

DAFTAR PUSTAKA

- Adam, C. L., P. A. Williams, K. E. Garden, L. M. Thomson, A. W. Ross. 2015. Dose Dependent Effects of a Soluble Dietary Fibre (Pectin) on Food Intake, Adiposity, Gut Hypertrophy and Gut Satiety Hormone Secretion in Rats. *PLos One* 10 (1): 1-14
- Adiputro D, Khotimah H, Widodo M, Romdoni R, Sargowo D. 2013. Effects of ethanolic extracts of *Garcinia mangostana* fruit pericarp on antioxidant status and foam cells in antherosclerotic rats. *J Exp Integr Med*.
- Andreas, N. M., Gitte, H., Sarah, J. P., Kirsten, L., Mads, T., C., Harald, S. H., Barry, E. L., Philip, J.L., Lotte, B.K., Keld, F. and Niels,V. 2010. Long-term characterization of the diet-induced obese and diet-resistant rat model: a polygenetic rat model mimicking the human obesity syndrome. *Journal of Endocrinology* 206: 287–296.
- Anik, H. 2010. *Manfaat Serat dalam Menu Makanan*. Universitas Mercu Buana. Jakarta.
- Ayuningati, L. K., Dwi Murtiastutik, Marsoedi Hoetomo. 2018. Perbedaan Kadar Malondialdehid (MDA) pada Pasien Dermatitis Atopik dan Nondermatitis Atopik. *Berkala Ilmu Kesehatan Kulit dan Kelamin-Periodical of Dermatology and Venereology* 30 (1).
- Azman, F.K., Zulkhairi, A., Azrina, A., Norhaizan, M. E., Rasadah, M.A., Zamree, M. S. dan Khairul, K. A. K. 2012. Antiobesity Effect Of *Tamarindus Indica* L. Pulp Aqueous Extract In High-Fat Diet Induced Obese Rats. *The Japanes Society of Pharmacognosy and Springer* 66: 333-342.

Badan Penelitian dan Pengembangan Kesehatan Kementerian Kesehatan RI. Riset kesehatan dasar (Riskesdas 2013). Jakarta: Kemenkes RI; 2013.

Bahadoran, Z., Mirmiran, P., Hosseini-Esfahani, F. and Azizi, F. 2013. Fast food consumption and the risk of metabolic syndrome after 3-years of follow-up: Tehran Lipid and Glucose Study. *Eur. J. Clin. Nutr* 67: 1303–1309.

Bartelt, A., Bruns, O.T., Reimer, R., Hohenberg, H., Ittrich, H., Peldschus, K. 2011. Brown adipose tissue activity controls triglyceride clearance. *Nat Med* 17: 200–205.

Buckman, E. S., Ibok Odoro, Wisdom A. Plahar, Charles Tortoe. 2018. Determination of The Chemical and Functional Properties of Yam Bean (*Pachyrhizus erosus* (L.) Urban) Flour For Food Systems. *Food Sci Nutr* (6): 457–463. DOI: 10.1002/fsn3.574.

Buffenstein R, Edrey YH, Yang T, Mele J. 2006. The oxidative theory of aging: embattled or invincible? Insight from non-traditional model organisms. *Age* 30: 99-109.

Chalasani N, Youbossi Z, Lavine JE, Diehl AM, Brunt EM, Cusi K. 2012. The diagnosis and management of non-alcoholic fatty liver disease: practice guideline by the American Association for the Study of Liver Disease, American College of Gastroenterology, and the American Gastroenterological Association. *Hepatology* 55(6): 2005–23.

Chambers, E. S., T. Preston, G. Frost, dan D. J. Morrison. 2018. Role Of Gut Microbiota-Generated Short-Chain Fatty Acids in Metabolik and Cardiovascular Health. *Current Nutrition Reports* 7: 198–206.

Chelikani. 2004. Loewen PC Diversity of structures and properties among catalases. *Cell Mol Life Sci* 61: 192–208.

Cherbut, C. 2002. Inulin and oligofructose in the dietary fibre concept. *British Journal of Nutrition* 87(2): 159–162.

Chung, A.P.Y.S, Gurtu, S., Chakravarthi, S., Moorthy, M., and Palanisamy, U.D. 2018. Geraniin Protects High-Fat-Diet Induced Oxidative Stress in Sparague Dwaley Rats. *Frontiers in Nutrition* 5: 17. doi:10.3389/fnut.

