

## DAFTAR PUSTAKA

- Abdel-Fattah SM, Sanad MI, Safaa MA, Ragaa FFG. 2010. The protective effect of white ginseng against biochemical and pathological changes induced by aflatoxins in rats. *J Am Sci* 6: 461-472
- Abramov, V.M.; Kosarev, I.V.; Machulin, A.V.; Deryusheva, E.I.; Pripitnevich, T.V.; Panin, A.N.; Chikileva, I.O.; Abashina, T.N.; Manoyan, A.M.; Ahmetzyanova, A.A.; et al. *Ligilactobacillus salivarius* 7247 Strain: Probiotic Properties and Anti-Salmonella Effect with Prebiotics. *Antibiotics* 2023, 12, 1535. <https://doi.org/10.3390/antibiotics12101535>
- Adamzik M, Hamburger T, Petrat F, Peters J, Groot Hd, Hartmann M.2012. Free Hemoglobin Concentration in Severe Sepsis: Methods of Measurement and Prediction of Outcome. *Critical Care*. 16(4):R125
- A'inurrofiqin,M., E.S. Rahayu,D.A.Suroto, T.Utami, Y.Mayangsari. Safety Assessment of Indigenous Probiotic Strain *Lactiplantibacillus* subsp. *plantarum* Kita-3 using Sprague Dawley Rats as a Model. 2022.
- Alemán CL, Más RM, Rodeiro I, Noa M, Hernández C, Menéndez R, Gámez R. Reference database of the main physiological parameters in Sprague-Dawley rats from 6 to 32 months. *Lab Anim*. 1998 Oct;32(4):457-66. doi: 10.1258/002367798780599802. PMID: 9807760.
- Amala Hazel A.M, Pattarayan R., Banumathy V. Acute and subacute (28-days) oral toxicity studies of Eraippu noi chooranam. *International Journal of Advanced Research in Biological Sciences*, 2016; 3 (6): 106-112.
- Argenzio RA, Southworth M. Sites of organic acid production and absorption in gastrointestinal tract of the pig. *Am. J. Physiol*. 1974;226:454–460.
- Athennia,Armita. 2015. Evaluasi Keamanan Probiotik *Indigenous Lactobacillus plantarum* Dad 13 pada Model Tikus *Sprague Dawley*. Tesis. Universitas Gadjah Mada
- Anika Niambi Al-Shura. 2020. Advanced Hematology in Integrated Cardiovascular Chinese Medicine
- A. M. O'Hara and F. Shanahan, "(e gut flora as a forgotten organ," *EMBO Reports*, vol. 7, no. 7, pp. 688–693, 2006.
- Balls, M., Goldberg, A. M., Fentem, J. H., Broadhead, C. L., Burch, R. L., Festing, M. F., & van Zutphen, B. F. (1995). The three Rs: the way forward, the report and recommendation of ECVAM (The European Center for the Validation of Alternative Methods). *Alternatives to Laboratory Animals*, 23(6), 838-866

