

DAFTAR PUSTAKA

- Akalestou, E., Genser, L. and Rutter, G. A. 2020. Glucocorticoid Metabolism in Obesity and Following Weight Loss. *Front. Endocrinol*,11:59. doi: 10.3389/fendo.2020.00059
- Albert, B., Johnson, A. and Lewis, J. 2015. *Molecular Biology of The Cell 6th ed.* New York: Garland Science.
- Angelhoff, C., Blomqvist, Y.T., Helmer, C.S., Olsson, E., Shorey, S., Frostell, A. and Morelius, E. 2018. Effect of skin-to-skin contact on parents' sleep quality, mood, parent-infant interaction and cortisol concentrations in neonatal care units: study protocol of a randomised controlled trial. *BMJ Open*, 8:1-8.
- Argente-Arizón, P., Cantera, S.G., Segura, L.M.G., Argente, J. and Chowen, J.A. 2017. Glial cells and energy balance. *Journal of Molecular Endocrinology*,58:59–71. doi: 10.1530/JME-16-0182
- Argente-Arizón, P., Freire-Regatillo, A., Argente, J. and Chowen, J.A. 2015. Role of non-neuronal cells in body weight and appetite control. *Neuroendocrine*,6:42. doi: 10.3389/fendo.2015.00042
- Bagnall, M., Lac, S.D. and Mauk, M. 2013. Cerebellum. *Fundamental Neuroscience*,31:677-696. doi: 10.1016/B978-0-12-385870-2.00031-7
- Basta-Kaim, A., Szczesnya, E., Glombik, K., Stachowicz, K., Slusarczyk, J., Nalepac, I., Zelek-Molik, A., Rafa-Zablockac, K., Budziszewska, B., Kuber, M., Leskiewicz, M. and Lason, W. 2104. Prenatal stress affects insulin-like growth factor-1(IGF-1) level and IGF-1 receptor phosphorylation in the brain of adult rats. *European Neuropsychopharmacology*,24:1546–1556. <http://dx.doi.org/10.1016/j.euroneuro.2014.07.002>
- Bergman, K., Sarkar, P., Glover, V. and O'Connor, T.G. 2010. Maternal Prenatal Cortisol and Infant Cognitive Development: Moderation by Infant–Mother Attachment. *Biol Psychiatry*,67:1026–1032. doi:10.1016/j.biopsych.2010.01.002
- Bleker, L.S., Rooij, S.R.D. and Roseboom, T.J. 2019. Prenatal Psychological Stress Exposure and Neurodevelopment and Health of Children. *Int. J. Environ. Res. Public Health*,16(3657). doi:10.3390/ijerph16193657
- Boeree, C.G. 2013. *The Cerebrum*. <http://webpace.ship.edu/cgboercerebrum.html> [Diakses 19 Maret 2020]
- Budday, S., Steinmann, P. and Kuhl, E. 2015. Physical biology of human brain development. *Front. Cell. Neurosci*,9(257). doi: 10.3389/fncel.2015.00257

- Buss, C., Entringer, S., Swanson, J.M. and Wadhwa, P.D. 2012. *The Role of Stress in Brain Development: The Gestational Environment's Long-Term Effects on the Brain*. <http://dana.org/news/cerebrum/detail.aspx?id=37188> [Diakses pada 22 Oktober 2020]
- Capes-Davis, A., Andrew, S. D., Hyland, V.J., Twigg, S., Learoyd, D. L., Dwight, T., Marsh, D. J. and Robinson, B, G. 1999. Glucocorticoids Differentially Inhibit Expression of the RET Proto-Oncogene. *Gene Expression*, 8:311-326. <https://www.researchgate.net/publication/12373873>.
- Carrasco, M., Habela, C.W. and Stafstrom, C.E. 2019. Chapter 1: Overview of Brain Development: Principles Relevant for Developmental Epilepsy. *Developmental Epilepsy*, 1-33. https://doi.org/10.1142/9789813277731_0001
- Carson, R., Nichols, A.P.M., DeFranco, D.B. and Rudine, A.C. 2016. Effects of Antenatal Glucocorticoids On The Developing Brain. *Steroids*, 114:25– 32. doi:10.1016/j.steroids.2016.05.012.
