DAFTAR PUSTAKA

Ahn, N and Kim, K. 2016. High-density lipoprotein cholesterol (HDL-C) in cardiovascular disease: effect of exercise training. *Integrative Medicine Research*. 5: 212-215.

Al-Awadi, J.H.H., Rashid, K.H., Hassen, A.J. 2013. High fat diet induce hyperlipidemia incidences With Sever Changes in Liver Tissue of Male Albino Rats: A Histological and biochemical study. *Kerbala Journal of Pharmaceutical Sciences*. 6: 21-32

Anyakudo, M.M.C and Omotayo, P. 2015. Effects of high dietary fat intake on biochemical variables and pancreas histoarchitecture in diabetic rats. *Journal of Human Nutrition & Food Science*. 3:1053-1059.

Attie, A.D., Kastelein J.P., Hayden, M.R. 2001. Pivotal role of ABCA1 in reverse cholesterol transport influencing HDL levels and susceptibility to atherosclerosis. *Journal of Lipid Research*. 42:1717–1726.

Battinelli, T. 2007. Physique, fitness, and performance. Second Edition. Taylor & Francis Group. United States of America.

Beam, J.R., Gibson, A.L., Kerksick, C.M., Conn, C.A., White, A.C., Mermier, C.M. 2015. Effects of post-exercise caffeine consumption and coffee consumption of green coffee beans on blood glucose and insulin concentration. *Nutrition*. 31: 292-297.

Boland, B.B., Rhodes, C.J., Grimsby, J.S. 2017.The dynamic plasticity of insulin production in b-cells. *Moleculer Metabolism*. 6 : 958-973.

Budiharjo, S.M., Romi, M., Prakosa, D. 2004. Pengaruh latihan fisik intensitas sedang terhadap presentasi lemak badan wanita lanjut usia. 36:195-200.

Burton, D.A., Stokes, K., Hall, G.M. 2004. Physiological effects of exercise. *Continuing Education in Anaesthesia Critical Care & Pain*. 4:185-188.

Cai, L., Ma, D., Zhang, Y., Liu, Z., Wang, P. 2012. The effect of coffee consumption on serum lipids: a meta-analysis of randomized controlled trials. *European Journal of Clinical Nutrition*. 66: 872–877.

Camont, L., Chapman, M.J., Kontush, A. 2011. Biologi aktivitas sub-populasi HDL dan relevansinya dengan penyakit kardiovaskular. *Trend in Molecular Medicine*. 17 : 594-603.

Cano-marquina, A., Tarin, J.J., Cano, A. 2013. The impact of coffee on health. *Maturitas*. 75: 7-21.

Caspersen, C.J., Powell, K.E., Christenson, G.M. 1985. Physical activity, exercise, and physical fitness: Definitions and Distinctions for Health-Related Research. *Public Health Report*. 100: 126-131.

Choi, B.K., Park, S.B., Lee, D.R., Lee, H.J., Jin, Y.Y., Yang, S.H., *et al*. 2016. Green coffee bean extract improves obesity by decreasing body fat in high-fat diet-induced obese mice. *Asian Pacific Journal of Tropical Medicine*. 9: 635-643.

Church, D.D., Hoffman, J.R., LaMonica, M.B., Riffe, J.J., Hoffman, M.W., Baker. K.M., *et al*. 2015. The effect of an acute ingestion of Turkish coffee on reaction time and time trial performance. *Journal of The International Society of Sport Nutrition*. 12:37.

Coelho, D.F., Pereira-Lancha, L.O., Chaves, D.S., Diwan,D., Ferraz, R., Campos-Ferraz, P.L., *et al*. 2011. Effect of high-fat diets on body composition, lipid metabolism and insulin sensitivity, and the role of exercise on these parameters. *Brazilian Journal of Medical and Biological Research*. 44: 966-972.

Colberg, S.R., Sigal, R.J., Fernhall, B., Regensteiner, J.G., Blissmer, B.J., Rubin, R.R., *et al*. 2010. Exercise and type 2 diabetes. *American Diabetes Association*. 33 : e147-e167.

