

## DAFTAR PUSTAKA

- Agarwal A, Shen H, Agarwal S, Rao AV. 2001. Lycopene content of tomato products: its stability, bioavailability and in vivo antioxidant properties. *J Med Food* 4(1):9-15.
- Agarwal A, Sekhon LH. 2010. The role of antioxidant therapy in the treatment of male infertility. *Hum Fertility* 13(4):217-25.
- Ahmad S, Ahmed A. 2004. Elevated placental soluble vascular endothelial growth factor receptor-1 inhibits angiogenesis in preeclampsia. *Circ Res*;95(9):884-91.
- Al-Ghafra A, Gude NM, Brennecke SP, King RG. 2006. Increased adrenomedullin protein content and mRNA expression in human fetal membranes but not placental tissue in pre-eclampsia. *Mol Hum Reprod*;12(3):181-6.
- Antartani, R., Ashok, K. 2011. Effect of lycopene in prevention of preeclampsia in high risk pregnant women. *J Turkish-German Gynecol Assoc*; 12: 35-8.
- Azzi A, Ricciarelli R, Zingg JM. 2002. Non antioxidant molecular functions of alfa-tocopherol (Vitamin E). *FEBS*;519(1-3):8-10.
- Banerjee S, Jeyaseelan S, Guleria R. 2009. Trial of lycopene to prevent pre-eclampsia in healthy primigravidas: result show some adverse effects. *J Obstet Gynaecol Res* 35(3):477-82.
- Basu A., Imran S. 2007. Soluble Endoglin and Other Circulating Antiangiogenic. *The New England Journal of Medicine*; 335:992-1005.
- Beeghly-Fadiel A, Gao YT, Long J, Cai Q, Shu XO. 2011. Polymorphisms in tissue inhibitors of metalloproteinases-2 and -3 and breast cancer susceptibility and survival. *Int J Cancer*;125:844-50. doi: 10.1002/ijc.24405
- Bell MJ, Robert JM, Faunds SA, Jeyabalan A, Terhorst L, Conley YP. 2013. Variation in endoglin pathway genes is associated with preclampsia: a case-control candidate gene association study. *BMC Pregn Childbirth* 13:82-94.
- Caniggia I, Taylor CV, Ritchie JWL, S J, Letarte M. 1997. Endoglin regulates trophoblast differentiation along the invasive pathway in human placental villous explants. *Endocrinology*;138:4977-88.
- Cao C, Ying T, Fang JJ, et al. 2010. Polymorphism of vascular endothelial growth factor -2578C/A with cancer risk: evidence from 11263 subjects. *Med Oncol*.

- Chelbi ST, Vaiman D. 2007. Genetic and epigenetic factor contributes to the onset of preeclampsia.
- Chappel S., Morgan L. 2006. Searching for genetic clues to the causes of pre-eclampsia. *J Clin Sci (Lond)*;110(4):443-58.
- Cohen H.W., Miller N.R., Garry D. 2003. Serum androgen markers in preeclampsia. *The Journal of Reproductive Medicine*;48(4):225-229.
- Cook RJ, Dickens BM, Wilson OAF, Scarow SE. 2001. Advancing safe motherhood through human rights. Geneva: World Health Organization.
- Coomarasamy A, Honest H, Papaioannou S, Gee H, Khan KS. 2003. Aspirin for prevention of preeclampsia in women with historical risk factors; a systematic review. *Obstet Gynecol*;10(6):1319-32.
- Cunningham FG, Leveno KJ, Bloom SL, Hauth JC, Rause DJ, Spancy CY. 2014. *Williams obstetrics*. 24<sup>th</sup> ed. New York: Mc Graw Hill
- Data Rekam Medik dan Laporan Tahunan Bagian Obstetri dan Ginekologi Tahun 2015-2016. Bandung: Fakultas Kedokteran Universitas Padjadjaran 2016.
- Davitson JM, Homuth V, Jeyebalan A, Conrad KP, Karumanchi SA, Quaggin S, et al. 2004. New aspect in the pathofisiology of preeclampsia. *J Am Soc Nephrol*;15(2440):8.
- Dekker GA, Sibai BM. 1997. Pathophysiology of hypertensive disorder. In: Gleicher N, Gall SA, Sibai BM, Elkayam U, Galbraith RMS, G E, eds.
- Denisov TE, Afanas'ev BI. Oxidation and antioxidants in organic chemi'stry and biology. 2005:849-891.
- Duley L, Meher S, Abalos E. 2006. Management of pre-eclampsia. *BMJ*;332(7539):463-8.
- El-Raey MA, Ibrahim GE, Eldahshan OA. Lycopene and lutein; A review for their Chemistry and medicinal uses. *J Pharmacognosy Phytochemistry* 2(1): 245-54.
- Fisher SJ, Roberts JM. 1993. Defects in placentation and placental perfusion. In: Linheimer MD, Roberts JM, Cunningham F, eds. *Chesley's hypertensive disorders in pregnancy*. 2nd ed. Stanford: Appleton & Lange:377-94.
- Farid. 2000. Perbandingan kadar nitrik oksida serum penderita preeklamsi dengan hamil normal [Tesis]. Bandung: Fakultas Kedokteran Universitas Padjadjaran.
- Farina AC, Chan W, Chiu R, Tsui N, Carinci P, et al. 2004. Circulating corticotropin-releasing hormone mRNA in maternal plasma: relationship

