

## REFERENCES

- Apriyantono, A., Husain, H., Lie, L., Jodoamidjojo, M., & Puspitasari-Nienaber, N.L. (1999). Flavor characteristics of Indonesian soy sauce (*Kecap Manis*). *Flavor Chemistry of Ethnic Foods*, 15-31. DOI: 10.1007/978-1-4615-4783-9\_3.
- Apriyantono A., Setyaningsih D., Hariyadi P., Nuraida L. (2004) Sensory and Peptides Characteristics of Soy Sauce Fractions Obtained by Ultrafiltration. In: Shahidi F., Spanier A.M., Ho CT., Braggins T. (eds) Quality of Fresh and Processed Foods. *Advances in Experimental Medicine and Biology*, vol 542. Springer, Boston, MA. DOI: 10.1007/978-1-4419-9090-7\_15.
- Benjamin, M.M., & Datta, A.R. (1995). Acid Tolerance of Enterohemorrhagic *Escherichia coli*. *Applied and Environmental Microbiology*, 61(4), p. 1669–1672.
- Bennet, R.W. (2005). Staphylococcal Enterotoxin and Its Rapid Identification in Foods by Enzyme-Linked Immunosorbent Assay–Based Methodology. *Journal of Food Protection*, 68(6), 1264–1270. DOI: 10.4315/0362-028X-68.6.1264.
- Blandino, A., Al-Aseeri, M. E., Pandiella, S. S., Cantero, D., & Webb, C. (2003). Cereal-based fermented foods and beverages. *Food Research International*, 36(6), 527–543. DOI: 10.1016/s0963-9969(03)00009-7.
- Bore, E., Langsrud, S., Langsrud, O., Rode, T. M., & Holck, A. (2007). Acid-shock responses in *Staphylococcus aureus* investigated by global gene expression analysis. *Microbiology*, 153(7), 2289–2303. DOI: 10.1099/mic.0.2007/005942-0.
- Bren, A., Park, J. O., Towbin, B. D., Dekel, E., Rabinowitz, J. D., & Alon, U. (2016). Glucose becomes one of the worst carbon sources for *E. coli* on poor nitrogen sources due to suboptimal levels of cAMP. *Scientific Reports*, 6(1). DOI: 10.1038/srep24834.
- Buchanan, R. (1997). Foodborne disease significance of *Escherichia coli* O157:H7 and other enterohemorrhagic *E. coli*. *Food Technology*, 51(10).
- Caprioli, A., Morabito, S., Brugère, H., & Oswald, E. (2005). Enterohaemorrhagic *Escherichia coli*: emerging issues on virulence and modes of transmission. *Veterinary Research*, 36(3), 289–311. DOI: 10.1051/vetres:2005002.
- Castillo, A.C A. (2017). Modeling the survival of *Salmonella* in soy sauce-based products stored at two different temperatures. *Dissertations, Theses, & Student Research in Food Science and Technology*, 84. <http://digitalcommons.unl.edu/foodscidiss/84>.
- Castro, A., Silva, J., & Teixeira, P. (2018). *Staphylococcus aureus*, A Food Pathogen: Virulence Factors and Antibiotic Resistance. *Foodborne Disease*, 213-238. DOI: 10.1016/B978-0-12-811444-5.00008-7.
- Centers for Disease Control and Prevention (CDC). 2018. Multistate Outbreak of *E. coli* O157:H7 Infections Linked to Romaine Lettuce.
- Centers for Disease Control and Prevention (CDC). 2019. Outbreak of *E. coli* Infections Linked to Fresh Express Sunflower Crisp Chopped Salad Kits.

- Chiou, R. Y.-Y. (1999). Salt-free Miso Fermentation Using Ethanol, Sugars, and Polyols. *Journal of Food Science*, 64(5), 918–920. DOI: 10.1111/j.1365-2621.1999.tb15940.x.
