

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 α 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.bbalip.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., Ramalhete, 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>
- Pakgozar, 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>
- Papasprou-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-erb α 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>