

## DAFTAR PUSTAKA

- Abbas S, Raza ST, Ahmed F, Ahmad A, Rizvi S dan Mahdi F, 2013. Association of Genetic Polymorphism of PPAR 2, ACE, MTHFR, FABP-2 and FTO Genes in Risk Prediction of Type 2 Diabetes Mellitus. *Journal of Biomedical Science* : 20 ; 80.
- Albuquerque D, Stice E, Rodrigues LR, Mancpl L, Nobrega C, 2015. Current Review of Genetic of Human Obesity Evolutionary Perspective. Springer. *Mol Genet Genomics*. 290 (4): 1191-1221.
- Al-Naemi AH, Ahmad AJ, 2018. Is the rs 1801282 (G/C) Polymorphism of PPAR-Gamma Gene Associated with T2DM in Iraqi People?. *J Med Sci* : 15 : 6 ; 447-455.
- American Diabetes Association, 2017. Standards of Medical Care in Diabetes-2017, *Diabetes Care*, 40 (Suppl 1).
- American Diabetes Association, 2017. Statistic About Diabetes, Overall Numbers, Diabetes & Prediabetes.
- Astarci E dan Banerjee S, 2008. PPARG. Atlas of Genetics & Cytogenetics in Oncology & Haematology Department of Biological Sciences, Middle East Technical University, Ankara 06531 Turkey. Open Acces Journal.
- Badan Penelitian dan Pengembangan Kesehatan (Banlitbangkes) Kementerian Kesehatan Republik Indonesia, 2014. Status Gizi. In: Departemen Kesehatan Indonesia. Laporan Hasil Riset Kesehatan Dasar Indonesia Tahun 2013, Riskesdas Dalam Angka. Jakarta, Indonesia: CV Kiat Nusa. P. 386-415.
- Barroso I, Gurnell M, Crowley VE, Agostini M, Schwabe JW, Soos MA, Maslen GL, Williams TD, Lewis H, Schafer AJ, Chatterjee VK, O'Rahilly S, 1999. Dominant Negative Mutations in Human PPARG Associated Severe Insulin Resistance, Diabetes Mellitus and Hypertension. *Nature* : 880-883.
- Bellary S, 2010. Enhanced Diabetes Care To People of South Asian Ethnicity The United Kingdom Asian Diabetes Study (UKADS). Dissertation University of Birmingham.

- Bhatt S, Misra A, Sharma M, Luthra K, Guleria R, Pandey R, Vikram N, 2012. Ala/Ala Genotype of Pro12Ala Polymorphism in the Peroxisome Proliferator-Activated Receptor- 2 Gene is Associated with Obesity and Insulin Resistance in Asian Indians. *Diabetes Technology & Therapeutics*.
- Bonora E, Targher G, Alberiche M, Bonadonna RC, Saggiani F, Zenere MB, 2000. Homeostasis Model Assessment Closely Mirrors the Glucose Clamp Technique in the Assessment of Insulin Sensitivity. *Diabetes Care* :23 : 57-63.
- Booth ML, Chey T, Wake M, Norton K, Hesketh K, Dollman J, Robertson I, 2003. Change in the Prevalence of Overweight and Obesity Among Young Australian 1969-1997. *Am J Clin Nutr*: 77 : 29-36.
- Bunt JC, Krakoff J, Ortega E, Knowler WC, Bogardus C, 2004. Acute Insulin Response is an Independent Predictor of type 2 DM in Individuals with both Normal Fasting and 2-h Plasma Glucose Concentration. *Diabetes Metab Res Rev*.2007; 23(4) : 304-10
- Carl JL, Milani RV, Ventura HO, 2009. Obesity and Cardiovascular Disease Risk Factor, Paradox and Impact of Weight Loss. *Journal of American College of Cardiology*, 53(21): 1925-1932.
- Chao C, Chen Y, Chiang C, Huang J, Hu F, Fang C, Chang C, Yen C, 2015. Sequence Variants of Peroxisome Proliferator-Activated Receptor-Gamma Gene and the Clinical Courses of Patient with End-Stage Renal Disease. *Disease Markers*, Hindawi Publishing Corporation.
- Cheema A, Adeloje D, Sridhar D dan Chan YK, 2014. Urbanization and Prevalence of Type 2 Diabetes in Southern Asia : A Systematic Analysis. *Journal Global Health* Vol 4, No.1.
- Costa V, Gallo M, Letizia F, Aprile M, Casamassimi A, Ciccociola A, 2010. PPAR $\gamma$  : Gene Expression Regulation and Next-Generation Sequencing for Unsolved Issues. *PPAR Research*.
- Damcott CM, Moffett SP, Feingold E, Barmada MM, Marshall JA, Hamman RF, 2004. Genetic Variation in Fatty Acid-Binding Protein-4 and Peroxisome Proliferator-Activated Receptor Gamma Interactively Influence Insulin Sensitivity and Body Composition in Males. *Metabolism*, 53: 303-309.
- Dean L, MD and Jo Mc, 2004. The Genetic Landscape of Diabetes. National Center for Biotechnology Information (US).

