

DAFTAR PUSTAKA

- Andersen, J. M., Barrangou, R., Abou Hachem, M., Lahtinen, S., Goh, Y. J., Svensson, B., & Klaenhammer, T. R. (2011). Transcriptional and functional analysis of galactooligosaccharide uptake by lacS in *Lactobacillus acidophilus*. *Proceedings of the National Academy of Sciences of the United States of America*, 108(43), 17785–17790. <https://doi.org/10.1073/pnas.1114152108>
- Asif, A., & Khalid, S. (2018). Therapeutic Aspects of Probiotics and Prebiotics. In Diet, microbiome and health (Vol. 11, pp. 53–91). essay, Academic Press, an imprint of Elsevier.
- Arasu, M. V., Al-Dhabi, N. A., Ilavenil, S., Choi, K. C., & Sriganpalram, S. (2016). In vitro importance of probiotic *Lactobacillus plantarum* related to medical field. *Saudi journal of biological sciences*, 23(1), 6–10. <https://doi.org/10.1016/j.sjbs.2015.09.022>
- Aziz, R. K., Bartels, D., Best, A. A., DeJongh, M., Disz, T., Edwards, R. A., Formsma, K., Gerdes, S., Glass, E. M., Kubal, M., Meyer, F., Olsen, G. J., Olson, R., Osterman, A. L., Overbeek, R. A., McNeil, L. K., Paarmann, D., Paczian, T., Parrello, B., ... Zagnitko, O. (2008). The RAST Server: Rapid annotations using Subsystems Technology. *BMC Genomics*, 9(1). <https://doi.org/10.1186/1471-2164-9-75>
- Ballard, O., & Morrow, A. L. (2013). Human milk composition: nutrients and bioactive factors. *Pediatric clinics of North America*, 60(1), 49–74. <https://doi.org/10.1016/j.pcl.2012.10.002>
- Bolado-Martínez, E., Acedo-Félix, E., Peregrino-Uriarte, A. B., & Yepiz-Plascencia, G. (2012). Fructose 6-phosphate phosphoketolase activity in wild-type strains of *Lactobacillus*, isolated from the intestinal tract of pigs. *Prikladnaia biokhimiia i mikrobiologiya*, 48(5), 494–500.
- Burgé, Grégoire; Saulou-Bérion, Claire; Moussa, Marwen; Allais, Florent; Athes, Violaine; Spinnler, Henry-Eric (2015). Relationships between the use of Embden Meyerhof pathway (EMP) or Phosphoketolase pathway (PKP) and lactate production capabilities of diverse *Lactobacillus reuteri* strains. *Journal of Microbiology*, 53(10), 702–710. doi:10.1007/s12275-015-5056-x
- Charlesworth, B., & Barton, N. (2004). Genome size: Does bigger mean worse?. *Current Biology*, 14(6). <https://doi.org/10.1016/j.cub.2004.02.054>
- Darling, A. C., Mau, B., Blattner, F. R., & Perna, N. T. (2004). Mauve: multiple alignment of conserved genomic sequence with rearrangements. *Genome research*, 14(7), 1394–1403. <https://doi.org/10.1101/gr.2289704>

