

DAFTAR PUSTAKA

- Adan, R. A. H., Tiesjema, B., Hillebrand, J. J. G., La Fleur, S. E., Kas, M. J. H., & De Krom, M. 2006. The MC4 receptor and control of appetite. *British journal of pharmacology*, 149(7), 815-827.
- Aisyah, B.A. 2023. Pengaruh Pemberian Produk Olahan Pangan Fungsional Black Rice Crunch terhadap Indeks Lee, Kadar Glukosa, SGPT, dan Bilirubin Darah Tikus (*Rattus norvegicus* Berkenhout, 1769) Obesitas. *Skripsi*. Universitas Gadjah Mada.
- Akinyemiju, T., Moore, J. X., Pisu, M., Judd, S. E., Goodman, M., Shikany, J. M., Howard, V. J., Safford, M. & Gilchrist, S. C. 2018. A prospective study of obesity, metabolic health, and cancer mortality. *Obesity*, 26(1), 193-201.
- Alnamshan, M. M. 2022. Antioxidant extract of black rice prevents renal dysfunction and renal fibrosis caused by ethanol-induced toxicity. *Brazilian Journal of Biology*, 82. <https://doi.org/10.1590/1519-6984.261874>
- Appleton, S.L. 2006. Central obesity is associated with nonatopic but not atopic asthma in a representative population sample. *Journal of Allergy and Clinical Immunology*, 118(6): 1284–1291
- Bagshaw, S. M., & Gibney, R. T. N. 2008. Conventional markers of kidney function. *Critical care medicine*, 36(4), S152-S158.
- Baum, N., Dichoso, C. C., & Carlton Jr, C. E. 1975. Blood urea nitrogen and serum creatinine: Physiology and interpretations. *Urology*, 5(5), 583-588.
- Bhattacharyya, S., & Roy, S. 2018. Qualitative and quantitative assessment of bioactive phytochemicals in gobindobhog and black Rice, cultivated in West Bengal, India. *International Journal of Pharmaceutical Sciences and Research*, 9(9), 3845-3851.
- Buettner, R., Schölmerich, J., & Bollheimer, L. C. 2007. High-fat diets: modeling the metabolic disorders of human obesity in rodents. *Obesity*, 15(4), 798-808.
- Busher, J. T. 1990. Serum albumin and globulin. *Clinical methods: The history, physical, and laboratory examinations*, 3, 497-499.
- Chatterjea, M. N., & Shinde, R. 2012. Metabolism of Proteins and amino acids. *Textbook of Medical Biochemistry*. 8th edition, Jaypee Brothers Medical.
- Choi, B. K., Nam, S. Y., Lee, Y. M., Kim, J. B., Choe, J. S., Lee, H. J., ... & Lee, S. H. 2015. Supplementary effects of black rice (*Oryza sativa* L.) Aleurone layer extract on body fat, serum lipid, and serum hormone levels in ovariectomized rats. *The Journal of the Korea Contents Association*, 15(9), 599-605.
- de Moura e Dias, M., Dos Reis, S. A., da Conceição, L. L., Sediya, C. M. N. D. O., Pereira, S. S., de Oliveira, L. L., ... & Milagro, F. I. 2021. Diet-induced obesity in animal models: points to consider and influence on metabolic markers. *Diabetology & Metabolic Syndrome*, 13(1), 1-14.
- Devenny, J. J., Godonis, H. E., Harvey, S. J., Rooney, S., Cullen, M. J., & Pellemounter, M. A. 2012. Weight loss induced by chronic dapagliflozin treatment is attenuated by compensatory hyperphagia in diet-induced obese (DIO) rats. *Obesity*, 20(8), 1645-1652. doi:10.1038/oby.2012.59

- El-Hakiem, M.A.H.A., Ellah M.R.A., Youssef, H.A., Saleh A.S., Hassanein K.M.A., 2011. Effect of Unilateral Ligation on Blood Constituents, Renal Histopathology and Ultrasonography in Dogs. *Medwell Journal*: 356-364.