- with gestational age and severity of preeclampsia. *Clin Chem*;50(10):1851-4.
- Fatmawati, H., Satuman, Endang, S.W., Rudijnto, A., Rasjad, I. 2010. Pengaruh Likopen terhadap Penurunan Aktivitas NF-kB dan Ekspresi ICAM-1 pada Kultur HUVECs yang Dipapar Leptin.
- Gerster, H. 1997. The potential role of lycopene for human health. *J. Am. Coll. Nutr*; 16, 109–126.
- Granger JP, Alexander BT, Llinas MT, Bennett WA, Khalil RA. 2001. Pathophysiology of hypertension during preeclampsia linking plasental ischemia with endothelial dysfunction. *Hypertension*;38:718-22.
- Greer IA. 2002. Pregnancy induced hypertension. In: Chamberlain G, Steer P, eds. *Turnbull's obstetrics*. 3rd ed. London: Churchill Livingstone:333-53.
- Gunardi J.I., Mose J., Mieke H.S., Anita D.A., Prima N.F., Triyuli. 2016. Effects of Papua Ant Nests (*Myrmecodia pendens*) on Level of sFlt-1, PIGF, MDA and NO in Preeclampsia-induced HUVEC Cell Line. *International Journal of PharmTech Research*. 9(6):424-435.
- Gurnadi J.I., Johannes Mose, Budi Handono, Prima Nanda Fauziah, Akhmad Yogi Pramatirta. 2015a. Correlation Between fms-Like Tyrosine Kinase-1(sFlt-1) Cell-Free Messenger RNA Expression and fms-Like Tyrosine Kinase1(sFlt-1) Protein Level In Severe Preeclampsia and Normal Pregnancy. *International Journal of Integrated Health Sciences (IJIHS)*. 3(2):66–71.
- Gurnadi J.I., Johannes Mose, Budi Handono, Mieke H. Satari, Anita Deborah Anwar, Prima Nanda Fauziah, A Yogi Pramatirta, Dwi Davidson Rihibiha. 2015b. Difference of Concentration of Placental Soluble fms-Like Tyrosine Kinase-1(sFlt-1), Placental Growth Factor (PIGF), and sFlt-1/PIGF Ratio In Severe Preeclampsia and Normal Pregnancy. *BMC Res Notes*. ID. 1363134797146898.
- Hallak M. Hypertension in pregnancy. In: James DK, Steer PJ, Weiner CP, Gonik B, eds. 2005. *High risk pregnancy*. 3 ed. London: WB Saunders:639-63.
- Hoppe PP, Kramer K, Van Den Berg H et al.2003. Synthetic and tomato-based lycopene have identical bioavailability in humans. *Eur J Nutr* 42:272-8.
- Hsiao, G., Fong, T.H., Nien, H.T. 2004. A Potent Antioxidant, Lycopene, Affords Neuroprotection Against Microglia Activation and Focal Cerebral Ischemia in Rats. *J in vivo* 18: 351-356.
- Hubel CA, Roberts JM. 1999. Lipid metabolism and oxidative stress. In: Linheimer MD, Roberts JM, F C, eds. *Chesley's hypertensive disorders in pregnancy*. 2nd ed. Stanford: Appleton & Lange:453-75.