- De Onis M, Blossner M, Borghi E, 2010. Global Prevalence and Trends of Overweight and Obesity Among Preschool Children. *Am J Clin Nutr.* 92 : 1257-1264.
- Fauci AS *et al* 2009. Obesity. In : Harrison's Manual of Internal Medicine 17th Edition. USA: The McGraw-Hill Companies, 939.
- Fornage M, Jacobs DR, Steffes MW, Gross MD, Bray MS, Schreiner PJ : Inverse Effect of the PPAR(Gamma)2 Pro12ala Polimorphism on Measures of Adiposity Over 15 years in African American and Whites. The CARDIA Study. *Metabolim*, 54 : 910-917.
- Galbete C, Toledo E, Martines MA, Martines JA, Guillen F, Marti A, 2013. Pro12Ala Variant of the PPAR 2 Gene Increased Body Mass Index: An Update Meta-Analysis Encompassing 49,092 Subjects. *Obesity (Silver Spring)* ; 21: 1486-1495.
- Garvey W, Maianu L, Zhu JH, Brechtel G, Wallace P, Baron AD, 1998. Evidence for Defects in the Trafficking and Translocation of GLUT-4 Glucose Transporters in Sceletal Muscle as A Cause of Human Insulin Resistance. *The Journal of Clinical Investigation.* Volume 101.
- Gauda H, Sagoo G, Harding A, Yates J, Shandu M dan Higgins J, 2010. The Association Between the Peroxisome Proliferator-Activated Receptor- 2 (PPAR 2) Pro12Ala Gene Variant and Type 2 Diabetes Mellitus : A Huge Review and Meta-Analysis.*Am J Epidemiol.*
- Ghoussaini M, Meyre D, Lobbens S, Charpentier G, Clement K, Charles MA, Tauber M, Weill J, Froguel P, 2005. Implication of the Pro12Ala Polymorphism of the PPAR 2 Gene in Type 2 Diabetes and Obesity in The French Population. *BMC Med Genet* 2005, 6:11
- Gonzales J, Borella C, Mayoral R, Gudín L, Hoghtower C and Sarmiento R, 2014. PPAR gamma pro12ala polymorphism and type 2 diabetes: a study in a spanish cohort. *Jurnal of genetic study.*
- Gupta D, Leahy A, Monga N, Peshavaria M, Jetton T, Leahy J, 2013. Peroxisome Proliferator-activated Receptor  $\gamma$  and its Target Genes Are Downstream Effectors of FoxO1 Protein in Islet -Cells. *J Biol Chem* 288(35) : 25440-25449.
- Guyton AC, Hall JE, 2014. Buku ajar Fisiologi Kedokteran. Ed. 12. Jakarta: EGC : 917-918.
- Hoek MV, Dehghan A, Witteman, Duijn C, Uitterlinden A, Oostra B, HofmanSijbrands E, and Janssens C, 2008. Predicting Type 2 Diabetes Based

on Polymorphisms From Genome-Wide Association Studies. *Diabetes* 57:3122–3128.

