

DAFTAR PUSTAKA

- Afzaal, M., Saeed, F., Rasheed, R., Hussain, M., Aamir, M., Hussain, S., Mohamed, A. A., Alamri, M. S., & Anjum, F. M. (2021). Nutritional, biological, and therapeutic properties of black garlic: a critical review. In *International Journal of Food Properties* (Vol. 24, Issue 1, pp. 1387–1402). <https://doi.org/10.1080/10942912.2021.1967386>
- Ahmed, T., & Wang, C. K. (2021). Black garlic and its bioactive compounds on human health diseases: A review. In *Molecules* (Vol. 26, Issue 16, p. 5028). Multidisciplinary Digital Publishing Institute. <https://doi.org/10.3390/molecules26165028>
- Aisala, H., Manninen, H., Laaksonen, T., Linderborg, K. M., Myoda, T., Hopia, A., & Sandell, M. (2020). Linking volatile and non-volatile compounds to sensory profiles and consumer liking of wild edible Nordic mushrooms. *Food Chemistry*, 304, 125403. <https://doi.org/10.1016/j.foodchem.2019.125403>
- Alam, M. S., Teshima, S., Koshio, S., & Ishikawa, M. (2004). Effects of supplementation of coated crystalline amino acids on growth performance and body composition of juvenile kuruma shrimp *Marsupenaeus japonicus*. *Aquaculture Nutrition*, 10(5), 309–316. <https://doi.org/10.1111/j.1365-2095.2004.00316.x>
- Albrecht-Ruiz, M., & Salas-Maldonado, A. (2015). Chemical composition of light and dark muscle of Peruvian anchovy (*Engraulis ringens*) and its seasonal variation. *Journal of Aquatic Food Product Technology*, 24(2), 191–196. <https://doi.org/10.1080/10498850.2012.762705>
- Alfosea-Simón, M., Simón-Grao, S., Zavala-Gonzalez, E. A., Cámara-Zapata, J. M., Simón, I., Martínez-Nicolás, J. J., Lidón, V., & García-Sánchez, F. (2021). Physiological, Nutritional and Metabolomic Responses of Tomato Plants After the Foliar Application of Amino Acids Aspartic Acid, Glutamic Acid and Alanine. *Frontiers in Plant Science*, 11, 2138. <https://doi.org/10.3389/fpls.2020.581234>
- Alihanoğlu, S., Karaaslan, M., & Vardin, H. (2017). Novel Nutritive Garlic Product “Black Garlic”: A Critical Review of Its Composition, Production and Bioactivity. *Harran Üniversitesi Mühendislik Dergisi*, 2(3), 57–63.
- Al-Marzooqi, W., Al-Farsi, M. A., Kadim, I. T., Mahgoub, O., & Goddard, J. S. (2010). The effect of feeding different levels of sardine fish silage on broiler performance, meat quality and sensory characteristics under closed and open-sided housing systems. *Asian-Australasian Journal of Animal Sciences*, 23(12), 1614–1625. <https://doi.org/10.5713/ajas.2010.10119>
- Andrés-Bello, A., Barreto-Palacios, V., García-Segovia, P., Mir-Bel, J., & Martínez-Monzó, J. (2013). Effect of pH on Color and Texture of Food Products. In *Food Engineering Reviews* (Vol. 5, Issue 3, pp. 158–170). <https://doi.org/10.1007/s12393-013-9067-2>
- Angeles, T. M. M., Jesús, P. A., Rafael, M. R., & Tania, M. A. (2016). Evolution

of some physicochemical and antioxidant properties of black garlic whole bulbs and peeled cloves. *Food Chemistry*, 199, 135–139.

<https://doi.org/10.1016/j.foodchem.2015.11.128>

Atungulu, G., Koide, S., Sasaki, S., & Cao, W. (2007). Ion-exchange membrane mediated electro dialysis of scallop broth: Ion, free amino acid and heavy metal profiles. *Journal of Food Engineering*, 78(4), 1285–1290.

<https://doi.org/10.1016/j.jfoodeng.2005.12.036>

Bae, S. E., Cho, S. Y., Won, Y. D., Lee, S. H., & Park, H. J. (2012). A comparative study of the different analytical methods for analysis of S-allyl cysteine in black garlic by HPLC. *LWT - Food Science and Technology*, 46(2), 532–535. <https://doi.org/10.1016/j.lwt.2011.11.013>

Bae, S. E., Cho, S. Y., Won, Y. D., Lee, S. H., & Park, H. J. (2014). Changes in S-allyl cysteine contents and physicochemical properties of black garlic during heat treatment. *LWT - Food Science and Technology*, 55(1), 397–402.

<https://doi.org/10.1016/j.lwt.2013.05.006>

Balasubramani, P., Palaniswamy, P. T., Visvanathan, R., Thirupathi, V., Subbarayan, A., & Prakash Maran, J. (2015). Microencapsulation of garlic oleoresin using maltodextrin as wall material by spray drying technology.

International Journal of Biological Macromolecules, 72, 210–217.

<https://doi.org/10.1016/j.ijbiomac.2014.08.011>

Bang, S. J., Shin, I. S., & Kim, S. M. (2006). Quality Characteristics of Sea Tangle Single Cell Detritus (SCD) Manufactured by *Vibrio* sp. Isolated from *Batillus cornutus*. *Journal of the Korean Society of Food Science and Nutrition*, 35(5), 606–612. <https://doi.org/10.3746/jkfn.2006.35.5.606>

Bar, M., Binduga, U. E., & Szychowski, K. A. (2022). Methods of Isolation of Active Substances from Garlic (*Allium sativum* L.) and Its Impact on the Composition and Biological Properties of Garlic Extracts. In *Antioxidants* (Vol. 11, Issue 7, p. 1345). Multidisciplinary Digital Publishing Institute.

<https://doi.org/10.3390/antiox11071345>

Barido, F. H., Jang, A., Pak, J. I., Kim, Y. J., & Lee, S. K. (2022). Combined effects of processing method and black garlic extract on quality characteristics, antioxidative, and fatty acid profile of chicken breast. *Poultry Science*, 101(4), 101723.

<https://doi.org/10.1016/j.psj.2022.101723>

Bedrníček, J., Laknerová, I., Lorenc, F., de Moraes, P. P., Jarošová, M., Samková, E., Tříška, J., Vrchotová, N., Kadlec, J., & Smetana, P. (2021). The use of a thermal process to produce black garlic: Differences in the physicochemical and sensory characteristics using seven varieties of fresh garlic. *Foods*, 10(11), 2703.

<https://doi.org/10.3390/foods10112703>

Beluhan, S., & Ranogajec, A. (2011). Chemical composition and non-volatile components of Croatian wild edible mushrooms. *Food Chemistry*, 124(3), 1076–1082. <https://doi.org/10.1016/j.foodchem.2010.07.081>

Benlaassri, M., Ecale, F., Crepin, A., Rodier, M. H., Venisse, N., & Cateau, E.

