

DAFTAR PUSTAKA

- Al-Jassim, Z. G. (2019). Using brewer's yeast and ginger in the management of constipation-predominant irritable bowel syndrome: a randomized double-blind placebo-controlled trial. *Asian Journal of Pharmaceutical and Clinical Research*, 12(3), 356–360. <https://doi.org/10.22159/AJPCR.2019.V12I3.30716>
- Alemaný-Fornes, M., Tintoré, M., & Cuñé, J. (2023). *Reliability of DAO supplements*.
- Asano, Y., Horiguchi, A., & Ito, M. (2019). *Effect of pancrelipase after pancreaticoduodenectomy*.
- Aziz, I., Tornblom, H., Palsson, O. S., Whitehead, W. E., & Simren, M. (2021). How the change in IBS criteria from Rome III to Rome IV impacts on clinical characteristics and key pathophysiological factors. *American Journal of Gastroenterology*, 116(6), 1260–1268. <https://doi.org/10.14309/ajg.0000000000001193>
- Bamola, V. D., Dubey, D., Samanta, P., & al., et. (2021). *Effect of Bacillus coagulans Unique IS-2 in Inflammatory Bowel Disease (IBD): A Randomized Controlled Trial*. <https://doi.org/10.1101/2021.07.18.21260556>
- Bang, U. C., Benfield, T., Bendtsen, F., & Hyldstrup, L. (2021). The effect of pancreatic enzyme replacement therapy on steatorrhea and nutritional status in chronic pancreatitis. *Pancreatology*, 21(2), 395–403. <https://doi.org/10.1016/j.pan.2020.12.007>
- Barto, T. L., Morency, C., & Schaap, N. (2022a). Intestinal absorption of lipids using a pancreatic enzyme-free nutritional supplement in patients with cystic fibrosis: A randomized, double-blind, crossover pilot trial. *Nutrients*. <https://doi.org/10.3390/nu14030680>
- Barto, T. L., Morency, C., & Schaap, N. (2022b). Intestinal absorption of lipids without pancreatic enzymes in cystic fibrosis. *Nutrients*.
- Bideeva, T. V., & Maev, I. V. (2020). Effectiveness of pancreatic enzyme replacement therapy in chronic pancreatitis. *Terapevticheskii Arkhiv*, 92(1), 5. <https://doi.org/10.26442/00403660.2020.01.000488>
- Bideeva, T. V., Maev, I. V., Kucheryavyy, Y. A., & al., et. (2020). The effectiveness of pancreatic enzyme replacement therapy using microencapsulated pancreatin preparations in the correction of nutritional status in patients with chronic pancreatitis: a prospective observational study. *Terapevticheskii Arkhiv*, 92(1), 24–30. <https://doi.org/10.1159/000501675>
- Brownell, J. N., Schall, J. I., Stallings, V. A., & al., et. (2019). Pancreatic Function in Chronic Pancreatitis: A Cohort Study Comparing 3

