

DAFTAR PUSTAKA

- Adam, C.L., Williams, P.A., Garden, K.E., Thomson, L.M., Ross, A.W., 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).
- Alhaji, M. and Farhana, A., 2022. Enzyme linked immunosorbent assay. In *StatPearls [Internet]*. StatPearls Publishing.
- Ali, E., & Nizar, N. N. A. (Eds.), 2018. *Preparation and processing of religious and cultural foods*. Woodhead Publishing.
- AOAC. 2005. *Official Methods of Analytical Chemistry*. Washington D.C. University of America.
- Armstrong, E.F., Eastwood, M.A., Gordon Brydon, W., 1993. The influence of wheat bran and pectin on the distribution of water in rat caecal contents and faeces. *Br J Nutr*, 69, 913–920.
- Asioli, D., Aschemann-Witzel, J., Caputo, V., Vecchio, R., Annunziata, A., Næs, T. and Varela, P., 2017. Making sense of the “clean label” trends: A review of consumer food choice behavior and discussion of industry implications. *Food Research International*, 99, pp.58-71.
- BeMiller, J. N., 2019. Inulin and konjac glucomannan. *Carbohydrate chemistry for food scientists*, 253-259.
- Campbell, J.M., Fahey Jr, G.C. and Wolf, B.W., 1997. Selected indigestible oligosaccharides affect large bowel mass, cecal and fecal short-chain fatty acids, pH and microflora in rats. *The Journal of nutrition*, 127(1), pp.130-136.
- Campos-Perez, Wendy, and Erika Martinez-Lopez., 2021. Effects of short chain fatty acids on metabolic and inflammatory processes in human health. *Biochimica et Biophysica Acta (BBA)-Molecular and Cell Biology of Lipids*, 1866(5), pp 158900.
- Chang, P.V., Hao, L., Offermanns, S. and Medzhitov, R., 2014. The microbial metabolite butyrate regulates intestinal macrophage function via histone deacetylase inhibition. *Proceedings of the National Academy of Sciences*, 111(6), pp.2247-2252.
- Chaplin, D.D., 2010. Overview of the immune response. *J Allergy Clin Immunol*, 125(2), pp.S3-S23.
- Chen, H., Wang, W., Degroote, J., Possemiers, S., Chen, D., De Smet, S. and Michiels, J., 2015. Arabinoxylan in wheat is more responsible than cellulose

for promoting intestinal barrier function in weaned male piglets. *The Journal of nutrition*, 145(1), pp.51-58.

Chen, T., Chen, D., Tian, G., Zheng, P., Mao, X., Yu, J., He, J., Huang, Z., Luo, Y., Luo, J. and Yu, B., 2019. Soluble fiber and insoluble fiber regulate colonic microbiota and barrier function in a piglet model. *BioMed research international*, 2019.

Chintyadewi, A. A., Marsono, Y., & Triwitono, P. Pengaruh Penambahan Fibercreme® terhadap Karakteristik Fisik dan Sensoris serta Konsentrasi Serat Pangan Beras Pra Tanak. *agriTECH*, 41(4), 386-394.

Considine, R.V., Sinha, M.K., Heiman, M.L., Kriauciunas, A., Stephens, T.W., Nyce, M.R., Ohannesian, J.P., Marco, C.C., McKee, L.J., Bauer, T.L. and Caro, J.F., 1996. Serum immunoreactive-leptin concentrations in normal-weight and obese humans. *New England Journal of Medicine*, 334(5), pp.292-295.

Corrêa-Oliveira, R., Fachi, J. L., Vieira, A., Sato, F. T., & Vinolo, M. A. R., 2016. Regulation of immune cell function by short-chain fatty acids. *Clinical & translational immunology*, 5(4), e73.

Corrigan, J.K., Ramachandran, D., He, Y., Palmer, C.J., Jurczak, M.J., Chen, R., Li, B., Friedline, R.H., Kim, J.K., Ramsey, J.J. and Lantier, L., 2020. A big-data approach to understanding metabolic rate and response to obesity in laboratory mice. *Elife*, 9, p.e53560.

Corthésy, B., 2013. Multi-faceted functions of secretory IgA at mucosal surfaces. *Front Immunol*, 4, p.185.

Cruz-Requena, M., Escobedo-García, S., Salas-Tovar, J. A., Mora-Cura, Y., Chávez-González, M. L., Castillo-Reyes, F., ... & Rodríguez-Herrera, R., 2019. Definitions and regulatory perspectives of dietary fibers. In *Dietary Fiber: Properties, Recovery, and Applications* (pp. 1-25). Academic Press.

Cummings, J. H., Pomare, E. W., Branch, W. J., Naylor, C. P., & MacFarlane, G., 1987. Short chain fatty acids in human large intestine, portal, hepatic and venous blood. *Gut*, 28(10), 1221-1227.

Cummings, J.H., Rombeau, J.L. and Sakata, T. eds., 2004. *Physiological and clinical aspects of short-chain fatty acids*. UK : Cambridge University Press.

Damat, D., 2013. Effect if Butyrylated Arrowroot Starch to the Digesta Profile and Molar Ratio SCFA. *Journal of Food Research*, 2(2), pp.144-149.