- Cho, T. J., Kim, N. H., Kim, S. A., Song, J. H., & Rhee, M. S. (2016). Survival of foodborne pathogens (*Escherichia coli* O157:H7, *Salmonella* Typhimurium, *Staphylococcus aureus*, *Listeria monocytogenes*, and *Vibrio parahaemolyticus*) in raw ready-to-eat crab marinated in soy sauce. *International Journal of Food Microbiology*, 238, 50–55. DOI: 10.1016/j.ijfoodmicro.2016.08.041.
- Codex (Joint FAO/WHO Food Standard Programme, Codex Alimentarius Commission). (2009). Hazard Analysis and Critical Control Point (HACCP) system and guidelines for its application.
- Desmarchelier, P., & Fegan, N. (2016). Pathogens in Milk: *Escherichia coli*. *Reference Module in Food Science*. DOI:10.1016/b978-0-08-100596-5.00989-6.
- Denison, G.A. (1936). Epidemiology and symptomatology of staphylococcus food poisoning. A report of recent outbreaks. *Am. J. Public Nation Health* 26, 1168–1175.
- Devanthi, P.V.P., Linforth, R., Onyeaka, H., & Gkatzionis, K. (2018). Effect of co-inoculation and sequential inoculation of *Tetragenococcus halophilus* and *Zygosaccharomyces rouxii* on soy sauce fermentation. *Food Chemistry*, 240 (1–8). DOI: 10.1016/j.foodchem.2017.07.094.
- Devanthi, P. V. P., & Gkatzionis, K. (2019). Soy sauce fermentation: Microorganisms, aroma formation, and process modification. *Food Research International*. DOI: 10.1016/j.foodres.2019.03.010.
- Durack, E., Alonso-Gomez, M., & Wilkinson, M. G. (2013). The Effect of Salt Reduction on the Growth of Food Spoilage Bacteria in Model Broth Systems and Salt-Adjusted Ready Meals. *Journal of Food Safety*, 33(3), 302–312. DOI: 10.1111/jfs.12053.
- Feng, Y., Su, G., Zhao, H., Cai, Y., Cui, C., Sun-Waterhouse, D., & Zhao, M. (2015). Characterization of aroma profiles of commercial soy sauce by odor activity value and omission test. *Food Chemistry*, 167, 220–228. DOI: 10.1016/j.foodchem.2014.06.057.
- Food Safety Authority of Ireland (FSAI). (2011). *Staphylococcus aureus*. *Microbial Factsheet Series*, (1).
- Food Standards Australia & New Zealand. (2013). *Staphylococcus aureus*.
- Gandhi, A. P. (2007). Development of HACCP procedures for the production of soy-based foods and their evaluation. Soybean Processing and Utilization Center, Central Institute of Agricultural Engineering, Bhopal.
- Gao, X., Zhao, H., Feng, Y. & Zhao, M. (2010). A comparative study on physicochemical properties of Chinese-type soy sauces prepared using pure koji and mixed kojis. *African Journal of Biotechnology*, 9(40), 6740-6747.
- Glass, K.A., Loeffelholz, J.M., Ford, J.P., & Doyle, M.P. (1992). Fate of *Escherichia coli* O157:H7 as affected by pH or sodium chloride and in fermented dry sausage. *Appl. Environ. Microbiol.* 58, 2513–2516.
- Genigeorgis, C. (1989). Present state of knowledge on staphylococcal intoxication. *International Journal of Food Microbiology*, 9(4), 327–360. DOI: 10.1016/0168-1605(89)90100-1.

- Gomes, T. A., Elias, W. P., Scaletsky, I. C., Guth, B. E., Rodrigues, J. F., Piazza, R. M., Ferreira, L. C., & Martinez, M. B. (2016). Diarrheagenic *Escherichia coli*. *Brazilian journal of microbiology*, 47, 3–30. DOI: 10.1016/j.bjm.2016.10.015.
- Gossman, W., Wasey, A., & Salen, P. (2019). *Escherichia coli* (E. coli O157 H7). In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK507845/>
- Grounta, A., Nychas, G.-J. E., & Panagou, E. Z. (2013). Survival of food-borne pathogens on natural black table olives after post-processing contamination. *International Journal of Food Microbiology*, 161(3), 197–202. DOI: 10.1016/j.ijfoodmicro.2012.12.017.
