10.1371/journal.pone.0186672>
- Mortensen, L. S., Hartvigsen, M. L., Brader, L. J., Astrup, A., Schrezenmeir, J., Holst, J. J., *et al.*, 2009. Differential effects of protein quality on postprandial lipemia in response to a fat-rich meal in type 2 diabetes: Comparison of whey, casein, gluten, and cod protein. *American Journal of Clinical Nutrition*, 90(1), 41–48. <https://doi.org/10.3945/ajcn.2008.27281>
- Murningtyas, F.S., Larasati, M. D., Rahmawati, A. Y., Prihatin, S., 2020. Besar Risiko Faktor Fisiologis dan Faktor Perilaku Terhadap Kejadian Sindrom Metabolik. *Jurnal Riset Gizi*, 8, 11–17. <https://doi.org/10.31983/jrg.v8i1.5152>
- Nakrani, M.N., Wineland, R.H., Anjum, F., 2023. *Physiology, Glucose Metabolism*. NCBI Bookshelf. URL <https://www.ncbi.nlm.nih.gov/books/NBK560599/>

- Natesan, V., Kim, S. J., 2021. Lipid Metabolism, Disorders and Therapeutic Drugs - Review. *Biomolecules & therapeutics*, 29, 596–604. <https://doi.org/10.4062/biomolther.2021.122>
- National Institute of Health, 2001. ATP III Guidelines At-A-Glance Quick Desk Reference. *National Cholesterol Education Program*.
- Nikniaz, L., Abbasalizad-Farhangi, M., Vajdi, M., Nikniaz, Z., 2021. The association between Sugars Sweetened Beverages (SSBs) and lipid profile among children and youth: A systematic review and dose-response meta-analysis of cross-sectional studies. In *Pediatric Obesity* (Vol. 16, Issue 7). John Wiley and Sons Ltd. <https://doi.org/10.1111/ijpo.12782>
- Nollet, M., Wisden, W., Franks, N.P., 2020. Sleep deprivation and stress: a reciprocal relationship. *Interface focus*, 10, 20190092. <https://doi.org/10.1098/rsfs.2019.0092>
- Noubiap, J. J., Nansseu, J. R., Lontchi-Yimagou, E., Nkeck, J. R., Nyaga, U. F., Ngouo, A. T., et al., 2022. Geographic distribution of metabolic syndrome and its components in the general adult population: A meta-analysis of global data from 28 million individuals. *Diabetes research and clinical practice*, 188, 109924. <https://doi.org/10.1016/j.diabres.2022.109924>
- Nursidika, P., Mahargyani, W., Anggraeni, F.K., 2018. Comparison Analysis of Total Cholesterol Level Examination Between Photometry and 3 Parameters Point of Care Testing Device. *Medical Laboratory Technology Journal*, 4, 49. <https://doi.org/10.31964/mltj.v4i2.184>
- O’Byrne, N. A., Yuen, F., Butt, W. Z., Liu, P. Y., 2021. Sleep and circadian regulation of cortisol: A short review. *Current Opinion in Endocrine and Metabolic Research*, 18, 178–186. doi:10.1016/j.coemr.2021.03.011
- Oh, S. S., Narver, H. L., 2024. Mouse and Rat Anesthesia and Analgesia. *Current Protocols*, 4(2). <https://doi.org/10.1002/cpz1.995>
- Okechukwu, C.E., 2022. The neurophysiologic basis of the human sleep–wake cycle and the physiopathology of the circadian clock: a narrative review. *The Egyptian Journal of Neurology, Psychiatry and Neurosurgery*, 58, 1–7. <https://doi.org/10.1186/s41983-022-00468-8>
- Ota, S. M., Hut, R. A., Riede, S. J., Crosby, P., Suchecki, D., Meerlo, P., 2020. Social stress and glucocorticoids alter PERIOD2 rhythmicity in the liver, but not in the suprachiasmatic nucleus. *Hormones and behavior*, 120, 104683. <https://doi.org/10.1016/j.yhbeh.2020.104683>