Huang X, Zhao J, Zhao T, 2011. Effects of Peroxisome Proliferator Activated Receptor-Gamma 2 gene Pro12Ala Polymorphism on Fasting Blood Lipid : a Meta-analysis. *Atherosclerosis* 215; 136-144.

Huguenin GV, Rosa G, 2010. The Ala Allele in the PPAR-gamma2 Gene is Associated With Reduced Risk of Type-2 DM in Caucasians and Improved Insulin Sensitivity in Overweight Subject. *Br J Nutr*, 104 : 488-497.

Ikawati Z, 2009. Berteman Dengan Diabetes. [Zulliesikawati.wordpress.com](http://Zulliesikawati.wordpress.com).

Isnaini N dan Ratnasari, 2018. Faktor Resiko Mempengaruhi Kejadian Diabetes Melitus Tipe-2. *Jurnal Keperawatan dan Kebidanan Aisyah*, vol 14 : P59-68.

Kurniawan I, 2010. Diabetes Melitus Tipe 2 pada Usia Lanjut. *Majalah Kedokteran Indonesia* Vol.60 No. 1

Kurniawaty E, Syukur S, Yerizel E, 2018. Relationship of Body Mass Index (BMI) and Insulin Resistance on Patients DM type-2 In Lampung. *ASRJETS*.

Kwon MJ, Park JH, 2008. Association Study of the Peroxisome Proliferator Activated Receptor  $\gamma$ 2 Pro12ala Polymorphism with Diabetic Nephropathy. *Korean Diabetes Association*.

Lehrke M, Lazar M. The Many Faces of PPAR , 2005. *Cell* 123 : 999.

Lipoeto IN, Yerizel E, Zulkarnain dan Widuri, 2007. Hubungan Nilai Antropometri dengan Kadar Glukosa Darah. [Repositori Unand ac.id](http://Repositori.Unand.ac.id)

Low S, Chin MC & Deurenberg Y, 2009. Review on Epidemic of Obesity. *Annals of the Academy of Medicine Singapore*, 38: 57-65.

Lyssenko V, Almgren P, Anevski D, Melander M, Sjogren M, Saloranta C, Tuomi T, Groop L, 2005. Genetic Prediction of Future Type 2 Diabetes. *Plos Medicine*.

Masud S, Ye S, 2003. Effect the Peroxisome Proliferator Activated Receptor Gamma Gene Pro12Ala Variant on Body Mass Index : a Meta-Analysis. *J Med Genet*, 40 : 773-780.

Mato EP, Fosso PE, Tiedeu BA, Noubiap JJ, Evehe MS, Dadjeu RD, Donfack OS, Ngwa EN, Fokeng MG, Mbacham WF, Sobngwi E, Mbanya JC, 2016. The



Pro12 Ala Polymorphism in the PPAR- 2 gene is not Associated to Obesity and type 2 Diabetes Mellitus in a Cameroonian Population. *BMC Obesity* 3 : 26.

Mercado D, Ornelas M, Ibarra C, Meraz C, Serratos R, Albarran C, Quezada R, Hernandez N, 2015. The482Ser of PPARGC1A and 12Pro of PPARG2 Alleles Are Associated with Reduction of Metabolic Risk Factors Even Obesity in A Mexican-Mestizo Population. *Biomed Research International* vol. 205.

Mirza, 2012. Profil Klinik dan laboratorium. *Skripsi Universitas*. Malahayati.

Morris AP, 2012. Large-Scale Association Analysis Provides Insights into the Genetic Architecture and Pathophysiology of the type 2 Diabetes. *Nat.Gen.*44, 981-990.