- Methods of Detecting Fat Malabsorption and the Impact of Short-term Pancreatic Enzyme Replacement Therapy. *Pancreas*, 48(8), 1070–1076. <https://doi.org/10.1097/MPA.0000000000001381>
- Camilleri, M., Ford, A. C., Mawe, G. M., Dinning, P. G., Rao, S. S. C., Chey, W. D., Simren, M., & Lembo, A. (2022). Chronic gastrointestinal disorders: Advances in understanding and management. *The Lancet*, 399(10335), 1664–1678. [https://doi.org/10.1016/S0140-6736\(21\)02615-9](https://doi.org/10.1016/S0140-6736(21)02615-9)
- Cavaletti, L., Taravella, A., & Carrano, L. (2019). E40, a novel microbial protease efficiently detoxifying gluten proteins, for the dietary management of gluten intolerance. *Scientific Reports*. <https://doi.org/10.1038/s41598-019-48299-7>
- Cavaletti, L., Taravella, A., Carrano, L., Carenzi, G., Sigurt, A., Solinas, N., Caro, S. De, Stasio, L. Di, Picascia, S., Laezza, M., Troncone, R., Gianfrani, C., & Mamone, G. (2019). *E40 , a novel microbial protease efficiently detoxifying gluten proteins , for the dietary management of gluten intolerance. July*, 1–11.
- Chey, W. D., Kurlander, J., & Eswaran, S. (2021). Irritable bowel syndrome: A clinical review. *JAMA*, 325(9), 865–877. <https://doi.org/10.1001/jama.2020.24706>
- Chey, W. D., Nojkov, B., Rubenstein, J. H., Dobhan, R. R., Greenson, J. K., & Cash, B. D. (2015). The yield of colonoscopy in patients with non-constipated irritable bowel syndrome. *American Journal of Gastroenterology*, 100(4), 929–934. <https://doi.org/10.1111/j.1572-0241.2005.41263.x>
- Comas-Basté, O., & Latorre-Moratalla, M. L. (2020). Lyophilised legume sprouts as a functional ingredient for diamine oxidase enzyme supplementation in histamine intolerance. *LWT - Food Science and Technology*. <https://doi.org/10.1016/J.LWT.2020.109201>
- Connealy, L. E., Settineri, R., & Causey, A. (2020). Clinical Observations on the Effects of a Dietary Supplement (GI Regenerate™) on Patients' Gastrointestinal Symptoms and Quality of Life Assessments. *International Journal of Physical Medicine and Rehabilitation*. <https://doi.org/10.4236/IJCM.2020.115030>
- Cornell, H. J., Czyzewska, A., & Macrae, F. A. (2016). The effect of enzyme supplementation on symptoms and duodenal histology in celiac patients. *International Journal of Celiac Disease*. <https://doi.org/10.12691/IJCD-4-2-2>
- DiMagno, M. J., & DiMagno, E. P. (2022). Chronic Pancreatitis and Pancreatic Enzyme Insufficiency. *Gastroenterology Clinics of North America*.
- Effects of microencapsulated sodium butyrate and probiotics in IBS*. (2022).

<https://doi.org/10.21203/rs.3.rs-1814960/v1>

- Erchinger, F., Tjora, E., & Nordaas, I. K. (2022a). Pancreatic enzyme treatment in chronic pancreatitis: Quality of management and adherence to guidelines—A cross-sectional observational study. *United European Gastroenterology Journal*. <https://doi.org/10.1002/ueg2.12276>
- Erchinger, F., Tjora, E., & Nordaas, I. K. (2022b). Pancreatic enzyme treatment in chronic pancreatitis: Quality of management and adherence to guidelines. *United European Gastroenterology Journal*. <https://doi.org/10.1002/ueg2.12276>
- Evaluation of *Bacillus clausii* CSI08, *Bacillus megaterium* MIT411 and a *Bacillus* cocktail on gastrointestinal health. (2023). *Beneficial Microbes*. <https://doi.org/10.3920/bm2022.0117>
- Fei, Y., Li, S., Wang, Z., & al., et. (2023). IRW (Ile–Arg–Trp) Alleviates DSS–Induced Intestinal Injury by Remodeling Gut Microbiota and Regulating Fecal SCFA Levels. *Nutrients*, 15(4). <https://doi.org/10.3390/nu15040953>
- Ferreira-Lazarte, A., Moreno, F. J., & Villamiel, M. (2018). Application of a commercial digestive supplement formulated with enzymes and probiotics in lactase non-persistence management. *Food & Function*, 9(9), 4800–4809. <https://doi.org/10.1039/C8FO01091A>
- Ford, A. C., Mahadeva, S., Carbone, M. F., Lacy, B. E., & Talley, N. J. (2023). Functional dyspepsia. *The Lancet*, 401(10375), 166–178. [https://doi.org/10.1016/S0140-6736\(22\)01798-7](https://doi.org/10.1016/S0140-6736(22)01798-7)
- Ford, A. C., Moayyedi, P., Chey, W. D., Harris, L. A., Lacy, B. E., Saito, Y. A., & Quigley, E. M. M. (2020). American College of Gastroenterology monograph on management of irritable bowel syndrome. *American Journal of Gastroenterology*, 115(SUPPL 1), 1–35. <https://doi.org/10.14309/ajg.0000000000001036>
- Giacosa, A., Riva, A., & Petrangolini, G. (2022). Beneficial effects on abdominal bloating with *Curcuma longa* and *Boswellia serrata* extracts in IBS with dysbiosis. *Nutrients*.
- Goyal, H., Awad, H. H., & Quinn, T. (2022). Pancreatic enzyme replacement therapy: A concise review. *Journal of Clinical Gastroenterology*, 56(4), 297–305. <https://doi.org/10.1097/MCG.0000000000001551>
- Graham, D. Y., Ketwaroo, G. A., Opekun, A. R., Shah, R., & Raufman, J.-P. (2018). Enzyme therapy for functional bowel disease-like post-prandial distress. *Journal of Digestive Diseases*, 19(11), 697–704. <https://doi.org/10.1039/C8FO01091A>
- Guarino, A., De Marco, G., & Dupont, C. (2021). Chronic diarrhea in children. *Best Practice & Research Clinical Gastroenterology*, 54, 101708. <https://doi.org/10.1016/j.bpg.2021.101708>