- Fitria L, Lukitowati F, Kristiawati D. 2019. Nilai rujukan untuk evaluasi fungsi hati dan ginjal pada tikus (*Rattus norvegicus* Berkenhout, 1769) Galur Wistar. *Jurnal Pendidikan Matematika dan IPA*. 10(2):243-58. DOI: 10.26418/jpmipa.v10i2.34144
- Fontaine, K. R., Redden, D. T., Wang, C., Westfall, A. O., & Allison, D. B. 2003. Years of life lost due to obesity. *Jama*, 289(2), 187-193.
- Friedman, A. N., & Fadem, S. Z. 2010. Reassessment of albumin as a nutritional marker in kidney disease. *Journal of the American Society of Nephrology*, 21(2), 223-230. DOI: 10.1681/ASN.2009020213
- Furukawa, S., Fujita, T., Shimabukuro, M., Iwaki, M., Yamada, Y., Nakajima, Y., Nakayama, O., Makishima, M., Matsuda, M., Shimomura, I. 2017. Increased oxidative stress in obesity and its impact on metabolic syndrome. *The Journal of Clinical Investigation*, 114(12), 1752–1761. <https://doi.org/10.1172/JCI21625>
- Giknis M & Clifford C. 2008. *Clinical Laboratory Parameters* for Crl:WI (Han). Charles River. 1-18 p.
- Gowda, S., Desai, P. B., Kulkarni, S. S., Hull, V. V., Math, A. A., & Vernekar, S. N. 2010. Markers of renal function tests. *North American journal of medical sciences*, 2(4), 170.
- Hall, J. E. 2016. *Guyton and Hall Textbook of Medical Physiology* (13th ed., Vol. 148). Elsevier. USA. p : 336-367, 879
- Hao, J., Zhu, H., Zhang, Z., Yang, S., & Li, H. 2015. Identification of anthocyanins in black rice (*Oryza sativa* L.) by UPLC/Q-TOF-MS and their in vitro and in vivo antioxidant activities. *Journal of Cereal Science*, 64, 92-99. <https://doi.org/10.1016/j.jcs.2015.05.003>
- Harbuwono, D. S., Pramono, L. A., Yunir, E., & Subekti, I. 2018. Obesity and central obesity in Indonesia: evidence from a national health survey. *Medical Journal of Indonesia*, 27(2), 114-20.
- Hariri, N., & Thibault, L. 2010. High-fat diet-induced obesity in animal models. *Nutrition Research Reviews*, 23(2), 270–299.
- Hermawati., Salam, A., & Battung, S. M. 2019. Efek Protein Sempurna dan Tidak Sempurna Terhadap Berat Badan dan Albumin Tikus. *Jurnal Gizi Masyarakat Indonesia (The Journal of Indonesian Community Nutrition)*, 8(1).
- Hill PG. 1985. The measurement of albumin in serum and plasma. *Annals of clinical biochemistry*. 22(6):565-78.
- Huang, Y. P., & Lai, H. M. 2016. Bioactive compounds and antioxidative activity of colored rice bran. *Journal of Food and Drug Analysis*, 24, 564–574.
- Ismoyowati, D., Riyadi, A., Rifai, A., Suwondo, E., & Nuringtyas, T. 2018. Black Rice Agroindustry in Sleman, Yogyakarta: Early Analysis. *International Conference on Agroindustry*, 51–54.
- Johnson-Delaney C, Harrison LR. 1996. Exotic animal companion medicine handbook for veterinarians. *Zoological Education Network*. 1(6):1-2.
- Jung, A. J., Sharma, A., Lee, S. H., Lee, S. J., Kim, J. H., & Lee, H. J. 2021. Efficacy of black rice extract on obesity in obese postmenopausal women: a 12-

- week randomized, double-blind, placebo-controlled preliminary clinical trial. *Menopause*, 28(12), 1391-1399.
- Kang, M., Oh, J. W., Lee, H. K., Chung, H. S., Lee, S. M., Kim, C., Lee, H.W., Yoon, D.W., Choi, H., Kim, H., Shin, M.K., Hong, M.C., & Bae, H. 2004. Anti-obesity effect of PM-F2-OB, an anti-obesity herbal formulation, on rats fed a high-fat diet. *Biological and Pharmaceutical Bulletin*, 27(8), 1251-1256.
