DAFTAR PUSTAKA

Agarwal, N., Sengar, N. S., Jain, P. K., Khare, R. Nephropathy in Newly Diagnosed Type 2 Diabetics with Special Stress on the Role of Hypertension. *JAPI* 2011 Vol. 59.

Al-Farabi, M. J., Ni'amita, L. F., Soeatmadji, D.W., Indra, M. R. Immunization with AGE-KLH Prevent Diabetic Complication in Mice. *Indonesian Scholars Journal* (2013) 1: 28-32.

American Diabetes Association. 2011. *Kidney Disease (Nephropathy)*. American Diabetes Association.

Arnoni, C.P., Lima, C., C., Priscila, *et al*. Regulation of Glucose Uptake in Mesangial Cells Stimulated by High Glucose: Role of Angiotensin II and Insulin. *Experimental Biology and Medicine* 2009, 234:1095-1101.

Bard, Jukka, Norie, Hiroyuki dan Seikoh. Advanced Glycation End Products are Eliminated by Scavenger-Receptor-Mediated Endocytosis in Hepatic Sinusoidal Kupffer and Endothelial Cells. *Biochem. J.* (1997) 322 (567–573)

Basta G, Schmidt AM, De Caterina R. Advanced Glycation End Products and Vascular Inflammation: Implications for Accelerated Atherosclerosis in Diabetes. *Cardiovasc Res.* 2004; 63: 582–592.

Baydanoff S, Konova E, Ivanova N. Determination of Anti-AGE antibodies in Human Serum. *Glycoconj J*. 1996; 13: 335-9

Bethesda. 2007. *United States Renal Data System USRDS 2007 Annual Data Report*. National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health, U.S. Department of Health and Human Services.

Bhatwadekar and V.S. Ghole. 2005. Rapid Method for the Preparation of an AGE-BSA Standard Calibrator Using Thermal Glycation. *Journal of Clinical Laboratory Analysis* 19:11–15.

Bohlender, J. M., Franke S., Stein, G., Wolf , G. Invited Review Advanced Glycation End Products and the Kidney. *Am J Physiol Renal Physiol* 289: F645–F659, 2005.

Cavanagh, ES., MacLeod, L, and Kennedy C.R.J. The Podocyte in Diabetic Kidney Disease. *Review The Scientific World Journal* (2009) 9, 1127–1139.

Doublier, S., Salvidio, G., Lupia, E., *et al*. 2003. Nephrin Expression is Reduced in Human Diabetic Nephropathy: Evidence for a Distinct Role for Glycated Albumin and Angiotensin II. *Diabetes* 52**,** 1023–1030.

Dronavalli S, Duka I, and Bakris GL. The Pathogenesis of Diabetic Nephropathy. *Natur Clinical Practice Endocrinology & Metabolism* Vol. 4(8), 2008.

Durvasula RV, Petermann AT, Hiromura K, *et al*. Activation of a local tissue angiotensin system in podocytes by mechanical strain. *Kidney Int* 65:30–39, 2004.

Endemann G, Stanton LW, Madden KS, Bryant CM, White RT, Protter AA. CD36 is a Receptor for Oxidized Low Density Lipoprotein. *J Biol Chem*. 1993 Jun 5;268(16):11811–11816.

Forbes, J., M., Cooper , M. E., Oldfield, M., D., Thomas, M., C. Role of Advanced Glycation End Products in Diabetic Nephropathy. *J Am Soc Nephrol* 14: S254–S258, 2003.

George J, Afek A, Gilburd B, et al. Hyperimmunization of Apo-E Deficient Mice with Homologous Malondialdehyde Low-Density Lipoprotein Suppresses Early Atherogenesis. *Atherosclerosis*. 1998;138: 147–152.

Goh, Su-Yen and Cooper, ME. The Role of Advanced Glycation End Products in Progression and Complications of Diabetes. *J Clin Endocrinol Metab* 93: 1143–1152, 2008.

Goldin, J. A. Beckman, A. M. Schmidt, and M. A. Creager: *Circulation* 114:597–605, 2006.

Gross, J.L., Azevedo, M. J. D., Silveiro, S.P., Canani, L. H., Caramori, M.L., Zelmanovitz, T. Diabetic Nephropathy: Diagnosis, Prevention, and Treatment. *Diabetes Care* 28:176–188, 2005.