- Das, Deeplina; Goyal, Arun (2015). Antioxidant activity and γ -aminobutyric acid (GABA) producing ability of probiotic *Lactobacillus plantarum* DM5 isolated from Marcha of Sikkim. *LWT - Food Science and Technology*, 61(1), 263–268. doi:10.1016/j.lwt.2014.11.013
- de Vos, W. M., and Vaughan, E. E. (1994). Genetics of lactose utilization in lactic acid bacteria. *Federation of European Microbiological Societies Microbiol.* 15, 217–237. doi:10.1111/j.1574-976.1994.tb00136.x
- Fortina, M. G., Ricci, G., Mora, D., Guglielmetti, S., & Manachini, P. L. (2003). Unusual organization for lactose and GALACTOSE gene clusters in *Lactobacillus helveticus*. *Applied and Environmental Microbiology*, 69(6), 3238–3243. https://doi.org/10.1128/aem.69.6.3238-3243.2003
- Gänzle, M. G., Haase, G., & Jelen, P. (2008). Lactose: Crystallization, hydrolysis and value-added derivatives. *International Dairy Journal*, 18(7), 685–694. https://doi.org/10.1016/j.idairyj.2008.03.003
- Gänzle, Michael G.; Follador, Rainer (2012). Metabolism of Oligosaccharides and Starch in *Lactobacilli*: A Review. *Frontiers in Microbiology*, 3, 340. doi:10.3389/fmicb.2012.00340
- Garcia-Gonzalez, N., Battista, N., Prete, R., & Corsetti, A. (2021). Health-Promoting Role of *Lactiplantibacillus plantarum* Isolated from Fermented Foods. *Microorganisms*, 9(2), 349. https://doi.org/10.3390/microorganisms9020349
- Garcia-Gonzalez, N., Prete, R., Battista, N., & Corsetti, A. (2018). Adhesion properties of food-associated *Lactobacillus plantarum* strains on human intestinal epithelial cells and modulation of il-8 release. *Frontiers in Microbiology*, 9. https://doi.org/10.3389/fmicb.2018.02392
- Gibson, G. R., & Roberfroid, M. B. (2008). Gastrointestinal Microflora and Interactions with Gut Mucosa. In *Handbook of prebiotics*. (pp 13-38) Taylor & Francis.
- Halttunen, T., Salminen, S., & Tahvonen, R. (2007). Rapid removal of lead and cadmium from water by specific lactic acid bacteria. *International journal of food microbiology*, 114(1), 30–35. https://doi.org/10.1016/j.ijfoodmicro.2006.10.040
- Hu, Meizhong; Zhao, Haizhen; Zhang, Chong; Yu, Jiansheng; Lu, Zhaoxin (2013). Purification and Characterization of Plantaricin 163, a Novel Bacteriocin Produced by *Lactobacillus plantarum* 163 Isolated from Traditional Chinese Fermented Vegetables. *Journal of Agricultural and Food Chemistry*, 61(47), 11676–11682. doi:10.1021/jf403370y
- Holden, H. M.; Rayment, I.; Thoden, J. B. (2003). Structure and Function of Enzymes of the Leloir Pathway for Galactose Metabolism. *Journal of Biological Chemistry*, 278(45), 43885–43888. doi:10.1074/jbc.r300025200