- Chapman, K., Holmes, M. and Seckl, J. 2013. 11-Hydroxysteroid Dehydrogenases: Intracellular Gate-Keepers Of Tissue Glucocorticoid Action. *Physiol Rev*, 93:1139–1206. doi:10.1152/physrev.00020.2012
- Charil, A., Laplante, D.P., Vaillancourt, C., King, S. 2010. Prenatal stress and brain development. *Brain research reviews*, 65:56–79. doi:10.1016/j.brainresrev.2010.06.002
- Chen, S., Liu, Y., Rong, X., Li, Y., Zhou, J. and Lu, L. 2017. Neuroprotective Role of the PI3Kinase/Akt Signaling Pathway in Zebrafish. *Front. Endocrinol*, 8:21. doi: 10.3389/fendo.2017.00021
- Cleal, J.K. and Lewis, R.M. 2016. *The Placenta and Developmental Origins of Health and Disease*. Southampton: Elsevier.
- Cruces, J., Venero, C., Pereda-Pérez, I. and De la Fuente, M. 2014. The Effect of Psychological Stress and Social Isolation on Neuroimmunoendocrine Communication. *Current Pharmaceutical Design*, 20. doi: 10.2174/1381612820666140130205822
- da Silva, P. G. C., Domingues, D. D., de Carvalho, L. A., Allodi, S. and Correa, L. C. 2016. Neurotrophic factors in Parkinson's disease are regulated by exercise: Evidence-based practice. *Journal of the Neurological Sciences*, 363:5–15. <http://dx.doi.org/10.1016/j.jns.2016.02.017>
- Davis, E.P., Sandman, C.A., Buss, C., Wing, D.A. and Head, K. 2013. Fetal Glucocorticoid Exposure is Associated with Preadolescent Brain Development. *Biol Psychiatry*, 74(9):647–655. doi:10.1016/j.biopsych.2013.03.009

- Desai, M., Lib, T. and Rossa, M. G. 2011. Hypothalamic neurosphere progenitor cells in low birth-weight rat newborns: Neurotrophic effects of leptin and insulin. *Brain research*,1378:29–42. doi:10.1016/j.brainres.2010.12.080
- Desky, F., Hermanto,T.J. and Widjiati. 2019. FR 50% in pregnancy results in different neuron and glial cell count (astrocytes, oligodendrocytes, and microglia) in the cerebrum and cerebellum of newborn *Rattus norvegicus*. *Maj Obs Gin*,27(2):56-65. doi: <http://dx.doi.org/10.20473/mog.V27I22019.56-65>
- Ding, Y, X. and Cui, H. 2019. The brain development of infants withintrauterine growth restriction: role of glucocorticoids. *Hormone Molecular Biology and Clinical Investigation*,16. doi: 10.1515/hmbci-2019-0016
- Duric, V., Clayton, S., Leong, M. L. and Yuan, L. L. 2016. Comorbidity Factors and Brain Mechanisms Linking Chronic Stress and Systemic Illness. *Neural Plasticity*,16. <http://dx.doi.org/10.1155/2016/5460732>
- Fayard, E., Gongda, X., Parcellier, A., Bozulich, L. and Hemming, B.A. 2010. Protein Kinase B (PKB/Akt), a Key Mediator of the PI3K Signaling Pathway. Phosphoinositide 3-kinase in Health and Disease. *Current Topics in Microbiology and Immunolog*,346(1). doi 10.1007/82_2010_58
- Gang, S., Gaoling, O. and Shideng, B. 2005. The activation of Akt/PKB signaling pathway and cell survival. *J. Cell. Mol. Med*,9(1):59-7.
- Giri, J.K. 2018. Cerebrum. Presentation. doi: 10.13140/RG.2.2.27148.36483
- Godoy ,L.D., Rossignoli, M.T. and Pereira, P.D., 2018. A Comprehensive Overview on Stress Neurobiology: Basic Concepts and Clinical Implications. *Front. Behav. Neurosci*, 12:127 <https://doi.org/10.3389/fnbeh.2018.00127>
- Guyton, A.C. and Hall, J.E. 2016. *Textbook of Medical Physiology*. Philadelphia:Elsevier.