- Hutcheon JA, Lisonkova S, Joseph KS. 2011. Epidemiology of preeclampsia and the other hypertensive disorders of pregnancy. *Best Pract Res Clin Obst Gyn* 25:391-403.
- Huppertz B. 2008. Placental origins of preeclampsia challenging the current hypothesis. *Hypertension*;51:970.
- Jeyabalan A., Caritis, S.N. 2006. Antioxidants and the Prevention of Preeclampsia — Unresolved Issues. *The New England Journal of Medicine*;354:1841-843.
- Jeyabalan A. 2013. Epidemiology of preeclampsia: impact of obesity. *Nutr Rev* 71:S18-25.
- Khaliq A, Dunk C, Jiang J, Shams M, Li X, Acevedo C. 1999. Hypoxia down-regulates placenta growth factor, whereas fetal growth restriction upregulates placenta growth factor expression. *Lab Invest* 79:151-70.
- Kam EPY, Gardner L, Loke YW, King A. 1999. The role of trophoblast in the physiological change in decidual spiral arteries. *Hum Reprod*;14(8):2131-8.
- Karumanchi SA, Maynard SE, Stillman IE, et al. 2005. Pre-eclampsia: a renal perspective. *Kidney Int* 67:2107.
- Kim Dj, Takasuka N, Nishino H, Tsuda H. 2000. Chemoprevention of lung cancer by lycopene. *Biofactors*;13:95-102.
- Kelkel M, Schumacher M, Diederich M. 2011. Antioxidant and anti-proliferative properties of lycopene. *Free Radic Res* 45(8):925-40.
- Kopcow, H.D., Karumanchi A. 2007. Angiogenic Factors and Natural Killer (NK) Cells in the Pathogenesis of Preeclampsia. *J Reprod Immunol.* 76(1-2): 23–29.
- Leo L., Vasyl H., Yee S.C., Jennifer B. 2000. Regulator of G protein signaling 5 is a determinant of gestational hypertension and preeclampsia. *Science Translational Medicine*; 7(290):290-8.
- Levine RJ, Maynard SE, Qian C, Lim KH, England LJ, Yu KF. 2004. Circulating angiogenic factors and the risk of preeclampsia. *NEJM*;350(7):672-83.
- Levy J, Bosin E, Feldman B, Giat Y, Miinster A, Danilenko M, Sharoni Y. 1995. Lycopene is a more potent inhibitor of human cancer cell proliferation than either - or carotene. *Nutr Cancer*;24:257-266.
- Li H, Gu B, Zhang Y, Lewis DF, Wang Y. 2005. Hypoxia-induced increase in soluble Flt-1 production correlates with enhanced oxidative stress in trophoblast cells from the human placenta. *Placenta*;25:210-7.

