DAFTAR PUSTAKA

Ahmad, A., Ali, M., Shakoori, A. R., 2012. Isolation and culture of cardiac progenitor and cardiomyocytes from adult mouse. *Pak J Zool* 44(2):511–516.

Ahmad, S. (Ed), 2007. *Profil Kesehatan Indonesia 2005.* Depkes RI,Jakarta.

Alberts, B., Johnson, A., Lewis, J., Raff, M., Roberts, K., Walter, P., 2008. *Molecular biology of the cell*. 5th ed. Garland Science, New York.

Al-Hillawi, E., Bhandari, D.G., Trayer, H.R., Trayer, I.P., 1995. The effects of phosphorylation of cardiac troponin-I on its interactions with actin and cardiac troponin-C. *Eur J Biochem* 228:962-970.

Armas, L. A. G., Hollis, B. W., Heaney, R. P., 2004. Vitamin D2 is much less effective than vitamin D3 in humans. *J Clin Endocrinol Metab* 89(11):5387–91.

Bergwitz, C., Jüppner, H., 2010. Regulation of phosphate homeostasis by PTH, vitamin D, and FGF23. *Annu Rev Med* 61:91–104.

Blum, M., Dolnikowski, G., Seyoum, E., Harris, S.S., Booth, S.L., Peterson, J., *et al.*, 2008. Vitamin D3 in fat tissue. *Endocrine* 33(1):90–94.

Bodor, G.S., Oakeley, A.E., Allen, P.D., Crimmins, D.L., Ladenson, J.H., Anderson, P.A.W., 1997. Troponin I phosphorilation in the normal and failing adult human heart. *Circulation* 96(5):1495-500.

Boushey, H.A., 2012. Drugs used in asthma. In: Katzung, B.G., Masters, S.B., Trevor, A.J.(Ed): *Basic and Clinical Pharmacology*, pp: 339-57. McGraw-Hill, New York.

Chen, S., Glenn, D.J., Ni, W., Grigsby, C.L., Olsen, K., Nishimoto, M., *et al.*, 2008. Expression of the vitamin D receptor is increase in the hypertrophic heart. *Hypertension* 52(6):1106-1112.

Christakos, S., Ajibade, D.V., Dhawan, P., Fechner, A.J., Mady, L.J., 2010. Vitamin D: metabolism. *Endocrinol Metab Clin North Am* 39(2): 243–253.

Deluca, F., 1987. The vitamin basic D story : a collaborative effort of science. *FASEB J* 2:224-236.

DeLuca, H.F., 2004. Overview of general physiologic features and functions of vitamin D. *Am J Clin Nutr* 80:1689S–96S.

Donaldson, J., Brown, A.M., Hill, S.J., 1988. Influence of rolipram on the cyclic 3′,5′-adenosine monophosphate response to histamine and adenosine in slices of guinea-pig cerebral cortex. *Biochem Pharmacol* 37:715–723.

Downey, J.M., Heusch, G., 2001. Sequence of cardiac activation and ventricular mechanics. In: Sperelakis, N., Kurachi, Y., Terzic, A., Cohen, M.,V. (Eds.): *Heart Physiology and Patophysiology*, pp: 3-18. Academic Press, Massachusetts.

Fabiato, A., Fabiato, F., 1977. Calcium release from the sarcoplasmic reticulum. *Circ Res* 40:119-129

Feldman, M. D., Copelas, L., Gwathmey, J. K., Phillips, P., Warren, S. E., Schoen, F. J., *et al.*, 1987. Deficient production of cyclic AMP: pharmacologic evidence of an important cause of contractile dysfunction in patients with end-stage heart failure. *Circulation 75*(2):331–339.

Fukuta, H., Little, W.C., 2008. The cardiac cycle and the physiological basis of left ventricular contraction ejection relaxation and filling. *Heart Fail Clin* 4(1):1-11.

Fuster, V., Kelly, B.B. (Eds.), 2010. *Promoting cardiovascular health in the developing world, a critical challenge to achieve global health*. The National Academies Press, Washington-D.C.

Garcia, V. C., Martini, L. A., 2010. Vitamin D and cardiovascular disease. *Nutrients* 2(4):426–37.

Gardner, D.G., Chen, S., Glenn, D.J., 2013. Vitamin D and the heart. *Am J Physiol Regul Integr Comp Physiol* 305(9):R969-R977.