Cordain L, Eaton SB, Sebastian A, Mann N, Lindeberg S, Watskin BA, O’Keefe JH, Brand-Miller J. 2005. Origin and evolution of the wetern diet: health implication for the 21st century. *Am J Clin Nutr* 81(2): 341-354.

Daubioul,C., Wispelaere, L., Taper, H., Delzenne, N. 2000. Dietary oligofructose lessens hepatic steatosis, but does not prevent hypertriglyceridemia in obese Zucker rats. *Journal of Nutrition* 130: 1314–1319.

Du, H. 2010. Dietary fiber and subsequent changes in body weight and waist circumference in European men and women. *Am J Clin Nutr* 91: 329–336.

Ellis, T.P., Wright, A.G., Clifton, P.M., Ilag, L.L. 2016. Postprandial insulin and glucose levels are reduced in healthy subjects when a standardised breakfast meal is supplemented with a filtered sugarcane molasses concentrate. *Eur J Nut* 55(8): 2365-2376.

Fahmi, M., Yudha Fahrimal, Dwinna Aliza , Hamdani Budiman , Siti Aisyah, dan Muhammad Hambal. 2015. Gambaran Histopatologis Hati Tikus (*Rattus novergicus*) yang Diinfeksi *Trypanosoma evansi* Setelah Pemberian Ekstrak Kulit Batang Jaloh (*Salix tetrasperma* Roxb). *Jurnal Medika Veterinaria* 9(2): 141-145.

Fadhilah, Q. 2019. Pengaruh Serat Bengkuang (*Pachyrhizus erosus* L.) terhadap Perkembangan Obesitas pada Mencit Putih Jantan (*Mus musculus* L.) yang diberi pakan berlemak tinggi. *Skripsi*. Universitas Andalas. Padang.

Farhana, N. 2017. Pengaruh Pemberian Kutu Jepang (*Tenebrio Molitor*) Terhadap Kadar *Superoxide Dismutase* (SOD) Darah Studi Eksperimental Pada Tikus Putih Jantan Galur *Sprague Dawley* yang Diinduksi Diet Tinggi Lemak. *Skripsi*. Fakultas Kedokteran Universitas Islam Sultan Agung. Semarang.

Farrell GC, Larter CZ. 2006. Non-alcoholic fatty liver disease: from steatosis to cirrhosis. *Hepatology* 43(2 Suppl 1): S99-S112

Galisteo, M., Duarte, J., Zarzuelo, A. 2008. Effects of dietary fibers on disturbances clustered in the metabolic syndrome. *J Nutr Biochem* 19: 71–84.

Gao, M., Ma, Y., Liu, D. 2015. High-Fat Diet- Induced Adiposity, Adipose Inflammation, Hepatic Steatosis and Hyperinsulinemia in Outbred CD-1 Mice. *Plos one* 10(3): e0119784.

Gill S.K., M. Rossi, B. Bajka dan K. Whelan. 2020. Dietary Fibre in Gastrointestinal Health and Disease. *Nature Reviews Gastroenterology & Hepatology*.

Grooms, K. N., Ommerborn, M. J., Pham, D. Q., Djousse, L. & Clark, C. R. 2013. Dietary fiber intake and cardiometabolic risks among US adults, NHANES 1999-2010. *Am. J. Med* 126: 1059–1067.

Guyton, A. C., dan Hall, J. E. 2011. *Textbook of Medical Physiology 12ed.* [e-book]. Saunders and Elsevier Inc. USA