Motavallian A, Andalib S, Vaseghi G, Sadeghi HM, Amini M, 2013. Association between PRO12ALA polymorphism of the PPARG- $\gamma$ 2 gene and type 2 diabetes mellitus in Iranian patients. *Indian Journal of Human Genetics*.

National Institute for Health and Care Excellent, 2011. Preventing Type 2 Diabetes : Population and Community-Level Intervention, London.

Navarro-GonzalesD, Sanches-Inigo L, Pastrana-Delgado J, Fernandes-Montero A, Martines JA, 2016. Triglyceride-Glucosa Index (TyG Index) in Comparison With Fasting Plasma Glucosa Improved Diabetes Prediction in Patients With Normal Fasting Plasma Glucosa : the Vascular-Metabolic CUN Cohort. *Prev Med* :86 ; 99-105.

Nayak BS, Sobrian A, Latif K, Pope D, Rampersad A, Laurenko K, Samuel N, 2014. The Association of Age, Gender, Ethnicity, Family History, Obesity and Hypertension with Type 2 DM in Trinidad. *Diabetes and Metabolic Syndrome : Clinical Research and Review*, Vol 8 : P 91-95.

Panelewen R, 2017. Hubungan Penyandang DM tipe-2 dan Disfungsi Ereksi. *Jurnal e Biomedik* Volume 5 No.2

Pihlajamaki J, Schwab U, Kaminska D, Agren J, Kuusisto J, Kolehmainen M, Paananen J, Laakso M, Uusitupa M, 2015. Dietary Polyunsaturated Fatty Acids and the Pro12Ala Polymorphism of PPARG Regulate Serum Lipid Through Divergent Pathways: a Randomized Crossover Clinical Trial. *Genes Nutr* 10:43.

Qi Q and Hu FB, 2012. Genetics of type 2 Diabetes in European Population. *J. Diabetes* 4, 203-212.

- Riediger ND, Clark K, Lukianchuk V, Roulette J, Bruce S, 2017. Fasting Triglycerides as a Predictor of Incident Diabetes, Insulin Resistance and  $\beta$ -cell Function in a Canadian First Nation. *International journal of Circumpolar Health* : 76.
- Risnatiti R, 2014. Insulin dan fungsinya. Seputar diabetes.
- Rivera JA, Barquera S, Gonzales-CT, Olais G, Sepulveda J., 2004. Nutrition Transition in Mexico and in other Latin American Countries. *Nutr, Rev* 62, S149-157.
- Sanghera D, Demirci Y, Kamboh I, 2010. PPARG and ADIPOQ Gene Polymorphisms Increase Type 2 Diabetes Risk in Asian Indian Sikhs: Pro12Ala Still Remains the Strongest Predictor. *Metabolism : Clinical and experimental*.
- Scacchi R, Pinto A, Rickards O, Pacella A, De Stefano GF, Cannella C, 2007. An Analysis of Peroxisome Proliferator-Activated Receptor Gamma (PPAR-Gamma2) pro12ala Polymorphism Distribution and Prevalence of Type 2 Diabetes Mellitus (T2DM) in World Populations in Relation to Dietary Habits. *Nutr Metab Cardiovasc Dis*, 17 : 632-641.
- Shen W, Punyanitya W, Chen J, Gallagher D, Albu J, Pi-Sunyer X, Lewis CE, Grunfield C, Heshka S, Heymsfield SB, 2006. Waist Circumference Correlates with Metabolic Syndrome Indicators Better than Percentage Fat. *Obesity J (Silver Spring)* : 14: 727-736.
- Sherwood, Lauralee, 2012. Fisiologi Manusia dari Sel ke Sistem. Edisi 6. Jakarta. EGC.
- Sinha, A dan Kling S, 2008. A Review of Adolescent Obesity : Prevalence, Etiology and Treatment. *Obese Surg*. 19 : 113-120.
- Sparks JD, Sparks CE, Adeli K, 2012. Selective Hepatic Insulin Resistance, VLDL Overproduction, and Hypertriglyceridemia. *Arterioscler Thromb Vasc Biol* : 32 : 2104-2112.
- Stumvoll M, Tschritter O, Fritsche A, Staiger H, Renn W, Weisser M, Machicao F, Ring H, 2002. Association of the T-G Polymorphism in Adiponectin (Exon 2) with Obesity and Insulin Sensitivity Interaction with Family History of Type 2 Diabetes. *Diabetes*, Vol 51.
- Tchernof A, Despres JP, 2013. Pathophysiology of Human Visceral Obesity: an Update. *Physiol Rev* : 93(1) : 359-404.