(2023). In vitro reciprocal interactions between yeasts from human cutaneous mycobiota and parabens used in cosmetics. *FEMS Microbiology Letters*, 370. <https://doi.org/10.1093/femsle/fnac124>

Bhatwalkar, S. B., Mondal, R., Krishna, S. B. N., Adam, J. K., Govender, P., & Anupam, R. (2021). Antibacterial Properties of Organosulfur Compounds of Garlic (*Allium sativum*). In *Frontiers in Microbiology* (Vol. 12). Frontiers Media SA. <https://doi.org/10.3389/fmicb.2021.613077>

Bũu, T. G., Mai, Đ. S., Đoan, T. L. T., & Nguyễn, Đ. H. (2018). Effect Of Some Factors Of Cellulase-Assisted Extraction On Polyphenol Content And Antioxidant Activity Of Ly Son Black Garlic Aqueous Extract. *Journal of Science and Technology - IUH*, 36(06). <https://jst.iuh.edu.vn/index.php/jst-iuh/article/view/827/373>

Çakir, Ç. A., & Bozkurt, A. (2020). Impact of pH on the salty taste perception of the yogurt drink , ayran. *Harran Journal of Agricultural and Food Science*, 24(3), 301–309. <https://doi.org/doi.org/10.29050/harranziraat.698654>

Carocho, M., Barreiro, M. F., Morales, P., & Ferreira, I. C. F. R. (2014). Adding molecules to food, pros and cons: A review on synthetic and natural food additives. In *Comprehensive Reviews in Food Science and Food Safety* (Vol. 13, Issue 4, pp. 377–399). <https://doi.org/10.1111/1541-4337.12065>

Caruso, G., Conti, S., Villari, G., Borrelli, C., Melchionna, G., Minutolo, M., Russo, G., & Amalfitano, C. (2014). Effects of transplanting time and plant density on yield, quality and antioxidant content of onion (*Allium cepa* L.) in southern Italy. *Scientia Horticulturae*, 166, 111–120. <https://doi.org/10.1016/j.scienta.2013.12.019>

Cato, L., Rosyidi, D., & Thohari, I. (2015). Pengaruh Subtitusi Tepung Porang (*Amorphophallus oncophyllus*) Pada Tepung Tapioka Terhadap Kadar Air, Protein, Lemak, Rasa dan Tekstur Nugget Ayam. *TERNAK TROPIKA Journal of Tropical Animal Production*, 16(1), 15–23. <https://doi.org/10.21776/ub.jtapro.2015.016.01.3>

Cavalcanti, V. P., Aazza, S., Bertolucci, S. K. V., Rocha, J. P. M., Coelho, A. D., Oliveira, A. J. M., Mendes, L. C., Pereira, M. M. A., Morais, L. C., Forim, M. R., Pasqual, M., & Dória, J. (2021). Solvent mixture optimization in the extraction of bioactive compounds and antioxidant activities from garlic (*Allium sativum* l.). *Molecules*, 26(19), 6026. <https://doi.org/10.3390/molecules26196026>

Cerruto-Noya, C. A., Goad, C. L., & Mireles Dewitt, C. A. (2011). Antimicrobial effect of ammonium hydroxide when used as an alkaline agent in the formulation of injection brine solutions. *Journal of Food Protection*, 74(3), 475–479. <https://doi.org/10.4315/0362-028X.JFP-10-343>

Chang, T. C., & Jang, H. Der. (2021). Optimization of aging time for improved antioxidant activity and bacteriostatic capacity of fresh and black garlic. *Applied Sciences (Switzerland)*, 11(5), 1–16. <https://doi.org/10.3390/app11052377>

Chi, C. F., Hu, F. Y., Wang, B., Li, Z. R., & Luo, H. Y. (2015). Influence of

amino acid compositions and peptide profiles on antioxidant capacities of two protein hydrolysates from skipjack tuna (*Katsuwonus pelamis*) dark muscle. *Marine Drugs*, 13(5), 2580–2601. <https://doi.org/10.3390/md13052580>

Cho, Y. K., Ann, S. W., Jang, M. J., Oh, T. S., Oh, M. G., Park, Y. J., & Kim, C. H. (2020). Analysis of Biological Activity by Time of Black Garlic Ripening in Seosan Yukjok Garlic and Elephant Garlic. *Journal of Environmental Science International*, 29(5), 469–477. <https://doi.org/10.5322/jesi.2020.29.5.469>

Choi, D. J., Lee, S. J., Kang, M. J., Cho, H. S., Sung, N. J., & Shin, J. H. (2008). Physicochemical characteristics of black garlic (*Allium sativum* L.). *Journal of the Korean Society of Food Science and Nutrition*, 37(4), 465–471. <https://doi.org/10.3746/jkfn.2008.37.4.465>

Choi, I. S., Cha, H. S., & Lee, Y. S. (2014). Physicochemical and antioxidant properties of black garlic. *Molecules*, 19(10), 16811–16823. <https://doi.org/10.3390/molecules191016811>

Choi, S. H., Kim, D. S., Kozukue, N., Kim, H. J., Nishitani, Y., Mizuno, M., Levin, C. E., & Friedman, M. (2014). Protein, free amino acid, phenolic, β -carotene, and lycopene content, and antioxidative and cancer cell inhibitory effects of 12 greenhouse-grown commercial cherry tomato varieties. *Journal of Food Composition and Analysis*, 34(2), 115–127. <https://doi.org/10.1016/j.jfca.2014.03.005>

Chua, L. S., Abdullah, F. I., & Lim, S. H. (2022). Physicochemical changes and nutritional content of black garlic during fermentation. *Applied Food Research*, 2(2). <https://doi.org/10.1016/j.afres.2022.100216>

Clark, A. J., Soni, B. K., Sharkey, B., Acree, T., Lavin, E., Bailey, H. M., Stein, H. H., Han, A., Elie, M., & Nadal, M. (2022). Shiitake mycelium fermentation improves digestibility, nutritional value, flavor and functionality of plant proteins. *LWT*, 156, 113065. <https://doi.org/10.1016/j.lwt.2021.113065>

Colín-González, A. L., Santana, R. A., Silva-Islas, C. A., Chánez-Cárdenas, M. E., Santamaría, A., & Maldonado, P. D. (2012). The antioxidant mechanisms underlying the aged garlic extract- and S-allylcysteine-induced protection. In *Oxidative Medicine and Cellular Longevity*. <https://doi.org/10.1155/2012/907162>

Crovetto, S. I., Moreno, E., Dib, A. L., Espigares, M., & Espigares, E. (2017). Bacterial toxicity testing and antibacterial activity of parabens. *Toxicological and Environmental Chemistry*, 99(5–6), 858–868. <https://doi.org/10.1080/02772248.2017.1300905>

Davidson, P. M., Taylor, T. M., & David, J. R. D. (2020). Antimicrobials in Food. In P. M. Davidson, T. M. Taylor, & J. R. D. David (Eds.), *CRC Press* (4th ed.). Taylor & Francis Group. <https://doi.org/10.1201/9780429058196>

Dermiki, M., Mounayar, R., Suwankanit, C., Scott, J., Kennedy, O. B., Mottram, D. S., Gosney, M. A., Blumenthal, H., & Methven, L. (2013). Maximising umami taste in meat using natural ingredients: Effects on chemistry, sensory perception and hedonic liking in young and old consumers. *Journal of the Science of Food*

and Agriculture, 93(13), 3312–3321. <https://doi.org/10.1002/jsfa.6177>

Devi, V., & Brar, J. K. (2018). Comparison of proximate composition and mineral concentration of *Allium ampeloprasum* (elephant garlic) and *Allium sativum* (garlic). *Chemical Science Review and Letters*, 7(25), 362–367.