- Iskandar, C. F., Cailliez-Grimal, C., Borges, F., & Revol-Junelles, A.-M. (2019). Review of lactose and galactose metabolism In lactic acid Bacteria dedicated to Expert genomic annotation. *Trends in Food Science & Technology*, 88, 121–132. <https://doi.org/10.1016/j.tifs.2019.03.020>
- Jiang, M., Zhang, F., Wan, C., Xiong, Y., Shah, N. P., Wei, H., & Tao, X. (2016). Evaluation of probiotic properties of *Lactobacillus plantarum* WLPL04 isolated from human breast milk. *Journal of dairy science*, 99(3), 1736–1746. <https://doi.org/10.3168/jds.2015-10434>
- Kant, R., Blom, J., Palva, A., Siezen, R. J., & de Vos, W. M. (2010). Comparative genomics of *Lactobacillus*. *Microbial Biotechnology*, 4(3), 323–332. <https://doi.org/10.1111/j.1751-7915.2010.00215.x>
- Kleerebezem, M.; Boekhorst, J.; van Kranenburg, R.; Molenaar, D.; Kuipers, O. P.; Leer, R.; Turchini, R.; Peters, S.A.; Sandbrink, H.M.; Fiers, M.W.E.J.; Stiekema, W.; Lankhorst, R.M.K.; Bron, P.A.; Hoffer, S.M.; Groot, M.N.N.; Kerkhoven, R.; de Vries, M.; Ursing, B.; de Vos, W.M.; Siezen, R.J (2003). Complete genome sequence of *Lactobacillus plantarum* WCFS1. *Proceedings of the National Academy of Sciences of the United States of America*, 100(4), 1990-1995. doi/10.1073/pnas.0337704100
- Kolmogorov, Mikhail; Yuan, Jeffrey; Lin, Yu; Pevzner, Pavel A. (2019). Assembly of long, error-prone reads using repeat graphs. *Nature Biotechnology*, 37, 540 – 546. doi:10.1038/s41587-019-0072-8
- Macfarlane, G. T., Steed, H., & Macfarlane, S. (2007). Bacterial metabolism and health-related effects of galacto-oligosaccharides and other prebiotics. *Journal of Applied Microbiology*. 104(2). 305-344. doi.org/10.1111/j.1365-2672.2007.03520.x
- Noda, M., Shiraga, M., Kumagai, T., Danshiitsoodol, N., & Sugiyama, M. (2018). Characterization of the sn35n strain-specific exopolysaccharide encoded in the whole circular genome of a plant-derived *Lactobacillus plantarum*. *Biological and Pharmaceutical Bulletin*, 41(4), 536–545. <https://doi.org/10.1248/bpb.b17-00840>
- O’ Donnell, M. M., Forde, B. M., Neville, B., Ross, P. R., & O’ Toole, P. W. (2011). Carbohydrate catabolic flexibility in the mammalian intestinal commensal *Lactobacillus ruminis* revealed by fermentation studies aligned to genome annotations. *Microbial Cell Factories*, 10(Suppl 1), 1–11. <https://doi.org/10.1186/1475-2859-10-s1-s12>
- Ooi, M. F., Foo, H. L., Loh, T. C., Mohamad, R., Rahim, R. A., & Ariff, A. (2021). A refined medium to enhance the antimicrobial activity of postbiotic produced by *Lactiplantibacillus plantarum* Rs5. *Scientific Reports*, 11(1). <https://doi.org/10.1038/s41598-021-87081-6>
- Parada Venegas, D., De la Fuente, M. K., Landskron, G., González, M. J., Quera, R., Dijkstra, G., Harmsen, H. J., Faber, K. N., & 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*, 10. <https://doi.org/10.3389/fimmu.2019.00277>

Pokusaeva, K., Fitzgerald, G. F., & van Sinderen, D. (2011). Carbohydrate metabolism in Bifidobacteria. *Genes & nutrition*, 6(3), 285–306. <https://doi.org/10.1007/s12263-010-0206-6>

Posthuma, C. C., Bader, R., Engelmann, R., Postma, P. W., Hengstenberg, W., & Pouwels, P. H. (2002). Expression of the Xylulose 5-phosphate phosphoketolase gene, *xpkA*, from *Lactobacillus pentosus* MD363 is induced by sugars that are fermented via the phosphoketolase pathway and is repressed by glucose mediated by *ccpa* and the mannose phosphoenolpyruvate phosphotransferase system. *Applied and Environmental Microbiology*, 68(2), 831–837. <https://doi.org/10.1128/aem.68.2.831-837.2002>

Rachmah, Athiyyarizka Farbila (2020) *Isolasi dan identifikasi bakteri Bifidobacterium sp. dari air susu ibu (ASI) = Isolation and identification of Bifidobacterium sp. from human breast milk*. Bachelor thesis, Universitas Pelita Harapan.