- Bayer AS, Chow AW, Betts D, Guze LB. Lactobacillemia--report of nine cases. Important clinical and therapeutic considerations. *Am J Med.* 1978 May;64(5):808-13. doi: 10.1016/0002-9343(78)90521-1. PMID: 645745.
- Beveridge,T.J. 2001. Use of The Gram Stain in Microbiology. *Biotechnic & Histochemistry.* 76(3): 111-118.
- Bürger C, Fischer DR, Cordenunzzi DA, de Borba Batschauer AP, Filho VC dos Santos Soares AR. 2005. Acute and subacute toxicity of the hydroalcoholic extract from *Wedelia paludosa* (*Acmela brasiliensis*) (*Asteraceae*) in mice. *J Pharm Pharmaceut Sci* 8: 370-373.
- Campbell, J.M., Fahey, G.C. dan Wolf, B.W. 1997. *Selected Indigestible Oligosaccharides Affect Large Bowel Mass, Cecal and Fecal Short-chain Fatty Acids, pH and Microflora In Rats.* *Journal of Nutrition* 127: 130-136.
- Chapman,C.M.C., G.R. Gibson, I. Rowland. 2012. In vitro evaluation of single- and multi-strain probiotics: Inter species inhibition between probiotic strains, and inhibition of pathogens. *Anaerobe* 18 (2012) :405-413.
- Chichlowski, M., W. J. Croom, F. W. Edens, B. W. MacBride, R. Qiu, C. C. Chiang, L. R. Daniel, G. B. Havenstein, and M. D. Koci. 2007. Microarchitecture and spatial relationship between bacteria and ileal, cecal and colonic epithelium in chicks fed a direct-fed microbial, PrimaLac, and salinomycin. *Poult. Sci.* 86:1121–1132.
- Clarridge JE 3rd. Impact of 16S rRNA gene sequence analysis for identification of bacteria on clinical microbiology and infectious diseases. *Clin Microbiol Rev.* 2004 Oct;17(4):840-62, table of contents. doi: 10.1128/CMR.17.4.840-862.2004.
- Cook SI, Sellin JH. Review article: short chain fatty acids in health and disease. *Aliment Pharmacol Ther.* 1998;12:499–507.
- Cummings JH, Hill MJ, Bone ES, et al. The effect of meat protein and dietary fiber on colonic function and metabolism. II. Bacterial metabolites in feces and urine. *Am J Clin Nutr.* 1979;32:2094–2101.
- De Groote MA, Frank ND, Dowell E, Glode MP, Pace NR. *Lactobacillus rhamonosus* GG bacteremia associated with probiotic use in a child with short gut syndrome. *The Pediatric Infectious Disease Journal* 2005;24:278–80.
- Deleu, S., Machiels, K., Raes, J., Verbeke, K., & Vermeire, S. (2021). Short chain fatty acids and its producing organisms: An overlooked therapy for IBD?. *EBioMedicine*, 66, 103293. <https://doi.org/10.1016/j.ebiom.2021.103293>

- Driessen, F.M., Kingma, F., Stadhouders, J., 1982. Evidence that *Lactobacillus bulgaricus* in yogurt is stimulated by carbon dioxide produced by *Streptococcus thermophilus*. *Neth. Milk Dairy J.* 36, 135–144.
- Effenberger-Neidnicht, K.; Hartmann, M. Mechanisms of Hemolysis During Sepsis. *Inflammation* 2018, 41, 1569–1581.
- Farber, J.M. (1996). An introduction to the hows and whys of molecular typing. *J. Fd. Prot.* 59:1091–1101.
- Fardiaz, S. 1989. *Penuntun Praktek Mikrobiologi Pangan*. Lembaga Sumberdaya Informasi, IPB. Bogor.
- FAO/WHO. Joint Working Group on Drafting Guideline for The Evaluation of Probiotics in Food. April–May. 2002. Available online: [https://www.who.int/foodsafety/fs\\_management/en/probiotic\\_guidelines.pdf](https://www.who.int/foodsafety/fs_management/en/probiotic_guidelines.pdf)
- Fitrianingthias, R.R.D.R., T. Utami, R. Yanti, J. Widada dan E.S. Rahayu. 2018. Consumption OF Indigenous Probiotic *Lactobacillus plantarum* Mut-7 Powder and Fecal Population of *Lactobacillus*, *Bifidobacterium*, *Clostridium* dan SCFA. *International Journal of Probiotics and Prebiotics*. (13) 4 : 143-150
- Forte, C., E. Manuali, Y. Abbate, P. Papa, L. Vieceli, M. Tentellini, M. Trabalza-Marinucci, L. Moscati. 2018. Dietary *Lactobacillus acidophilus* positively influences growth performance, gut morphology, and gut microbiology in rurally reared chickens. *Poultry Science*. 97(3) : 930-936
- Fu LL, Li JR. Microbial source tracking: a tool for identifying sources of microbial contamination in the food chain. *Crit. Rev. Food Sci. Nutr.* 54: 699-707 (2014)
- F. Han, L. Hu, Y. Xuan. Effects of high nutrient intake on the growth performance, intestinal morphology and immune function of neonatal intra-uterine growth-retarded pigs. 2013 *British Journal of Nutrition*, vol. 110, no. 10, pp. 1819–1827, 2013.
- Galina, Daiga, Ansonska, L., Valdovska, A. 2020. Effect of Probiotics and Herbal Products on Intestinal Histomorphological and Immunological Development in Piglets. *Veterinary Medicine International*.
- Gill PA, van Zelm MC, Muir JG, Gibson PR. Review article: short chain fatty acids as potential therapeutic agents in human gastrointestinal and inflammatory disorders. *Aliment Pharmacol Ther.* 2018; 48:15-34.
- Goldford JE, Lu N, Bajic´ D, Estrela S, Tikhonov M, Sanchez-Gorostiaga A, et al. Emergent simplicity in microbial community assembly. *Science* (80-) 2018; 361(6401):469–74. <https://doi.org/10.1126/science.aat1168>.