Costanzo, L.S. 2014. Physiology . Fifth Edition. Saunders Elsevier

Cox, R.A., García-Palmieri, M.R. 1990. Cholesterol, triglycerides, and associated lipoproteins. In: Walker HK, Hall WD, Hurst JW, editors. Clinical Methods: The History, Physical, and Laboratory Examinations. 3rd edition. Boston: Butterworths. Chapter 31.

Cunha, F. A., Farinatti, P. E., Midgley, A. W. 2011. Methodological and practical application issues in exercise prescription using the heart rate reserve and oxygen uptake reserve methods. *Journal of Sciense and Medicine in Sport*. 14:46-57.

Deeb, S.S., Zambon, A., Carr, M.C., Ayyobi, A.F., Bruzell, J.D. 2003. Lipase of the liver and dyslipidemia: the interaction between genetic variants, obesity, gender, and diet. *Lipid Research Journal*. 44: 1279-1286.

Devlin, T.M. 2006. Textbook of biochemistry with Clinical Correlations. Sixth Edition. Wiley-Liss.

Eren, E., Yilmaz, N., Aydin, O. 2012. High density lipoprotein and dysfunction. *The open biochemistry journal*. 6: 78-93.

FAO. 2010. http://www.fao.org/docrep/006/y5143e/y5143e0v.htm [Akses 08.11.17].

Farah, A., Monteiro, M., Donangelo, C.M., Lafay, S. 2008. Chlorogenic acids from green coffee extract are highly bioavailable in humans. *The Journal of Nutrition*. 138: 2309-2315.

Feingold, K.R and Grunfeld. C. 2000. Role of Glucose and Lipids in the Cardiovascular Disease of Patients with Diabetes. [Updated 2016 Sep 29]. In: De Groot, L.J., Chrousos, G., Dungan, K. *et al*., editors. Endotext [Internet]. South Dartmouth (MA): MDText.com, Inc.

Festing, M., Baumans, V., Combes, R., Halder, M., Hendriksen, C., Howard, B., *et al*. 1998. Reducing the use of laboratory animals in biomedical research:problem and possible solutions. *ATLA*. 26:283-291.

Freeman, M.W and Walford, G.A. 2016. Endocrinology: Adult and Pediatric. Seven Edition. Elsevier

Gill, J.M.R and Hardman, A.E. 2003. Exercise and postprandial lipid metabolism: an update on potential mechanisms and interactions with high-carbohydrate diets (review). *The Journal of Nutritional Biochemistry*. 14: 122-132.

Goodman, D.S., Hulley, S.B., Clark, L.T., Davis, C.E., Fuster, V., LaRosa, J.C., *et al*. 1988. Report of the National Cholesterol Education Program Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults. *Archives of internal medicine*.148 : 36-69.

Gordon, B., Chen, S., Durstine, J.L. 2014. Effects of exercise exercises on traditional lipid profiles and beyond. *The latest sports medicine report*. 13: 253-259.

Govers, R. 2014. Molecular mechanisms of GLUT4 regulation in adipocytes Mécanismes moléculaires de la régulation de GLUT4 dans l'adipocyte. *Diabetes & Metabolism*: 40:400-410.

Guyton, A.C and Hall, J.E .2006. Textbook of Medical Physiology: For preview purpose only. Eleventh Edition. Elsevier Saunders.

Ha, M.S., Kim, J.H., Kim, Y.S., Kim, D.Y. 2017. Effects of aquarobic exercise and burdock intake on serum blood lipids and vascular elasticity in Korean elderly women. *Experimental Gerontology*. 101: 63-68.

Haidari, F., Samadi, M., Mohammadshahi, M., Jalali, M.T., Engali, K.A. 2017. Energy restriction combined with green coffee bean extract affects serum adipocytokines and the body composition in obese women. *Asia Pacific jounal of clinical nutrition*. 26: 1048-1054.

Hariri, N and Thibault, L. 2010. High fat diet induced obesity in animal models. *Nutrition Research Reviews*. 23 : 270-299.