- Haggag MESY, Elsanhoty RM, Ramadan MF. 2014. Impact of dietary oils and fats on lipid peroxidation in liver and blood of albino rats. *Asian Pac J Trop Biomed* 4 (1): 52-8.
- Hamdaoui, L., Naifar, M., Rahmouni, F., Ayadi, F., Rebai, T. 2019. Sub-chronic exposure to Kalach 360 SL-induced damage in rats' liver and hematological system. *Environmental Science and Pollution Research*
- Hariato, C. E. W., Hasian, T., Widyaningsih, T. D. 2018. Uji Hepatoprotektor Ekstrak Bawang Lanang Pada Tikus Wistar Jantan yang Diinduksi Paracetamol. *Jurnal Pangan dan Agroindustri* 6(4): 1-10.
- Johnson AM, Olefsky JM. 2013. The origins and drivers of insulin resistance. *Cell* 152 (4): 673-84. doi: 10.1016/j.cell.2013.01.041.
- Karundeng, R., Wangko, S., Kalang, S.J.R. 2014. Jaringan Lemak Putih dan Jaringan lemak coklat, aspek histofisiologi. *Jurnal Biomed* .6(3): S8-16.
- Kumalasari, I.D., Nishi, K., Harmayani E., Raharjo S., Sugahara T. 2014. Immunomodulatory activity of Bengkoang (*Pachyrhizus erosus*) fiber extract *in vitro* and *in vivo*. *Cytotechnology* 66: 75–85.
- Karuniawan, A dan Wicaksana, N. 2006. *Kekerabatan Genetik Populasi Bengkuang (Pachyrhizus erosus). Berdasarkan Karakter Morfologi Bunga dan Daun.* Buletin Agron.
- Li, X., Guo, J., Ji, K., Zhang, P. 2016. Bamboo shoot fiber prevents obesity in mice by modulating the gut mmicrobiota. *Scientific Reports* 6: 32953.
- Lingga, L. 2012. The Healing Power of Antioxidant. Jakarta: *PT Elex Media Komputindo*. Hal:1-6, 26-28.

Lu, J.-M., Lin, P. H., Yao, Q. & Chen, C. 2010. Chemical and Molecular Mechanisms of Antioxidants: Experimental Approaches and Model Systems. *J. Cell. Mol. Med.*, 14(4), pp. 840-860.

Masek, T., Filipovic, N., Vuica, A., Starcevic, A. 2017. Effects of treatment with sucrose in drinking water on liver histology, lipogenesis and lipogenic gene expression in rats fed high-fiber diet. *Prostaglandins, Leukotrienes and Essential Fatty Acids* 116: 1–8.

Misra, A., Singhal, N. & Khurana, L. 2010. Obesity, the metabolic syndrome, and type 2 diabetes in developing countries: role of dietary fats and oils. *Journal of the American College of Nutrition* 29: 289S–301S.

Mulyati, L. 2020. Pengaruh Serat Umbi Bengkuang (*Pachyrhizus Erosus* L.) Terhadap Struktur Histologi Dan Fungsi Hati Mencit Putih (*Mus Musculus* L.) Diabetes Melitus Yang Diinduksi Aloksan. *Skripsi Sarjana Biologi*. FMIPA. Universitas Andalas. Padang.

Murray RK, Granner DK, Mayes PA, Rodwell VW. 2003. Biokimia Harper. Edisi 26. Jakarta. EGC.

Murray RK, Granner DK, Mayes. 2006. Dalam: Wulandari N, Rendy L, Dwijayanthi L, Liena, editor. Biokimia Harper Ed 27. Jakarta: EGC.

Murray RK, Bender DA, Botham KM, Kennelly PJ, Victor W, Weil PA. 2009. Harper's Illustrated Biochemistr, 28e. 28th ed. McGraw-Hill Medical Publishing Division.

Nagwa AI, Sawsan HO, Anil D, Azza MOAR, Nehal AH, Olfat S. 2012. Glutathione peroxidase, superoxide dismutase and catalase activities in children with

chronic hepatitis. Medical Biochemistry Department, Faculty of Medicine, Cairo University, Cairo, Egypt., 3,972-7.

Nascimento, F.A.M., Silva, S.B., Santos, C.F., Lacerda, C.A., Aguila, M.B. 2010. Adipose tissue, liver and pancreas structural alterations in C57BL/6 mice fed high-fat-high-sucrose diet supplemented with fish oil (n-3 fatty acid rich oil). *Experimental and Toxicologic Pathology* 62 (1): 17–25.

Noeman SA, Hamooda HE, Baalash AA. 2011. Biochemical study of oxidative stress markers in the liver, kidney, and heart of high fat diet induced obesity in rats. *Diabetol Metab Syndr* 3(1): 17.