- Guice, J., Hollins, M., & Farmar, J. (2023). Microbial inulinase promotes fructan hydrolysis. *Frontiers in Nutrition*.
- Hosseini, S. V., Ayatollahi, M., & Zare, M. (2020). Drug-induced gastrointestinal disorders. *Middle East Journal of Digestive Diseases*, 12(3), 153–162. <https://doi.org/10.34172/mejdd.2020.170>
- Houghton, D., Shannon, O. M., & Chater, P. I. (2023). White kidney bean extract as a nutraceutical: effects on gut microbiota, alpha-amylase inhibition, and user experiences. *Gut Microbiome*. <https://doi.org/10.1017/gmb.2023.5>
- Indonesia, K. K. R. (2018). *Laporan Nasional Riskesdas 2018*. Badan Penelitian dan Pengembangan Kesehatan.
- Jung, J. H., Kim, J. H., & Lee, H. J. (2021). Digestive enzymes from endogenous and exogenous sources and their therapeutic applications. *Biotechnology Advances*, 49, 107756. <https://doi.org/10.1016/j.biotechadv.2021.107756>
- Jung, K., Kim, A., Lee, J.-H., & al., et. (2022). Effect of Oral Intake of *Lactiplantibacillus plantarum* APSulloc 331261 (GTB1TM) on Diarrhea-Predominant Irritable Bowel Syndrome: A Randomized, Double-Blind, Placebo-Controlled Study. In *Nutrients*. <https://doi.org/10.21203/rs.3.rs-1814960/v1>
- Keller, J., Layer, P., & Human, M. (2021). Pancreatic Enzyme Supplementation Therapy. *Current Treatment Options in Gastroenterology*.
- Kühn, F., & Adiliaghdam, F. (2020). Intestinal alkaline phosphatase targets the gut barrier to prevent aging. *JCI Insight*, 5(6), e134049. <https://doi.org/10.1172/JCI.INSIGHT.134049>
- Lacy, B. E., Weiser, K., & Kennedy, A. (2021). Functional dyspepsia: The economic impact to patients. *Alimentary Pharmacology & Therapeutics*, 53(2), 141–150. <https://doi.org/10.1111/apt.16112>
- Lebwohl, B., Sanders, D. S., & Green, P. H. R. (2020). Coeliac disease. *The Lancet*, 391(10115), 70–81. [https://doi.org/10.1016/S0140-6736\(17\)31796-8](https://doi.org/10.1016/S0140-6736(17)31796-8)
- Lerner, A. (2016). Is Enzyme Supplementation Effective Strategy to Reduce the Burden of Gluten Free Diet in Celiac Disease. *International Journal of Celiac Disease*, 4(2), 52–57. <https://doi.org/10.12691/IJCD-4-2-7>
- Levy, P., Dominguez-Munoz, J. E., Imrie, C., Lohr, J. M., & Maisonneuve, P. (2023). Epidemiology of chronic pancreatitis. *Pancreatology*, 23(1), 10–18. <https://doi.org/10.1016/j.pan.2022.10.006>
- Lewis, D. (2023). *Navigating Ambiguities in Exocrine Pancreatic Insufficiency*. <https://doi.org/10.31219/osf.io/xcnf6>
- Li, X., & Lin, Y. (2022). *Phyllanthus emblica* alleviates functional dyspepsia.