Dewi, N. N. A., & Mustika, I. W. (2018). Nutrition Content and Antioxidant Activity of Black Garlic. *International Journal of Health Sciences (IJHS)*, 2(1). <https://doi.org/10.29332/ijhs.v2n1.86>

Dong, M., Qin, L., Xue, J., Du, M., Lin, S. Y., Xu, X. B., & Zhu, B. W. (2018). Simultaneous quantification of free amino acids and 5'-nucleotides in shiitake mushrooms by stable isotope labeling-LC-MS/MS analysis. *Food Chemistry*, 268, 57–65. <https://doi.org/10.1016/j.foodchem.2018.06.054>

Duong, V. B., Nguyễn, & Điệp, T. (2014). PREPARING BLACK GARLIC DRIED EXTRACT POWDER BY SPRAY DRYING. *TẠP CHÍ Y - DƯỢC HỌC QUÂN SỰ*, 5(2).

http://hocvienquany.edu.vn/Tapchi_YDHQS/Data/TapTinBaiVietPDF/NGHIÊN CỨU ĐIỀU CHẾ BỘT CAO KHÔ TỎI ĐEN BẰNG PHƯƠNG PHÁP PHUN SẤY.pdf

Dursun Capar, T., Inanir, C., Cimen, F., Ekici, L., & Yalcin, H. (2022). Black garlic fermentation with green tea extract reduced HMF and improved bioactive properties: optimization study with response surface methodology. *Journal of Food Measurement and Characterization*, 16(2), 1340–1353. <https://doi.org/10.1007/s11694-021-01247-4>

Fajri, F. A. N., Sumardianto, & Rianingsih, L. (2021). Penambahan Anti Kempal Magnesium Karbonat (MgCO₃) Terhadap Karakteristik Flavor Lemi Rajungan (*Portunus pelagicus*). *Jurnal Ilmu Dan Teknologi Perikanan*, 3(2), 6. <https://doi.org/10.14710/JITPI.2021.13148>

Fang, D., Wang, C., Deng, Z., Ma, N., Hu, Q., & Zhao, L. (2021). Microflora and umami alterations of different packaging material preserved mushroom (*Flammulina filiformis*) during cold storage. *Food Research International*, 147. <https://doi.org/10.1016/J.FOODRES.2021.110481>

Ferrari, R., Storti, G., & Morbidelli, M. (2020). Maltodextrin as stabilizer for emulsion polymerization: Adsorption and grafting behavior. *Journal of Polymer Science*, 58(12), 1642–1654. <https://doi.org/10.1002/pol.20200083>

Franco, D., González, L., Bispo, E., Rodríguez, P., Garabal, J. I., & Moreno, T. (2010). Study of hydrolyzed protein composition, free amino acid, and taurine content in different muscles of galician blonde beef. *Journal of Muscle Foods*, 21(4), 769–784. <https://doi.org/10.1111/j.1745-4573.2010.00218.x>

Fransway, A. F., Fransway, P. J., Belsito, D. V., Warshaw, E. M., Sasseville, D., Fowler, J. F., DeKoven, J. G., Pratt, M. D., Maibach, H. I., Taylor, J. S., Marks, J. G., Mathias, C. G. T., DeLeo, V. A., Zirwas, J. M., Zug, K. A., Atwater, A. R., Silverberg, J., & Reeder, M. J. (2019). Parabens. In *Dermatitis* (Vol. 30, Issue 1, pp. 3–31). Lippincott Williams and Wilkins.

<https://doi.org/10.1097/DER.0000000000000429>

Fredotović, Ž., Soldo, B., Šprung, M., Marijanović, Z., Jerković, I., & Puizina, J. (2020). Comparison of organosulfur and amino acid composition between triploid onion *Allium cornutum clementi ex visiani*, 1842, and common onion *Allium cepa* L., and evidences for antiproliferative activity of their extracts. *Plants*, 9(1), 98. <https://doi.org/10.3390/plants9010098>

Fuchs, M., Turchiuli, C., Bohin, M., Cuvelier, M. E., Ordonnaud, C., Peyrat-Maillard, M. N., & Dumoulin, E. (2006). Encapsulation of oil in powder using spray drying and fluidised bed agglomeration. *Journal of Food Engineering*, 75(1), 27–35. <https://doi.org/10.1016/j.jfoodeng.2005.03.047>

Gallo, L., Llabot, J. M., Allemandi, D., Bucalá, V., & Piña, J. (2011). Influence of spray-drying operating conditions on *Rhamnus purshiana* (Cáscara sagrada) extract powder physical properties. *Powder Technology*, 208(1), 205–214. <https://doi.org/10.1016/j.powtec.2010.12.021>

García-Herrera, P., Morales, P., Fernández-Ruiz, V., Sánchez-Mata, M. C., Cámara, M., Carvalho, A. M., Ferreira, I. C. F. R., Pardo-de-Santayana, M., Molina, M., & Tardío, J. (2014). Nutrients, phytochemicals and antioxidant activity in wild populations of *Allium ampeloprasum* L., a valuable underutilized vegetable. *Food Research International*, 62, 272–279. <https://doi.org/10.1016/j.foodres.2014.03.004>

Gencbay, G., & Turhan, S. (2016). Proximate Composition and Nutritional Profile of the Black Sea Anchovy (*Engraulis encrasicolus*) Whole Fish, Fillets, and By-Products. *Journal of Aquatic Food Product Technology*, 25(6), 864–874. <https://doi.org/10.1080/10498850.2014.945199>

Goddard, J. S., & Al-Yahyai, D. S. S. (2001). Chemical and nutritional characteristics of dried sardine silage. *Journal of Aquatic Food Product Technology*, 10(4), 39–50. https://doi.org/10.1300/J030v10n04_04

Hasmedi, M. (2021). Effect of water on the caking properties of different types of wheat flour. *Food Research*, 5(1), 266–270. [https://doi.org/10.26656/fr.2017.5\(1\).412](https://doi.org/10.26656/fr.2017.5(1).412)

Hastiti, F. F. (2022, June 3). *Kaldu Jamur atau Kaldu Rasa Jamur, Apakah sama-sama lebih sehat daripada MSG ? Kompasiana*. <https://www.kompasiana.com/fahrulifatma/6299e4eed26345535b4d6342/kaldu-jamur-atau-kaldu-rasa-jamur-apakah-sama-sama-lebih-sehat-daripada-msg?page=1>

