

DAFTAR PUSTAKA

- Afrianto, S. and Wariyah, C., 2020. Karakteristik Growol yang Dibuak dengan Variasi Varietas Ubi Kayu (*Manihot esculenta* Crantz) dan Lama Fermentasi *Agritech*, 40(3), pp.254-261.
- Akbar, S.A., Putri, D.S. and Harissatria, H., 2022. Pengaruh Penggunaan EM4 terhadap fermentasi Ampas Serai Wangi Terhadap Kandungan Bahan Kering, Kadar Abu dan Bahan Organik. *Jurnal Peternakan Mahaputra*, 3(1), pp.23-31.
- Belmonte-Izquierdo, Y., Salomé-Abarca, L.F., González-Hernández, J.C. and López, M.G., 2023. Fructooligosaccharides (FOS) production by microorganisms with fructosyltransferase activity. *Fermentation*, 9(11), p.968.
- Cahyaningtyas, F.D. and Wikandari, P.R., 2022. Review Artikel: Potensi Fruktooligosakarida dan Inulin Bahan Pangan Lokal Sebagai Sumber Prebiotik. *Unesa Journal of Chemistry*, 11(2), pp.97-107.
- Carroll, K.C. and Pfaller, M.A. eds., 2024. *Manual of Clinical Microbiology*, 4 Volume Set. John Wiley & Sons.
- Caron, B., Honap, S. and Peyrin-Biroulet, L., 2024. Epidemiology of Inflammatory Bowel Disease Across the Ages in the Era of Advanced Therapies. *Journal of Crohn's and Colitis*, 18(Supplement_2), pp.ii3-ii15.
- Dong, Y., Han, M., Fei, T., Liu, H. and Gai, Z., 2024. Utilization of Diverse Oligosaccharides for Growth by *Bifidobacterium* and *Lactobacillus* Species and Their In Vitro Co-Cultivation Characteristics. *International Microbiology*, 27(3), pp.941-952.

- Elzalaky, E., 2025. Definition and Health Benefits of Macrobiotic, Probiotic, Prebiotic, Symbiotic, Microbiota, Psycobiotic, and Pharmabiotic with emphasis on Postbiotic: Overview. *Alexandria Journal of Food Science and Technology*, 22(1), pp.21-28.
- Ezeagu, G.G., Omotosho, A.O. and Suleiman, K.O., 2023. Effective Microorganisms, Their Products and Uses-A Review. *Nile Journal of Engineering and Applied Science*, 1.
- Fasya, M.I., Diniarti, N. and Lumbessy, S.Y., 2023. Penambahan Probiotik EM-4 dengan Konsentrasi Berbeda Pada Media Budidaya Terhadap Pertumbuhan dan Kelulushidupan Ikan Bawal Air Tawar (*Colossoma macropomum*). *Jurnal Mina Sains*, 9(2).
- Ferdinan, 2023. *Peneliti Ungkap Singkong di Indonesia Ternyata Dibawa dari Peru Tahun 1850*. Diakses tanggal 16 Juni 2025. <https://voi.id/berita/339117/peneliti-ungkap-singkong-di-indonesia-ternyata-dibawa-dari-peru-tahun-1850>.
- Fitri, I. and Mursyida, E., 2024. Study of Prebiotic Potency Sweet Potato Flour With Difference of Varieties as Complementary Feeding. *Al-Tamimi Kesmas: Jurnal Ilmu Kesehatan Masyarakat (Journal of Public Health Sciences)*, 13(1), pp.76-81.
- Guo, L., Ze, X., Feng, H., Liu, Y., Ge, Y., Zhao, X., Song, C., Jiao, Y., Liu, J., Mu, S. and Yao, S., 2024. Identification and Quantification of Viable *Lactocaseibacillus rhamnosus* in Probiotics Using Validated PMA-qPCR Method. *Frontiers in Microbiology*, 15, p.1341884.
- Guron, G.K., Hotchkiss Jr, A.T., Bodnar, B.H., Harron, A., Renye Jr, J.A. and McAnulty, M.J., 2025. Oligosaccharide Production Using β -Galactosidase

from *Lactobacillus bulgaricus* and *Kluyveromyces lactis* in Sweetened Reconstituted Nonfat Dry Milk. *Journal of Dairy Science*.

Hidalgo, D., Corona, F. and Martín-Marroquín, J.M., 2022. Manure Biostabilization by Effective Microorganisms as a Way to Improve Its Agronomic Value. *Biomass Conversion and Biorefinery*, 12(10), pp.4649-4664.

Higa, T. and Parr, J.F., 1994. *Beneficial and Effective Microorganisms for Sustainable Agriculture and Environment* (Vol. 1, pp. 16-16). Atami, Japan: International Nature Farming Research Center.