Octavian, R. 2020. Pengaruh Serat Umbi Bengkuang (*Pachyrhizus Erosus L.*) Terhadap Struktur Dan Fungsi Hati Mencit Putih (*Mus Musculus L.*) Yang Diberi Pakan Bergula Tinggi. *Skripsi Sarjana Biologi*. FMIPA. Universitas Andalas. Padang.

Oktaviana, 2005 dalam Wulandari, Debin. 2012. Kadar Malondialdehyde (Mda) Dan Gambaran Histopatologi Organ Hati pada Hewan Model Tikus (*Rattus norvegicus*) Hiperkolesterolemia Setelah Terapi Ekstrak Air Benalu Mangga (*Dendrophthoe petandra L.Miq*). Fakultas Kedokteran Hewan. Universitas Brawijaya.

Omaye ST. 2004. *Food and nutritional toxicology*. New York: CRC Press LLC.

Park, C.J., Han, J.S. 2015. Hypoglycemic Effect of Jicama (*Pachyrhizus erosus*) Extract on Streptozotocin-Induced Diabetic Mice. *Prev. Nutr. Food Sci* 20(2): 88-93.

- Park, C. J., Hyun Ah Lee dan Ji Sook Han. 2016. Jicama (*Pachyrhizus erosus*) Extract Increases Insulin Sensitivity and Regulates Hepatic Glucose In Mice. *J. Clin. Biochem. Nutr* 58 (1): 56–63. doi: 10.3164/jcbtn.15-59.
- Pitoyo FLH, Fatmawati H. 2012. Efek Quercetin Untuk Menurunkan Kadar Trigliserida Dan Glukosa Darah Pada Tikus Model Diet-Induced Obesity. *Jurnal Medika Planta* 1(5): 36-46.
- Power SK, Jackson MJ. 2008. Exercise-induced oxidative stress: cellular mechanism and impact on muscle force production. *Journal Physiol Rev* 88: 1243-1276.
- Prastiawan, A. 2015. *Gambaran Histopatologi Organ Hati dan Ginjal Pada Tikus Model Diabetes Dengan Pemberian Ekstrak Etanol Biji Mahoni (Swietenia mahagoni Jacq.)*. Skripsi Sarjana Kedokteran Hewan FKH IPB. Bogor.
- Priyanto. 2007. Toksisitas obat, zat kimia dan terapi antidotum. Depok: Leskonfi; 43 44, 48, 51, 53.
- Putra, S. R. 2012. *Optimalkan Kesehatan Wajah dan Kulit dengan Bengkuang*. Cetakan Pertama. DIVA Press. Yogyakarta
- Rahayu, 2014. *Manfaat Bengkuang*. Penebar Swadaya. PT. Mirota Indah Indonesia. Jakarta.
- Rusmarilin, H. dan Hilman A. 2019. Physicochemical Characterization of Water-soluble Polysaccharide of *Pachyrhizus erosus* L. With Fermentation Assisted Extraction Method. *IOP Conference Series: Earth and Enviromental Science* (260): 012096. DOI: 10.1088/1755-1315/260/1/012096.
- Roberfroid, M. 2005. Inulin-type fructans: functional food ingredients. *CRC Press: Boca Raton*.

Santoso, P., Amelia, A., Rahayu, R. 2019a. Jicama (*Pachyrhizus erosus*) fiber prevents excessive blood glucose and body weight increase without affecting food intake in mice fed with high-sugar diet. *Journal of Advanced Veterinary and Animal Research* 6 (02): 222-230.

Sarah J. B., Ping K., Jennifer F., Horacio G.A., M L.B., Thomas M. B., Kartik S. 2014. High Fat Diet and In Utero Exposure to Maternal Obesity Disrupts Circadian Rhythm and Leads to Metabolic Programming of Liver in Rat Offspring. *Plos One* 9 (1).

Sayuti K, Yenrina R. 2015. *Antioksidan, Alami dan Sintesis*. Padang: Andalas University Press.

Shang W, Si X, Chou Z, Li Y, Strappe P, Blanchard C. 2017. Characterization of fecal fat composition and gut derived fecal microbiota in high-fat diet fed rats following intervention with chito-oligosaccharide and resistent starch complexes. *Food and Function* 8(12).

Silvia FS. 2009. *Aktivitas Spesifik Katalase Jaringan Jantung Tikus yang Diinduksi Hipoksia Hipobarik Akut Berulang*. FK UI, Jakarta. 25-7.