- Kashani, K., Rosner, M. H., & Ostermann, M. 2020. Creatinine: from physiology to clinical application. *European journal of internal medicine*, 72, 9-14
- Kementrian Kesehatan Republik Indonesia. 2022. *Upaya Ibu Cegah Anak Stunting dan Obesitas*.
<https://www.kemkes.go.id/article/view/22011800003/upaya-ibu-cegah-anak-stunting-dan-obesitas.html>. Diakses pada tanggal 3 Maret 2022.
- Khasanah, Y., Ariani, D., Angwar, M., & Nuraeni, T. 2015. In vivo study on albumin and total protein in white rat (*Rattus Norvegicus*) after feeding of enteral formula from tempe and local food. *Procedia Food Science*, 3, 274-279.
- Koller A, Kaplan A. 1984. The CV Mosby Co St. Louis toronto princeton. *Clin Chem*. 1257-1260, 437, 418.
- Kristamtin., Indrasari, S. D., Widyayanti, S., & Andriyanto, R. 2021. Molecular, morphological, and biochemical identification of sembada merah and sembada hitam rice (*Oryza sativa* L). In *Journal of Physics: Conference Series* (Vol. 1918, No. 5, p. 052017). IOP Publishing.
- Kurdanti, W., Suryani, I., Syamsiatun, N. H., Siwi, L. P., Adityanti, M. M., Mustikaningsih, D., & Sholihah, K. I. 2015. Faktor-faktor yang mempengaruhi kejadian obesitas pada remaja. *Jurnal Gizi Klinik Indonesia*, 11(4), 179-190.
- Kurtz DM, Travlos GS. 2020. The clinical chemistry of laboratory animals 3rd edition. CRC Press. 2143-2154 p.
- Lamb, E. J., Path, F. R. C., & Price, C. P. 2014. 21 Kidney Function Tests—Creatinine, Urea, and Uric Acid. *Tietz Fundamentals of Clinical Chemistry and Molecular Diagnostics-E-Book*, 364. Diakses di :
<https://books.google.co.id/books?id=p7XwAwAAQBAJ>
- Laorodphun P, Arjinajarn P, Thongnak L, Promsan S, Swe MT, Thitisut P, et al. 2021. Anthocyanin-rich fraction from black rice, *Oryza sativa* L. var. indica “Luem Pua,” bran extract attenuates kidney injury induced by high-fat diet involving oxidative stress and apoptosis in obese rats. *Phytotherapy Research*; 35(9), 5189-5202.
- Lee, S-II., Kim, J.W., Lee, Y.K., Yang, S.H., Lee, I., Suh, J.W., and Kim, S.D. 2011. Anti-obesity Effect of *Monascus pilosus* Mycelial Extract in High Fat Diet-induced Obese Rat. *Journal Applied Biomolecular Chemistry*; 54, 197-205.
- Limtrakul, P., Semmarath, W., & Mapoung, S. 2019. Anthocyanins and proanthocyanidins in natural pigmented rice and their bioactivities. *Phytochemicals in human health*, 1, 1-24.
- Ling, X. C., & Kuo, K. L. 2018. Oxidative stress in chronic kidney disease. *Renal Replacement Therapy*, 4(1), 1-9. <https://doi.org/10.1186/s41100-018-0195-2>

- Liu, D., Ji, Y., Zhao, J., Wang, H., Guo, Y., & Wang, H. 2020. Black rice (*Oryza sativa* L.) reduces obesity and improves lipid metabolism in C57BL/6J mice fed a high-fat diet. *Journal of Functional Foods*, 64, 103605.
- Loeb, WF and Quimby, FW. 1999. *The Clinical Chemistry of Laboratory Animals*, 2nd ed. Philadelphia: Taylor & Francis USA
- Mehta, A. R. 2008. Why does the plasma urea concentration increase in acute dehydration?. *Advances in physiology education*, 32(4), 336-336.
- Miranda J, Eseberri I, Lasa A, Portillo MP. 2018. Lipid metabolism in adipose tissue and liver from diet-induced obese rats: a comparison between Wistar and Sprague-Dawley strains. *J Physiol Biochem.* <https://doi.org/10.1007/s13105-018-0654-9>.