- Harris, L.G., Foster, S.J. & Richards, R.G. (2002). An introduction to *Staphylococcus aureus*, and techniques for identifying and quantifying *S. aureus* adhesins in relation to adhesion to biomaterials: Review. *European Cells and Materials* Vol. 4. (pages 39-60) DOI: 10.22203/eCM.v004a04.
- Hajmeer, M., Ceylan, E., Marsden, J. L., & Fung, D. Y. C. (2006). Impact of sodium chloride on *Escherichia coli* O157:H7 and *Staphylococcus aureus* analysed using transmission electron microscopy. *Food Microbiology*, 23(5), 446–452. DOI: 10.1016/j.fm.2005.06.005
- Hennekinne, J.A., De Buyser, M.L., & Dragacci, S. (2012). *Staphylococcus aureus* and its food poisoning toxins: characterization and outbreak investigation. *FEMS Microbiol Rev*, 36(4):815-36. DOI: 10.1111/j.1574-6976.2011.00311.x.
- Hennekinne, J.-A. (2018). *Staphylococcus aureus* as a Leading Cause of Foodborne Outbreaks Worldwide. *Staphylococcus Aureus*, 129–146. DOI: 10.1016/b978-0-12-809671-0.00007-3.
- Hoang, N. X., Ferng, S., Ting, C.-H., Huang, W.-H., Chiou, R. Y.-Y., & Hsu, C.-K. (2016). Optimizing the initial moromi fermentation conditions to improve the quality of soy sauce. *LWT*, 74, 242–250. DOI: 10.1016/j.lwt.2016.07.049.
- Hoang, N. X., Ferng, S., Ting, C.-H., Lu, Y.-C., Yeh, Y.-F., Lai, Y.-R., Chiou, R.Y. -Y, Hwang, J. -Y., & Hsu, C.-K. (2018). Effect of initial 5 days fermentation under low salt condition on the quality of soy sauce. *LWT*, 92, 234–241. DOI: 10.1016/j.lwt.2018.02.043.
- Huffman, D.E., Quinter-Betancourt, W., & Rose, J. (2003). Emerging waterborne pathogens. *Handbook of Water and Wastewater Microbiology*, 193-208.
- Inatsu, Y., Bari, M. L., Kawasaki, S., & Isshiki, K. (2004). Survival of *Escherichia coli* O157:H7, *Salmonella Enteritidis*, *Staphylococcus aureus*, and *Listeria monocytogenes* in Kimchi. *Journal of Food Protection*, 67(7), 1497–1500. DOI: 10.4315/0362-028x-67.7.1497.
- Jamshidi, A., Kazerani, H. R., Seifi, H. A., and Moghaddas, E. (2008). Growth limits of *Staphylococcus aureus* as a function of temperature, acetic acid, NaCl concentration, and inoculum level. *Iranian Journal of Veterinary Research*, Shiraz University, Vol. 9, No. 4, Ser. No. 25.
- Kadariya, J., Smith, T. C., & Thapaliya, D. (2014). *Staphylococcus aureus* and Staphylococcal Food-Borne Disease: An Ongoing Challenge in Public Health. *BioMed Research International*, 2014, 1–9. DOI: 10.1155/2014/827965.

- Kaper, J. B., Nataro, J. P., & Mobley, H. L. T. (2004). Pathogenic *Escherichia coli*. *Nature Reviews Microbiology*, 2(2), 123–140. DOI: 10.1038/nrmicro818.
- Karagozlu, N., Karagozlu, C., & Ergonul, B. (2009). A model HACCP plan for small-scale manufacturing of Tarhana (a traditional Turkish fermented food). *Bulgarian Journal of Agricultural Science*, 15 (No 6), 501-513.
- Langsrud, S. (2009). Biofilm formation by Gram-positive bacteria including *Staphylococcus aureus*, *Mycobacterium avium* and *Enterococcus* spp. in food processing environments. *Biofilms in the Food and Beverage Industries*, 250–269. DOI: 10.1533/9781845697167.2.250.