Hegele, R.A., Ginsberg, H.N., Chapman, M.J. 2014. The polygenic nature of hypertriglyceridaemia: implications for definition, diagnosis, and management. *Lancet Diabetes Endocrinol*. 2: 655–666

Hers, H.G. 1990. Mechanisms of blood glucose homeostasis. *Journal of Inherited Metabolic Disease*. 13:395-410.

Yoshida, H and Kisugi, R. 2010. Mechanisms of LDL oxidation. *Clinica Chimica Acta*. 411: 1875-1882.

Ho, L., Varghese, M., Wang, J., Zhao, W., Chen, F., Knable, L.A., Ferruzzi, M., Pasinetti, G.M. 2012. Dietary supplementation with decaffeinated green coffee improves diet-induced insulin resistance and brain energy metabolism in mice. *Nutritional Neuroscience*.15: 37-45.

Holesh, J.E and Bhimji, S.S. 2017. Dietary, Carbohydrates. [Updated 2017 Oct 5] .In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing.

Huang, S and Czech, M.P. 2007. The GLUT4 Glucose Transporter. *Cell Metabolism*. 5: 237-252.

Ihedioha, J.I., Noel-Uneke, O.A., Ihedioha, T.E. 2013. Reference values for the serum lipid profile of albino rats (*Rattus norvegicus*) of varied ages and sexes. *Comparative Clinical Pathology*. 22:93–99

International Coffee Organization. 2013. 50 years serving the world coffee community. 22 Berners Street – London W1T 3DD – United Kingdom.

Jeszka-Skowron, M., Zgola-Grzeskowiak, A., Waskiewicz, A., Stepien, L., Stanisz, E. 2017. Positive and negative aspects of green coffee consumption - antioxidant activity versus mycotoxins. *Journal of the Science of Food and Agriculture*. 97:4022-4028.

Kamani, C. H., Gencer, B., Montecucco, F., Courvoisier, D., Vuilleumier, N., Meyer, P., *et al*. 2015. Stairs instead of elevators at the workplace decreases PCSK9 levels in a healthy population. *European Journal of Clinical Invertigation*. 45: 1017-1024.

Kazeminasab, F., Marandi, M., Ghaedi, K., Esfarjani, F., Moshtaghian, J. 2017. Effects of a 4-week aerobic exercise on lipid profile and expression of LXRα in rat liver. *Cell Journal*. 19: 45–49

Kementrian Kesehatan Republik Indonesia. 2017. Heart Disease The Highest Cause of Death, Ministry of Health Reminds CERDIK. Di akses maret 2018. http://www.depkes.go.id/article/view/17073100005/penyakit-jantung-penyebab-kematian-tertinggi-kemenkes-ingatkan-cerdik-.html

Khojah, E.Y. 2016. Effect of arabic and green coffee beans on lowering lipid profile parameters in male rats. *Australian Journal of Basic and Applied Sciences*. 10 : 310-317.

Klop, B., Elte, J.W.F., Cabezas, M.C. 2013. Dyslipidemia in obesity: mechanisms and potential targets. *Nutrients*. *5*: 1218-1240.

Kobayashi, J., Nohara, A., Kawashiri, M. A., Inazu, A., Koizumi, J, Nakajima, K., *et al*. 2007 . Serum lipoprotein lipase mass: clinical significance of its measurement. *Clinica Chimica Acta; International Journal of Clinical Chemistry*. 378: 7–12.

Kontush, A and Chapman, M.J. 2008. Why is HDL functionally deficient in type 2 diabetes?. *Current Diabetes Report*. 8: 51-59.

Kregel, K.C., Allen, D,L., Booth, F.W., Fleshner, M.R., Henriksen, E.J., Musch, T.I., *et al*. 2006. Resource book for the design of animal exercise protocols. American Physiological Society

Li, W.N., Han, Y.D., Liu, Y. H., *et al*. 2012. Effects of Chlorogenic acid extract from leaves of Eucommia ulmoides on key enzyme activities in lipid metabolism. *Traditional Chinese Drug Research and Clinical Pharmacology*. 23: 30 –33.