- Mokdad AH, Ford ES, Bowman BA, Dietz, W. H., Vinicor, F., Bales, V. S., & Marks, J. S. 2003. Prevalence of obesity, diabetes, and obesity-related health risk factors. *JAMA* ;289(1):76–9.
- Moman RN, Gupta N, Varacallo M. 2021. Physiology, Albumin. In: *StatPearls*. StatPearls Publishing, Treasure Island (FL). PMID: 29083605.
- Mun, K. H. 2021. Association Between Serum Albumin Levels and Obesity and Risk of Developing Chronic Kidney Disease Using Data from the Korean Multi-Rural Communities Cohort (MRCohort) Population Database. *Medical Science Monitor: International Medical Journal of Experimental and Clinical Research*, 27, e933840-1.
- Nashrurrokhman, M., Sayekti, P. R., Safitri, A., Purwestri, Y. A., & Pratiwi, R. 2019. Macronutrient and mineral contents of five local black rice (*Oryza sativa*) cultivars in Indonesia. *Biodiversitas Journal of Biological Diversity*, 20(12).
- Newman DJ, Price CP. 1999. Renal function and nitrogen metabolites. In: Burtis CA, Ashwood ER, editors. *Tietz Textbook of Clinical Chemistry*. 3rd ed. Philadelphia: W.B Saunders Company; p. 1204-1270.
- Nikolic J, Cvetkovic T, Sokolovic D. 2003. Role of quercetin on hepatic urea. Production in acute renal failure. *Renal Failure* 25: 149- 155.
- Nisha, R., Srinivasa Kannan, S. R., Thanga Mariappan, K., & Jagatha, P. 2017. Biochemical evaluation of creatinine and urea in patients with renal failure undergoing hemodialysis. *J Clin Path Lab Med*, 1(2), 1-5.
- Novelli, E. L. B., Diniz, Y. S., Galhardi, C. M., Ebaid, G. M. X., Rodrigues, H. G., Mani, F., Fernandes, A. A. H., Cicogna, A. C., & Novelli Filho, J. L. V. B. 2007. Anthropometrical parameters and markers of obesity in rats. *Laboratory animals*, 41(1), 111-119.
- Park, Sam Y, Kim SJ, and Chang HI. 2008. Isolation of anthocyanin from black rice (Heugjinjubyeo) and screening of its antioxidant activities. *Kor J Microbiol Biotechnol*, 36 (1): 55–60.
- Phillips, C. M., Dillon, C., Harrington, J. M., McCarthy, V. J., Kearney, P. M., Fitzgerald, A. P., & Perry, I. J. (2013). Defining metabolically healthy obesity: role of dietary and lifestyle factors. *PloS one*, 8(10), e76188.
- Polyzos, S. A., Kountouras, J., & Mantzoros, C. S. 2018. Obesity and nonalcoholic fatty liver disease: From pathophysiology to therapeutics. *Metabolism*, 92, 82-97.

- Pratiwi, R., & Purwestri, Y. A. 2017. Black rice as a functional food in Indonesia. *Functional Foods in Health and Disease*, 7(3), 182–194. <https://doi.org/10.31989/ffhd.v7i3.310>
- Pratiwi, R., Amalia, A. R., Tunjung, W. A. S., & Rumiati. 2019. Active fractions of black rice bran cv Cempo Ireng inducing apoptosis and S-phase cell cycle arrest in T47D breast cancer cells. *Journal of Mathematical and Fundamental Sciences*, 51(1), 47–59.
- Pratiwi, R., Tunjung, W. A. S., & Amalia, A. R. 2015. Black rice bran extracts and fractions containing cyanidin 3-glucoside and peonidin 3-glucoside induce apoptosis in human cervical cancer cells. *Indonesian Journal of Biotechnology*, 20(1), 69–76.
- Price C dan Finney H. 2000. Developments in the assessment of glomerular filtration rate. *Clinica Chimica Acta*.;297(1-2):55-66. Publishers Pvt. Ltd. P : 525-526.
- Purwanto, A. A., & Indriawati, R. 2014. Pengaruh Seduhan Teh Hibiscus sabdariffa L terhadap Kadar Albumin pada Rattus norvegicus yang Diinduksi CCl 4. *Mutiara Medika: Jurnal Kedokteran dan Kesehatan*, 14(1), 25-32.