Davani-Davari, D., Negahdaripour, M., Karimzadeh, I., Seifan, M., Mohkam, M., Masoumi, S. J., ... & Ghasemi, Y., 2019. Prebiotics: definition, types, sources, mechanisms, and clinical applications. *Foods*, 8(3), 92.

- Dayrit, Fabian M., Olivia Erin M. Buenafe, Edward T. Chainani, Ian Michelle S. de Vera, Ian Ken D. Dimzon, Estrella G. Gonzales, and Jaclyn Elizabeth R. Santos., 2007. Standards for essential composition and quality factors of commercial virgin coconut oil and its differentiation from RBD coconut oil and copra oil. *Philippine Journal of Science*. 136(2):119-129.
- de Cossío, L. F., Fourrier, C., Sauvant, J., Everard, A., Capuron, L., Cani, P. D., ... & Castanon, N., 2017. Impact of prebiotics on metabolic and behavioral alterations in a mouse model of metabolic syndrome. *Brain, behavior, and immunity*, 64, 33-49.
- de Sousa-Pereira, P., & Woof, J. M., 2019. IgA: structure, function, and developability. *Antibodies*, 8(4), 57.
- Den Besten, G., Bleeker, A., Gerding, A., van Eunen, K., Havinga, R., van Dijk, T.H., Oosterveer, M.H., Jonker, J.W., Groen, A.K., Reijngoud, D.J. and Bakker, B.M., 2015. Short-chain fatty acids protect against high-fat diet–induced obesity via a PPAR γ -dependent switch from lipogenesis to fat oxidation. *Diabetes*, 64(7), pp.2398-2408.
- Dhaygude, V., Soós, A. and Somogyi, L., 2018. Solidification of the blends of fully hydrogenated coconut oil and non-hydrogenated coconut oil. *Periodica Polytechnica Chemical Engineering*, 62(1), pp.123-127.
- Ding, X.M., Li, D.D., Bai, S.P., Wang, J.P., Zeng, Q.F., Su, Z.W., Xuan, Y. and Zhang, K.Y., 2018. Effect of dietary xylooligosaccharides on intestinal characteristics, gut microbiota, cecal short-chain fatty acids, and plasma immune parameters of laying hens. *Poultry Science*, 97(3), pp.874-881.
- Dupraz, L., Magniez, A., Rolhion, N., Richard, M.L., Da Costa, G., Touch, S., Mayeur, C., Planchais, J., Agus, A., Danne, C. and Michaudel, C., 2021. Gut microbiota-derived short-chain fatty acids regulate IL-17 production by mouse and human intestinal $\gamma\delta$ T cells. *Cell Reports*, 36(1), p.109332.
- El Hage, R., Hernandez-Sanabria, E., Calatayud Arroyo, M., Props, R., & Van de Wiele, T., 2019. Propionate-producing consortium restores antibiotic-induced dysbiosis in a dynamic in vitro model of the human intestinal microbial ecosystem. *Frontiers in microbiology*, 10, 1206.
- Falony G., Joossens M., Vieira-Silva S., Wang J., Darzi Y., Faust K., Kurilshikov A., Bonder M.J., Valles-Colomer M., Vandeputte D., et al. Population-level analysis of gut microbiome variation. *Science*. 2016;352:560–564.
- Fleming, S.E., Choi, S.Y. and Fitch, M.D., 1991. Absorption of short-chain fatty acids from the rat cecum in vivo. *The Journal of nutrition*, 121(11), pp.1787-1797.

- Fleming, S.E., Fitch, M.D., Chansler, M.W., 1989. High-fiber diets: influence on characteristics of cecal digesta including short-chain fatty acid concentrations and pH. *Am J Clin Nutr*, 50, 93–99.
- Gao, X., Zhao, A., Zhou, M., Lin, J., Qiu, Y., Su, M., & Jia, W., 2011. GC/MS-based urinary metabolomics reveals systematic differences in metabolism and ethanol response between Sprague–Dawley and Wistar rats. *Metabolomics*, 7(3), 363–374.
- Gentile CL, Weir TL. 2018. The gut microbiota at the intersection of diet and human health. *Science*. 362:776–780.
- Geuking, M. B., McCoy, K. D., & Macpherson, A. J. (2012, February). The function of secretory IgA in the context of the intestinal continuum of adaptive immune responses in host-microbial mutualism. In *Seminars in Immunology*, 24(1):36–42. Academic Press.
- Gibson, G. R., Probert, H. M., van Loo, J. A. E., Rastall, R. A. and Roberfroid, M. B., 2004. Dietary modulation of the human colonic microbiota: updating the concept of prebiotics. *Nut Res Rev*, 17: 259–275
- Hadri, Z., Chaumontet, C., Fromentin, G., Even, P.C., Darcel, N., Bouras, A.D., Tomé, D. and Rasoamanana, R., 2015. Long term ingestion of a preload containing fructo-oligosaccharide or guar gum decreases fat mass but not food intake in mice. *Physiology & behavior*, 147, pp.198–204.
- Hanczakowska, E., 2017. The use of medium-chain fatty acids in piglet feeding—a review. *Annals of animal science*, 17(4), pp.967–977.
- Harmayani, E., Aprilia, V., Marsono, Y., 2014. Characterization of glucomannan from *Amorphophallus oncophyllus* and its prebiotic activity in vivo. *Carbohydr Polym*, 112, 475–479.
- Harmita. 2008. *Buku Ajar Analisis Hayati Edisi 3*. Jakarta : EGC
- Heldsinger, A., Grabauskas, G., Wu, X., Zhou, S., Lu, Y., Song, I., Owyang, C., 2014. Ghrelin Induces Leptin Resistance by Activation of Suppressor of Cytokine Signaling 3 Expression in Male Rats: Implications in Satiety Regulation. *Endocrinology* 155, 3956.
- Hosono, A., Ozawa, A., Kato, R., Ohnishi, Y., Nakanishi, Y., Kimura, T. and Nakamura, R., 2003. Dietary fructooligosaccharides induce immunoregulation of intestinal IgA secretion by murine Peyer's patch cells. *Biosci, biotechnol, and biochem*, 67(4), pp.758–764.
- Hussain, M.S., Al-Alaq, F.T., Al-Khafaji, N.S. and Al-Dahmoshi, H.O., 2020. Antibacterial Effect of Virgin and Refined Coconut Oils on Pathogenic Bacteria: A Review. *Indian Journal of Forensic Medicine & Toxicology*, 14(4), pp.6042–6048.