- Vaessen N, Heutink P, Janssen J, Witteman J, Testers L, Hofman A, Lamberts S, Oostra B, Pols H, and Duijn C, 2001. A Polymorphism in the Gene for IGF-1 Functional properties and Risk for Type 2 Diabetes and Myocardial Infarction. *Diabetes* 50:637–642.
- Vasques AC, Novaes FS, de Oliveira Mda S, 2011. TyG Index Performs Better than HOMA in a Brazillian Population: a Hiperglycemic Clamp Validated Study. *Diabetes Res Clin Pract* ; 93: e98-100.
- Vergotine Z, Yako Y, Kengne A, Erasmus R, dan Matsha T, 2014. Proliferator-Activated Receptor Gamma Pro12Ala Interact with the Insulin Receptor Substrate 1 Gly972Arg and Increase the Risk of Insulin Resistance and Diabetes in the Mixed Ancestry Population from South Africa. *BMC Genetics*
- Wang L, Teng Z, Cai S, Wang D, Zhao X, Yu K, 2013. The association between the PPAR $\gamma$ 2 Pro12Ala polimorphism and nephropathy susceptibility in type 2 diabetes: a meta-analysis based on 9,176 subjects. *Diagnostic Pathology* 2013, 8;118
- Wang X, Liu J, Ouyang Y, Fang M, Gao H, Liu L, 2013. The Association between the Pro12Ala Variant in the PPAR $\gamma$ 2 Gene and Type 2 Diabetes Mellitus and Obesity in a Chinese Population. *PloS ONE* 8(8).
- WHO/IASO/IOTF, 2012. The Asia-Pacific Perspective : Redefining Obesity and its Treatment. Health Communication Australia : Melbourne. ISBN 0-9577082-1-1.
- Wilcox, Gisela, 2005. Insulin and Insulin Resistance. *Clin Biochem Rev.*
- Yates T, Davies MJ, Henson J, Edwardson C, Webb D, Bodicot DH, Webb M, Howard P, Cooper JA, Humpries SE, Khunti K, Talmud P, 2015. Effect of the PPAR $\gamma$ 2 Pro12Ala Polymorphism on Association of Physical Activity and Sedentary Time with Markers of Insulin Sensitivity in Those with an Elevated Risk of Type 2 Diabetes. *PloS ONE*
- Zahtamal, Chandra F, Suyanto, Restuastuti T, 2007. Faktor –Faktor Resiko Pasien Diabetes Mellitus, *Berita Kedokteran Masyarakat*, Vol. 23, No. 3, September 2007, Hal. 142-147.
- Zappavigna S, Luce A, Vitale G, Merola N, Facchini S, Caraglia M, 2013. Autofagic Cell Death: A New Frontier in Cancer Research. *Advance in Bioscience and Biotechnology*, 4 : 250-262.

Zeggini E, Scott LJ, Saxena R, 2008. Meta Analysis of Genome Wide Association Data and Large-Scale Replication Identifies Additional Susceptibility Loci for Type-2 Diabetes. *Nat Genet* ; 40 (5) : 638-645.