Rattanaprasert, M., van Pijkeren, J. P., Ramer-Tait, A. E., Quintero, M., Kok, C. R., Walter, J., & Hutkins, R. W. (2019). Genes Involved in Galactooligosaccharide Metabolism in *Lactobacillus reuteri* and Their Ecological Role in the Gastrointestinal Tract. *Applied and environmental microbiology*, 85(22), e01788-19. <https://doi.org/10.1128/AEM.01788-19>

Ronimus, R. S., & Morgan, H. W. (2003). Distribution and phylogenies of enzymes of the Embden-Meyerhof-Parnas pathway from archaea and hyperthermophilic bacteria support a gluconeogenic origin of metabolism. *Archaea* (Vancouver, B.C.), 1(3), 199–221. <https://doi.org/10.1155/2003/162593>

Sangwan, V., Tomar, S. K., Singh, R. R. B., Singh, A. K., & Ali, B. (2011). Galactooligosaccharides: Novel components of designer foods. *Journal of Food Science*, 76(4). <https://doi.org/10.1111/j.1750-3841.2011.02131.x>

Sharma, S., & Kanwar, S. S. (2017). Effect of prebiotics on growth behavior of *Lactobacillus plantarum* and their impact on adherence of strict anaerobic pathogens to intestinal cell lines. *Journal of Food Safety*, 38(1). <https://doi.org/10.1111/jfs.12384>

Stackebrandt, E., & Goebel, B. (1994). Taxonomic note: a place for dna-dna reassociation and 16S-rRNA sequence analysis in the present species definition in bacteriology. *International Journal Of Systematic And Evolutionary Microbiology*, 44(4), 846-849.

- Sveta, G. (2014). Fermentations in Streptococci. Seed viewer - the seed. Retrieved from: https://pubseed.theseed.org/SubsysEditor.cgi?page=ShowSubsystem&subsystem=Fermentations_in_Streptococci.
- Vitali, B., Minervini, G., Rizzello, C. G., Spisni, E., Maccaferri, S., Brigidi, P., Gobbetti, M., & Di Cagno, R. (2012). Novel probiotic candidates for humans isolated from raw fruits and vegetables. *Food microbiology*, 31(1), 116–125. <https://doi.org/10.1016/j.fm.2011.12.027>
- Vogel, R.F., Pavlovic, M., Ehrmann, M.A. Genomic analysis reveals *Lactobacillus sanfranciscensis* as stable element in traditional sourdoughs. *Microb Cell Fact* 10, S6 (2011). <https://doi.org/10.1186/1475-2859-10-S1-S6>
- Wee, Y.-J., Kim, J.-N., and Ryu, H.-W. (2006). Biotechnological production of lactic acid and its recent applications. *Food Technol Biotech.* 44, 163–172.
- World Health Organization. (2002) Food and Agricultural Organization of the United Nations and World Health Organization. Joint FAO/WHO working group report on drafting guidelines for the evaluation of probiotics in food. Food and Agricultural Organization of the United Nations [online].
- Yin, Y., Mao, X., Yang, J., Chen, X., Mao, F., & Xu, Y. (2012). dbCAN: a web resource for automated carbohydrate-active enzyme annotation. *Nucleic acids research*, 40, 445–451. <https://doi.org/10.1093/nar/gks479>
- Yoo, D., Bagon, B. B., Valeriano, V., Oh, J. K., Kim, H., Cho, S., & Kang, D. K. (2017). Complete genome analysis of *Lactobacillus fermentum* SK152 from kimchi reveals genes associated with its antimicrobial activity. *Federation of European Microbiological Societies microbiology letters*, 364(18), 10.1093/femsle/fnx185. <https://doi.org/10.1093/femsle/fnx185>
- Zheng, J., Wittouck, S., Salvetti, E., Franz, C. M. A. P., Harris, H. M. B., Mattarelli, P., O'Toole, P. W., Pot, B., Vandamme, P., Walter, J., Watanabe, K., Wuyts, S., Felis, G. E., Gänzle, M. G., & Lebeer, S. (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 and Leuconostocaceae. *International Journal of Systematic and Evolutionary Microbiology*, 70(4), 2782–2858. doi:10.1099/ijsem.0.004107
- Zúñiga, M., Yebra, M. J., & Monedero, V. (2021). Complex Oligosaccharide Utilization Pathways in *Lactobacillus*. *Current Issues in Molecular Biology*, (40) 49–80. <https://doi.org/10.21775/cimb.040.049>