Gilaberte, Y., Aguilera, J., Carrascosa, J. M., Figueroa, F. L., Romaní de Gabriel, J., Nagore, E., 2011. Vitamin D: evidence and controversies. *Actas Dermosifiliogr 102*(8):572–88.

Giovannucci, E., Liu Y., Hollis, B., Rimm, E.B., 2008. 25-Hydroxyvitamin D and Risk of Myocardial Infarction in Men. *Arch Intern Med* 168(11):1174-1180.

Green, J. J., Robinson, D. A., Wilson, G. E., Simpson, R. U., Westfall, M. V., 2006. Calcitriol modulation of cardiac contractile performance via protein kinase C. *J Mol Cell Cardiol 41*(2):350–9.

Guyton, A.C., Hall, J.E., 2008. *Buku Ajar Fisiologi Kedokteran*. Ed. 11. EGC, Jakarta.

Hill, S. J., Williams, C., May, L. T., 2010. Insights into GPCR pharmacology from the measurement of changes in intracellular cyclic AMP; advantages and pitfalls of differing methodologies. *Br J Clin Pharmacol* 161(6):1266–1275.

Hoit, B.D., Walsh, R.A., 2008. Normal physiology of the cardiovascular system. In Fuster, V., Walsh, R.A., O'Rourke, R.A., Poole-Wilson, P. (Eds.): *Hurst's The Heart*, pp: 83-109. McGraw-Hill, New York.

Holick, M. F. 2003. Vitamin D: A millenium perspective. *J Cell Biochem* 88(2):296–307.

Holick, M. F., 2005. The vitamin D epidemic and its health consequences. *J Nutr* 135: 2739S–2748S.

Holick, M. F., Chen, T. C., 2008. Vitamin D deficiency: a worldwide problem with health. *Am J Clin Nutr* 87:1080–1086.

Huhtakangas, J. A., Olivera, C. J., Bishop, J. E., Zanello, L. P., Norman, A. W., 2004. The vitamin D receptor is present in caveolae-enriched plasma membranes and binds 1 alpha,25(OH)2-vitamin D3 in vivo and in vitro. *Mol Endocrinol* 18(11):2660–71.

Jäpelt, R.B., Jacobsen, J., 2013. Vitamin D in plants: a review of occurrence, analysis and biosynthesis. *Front Plant Sci* 136(4):1-20.

Jideama, N.M., Noland, T.A., Raynor, R.L., Blobe, G.C., Fabbro, D., Kazanietz, M.G., *et al*., 1996. Phosphorylation specificities of protein kinase C isozymes for bovine cardiac troponin I dan troponin T and sites within these proteins and regulation of myofilament properties. *J Biol Chem* 271(38):23277-83.

Jones, G., Strugnell, S. A, DeLuca, H. F., 1998. Current understanding of the molecular actions of vitamin D. *Physiol Rev* 78(4):1193–231.

Layland J, Solaro J, Shah A.M., 2005. Regulation of cardiac contractile function by troponin I phosphorylation. *Cardivasc Res* 66(1):12-21.

Liu S, Tang W, Zhou J, Stubbs, J.R., Luo, Q., Pi, M., *et al.*, 2006. Fibroblast growth factor 23 is a counter-regulatory phosphaturic hormone for vitamin D. *J Am Soc Nephrol* 17:1305–15.

Loscalzo, J., Libby, P., Braunwald, E., 2010. Basic Biology of The Cardiovascular System. In: Loscalzo, J. (Ed.): *Harrison's Cardiovascular Medicine*, pp: 2-17. McGraw-Hill, New York.

Louch, W. E., Sheehan, K., Wolska, B. M., 2011. Methods in cardiomyocyte isolation, culture, and gene transfer. *J Mol Cell Cardiol* 51(3):288–98.

Luo W.J., Qian J.F., Jiang H.H., 2006. Pretreatment with aminophylline reduces release of Troponin I and neutrophil activation in the myocardium of patients undergoing cardioplegic arrest. *Eur J Cardiothorac Surg* 31(3):360-5.

Matiazzi, A., Mundina-Weilenmann, Vittone, L., C., Said, M., Kranias, E.G., 2006. The importance of the Thr^{17} residue of phospholamban as a phosphorylation site under physiological and pathologiacl conditions. *Braz J Med Biol Res* 39:563-572.

Messer, A.E., Jacques, A.M., Marston, S.B., 2007. Troponin I phosphorylation and regulatory function in human heart muscle: dephosphorylation of Ser23/24 on troponin I could account for the contractile defect in end-stage heart failure. *J Mol Cell Cardiol* 42(1):247-59.