- Ota, S. M., Kong, X., Hut, R., Suchecki, D., dan Meerlo, P., 2021. The impact of stress and stress hormones on endogenous clocks and circadian rhythms. *Frontiers in Neuroendocrinology*, 63, 100931. <https://doi.org/https://doi.org/10.1016/j.yfrne.2021.100931>
- Otarod, J. K., Goldberg, I. J., 2004. Lipoprotein lipase and its role in regulation of plasma lipoproteins and cardiac risk. *Current atherosclerosis reports*, 6(5), 335–342. <https://doi.org/10.1007/s11883-004-0043-4>
- Pakgohar, A., dan Mehrannia, H. 2024. Sample Size Calculation in Clinical Trial and Animal Studies. *Iranian Journal of Diabetes and Obesity*. <https://doi.org/10.18502/ijdo.v16i1.15241>
- Pal, S., Ellis, V., & Ho, S., 2010. Acute effects of whey protein isolate on cardiovascular risk factors in overweight, post-menopausal women. *Atherosclerosis*, 212(1), 339–344. <https://doi.org/10.1016/j.atherosclerosis.2010.05.032>
- Papaspyrou-Rao, S., Schneider, S.H., Petersen, R.N., Fried, S.K., *et al.*, 1997. Dexamethasone increases leptin expression in humans in vivo. *The journal of clinical endocrinology and metabolism*, 82(5), pp. 1635–1637. Available at: <https://doi.org/10.1210/jcem.82.5.3928>.
- Paththinige, C., Sirisena, N., Dissanayake, V., 2017. Genetic determinants of inherited susceptibility to hypercholesterolemia e a comprehensive literature review. *Lipids Health Dis.* 16, 103. <https://doi.org/10.1186/s12944-017-0488-4>.
- Pérez-Belmonte, L. M., Moreno-Santos, I., Cabrera-Bueno, F., Sánchez-Espín, G., Castellano, D., Such, M., *et al.*, 2017. Expression of Sterol Regulatory Element-Binding Proteins in epicardial adipose tissue in patients with coronary artery disease and diabetes mellitus: preliminary study. *International journal of medical sciences*, 14(3), 268–274. <https://doi.org/10.7150/ijms.17821>
- Pradhan, G., Samson, S. L., Sun, Y., 2013. Ghrelin: much more than a hunger hormone. *Current opinion in clinical nutrition and metabolic care*, 16(6), 619–624. <https://doi.org/10.1097/MCO.0b013e328365b9be>
- Listyandini, R., Pertiwi, F.D., Riana, D. P., Lestari, W.A., 2021. The Dominant factor of metabolic syndrome among office workers. *Journal of Health Science and Prevention*, 5, 40–48. <https://doi.org/10.29080/jhsp.v5i1.421>

- Rader, D. J., 2006. Molecular regulation of HDL metabolism and function: Implications for novel therapies. In *Journal of Clinical Investigation* (Vol. 116, Issue 12, pp. 3090–3100). <https://doi.org/10.1172/JCI30163>
- Rakateli, L., Huchzermeier, R., van der Vorst, E. P. C., 2023. AhR, PXR and CAR: From Xenobiotic Receptors to Metabolic Sensors. In *Cells*. Vol. 12, Issue 23. Multidisciplinary Digital Publishing Institute (MDPI). <https://doi.org/10.3390/cells12232752>
- Rashnuodi, P., Afshari, D., Shirali, G. A., Amiri, A., Zadeh, M. R., Samani, A. S., 2022. Metabolic syndrome and its relationship with shift work in petrochemical workers. *Work (Reading, Mass.)*, 71(4), 1175–1182. <https://doi.org/10.3233/WOR-205223>
- Raymond, F., Wang, L., Moser, M., Metairon, S., Mansourian, R., Zwahlen, M.C., *et al.* 2012. Consequences of exchanging carbohydrates for proteins in the cholesterol metabolism of mice fed a high-fat diet. *PloS one*, 7(11), p. e49058. Available at: <https://doi.org/10.1371/journal.pone.0049058>.
