

DAFTAR PUSTAKA

- Adisasmito, W., 2007. Faktor risiko diare pada bayi dan balita di Indonesia: *systematic review* penelitian akademik bidang kesehatan masyarakat. **MAKARA, KESEHATAN**, Vol. 11, No. 1, Juni 2007: 1-10.
- Ajizah, A. 2004. **Sensitivitas *Salmonella Typhimurium* Terhadap Ekstrak Daun *Psidium Guajava L.*** FKIP Universitas Lambung Mangkurat. **BIOSCIENTIAE** Vol. 1, No. 1 Hal 31-38.
- Anal, A. K. and Singh, H. 2007. Recent Advances in microencapsulation of probiotics for industrial applications and targeted delivery. **Trends in Food Sci. Technol.** Vol. 18, p.240-251.
- Belemtougri, R.G., Constantin, B., Cognard, C., Raymond, G. and Sawadogo, L. (2006). Effects of two medicinal plants *Psidium guajava* L. (Myrtaceae) and *Diospyros mespiliformis* L. (Ebenaceae) leaf extracts on rat skeletal muscle cells in primary culture. *Journal of Zhejiang University – science B.* 7(1): 53 – 63.
- Boirivant, M., Strober, W., 2007. The mechanism of action of probiotics. **Curr Opin Gastroenterol** vol. 23, p. 679–692.
- Brashears, M.M and Gilliland S. E. (1997). Influence of pH During Growth on Removal of Cholesterol from MRS Broth by *Lactobacillus casei* and *Lactobacillus acidophilus*. *Jurnal*
- Burgain, C. Gaiani, M. Linder, J. Scher, 2011. Encapsulation of probiotic living cells: From laboratory scale to industrial Applications. **J. Food Eng.** vol. 104, p.467–483.

- Cahyanti, Reni Ika, 2011. Profil daya antibakteri kombinasi sediaan *Lactobacilli sp*(dalam susu) dan ekstrak daun jambu biji. Fakultas Farmasi Universitas Airlangga Surabaya.
- Canani,RB., Cirillo, Pia, Terrin,G., Cesarano,L., Spagnuolo,MI., De Vincenzo,A., Albano,F., Passariello, A., De Marco, G., Manguso, F., Guarino, A.,2007. Probiotics for treatment of acute diarrhoea in children: randomised clinical trial of five different preparations. **BMJ.com** diakses pada 19 Agustus 2013.
- Chen, M.J., Chen, K.N., 2007. Applications of probiotic encapsulation in dairy products. In: Lakkis, Jamileh M. (Ed.), **Encapsulation and Controlled Release Technologies in Food Systems**. Wiley-Blackwell, USA, p.83–107.
- Chuayana, L. E., Ponce, V. C., Rivera, B. R. M. and Cabrera, C., E.(2003). Antimicrobial Activity of Probiotics from Milk Product. *Phill J Microbial Infect Dis*. 32 (2):71-74.
- De Roos N., Katan M., 2000. Effects of Probiotic Bacteria on Diarrhea, Lipid Metabolism, and Carcinogenesis: A Review of Papers Published Between 1988 and 1998. *Am. J. Clin. Nutr.* Vol. 71, p. 405-411.
- Ding, W. K. and Shah, N. P., 2007. Acid, bile, and heat tolerance of free and microencapsulated probiotic bacteria. **J. Food Sci.** vol. 72, p.446-450.
- Dipiro, J. T., dkk., 2008. Constipation, Diarrhea, and Irritable Bowel Syndrome. **Pharmacotherapy Principles & Practice**. New York: Mc Graw Hill, p. 311-316.