- Guntarti, A., Ningrum, K. P., Gandjar, I. G., & Salamah, N. (2021). Authentication of *Sprague Dawley* rats (*Rattus norvegicus*) fat with GC-MS (Gas Chromatography-Mass Spectrometry) combined with chemometrics. *International Journal of Applied Pharmaceutics*, 13(2), 134-139.
- Handoyo, Darmo dan Ari Rudiretna. 2001. Prinsip Umum dan Pelaksanaan Polymerase Chain Reaction (PCR), Unitas, Vol 9.17-29
- Harahap, I.A., M. Mariyatun<sup>1</sup>, P. N. Hasan<sup>1</sup>, F. H. Pamungkaningtyas, J. Widada, T. Utami, M. N. Cahyanto, M. Juffrie, A. Dinoto, S. Nurfiani, E. Zulaichah, I. N. Sujaya, E. S. Rahayu. 2021. Recovery of Indigenous probiotic *Lactobacillus plantarum* Mut-7 on healthy Indonesian adults after consumption of fermented milk containing these bacteria. *J Food Sci Technol*. 58(9):3525–3532.
- Hayakawa, K. 1992. Classification and Action of Food Microorganism. Di dalam: Nakazawa, Y. dan A. Hosono (eds) *Function of Fermented Milk: Challenges for the health science*, p 127. Elsevier Science Publisher Ltd.
- Huang Z, Mu C, Chen Y, Zhu Z, Chen C, Lan L, et al. Effects of dietary probiotic supplementation on LXR $\alpha$  and CYP7 $\alpha$ 1 gene expression, liver enzyme activities and fat metabolism in ducks. *Br Poultry Sci*. (2015) 56:218–24. doi: 10.1080/00071668.2014.100082153. Huang Z, Mu C, Chen Y, Zhu Z, Chen C, Lan L, et al. Effects of dietary probiotic supplementation on LXR $\alpha$  and CYP7 $\alpha$ 1 gene expression, liver enzyme activities and fat metabolism in ducks. *Br Poultry Sci*. (2015) 56:218–24. doi: 10.1080/00071668.2014.1000821
- Hu, J. L., Nie, S. P., Min, F. F., Xie, M. Y. 2012. Polysaccharide from Seeds of *Plantago asiatica* L. Increases Short Chain Fatty Acid Production and Fecal Moisture along with Lowering pH in Mouse Colon. *Journal of Agricultural and Food Chemistry*. 60:11525-11532. <https://doi.org/10.1021/jf302169u>
- ICMR-DBT Guidelines for Evaluation of Probiotics in Food. 2011. *Indian J Med Res.*, 134: 22-25.
- Ignacio A. Gómez-de-Segura, Isabel Prieto, Antonio G. Grande, Pilar, García, Ana Guerra, Javier Mendez & Enrique De Miguel (1998) Growth Hormone Reduces Mortality and Bacterial Translocation in Irradiated Rats, *Acta Oncologica*, 37:2, 179-185, DOI:10.1080/028418698429748
- Ikhsani, A.Y., E.Riftyan, R.A.Safitri, Y.Marsono, T.Utami, J. Widada, E.S. Rahayu. 2020. Safety Assessment of Indigenous Probiotic Strain *Lactobacillus plantarum* Mut-7 Using Sprague Dawley Rats as a Model. *Am. J. of Pharmacol. Toxicol.*, 15: 7-16.
- Iliya D. Kwoji, O. A. Aiyegoro, M. Okpeku dan M.A. Adeleke. 2021. Multi-Strain Probiotics: Synergy among Isolates Enhances Biological Activities : A Review. *MDPI.Biology*. 10 (322),1.