- Purwestri, Y. A., Pratiwi, R., Nuringtyas, T. Ri., Rumiati, Fauzia, A. N., & Garusti. (2022). *Makanan Fungsional Berbahan Dasar Beras Hitam dan Proses Pembuatannya*.
- Qi, S. S., He, J., Yuan, L. P., Le Wu, J., Zu, Y. X., & Zheng, H. X. 2020. Cyanidin-3-glucoside from black rice prevents renal dysfunction and renal fibrosis in streptozotocin-diabetic rats. *Journal of Functional Foods*, 72, 104062.
- Restuti, A. N., Yulianti, A., & Nuraini, N. 2018. Effect of Modification Diet On The Body Weight of sprague dawley Rats. In *Proceeding of the 1st International Conference on Food and Agriculture*.
- Rodkey FL. 1964. Binding of bromocresol green by human serum albumin. *Archives of Biochemistry and Biophysics*. 108(3):510-3.
- Rosenfeld, A. J., dan Dial, S. M. 2010. *Clinical Pathology for the Veterinary Team*. Wiley- Blackwell: 75-90.
- Salazar, J. H. 2014. Overview of urea and creatinine. *Laboratory Medicine*, 45(1), e19-e20.
- Sampson EJ, Baird MA, Burtis CA, Smith EM, Witte DL, Bayse DD. 1980. A coupled-enzyme equilibrium method for measuring urea in serum: optimization and evaluation of the AACC study group on urea candidate reference method. *Clin Chem*. 26:816-26.
- Sangma, H. C. R., & Parameshwari, S. 2021. Health benefits of black rice (*Zizania aquatica*)-a review. *Materials Today: Proceedings*, 80, 3380-3384.
- Sengupta, P. 2013. The laboratory rat: relating its age with human's. *International journal of preventive medicine*, 4(6), 624.
- Sherwood L. 2010. *Human Physiology*. USA. Brooks/Cole. P : 517, 539
- Shiyan S, Herlina BM, Amriani A. 2017. Antiobesitas dan antihiperkolesterolemia seduhan white tea (*Camellia sinensis*) pada tikus yang diberi diet lemak tinggi. *Pharmaciana*, 7(2): 280.
- Shrestha M, Abraham WR, Shrestha PM, Noll M, Conrad R. 2008. Activity and composition of methanotrophic bacterial communities in planted rice soil

- studied by flux measurements, analyses of pmoA gene and stable isotope probing of phospholipid fatty acids. *Environ Microbiol.* 10:400–412.
- Silva Junior, G. B. D., Bentes, A. C. S. N., Daher, E. D. F., & Matos, S. M. A. D. 2017. Obesity and kidney disease. *Brazilian Journal of Nephrology*, 39(1), 65-69.
- Slot C. 1965. Plasma creatinine determination a new and specific Jaffe reaction method. *Scandinavian journal of clinical and laboratory investigation*. 17(4):381-7.
- Speich, M., Pineau, A., & Ballereau, F. 2001. Minerals, trace elements and related biological variables in athletes and during physical activity. *Clinica Chimica Acta*, 312, 1–11.
- Susce, M.T. 2005. Obesity and associated complications in patients with severe mental illnesses: a cross-sectional survey. *The Journal of Clinical Psychiatry*, 66(2): 167-173
- Swe, M. T., Thongnak, L., Jaikumkao, K., Pongchaidecha, A., Chatsudthipong, V., & Lungkaphin, A. 2020. Dapagliflozin attenuates renal gluconeogenic enzyme expression in obese rats. *The Journal of Endocrinology*, 245(2), 193–205. <https://doi.org/10.1530/joe-19-0480>
- Syam, A.M. 2023. Pengaruh Pemberian Produk Pangan Fungsional “Black Rice Crunch” terhadap Berat Badan dan Profil Sel Darah Merah Tikus (*Rattus norvegicus* Berkenhout, 1796) Obesitas. *Skripsi*. Universitas Gadjah Mada.
- Thaker VV. 2017. Genetic and Epigenetic causes of Obesity. *Adolescent medicine: state of the art reviews*. 28(2):379–405.