Li, S.Y., Chang, C.Q., Ma, F.Y., Yu, C.L. 2009. Modulating effects of chlorogenic acid on lipids and glucose metabolism and expression of hepatic peroxisome proliferator-activated receptor-*α* in golden hamsters fed on high fat diet. *Biomedical and Environmental Sciences*. 22: 122 –129.

Lira, F.S., Carnevali, L.C., Zanchi, N.E., Santos, R.V., Lavoie, J.M., Seelaender, M. 2012. Exercise Intensity Modulation of Hepatic Lipid Metabolism. *Journal of Nutrition and Metabolism*. 2012:1-8

Lira, F.S., Zanchi, N.E., Lima-Silva, A.E., Pires, F.O., Bertuzzi, R.C., Santos, R.V., Caperuto, E.C., Kiss, M.A., Seelaender, M. 2009. Acute high-intensity exercise with low energy expenditure reduced LDL-c and total cholesterol in man. *European Journal of Applied Physiology.* 107: 203-210.

Ludgero-Correia, A., Aguila, M.B., Mandarim-de-lacerda, C.A., Faria, T.S. 2012. Effects of high-fat diet on plasma lipids, adiposity, and inflammatory markers in ovariectomized C57BL/6 mice. *Nutrition*. 28: 316-323.

Ludwig, I.A., Clifford, M.N., Lean, M.E., Ashihara, H., and Crozier, A. 2014. Coffee: biochemistry and potential impact on health. *Food & Function.* 5:1695-717.

Madariaga, Y.G., Cárdenas, M.B., Irsula, M.T., Alfonso, O.C., Cáceres, B.A., Morgado, E.B. 2015. Assessment of four experimental models of hyperlipidemia. *Lab Animal*. 44 :135-140.

Mangal, S.K. 2007. Coffee Planting, Production & Processing. Gene-Tech Book. India.

Mann, S., Beedie, C., Jimenez, A. 2014. Differential effects aerobic exercise, resistance training and modality integrated exercise on cholesterol and lipid profile: Review, synthesis and recommendations. *Sports Medicine*. 44: 211-221.

Marliss, E.B and Vranic, M. 2002. Intense exercise has unique effects on both insulin release and its roles in glucoregulation: implications for diabetes. *Diabetes*. 1: 271-281

McCarty, M. F. 2005. Nutraceutical resources for diabetes prevention—an update. *Medical Hypotheses*. 64 :151–158.

Meng, S., Cao, J., Feng, Q., Peng, J., Hu, Y. 2013. Roles of chlorogenic acid on regulating glucose and lipids metabolism: A Review. *Evidence-based Complementary and Alternative Medicine*. Article ID 801457.

Miele, E.M., Headley, S.A., Germain, M., Joubert, J., Herrick, S., Milch, C., *et al*. 2017. High-density lipoprotein particle pattern and overall lipid responses to a short-term moderate-intensity aerobic exercise training intervention in patients with chronic kidney disease. *Clinical Kidney Journal*. 10: 524–531.

Miller, M., Stone, N.J., Ballantyne, C., Bittner, V., Criqui, M.H., Ginsberg, H.N., *et al*. 2011. Triglycerides and cardiovascular disease: a scientific statement from the American Heart Association. *Circulation*. 123: 2292-2333.

Moon, J., Yoo, H.S., Shibamoto, T. 2009. Role of roasting condition in the level of Chlorogenic Acid content in coffee beans: Correlation with coffee acidity. *Journal of Agricultural and Food Chemistry*. 57: 5365-5369.

Moraska, A., Deak, T., Spencer, R.L., Roth, D., Fleshner, M. 2000. Treadmill running produces both positive and negative physiological adaptations in Sprague-Dawley rats. *American journal of physiology*, *Regulatory, Integrative and Comparative Physiology*. 279: 1321-1329.

Mouri, M.I., Bhimji, S.S. 2017. Hyperglycemia. [Updated 2017 Apr 16]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing.

Movahed, A., Gnanasegaran, G., Buscombe, J., Hall, M. 2009. Integrating Cardiology for Nuclear Medicine Physicians : A Guide to Nuclear Medicine Physicians. Springer.