Herlina, H., Vionita, R. R., Sulistiyani, S., Nurhayati, N., & Lindriati, T. (2022). Sauce Product Development with Black Garlic Addition as a Flavour Enhancer and Antioxidant. *Industria: Jurnal Teknologi Dan Manajemen Agroindustri*, 11(1), 31–39. <https://doi.org/10.21776/ub.industria.2022.011.01.4>

Herlina, Soekarno, S., & Ivansyah, J. A. (2023). Production of Black Garlic From Local Garlic Varieties of Lumbu Hijau at Various Aging. *AIP Conference Proceedings*, 2583(1). <https://doi.org/10.1063/5.0119650>

- Huang, T., Qian, Y., Wei, J., & Zhou, C. (2019). Polymeric Antimicrobial food packaging and its applications. In *Polymers* (Vol. 11, Issue 3, p. 560). Multidisciplinary Digital Publishing Institute. <https://doi.org/10.3390/polym11030560>
- Idayanti, D., Darmawati, E., & Sutrisno, S. (2018). Pembuatan dan Pendugaan Lama Simpan Bubuk Asam Sunti dalam Kemasan dengan Metode Sorpsi. *Jurnal Keteknik Pertanian*, 6(2), 151–156. <https://doi.org/10.19028/jtep.06.2.151-156>
- Ilavarasan, R., Abraham, R. J. J., Rao, V. A., Ruban, S. W., & Ramani, R. (2016). Effect of age on meat quality characteristics and nutritional composition of Toda buffalo. *Buffalo Bulletin*, 35(2), 215–224. <https://kuojs.lib.ku.ac.th/index.php/BufBu/article/view/1293>
- Inglis, S. D., Kristmundsson, Á., Freeman, M. A., Levesque, M., & Stokesbury, K. (2016). Gray meat in the Atlantic sea scallop, *Placopecten magellanicus*, and the identification of a known pathogenic scallop apicomplexan. *Journal of Invertebrate Pathology*, 141, 66–75. <https://doi.org/10.1016/j.jip.2016.10.008>
- Intarasirisawat, R., Benjakul, S., & Visessanguan, W. (2011). Chemical compositions of the roes from skipjack, tongol and bonito. *Food Chemistry*, 124(4), 1328–1334. <https://doi.org/10.1016/j.foodchem.2010.07.076>
- Istiqamah, A., Lioe, H. N., & Adawiyah, D. R. (2019). Umami compounds present in low molecular umami fractions of asam sunti – A fermented fruit of *Averrhoa bilimbi* L. *Food Chemistry*, 270, 338–343. <https://doi.org/10.1016/j.foodchem.2018.06.131>
- Jing, H. (2020). Black Garlic: Processing, Composition Change, and Bioactivity. *EFood*, 1(3), 242–246. <https://doi.org/10.2991/efood.k.200617.001>
- Joshi, K., Satpute, S., Khutale, A., & Mudhalwadkar, R. P. (2016). PH and conductivity based taste identification. *International Conference on Electrical, Electronics, and Optimization Techniques, ICEEOT 2016*, 1963–1967. <https://doi.org/10.1109/ICEEOT.2016.7755032>
- Kang, M. J., Lee, S. J., Sung, N. J., & Shin, J. H. (2013). The Effect of Extract Powder from Fresh and Black Garlic on Main Components in Serum and Organs of Streptozotocin-Induced Diabetic Rats. *Journal of Life Science*, 23(3), 432–442. <https://doi.org/10.5352/jls.2013.23.3.432>
- Kang, O. J. (2016). Physicochemical characteristics of black garlic after different thermal processing steps. *Preventive Nutrition and Food Science*, 21(4), 348–354. <https://doi.org/10.3746/pnf.2016.21.4.348>
- Karakuzu, B., Temel, T. M., Yücel, S., Terzioğlu, P., & Elalmış, Y. (2016). Effect of Acid Type and Gelation pH on The Structural Properties of Silica Aerogels Prepared by Use of Rice Hull Biosilica. *Nat Sci*, 34(2), 175–182.
- Kari, N. M., Ahmad, F., & Ayub, M. N. A. (2022). Proximate composition, amino acid composition and food product application of anchovy: a review. In *Food Research* (Vol. 6, Issue 4, pp. 16–29). [https://doi.org/10.26656/fr.2017.6\(4\).419](https://doi.org/10.26656/fr.2017.6(4).419)

- Karnjanapratum, S., Supapvanich, S., Kaewthong, P., & Takeungwongtrakul, S. (2021). Impact of steaming pretreatment process on characteristics and antioxidant activities of black garlic (*Allium sativum* L.). *Journal of Food Science and Technology*, 58(5), 1869–1876. <https://doi.org/10.1007/s13197-020-04698-7>
- Kawashima, T., Shirai, T., Matsuda, H., Osako, K., & Okazaki, E. (2018). Identification and roles of the taste-active components of dried nori. *Japan Journal of Food Engineering*, 19(2), 121–128. <https://doi.org/10.11301/jsfe.18515>
- Khalid, W., Arshad, M. S., Nayik, G. A., Alfarraj, S., Ansari, M. J., & Guiné, R. P. F. (2022). Impact of Gamma Irradiation and Kale Leaf Powder on Amino Acid and Fatty Acid Profiles of Chicken Meat under Different Storage Intervals. *Molecules*, 27(23), 8201. <https://doi.org/10.3390/molecules27238201>
- Khan, A., Khan, S., Khan, M. A., Qamar, Z., & Waqas, M. (2015). The uptake and bioaccumulation of heavy metals by food plants, their effects on plants nutrients, and associated health risk: a review. *Environmental Science and Pollution Research*, 22(18), 13772–13799. <https://doi.org/10.1007/s11356-015-4881-0>
- Kim, D., Kim, K. H., & Yook, H. S. (2015). Analysis of active components of giant black garlic. *Journal of the Korean Society of Food Science and Nutrition*, 44(11), 1672–1681. <https://doi.org/10.3746/jkfn.2015.44.11.1672>
- Kim, H. J., & Yang, E. J. (2015). Optimization of hot water extraction conditions of wando sea tangle (*Laminaria japonica*) for development of natural salt enhancer. *Journal of the Korean Society of Food Science and Nutrition*, 44(5), 767–774. <https://doi.org/10.3746/jkfn.2015.44.5.767>
- Kim, J. S., Kang, O. J., & Gweon, O. C. (2013a). Comparison of phenolic acids and flavonoids in black garlic at different thermal processing steps. *Journal of Functional Foods*, 5(1), 80–86. <https://doi.org/10.1016/j.jff.2012.08.006>
- Kim, J. S., Kang, O. J., & Gweon, O. C. (2013b). Changes in the content of fat- and water-soluble vitamins in black garlic at the different thermal processing steps. *Food Science and Biotechnology*, 22(1), 283–287. <https://doi.org/10.1007/s10068-013-0039-3>
- Kim, J., Choi, J. Y., Kim, J., Jeong, S., Lee, S. H., Oh, Y., & Moon, K. D. (2021). Effect of anticaking agents on caking and quality characteristics of garlic cream powder sauce. *Korean Journal of Food Preservation*, 28(2), 181–189. <https://doi.org/10.11002/kjfp.2021.28.2.181>
- Kim, M. J., Parvin, R., Mushtaq, M. M. H., Hwangbo, J., Kim, J. H., Na, J. C., Kim, D. W., Kang, H. K., Kim, C. D., Cho, K. O., Yang, C. B., & Choi, H. C. (2013). Influence of monochromatic light on quality traits, nutritional, fatty acid, and amino acid profiles of broiler chicken meat. *Poultry Science*, 92(11), 2844–2852. <https://doi.org/10.3382/ps.2013-03159>
- Kim, M. S., Kim, M. J., Bang, W. S., Kim, K. S., & Park, S. S. (2012). Determination of s-allyl-l-cystein, diallyl disulfide, and total amino acids of black garlic after spontaneous short-term fermentation. *Journal of the Korean Society of*