- Hussein, L.A., 2022. Novel prebiotics and next-generation probiotics: opportunities and challenges. *Functional Foods and Nutraceuticals in Metabolic and Non-Communicable Diseases*, pp.431-457.
- Ibrahim, O. O., 2018. Functional oligosaccharides: chemicals structure, manufacturing, health benefits, applications and regulations. *J Food Chem Nanotechnol*, 4(4), 65-76.
- Ingredion., 2014. *The clean label guide in Europe*. Retrieved from <http://www.alimentatec.com/wp-content/uploads/2014/10/The-Clean-Label-Guide-ToEurope.pdf>
- Institute of Food and Technologist. (2021, Sept 1st). *The Changing Face of Clean Label*. Diakses dari <https://www.ift.org/news-and-publications/food-technology-magazine/issues/2021/september/columns/ingredients-clean-label>
- Jha, R. and Berrocoso, J.F.D., 2016. Dietary fiber and protein fermentation in the intestine of swine and their interactive effects on gut health and on the environment: A review. *Anim Feed Sci Technol* 212, 18–26.
- Jittimanee, S., Wongratanacheewin, S., Kaewraemruaen, C. and Jittimanee, J., 2021. Opisthorchis viverrini antigens up-regulates the expression of CD80 and MHC class II in JAWSII mouse dendritic cells and promotes IL-10 and TGF- β secretions. *Parasitology International*, 84, p.102401.
- Jose, S. P.; Krishnakumar, I. M.; Ratheesh, M.; Asha, S.; Sandya, S.; Rajmohan, V. Polyphenolic Fraction of Virgin Coconut Oil Inhibits the Inflammatory Response in Oxidized LDL Activated Human Peripheral Blood Mononuclear Cells by Modulating TLR/ NF- κ B Signaling Pathways. *Eur. J. Integrative Med.* 2017, 10, 59–65.
- Kaneko, T., Yokoyama, A., & Suzuki, M., 1995. Digestibility characteristics of isomaltooligosaccharides in comparison with several saccharides using the rat jejunum loop method. *Bioscience, biotechnology, and biochemistry*, 59(7), 1190-1194.
- Kementerian Kesehatan Republik Indonesia. 2018. *Laporan Nasional Riskesdas 2018*.
- Ketabi, A., Dieleman, L.A. and Gänzle, M.G., 2011. Influence of isomaltoligosaccharides on intestinal microbiota in rats. *Journal of applied microbiology*, 110(5), pp.1297-1306.
- Koleva, P., Ketabi, A., Valcheva, R., Gänzle, M.G. and Dieleman, L.A., 2014. Chemically defined diet alters the protective properties of fructooligosaccharides and isomaltoligosaccharides in HLA-B27 transgenic rats. *PLoS One*, 9(11), p.e111717.