- Jati,S.K., E.S.Rahayu, D. A. Surotro, T.Utami,dan Y.Mayangsari. Safety Assessment of Indigenous Probiotic Strain *Lactiplantibacillus* subsp. *plantarum* T-3 using Sprague Dawley Rats as a Model. 2022. Tesis. Universitas Gadjah Mada
- Kajander K, Hatakka K, Poussa T, Färkkilä M, Korpela R. A probiotic mixture alleviates symptoms in irritable bowel syndrome patients: a controlled 6-month intervention. *Aliment Pharmacol Ther.* 2005 Sep 1;22(5):387-94. doi: 10.1111/j.1365-2036.2005.02579.x. PMID: 16128676.
- Kechagia M, Basoulis D, Konstantopoulou S, et al. (2013) Health benefits of probiotics: a review. *ISRN Nutr* 2013: 481651. <http://doi.org/10.5402/2013/481651>
- Kerrigan, S., Wang, Y., & Wang, A. (2013). *Recent Advance of Endocarditis: Complications of Endocarditis*. Intech, Croatia
- Kim, J. J., dan W. I. Khan. 2013. Goblet cells and mucins: role in innate defense in enteric infections. *Pathogens.* 2: 55–70.
- Kunz AN, Noel JM, Fairchok MP. Two cases of *Lactobacillus* bacteremia during probiotic treatment of short gut syndrome. *J Pediatr Gastroenterol Nutr.* 2004 Apr;38(4):457-8. doi: 10.1097/00005176-200404000-00017. PMID: 15085028.
- Lahtinen,S., Oewehand,A.C., Salminen,S. Wright,A.V. 2012. *Lactic Acid Bacteria, Microbiological and Functional Aspects*. Boca Raton : CRC Press.h.2.
- Land MH, Rouster-Stevens K, Woods CR, Cannon ML, Cnota J, Shetty AK. *Lactobacillus* sepsis associated with probiotic therapy. *Pediatrics* 2005; 115:178-81
- Lanjing,T., Cai N, Zhou Y, Liu Y, Hu J, Li Y, Yi S, Song W, Kang L, He H. Acute stress induces an inflammation dominated by innate immunity represented by neutrophils in mice. *Front Immunol.* 2022 Sep 29;13:1014296. doi: 10.3389/fimmu.2022.1014296. PMID: 36248830; PMCID: PMC9556762.
- Lara-Villoslada F, Sierra S, Diaz-Ropero MP, Olivares M, Xaus J. 2007. Safety assessment of the human milkisolated probiotic *Lactobacillus salivarius* CECT5713. *J.Dairy Sci.* 90:3583-9.
- Liu H, Wang J, He T, Becker S, Zhang G, Li D, Ma X. Butyrate: a doubled-edged sword for health? *Adv Nutr.* 2018;9:21-9.
- Li H, Liu F, Lu J, Shi J, Guan J, Yan F, Li B and Huo G. 2020. Probiotic mixture of *Lactobacillus plantarum* strains improves lipid metabolism and gut microbiota structure in high fat diet-fed mice. *Front. Microbiol.* 11:512. doi:10.3389/fmicb.2020.00512