Food Science and Nutrition, 41(5), 661–665.

<https://doi.org/10.3746/jkfn.2012.41.5.661>

Kim, Y. S., Kang, C. O., Kim, M. H., Cha, W. S., & Shin, H. J. (2011). Contents of Water Extract for *Laminaria japonica* and its Antioxidant Activity. *KSBB Journal*, 26(2), 112–118. <https://doi.org/10.7841/ksbbj.2011.26.2.112>

Kimura, S., Tung, Y. C., Pan, M. H., Su, N. W., Lai, Y. J., & Cheng, K. C. (2017). Black garlic: A critical review of its production, bioactivity, and application. In *Journal of Food and Drug Analysis* (Vol. 25, Issue 1, pp. 62–70). No longer published by Elsevier. <https://doi.org/10.1016/j.jfda.2016.11.003>

Kolb, N., Vallorani, L., Milanović, N., & Stocchi, V. (2004). Evaluation of Marine Algae Wakame (*Undaria pinnatifida*) and Kombu (*Laminaria digitata japonica*) as Food Supplements. *Food Technology and Biotechnology*, 42(1), 57–61.

Kopec, W., Jamroz, D., Wiliczekiewicz, A., Biazik, E., Pudlo, A., Korzeniowska, M., Hikawczuk, T., & Skiba, T. (2020). Antioxidative characteristics of chicken breast meat and blood after diet supplementation with carnosine, l-histidine, and β -alanine. *Antioxidants*, 9(11), 1–14. <https://doi.org/10.3390/antiox9111093>

Körner, P. (2021). Hydrothermal Degradation of Amino Acids. In *ChemSusChem* (Vol. 14, Issue 22, pp. 4947–4957). John Wiley & Sons, Ltd. <https://doi.org/10.1002/cssc.202101487>

Krisnawan, A. H., Budiono, R., Natarika, A., Mirani, A., & Andarini, N. (2022a). The Effects of Processing Time on the Total Phenolic, Flavonoid Content, and Antioxidant Activity of Multi Bulb and Single Bulb Black Garlic. *Jurnal Teknologi Dan Industri Pangan*, 33(1), 69–76. <https://doi.org/10.6066/JTIP.2022.33.1.69>

Krisnawan, A. H., Dharmawati, A. G., & Mallaleng, H. R. (2022b). Formulation of Instan Powder from the Combination of Single-bulb Black Garlic (*Allium sativum* L.) and Rosella Flower (*Hibiscus sabdariffa* L.) with Foam Mat Drying Method. *Journal Pharmasci (Journal of Pharmacy and Science)*, 7(1), 15–20. <https://doi.org/10.53342/pharmasci.v7i1.273>

Kurihara, K. (2015). Umami the Fifth Basic Taste: History of Studies on Receptor Mechanisms and Role as a Food Flavor. In *BioMed Research International* (Vol. 2015). Hindawi Publishing Corporation. <https://doi.org/10.1155/2015/189402>

Lazutkaite, G., Soldà, A., Lossow, K., Meyerhof, W., & Dale, N. (2017). Amino acid sensing in hypothalamic tanycytes via umami taste receptors. *Molecular Metabolism*, 6(11), 1480–1492. <https://doi.org/10.1016/j.molmet.2017.08.015>

Lee, Y. M., Gweon, O. C., Seo, Y. J., Im, J., Kang, M. J., Kim, M. J., & Kim, J. I. (2009). Effect of Garlic and Aged Black Garlic on Hyperglycemia and Dyslipidemia in Animal Model of Type 2 Diabetes Mellitus. *J Food Sci Nutr*, 14, 1–7. <https://doi.org/10.3746/jfn.2009.14.1.001>

Lipasek, R. A., Ortiz, J. C., Taylor, L. S., & Mauer, L. J. (2012). Effects of

anticaking agents and storage conditions on the moisture sorption, caking, and flowability of deliquescent ingredients. *Food Research International*, 45(1), 369–380. <https://doi.org/10.1016/j.foodres.2011.10.037>

Lishianawati, T. U., Yusiati, L. M., & Jamhari. (2022). Antioxidant effects of black garlic powder on spent duck meat nugget quality during storage. *Food Science and Technology (Brazil)*, 42, e62220. <https://doi.org/10.1590/fst.62220>

Liu, P., Weng, R., Sheng, X., Wang, X., Zhang, W., Qian, Y., & Qiu, J. (2020). Profiling of organosulfur compounds and amino acids in garlic from different regions of China. *Food Chemistry*, 305. <https://doi.org/10.1016/j.foodchem.2019.125499>

Liu, S., Du, M., Tu, Y., You, W., Chen, W., Liu, G., Li, J., Wang, Y., Lu, Z., Wang, T., & Shan, T. (2023). Fermented mixed feed alters growth performance, carcass traits, meat quality and muscle fatty acid and amino acid profiles in finishing pigs. *Animal Nutrition*, 12, 87–95. <https://doi.org/10.1016/j.aninu.2022.09.003>

Liu, Y. X., Zhang, Y. Y., Zheng, J., Chen, J. N., Huang, X. H., Dong, X. P., Zhu, B. W., & Qin, L. (2022). Seasonal variations in free amino acid, 5'-nucleotide, and lipid profiles of scallop (*Patinopecten yessoensis*) revealed by targeted and untargeted metabolomic approaches. *LWT*, 154, 112881. <https://doi.org/10.1016/j.lwt.2021.112881>

Lopes, A. F., Alfaia, C. M. M., Partidário, A. M. C. P. C., Lemos, J. P. C., & Prates, J. A. M. (2014). Influence of household cooking methods on amino acids and minerals of Barrosã-PDO veal. *Meat Science*, 99, 38–43. <https://doi.org/10.1016/j.meatsci.2014.08.012>