- Kou, X., Luo, D., Li, Y., Xu, B., Zhang, K., Li, P., ... & Liu, J., 2018. Effect of inulin with different degree of polymerisation on textural and rheological properties of wheat starch–Effect of inulin on gel properties of starch. *International Journal of Food Science & Technology*, 53(11), 2576-2585.
- Kubistova, Z., Mrazek, F. and Petrek, M., 2009. Polymorphisms of the immune response genes: selected biological, methodical and medical aspects. *Biomedical Papers of the Medical Faculty of Palacky University in Olomouc*, 153(2).
- Kuksis, A., 2000. LIPIDS | Gas Chromatography. In *Encyclopedia of Separation Science*. Oxford : Academic Press.
- Kumar, P.P. and Krishna, A.G., 2015. Physicochemical characteristics of commercial coconut oils produced in India. *Grasas y Aceites*, 66(1), pp.e062-e062.
- Laaksonen, K.S., Nevalainen, T.O., Haasio, K., Kasanen, I.H.E., Nieminen, P.A., Voipio, H.M., 2013. Food and water intake, growth, and adiposity of Sprague-Dawley rats with diet board for 24 months. *Lab Anim* 47, 245–256.
- Lattimer, J. M., & Haub, M. D., 2010. Effects of dietary fiber and its components on metabolic health. *Nutrients*, 2(12), 1266-1289.
- Laurentin, A., & Edwards, C., 2005. Resistant starch and oligosaccharides. *Guide Nutr. Suppl*, 84, 246-253.
- Lestari, L.A., 2014. *Peran Sinbiotik Lokal Lactobacillus plantarum Mut7 dan Tepung Ubi Jalar (Ipomoea batatas) Kaya Serat terhadap Respon Imun dan Mikrobiota Digesta: Kajian pada Tikus Sprague Dawley yang Diinfeksi dengan Salmonella typhimurium* (Doctoral dissertation, Universitas Gadjah Mada).
- Levin, B.E., Dunn-Meynell, A.A., Balkan, B. and Keesey, R.E., 1997. Selective breeding for diet-induced obesity and resistance in Sprague-Dawley rats. *American Journal of Physiology-Regulatory, Integrative and Comparative Physiology*, 273(2), pp.R725-R730.
- Lin, H.V., Frassetto, A., Kowalik Jr, E.J., Nawrocki, A.R., Lu, M.M., Kosinski, J.R., Hubert, J.A., Szeto, D., Yao, X., Forrest, G. and Marsh, D.J., 2012. Butyrate and propionate protect against diet-induced obesity and regulate gut hormones via free fatty acid receptor 3-independent mechanisms. *PloS one*, 7(4), p.e35240.
- Liu, H.Y., Walden, T.B., Cai, D., Ahl, D., Bertilsson, S., Phillipson, M., Nyman, M. and Holm, L., 2019. Dietary fiber in bilberry ameliorates pre-obesity events in rats by regulating lipid depot, cecal short-chain fatty acid formation and microbiota composition. *Nutrients*, 11(6), p.1350.

- Liu, L., Li, Q., Yang, Y., & Guo, A., 2021. Biological Function of Short-Chain Fatty Acids and Its Regulation on Intestinal Health of Poultry. *Frontiers in Veterinary Science*, 8.
- Louis, P., & Flint, H. J., 2017. Formation of propionate and butyrate by the human colonic microbiota. *Environmental microbiology*, 19(1), 29-41.
- Louis, P., Scott, K.P., Duncan, S.H., Flint, H.J., 2007. Understanding the effects of diet on bacterial metabolism in the large intestine. *J Appl Microbiol*, 102, 1197–1208.
- Louis, P., Young, P., Holtrop, G., & Flint, H. J. (2010). Diversity of human colonic butyrate-producing bacteria revealed by analysis of the butyryl-CoA: acetate CoA-transferase gene. *Environmental microbiology*, 12(2), 304-314.
- Macfarlane, S. and Macfarlane, G.T., 2003. Regulation of short-chain fatty acid production. *Proceedings of the Nutrition Society*, 62(1), pp.67-72.
- Macia, L., Tan, J., Vieira, A.T., Leach, K., Stanley, D., Luong, S., Maruya, M., Ian McKenzie, C., Hijikata, A., Wong, C. and Binge, L., 2015. Metabolite-sensing receptors GPR43 and GPR109A facilitate dietary fibre-induced gut homeostasis through regulation of the inflammasome. *Nat commun*, 6(1), pp.1-15.
- Maeda, T., Towatari, M., Kosugi, H., & Saito, H. (2000). Up-regulation of costimulatory/adhesion molecules by histone deacetylase inhibitors in acute myeloid leukemia cells. *Blood, the Journal of the American Society of Hematology*, 96(12), 3847-3856.
- Mäkelä, A.M., Hohtola, E., Miinalainen, I.J., Autio, J.A., Schmitz, W., Niemi, K.J., Hiltunen, J.K. and Autio, K.J., 2019. Mitochondrial 2, 4-dienoyl-CoA reductase (Decr) deficiency and impairment of thermogenesis in mouse brown adipose tissue. *Scientific reports*, 9(1), pp.1-16.
- Mantis, N.J. and Forbes, S.J., 2010. Secretory IgA: arresting microbial pathogens at epithelial borders. *Immunological investigations*, 39(4-5), pp.383-406.
- Mantis, N.J., Rol, N. and Corthésy, B.J.M.I., 2011. Secretory IgA's complex roles in immunity and mucosal homeostasis in the gut. *Mucosal immunology*, 4(6), pp.603-611.
- Marques, C., Meireles, M., Norberto, S., Leite, J., Freitas, J., Pestana, D., ... & Calhau, C. (2016). High-fat diet-induced obesity Rat model: a comparison between Wistar and Sprague-Dawley Rat. *Adipocyte*, 5(1), 11-21.
- Marsono, Y., Putri, R.G. and Arianti, E.D., 2020. The effects of replacement of dietary fiber with FiberCreme™ on lowering serum glucose and

improvement of lipid profile in hypercholesterolemia-diabetic rats and its mechanism. *Pak J Nutr*, 19, pp.204-211.