Messer, A.E., Marston, S.B., 2014. Investigating the role of uncoupling of troponin I phosphorilation from changes in myofibrillar Ca^{2+}-sensitivity in the pathogenesis of cardiomyopathy. *Front Physiol* 5:315.

Mitcheson, J. S., Hancox, J. C., Levi, A. J., 1998. Cultured adult cardiac myocytes: future applications, culture methods, morphological and electrophysiological properties. *Cardiovasc Res* 39(2):280–300.

Mizobuchi, M., Nakamura, H., Tokumoto, M., Finch, J., Liapis, H., Slatopolsky, E., 2010. Myocardial Effects of VDR Activators in Renal Failure. *J Steroid Biochem Mol Biol* 121(1-2):188–192.

Nimitphong, H., Holick, M. F., 2013. Vitamin D status and sun exposure in Southeast Asia. *Dermatoendocrinol* 5(1):1–4.

Noland, T.A., Guo, X., Raynor, R.L., Jideama, N.M., Averyhart-Fullard, V., Solaro, J., Kuo, J.F., 1995. Cardiac troponin I mutants: phosphorylation by protein kinases C and A and regulation of Ca^{2+}-stimulated MgATPase of reconstituted actomyosin S-1. *J Biol Chem* 270:25445-54.

Norman, A. W., 2006. Minireview: Vitamin D Receptor: New Assignments for an Already Busy Receptor. *Endocrinology 147*(12):5542–5548.

Norman, A. W., 2008. From vitamin D to hormone D: fundamentals of the vitamin D endocrine system essential for good health. *Am J Clin Nutr* 88(2):491S–499S.

Nuss, H. B., Marban, E., 1994. Electrophysiological properties of neonatal mouse cardiac myocytes in primary culture. *J Physiol* 479(2): 265–79.

Orchard, C. H., Pásek, M., Brette, F., 2009. The role of mammalian cardiac t-tubules in excitation-contraction coupling: experimental and computational approaches. *Exp Physiol* 94(5):509–19.

Pacini, S., Morucci, G., Branca, J. J. V, Aterini, S., Amato, M., Gulisano, M., *et al.*, 2013. Effects of vitamin D3 and paricalcitol on immature cardiomyocytes: a novel role for vitamin D analogs in the prevention of cardiovascular diseases. *Nutrients* 5(6):2076–92.

Pi, Y., Zhang, D., Kemnitz, K.R., Wang, H., Walker, J.W., 2003. Protein kinase C and A sites on troponin I regulate myofilament Ca^{2+} sensitivity and ATPase activity in the mouse myocardium. *J Physiol* 552(3):845-57.

Pilz, S., März, W., Wellnitz, B., Seelhorst, U., Fahrleitner-Pammer, A., Dimai, H.P., *et al.*, 2008. Association of vitamin D deficiency with heart failure and sudden cardiac death in a large cross-sectional study of patients referred for coronary angiography. *J Clin Endocrinol Metab* 93:3927-3935

Pusat Data dan Informasi Kemenkes RI, 2012. *Buletin Jendela Data dan Informasi Kesehatan: Penyakit tidak menular*. Kementrian Kesehatan Republik Indonesia, Jakarta.

Ramesh, B., Bishi, D.K., Rallapalli, S., Arumugam, S., CHerian, K.M., Guhathakurta, S., 2012. Ischemic cardiac tissue conditioned media induced differentiation of human mesenchymal stem cells into early stage cardiomyocytes. *Cytotechnology* 64:563–575.

Rapundalo, S.T., 1998. Cardiac protein phosphorylation: functional and pathophysiological correlates. *Cardiovasc Res* 38(3):559–88.

Rapundalo, S.T., Solaro, R.J., Kranias, E.G., 1989. Inotropik responses to isoproterenol and phosphodiesterase inhibitors in intact guinea pig hearts: comparison of cyclic AMP level and phosphorylation of sarcoplasmic reticulum and myofibrillar proteins. *Circ Res* 64:104-111.

Ross A.C., Taylor C.L., Yaktine A.L., Del Valle, H.B., (Eds.), 2011. *Dietary Reference Intakes for Calcium and Vitamin D*. National Academies Press (US), Washington (DC).

Santillán, G.E., Boland ,R.L., 1998. Studies suggesting the participation of protein kinase A in 1, 25(OH)2-vitamin D3-dependent protein phosphorylation in cardiac muscle. *J Mol Cell Cardiol* 30(2):225-33.