Mul, J.D., Stanford, K.I., Hirshman, M.F., Goodyear, L.J. 2016. Exercise and regulation of carbohydrate metabolism. *Progress in Molecular Biology and Translational Science*. 135: 17-37.

Munshi, R.P., Joshi, S.G., Rane, B.N. 2014. Development of an experimental diet model in rats to study hyperlipidemia and insulin resistance and markers for coronary heart disease. *Indian Journal of Pharmacology*. 46 : 270-276

Nair, A.B and Jacob, S. 2016. A simple practice guide for dose conversion between animals and human. *Journal of Basic and Clinical Pharmacy*. 7: 27-31.

National Institutes of Health, National Heart, Lung, and Blood Institute. 2006. Your Guide To Physical Activity and Your Heart. U.S. Department Of Health And Human Services.

Naveed, M., Hejazi, V., Abbas, M., Kamboh, A.A., Khan, G.J., Shumzaid, M., *et al*. 2018. Chlorogenic acid (CGA): A pharmacological review and call for further research. *Biomedicine & Pharmacotherapy*. 97: 67-74.

Nelson, D.L and Cox, M.C. 2005. Lehninger Principles of Biochemistry. Edisi 4. New York.

Ni, W.Q., Liu, X.L., Zhuo, Z.P., Yuan, X.L., Song, J.P., Chi, H.S., *et al*. 2014. Serum lipids and associated factors of dyslipidemia in the adult population in Shenzhen. *Lipids in Health and Disease*. 14: 71-81.

Onakpoya, I., Terry, R., Ernst, E. 2011. The use of green coffee extract as a weight loss supplement: A systematic review and meta-analysis of randomised clinical trials. *Gastroenterology Research and Practice*. Pii: 382852.

Ong, K.W., Hsu, A., Tan, B.K. 2012. Chlorogenic acid stimulates glucose transport in skeletal muscle via AMPK activation: a contributor to the beneficial effects of coffee on diabetes. *PLoS ONE*. 7: e32718.

Ong, K.W., Hsu, A., Tan, B.K. 2013. Anti-diabetic and anti-lipidemic effects of chlorogenic acid are mediated by ampk activation. *Biochemical Pharmacology*. 85: 1341-1351.

Ou, S.M., Chen, Y.T., Shih, C.J., Tarng, D.C. 2017. Impact of physical activity on the association between lipid profiles and mortality among older people. *Scientific Reports*. 7: 8399.

Palaparthi, S. 2017. Role of Homeostasis in Human Physiology: A Review. *Journal of Medical Physiology & Therapeutics*. 1: 101-105.

Pedersen, B and Saltin, B. 2006. Evidence for prescribing exercise as therapy in chronic disease. *Scandinavian Journal of Medicine and Science in Sports*. 16 : 3 -63

Preedy, V.R. 2015. Coffee in Health and Disease Prevention. Department of Nutrition and Dietetic, King's College London, UK. Elsevier.

Priftis, A., Stagos, D., Konstantinopoulos, K., Tsitsimpikou, C., Spandidos, D.A., Tsatsakis, A.M., Tzatzarakis, M.N., Kouretas, D. 2015. Comparison of antioxidant activity between green and roasted coffee beans using molecular methods. *Molecular Medicine Reports*. 12: 7293-7302.

Proeyen, K.V., Szlufcik, K., Nielens, H., Pelgrim, K., Deldicque, L., Hesselink, M., *et al*. 2010. Training in the fasted state improves glucose tolerance during fat-rich diet. *Journal of Physiology*. 588: 4289-4302.

Qasem, R.J., Li, J., Tang, H.M., Browne, V., Mendez, C., Yablonski, E., *et al*. 2015. Decreased liver triglyceride content in adult rats exposed to protein restriction during gestation and lactation: role of hepatic triglyceride utilization. *Clinical and Experimental Pharmacology & Physiology*. 42: 380-388.

Raguso, C.A., Coggan, A.R., Gastaldelli, A., Sidossis, L.S., Bastyr, E.J., Wolfe, R.R. 1995. Lipid and carbohydrate metabolism in IDDM during moderate and intense exercise. *Diabetes*. 44:1066–1074.