- Licitra, G. (2013). Etymologia: *Staphylococcus*. *Emerging Infectious Diseases*, 19(9). DOI: 10.3201/eid1909.et1909.
- Lim, J. Y., Yoon, J., & Hovde, C. J. (2010). A brief overview of *Escherichia coli* O157:H7 and its plasmid O157. *Journal of microbiology and biotechnology*, 20(1), 5–14.
- Lioe, H. N., Selamat, J., & Yasuda, M. (2010). Soy Sauce and Its Umami Taste: A Link from the Past to Current Situation. *Journal of Food Science*, 75(3), R71–R76. DOI: 10.1111/j.1750-3841.2010.01529.x.
- Lioe, H. N., Apriyantono, A., & Yasuda, M. (2012). Soy Sauce: Typical Aspects of Japanese Shoyu and Indonesian Kecap. *Handbook of Plant-based Food and Beverage Technology, Edition: 2nd Edition*.
- Lioe, H. N. (2014). Soy Sauce. *Encyclopaedia of the History of Science, Technology, and Medicine in Non-Western Cultures*, 1–6. DOI: 10.1007/978-94-007-3934-5\_10249-1.
- Luh, B.S. (1995). Industrial production of soy sauce. *Journal of Industrial Microbiology & Biotechnology*, 14, 467–471.
- Luo, J., Ding, L., Chen, X., & Wan, Y. (2009). Desalination of soy sauce by nanofiltration. *Separation and Purification Technology*, 66(3), 429–437. DOI: 10.1016/j.seppur.2009.02.015.
- Martinović, T., Andjelković, U., Gajdošik, M. Š., Rešetar, D., & Josić, D. (2016). Foodborne pathogens and their toxins. *Journal of Proteomics*, 147, 226–235. DOI: 10.1016/j.jprot.2016.04.029.
- Masuda, S., Hara-Kudo, Y., & Kumagai, S. (1998). Reduction of *Escherichia coli* O157:H7 Populations in Soy Sauce, a Fermented Seasoning. *Journal of Food Protection*, 61(6), 657–661. DOI: 10.4315/0362-028x-61.6.657.
- McClure, P. (2000). The Impact of *E. coli* O157 on the Food Industry. *World Journal of Microbiology and Biotechnology*, 16(8/9), 749–755. DOI:10.1023/a:100899731096.
- Medved'ová, A., & Valík, L. (2012). *Staphylococcus aureus*: Characterisation and Quantitative Growth Description in Milk and Artisanal Raw Milk Cheese Production. *Structure and Function of Food Engineering*. DOI: 10.5772/48175.
- Mercer, R. G., Zheng, J., Garcia-Hernandez, R., Ruan, L., Gänzle, M. G., & McMullen, L. M. (2015). Genetic determinants of heat resistance in *Escherichia coli*. *Frontiers in microbiology*, 6, 932. DOI: 10.3389/fmicb.2015.00932.

- Missiakas, D. M., & Schneewind, O. (2013). Growth and laboratory maintenance of *Staphylococcus aureus*. *Current protocols in microbiology*, Chapter 9, Unit–9C.1. DOI: 10.1002/9780471729259.mc09c01s28.
- Miyagi, A., Suzuki, T., Nabetani, H., & Nakajima, M. (2013). Color control of Japanese soy sauce (shoyu) using membrane technology. *Food and Bioproducts Processing*. DOI: 10.1016/j.fbp.2013.05.002.
- Mohd-Zaki, Z., Bastidas-Oyanedel, J., Lu, Y., Hoelzle, R., Pratt, S., Slater, F., & Batstone, D. (2016). Influence of pH Regulation Mode in Glucose Fermentation on Product Selection and Process Stability. *Microorganisms*, 4(1), 2. DOI: 10.3390/microorganisms4010002.
- Money, P., Kelly, A. F., Gould, S. W. J., Denholm-Price, J., Threlfall, E. J., & Fielder, M.D. (2010). Cattle, weather, and water: mapping *Escherichia coli* O157:H7 infections in humans in England and Scotland. *Environmental Biology*. DOI: 10.1111/j.1462-2920.2010.02293.x.