- Harris, A. and Seckl, J. 2011. Glucocorticoids, prenatal stress and the programming of disease. *Hormones and Behavior*,59:279–289. doi:10.1016/j.yhbeh.2010.06.007
- He, Z., Zhang, J., Huangb, H., Yuan, C., Zhu, C., Magdalou, J. and Wang, H. 2019. Glucocorticoid-activation system mediated glucocorticoid-insulin-like growth factor 1 (GC-IGF1) axis programming alteration of adrenal dysfunction induced by prenatal caffeine exposure. *Toxicology Letters*,302 :7–17. <https://doi.org/10.1016/j.toxlet.2018.12.001>
- Hemmings, B.A. and Restuccia, D.F. 2012. PI3K-PKB/Akt Pathway. *Cold Spring Harb Perspect Biol*,4:a011189. doi: 10.1101/cshperspect.a011189

- Hines, T. 2018. *Anatomy of the Brain*. Mayfield Brain and Spine. <https://mayfieldclinic.com/pe-anatbrain.htm>. [Diakses pada 15 April 2020].
- Hosoi, T., Hyoda, K., Okuma, Y., Nomura, Y. and Ozawa, K. 2007. Akt up- and down-regulation in response to endoplasmic reticulum stress. *Brainresearch*, 1152:27–31. doi:10.1016/j.brainres.2007.03.052
- Jafari, Z., Faraji, J., Agha, B.M., Metz, G.A.S., Kolb, B.E. and Mohajerani M.H. 2016. The Adverse Effects of Auditory Stress on Mouse Uterus Receptivity and Behaviour. *Scientific Reports*, 7:4720. doi:10.1038/s41598-017-04943-8
- Jakel, S. and Dimou, L. 2017. Glial Cells and Their Function in the Adult Brain: A Journey through the History of Their Ablation *Front. Cell. Neurosci*, 11:24. doi: 10.3389/fncel.2017.00024
- Jauregui-Huerta, F., Ruvalcaba-Delgadillo, Y., Gonzalez-Castañeda, Garcia-Estrada, J., Gonzalez-Perez, O. and Luquin, S. 2010. Responses of glial cells to stress and glucocorticoids. *Curr Immunol Rev*, 1,6(3):195–204. doi:10.2174/157339510791823790.
- Jiang, X. and Nardelli, J. 2015. Cellular and molecular introduction to brain development. *Neurobiology of Disease*. doi:10.1016/j.nbd.2015.07.007
- Lefmann, T.A. 2014. *Effects of Prenatal Stress and Poverty on Fetal Growth*. *Doctoral Dissertations*. University of Tennessee: Knoxville. https://trace.tennessee.edu/cgi/viewcontent.cgi?article=4271&context=u tk_graddiss. [Diakses pada 3 Mei 2020]
- Mackenzie, Richard, W.A. and Elliot, B.T. 2014. Akt/PKB activation and insulin signaling: a novel insulin signaling pathway in the treatment of type 2 diabetes. *Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy*, 7:55–64. doi.org/10.2147/DMSO.S48260
- Mairesse, J., Lesage, J., Breton, C., Bre'ant, B., Hahn, T., Darnaude'ry, M., Dickson, S.L., Seckl, J., Blondeau, B., Vieau, D., Maccari, S. and Viltart, O. 2007. Maternal stress alters endocrine function of the fetoplacental unit in rats. *Am J Physiol Endocrinol Metab*, 292:E1526–E1533. doi:10.1152/ajpendo.00574.2006.