Raj, C.D., Jayanthi, V., Manaswini, V.S., Gayathri, R., Ranjani, C., Brindha, P. 2012. Effect of polyherbal formulation (ob-6) on high fat diet induced hyperlipidemia in rats. *International Journal of Pharmacy and Pharmaceutical Sciences*. 4: 31-35.

Rakvaag, E and Dragsted, L.O. 2016. Acute effects of light and dark roasted coffee on glucose tolerance: a randomized, controlled crossover trial in healthy volunteers. *European Journal of Nutrition*. 55: 2221-2230.

Riddell, M. C and Perkins, B. A. 2006. Type 1 diabetes and exercise. Part I: applications of exercise physiology to patient management during vigorous activity. *Canadian Journal of Diabetes*. 30: 63–71.

Riddell, M and Perkins, B. A. 2009. Exercise and glucose metabolism in persons with diabetes mellitus: Perspectives on the role for continuous glucose monitoring. *Journal of Diabetes Science and Technology*. 3: 914-923.

Riset Kesehatan Dasar. 2013. Badan Penelitian Dan Pengembangan Kesehatan Kementerian Kesehatan Republik Indonesia.

Riwanto, M and Landmesser, U. 2013. High density lipoproteins and endothelial functions: mechanistic insights and alterations in cardiovascular disease. *The Journal of Lipid Research*. 54: 3227-3243

Roder, P.V., Wu, B., Liu, Y., Han, W. 2016. Pancreatic regulation of glucose homeostasis. *Experimental & Molecular Medicine*. 48: e219

Roebuck, B. D., McCaffrey, J., and Baumgartner, K. 1990. Protective effects of voluntary exercise during the postinitiation phase of pancreatic carcinogenesis in the rat. *Cancer Research*. 50: 6811–6816.

Roshan, H., Nikpayam, O., Sedaghat, M., Sohrab, G. 2018. Effects of green coffee extract supplementation on anthropometric indices, glycaemic control, blood pressure, lipid profile, insulin resistance and appetite in patients with the metabolic syndrome: a randomised clinical trial. *British Journal of Nutrition*. 119: 250-258.

Sa'adah., N.N., Purwani., K.I., Nurhayati., A.P.D., Ashuri., N.M. 2017. Analysis of lipid profile and atherogenic index in hyperlipidemic rat (*Rattus norvegicus* Berkenhout, 1769) that given the methanolic extract of parijoto (*Medinilla speciosa*). *Proceeding of International Biology Conference.* 020031:1-8.

Santana-Galvez, J., Jacob-Velazquez, D.A., Cisneros-Zevallos, L. 2017. Chlorogenic acid: Recent advances on its dual Role as a food additive and a nutraceutical against metabolic syndrome. *Molecules*. 22: 358.

Schwab D., Herling, A.W., Hemmerle, H., Schubert, G., Hagenbuch, B., Burger, H.J. 2001. Hepatic uptake of synthetic chlorogenic acid derivatives by the organic anion transport proteins. *Journal of Pharmacology and Experimental Therapeutic*. 296: 91-98.

Shaheen, H.A., Alpert, P.T., Navalta, J., Tandy, R.D., Young, J.C., Santo, A.S. 2014. The effect of acute endurance exercise on lipoproteins: a comparison of the nuclear magnetic resonance technique with the conventional lipid profile in healthy men. *Applied Physiology, Nutrition and Metabolism*. 39: 233-237.

Shahmohammadi, H.A., Hosseini, S.A., Hajiani, E., Charity, S.M., Alipour, M. 2017. Effect of green coffee bean extract supplement on patients with non-alcoholic fatty liver disease: Randomized Clinical Trial. *Hepatitis Monthly*. 17: e12299.

Shaodong, C., Haihong, Z., Manting, Lin., Guohui, Li., Zhengxiao, Z., Zhang, Y.M. 2013. Research of influence and mechanism of combining exercise with diet

control on a model of lipid metabolism rat induced by high fat diet. *Lipids in Health and Disease*. 12: 21-23.

Sherwood, L.2014. Human Physiology : From Cells to System. Ninth Edition. Cengage Learning.