Lu, X., Li, N., Qiao, X., Qiu, Z., & Liu, P. (2017). Composition analysis and antioxidant properties of black garlic extract. *Journal of Food and Drug Analysis*, 25(2), 340–349. <https://doi.org/10.1016/j.jfda.2016.05.011>

Manninen, H. (2021). *Taste of Nordic forests: Analysis of the taste of mushrooms and taste modification properties of nanocellulose* [Tampere University]. <https://trepo.tuni.fi/handle/10024/124473>

Manninen, H., Rotola-Pukkila, M., Aisala, H., Hopia, A., & Laaksonen, T. (2018). Free amino acids and 5'-nucleotides in Finnish forest mushrooms. *Food Chemistry*, 247, 23–28. <https://doi.org/10.1016/j.foodchem.2017.12.014>

Manoonphol, K., Suttisansanee, U., Promkum, C., & Butryee, C. (2023). Effect of Thermal Processes on S-Allyl Cysteine Content in Black Garlic. *Foods*, 12(6), 1227. <https://doi.org/10.3390/foods12061227>

Marchelina, C., Sinaga, H., & Lubis, L. M. (2020). Effect of the Types and Percentages of Stabilizer on the Quality of Instant Garfish Condiment. *Indonesian Journal of Agricultural Research*, 3(1), 10–22. <https://doi.org/10.32734/injar.v3i1.3615>

Metwally, R. A., Soliman, S. A., Abdel Latef, A. A. H., & Abdelhameed, R. E.

- (2021). The individual and interactive role of arbuscular mycorrhizal fungi and *Trichoderma viride* on growth, protein content, amino acids fractionation, and phosphatases enzyme activities of onion plants amended with fish waste. *Ecotoxicology and Environmental Safety*, 214, 112072. <https://doi.org/10.1016/j.ecoenv.2021.112072>
- Mikaili, P., Maadirad, S., Moloudizargari, M., Aghajanshakeri, S., & Sarahroodi, S. (2013). Therapeutic Uses and Pharmacological Properties of Garlic, Shallot, and Their Biologically Active Compounds. *Iranian Journal of Basic Medical Sciences*, 16(10), 1031. /pmc/articles/PMC3874089/
- Mitchell, M., Brutnon, N. P., Fitzgerald, R. J., & Wilkinson, M. G. (2013). The Use of Herbs, Spices, and Whey Proteins as Natural Flavor Enhancers and Their Effect on the Sensory Acceptability of Reduced-Salt Chilled Ready-Meals. *Journal of Culinary Science and Technology*, 11(3), 222–240. <https://doi.org/10.1080/15428052.2013.769869>
- Mohammed, H. O., O'grady, M. N., O'sullivan, M. G., Hamill, R. M., Kilcawley, K. N., & Kerry, J. P. (2021). An assessment of selected nutritional, bioactive, thermal and technological properties of brown and red Irish seaweed species. *Foods*, 10(11), 2784. <https://doi.org/10.3390/foods10112784>
- Molina-Calle, M., de Medina, V. S., Priego-Capote, F., & de Castro, M. D. L. (2017). Establishing compositional differences between fresh and black garlic by a metabolomics approach based on LC–QTOF MS/MS analysis. *Journal of Food Composition and Analysis*, 62, 155–163. <https://doi.org/10.1016/j.jfca.2017.05.004>
- Moreno-Rojas, J. M., Moreno-Ortega, A., Ordóñez, J. L., Moreno-Rojas, R., Pérez-Aparicio, J., & Pereira-Caro, G. (2018). Development and validation of UHPLC–HRMS methodology for the determination of flavonoids, amino acids and organosulfur compounds in black onion, a novel derived product from fresh shallot onions (*Allium cepa* var. *aggregatum*). *LWT*, 97, 376–383. <https://doi.org/10.1016/j.lwt.2018.07.032>
- Moscoso-Ramírez, P. A., Montesinos-Herrero, C., & Palou, L. (2013). Characterization of postharvest treatments with sodium methylparaben to control citrus green and blue molds. *Postharvest Biology and Technology*, 77, 128–137. <https://doi.org/10.1016/j.postharvbio.2012.10.007>
- Mouritsen, O. G., Styrbæk, K., Mouritsen, J. D., & Johansen, M. (2014). *Umami: Unlocking the Secrets of the Fifth Taste* (O. G. Mouritsen & K. Styrbæk (eds.); 1st ed., Vol. 1). Columbia University Press. <https://doi.org/10.7312/MOUR16890>
- Muzaffar, K., Nayik, G. A., Kumar, P. (2015). Stickiness Problem Associated with Spray Drying of Sugar and Acid Rich Foods: A Mini Review. *Journal of Nutrition & Food Sciences*, s12. <https://doi.org/10.4172/2155-9600.s12-003>
- Nair, K. P. (2021). Minor Spices and Condiments: Global Economic Potential. In *Minor Spices and Condiments*. Springer International Publishing. <https://doi.org/10.1007/978-3-030-82246-0>

- Najman, K., Sadowska, A., & Hallmann, E. (2021). Evaluation of bioactive and physicochemical properties of white and black garlic (*Allium sativum* L.) from conventional and organic cultivation. *Applied Sciences (Switzerland)*, *11*(2), 1–23. <https://doi.org/10.3390/app11020874>
- Nassur, R. de C. M. R., Boas, E. V. de B. V., & Resende, F. V. (2017). Black garlic: Transformation effects, characterization and consumer purchase intention. *Comunicata Scientiae*, *8*(3), 444–451. <https://doi.org/10.14295/CS.v8i3.2251>
- Necas, J., & Bartosikova, L. (2013). Carrageenan: a review. *Veterinárni Medicína*, *58*(4), 187–205. <https://doi.org/10.17221/6758-VETMED>
- Neta, E. R. D., Johanningsmeier, S. D., Drake, M. A., & McFeeters, R. F. (2009). Effects of pH adjustment and sodium ions on sour taste intensity of organic acids. *Journal of Food Science*, *74*(4). <https://doi.org/10.1111/j.1750-3841.2009.01127.x>
- Nisar, M. F., Arshad, M. S., Yasin, M., Arshad, M. U., & Nadeem, M. T. (2019). Influence of irradiation and moringa leaf powder on the amino acid and fatty acid profiles of chicken meat stored under various packaging materials. *Journal of Food Processing and Preservation*, *43*(9). <https://doi.org/10.1111/jfpp.14166>
- Noh, Y., Park, K. H., Sun Lee, J., Kim, H. J., Kim, M. J., Kim, K. H., Kim, J. G., Heu, M. S., & Kim, J. S. (2013). Improvement on Yield of Extracts from Byproducts of Alaska Pollock *Theragra chalcogramma* and Sea Tangle *Laminaria japonica* using Commercial Enzymes and Its Food Component Characterization. *Korean Journal of Fisheries and Aquatic Sciences*, *46*(1), 37–45. <https://doi.org/10.5657/kfas.2013.0037>
- Nurhadi, B., & Roos, Y. H. (2017). Influence of anti-caking agent on the water sorption isotherm and flow-ability properties of vacuum dried honey powder. *Journal of Food Engineering*, *210*, 76–82. <https://doi.org/10.1016/j.jfoodeng.2017.04.020>
- Okorafor, L. M., Eneji, I. S., & Sha'Ato, R. (2019). Proximate and Elemental Analysis of Local Spices Used in Nigeria. *Chemical Science International Journal*, *28*(2), 1–9. <https://doi.org/10.9734/CSJI/2019/v28i230135>
- Orefice, C., Morganella, N., Gallo, M., Garella, I., Marzocchella, A., & Nigro, R. (2022). Black Garlic: an Innovative Additive for Food Formulations. *Chemical Engineering Transactions*, *93*, 331–336. <https://doi.org/10.3303/CET2293056>
- Ostrowska-Ligeza, E., & Lenart, A. (2015). Influence of water activity on the compressibility and mechanical properties of cocoa products. *LWT*, *60*(2), 1054–1060. <https://doi.org/10.1016/j.lwt.2014.10.040>
- Outuki, P. M., de Francisco, L. M. B., Hoscheid, J., Bonifácio, K. L., Barbosa, D. S., & Cardoso, M. L. C. (2016). Development of arabic and xanthan gum microparticles loaded with an extract of *Eschweilera nana* Miens leaves with antioxidant capacity. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, *499*, 103–112. <https://doi.org/10.1016/j.colsurfa.2016.04.006>
- Peng, S., Chen, C., Shi, Z., & Wang, L. (2013). Amino Acid and Fatty Acid