- Montville, T.J., Matthews, K.R., & Kniel, K.E. (2012) Food microbiology: An introduction. 3rd ed, ASM Press, Washington D.C.
- Nahemiah, D., Bankole, O. S., Tswako, M., Nma-Usman, K. I., Hassan, H., & Fati, K. I. (2014). Hazard Analysis Critical Control Points (HACCP) in the Production of Soy-kununzaki: A Traditional Cereal-Based Fermented Beverage of Nigeria. *American Journal of Food Science and Technology*, 2(6), 196-202. DOI: 10.12691/ajfst-2-6-5.
- Onyango, L. A., & Alreshidi, M. M. (2018). Adaptive Metabolism in Staphylococci: Survival and Persistence in Environmental and Clinical Settings. *Journal of Pathogens*, 2018, 1–11. DOI: 10.1155/2018/1092632
- O’Toole, D. K. (2019). The role of microorganisms in soy sauce production. *Advances in Applied Microbiology*, 45-113. DOI: 10.1016/bs.aams.2019.07.002.
- Pennington, T. H. (2014). *E. coli* O157 outbreaks in the United Kingdom: past, present, and future. *Infection and drug resistance*, 7, 211–222. DOI: 10.2147/IDR.S49081.
- Sadamoto, R., Niikura, K., Monde, K., & Nishimura, S.-I. (2003). Cell Wall Engineering of Living Bacteria through Biosynthesis. *Recognition of Carbohydrates in Biological Systems, Part A: General Procedures*, 273–286. DOI: 10.1016/s0076-6879(03)01019-x.
- Sasaki, M., & Nunomura, N. (2003). Fermented Foods | Soy (Soya) Sauce. *Encyclopedia of Food Sciences and Nutrition*, 2359–2369. DOI: 10.1016/b0-12-227055-x/00455-7.
- Scallan, E., Hoekstra, R. M., Angulo, F. J., Tauxe, R. V., Widdowson, M.-A., Roy, S. L., Jones, J.L., Griffin, P. M. (2011). Foodborne Illness Acquired in the United States—Major Pathogens. *Emerging Infectious Diseases*, 17(1), 7–15. DOI: 10.3201/eid1701.p11101.
- Segawa, D., Nakamura, K., Kuramitsu, R., Muramatsu, S., Sano, Y., Uzuka, Y., Tamura, M., & Okai, H. (2014). Preparation of Low Sodium Chloride Containing Soy Sauce Using Amino Acid Based Saltiness Enhancers. *Bioscience, Biotechnology, and Biochemistry*, 59 (1), 35-39. DOI: 10.1271/bbb.59.35.
- Singracha, P., Niamsiri, N., Visessanguan, W., Lertsiri, S., & Assavanig, A. (2017). Application of lactic acid bacteria and yeasts as starter cultures for reduced-salt soy sauce (moromi) fermentation. *LWT - Food Science and Technology*, 78 (181-188). DOI: 10.1016/j.lwt.2016.12.019.

- Song, Y.-R., Jeong, D.-Y., & Baik, S.-H. (2015). Effects of indigenous yeasts on physicochemical and microbial properties of Korean soy sauce prepared by low-salt fermentation. *Food Microbiology*, 51, 171-178. DOI: 10.1016/j.fm.2015.06.001.
- Syifaa, A.H., Jinap, S., Sanny, M., & Khatib, A. (2016). Chemical profiling of different types of soy sauce and the relationship with its sensory attributes. *Journal of Food Quality*. DOI: 10.1111/jfq.12240.
- Tamarapu, S., McKillip, J.L., & Drake, M. (2001). Development of a multiplex Polymerase chain reaction assay for detection and differentiation of *Staphylococcus aureus* in dairy products. *Journal of Food Protection*, 64, 664 – 668.