Gugliucci, A. dan Bendayan, M. Reaction of Advanced Glycation End Products with Renal Tissue From Normal and Streptozotocin-Induced Diabetic Rats. An Ultrastructural Study Using Colloidal Gold Cytochemistry. *J Histochem Cytochem* 43: 591–600, 1995.

Haneda, M., Koya, D., Isono, M., Kikkawa, R. Overview of Glucose Signaling in Mesangial Cells in Diabetic Nephropathy. *J Am Soc Nephrol* 14: 1374–1382, 2003.

Kanwar, Y.S., Wada J., Sun L., *et al*. Diabetic Nephropathy: Mechanisms of Renal Disease Progression *Experimental Biology and Medicine* 2008, 233:4-11.

Kitada, M., Kume, S., Takeda-Watanabe, A., Kanasaki, K., and Koya, D. Sirtuins and Renal Diseases: Relationship with Aging and Diabetic Nephropathy. *Clinical Science* (2013) 124, 153–164.

Lee, H. L., Yu, M., Yang, Y., Jiang, Z., Hunjoo, H.A. Reactive Oxygen Species-Regulated Signaling Pathways in Diabetic Nephropathy. *J Am Soc Nephrol* 14: S241–S245, 2003.

Lee, P.H., Hsu, Y. C., Lei, C. C., Lin, C. L., and Wang, F.S. New Paradigm for Progression of Diabetic Nephropathy. *Acta Nephrologica* 27(2): 70-75, 2013.

Makita Z, Radoff S, Rayfield EJ, *et al*. Advanced Glycosylation End Products in Patients with Diabetic Nephropathy. *N Engl J Med* 325: 836–842, 1991.

Markum, H.M.S, Galastri, M. Diabetic nephropathy among Type 2 Diabetes Mellitus Patients in Dr. Cipto Mangunkusumo Hospital. *Medical journal of indonesia*.2004; 13:161-165.

McIlwain, D. R., Berger, T., Mak, T.W. Caspase Functions in Cell Death and Disease. *Cold Spring Harb Perspect Biol* (2013).

Mera, K., Nagai, R., Takeo, K., Izumi, M., Maruyama, T., Otagiri, M. An Autoantibody Against N(ε)-(carboxyethyl)lysine (CEL): Possible Involvement in the Removal of CEL-Modified Proteins by Macrophages. *Biochem Biophys Res Commun.*2011; 407 (2):420-5.

Miyata T, Ueda Y, Shinzato T, *et al*. 1996. Accumulation of Albumin-Linked and Free-Form Pentosidine in the Circulation of Uremic Patients with End-Stage Renal Failure: Renal Implications in the Pathophysiology of Pentosidine. *J Am Soc Nephrol* 7: 1198-1206.

Miyata, T., Ueda, Y., Horie, K., *et al*. Renal Catabolism of advanced Glycation End Products: The Fate of Pentosidine. *Kidney Int* 1998; 53:416-22.

Nicoloff, G., Baydanoff, S., Petrova, C.H., Christova, P. Antibodies to Advanced Glycation End Products in Children with Diabetes Melitus. *Vascular Pharmacology* 39 (2002) 39– 45.

Ohshiro, Y., Lee, Y., King., G. L. Mechanism of Diabetic Nephropathy: Role of Protein Kinase-C Activation. *ADS Stud Med* 2005;5(1A):S10-S19.

Pal, P.B., Sinha, K., Sil, P. C. Mangiferin, a Natural Xanthone, Protects Murine Liver in Pb(II) Induced Hepatic Damage and Cell Death via MAP Kinase, NF-kB and Mitochondria Dependent Pathways. *Plos One* 8:2 (2013).

Palinski W, Miller E, Witztum JL. Immunization of Low Density Lipoprotein (LDL) Receptor-Deficient Rabbits with Homologous Malondialdehyde-Modified LDL Reduces Atherogenesis. *Proc Natl Acad Sci U S A*. 1995;92:821– 825.

Peppa, M dan Vlassara, H. Advanced Glycation End Products and Diabetic Complications: A General Overview. *Hormone*, 2005.