Maruyama, S., Lim, J., & Streletskaia, N. A. (2021). Clean Label Trade-Offs: A Case Study of Plain Yogurt. *Front. Nutr.*, 462.

Mathewson, N.D., Jenq, R., Mathew, A.V., Koenigsknecht, M., Hanash, A., Toubai, T., Oravec-Wilson, K., Wu, S.R., Sun, Y., Rossi, C., 2016, Gut microbiome-derived metabolites modulate intestinal epithelial cell damage and mitigate graft-versus-host disease. *Nat. Immunol.* 17, 505–513

McConnell, E.L., Basit, A.W. and Murdan, S., 2008. Measurements of rat and mouse gastrointestinal pH, fluid and lymphoid tissue, & implications for in-vivo experiments. *J Pharmy Pharmacology*, 60(1), pp.63-70.

Mensink, M.A., Frijlink, H.W., van der Voort Maarschalk, K. and Hinrichs, W.L., 2015. Inulin, a flexible oligosaccharide I: Review of its physicochemical characteristics. *Carbohydrate polym*, 130, pp.405-419.

Michel, C., Levin, B. E., & Dunn-Meynell, A. A. (2003). Stress facilitates body weight gain in genetically predisposed rats on medium-fat diet. *American Journal of Physiology-Regulatory, Integrative and Comparative Physiology*, 285(4), R791-R799.

Midhun, N., Sonia, B.J.K., Chakrapani, K. V. Haripriya, G. 2021. Enzyme linked immunosorbant assay-lab diagnosis: A review. *Indian Journal of Microbiology Research*. 8(1):10–14

Mikulic, J., Longet, S., Favre, L., Benyacoub, J. and Cortes, B., 2017. Secretory IgA in complex with Lactobacillus rhamnosus potentiates mucosal dendritic cell-mediated Treg cell differentiation via TLR regulatory proteins, RALDH2 and secretion of IL-10 and TGF- β . *Cellular & molecular immunology*, 14(6), pp.546-556.

Morrison, D. J., & Preston, T. 2016. Formation of short chain fatty acids by the gut microbiota and their impact on human metabolism. *Gut microbes*, 7(3), 189-200.

Mudgil, D., 2017. The interaction between insoluble and soluble fiber. In *Dietary fiber for the prevention of cardiovascular disease* (pp. 35-59). Academic Press.

Müller, M., Canfora, E.E. and Blaak, E.E., 2018. Gastrointestinal transit time, glucose homeostasis and metabolic health: modulation by dietary fibers. *Nutrients*, 10(3), p.275.

- Nugroho, S. W., Fauziyah, K. R., Sajuthi, D., & Darusman, H. S. (2018). Profil Tekanan Darah Normal Tikus Putih (*Rattus norvegicus*) Galur Wistar dan Sprague-Dawley. *Acta VETERINARIA Indonesiana*, 6(2), 32-37.
- O'Flaherty, S., Saulnier, D., Pot, B., Versalovic, J., 2010. How can probiotics and prebiotics impact mucosal immunity? *Gut Microbes*, 1, 293–300.
- O'Keefe, S. J., Li, J. V., Lahti, L., Ou, J., Carbonero, F., Mohammed, K., ... & Zoetendal, E. G. (2015). Fat, fibre and cancer risk in African Americans and rural Africans. *Nature communications*, 6(1), 1-14.
- Ogoina, D., & Onyemelukwe, G. C. (2009). The role of infections in the emergence of non-communicable diseases (NCDs): compelling needs for novel strategies in the developing world. *Journal Infect Public Health*, 2(1), 14-29.
- Oswari, H., Widodo, A.D., Handayani, F., Juffrie, M., Sundjaya, T., Bindels, J., Hegar, B., 2019. Dosage-Related Prebiotic Effects of Inulin in Formula-Fed Infants. *Pediatr Gastroenterol Hepatol Nutr*, 22, 63.
- Paliogiorgou, 2021. Effect of different types of inulin as fat replacers in meat burgers. Diakses pada 1 Maret 2023, dari <https://edepot.wur.nl/521180>
- Pan, X.D., Chen, F.Q., Wu, T.X., Tang, H.G. and Zhao, Z.Y., 2009. Prebiotic oligosaccharides change the concentrations of short-chain fatty acids and the microbial population of mouse bowel. *Journal of Zhejiang University Science B*, 10, pp.258-263.
- Panesar, P. S., Bali, V., Kumari, S., Babbar, N., & Oberoi, H. S. 2014. Prebiotics. In *Biotransformation of waste biomass into high value biochemicals* (pp. 237-259). Springer, New York, NY.
- Park, Y.H., Kim, N., Shim, Y.K., Choi, Yoon Jin, Nam, R.H., Choi, Yoon Jeong, Ham, M.H., Suh, J.H., Lee, S.M., Lee, C.M., Yoon, H., Lee, H.S., Lee, D.H., 2015. Adequate Dextran Sodium Sulfate-induced Colitis Model in Mice and Effective Outcome Measurement Method. *J Cancer Prev*, 20, 260.
- Pattola, P., Nur, A., Atmadja, T. F. A. G., Yuniato, A. E., Rasmaniar, R., Marzuki, I., ... & Purba, A. M. V., 2020. *Gizi Kesehatan dan Penyakit. Yayasan Kita Menulis*.
- Petri, R.M., Wetzels, S.U., Kumar, M., Khiaosa-Ard, R. and Zebeli, Q., 2019. Adaptive responses in short-chain fatty acid absorption, gene expression, and bacterial community of the bovine rumen epithelium recovered from a continuous or transient high-grain feeding. *Journal of dairy science*, 102(6), pp.5361-5378.