- Manning, B.D. and Toker, A. 2017. AKT/PKB Signaling: Navigating the Network. *Cell*, 169. <http://dx.doi.org/10.1016/j.cell.2017.04.001>
- Maric, N. P., Dunjic, B., Stojiljkovic and Dragan, J. 2009. Prenatal stress during the 1999 bombing associated with lower birth weight—a study of 3,815 births from Belgrade. *Arch Womens Ment Health*, 13:83–89. doi 10.1007/s00737-009-0099-9

- Mayasari, E., Balebu, G.P.P., Hasanah, L., Wulandari, R. and Nooraeni, R. 2020. Analisis Determinan Berat Badan Lahir Rendah (BBLR) Di Provinsi Nusa Tenggara Timur Tahun 2017. *Business Economic, Communication, and Social Sciences*,2(2):65-71. https://www.google.com/url?sa=t&source=web&rct=j&url=https://journal.binus.ac.id/index.php/BECOSS/article/download/6413/3832&ved=2ahUKEwilq5CoxpjrAhVNH7cAHbKLBkwQFjACegQIAxAB&usg=AOvVaw2Or1_57fFc kOmH7TWHfJZ4. [Diakses pada 10 Juni 2020]
- McEwen, B. S. 2007. Physiology and Neurobiology of Stress and Adaptation: Central Role of the Brain. *Physiol Rev*,87:873–904. doi:10.1152/physrev.00041.2006.
- Meijer, O.C., Buurstede, J.C. and Schaaf, M.J.M. 2019. Corticosteroid Receptors in the Brain: Transcriptional Mechanisms for Specificity and Context-Dependent Effects. *Cellular and Molecular Neurobiology*,39:539–549. <https://doi.org/10.1007/s10571-018-0625-2>
- Metgud, C.S., Nalk, V.A. and Mallapur, M.D. 2012. Factors Affecting Birth Weight of a Newborn – A Community Based Study in Rural Karnataka, India. *Plos One*, 7(7): e40040. doi:10.1371/journal.pone.0040040
- Miller, S. L Huppi, P. S and Mallard, C. 2016. The consequences of fetal growth restriction on brain structure and neurodevelopmental outcome. *J Physiol*, 594(4):807–823. doi: 10.1113/JP271402
- Mitroshina, E. V., Mishchenko, T. A., Shirokova, O. M., Astrakhanova, T. A., Loginova, M. M., Epifanova, E. A., Babaev, A. A., Tarabykin, V. S. and Vedunova, M. V. 2017. Intracellular Neuroprotective Mechanisms in Neuron-Glial Networks Mediated by Glial Cell Line-Derived Neurotrophic Factor. *Oxidative Medicine and Cellular Longevity*,1036907:15. <https://doi.org/10.1155/2019/1036907>
- Montoya-William, D., Quinlan, J. and Clukai, C. 2017. Associations between maternal prenatal stress, methylation changes in IGF1 and IGF2, and birth weight. *Journal of Developmental Origins of Health and Disease*,1-8. doi:10.1017/S2040174417000800
- Mulligan, C., D’Errico, N. And Stees., J. 2012. Methylation changes at NR3C1 in newborns associate with maternal prenatal stress exposure and newborn birth weight. *Epigenetics*,7(8):853-857. doi: 10.4161/epi.21180
- Numakawa, T., Odaka, H. And Adachi, N. 2017. Actions of Brain-Derived Neurotrophic Factor and Glucocorticoid Stress in Neurogenesis. *Int. J. Mol. Sci*,18:2312. doi:10.3390/ijms18112312

- Parker, V.J. and Douglas, A.J. 2009. Stress in early pregnancy: maternal neuro-endocrine-immunerresponses and effects. *Journal of Reproductive Immunology*,85:86–92. doi:10.1016/j.jri.2009.10.011
- Pawluski, J.L., Csaszar, E., Savage, E., Claros, M.M., Steinbusch, H.W.M. and HOVE, D.V.D. 2015. Effects Of Stress Early In Gestation On Hippocampal Neurogenesis And Glucocorticoid Receptor Density In Pregnant Rats. *Neuroscience*,290:379–388. <http://dx.doi.org/10.1016/j.neuroscience.2015.01.048>