- Maldonado, A., Barba, J.L.; Jiménez-Díaz, R. Production of plantaricin NC8 by *Lactobacillus plantarum* NC8 is induced in the presence of different types of gram-positive bacteria. *Arch. Microbiol.* 2004, 181, 8–16.
- Macfarlane, S. dan G.T. Macfarlane.2003. Regulation of short-chain fatty acid production. *Proceedings of the Nutrition Society* (2003), 62, 67–72.
- Mantelli,F. dan P. Argueso. 2008. Functions of Ocular Surface Mucins in Health and Disease. *Current Opinion in Allergy and Clinical Immunology*, 8(5). 477-483.
- Marmur, J. 1961. A procedure for isolation of deoxyribonucleic acid from microorganisms. *Journal of Molecular Biology.* 3 (2) : 208.
- Masco, L., Huys, G., Gevers, D., Verbruggen, L., & Swings, J. (2003). Identification of *Bifidobacterium* species using rep-PCR fingerprinting. *Systematic and Applied Microbiology*, 26(4), 557-563.
- Meini,S. R.Laureano, L. Fani, C.Tascini, A.Galano, A.Antonelli, G.M. Rossolini. 2015. Breakthrough *Lactobacillus rhamnosus* GG bacteremia associated with probiotic use in an adult patient with severe active ulcerative colitis: case report and review of the literature. 43(6):777-81
- Min Tze Liong. Safety of probiotics: translocation and infection. *Nutrition Reviews* 2008; 66:192–202
- Morrison, D. J. & Preston, T. Formation of short chain fatty acids by the gut microbiota and their impact on human metabolism. *Gut*
- Microbes* 7, 189–200, <https://doi.org/10.1080/19490976.2015.1134082> (2016).
- Muntiha, M. 2001. Teknik Pembuatan Preparat Histopatologi Dari Jaringan Hewan Dengan Pewarnaan HE. *Temu Teknis Fungsional Non Peneliti.* 1 (1) : 1-8.
- Nielsen K, Duncan J. *Animal Brucellosis*. Boca Raton, FL: CRC Press, Inc 1990
- Nick Ashton, *Physiology of red and white blood cells, Anaesthesia & Intensive Care Medicine.* 2007. 8(5): 203-208. <https://doi.org/10.1016/j.mpaic.2007.02.003>.
- O'Sullivan MA dan O'Morain CA. Bacterial supplementation in the irritable bowel syndrome. A randomised double-blind placebo-controlled crossover study. *Dig Liver Dis.* 2000 May;32(4):294-301. doi: 10.1016/s1590-8658(00)80021-3. PMID: 11515626.
- Patterson JK, Lei XG, Miller DD. 2008. The pig as an experimental model for elucidating the mechanisms governing dietary influence on mineral absorption. *Exp Biol Med* : 233:651-64.
- Peres CM, Alves M, Hernandez-Mendoza A, Moreira L, Silva S, Bronze MR, Vilas-Boas L, Peres C, Malcata FX. 2014. Novel isolates of lactobacilli



from fermented Portuguese olive as potential probiotics. LWT-Food Sci Technol 59: 234-246. DOI: 10.1016/j.lwt.2014.03.003

Piagnerelli M, Boudjeltia KZ, Gulbis B, Vanhaeverbeek M, Vincent JL. 2007. Anemia in Sepsis: The Importance of Red Blood Cell Membrane Changes. Transfusion Alternatives in Transfusion Medicine.;9:143-9

Rahayu, E. S. (2003). Lactic acid bacteria in fermented foods of Indonesian origin. Agritech 23:75–84.

Rahayu, E.S., A.Yogeswara, Mariyatun, L.Windiarti, T. Utami, dan K. Watanabe. 2015. Molecular Characteristics of Indigenous Probiotic Strains from Indonesia. Int J Probiotics Prebiotics. 11(2):109–116

Rahayu, E.S., M.N.Cahyanto, L.Windiarti, J. Sutriyanto, T. Kandarina, T.Utami. 2016. Effects of consumption of fermented milk containing indigenous probiotic *Lactobacillus plantarum* Dad-13 on the fecal microbiota of healthy Indonesian volunteers. Intl J Probiotics Prebiotics 11 (2): 91-98.

Rahayu, E.S., I.H. Rusdan, A. Athennia, R.Z. Kamil, P.C. Pramesi, Y. Marsono, T. Utami dan J. Widada. 2019. Safety Assessment of Indigenous Probiotic Strain *Lactobacillus plantarum* Dad-13 Isolated from Dadih Using Sprague Dawley Rats as a Model. Am. J. Pharmacol. Toxicol., 14: 38-47.

Ratna, D.K., M.M. Evita, E.S. Rahayu, M.N. Cahyanto, R. Wikandari dan T. Utami. Indigenous Lactic Acid Bacteria from Halloumi Cheese as a Probiotics Candidate of Indonesian Origin. International Journal of Probiotics and Prebiotics. 16 (39-44).

Rodney D. Berg. Bacterial translocation from the gastrointestinal tract . In: Fuller R, ed. Probiotics: The Scientific Basis. London: Chapman & Hall; 1992:55–85.