Foods, 11(10), 1491. <https://doi.org/10.3390/foods11101491>

- Lohr, J. M., Dominguez-Munoz, J. E., Rosendahl, J., Besselink, M., Haas, S., Lerch, M. M., & Mayerle, J. (2020). United European Gastroenterology evidence-based guidelines for the diagnosis and therapy of chronic pancreatitis. *United European Gastroenterology Journal*, 8(6), 637–657. <https://doi.org/10.1177/2050640620919353>
- Lopresti, A. L., & Smith, S. J. (2021). Curcumin extract improves digestive symptoms. *Journal of Traditional and Complementary Medicine*. <https://doi.org/10.1186/S12906-021-03220-6>
- Luo, M., Liu, Q., & Xiao, L. (2022). Golden bifid might improve diarrhea-predominant irritable bowel syndrome via microbiota modulation. *Journal of Health Population and Nutrition*, 41(1), 10. <https://doi.org/10.1186/s41043-022-00302-0>
- Luo, S., Lenon, G. B., Gill, H., & al., et. (2019). *Inhibition of Pancreatic α -Amylase Activity by a Weight-Loss Herbal Formula RCM-107*. <https://doi.org/10.20944/PREPRINTS201907.0284.V1>
- Marchix, J., Qu  n  herv  , L., & Bordron, P. (2023). Could the microbiota be a predictive factor for the clinical response to probiotic supplementation in IBS-D? A cohort study. *Microorganisms*. <https://doi.org/10.3390/microorganisms11020277>
- Mari, A., & Sbeit, W. (2022). Maldigestion in metabolic syndrome. *Journal of Clinical Medicine*, 11(19), 5720. <https://doi.org/10.3390/jcm11195720>
- Martinsen, T. C., Bergh, K., & Waldum, H. L. (2020). Gastric acid secretion in health and disease. *Scandinavian Journal of Gastroenterology*, 55(4), 413–422. <https://doi.org/10.1080/00365521.2020.1744214>
- Martinsen, T. C., Bergh, K., & Waldum, H. L. (2023). Digestive enzymes and gastrointestinal physiology. *Scandinavian Journal of Gastroenterology*, 58(1), 1–10. <https://doi.org/10.1080/00365521.2022.2145684>
- Moran, J., & Moles, G. (2025). *Plant Diamine Oxidase (DAO) Obtained from Pisum Sativum : Biochemical and Technological Characterization and Safety Profile for Its Application in Food Supplements*. 9(3), 62–67.
- Mor  n, J., & Moles, G. (2025a). Plant Diamine Oxidase (DAO) Obtained from Pisum Sativum: Biochemical and Technological Characterization and Safety Profile for Its Application in Food Supplements. *World Journal of Food Science and Technology*. <https://doi.org/10.11648/j.wjfst.20250903.13>
- Mor  n, J., & Moles, G. (2025b). Plant Diamine Oxidase (DAO) obtained from Pisum sativum: biochemical characterization and safety. *World Journal of Food Science and Technology*, 9(3).

<https://doi.org/10.11648/j.wjfst.20250903.13>

- Mosztbacher, D., Jancsó, Z., Jancsó, Z., & al., et. (2020). Loss of chymotrypsin-like protease (CTRL) alters intrapancreatic protease activation but not pancreatitis severity in mice. *Scientific Reports*, 10. <https://doi.org/10.1038/S41598-020-68616-9>
- Münch, A., Bühner, C., & al., et. (2021). Digestive enzyme replacement relieves growth failure in preterm infants with poor exocrine pancreatic function: a retrospective case series. *European Journal of Pediatrics*, 180(6), 1941–1948. <https://doi.org/10.1007/S00431-021-04069-0>
- Organisation, W. G. (2021). *Global Guidelines: Irritable Bowel Syndrome*. World Gastroenterology Organisation.
- Oshima, T., & Miwa, H. (2021). Epidemiology of functional gastrointestinal disorders in Asia. *Journal of Neurogastroenterology and Motility*, 27(4), 623–632. <https://doi.org/10.5056/jnm21075>
- Peng, S., & Ling, X. (2022). LMWP alleviates diarrhea-predominant IBS. *Molecules*, 27(14), 4517. <https://doi.org/10.3390/molecules27144517>
- Pham, V. T., Steinert, R. E., Duysburgh, C., & al., et. (2023). In Vitro Effect of Enzymes and Human Milk Oligosaccharides on FODMAP Digestion and Fecal Microbiota Composition. *Nutrients*, 15(7). <https://doi.org/10.3390/nu15071637>
- Polishchuk, S., & Neverovskyi, A. (2023). Efficacy of bile salt hydrolase synthesizing probiotic bacteria in the treatment of irritable bowel syndrome with diarrhea. *Gastroenterology*, 57(2). <https://doi.org/10.22141/2308-2097.57.2.2023.540>
- Portincasa, P., Bonfrate, L., Scribano, M. L., Kohn, A., Caporaso, N., & Di Rienzo, T. (2022). Digestive enzyme supplementation in functional gastrointestinal disorders. *Nutrients*, 14(7), 1432. <https://doi.org/10.3390/nu14071432>
- Prolonged efficacy of Bifidobacterium lactis in the treatment of functional dyspepsia*. (2023). <https://doi.org/10.21203/rs.3.rs-2529681/v1>
- Qiao, X., Zhang, H., & Shan, L. (2024). Probiotic interventions and quality of life in gastrointestinal diseases. *Advances in Clinical and Experimental Medicine*.
- Rao, S. S. C., & Makharia, G. K. (2019). Dietary therapies for irritable bowel syndrome. *Gastroenterology Clinics of North America*, 48(3), 393–411. <https://doi.org/10.1016/j.gtc.2019.04.007>
- Revivify Modulates Healthy Gut Microbiomes and Short Chain Fatty Acids Evaluated by an In Vitro Model of Gut Microbiome Study*. (2023). <https://doi.org/10.21203/rs.3.rs-3050737/v1>
- Ritz, S., Hahn, D., Wami, H., & al., et. (2020). Gut microbiome as a response marker for pancreatic enzyme replacement therapy in a porcine model