Sutejo, IR dan Dewi R,. 2012. Kerusakan sel hati dan peningkatan Kolesterol Serum Mencit Akibat Pemberian Minyak Goreng Bekas Pakai. *Jurnal IKESMA* Volume 8 Nomor 1.

Suttirak W, Manurakchinakorn S. 2014. *In vitro* antioxidant properties of mangosteen peel extract. *J Food Sci Technol* 51: 3546-58.

Swastika, A. P. A. 2013. Kadar Malondialdehyde (MDA) Pada Abortus Inkomplit Lebih Tinggi Dibandingkan dengan Kehamilan Normal. Tesis

- Thaptimthong, T., Kasemsuk, T., Sibmooh, N., Unchern, S. 2016. Platelet inhibitory effects of juices from *Pachyrhizus erosus* L. root and *Psidium guajava* L. fruit: a randomized controlled trial in healthy volunteers. *BMC Complementary and Alternative Medicine* 16: 269.
- Tacer, K.F., & Rozman, D. 2011. Nonalcoholic Fatty Liver Disease: Focus on Lipoprotein and Lipid Deregulation. *Journal of Lipids*.
- Tu, L.N., Showalter, M.R., Cajka, T., Fan, S., Pillail, V.V., Fienhn, O., Selvaraj, V. 2017. Metabolomic characteristics of cholesterol-induced non-obese nonalcoholic fatty liver disease in mice. *Scientific Reports*. 7: 6120.
- Tucker, L. A. & Thomas, K. S. 2009. Increasing total fiber intake reduces risk of weight and fat gains in women. *J. Nutr* 139: 576–581.
- Tsai S-Y, Chung P-C, Owaga EE, Tsai I-J, Wang P-Y, Tsai J-I. 2016. Alpha mangostin from mangosteen (*Garcinia mangostana* Linn.) pericarp extract reduces high fat-diet induced hepatic steatosis in rats by regulating mitochondria function and apoptosis. *Nutr Metab (Lond)* 13 (1): 88.
- Van Remmen H, Ikeno Y, Hamilton M, Wolf N, Thorpe SR, ET AL. 2003. Life Long reduction in MnSOD activity result in increased DNA damage and Higher incidence of cancer but does not accelerate aging. *Physiol Genomics* 16: 29-37.
- Vincent HK, Innes KE. 2007. Oxidative stress and potensial intervention to reduce oxidative stress in overweight and obesity. *Diabetes, Obesity and metabolism*.

Yang RL, Shi YHS, Li W, Le GW. 2008. Increasing oxidative stress with progressive hyperlipidemia in human: relation between malondialdehyde and atherogenic index. *J Clin Biochem Nutr* 43 (3): 154-8.

Yang, ZH., Miyahara, H., Takeo, J. *Et al.* 2012. Diet high in fat and sucrose induces rapid onset of obesity-related metabolic syndrome partly through rapid response of genes involved in lipogenesis, insulin signalling and inflammation in mice. *Diabetol Metab Syndr* 4: 32.
<https://doi.org/10.1186/1758-5996-4-32>

Yunanto, Ari., Setiawan, Bambang., Suhartono, Eko. 2009. Kapita Selekta Biokimia; Peran Radikal Bebas pada Intoksikasi dan Patobiologi Penyakit. Banjarmasin: Penerbit Pustaka Banua.

Wang, Z. Q., Yu, Y., Zhang, X.H., Floyd, E.Z., Bourdreau, A., Lian, K., Lian, K., Cefalu, W.T. 2012. Comparing the effects of nano-sized sugarcane fiber with cellulose and psyllium on hepatic cellular signaling in mice. *Inter.J. of Nanomedicine* (7): 2999–3012

Winarsi H. 2007. Antioksidan Alami dan Radikal Bebas. Kanisius. Yogyakarta.

Zubir, N. 2014. Koma Hepatik. Dalam *Buku Ajar Ilmu Penyakit Dalam* Edisi VI Jilid III, hlmn 1987-1990. Interna Publishing. Jakarta.

Zhu YG, Zhang SM, Wang JY, Xiao WQ, Wang YZ, Zhou AJ. 2006. Over Weight and obesity Induced Oxidative stress in Children. *Biomedical and Enviromental Sciences*, 19: 353-359.