- Phalipon, A., Cardona, A., Kraehenbuhl, J.P., Edelman, L., Sansonetti, P.J. and Corthésy, B., 2002. Secretory component: a new role in secretory IgA-mediated immune exclusion in vivo. *Immunity*, 17(1), pp.107-115.
- Primec, M., Mičetić-Turk, D., Langerholc, T., 2017. Analysis of short-chain fatty acids in human feces: A scoping review. *Anal Biochem* 526, 9–21. <https://doi.org/10.1016/J.AB.2017.03.007>
- PT Lautan Natural Krimerindo. 2017. *FAQ About FiberCreme*. Diakses dari <https://fibercreme.com/faq/?lang=en> pada 25 Desember 2022
- Puyalto, M., Sol, C. and Mallo, J.J., 2016. Coconut oil: A new option for controlling pig pathogens. *Pig Prog*, 32, pp.35-36.
- Ragsdale S. W., Pierce E. 2008. Acetogenesis and the Wood-Ljungdahl pathway of CO(2) fixation. *Biochim. Biophys. Acta*. 1784: 1873–1898.
- Reeves, PG., Nielson, H., dan Fahey, GC.. 1993. AIN-93. Purified Diets for Laboratory Rodents. Final Reports of the American Institute of Nutrition Ad Hoc Writing Committee on the Reformulation of the AIN-76 a Rodent Diet. *Journal of Nutrition*. 123:1939-1951.
- Rehné, P. (2022). *Do prebiotics offer more growth potential than probiotics?* Diakses pada 11 Maret 2023, dari <https://www.nutritionaloutlook.com/view/do-prebiotics-offer-more-growth-potential-than-probiotics>
- Rios, D., Wood, M.B., Li, J., Chassaing, B., Gewirtz, A.A. and Williams, I.R., 2016. Antigen sampling by intestinal M cells is the principal pathway initiating mucosal IgA production to commensal enteric bacteria. *Mucosal immunology*, 9(4), pp.907-916.
- Roberfroid, M. (2004). *Inulin-type fructans: functional food ingredients*. CRC Press.
- Rohman, A., Irnawati, Erwanto, Y., Lukitaningsih, E., Rafi, M., Fadzilah, N.A., Windarsih, A., Sulaiman, A. and Zakaria, Z., 2021. Virgin coconut oil: extraction, physicochemical properties, biological activities and its authentication analysis. *Food Reviews International*, 37(1), pp.46-66.
- Roller, M., Rechkemmer, G., Watzl, B., 2004. Prebiotic Inulin Enriched with Oligofructose in Combination with the Probiotics *Lactobacillus rhamnosus* and *Bifidobacterium lactis* Modulates Intestinal Immune Functions in Rats. *J Nutr*, 134, 153–156.
- Sakata, T., 2019. Pitfalls in short-chain fatty acid research: A methodological review. *Anim Sci J* 90, 3–13.
- Salleh, S. N., Fairus, A. A. H., Zahary, M. N., Bhaskar Raj, N., & Mhd Jalil, A. M., 2019. Unravelling the effects of soluble dietary fibre supplementation

on energy intake and perceived satiety in healthy adults: evidence from systematic review and meta-analysis of randomised-controlled trials. *Foods*, 8(1), 15.

Sandra J. M. Ten Bruggencate, Ingeborg M. J. Bovee-Oudenhoven, Mischa L. G. Lettink-Wissink, Roelof Van der Meer, 2003. Dietary Fructo-Oligosaccharides Dose-Dependently Increase Translocation of Salmonella in Rats, *The Journal of Nutrition*, 133(7). pp 2313–2318

Schley, P. D., & Field, C. J. (2002). The immune-enhancing effects of dietary fibres and prebiotics. *Br J Nutr*, 87(S2), S221-S230.

Schönfeld P, Wojtczak L. Short- and medium-chain fatty acids in energy metabolism: the cellular perspective. *J Lipid Res*. (2016) 57:943–54.

Schroeder Jr, H.W. and Cavacini, L., 2010. Structure and function of immunoglobulins. *Journal of allergy and clinical immunology*, 125(2), pp.S41-S52.

Scott, K. P., Martin, J. C., Duncan, S. H., & Flint, H. J. (2014). Prebiotic stimulation of human colonic butyrate-producing bacteria and bifidobacteria, in vitro. *FEMS microbiology ecology*, 87(1), 30-40.