Hrncir, T., 2022. Gut Microbiota Dysbiosis: Triggers, Consequences, Diagnostic and Therapeutic Options. *Microorganisms*, 10(3), p.578.

Hrncirova, L., Machova, V., Trckova, E., Krejsek, J. and Hrncir, T., 2019. Food Preservatives Induce Proteobacteria Dysbiosis in Human-Microbiota-Associated Nod2-Deficient Mice. *Microorganisms*, 7(10), p.383.

Huebner, J., Wehling, R.L. and Hutkins, R.W., 2007. Functional Activity of Commercial Prebiotics. *International Dairy Journal*, 17(7), pp.770-775.

Hutasuhut, L.Y., Hanum, Z. and Yurliasni, Y., 2021. Efektivitas Fermentasi Susu Kambing Menggunakan Bakteri *Lactobacillus rhamnosus* dengan Penambahan Jus Buah Bit (*Beta vulgaris L.*) dalam Menghambat Pertumbuhan Bakteri Patogen Usus. *Jurnal Ilmiah Mahasiswa Pertanian*, 6(4), pp.429-435.

Kaewarsar, E., Chaiyasut, C., Lailerd, N., Makhamrueang, N., Peerajan, S. and Sirilun, S., 2023. Optimization of Mixed Inulin, Fructooligosaccharides,

and Galactooligosaccharides as Prebiotics for Stimulation of Probiotics Growth and Function. *Foods*, 12(8), p.1591.

Kanetro, B. and Luwihana, S., 2015. Komposisi Proksimat dan Kandungan Bakteri Asam Laktat Oyek Terbaik dari Perlakuan Penambahan Kacang Tunggak (*Vigna unguiculata*) Berdasarkan Tingkat Kesukaan. *Agritech*, 35(3), pp.261-265.

Khayrah, U., Prangdimurti, E. and Nuraida, L., 2022. Karakteristik dan Evaluasi Prebiotik Tepung Biji Cempedak (*Artocarpus champeden*). *Jurnal Ilmu Pertanian Indonesia*, 27(2), pp.248-254.

Kherade, M., Solanke, S., Tawar, M. and Wankhede, S., 2021. Fructooligosaccharides: A comprehensive Review. *Journal of Ayurvedic and Herbal Medicine*, 7(3), pp.193-200.

Kusmiyati, N., 2021. *Prebiotik Nutrisi Sehat Saluran Pencernaan*. Jawa Tengah: CV. Pena Persada.

Lestari, G.P., Puspaningtyas, D.E., Sari, P.M., Styaningrum, S.D. and Sucipto, A., 2024. Skor aktivitas Prebiotik Tepung Growol terhadap *Lactobacillus bulgaricus*, *Streptococcus thermophilus*, dan *Lactobacillus acidophilus* dibanding *Escherichia coli*. *Ilmu Gizi Indonesia*, 7(2), pp.173-182.

Martirosyan, D., Kanya, H. and Nadalet, C., 2021. Can Functional Foods Reduce the Risk of Disease? Advances in the Definition and Development of Functional Food Products. *Functional Foods in Health and Disease*, 11(5), pp.213-221.

Marvie, I., Sitanggang, A.B. and Budijanto, S., 2022. Produksi Selobiosa dari Hidrolisis Kulit Umbi Singkong dan Uji Aktivitas Prebiotiknya terhadap *Lactobacillus plantarum*. *agriTECH*, 42(3), pp.231-241.

- Meng, M.J., Huang, J., Tsou, Y.K., Pan, Y.B., Chiu, C.T., Lin, Y.T. and Le, P.H., 2024. Diet and the Risk of Inflammatory Bowel Disease: A Retrospective Cohort Study in Taiwan. *Journal of the Formosan Medical Association*.
- Morales-Landa, J.L., Moreno-Vilet, L., Cordero-Quiñones, L.M., González-Montemayor, J.A., García-Fajardo, J.A. and Luiz-Santos, N., 2024. Effect of The Molecular Structure and Degree of Polymerization of Fructans on The Growth Behavior of Four Lactic Acid Bacteria. *ACS Food Science & Technology*, 4(8), pp.1929-1936.
- Nofia, Y., Wasita, B. and Susilawati, T.N., 2022. Elevated Growol Flour Reduces Fasting Blood Glucose and HOMA-IR, and Increases Insulin Levels in a Rat Model of Type 2 Diabetes Mellitus. *Media Gizi Indonesia*, 17(2), pp.151-158.
- Nurrohima, D., Rahman, N. and Lutfiyah, F., 2024. Nutritional and Organoleptic Value in the Formula Enteral of Growol and Germinated Mung Bean Flour as an Alternative Enteral Type 2 Diabetes Mellitus. *Amerta Nutrition*, 8(3).
- Nuritasari, Y. 2012. Isolasi dan seleksi mikroba penghasil enzim penggumpak (milk-clotting) dari pangan fermentasi sebagai pengganti renin dalam pembuatan keju. Skripsi tidak dipublikasikan. Bogor: Fakultas Teknologi Pertanian IPB.
- Oh, N.S., Kim, K., Oh, S. and Kim, Y., 2019. Enhanced Production of Galactooligosaccharides Enriched Skim Milk and Applied to Potentially Synbiotic Fermented Milk with *Lactobacillus rhamnosus* 4B15. *Food Science of Animal Resources*, 39, pp.725–741.