Santillán, G.E., Vazquez, G., Boland, R.L., 1999. Activation of a beta-adrenergic-sensitive signal transduction pathway by the secosteroid hormone 1,25-(OH)2-vitamin D3 in chick heart. *J Mol Cell Cardiol* 31(5):1095-104.

Sasayama, S., 2008. Heart disease in Asia. *Circulation* 118:2669-2671.

Scragg, R.K., Camargo, C.A., Simpson, R.U., 2010. Relation of serum 25-hydroxyvitamin D to heart rate and cardiac work (from the national health and nutrition examination surveys). *Am J Cardiol* 105:122-128.

Shimada, T., Kakitani, M., Yamazaki, Y., Hasegawa, H., Takeuchi, Y., Fujita, T., *et al.*, 2004. Targeted ablation of Fgf23 demonstrates an essential physiological role of FGF23 in phosphate and vitamin D metabolism. *J Clin Invest* 113(4):561–568.

Soenardi, T.A., Zulkarnain, I., Sitohang, V., Hardana, B. (Eds.), 2012. *Indonesian health profile 2011*. Minister of Heath Republic of Indonesia,Jakarta.

Solaro, R.J., Rosevear, P., Kobayashi, T., 2008. The unique function of cardiac troponin I in the control of cardiac muscle contraction and relaxation. *Biochem Biophys Res Commun* 369(1): 82-87.

Swiderek, K., Jaquet, K., Meyer, H.E., Schachtele, C., Hofmann, F., Heilmeyer, L.M.G., 1990. Sites phosphorylated in bovine cardiac troponin T and I: Characterization by 'P-NMR spectroscopy and phosphorylation by protein kinases. *Eur J Biochem* 190:575-82.

Tishkoff, D.X., Nibbelink, K.A., Holmberg, K.H., Dandu, L., Simpson, R.U., 2008. Functional vitamin D receptor (VDR) in the T-tubules of cardiac myocytes: VDR knockout cardiomyocyte contractility. *Endocrinology* 149(2):558-564.

Tortora & Derrickson, G.J., Derrickson, B., 2009. *Principles of anatomy and physiology*. 12th ed. John Wiley & Sons, NewYork.

Turnbull, D. J., Parisi, V, KimLin, M. G., 2005. Vitamin D effective ultraviolet wavelengths due to scattering in shade. *J Steroid Biochem Mol Biol* 96(5):431–6.

Ün, İ., Kurt, A. H., Batuş, A., Büyükafşar, K., 2013. Alfacalcidol suppresses α-receptor–mediated vasoconstriction via an endothelium dependent mechanism. *Turk J Med Sci* 43:238–244.

Ward, D.G., Cornes, M.P., Trayer, I.P., 2002, Structural Consequences of Cardiac Troponin I Phosphorylation. *J Biol Chem* 277:41795-41801.

Watanabe, A.M., Hathaway, D.R., Besch, H.R., Farmer, B.B., Harris, R.A., 1977. α-adrenergic reduction of cyclic adenosine monophosphate concentration in rat myocardium. *Circ Res* 40(6):596-602.

Wattanapermpool, J., Guo, X., Solaro, J., 1995. The unique amino-terminal peptide of cardiac troponin I regulates myofibrillar activity only when it is phosphorylated. *J mol cell cardiol* 27(7):1383-91

Winslow, R. L., Greenstein, J. L., 2011. Cardiac myocytes and local signaling in nano-domains. *Prog Biophys Mol Biol* 107(1):48–59.

Yamashita, N., Hoshida, S., Nishida, M., Igarashi, J., Taniguchi, N., Tada, M., *et al.*, 1997. Heat shock-induced manganese superoxide dismutase enhances the tolerance of cardiac myocytes to hypoxia–reoxygenation injury. *J Mol Cell Cardiol* 29:1805–1813.

Zanello, L. P., Norman, A. W., 2004. Rapid modulation of osteoblast ion channel responses by 1alpha,25(OH)2-vitamin D3 requires the presence of a functional vitamin D nuclear receptor. *Proceedings of the National Academy of Sciences of the United States of America* 101(6):1589–94.

Zhao, G., Simpson, R. U., 2010. Interaction between vitamin D receptor with caveolin-3 and regulation by 1,25-dihydroxyvitamin D3 in adult rat cardiomyocytes. *J Steroid Biochem Mol Biol* 121(1-2):159–63.