Sender, R., Fuchs, S., & Milo, R. (2016). Revised estimates for the number of human and bacteria cells in the body. *PLoS biology*, 14(8), e1002533.

Setyani, T. S., 2023 - *unpublished data*. Pengaruh Konsumsi FiberCreme™ Tipe 01 terhadap Karakteristik Digesta Sekum, SCFA, dan Imunitas (sIgA) pada Tikus Sprague Dawley. *Skripsi*, UGM

Shi N, Li N, Duan X, Niu H. Interaction between the gut microbiome and mucosal immune system. *Mil Med Res*, 2017; 4:14.

Shoaib, M., Shehzad, A., Omar, M., Rakha, A., Raza, H., Sharif, H. R., ... & Niazi, S. (2016). Inulin: Properties, health benefits and food applications. *Carbohydrate polymers*, 147, 444-454.

Silva, Y. P., Bernardi, A., & Frozza, R. L. (2020). The role of short-chain fatty acids from gut microbiota in gut-brain communication. *Frontiers in endocrinology*, 11, 25.

Singh, V. and Vijay-Kumar, M., 2020. Beneficial and detrimental effects of processed dietary fibers on intestinal and liver health: health benefits of refined dietary fibers need to be redefined! *Gastroenterology Report*, 8(2), pp.85-89.

Sireeratawong, S., Piyabhan Phd, P., Singhalak, T., Wongkrajang, Y., Temsiririkkul, R., Punsirat Bsc, J., Ruangwises Phd, N., Saraya Phd, S.,

- Lerdvuthisopon Phd, N., Jaijoy, K., 2010. Toxicity Evaluation of Sappan Wood Extract in Rats. *J Med Assoc Thai* 93.
- Smith, P.M., Howitt, M.R., Panikov, N., Michaud, M., Gallini, C.A., Bohlooly-y, M., Glickman, J.N. and Garrett, W.S., 2013. The microbial metabolites, short-chain fatty acids, regulate colonic Treg cell homeostasis. *Science*, 341(6145), pp.569-573.
- Song, J., Li, Q., Everaert, N., Liu, R., Zheng, M., Zhao, G. and Wen, J., 2020. Effects of inulin supplementation on intestinal barrier function and immunity in specific pathogen-free chickens with Salmonella infection. *Journal of Animal Science*, 98(1), p.skz396.
- Stahl, B., Zens, Y. and Boehm, G., 2007. *Prebiotics with special emphasis on fructo-, galacto-, galacturono-, and xylooligosaccharides*.
- Steed, H., Macfarlane, S., 2009. Mechanisms of Prebiotic Impact on Health. *Prebiotics Probiotics Sci. Technol.* 135.
- Stephen AM, Champ MM, Cloran SJ, et al.. Dietary fibre in Europe: current state of knowledge on definitions, sources, recommendations, intakes and relationships to health. *Nutr Res Rev* 2017;30:149-90.
- Stevens CE, Hume ID. 1995. *Comparative Physiology of The Vertebrate Digestive System*. Cambrige University Press: Cambridge, UK.
- Sulistyowati, E., Handayani, D., Soeharto, S., Rudijanto, A., 2022. A high-fat and high-fructose diet lowers the cecal digesta's weight and short-chain fatty acid level of a Sprague-Dawley rat model. *Turk J Med Sci*, 52: 268–275.
- Suzuki, K. and Fagarasan, S., 2008. How host-bacterial interactions lead to IgA synthesis in the gut. *Trends in immunology*, 29(11), pp.523-531.
- Tan, C., Wei, H., Zhao, X., Xu, C., Peng, J., 2017. Effects of dietary fibers with high water-binding capacity and swelling capacity on gastrointestinal functions, food intake and body weight in male rats. *Food Nutr Res*, 61.
- Tan, C., Wei, H., Zhao, X., Xu, C., Zhou, Y., Peng, J., 2016. Soluble Fiber with High Water-Binding Capacity, Swelling Capacity, and Fermentability Reduces Food Intake by Promoting Satiety Rather Than Satiation in Rats. *Nutrients*, 8.
- Tawfick, M. M., Xie, H., Zhao, C., Shao, P., & Farag, M. A. (2022). Inulin fructans in diet: Role in gut homeostasis, immunity, health outcomes and potential therapeutics. *International Journal of Biological Macromolecules*.
- Tezuka, H., Abe, Y., Asano, J., Sato, T., Liu, J., Iwata, M. and Ohteki, T., 2011. Prominent role for plasmacytoid dendritic cells in mucosal T cell-independent IgA induction. *Immunity*, 34(2), pp.247-257.