Shimoda, H., Seki, E., Aitani, M. 2006. Inhibitory effect of green coffee bean extract on fat accumulation and body weight gain in mice. *BMC Complementary and Alternative Medicine*.6: article 9.

Smith, J. D. 2010. Dysfunctional HDL as a diagnostic and therapeutic target. *Arteriosclerosis, Thrombosis, and Vascular biology*. 30 : 151–155.

Silverthorn, D.U., Johnson, B.R., Ober, W.C., Garrison, C.W., Silverthorn, A.C. 2013. Human Physiology: an Integrated approach. Sixth Edition. Pearson.

Storlien, L. H., Higgins, J. A., Thomas, T. C., Brown, M. A., Wang, H. Q., Huang, X. F., *et al*. 2000. Diet composition and insulin action in animals models. *British Journal of Nutrition*. 83: S85-S90.

Suárez-García, S., del Bas, J.M., Caimari, A., Escorihuela, R.M., Arola, L., Suárez, M. 2017. Impact of a cafeteria diet and daily physical training on the rat serum metabolome. *PLoS ONE*. 12 : e0171970.

Sudeep, H.V., Venkatakrishna, K., Patel, D., Shyamprasad, K. 2016. Biomechanism of chlorogenic acid complex mediated plasma free fatty acid metabolism in rat liver. *BMC Complementary and Alternative Medicine*. 16: article 274.

Subramanian, S and Chait, A. 2012. Hypertriglyceridemia secondary to obesity and diabetes. *Biochimica et Biophysica Acta*. 1821: 819-825.

Suk, M and Shin, Y. 2015. Effect of high-intensity exercise and high-fat diet on lipid metabolism in the liver of rats. *Journal of Exercise Nutrition & Biochemistry*. 19: 289-295.

Souza, R.M. 2008. Plant-Parasitic Nematodes of Coffee. Universidade Estadual do Norte Fluminense Darcy Ribeiro, Brazil. Springer.

Song, S.J., Choi, S., Park, T. 2014. Decaffeinated green coffee bean extract attenuates diet-induced obesity and insulin resistance in mice. *Evidence-Based Complementary and Alternative Medicine.* Article ID 718379.

Tajik, N., Tajik, M., Mack, I., Enck, P. 2017. The potential effects of chlorogenic acid, the main phenolic components in coffee, on health: a comprehensive review of the literature. *European Journal of Nutrition*. 56: 2215-2244

Tao, C., Sifuentes, A., Holland, W. 2014. Regulation of glucose and lipid homeostasis by adiponectin: Effects on hepatocytes, pancreatic β cells and adipocytes. *Best Practice & Research: Clinical Endocrinology & Metabolism.* 28: 43-58.

Thirumalai, T., Tamilselvan, N., David, E. 2014. Hypolipidemic activity of *Piper betel* in high fat diet induced hyperlipidemic rat. *Journal of Acute Disease*. 3: 131-135.

Toda, K., Oshida, Y., Tokudome, M., Manzai, T., Sato, Y. 2002. Effects Of moderate exercise on metabolic responses and respiratory exchange ratio (Rer). *Nagoya Journal of Medical Science.* 65: 109-113.

Tomas, E.T., Zorzano, A., Ruderman, N.B. 2002. Exercise and insulin signaling: a historical perspective. *Journal of Applied Physiology*. 93: 765-772.

Tortora, G.J and Derrickson, B. 2014. Principles of Anatomy & Physiology. Fourteenth Edition. Wiley.

Trapani, L., Segatto, M., Pallottini, V. 2012. Regulation and deregulation of cholesterol homeostasis: The liver as a metabolic "power station". *World Journal of Hepatology*. 4: 184-190.

Vanhees, L., Geladas, N., Hansen, D., Kouidi, E., Niebauer, J., Reiner, Z., *et al*. 2012. Importance of characteristics and modalities of physical activity and exercise in the management of cardiovascular health in individuals with cardiovascular risk factors: recommendations from the EACPR (Part II). *European Journal of Preventive Cardiology*. 19: 1005-1033.