- Tanaka, Y., Watanabe, J., & Mogi, Y. (2012). Monitoring of the microbial communities involved in the soy sauce manufacturing process by PCR-denaturing gradient gel electrophoresis. *Food Microbiology*, 31(1), 100–106. DOI: 10.1016/j.fm.2012.02.005
- Tiganitas, A., Zeaki, N., Gounadaki, A. S., Drosinos, E. H., & Skandamis, P. N. (2009). Study of the effect of lethal and sublethal pH and aw stresses on the inactivation or growth of *Listeria monocytogenes* and *Salmonella typhimurium*. *International Journal of Food Microbiology*, 134(1-2), 104–112. DOI: 10.1016/j.ijfoodmicro.2009.02.016.
- van Elsas, J. D., Semenov, A. V., Costa, R., & Trevors, J. T. (2011). Survival of *Escherichia coli* in the environment: fundamental and public health aspects. *The ISME journal*, 5(2), 173–183. DOI: 10.1038/ismej.2010.80.
- Vera, K., & Lazar, S. (2003). The effect of salt concentration and pH on the survival and growth of *E. coli* O157:H7 in white cheese and trypticase soy broth. *Acta Veterinaria*, 53(5-6), 411–418. DOI: 10.2298/avb0306411k.
- Vitko, N. P., Grosser, M. R., Khatri, D., Lance, T. R., & Richardson, A. R. (2016). Expanded glucose import capability affords *Staphylococcus aureus* optimized glycolytic flux during infection. *mBio*, 7(3). DOI :10.1128/mbio.00296-16
- Wallace, N., Zani, A., Abrams, E., & Sun, Y. (2016). The impact of oxygen on bacterial enteric pathogens. *Advances in Applied Microbiology*, 179-204. DOI: 10.1016/bs.aams.2016.04.002.
- Wei, Q., Wang, H., Chen, Z., Lv, Z., Xie, Y., & Lu, F. (2013). Profiling of dynamic changes in the microbial community during the soy sauce fermentation process. *Applied Microbial and Cell Physiology*, 97 (9111–9119). DOI: 10.1007/s00253-013-5146-9.
- Wirtanen, G., & Salo, S. (2016). Biofilm Risks. Handbook of Hygiene Control in the Food Industry (Second Edition), 55–79. DOI:10.1016/b978-0-08-100155-4.00005-4.
- World Health Organization. (2012). Guideline1: Sodium intake for adults and children. Geneva: WHO.
- World Health Organization. (2015). WHO estimates the global burden of foodborne diseases.
- World Health Organization. (2018). *E. coli*.
- Yan, Y., Qian, Y., Ji, F., Chen, J., & Han, B. (2013). Microbial composition during Chinese soy sauce koji-making based on culture dependent and independent methods. *Food Microbiology*, 34(1), 189–195. DOI: 10.1016/j.fm.2012.12.009.

- Yanfang, Z., Lijuan, W., & Wenyi, T. (2009). Biochemical changes in low-salt fermentation of solid-state soy sauce. *African Journal of Biotechnology*, 8(24), 7028–703.
- Yokotsuka, T. & Sasaki, M. (1997). Fermented protein foods in the Orient: shoyu and miso in Japan. In: Wood, B.J.B. *Microbiology of Fermented Foods*, 2nd edition, Vol 1. Thompson Science, Hongkong. DOI: 10.1007/978-1-4613-0309-1.
- Yunus, G. (2019). Biosensors: An Enzyme-Based Biophysical Technique for the Detection of Foodborne Pathogens. *Enzymes in Food Biotechnology*, 723-738.
- Zeaki, N., Jöhler, S., Skandamis, P. N., & Schelin, J. (2019). The Role of Regulatory Mechanisms and Environmental Parameters in Staphylococcal Food Poisoning and Resulting Challenges to Risk Assessment. *Frontiers in Microbiology*, 10. DOI:10.3389/fmicb.2019.01307.
- Zhang, L., Zhou, R., Cui, R., Huang, J., & Wu, C. (2016). Characterizing Soy Sauce Moromi Manufactured by High-Salt Dilute-State and Low-Salt Solid-State Fermentation Using Multiphase Analyzing Methods. *Journal of Food Science*, 81(11), C2639–C2646. DOI :10.1111/1750-3841.13516.