- Doleyres, Y. and Lacroix, C., 2005. Technologies with free and immobilised cells for probiotic bifidobacteria production and protection. **Int. Dairy J.** vol. 15, p.973-988.
- Esquijarosa, A., J., Haza, J., U., Gonzales, A., D., Martinez, S., L. 2009. Spray Drying of Aqueous Extract of *Mangifera indica* L (Vimang): Scale Up for The Process. **World Appl. Sci. J.**, 6 (3): 408-412.
- Farthing, M., Salam, M., Lindberg, G., et al., 2012. Acute diarrhea in adults and children: a global perspective. **WGO Global Guidelines**, p. 1-29.
- Fauzia, Wiryanto, Lubis S. 2005. Pemeriksaan Potensi Tablet Ciprofloxacin yang beredar di Apotek Medan dengan Metode Pengenceran. Pemeriksaan Potensi Tablet Ciprofloxacin. **Majalah Kedokteran Nusantara** Vol. 38 No.4 hal 302-304.
- Felis, G. E., & Dellaglio, F. 2007. Taxonomy of Lactobacilli and Bifidobacteria. **Curr. Issues Intestinal Microbiol.** 6 ed , 41-61.
- Gardiner, G. E., O'Sullivan, E., Kelly, J., Auty, M. A. E., Fitzgerald, G. F., Collins, J. K., R. P. Ross dan AND Stanton, C. 2000. Comparative Survival Rates of Human-Derived Probiotic *Lactobacillus paracasei* and *L. salivarius* Strains during Heat Treatment and Spray Drying. **APPL. ENVIRON. MICROBIOL.** p. 2605–2612.
- Gbassi, GK. dan Vandamme, T., 2012. Probiotic Encapsulation Technology : From Microencapsulation to Release into the Gut. **Pharmaceutics** 2012, 4, p.149-163.
- Geidam, Y.A., A.G, Ambali and P.A. Onyeyili, 2007. Preliminary phytochemical and antibacterial evaluation of crude aqueous extract of *Psidium guajava* leaf. **J. Applied Sci.**, 7: 511-514.

- Gilliland S., Speck M., 1977. Deconjugation of Bile Acids by Intestinal *Lactobacillus acidophilus*, *Lactobacillus bulgaricus*, dan *Lactobacillus casei*. **Appl. Environ. Microbiol.** Vol.33, p. 8-15.
- Golowczyc, M., Silva, J., Teixeira, P., De Antoni, G.L., Abraham, A.G., 2012. Cellular injuries of spray-dried *Lactobacillus sp* isolated from kefir and their impact on probiotic properties. **Songklanakarinn J. Sci. Technol.**34(3),241-245, May-Jun. 2012.
- Hassan, HPA., Khiang Peh, K. Dan Tze Liong, Min. 2011. Antimicrobial activity of Metabolites of various strains of *Lactobacillus acidophilus*. **ICASEIT** 2011.
- Herfindal ET, Gourley DR. **Textbook of Therapeutics Drug and Disease Mahagement.** 7th Ed. 2000. Lippincott Williams & Wilkins.
- Holt, J. G., Krieg, N. R., Sneath, P. H. A., Stanley, J. J. and Williams, S. T.(1994). *Bergey's Manual of Determinative Bacteriology*, 9th. Williams and Wilkins : Philadelphia.
- Holzappel, W.H., Haberer, P., Geisen, R., Björkroth, J., Schillinger, U., 2001. Taxonomy and important features of probiotic microorganisms in food and nutrition. **Am. J. Clin. Nutr.** Vol.73, p.365S-373S.
- Jankowski, T., M. Zielinska and A. Wysłowska. 1997. Encapsulation of lactic acid bacteria with alginate/starch capsules. *Biotechnol. Tech.*vol. 11, p.31-34.
- Joseph, Baby dan Priya, Mini R., 2011. Review on nutritional, medicinal and pharmacologic properties of guajava (*Psidium guajava* Linn.). **International Journal of Pharma and Bio Sciences** Vol.2(1) p.53-69

- Kailasapathy, Kaila. 2002. Microencapsulation of Probiotic Bacteria: Technology and Potential Applications. **Curr. Issues Intest. Microbiol** 3: 39-48.
- Kanatani, K., Oshimura, M. and Sano, K. (1995). Isolation and Characterization of Acidocin A and Cloning of Bacteriocin Gene from *Lactobacillus acidophilus*. *Applied and Environmental Microbiology*. 61(3): 1061-1067.
- Kinam Park dan Yoon Yeo. 2007. **Encyclopedia Of Pharmaceutical Technology Third Edition**. Hal 2315-2327.
- Krasaekoopt, W., Bhandari, B., Deeth, H. 2003. Evaluation of encapsulation techniques of probiotics for yoghurt. **Int. Dairy J.** vol. 13, p.3–13.
- Lacroix, C. and Yildirim, S., 2007. Fermentation technologies for the production of probiotics with high viability and functionality. **Current Opinion in Biotechnol.** vol. 18, p.176–183.
- Lone, KD.dan Dhole, JA., 2013. Formulation and evaluation of probiotic tablets containing anti-inflammatory drug. **IJPSR** 2013 Vol. 4(1): 341-346
- Lozoya, X., Reyes-Morales, H., Chavez-Soto, M. Martinez-Garcia Mdel C., Soto-Gonzalez, Y. and Doubova S.V. (2002). Intestinal antispasmodic effect of a phytodrug of *Psidium guajava folia* in the treatment of acute diarrheic disease. *J. Ethnopharmacolo.* 83: 19-24.
- McFarland, L.V., 2009. Evidence-based review of probiotics for antibiotic-associated diarrhea and *Clostridium difficile* infections. **Anaerobe** vol. 15, p. 274–280.