- Olagunju, A.I. and Omoba, O.S., 2022. High fibres functional products. In *Functional cereals and cereal foods: Properties, functionality and applications* (pp. 379-400). Cham: Springer International Publishing.
- Palframan, R., Gibson, G.R. and Rastall, R.A., 2003. Development of a Quantitative Tool for The Comparison of The Prebiotic Effect of Dietary Oligosaccharides. *Letters in Applied Microbiology*, 37(4), pp.281-284.
- Patzer, S.I. and Braun, V., 2010. Gene Cluster Involved in the Biosynthesis of Griseobactin, a Catechol-Peptide Siderophore of *Streptomyces* sp. ATCC 700974. *Journal of bacteriology*, 192(2), pp.426-435.
- Permatasari, T. and Fauziyah, A.I., 2024. Literatur Review dari Randomized Controlled Trials (RCTs): Pengaruh Prebiotik terhadap Sistem Kekebalan Usus pada Penderita Diabetes Mellitus Tipe 2. *Jurnal SAGO Gizi dan Kesehatan*, 5(3B), pp.990-997.
- Permatasari, O., Ismawanti, Z., Muhlshoh, A. and Sholihah, I., 2022. Sosialisasi Manfaat Tempe dan Pelatihan Pengolahan Tempe Menjadi Tepung Sebagai ALternatif Pengganti Tepung Terigu. *Jurnal Kreativitas Pengabdian Kepada Masyarakat (PKM)*, 5(2), pp.558-564.
- Puspaningtyas, D.E., Sari, P.M., Kusuma, N.H. and SB, D.H., 2019. Analisis Potensi Prebiotik Growol: Kajian Berdasarkan Perubahan Karbohidrat Pangan. *Gizi Indonesia*, 42(2), pp.83-90.
- Putri, W.D.R., Haryadi, H. and Marseno, D.W., 2012. Isolation and Characterization of Amylolytic Lactic Acid Bacteria During Growol Fermentation, An Indonesian Traditional Food. *Jurnal Teknologi Pertanian*, 13(1).

- Rahmawati, D.M., Puspaningtyas, D.E., Sari, P.M., Styaningrum, S.D. and Sucipto, A., 2024. Skor Aktivitas Prebiotik Tepung Singkong terhadap *Lactobacillus Bulgaricus*, *Streptococcus Thermophilus*, *Lactobacillus Acidophilus* dibanding *Escherichia Coli*. *Journal Medika Respati: Jurnal Ilmiah Kesehatan*, pp.145-154.
- Rana, A., Taneja, N.K., Raposo, A., Alarifi, S.N., Teixeira-Lemos, E., Lima, M.J., Gonçalves, J.C. and Dhewa, T., 2024. Exploring Prebiotic Properties and Its Probiotic Potential of New Formulations of Soy Milk-Derived Beverages. *Frontiers in Microbiology*, 15, p.1404907.
- Risna, Y.K., Sri-Harimurti, S.H., Wihandoyo, W. and Widodo, W., 2022. Kurva Pertumbuhan Isolat Bakteri Asam Laktat dari Saluran Pencernaan Itik Lokal Asal Aceh. *Jurnal Peternakan Indonesia (Indonesian Journal of Animal Science)*, 24(1), pp.1-7.
- Roberfroid, M.B., 1998. Prebiotics and Synbiotics: Concepts and Nutritional Properties. *British Journal of Nutrition*, 80(S2), pp.S197-S202.
- Sari, P.M. and Puspaningtyas, D.E., 2019. Skor Aktivitas Prebiotik Growol (Makanan Fermentasi Tradisional dari Singkong) terhadap *Lactobacillus* sp. dan *Escherichia coli*. *Ilmu Gizi Indonesia*, 2(2), p.101.
- Schouler, C., Taki, A., Chouikha, I., Moulin-Schouleur, M. and Gilot, P., 2009. A Genomic Island of An Extraintestinal Pathogenic *Escherichia Coli* Strain Enables The Metabolism of Fructooligosaccharides, Which Improves Intestinal Colonization. *Journal of bacteriology*, 191(1), pp.388-393.
- Setiarto, R.H.B. and Widhyastuti, N., 2017. Pengaruh Fermentasi Bakteri Asam Laktat dan Siklus Pemanasan Bertekanan-Pendinginan Terhadap Kadar