- Liu Z, Afink GB, ten Dijke Peter. 2012. Soluble fms-like tyrosine kinase 1 and soluble endoglin are elevated circulating anti-angiogenic factor in pre-eclampsia. *Int J Women Cardiovascular Health*, 2:358-67.
- Lo Y.M., Leung T.N., Tein M.S., Sargent I.L., Zhang J., Lau T.K., Haines C.J., Redman C.W. 1999. Quantitative abnormalities of fetal DNA in maternal serum in preeclampsia. *J Clin Chem*;45(2):184-8.
- Lyall F, Greer IA. 1996. The vascular endothelium in normal pregnancy and preeclampsia. *J Reprod Fertil*;1:107-16.
- Maynard DE, Min JY, Merchan J, Lim KH, Li J, Mondal S, et al. 2003. Excess placental sFLT1 may contribute to endothelial dysfunction, hypertension, and proteinuria in preeclampsia. *J Clin Invest*;111(5):649-58.
- Mayne M. 1996. Pre-eclampsia. *Ceylon Medical Journal*;41(1):7-9.
- Neale D, Demadsio K, Illuzi J, Chaiworapongsa, Romero R, and Mor G. 2003. Maternal serum of women with preeclampsia reduces trophoblast cell viability: evidence for an increased sensitivity to Fas-mediated apoptosis. *The Journal of Maternal-Fetal and Neonatal Medicine*. 13:39-44.
- Noris, M., Perico, N., Remuzzi, G. 2005. Mechanisms of disease: Pre-eclampsia. *Nat Clin Pract Nephrol*;1(2):98-114.
- Okazaki S, Sekizawa A, Farina A, Okai T. 2006. Measurement of mRNA of trophoblasti-specific genes in cellular and plasma components of maternal blood. *J Med Genet*;43:47.
- Osol G, Mandala M. 2009. Maternal uterine vascular remodelling during pregnancy. *Physiol* 24:58-71.
- Park M, Brewster UC. 2007. Management of preeclampsia. *Hosp Phys*;1:25-32.
- Poston L, Briley AL, Seed PT, Kelly FJ, Shennan AH. 2006. Vitamin C and vitamin E in pregnant women at risk for pre-eclampsia (VIP trial): randomised placebo controlled trial. *Lancet*;367(9517):1145-53.
- Pennington KA, Schlitt JM, Jackson DL, Schulz LC, Schust DJ. 2012. Preeclampsia: multiple approaches for a multifactorial disease. *Disease Models and Mechanisms*;5:9-18.
- Pramatirta A.Y., Bremmy Laksono, Prima Nanda Fauziah, Anita Deborah Anwar, Sofie Rifayani Krisnadi, Debbie S Retnoningrum, Ani Melani Maskoen, Erlina Widiarsih. 2016. Effects of Low Dose Aspirin on Caspase 3, TNF- and Apoptotic Index Levels in Preeclampsia Maternal Serum-Induced Placental Trophoblast Cell Line In Vitro. *International Journal of PharmTech Research*. 9(10):1-6.

- Purwosunu Y, Sekizawa A, Okazaki S, Farina A, Wibowo N, Nakamura M, et al. 2009. Prediction of preeclampsia by analysis of cell-free messenger RNA in maternal plasma. *Am J Obstet Gynecol*;200(4):1-7.
- Raijmakers MTMP, L. 2007. The role of oxidative stress in pre-eclampsia, in *Preeclampsia etiology and clinical practice*. Cambridge University Press; 8:121-32.
- Rao AV, Agarwal S. 2000. Review, role of antioxidant lycopene in cancer and heart disease. *J Am College Nutr* 19(5):563-9.
- Reynolds C, Mabie WC, Sibai BM. 2005. Hypertensive status of pregnancy. In: DeCherney AH, Nathan L, eds. *Current obstetric & gynecologic diagnosis & treatment*. 10 ed. New York: Mc Graw Hill:338-53.
- Robert JM, Taylor RM, Musci TJ, Rodgers GM, Hubel CA, Mclaughlin MK. 1989. Preeclampsia. An endothelial cell disorder. *Am J Obstet Gynecol*;161:1200-4.
- Robert J. Pregnancy-related hypertension. In: Creasy R, Iams J, eds. 2004. *Maternal fetal medicine principle and practice*. 2 ed. Philadelphia: WB Saunders:859-80.
- Roberts JM, Gammill HS. 2005. Preeclampsia: recent insight. *Hypertension* 46:1243-9.
- Robinson CJ, Johnson DD. 2007. Soluble endoglin as a second-trimester marker for preeclampsia. *Am J Obstet Gynecol*;197(2):174-5.
- Roeshadi, H.R. 2004. *Upaya Menurunkan Angka Kesakitan dan Angka Kematian Ibu Pada Penderita Preeklampsia dan Eklampsia*. Universitas Sumatra Utara. Medan.
- Romero R, Mazor M, Lockwood CJ, Emamian M, Belanger KP, Hobbins JC, et al. 1989. Clinical significance, prevalence, and natural history of thrombocytopenia in pregnancy-induced hypertension. *Am J Perinatol*;6(1):32-8.
- Sanjiv A, Rao AV. 2000. Tomatolycopene and its role in human health and chronic disease. *Canadian Med Association J* 163(6):739-44.
- Sharma JB, Kumar A, Malhotra M, Arora R, Prasad S, Batra S. 2003. Effect of lycopene on pre-eclampsia and intra-uterine growth retardation in primigravidas. *Int J Gynaecol Obstet* 81(3):257-62.
- Shibuya, M. 2001. Involvement of Flt-1 (VEGF receptor-1) in cancer and preeclampsia. *Proc Jpn Ser B Phys Biol Sci*; 87(4):167-78.