Volkmann, E.R., Grossman, J.M., Sahakian, L.J., Skaggs, B.J., FitzGerald, J., Ragavendra, N., *et al.* 2010. Low physical activity is associated with proinflammatory high-density lipoprotein and increased subclinical atherosclerosis in women with systemic lupus erythematosus. *Arthritis Care & Research (Hoboken)*. 62: 258-265.

Wan, C.W., Wong, C.N., Pin, W.K., Wong, M.H., Kwok, C.Y., Chan, R.Y., *et al*. 2013. Exhibits cholesterol lowering and fatty liver attenuating properties by up-regulating the gene expression of PPAR-α . *Phytotherapy Research*. 27: 545 –551.

Wang, J.C., Gray, N.E., Kuo, T., Harris, C.A. 2012. Regulation of triglyceride metabolism by glucocorticoid receptor. *Cell & Bioscience*. 2: 19-27.

Wang, J.H., Liu, Y.L., Li, C.L., *et al*. 2012. Effect of chlorogenic acid extracted from Eucommia Ulmoides Oliv on hyperlipemia of mice induced by high fat diet. *Science and Technology of Food Industry*. 15: 360–362.

Wang, Y and Xu, D. 2017. Effects of aerobic exercise on lipids and lipoproteins. *Lipids in Health and Disease*. 16: 132.

Wasserman, D. H and Zinman, B. 1994. Exercise in individuals with IDDM. *Diabetes Care*. 17: 924–937.

White, B.A and Porterfield, S.P. 2013. Endocrine and Reproductive Physiology. fourth Edition. Elsevier Mosby.

WHO. 2017. http://www.who.int/topics/physical_activity/en/ Akses 08.11.17.

Yilmaz, N., Aydin, O., Yegin, A., Tiltak, A., Eren, E. 2011. Increased levels of total oxidant status and decreased activity of arylesterase in migraineurs. *Clinical Biochemistry*. 2011. 44:832–837.

Ying, H.Z., Yu, C.H., Wang, Z.Y., Yu, B., Zang, J.N., Liu, Y.H. 2012. Characterization and mechanisms of lipid metabolism in high-fat diet induced hyperlipidemia in Mongolian gerbil (*Meriones unguiculatus*). *African Journal of Biotechnology*. 11: 16347-16352

Younk, L. M., Mikeladze, M., Tate, D., Davis, S.N. 2011. Exercise-related hypoglycemia in diabetes melitus. *Expert Review of Endocrinology and Metabolism*. 6: 93-108.

Yukawa, G.S., Mune, M., Otani, H., Tone, Y., Liang, X.M., Iwahashi, H., *et al*. 2004. Effects of coffee consumption on oxidative susceptibility of low-density lipoproteins and serum lipid levels in humans. *Biochemistry*. 69: 70-74.

Zanuso, S., Jimenez, A., Pugliese, G., Corigliano, G., Balducci, S. 2010. Exercise for the management of type 2 diabetes: a review of the evidence. *Acta Diabetologica*. 47: 15-22.

Zhang, Y., Xu, D., Huang, H., Chen, S., Wang, L., Zhu, L., *et al*. 2014. Regulation of glucose homeostasis and lipid metabolism by PPP1R3G-mediated hepatic glycogenesis. *Molecular Endocrinology*. 28: 116 –126.

Zhang, X., Wu, C., Wu, H., Sheng, L., Su, Y., Zhang, X., *et al*. 2013. Anti-hyperlipidemic effects and potential mechanisms of action of the Caffeoylquinic acid-rich Pandanus tectorius fruit extract in hamsters fed a high fat-diet. *PLoS ONE*. 8: e61922.

Zhong, H., Chen, K., Feng, M., Shao, W., Wu, J., Chen, K., *et al*. 2018. Genipin alleviates high-fat diet-induced hyperlipidemia and hepatic lipid accumulation in mice via miR-142a-5p/SREBP-1c axis. *The FEBS Journal* 285: 501-517.

Zhukova, N.V., Novgorodtseva, T.P., Denisenko, Y.K. 2014. Effect of the prolonged high-fat diet on the fatty acid metabolism in rat blood and liver. *Lipids in Health and Disease*. 13:49- 56.