Prodjosudjadi, Wiguno. Incidence, Prevalence, Treatment and Cost of End-Stage Renal Disease in Indonesia. *Ethn Dis. 2006*;16[suppl 2]:S2-14–S2-16.

Rachmani R, Ravid M. Risk Factors for Nephropathy in Type 2 Diabetes Melitus. *Compr Ther*. 1999; 25(6-7): 366-9

Rangan, G. K. and Tesch, G. H. Methods in Renal Research Quantification of Renal Pathology by Image Analysis. *Nephrology* 2007; 12, 553–558.

Reddy, S., Bichler, J., Wells-Knecht, K.J., Thorpe, S.R., Baynes, J.W. 1995. Nε-(Carboxymethyl)lysine is a Dominant Advanced Glycation End Product (AGE) Antigen in Tissue Proteins. *Biochemistry* 34, 10872– 10878.

Rohilla, A., Tiwari SK, Rohilla S, Kushnoor A. Diabetic Nephropathy: Pathogenesis, Prevention and Treatment. *European Journal of Experimental Biology*, 2011, 1 (4):72-80.

Ruster, C., Bondeva, T., Franke, S., Tanaka, N., Yamamoto, H., and Wolf, G. (2009) Angiotensin II Upregulates RAGE Expression on Podocytes: Role of AT2 Receptors. *Am. J. Nephrol*. 29, 538–550.

Sahib, M.N, Abdulameer, S.A., Aziz, N. A., dan Hassan, Y. Pathogenesis of Diabetic Kidney Disease: Review of Cellular Aspects of Renal Lesions. *African Journal of Pharmacy and Pharmacology* Vol. 3(11). pp. 507-514. 2009.

Salonen JT, Yla-Herttuala S, Yamamoto R, Autoantibody Against Oxidized LDL and Progression of Carotid Atherosclerosis. *Lancet*. 1992; 339:883–887.

Satirapoj, B. Review on Pathophysiology and Treatment of Diabetic Kidney Disease. *J Med Assoc Thai* 2010; 93 (Suppl. 6): S228-S241.

Shcheglova, T., Makker, S., Tramontano, A. Reactive Immunization Suppresses Advanced Glycation and Mitigates Diabetic Nephropathy. *J Am Soc Nephrol* 20: 1012–1019, 2009.

Shestakova MV, Koshel' LV, Vagodin VA, Dedov II. Risk Factors of Diabetic Nephropathy Progression in Patients with A Long History of Diabetic Melitus as Shown by a Retrospective Analysis. *Ter Arkh.* 2006;78(5):60-4.

Shibayama,R., Araki,. N., Ejima, Y., *et al*. Study of Autoantibodies Against Advanced Glycation Endproducts of the Maillard reaction. *Diabetes* 48:1842–1849, 1999.

Shinohara M, Thornalley PJ, Giardino I, *et al*. 1998. Overexpression of Glyoxalase-I in Bovine Endothelial Cells Inhibits Intracellular Advanced Glycation Endproduct Formation and Prevents Hyperglycemia-Induced Increases In Macromolecular Endocytosis. *J Clin Invest* 101: 1142-1147.

Skogh T, Blomhoff R, Eskild W, Berg T(1985) *Immunology* 55:585–594.

Smedsrod, B., Melkko, J., Araki, N., Sano, H., Horiuchi, S. Advanced Glycation End Products are Eliminated by Scavenger-Receptor-Mediated Endocytosis in Hepatic Sinusoidal Kupffer and Endothelial Cells. *Biochem J*. 1997; 322(Pt 2): 567–573.

Soegondo, S., Prodjosudjadi, W., Setiawati, A. Prevalence and Risk Factors for Microalbuminuria in A Cross-Sectional Study of Type-2 Diabetic Patients in Indonesia: a Subset of DEMAND Study. *Med J Indones* 2009: 124-130.

Stanton, L.W., White R.T., Bryant C.M., Protter A.A., Endemann G. A. Macrophage Fc Receptor for IgG is Also a Receptor for Oxidized Low Density Lipoprotein. *J Biol Chem*. 1992 Nov 5;267(31):22446–22451.