- Togatorop, L.B., Mawarti, H., Saputra, B.A., Elon, Y., Malinti, E., Manalu, N.V., Khotimah, K., Suwanto, T., Haro, M., Damayanti, D. and Siagian, E., 2021. *Keperawatan Sistem Imun dan Hematologi*. Yayasan Kita Menulis.
- Tordesillas, L. and Berin, M.C., 2018. Mechanisms of oral tolerance. *Clinical reviews in allergy & immunology*, 55, pp.107-117.
- Trompette, A., Gollwitzer, E.S., Yadava, K., Sichelstiel, A.K., Sprenger, N., Ngom-Bru, C., Blanchard, C., Junt, T., Nicod, L.P., Harris, N.L. and Marsland, B.J., 2014. Gut microbiota metabolism of dietary fiber influences allergic airway disease and hematopoiesis. *Nature medicine*, 20(2), pp.159-166.
- Usuda, H., Okamoto, T. and Wada, K., 2021. Leaky gut: Effect of dietary fiber and fats on microbiome and intestinal barrier. *International journal of molecular sciences*, 22(14), p.7613.
- Valls, J., Pasamontes, N., Pantaleón, A., Vinaixa, S., Vaqué, M., Soler, A., ... & Gómez, X. (2013). Prospects of functional foods/nutraceuticals and markets. *Natural products*, 2491-2525.
- van der Hee, B. and Wells, J.M., 2021. Microbial regulation of host physiology by short-chain fatty acids. *Trends in Microbiology*, 29(8), pp.700-712.
- Vella, M. N., Stratton, L. M., Sheeshka, J., & Duncan, A. M. (2014). Functional food awareness and perceptions in relation to information sources in older adults. *Nutrition journal*, 13, 44.
- Venegas, D., De la Fuente, M. K., Landskron, G., González, M. J., Quera, R., Dijkstra, G., ... & Hermoso, M. A. 2019. Short chain fatty acids (SCFAs)-mediated gut epithelial and immune regulation and its relevance for inflammatory bowel diseases. *Frontiers in immunology*, 277.
- Vijay N, Morris ME., 2014. Role of monocarboxylate transporters in drug delivery to the brain. *Curr Pharm Des.* 20:1487–98.
- Vogt, J. A., & Wolever, T. M., 2003. Fecal acetate is inversely related to acetate absorption from the human rectum and distal colon. *The Journal of Nutrition*, 133, 3145–3148.
- Vogt, L., Meyer, D., Pullens, G., Faas, M., Smelt, M., Venema, K., Ramasamy, U., Schols, H.A., De Vos, P., 2015. Immunological Properties of Inulin-Type Fructans. *Crit. Rev. Food Sci. Nutr.* 55, 414–436.
- Wahjuningsih, S.B., Marsono, Y., Noor, Z., 2017. Konsentrat Serat Kedelai : Preparasi dan Pengaruhnya terhadap Sifat Fisik dan Kimia Digesta pada Tikus. *agriTECH*, 25: 90–95

- Wang, X.X., Song, P.X., Wu, H., Xue, J.X., Zhong, X. and Zhang, L.Y., 2016. Effects of graded levels of isomaltooligosaccharides on the performance, immune function and intestinal status of weaned pigs. *Asian-Australasian Journal of Animal Sciences*, 29(2), pp.250-256.
- Watzl, B., Gierbach, S., Roller, M., 2005. Inulin, oligofructose and immunomodulation. *British Journal of Nutrition*, 93, S49–S55.
- Wen, J., Niu, X., Chen, S., Chen, Z., Wu, S., Wang, X., Yong, Y., Liu, X., Yu, Z., Ma, X. and Abd El-Aty, A.M., 2022. Chitosan oligosaccharide improves the mucosal immunity of small intestine through activating SIgA production in mice: Proteomic analysis. *International Immunopharmacology*, 109, p.108826.
- WHO (World Health Organization), 2005. *Preventing chronic diseases: a vital investment*. World Health Organization.
- Widyaningsih, T. D., Wijayanti, N., & Nugrahini, N. I. P. (2017). *Pangan Fungsional: Aspek Kesehatan, Evaluasi, dan Regulasi*. Universitas Brawijaya Press.
- Woof, J.M. and Kerr, M.A., 2004. IgA function—variations on a theme. *Immunology*, 113(2), p.175.
- Woof, J.M. and Russell, M.W., 2011. Structure and function relationships in IgA. *Mucosal immunology*, 4(6), pp.590-597.
- Wu, G.D., Chen, J., Hoffmann, C., Bittinger, K., Chen, Y.Y., Keilbaugh, S.A., Bewtra, M., Knights, D., Walters, W.A., Knight, R. and Sinha, R., 2011. Linking long-term dietary patterns with gut microbial enterotypes. *Science*, 334(6052), pp.105-108.
- Yanuhar, U., & Caesar, N. R., 2021. *Teknologi Rekombinan Vaksin untuk Ikan*. Universitas Brawijaya Press.
- Zhang B., Guo Y. Supplemental zinc reduced intestinal permeability by enhancing occludin and zonula occludens protein-1 (ZO-1) expression in weaning piglets. *Br. J. Nutr.* 2009;102:687–693.
- Zhang, F., Fan, D., Huang, J.L. and Zuo, T., 2022. The gut microbiome: linking dietary fiber to inflammatory diseases. *Medicine in Microecology*, p.100070.
- Zhang, S., Hu, H., He, W., Muhammad, Z., Wang, L., Liu, F. and Pan, S., 2019. Regulatory roles of pectin oligosaccharides on immunoglobulin production in healthy mice mediated by gut microbiota. *Molecular nutrition & food research*, 63(14), p.1801363.