Sagala, L.R. 2021. PENENTUAN BARCODE DNA BERDASARKAN LOKUS GEN *rbcl* PADA *Zingiber loerzingii* VALETON. Skripsi. Universitas Islam Negeri Sumatera Utara.

Salminen MK, Tynkkynen S, Rautelin H, Saxelin M, Vaara M, Ruutu P, et al. *Lactobacillus* bacteremia during a rapid increase in probiotic use of *Lactobacillus rhamnosus* GG in Finland. Clin Infect Dis 2002; 35:1155-60

Sanders, M.E., Akkermans, L.M.A., D. Haller, C. Hammerman, J. Heimbach, G. Hörmannspurger, G. Huys, D.D. Levy, F. Lutgendorff, D. Mack, P. Phothirath, G.S. Aguilar dan E. Vaughan. 2010. Safety assessment of probiotics for human use. Gut Microbes, 1(3) :164-185.

Saulahirwan, R., Sinay, H., Karuwal, R.L. 2023. Transaminase Enzyme and Liver Histopathological Structure of Mice Facing to Smoke Cigarettes After Administered with *Enhalus acoroides* Peel Extract. Journal of Biology & Biology Education. 15 (1) : 97-104.

- Schlegel L, Lemerle S, Geslin P. *Lactobacillus* species as opportunistic pathogens in immunocompromised patients. *Eur J Clin Microbiol Infect Dis* 1998;17:887–888.
- Svetoch EA, Eruslanov BV, Levchuk VP, Perelygin VV, Mitsevich EV, Mitsevich IP, Stepanshin J, Dyatlov I, Seal BS, Stern NJ. Isolation of *Lactobacillus salivarius* 1077 (NRRL B-50053) and characterization of its bacteriocin, including the antimicrobial activity spectrum. *Appl Environ Microbiol*. 2011 Apr;77(8):2749-54. doi: 10.1128/AEM.02481-10. Epub 2011 Mar 4. PMID: 21378051; PMCID: PMC3126352.
- Sharma A, Lee S, Park YS. Molecular typing tools for identifying and characterizing lactic acid bacteria: a review. *Food Sci Biotechnol*. 2020 Aug 16;29(10):1301-1318. doi: 10.1007/s10068-020-00802-x.
- Shihata, A., Shah, N.P., 2000. Proteolytic profiles of yogurt and probiotic bacteria. *Int. Dairy J.* 10, 401–408.
- Shokryazdan P, Faseleh Jahromi M, Liang JB, Kalavathy R, Sieo CC, Ho YW. Safety Assessment of Two New *Lactobacillus* Strains as Probiotic for Human Using a Rat Model. *PLoS One*. 2016 Jul 28;11(7):e0159851. doi: 10.1371/journal.pone.0159851. PMID: 27467068; PMCID: PMC4965145.
- Shu,Quan, Joseph S Zhou, Kay J. Rutherford, Mervyn J Birtles, Jaya Prasad, Pramod K Gopal, Harsharnjit S Gill, Probiotic lactic acid bacteria (*Lactobacillus acidophilus* HN017, *Lactobacillus rhamnosus* HN001 and *Bifidobacterium lactis* HN019) have no adverse effects on the health of mice, *International Dairy Journal*, Volume 9, Issue 11, 1999, Pages 831-836.
- Sominsky, L., & Spencer, S. J. (2014). Eating behavior and stress: a pathway to obesity. *Frontiers in Psychology*, 5, 434
- Stackebrandt E, Goebel BM. 1995. A place for DNA-DNA reassociation and 16S rRNA sequence analysis in the present species definition in bacteriology. *Int. J. of Systematic Bacteriol.* 44: 846-849
- Sutula,J., L.Coulthwaite, J. Verran.2012.Culture media for differential isolation of *Lactobacillus casei* Shirota from oral samples, *Journal of Microbiological Methods*. 90(1) : 65-71.
- Takeuchi A, Sprinz H. Electron-Microscope Studies of Experimental Salmonella Infection in the Preconditioned Guinea Pig: II. Response of the Intestinal Mucosa to the Invasion by *Salmonella typhimurium*. *Am J Pathol*. 1967 Jul;51(1):137-61. PMID: 19971038; PMCID: PMC1965332.
- Thananimit S, Pahumunto N, Teanpaisan R. Characterization of Short Chain Fatty Acids Produced by Selected Potential Probiotic *Lactobacillus* Strains. *Biomolecules*. 2022; 12(12):1829. <https://doi.org/10.3390/biom12121829>.