- Srinivasan V, Netz D.J., Webert H. 2007. Structure of the Yeast WD40 Domain Protein Cia1, a Component Acting Late in Iron-Sulfur Protein Biogenesis. *J Structure* 15(10):1246-1257
- Staum-Ram E., Shalev E. 2005. Human trophoblast function during the implantation process. *Reprod Biol Endocrinol*;3:56.
- Stepan H, Faber R, Dornhofer N, Huppertz B, Robitzki A, Walther T. 2006. Elevated sFlt-1 Level and Preeclampsia with Parvovirus-Induced Hydrops. *Biol Reprod*;74(5):772-6.
- Story EN, Kopec RE, Schwartz SJ, Harris GK. 2010. An update on the health effects of tomato lycopene. *Annu Rev Food Sci Technol* 1:189-210.
- Tas M, Saruhan BG, Kurt D, Yokus B, Denli M. 2010. Protective role of lycopene on aflatoxin B1 induced changes sperm characteristics and testicular damages in rats karkas *Univ Vet Fak Derg* 16(4);597-604.
- VanWijk, M.J., Kublickiene, K., Kees, B., Ed, V. 2000. Vascular function in preeclampsia. *Cardiovasc Res*; 47 (1): 38-48.
- Vijayalakshmi, Ambareesha K, Kayalvizhi E, Qairunnisa S, Revathi M, Chandrasekhar M. 2013. Effect of antioxidants in preeclampsia women at increased risk. *International Journal of Medical Research and Health Sciences*. Vol.2(2):177-181.
- Walfish A, Hallak M. 2006. Hypertension. In: James DK, Steer PJ, Weiner CP, Gonik B, eds. *High risk pregnancy management options*. 3 ed. Philadelphia: Elsevier Saunders:772-92.
- Wang J, Trodinger B. 1998. Endothelial cell dysfunction in preeclampsia. *J Nephrol*;11:53-6.
- Weisburger JH. 1998. Evaluation of the evidence on the role of tomato products in disease prevention. *Proc Soc Exp Biol Med* 218:140-3.
- Wilcox A.J., Basso O., Weinberg C.R. 2003. Subfecundity as a correlate of preeclampsia: a study within the Danish National Birth Cohort. *Am J Epidemiol*;157(3):195-202.
- Wright C.F., Burton H. 2009. The use of cell-free fetal nucleic acids in maternal blood for non-invasive prenatal diagnosis. *J Human Reprod Update*;15(1):139-51.
- Yuan HT, Haig D, Karumanchi SA. 2005. Angiogenic factors in the pathogenesis of preeclampsia. *Curr Top Dev Biol*;71:297-312.
- Zhou Y. 2002. Vascular endothelial growth factor ligands and receptors that regulate human cytotrophoblast survival are dysregulated in severe preeclampsia an

hemolysis, elevated liver enzymes, and low platelets syndrome. *Am J Pathol*;160:1405-23.