Composition of the Muscle Tissue of Yellowfin Tuna (*Thunnus Albacares*) and Bigeye Tuna (*Thunnus Obesus*). *Journal of Food and Nutrition Research*, 1(4), 42–45. <https://doi.org/10.12691/jfnr-1-4-2>

PT Indomarco Prismatama. (2022a). *Ajinomoto Penyedap Rasa Masako Ayam 100G*. Klik Indomaret. <https://www.klikindomaret.com/product/penyedap-rasa-masako-1>

PT Indomarco Prismatama. (2022b). *Ajinomoto Penyedap Rasa Masako Sapi 100G*. Klik Indomaret. <https://www.klikindomaret.com/product/penyedap-rasa-masako-2>

PT Indomarco Prismatama. (2022c). *Royco Bumbu Kaldu Ayam 100G*. Klik Indomaret. <https://www.klikindomaret.com/product/bumbu-kaldu-19609>

PT Unilever Indonesia Tbk. (2023a). *Knorr Bumbu Rasa Ayam Refill 200g*. Unilever Food Solutions. <https://www.unileverfoodsolutions.co.id/id/product/knorr-bumbu-rasa-ayam-refill-200-g-43-ID-864414.html>

PT Unilever Indonesia Tbk. (2023b). *Royco Bumbu Ekstrak Daging Sapi 1.5kg*. Unilever Food Solutions. <https://www.unileverfoodsolutions.co.id/id/product/royco-bumbu-ekstrak-daging-sapi-1-5kg-43-ID-694838.html>

Putri, N. T., Rhamadani, A., & Wisnel, W. (2020). Designing food safety standards in beef jerky production process with the application of hazard analysis critical control point (HACCP). *Nutrition and Food Science*, 50(2), 333–347. <https://doi.org/10.1108/NFS-04-2019-0139>

Qiu, Z., Lu, X., Li, N., Zhang, M., & Qiao, X. (2018). Characterization of garlic endophytes isolated from the black garlic processing. *MicrobiologyOpen*, 7(1), e00547. <https://doi.org/10.1002/mbo3.547>

Qiu, Z., Zheng, Z., Zhang, B., Sun-Waterhouse, D., & Qiao, X. (2020). Formation, nutritional value, and enhancement of characteristic components in black garlic: A review for maximizing the goodness to humans. *Comprehensive Reviews in Food Science and Food Safety*, 19(2), 801–834. <https://doi.org/10.1111/1541-4337.12529>

Rahgo, Z., Samadlouie, H. R., Mojerlou, S., & Jahanbin, K. (2019). Statistical Optimization of Culture Conditions for Protein Production by a Newly Isolated *Morchella fluvialis*. *BioMed Research International*, 2019. <https://doi.org/10.1155/2019/7326590>

Rahman, M. M., Fazlic, V., & Saad, N. W. (2012). Antioxidant properties of raw garlic (*Allium sativum*) extract. *International Food Research Journal*, 19(2), 589–591. <http://agris.upm.edu.my:8080/dspace/handle/0/12814>

Ríos-Ríos, K. L., Montilla, A., Olano, A., & Villamiel, M. (2019). Physicochemical changes and sensorial properties during black garlic elaboration: A review. In *Trends in Food Science and Technology* (Vol. 88, pp. 459–467).

Elsevier Ltd. <https://doi.org/10.1016/j.tifs.2019.04.016>

Ryu, J. H., & Kang, D. (2017). Physicochemical properties, biological activity, health benefits, and general limitations of aged black garlic: A review. In *Molecules* (Vol. 22, Issue 6, p. 919). Multidisciplinary Digital Publishing Institute. <https://doi.org/10.3390/molecules22060919>

Sankar, T. V., Anandan, R., Mathew, S., Asha, K. K., Lakshmanan, P. T., Varkey, J., Aneesh P, P. A., & Mohanty, B. P. (2013). Chemical composition and nutritional value of Anchovy (*Stolephorus commersonii*) caught from Kerala coast, India. *European Journal of Experimental Biology*, 3(1), 85–89. www.pelagiaresearchlibrary.com

Sansone, F., Mencherini, T., Picerno, P., D'Amore, M., Aquino, R. P., & Lauro, M. R. (2011). Maltodextrin/pectin microparticles by spray drying as carrier for nutraceutical extracts. *Journal of Food Engineering*, 105(3), 468–476. <https://doi.org/10.1016/j.jfoodeng.2011.03.004>

Sasaki, J. I., Lu, C., Machiya, E., Tanahashi, M., & Hamada, K. (2007). Processed black garlic (*Allium sativum*) extracts enhance anti-tumor potency against mouse tumors. *Medical and Aromatic Journal of Plant Science and Biotechnology*, 1(2), 278–281.