- Than, W. H., Chan, G. C. K., Ng, J. K. C., & Szeto, C. C. 2020. The role of obesity on chronic kidney disease development, progression, and cardiovascular complications. *Advances in Biomarker Sciences and Technology*, 2, 24-34.
- Tsalissavrina, I., Wahono, D., & Handayani, D. 2006. Pengaruh pemberian diet tinggi karbohidrat dibandingkan diet tinggi lemak terhadap kadar trigliserida dan HDL darah pada *Rattus norvegicus* galur Wistar. *Jurnal Kedokteran Brawijaya*, 22(2), 80-89.
- Upadhyay, J., Farr, O., Perakakis, N., Ghaly, W., & Mantzoros, C. 2018. Obesity as a disease. *Medical Clinics*, 102(1), 13-33.
- Verma, D. K., & Srivastav, P. P. 2020. Bioactive compounds of rice (*Oryza sativa* L.): Review on paradigm and its potential benefit in human health. *Trends in Food Science & Technology*, 97, 355-365.
- Von Diemen, V., Trindade, E. N., & Trindade, M. R. M. 2006. Experimental model to induce obesity in rats. *Acta Cirurgica Brasileira*, 21, 425-429.
- Wahyuni AS, Munawaroh R, and Da'i M. 2016. Antidiabetic mechanism of ethanol extract of black rice bran on diabetic rats. *National Journal of Physiology, Pharmacology, and Pharmacology*, 6 (2): 106-110.
- Wahyuni, A. S., & Munawaroh, R. 2015. Potensi Ekstrak Etanol Beras Hitam Sebagai Penurun Gula Darah Pada Tikus Nefropati Diabetes. In *Prosiding Seminar Nasional & Internasional*.
- WHO, 2021. *Obesity and overweight*. <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>. Diakses tanggal 03 Juli 2023, jam 01:46 WIB.

- WHO. 2023. *Controlling the global obesity epidemic*. <https://www.who.int/activities/controlling-the-global-obesity-epidemic>. Diakses tanggal 03 Juli 2023, jam 01:46 WIB.
- WHO. World Health Organization . 2000. International Association for the Study of Obesity (IASO) and International Obesity Task Force (IOTF). The Asia-Pacific Perspective: Redefining Obesity and its Treatment. Geneva: World Health Organization. p. 378-420.
- WHO. World Health Organization. 2016. ProMED-mail website. Available at: www.who.int/mediacentre/factsheets/fs311/en/. Accessed 14 March 2021.
- Widyastuti, D. A., Ristianti, M. A., & Sari, I. M. 2019. The study of blood creatinin and urea concentration of Wistar rats (*Rattus norvegicus*) due to sodium nitrite induction. *Jurnal Ilmu Kefarmasian Indonesia*, 17(1), 14-20.
- Yuwen P, Chen W, Lv H, Feng C, Li Y, Zhang T, Hu P, Guo J, Tian Y, Liu L, Sun J, Zhang Y. 2017. Albumin and surgical site infection risk in orthopaedics: a meta-analysis. *BMC Surg*. Jan 16;17(1):7.
- Zhang H, Shao Y, Bao J and Beta T. 2015. Phenolic compounds and antioxidant properties of breeding lines between the white and black rice. *Food chemistry*; 172: 630-639.
- Zhang X, Shen Y, Prinyawiwatkul W, King JM, Xu Z. 2013. Comparison of the activities of hydrophilic anthocyanins and lipophilic tocopherols in black rice bran against lipid oxidation. *Food Chemistry*, 141: 111-116.
- Zhao, S., Li, N., Zhu, Y., Straub, L., Zhang, Z., Wang, M. Y., Zhu, Q., Kusminski, C. M., Elmquist, J. K., & Scherer, P. E. 2020. Partial leptin deficiency confers resistance to diet-induced obesity in mice. *Molecular Metabolism*, 37, 100995.
- Zulissetiana, E. F., Santoso, B., Alkaf, S., Suryani, P. R., & Kurnianto, A. 2020. Upaya pencegahan sindrom metabolik dan obesitas melalui perubahan pola eating habits, screen-based activities serta peningkatan aktivitas fisik pada anak dan remaja. *Jurnal Pengabdian Masyarakat: Humanity and Medicine*, 1(2), 76-85.