- Polman, J.A.E., Hunter, R.G., Speksnijder, N., Oever, J.M.E.V.D., Korobko, O.B., McEwen, B.S. Kloet, E.R.D. and Datson, N.A. 2012. Glucocorticoids Modulate the mTOR Pathway in the Hippocampus: Differential Effects Depending on Stress History. *Endocrinology*,153(9):4317–4327. doi: 10.1210/en.2012-1255
- Popoli, M., Zhen, Y. and McEen, B. 2013. The stressed synapse: the impact of stress and glucocorticoids on glutamate transmission. *Nat Rev Neurosci*, 13(1): 22–37. doi:10.1038/nrn3138
- Popova, N. K., Ilchibaeva, T. V. And Naumenko, V. S. 2017. Neurotrophic Factors (BDNF and GDNF) and the Serotonergic System of the Brain. *Biochemistry*,82(3):308-317.doi: 10.1134/S00062979170 30099
- Rensel, M.A., Ding, J.A., Pradhan, D.S. and Schlinger, B.A. 2018. 11 β -hsD Types 1 and 2 in the songbird Brain. *Front. Endocrinol*,9:86. doi: 10.3389/fendo.2018.00086
- Revuelta, M., Scheuer, T., Chew, L. J. and Schmitz, T. 2020. Glial Factors Regulating White Matter Development and Pathologies of the Cerebellum. *Neurochemical Research*,45:643–655. <https://doi.org/10.1007/s11064-020-02961-z>
- Rugh, R. 1990. *The Mouse: Its Reproduction and Development*. Oxford University Press: New York. <https://books.google.co.id/books?id=0bdqAAAAMAAJ&printsec=frontcover#v=onepage&q&f=false>. [Diakses pada 2 April 2020]
- SDKI. 2017. *Survei Demografi dan Kesehatan Indonesia*. Kementerian Kesehatan: Jakarta.
- Sharma, S. and Majsak, M. 2014. Brain Anatomy. *Encyclopedia of the Neurological Sciences*, 1 ,463-466.
- Sitairesmi, M.N. 2019. *Kenali Autisme Sejak Dini*. <https://fk.ugm.ac.id/kenali-autismesejakdini/#:~:text=ASD%20lebih%20banyak%20menyerang%20anak,ASD%20sebanyak%204%20juta%20orang>. [Diakses pada 18 Oktober 2020].
- Squire, L.R., Berg,D. and Bloom, F.D. 2013. Cerebellum. *Fundamental Neuroscience*,4. doi: 10.1016/B978-0-12-385870-2.00031-7

- Stiles, J. and Jernigan, T.L. 2010. The Basics of Brain Development. *Neuropsychol Rev*,20:327–348. doi 10.1007/s11065-010-9148-4
- Storer, T, I. and Usinger, R, L. 1957. *General Zoology 3rd ed*. Philadelphia: Mac Graw Hills Book Company.
- St-Pierre, J., Laurent, L. and King, S. 2015. Effects of prenatal maternal stress on serotonin and fetal development. *Placenta*,30:1e6. <http://dx.doi.org/10.1016/j.placenta.2015.11.013>
- Tau, G.Z., and Peterson, B.S. 2010. Normal Development of Brain Circuits. *Neuropsychopharmacology. Reviews*, 35:147–168. doi:10.1038/npp.2009.115
- Tenorio, G.P., Stal, O. And Karlsson, E. 2014. Clinical value of isoform-specific detection and targeting of AKT1, AKT2 and AKT3 in breast cancer. *Breast Cancer Manag*,3(5):409–421. doi: 10.2217/bmt.14.35
- Theiler, K. 1989. *The House Mouse: Atlas of Embryonic Development*. New York:Springer-Verlag. <http://genex.hgu.mrc.ac.uk/Databases/Anatomy/new/>. [Diakses pada 22 Desember 2019].
- Tierney, A.L. and Nelson, C.A. 2009. Brain Development and the Role of Experience in the Early Years. *Zero Three*,1;30(2):9–13. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3722610/#_ffn_sectitle. [Diakses pada 2 April 2020].