- of exocrine pancreas insufficiency. *Microbial Cell Factories*, 19. <https://doi.org/10.1186/S12934-020-01482-2>
- Schmulson, M., Drossman, D. A., & Chang, L. (2022). The global impact of functional gastrointestinal disorders. *Gastroenterology*, 162(2), 357–370. <https://doi.org/10.1053/j.gastro.2021.10.033>
- Schnedl, W. J., Schenk, M., & Lackner, S. (2019). Diamine oxidase supplementation improves symptoms in patients with histamine intolerance. *Food Science and Biotechnology*. <https://doi.org/10.1007/S10068-019-00627-3>
- Shah, A., Morrison, M., Holtmann, G., & Talley, N. J. (2023). Dietary factors and lifestyle influences in functional gastrointestinal disorders. *Nature Reviews Gastroenterology & Hepatology*, 20(4), 225–239. <https://doi.org/10.1038/s41575-022-00673-5>
- Shinde, T., & Perera, A. P. (2020). Synbiotic supplementation ameliorates gut inflammation. *European Journal of Nutrition*, 59, 1121–1134. <https://doi.org/10.1007/S00394-020-02200-9>
- Stanghellini, V., Chan, F. K. L., Hasler, W. L., Malagelada, J. R., Suzuki, H., & Tack, J. (2016). Gastroduodenal disorders. *Gastroenterology*, 150(6), 1380–1392. <https://doi.org/10.1053/j.gastro.2016.02.011>
- Staudacher, H. M., Whelan, K., Irving, P. M., & Lomer, M. C. E. (2020). Comparison of symptom response following advice for a low FODMAP diet versus standard dietary advice in patients with IBS. *Journal of Human Nutrition and Dietetics*, 33(3), 397–407. <https://doi.org/10.1111/jhn.12746>
- Susilawati, N. M., Halimah, E., & Saidah, S. (2021). Review of Impact and Handling of Potential Antihypertensive Drug Interactions in Chronic Kidney Disease Patients. *Jurnal Farmasi Galenika*, 7(1). <https://doi.org/10.22487/J24428744.2021.V7.I1.15332>
- Swami, O. C., & Shah, N. J. (2017). Functional dyspepsia and the role of digestive enzymes supplement in its therapy. *International Journal of Basic and Clinical Pharmacology*, 6(4), 954–960. <https://www.ijbcp.com/index.php/ijbcp/article/view/1163>
- Talley, N. J., Ford, A. C., & Walker, M. M. (2019). Functional dyspepsia. *The Lancet Gastroenterology & Hepatology*, 4(10), 805–818. [https://doi.org/10.1016/S2468-1253\(19\)30150-2](https://doi.org/10.1016/S2468-1253(19)30150-2)
- Tannous, S., Stellbrinck, T., & Hoter, A. (2023a). Interaction between the α -glucosidases, sucrase-isomaltase and maltase-glucoamylase, in human intestinal brush border membranes. *Frontiers in Molecular Biosciences*. <https://doi.org/10.3389/fmolb.2023.1160860>
- Tannous, S., Stellbrinck, T., & Hoter, A. (2023b). Interaction between the α -glucosidases, sucrase-isomaltase and maltase-glucoamylase, in human intestinal brush border membranes and its potential impact on