- Michail, S., Sylvester, F., Fuchs, G., Isсенman, R., 2006. Clinical efficacy of probiotics: review of the evidence with focus on children. **J *Pediatr Gastroenterol Nutr*** vol. 43, p. 550-557.
- Mishra, M dan Mishra B. 2011. Formulation Optimization and Characterization of Spray Dried Microparticles for Inhalation Delivery of Doxycycline Hyclate. ***Yakugaku Zasshi*** 131(12) 1813-1825.
- Mohan, G., Guhankumar, P., Kiruththic, V., Santhiya, N. dan Anita, S. 2013. PROBIOTICATION OF FRUIT JUICES BY *Lactobacillus acidophilus*. ***International Journal of Advanced Biotechnology and Research*** Vol 4, Issue 1 p. 72-77.
- Mortazavian, A., Razavi, SH., Ehsani, MR., dan Sohrabvandi, S., 2007. Principles and methods of microencapsulation of probiotic microorganism. ***Iranian Journal of Biotechnology*** vol.5 No.1.
- Nandiyanto, ABD dan Okuyama, K. 2011. Progress in developing spray-drying methods for the production of controlled morphology particles: From the nanometer to submicrometer size ranges. ***Advanced Powder Technology*** 22 (2011) 1–19.
- Ojewole, JAO., Awe, EO., Chiwororo,WDH., 2008. Antidiarrhoeal activity of *Psidium guajava* Linn.(Myrtaceae) leaf aqueous extract in rodents. ***J. Smooth Muscle Res.*** 44(6) p. 195-207.
- Ozdikicierler,O., Dirim, SN. dan Pazir, F. 2014. The effects of spray drying process parameters on the characteristic process indices and rheological powder properties of microencapsulated plant (*Gypsophilia*) extract powder. ***Powder Technology*** 253 p. 474-480.

- Pamuji, Dike Bagus, 2012. Aktivitas mikropartikel probiotik dengan matriks HPMC K100LV terhadap *Salmonella thyphimurium* ATCC 14028. Fakultas Farmasi Universitas Airlangga Surabaya.
- Pedretti, S., 2013. Probiotic market: up or down?. **Nutrafoods** Vol. 12, p. N18-N19.
- Pigeon, R.M., E.P. Cuesta and S.E.Gilliland.(2002).Binding of free bile acids by cells of yoghurt culture bacteria. *J.Dairy Science*. 85 : 2705 – 2710.
- Prangdimurti, E.(2001). *Probiotik dan Efek Perlindungannya*. Tesis. Program Pasca Sarjana. IPB : Bogor.
- Rattanachaikunsopon, P dan Phumkhachorn, P., 2010. Lactic acid bacteria: their antimicrobial compounds and their uses in food production. **Annals of Biological Research**, 2010, 1 (4) p. 218-228.
- Salminen, S., Wright, A.V., and Ouwehand, A. 2004. Lactic Acid Bacteria. Microbiological and Functional Aspects. Marcel Dekker, Inc. New York.
- Sarker, Shafiqul A., dan Fuchs, George J., 2009. The Role of Probiotics in the Treatment and Prevention of Infectious Diarrhea in Children. **Nutrition and Health: Probiotics in Pediatric Medicine** .Totowa : Humana Press., p.147-165.
- Schlegel, H.G. & K. Schmidt, 1994, **Mikrobiologi Umum**, Ed.6, UGM Press: Jogjakarta.
- Servin, Alain L., 2004. Antagonistic activities of lactobacilli and bifidobacteria against microbial pathogens. **FEMS Microbiology Reviews** 28 (2004) p.405-440.