Stenvinkel, P. Chronic Kidney Disease: A Public Health Priority and Harbinger of Premature Cardiovascular Disease (Review). *J Intern Med* 2010; 268: 456–467.

Takata, K., Horiuchi, S., Araki, N., Shiga, M., Saitoh, M. and Morino, Y. 1988. Endocytic Uptake of Nonenzymatically Glycosylated Proteins is Mediated

by a Scavenger Receptor for Aldehyde-Modified Proteins. *J. Biol. Chem.* 263, 14819–14825

Tanji, N., Markowitz, G., S., Fu, C., Kislinger, T.,Taguchi, A., Pischetsrieder, M., Stern, D., Schmidt, A., M., D'agati, V., D. Expression of Advanced Glycation End Products and Their Cellular Receptor RAGE in Diabetic Nephropathy and Nondiabetic Renal Disease. *J Am Soc Nephrol* 11: 1656–1666, 2000.

Tesch, G.H dan Allen, T. J. Methods in Renal Research Rodent Models of Streptozotocin-Induced Diabetic Nephropathy. *Nephrology* 2007; 12, 261–266.

Turk, Z., S. Ljubic, N. Turk, and B. Benko. 2001. Detection of Autoantibodies Against Advanced Glycation End Products and AGE- Immune Complexes in Serum of Patients with Diabetes Melitus. *Clin.Chim.Acta*. 303: 105–115.

VanBerkel, T. J. C., de Rijke, Y. B. and Kruijt, J. K. 1991. Different Fate *In Vivo* of Oxidatively Modified Low Density Lipoprotein and Acetylated Low Density Lipoprotein in Rats. *J. Biol. Chem.* 226, 2282–2289.

Vay, D., Vidalli, M., Allochis, G., *et al*. Antibodies Againts Advanced Glycation End Product N^{ε}-(carboxymethyl)lysine in Healthy Controls and Diabetics Patients. *Diabetologia* (2000) 43: 1385-1388.

Vidotti, D.B, Casarini, D.E., Cristovam, P.C., Leite, C.E., Schor, N., Boim, M.A. High Glucose Stimulates Intracellular Renin Activity and Angiotensin II Generation in the Mesangial Cells. *Am J Physiol Renal Physiol* 286: F1039–F1045, 2004.

Virella G, Virella I, Leman RB, *et al*. Anti-Oxidized Low-Density Lipoprotein Antibodies in Patients with Coronary Heart Disease and Normal Healthy Volunteers. *Int J Clin Lab Res*. 1993;23:95–101.

Vlassara H, Palace MR (2002) Diabetes and Advanced Glycation End Products. *J Intern Med* 251:87–101.

Vucic, D., Dixit, V. M., and Wertz, I. E. Ubiquitylation in Apoptosis: a Post-translational Modification at the Edge of Life and Death. Nature Reviews *Molecular Cell Biology* 12 (2011).

Wagner J, Lerner RA, Barbas CF. 1995. Efficient aldolase catalytic anti- bodies that use the enamine mechanism of natural enzymes. *Science* 270:1797–1800.

Wautier MP, Chappey O, Corda S, *et al*. 2001. Activation of NADPH oxidase by AGE links oxidant stress to altered gene expression via RAGE. *Am J Physiol Endocrinol Metab*. 280:E685–94.

WHO. 2011. *Diabetes Fact Sheet*. Genewa: WHO.

Wu, K. K. and Huan, Y. Streptozotocin-Induced Diabetic Models in Mice and Rats. *Current Protocols in Pharmacology* 5.47.1-5.47.14, 2008.

Yamagishi, S. Role of Advanced Glycation End Products (AGEs) and Receptor for AGEs (RAGE) in Vascular Damage in Diabetes. *Experimental Gerontology* 46 (2011) 217–224.

Yamagishi, S., Matsui, T. 2010. Advanced Glycation End Products, Oxidative Stress and Diabetic Nephropathy (Review). *Oxidative Medicine and Cellular Longevity* 3:2, 101-108.

Zhou, X., Caligiuri, G., Hamsten, A., *et al*. LDL Immunization Induces T-cell-Dependent Antibody Formation and Protection Against Atherosclerosis. *Arterioscler Thromb Vasc Biol*. 2001;21:108 –114.