- Reddy, S., Reddy, V., Sharma, S., 2023. *Physiology, Circadian Rhythm*. NCBI Bookshelf. <https://www.ncbi.nlm.nih.gov/books/NBK519507/>.
- Ruddick-Collins, L.C., Morgan, P.J. & Johnstone, A.M., 2020. Mealtime: A circadian disruptor and determinant of energy balance?. *Journal of neuroendocrinology*, 32(7), p. e12886. Available at: <https://doi.org/10.1111/jne.12886>.
- Rustika, R., Driyah, S., Oemiati, R., Hartati, N., 2019. Prediktor Sindrom Metabolik : Studi Kohor Prospektif Selama Enam Tahun di Bogor, Indonesia. *Media Penelitian Dan Pengembangan Kesehatan*, 29(3), 215–224. <https://doi.org/10.22435/mpk.v29i3.654>
- Rosenfeld, P., Van Eekelen, J., Levine, S., De Kloet, E., 1988. Ontogeny of the Type 2 glucocorticoid receptor in discrete rat brain regions: an immunocytochemical study. *Developmental Brain Research*, 42(1), 119–127. [https://doi.org/https://doi.org/10.1016/0165-3806\(88\)90207-6](https://doi.org/https://doi.org/10.1016/0165-3806(88)90207-6)
- Shea, S.A., Hilton, M.F., Orlova, C., Ayers, R.T., Mantzoros, C.S., 2005. Independent circadian and sleep/wake regulation of adipokines and glucose in humans. *The journal of clinical endocrinology and metabolism*, 90(5), pp. 2537–2544. Available at: <https://doi.org/10.1210/jc.2004-2232>.
- Sherwood, L., 2008. *Human physiology: From cells to systems*. 7th ed. Brooks/Cole.

- Shimba, S., Ogawa, T., Hitosugi, S., Ichihashi, Y., Nakadaira, Y., Kobayashi, M., *et al.*, 2011. Deficient of a clock gene, brain and muscle Arnt-like protein-1 (BMAL1), induces dyslipidemia and ectopic fat formation. *PLoS one*, 6(9), e25231. <https://doi.org/10.1371/journal.pone.0025231>.
- Song, Y. & Chen, M., 2009. Effects of melatonin administration on plasma leptin concentration and adipose tissue leptin secretion in mice. *Acta biologica Hungarica*, 60(4), pp. 399–407. Available at: <https://doi.org/10.1556/abiol.60.2009.4.6>.
- Solano, J.M. & Jacobson, L., 1999. Glucocorticoids reverse leptin effects on food intake and body fat in mice without increasing NPY mRNA. *The American journal of physiology*, 277(4 Pt 1), pp. E708-16.
- St-Onge, M. P., 2016. Effects of Diet on Sleep Quality. *Advances in Nutrition*, 7, 938–949. <https://doi.org/10.3945/an.116.012336>
- Sun, S., Hanzawa, F., Kim, D., Umeki, M., Nakajima, S., Sakai, K., *et al.*, 2019. Circadian rhythm-dependent induction of hepatic lipogenic gene expression in rats fed a high-sucrose diet. *The Journal of biological chemistry*, 294(42), 15206–15217. <https://doi.org/10.1074/jbc.RA119.010328>
- Suhaema, K. :, Gizi, J., Kesehatan, P., Mataram, K., Prabu, J., Dasan, R., & Sandubaya, C., 2015. *Artikel Penelitian 340*.