- Shruthi, SD., Roshan, A., Timilsina, SS., dan Sunita, S., 2013. A review on the medicinal plant *Psidium guajava* Linn. (Myrtaceae). **Journal of Drug Delivery & Therapeutics** vol. 3(2), p. 162-168.
- Sgouras, D. Et al. 2004. In vitro and in vivo inhibition of *Helicobacter pylori* by *Lactobacillus casei* strain Shirota. **Appl Environ Microbiol**, Vol. 70 : 518 – 526.
- Siepmann, J. dan Peppas, NA. 2012. Modeling of drug release from delivery systems based on hydroxypropyl methylcellulose (HPMC). **Advanced Drug Delivery Reviews** 64 p.163–174
- Silva, L.S., da Silva, L.S., Brumano, L., et al., 2012. Preparation of dry extract of *Mikania glomeratas* prengel (guaco) and determination of its coumarin levels by spectrophotometry and HPLC-UV. **Molecules** vol.17, p. 10344-10354.
- Stankovi'c, A, Dimitrijevi'c, S, Uskokovi'c D. 2013. Influence of size scale and morphology on antibacterial properties of ZnO powders hydrothermally synthesized using different surface stabilizing agents. **Colloids and Surfaces B: Biointerfaces** 102 (2013) 21– 28.
- Sukardi, A, R, Mulyarto, dan W. Safera. 2007. **Optimasi Waktu Ekstraksi Terhadap Kandungan Tanin Pada Bubuk Ekstrak Daun Jambu Biji (Psidium Folium) Serta Biaya Produksinya**. Jurnal Teknologi Pertanian Universitas Brawijaya, Vol 8 No.2 88-94.
- Sultana, K., Godward, G., Reynolds, N., Arumugaswamy, R., Peiris, P. and Kailasapathy, K., 2000. Encapsulation of probiotic bacteria with alginate-starch and evaluation of survival in simulated gastrointestinal conditions and in yoghurt. **Int. J. Food Microbiol.** vol. 62, p.47-55.

- Suparjo, 2008, **Bakteriosin dan Peranannya dalam Ekologi Mikroba Lumen**, Laboratorium Makanan Ternak Fakultas Peternakan Universitas Jambi: 1-3.
- Suskovic J., Kos B., Goreta J., Matosic S. 2001. Role of Lactic Acid Bacteria and *Bifidobacteria* in Synbiotic Effect. *Food Technol. Biotechnol.* 39(3): 227-235.
- Taillandier, P., Gilis, F., Portugal, F.R., Laforce, P. and Strehaiano, P. (1996) 'Influence of Medium Composition, pH and Temperature on the Growth and Viability of *Lactobacillus acidophilus*' in *Biotechnology Letters* 18, 775-780.
- Talwalkar, A. and Kailasapathy, K. 2004. A Review of Oxygen Toxicity in Probiotic Yogurts: Influence on the Survival of Probiotic Bacteria and Protective Techniques. **Comp. Rev. Food Sci. Food Safety**. vol. 3, p.117-124.
- Torres, ML, Cruz EEG, Calderas F, Laredo, RFG, Olivares, GS, Infante, JAG, Guzmán, NER, Ramírez, JR. 2013. Microencapsulation by spray drying of gallic acid with nopal mucilage (*Opuntia ficus indica*). **LWT - Food Science and Technology** 50 (2013) 642-650.
- Touhy K.M., Probert H.M., Smejkal C.W., and Gibson G.R. 2003. Using Probiotics and Prebiotics to Improve Gut Health. *DDT Vol 8 (15)* : 692-700.
- Umar, Z., Sagala, Khalid H., Ginting J., 2004. Diare Akut Disebabkan Bakteri. **e-USU Repository Universitas Sumatera Utara**.
- Utama E.D. 2006. Uji Kepekaan Bakteri Terhadap Antibakteri. Dalam : Utama ED., Siregar N., Sjah R., Lubis S. **Penuntun Praktikum Mikrobiologi Medik**. Buku B. Medan.

Departemen Mikrobiologi Fakultas Kedokteran USU, 2006 : 29-35.

- Wandrey, C., Bartkowiak, A., Harding, SE., 2010. Materials for Encapsulation. **Encapsulation Technologies for Active Food Ingredients and Food Processing**. P. 41-64
- Yadav, AK., Chaudhari, AB., Kothari, RM., 2009. Enhanced viability of *Bacillus coagulans* after spray drying with calcium lactate storage and rehydration. **Indian Journ of Chemical Technology** vol.16 p. 519-522.
- Yamaguishi, C. T., Spier M.R., De Dea Lindner, J. Soccol V.J., dan Soccol, C.R., 2011. Current Market Trends and Future Directions. **Probiotics, Microbiology Monographs** vol.21.
- Yonekura, L., Sun, H., Soukoulis, C., dan Fisk, I., 2013. Microencapsulation of *Lactobacillus acidophilus* NCIMB 701748 in matrices containing soluble fibre by spray drying: Technological characterization, storage stability and survival after in vitro. **Journal of Functional food** 2013.