- Pati Resisten Tepung Ubi Jalar Ungu (*Ipomea Batatas* Var *Ayamurasaki*)
Termodifikasi. *Indonesian Journal of Industrial Research*, 34(1), pp.26-35.
- Singh, R., Zogg, H., Wei, L., Bartlett, A., Ghoshal, U.C., Rajender, S. and Ro, S.,
2021. Gut Microbial Dysbiosis in the Pathogenesis of Gastrointestinal
Dysmotility and Metabolic Disorders. *Journal of Neurogastroenterology
and Motility*, 27(1), p.19.
- Songer, J.G. and Post, K.W. 2005. The Genus *Staphylococci*. In *Veterinary
Microbiology; Bacterial and Fungal Agents of Animal Disease. 1st ed.
Elsevier Saunders, St. Louis, Missouri*. Pg. 66-76.
- Sudarmono, P.P., 2016. Mikrobioma: Pemahaman baru tentang peran
mikroorganisme dalam kehidupan manusia. *EJournal Kedokteran
Indonesia*, 4(2), pp.5-71.
- Suparno, A.C., Kasasiah, A. and Ratnasari, D., 2022. Isolasi *Escherichia coli*
pada Sumber Air Baku serta Uji Resistensinya terhadap Antibiotik
Ampisilin dan Seftriakson. *Journal of Pharmaceutical And Sciences*, 5(2),
pp.265-273.
- TKPI. 2020. *Tabel Komposisi Pangan Indonesia*. Jakarta: Kementerian
Kesehatan.
- Torres, D.P.M., Goncalves, M., Teixeira, J.A. & Rodrigues, L.R., 2010.
Galacto-Oligosaccharides: Production, Properties, Applications, and
Significance as Prebiotics. *Comprehensive Reviews in Food Science and
Food Safety*, 9, pp.438–454.
- Tsania, I.L., Hidayati, I. and Jariyah, I.A., 2021. Uji Prebiotik Mangga Manalagi
(*Mangifera indica* L. var. *manalagi*) terhadap Pertumbuhan *Lactobacillus*

plantarum secara *In Vitro*. *Jurnal Al-Azhar Indonesia Seri Sains dan Teknologi*, 6(2), pp.102-107.

Wariyah, C., Huda, N. and Slamet, A., 2025. The Prebiotic Index of Dried-Growol Made with Different Cassava Varieties and Cooking Methods. *Caraka Tani: Journal of Sustainable Agriculture*, 40(1), pp.97-108.

Widianto, E. 2023. *Struktur Glukosa, Galaktosa, Fruktosa dan Fungsinya*. Diakses 9 Juni 2025 <https://bloglab.id/struktur-glukosa-galaktosa-fruktosa-dan-fungsinya/>.

Widyanti, E.A. and Seveline, S., 2022. Karakteristik Organoleptik Dan Fisikokimia Tepung Umbi Gadung (*Dioscorea hispida Dennst.*) Fermentasi. *Gorontalo Agriculture Technology Journal*, pp.77-85.

Wulandari, F., Nazaruddin, N. and Amaro, M., 2021. Pengaruh Jenis Bakteri Asam Laktat dan Lama Fermentasi terhadap Mutu Fisik, Kimia, Organoleptik, dan Mikrobiologi Tepung Mocaf. *Prosiding SAINTEK*, 3, pp.169-181.

Xu, Z.R., Hu, C.H. and Wang, M.Q., 2002. Effects of Fructooligosaccharide on Conversion of L-Tryptophan to Skatole and Indole by Mixed Populations of Pig Fecal Bacteria. *The Journal of General and Applied Microbiology*, 48(2), pp.83-89.

Yin, Z., Liu, X., Guo, L., Ren, M., Kang, W., Ma, C., Waterhouse, G.I. and Sun-Waterhouse, D., 2024. The Potential of Dietary Fiber in Building Immunity Against Gastrointestinal and Respiratory Disorders. *Critical Reviews in Food Science and Nutrition*, 64(33), pp.13318-13336.

- Yuanita, L. and Maulidah, E.Y., 2022. Pengaruh Pemberian Sirup Prebiotik Umbi Yacon terhadap Aktivitas Enzim Pencernaan pada Duodenum *Rattus norvegicus*. *Unesa Journal of Chemistry*, 11(1), pp.1-8.
- Yuniati, R., Damayanti, M. E., and Wardhana, W. (2025). Effect of EM-4 (Effective Microorganism-4) on Growth and Productivity of Cucumber (*Cucumis Sativus L.*) Pengaruh EM-4 (Effective Microorganism-4) terhadap Pertumbuhan dan Produktivitas Ketimun (*Cucumis sativus L.*). *Jurnal Biologi*, 18(1), 134–143.