- Towoliu,S., P. Lintong, C. Kairupan, 2013. Pengaruh Pemberian *Lactobacillus* Terhadap Gambaran Mikroskopis Mukosa Usus Halus Tikus Wistar (*Rattus Norvegicus*) Yang Diinfeksi dengan *Escherichia Coli*. Skripsi. Universitas Sam Ratulangi Manado.
- Tiengrim S, Leelaporn A, Manatsathit S, Thamlikitkul V. Viability of *Lactobacillus casei* strain Shirota (LcS) from feces of Thai healthy subjects regularly taking milk product containing LcS. 2012. J Med Assoc Thai. (95)2:S42-7.
- Timmerman,H.M, C.J.M. Koningb , L. Mulder , F.M. Romboutsd , A.C. Beynen. 2004. Monostrain, *multi-strain* and multispecies probiotics : A comparison of functionality and efficacy. International Journal of Food Microbiology 96 (2004), 227
- Utami,U.H., Harianie,L., Kusmiyati,N., Fitriasari,P.D. 2018. Buku Panduan Praktikum Mikrobiologi Umum. UIN Malang.
- Vigneshwar R, Arivuchelvan A, Mekala P and Imayarasi K, 2021. Sex-specific reference intervals for Wistar albino rats: hematology and clinical biochemistry. Indian J Anim Health, 60(1): 58-65, doi: 10.36062/ijah.60.1.2021.58-65
- Vissers, Y.M., Snel, J., Zuurendonk, P.F., Smit, B.A., Wichers,H.J. and Savelkoul, H.F. (2010) Differential effects of *Lactobacillus acidophilus* and *Lactobacillus plantarum* strain on cytokine induction in human peripheral blood mononuclear cells. FEMS Immunol Med Microbiol 59, 60–70.
- Webster, S.H., E.T. Liljegreen and D.J. Zimicen, 1947. Body weight ratios for liver, kidneys and spleen of laboratory animals: 1 Albino rat. Am. J. Anatomy, 81: 471-514.
- Wong, J. M. W., de Souza, R., Kendall, C. W. C., Emam, A., Jenkins, D. J. A. 2006. Colonic Health: Fermentation and Short Chain Fatty Acids. Journal Clinical Gastroenterol. 40(3):235–243. <https://doi.org/10.1097/00004836-200603000-00015>
- W. A. Awad, K. Ghareeb, S. Abdel-Raheem, and J. B`ohm. 2009. Effects of dietary inclusion of probiotic and synbiotic on growth performance, organ weights, and intestinal histomorphology of broiler chickens. Poultry Science, vol. 88, no. 1, pp. 49–56, 2009.
- Zhang H, Wang Y, Sun J, Guo Z, Guo H, Ren F. Safety evaluation of *Lactobacillus paracasei* subsp. *Paracasei* LC01, a probiotic bacterium. J Microbiol. 2013; 51(5):633-8. [DOI:10.1007/s12275-013-3336-x] [PMID]
- Zheng, J., S.Wittouck, E.Salvetti, C. M.A.P. Franz, H.M.B. Harris, P. Mattarelli, P.W. O'Toole, B.Pot, P.Vandamme, J.Walter,K. Watanabe,S. Wuyts, G. E. Felis3,M.G.Gänzle dan S.Lebeer. 2020. A taxonomic note on the genus

*Lactobacillus*: Description of 23 novel genera, emended description of the genus *Lactobacillus Beijerinck* 1901, and union of *Lactobacillaceae* dan *Leuconostocaceae*. International Journal of Systematic and Evolutionary Microbiology. 70(2782–2858).

Zhou JS, Shu Q, Rutherford KJ, et al. (2000) Acute oral toxicity and bacterial translocation studies on potentially probiotic strains of lactic acid bacteria. Food Chem Toxicol 38: 153–161. [https://doi.org/10.1016/S0278-6915\(99\)00154-4](https://doi.org/10.1016/S0278-6915(99)00154-4)