- disaccharide digestion. *Frontiers in Molecular Biosciences*. <https://doi.org/10.3389/fmolb.2023.1160860>
- Tchoumi Neree, A., Soret, R., Marcocci, L., & al., et. (2020). Vegetal diamine oxidase alleviates histamine-induced contraction of colonic muscles. *Scientific Reports*, 10. <https://doi.org/10.1038/S41598-020-78134-3>
- Tolchynska, M. (2019). *Does Preprandial Oral Lactase Supplement Reduce Abdominal Pain in Lactose-intolerant Adult Patients after a Lactose-containing Meal?* <https://doi.org/10.21203/rs.3.rs-2800016/v1>
- Tsikis, S., Fligor, S. C., & Mitchell, P. (2023). Fat digestion using RELiZORB in children with short bowel syndrome. *PLOS ONE*.
- Tsikis, S. T., Fligor, S. C., Mitchell, P. D., Hirsch, T. I., Id, S. C., First, E., Loring, G., Rudie, C., Freedman, S. D., Martin, R., Gura, K. M., & Id, M. P. (2023). *PLOS ONE Fat digestion using RELiZORB in children with short bowel syndrome who are dependent on parenteral nutrition : Protocol for a 90-day , phase 3 , open labeled study*. 1–16. <https://doi.org/10.1371/journal.pone.0282248>
- Upadhyay, R., & Gadan, M. (2022). Evaluation of MDZenPro formulation on protein digestion. *International Journal for Multidisciplinary Research*, 4(4). <https://doi.org/10.36948/ijfmr.2022.v04i04.012>
- Upadhyay, R., Gadan, M., & Raut, S. H. (2022). Evaluation of Proprietary MDZenPro Formulation by Zenherb Labs in Mediating Protein Digestion under INFOGEST in-vitro Simulated Gastrointestinal Conditions. *International Journal For Multidisciplinary Research*. <https://doi.org/10.36948/ijfmr.2022.v04i04.012>
- Verma, A., Kumar, S., & Sharma, P. (2023). Safety and efficacy of plant-based digestive enzyme supplements. *Journal of Dietary Supplements*, 20(2), 145–160. <https://doi.org/10.1080/19390211.2022.2048765>
- Wang, T. Y., Chen, H. L., & Lu, Y. H. (2021). Digestive Enzyme Supplementation in Gastrointestinal Disorders: A Review. *Nutrients*.
- Wang, T. Y., Chen, H. L., & Lu, Y. H. (2022). Digestive enzyme supplementation and gastrointestinal health. *Nutrients*, 14(3), 589. <https://doi.org/10.3390/nu14030589>
- Yadlapati, R., & Pandolfino, J. E. (2021). Gastroesophageal reflux disease: A review. *JAMA*, 325(20), 2058–2068. <https://doi.org/10.1001/jama.2021.4684>
- Zhang, C. C., & Zhang, Y. C. (2022). Lactobacillus plantarum improves functional constipation. *Annals of Translational Medicine*, 10(5), 258. <https://doi.org/10.21037/atm-22-458>
- Zhang, Y., Li, L., Guo, C., Mu, D., Feng, B., & Zuo, X. (2021). Probiotics and prebiotics in irritable bowel syndrome: A systematic review.

Clinical Nutrition, 40(9), 4655–4665.
<https://doi.org/10.1016/j.clnu.2021.06.003>

Zheng, X., Chu, H., Cong, Y., Deng, Y., Long, Y., Zhu, Y., & Pohl, D. (2023). Lactose intolerance and health. *BMJ*, 380, e072102.
<https://doi.org/10.1136/bmj-2022-072102>

Zhuang, X., Xiong, L., Li, L., Li, M., & Chen, M. (2021). Alterations of gut microbiota in patients with irritable bowel syndrome. *Gastroenterology Research and Practice*, 2021, 1–12.
<https://doi.org/10.1155/2021/8896468>