- UNICEF-WHO. 2019. *Low Birthweight Estimates Levels and trends 2000–2015*. [http://dx.doi.org/10.1016/S2214-109X\(18\)30565-5](http://dx.doi.org/10.1016/S2214-109X(18)30565-5)
- Viho, M.G., Buurstede, J.C., Mahfouz, A., Koorneef, L.L., Weert, L.T.C.M.V., Houtman, R., Hunt, H.J., Kroon, J. and Meijer, O.C. 2019. Corticosteroid Action in the Brain: The Potential of Selective Receptor Modulation. *Neuroendocrinology*,109:266–276. doi: 10.1159/000499659
- Waffarn, G. and Davis, E.P. 2012. Effects of antenatal corticosteroids on the hypothalamicpituitary-adrenocortical axis of the fetus and newborn:experimental findings and clinical considerations. *Am J Obstet Gynecol*,207(6):446-454. doi:10.1016/j.ajog.2012.06.012
- Wang, H. J., Cao, J. P., Yu, J. K. and Gao, D. S. 2007. Role of PI3-K/Akt pathway and its effect on glial cell line-derived neurotrophic factor in midbrain dopamine cells. *Acta Pharmacol Sin*,28(2):166–172. doi: 10.1111/j.1745-7254.2007.00494.x
- Wang, L., Zhou, K., Fu1, Z., Yu1, D., Huang, H., Zang, X. and Mo, X. 2017. Brain Development and Akt Signaling: the Crossroads of Signaling Pathway and Neurodevelopmental Diseases. *J Mol Neurosci*,61:379–384. doi: 10.1007/s12031-016-0872-y

- Welker, W. 2005. *House Mouse (Mus musculus)*. <http://neurosciencelibrary.org/Specimen/rodentia/mouse/index.html>. [Diakses pada 22 Desember 2019].
- WHO. 2019. *Autism spectrum disorders*. <https://www.who.int/news-room/fact-sheets/detail/autism-spectrum-disorders> [Diakses pada 21 Oktober 2020].
- Williams, S. and Ghosh, C. 2020. Neurovascular glucocorticoid receptors and glucocorticoids: implications in health, neurological disorders and drug therapy. *Drug Discovery Today*, 25: 1. <https://doi.org/10.1016/j.drudis.2019.09.009>
- Wurzelmann, M., Romeika, J. and Sun, D. 2017. Therapeutic potential of brain-derived neurotrophic factor (BDNF) and a small molecular mimics of BDNF for traumatic brain injury. *Neural Regeneration Research*, 12(1):7-12. doi: 10.4103/1673-5374.198964
- Xiaocen, C., Zhao, Y., Ju, S. and Guo, L. 2014. Orexin-A stimulates 3 β -hydroxysteroid dehydrogenase expression and cortisol production in H295R human adrenocortical cells through the AKT pathway. *IJMM*. 34:1523-1528. doi: 10.3892/ijmm.2014.1959
- Xiaoxiao, Q. 2012. *Glucocorticoids - New Recognition of Our Familiar Friend*. Rijeka: InTech. Doi: <http://dx.doi.org/10.5772/2915>.
- Xu, F., Na, L., Li, Y. and Chen, L. 2020. Roles of the PI3K/AKT/mTOR signaling pathways in neurodegenerative diseases and tumours. *Cell Biosci*, 10:54. <https://doi.org/10.1186/s13578-020-00416-0>
- Younis, A.L. and Aljader, O.L. 2013. *Cerebrum and Cerebellum*. http://medicinemosul.oumosul.edu.iq/files/pages/page_8717231.pdf [Diakses pada 19 Maret 2020]
- Zhang, Y., Wang, L., Wang, X., Wang, Y., Li, C. and Zhu, X. 2019. Alterations of DNA Methylation at GDNF Gene Promoter in the Ventral Tegmental Area of Adult Depression-Like Rats Induced by Maternal Deprivation. *Front. Psychiatry*, 9:732. doi: 10.3389/fpsy.2018.00732
- Zulissetiana, E. B. dan Suryani, P. R. 2016. Degenerasi Kognitif pada Stres Kronik. *JK Unila*, 1(2). <https://jke.kedokteran.unila.ac.id/index.php/JK/article/download/1651/1609>. [Diakses pada 17 Februari 2020]