- Swarup, S., Goyal, A., Grigorova, Y., Zeltser, R., 2022. *Metabolic Syndrome*. NCBI Bookshelf. <https://www.ncbi.nlm.nih.gov/books/NBK459248/>
- Tahara, Y., Shiraishi, T., Kikuchi, Y., Haraguchi, A., Kuriki, D., Sasaki, H., Motohashi, H., Sakai, T., & Shibata, S., 2015. Entrainment of the mouse circadian clock by sub-acute physical and psychological stress. *Scientific Reports*, 5(1), 11417. <https://doi.org/10.1038/srep11417>
- Tonon, A.C., Pilz, L.K., Markus, R.P., Elisabetsky, E., 2021. Melatonin and Depression: A Translational Perspective From Animal Models to Clinical Studies. *Frontiers*.
- Topriceanu, C.C., Tillin, T., Chaturvedi, N., Joshi, R., Garfield, V., 2020. The association between plasma metabolites and sleep quality in the Southall and Brent Revisited (SABRE) Study: A cross-sectional analysis. *Journal of Sleep Research*, 30. <https://doi.org/10.1111/jsr.13245>
- Triandhini, R., Rahardjo, M., Putranti, M., 2018. Gambaran Konsumsi Gula, Garam dan Lemak Penduduk Dusun Batur Kidul Kecamatan Getasan Kabupaten Semarang. *Journal of Health*, 5.

- Triqueneaux, G., Thenot, S., Kakizawa, T., Antoch, M. P., Safi, R., Takahashi, J. S., *et al.*, 2004. The orphan receptor Rev-erbalpha gene is a target of the circadian clock pacemaker. *Journal of molecular endocrinology*, 33(3), 585–608. <https://doi.org/10.1677/jme.1.01554>
- Trebucq, L., Lamberti, M., Rota, R., Aiello, I., Borio, C., Bilen, M., *et al.*, 2023. Chronic circadian desynchronization of feeding-fasting rhythm generates alterations in daily glycemia, LDL cholesterolemia and microbiota composition in mice. *Frontiers in Nutrition*, 10. <https://doi.org/10.3389/fnut.2023.1154647>
- Wang, C., Guerriero, L., Huffman, D., Ajwad, A., Brooks, T., Sunderam, S., *et al.*, 2022. A comparative study of sleep and diurnal patterns in house mouse (*Mus musculus*) and Spiny mouse (*Acomys cahirinus*). *Scientific Reports*, 10, 1–16. <https://doi.org/10.1038/s41598-020-67859-w>
- Wang, H.H., Garruti, G., Liu, M., Portincasa, P., Wang, D.Q.-H., 2017. Cholesterol and Lipoprotein Metabolism and Atherosclerosis: Recent Advances in Reverse Cholesterol Transport. *Annals of Hepatology*, 16, S27–S42. <https://doi.org/10.5604/01.3001.0010.5495>
- WHO, 2021. *Cardiovascular diseases (CVDs)*. World Health Organization: WHO. *Sugars factsheet*. Who.int. <https://www.who.int/europe/publications/m/item/sugars-factsheet>.
- Yan, R., Choi, V. W. W., Hartono, T., Tse, I. M. Y., Tse, M. C. L., Zhou, Y., *et al.*, 2022. Effect of lifelong sucrose consumption at human-relevant levels on food intake and body composition of C57BL/6N mice. *Frontiers in nutrition*, 9, 1076073. <https://doi.org/10.3389/fnut.2022.1076073>
- Zahtamal, Z., Prabandari, Y.S., Setyawati, L., 2014. Prevalensi Sindrom Metabolik pada Pekerja Perusahaan. *Kesmas: National Public Health Journal*, 9, 113. <https://doi.org/10.21109/kesmas.v9i2.499>
- Zimmet, P., Alberti, K. G. M. M., Stern, N., Bilu, C., El-Osta, A., Einat, H., *et al.*, 2019. The Circadian Syndrome: is the Metabolic Syndrome and much more!. *Journal of internal medicine*, 286(2), 181–191. <https://doi.org/10.1111/joim.12924>