Serna-Saldivar, S. O. (2022). Snack Foods: Processing, Innovation, and Nutritional Aspects. In S. O. Serna-Saldivar (Ed.), *CRC Press* (1st ed.). Taylor & Francis Group. <https://doi.org/https://doi.org/10.1201/9781003129066>

Serrano, A., Cofrades, S., Ruiz-Capillas, C., Olmedilla-Alonso, B., Herrero-Barbudo, C., & Jiménez-Colmenero, F. (2005). Nutritional profile of restructured beef steak with added walnuts. *Meat Science*, 70(4), 647–654. <https://doi.org/10.1016/j.meatsci.2005.02.014>

Setiyoningrum, F., Herlina, N., Afiati, F., & Priadi, G. (2021). Antibacterial activities of Solo garlic. *IOP Conference Series: Materials Science and Engineering*, 1011(1). <https://doi.org/10.1088/1757-899X/1011/1/012067>

Setyadjit, & Sukasih, E. (2015). Effect of Addition of Filler on the Production of Shallot (*Allium Cepa* Var. *Ascalonicum* L.) Powder with Drum Dryer. *Procedia Food Science*, 3, 396–408. <https://doi.org/10.1016/j.profoo.2015.01.044>

Shao, D., Atungulu, G., Pan, Z., Yue, T., Zhang, A., & Chen, X. (2013). Separation Methods and Chemical and Nutritional Characteristics of Tomato Pomace. *Transactions of the ASABE*, 56(1), 261–268. <https://doi.org/10.13031/2013.42577>

Sharma, K., Mahato, N., Nile, S. H., Lee, E. T., & Lee, Y. R. (2016). Economical and environmentally-friendly approaches for usage of onion (*Allium cepa* L.) waste. In *Food and Function* (Vol. 7, Issue 8, pp. 3354–3369). The Royal Society of Chemistry. <https://doi.org/10.1039/c6fo00251j>

Shenoy, P., Viau, M., Tammel, K., Innings, F., Fitzpatrick, J., & Ahrné, L. (2015). Effect of powder densities, particle size and shape on mixture quality of binary

food powder mixtures. *Powder Technology*, 272, 165–172.
<https://doi.org/10.1016/j.powtec.2014.11.023>

Shin, J. H., Choi, D. J., Lee, S. J., Cha, J. Y., Kim, J. G., & Sung, N. J. (2008). Changes of Physicochemical Components and Antioxidant Activity of Garlic During its Processing. *Journal of Life Science*, 18(8), 1123–1131.
<https://doi.org/10.5352/jls.2008.18.8.1123>

Silva, D. F. da, Wang, H., Czaja, T. P., Berg, F. van den, Kirkensgaard, J. J. K., Ipsen, R., & Hougaard, A. B. (2021). Effects of homogenization and pH adjustment of cheese feed without emulsifying salt on the physical properties of high fat cheese powder. *Powder Technology*, 378, 227–236.
<https://doi.org/10.1016/j.powtec.2020.10.004>

Silva, G. M. S. W., & Wansapala, M. A. J. (2016). Formulation of flavor enhancer using locally available natural raw materials. *International Journal of Innovative Research in Technology*, 2(9), 77–81.
<http://dr.lib.sjp.ac.lk/handle/123456789/6802>

Silva, M. M., & Lidon, F. C. (2016). Food preservatives - An overview on applications and side effects. In *Emirates Journal of Food and Agriculture* (Vol. 28, Issue 6, pp. 366–373). United Arab Emirates University.
<https://doi.org/10.9755/ejfa.2016-04-351>

Smiderle, F. R., Carbonero, E. R., Sasaki, G. L., Gorin, P. A. J., & Iacomini, M. (2008). Characterization of a heterogalactan: Some nutritional values of the edible mushroom *Flammulina velutipes*. *Food Chemistry*, 108(1), 329–333.
<https://doi.org/10.1016/j.foodchem.2007.10.029>

SNI 01-3709-1995. (1995): Rempah-Rempah Bubuk. Badan Standardisasi Nasional Indonesia. Jakarta Pusat. Diakses dari <https://akses-sni.bsn.go.id/viewsni/baca/1566>

SNI 01-4281-1996. (1996): Bumbu Rasa Ayam. Badan Standardisasi Nasional Indonesia. Jakarta Pusat. Diakses dari <https://akses-sni.bsn.go.id/viewsni/baca/1741>

SNI 8067-2015. (2015): Mononatrium L-Glutamat. Badan Standardisasi Nasional Indonesia. Jakarta Pusat. Diakses dari <https://akses-sni.bsn.go.id/viewsni/baca/6257>

Sperber, W. H., & Doyle, M. P. (2009). Compendium of the Microbiological Spoilage of Foods and Beverages. In W. H. Sperber & M. P. Doyle (Eds.), *Food Microbiology and Food Safety* (1st ed.). Springer New York LLC.
<https://doi.org/10.1007/978-1-4419-0826-1>

Stadlander, T., Khalil, W. K. B., Focken, U., & Becker, K. (2013). Effects of low and medium levels of red alga Nori (*Porphyra yezoensis* Ueda) in the diets on growth, feed utilization and metabolism in intensively fed Nile tilapia, *Oreochromis niloticus* (L.). *Aquaculture Nutrition*, 19(1), 64–73.
<https://doi.org/10.1111/j.1365-2095.2012.00940.x>

- Tahir, Z., Saeed, F., Nosheen, F., Ahmed, A., & Anjum, F. M. (2022). Comparative study of nutritional properties and antioxidant activity of raw and fermented (black) garlic. *International Journal of Food Properties*, 25(1), 116–127. <https://doi.org/10.1080/10942912.2022.2026954>
- Tan, Y., Zeng, N. K., & Xu, B. (2022). Chemical profiles and health-promoting effects of porcini mushroom (*Boletus edulis*): A narrative review. In *Food Chemistry* (Vol. 390). <https://doi.org/10.1016/j.foodchem.2022.133199>
- Tazikeh, T., Kenari, A. A., & Esmaeili, M. (2020). Effects of fish meal replacement by meat and bone meal supplemented with garlic (*Allium sativum*) powder on biological indices, feeding, muscle composition, fatty acid and amino acid profiles of whiteleg shrimp (*Litopenaeus vannamei*). *Aquaculture Research*, 51(2), 674–686. <https://doi.org/10.1111/are.14416>
- Temel, T. M., İkizler, B. K., Terzioğlu, P., Yücel, S., & Elalmış, Y. B. (2017). The Effect of Process Variables on The Properties of Nanoporous Silica Aerogels: An Approach to Prepare Silica Aerogels From Biosilica. *Journal of Sol-Gel Science and Technology*, 84(1), 51–59. <https://doi.org/10.1007/s10971-017-4469-x>
- Thangaraj, P. (2015). Proximate Composition Analysis. In K. D. Rainsford (Ed.), *Pharmacological Assays of Plant-Based Natural Products. Progress in Drug Research* (1st ed., Vol. 71, pp. 21–31). Springer Cham. https://doi.org/10.1007/978-3-319-26811-8_5
- Tian, Z., Cui, Y., Lu, H., Wang, G., & Ma, X. (2021). Effect of long-term dietary probiotic *Lactobacillus reuteri* 1 or antibiotics on meat quality, muscular amino acids and fatty acids in pigs. *Meat Science*, 171. <https://doi.org/10.1016/j.meatsci.2020.108234>
- Tran, G. B., Pham, T. V., & Trinh, N. N. (2020). Black Garlic and Its Therapeutic Benefits. In *Medicinal Plants - Use in Prevention and Treatment of Diseases*. IntechOpen. <https://doi.org/10.5772/intechopen.85042>
- Tsai, S. Y., Weng, C. C., Huang, S. J., Chen, C. C., & Mau, J. L. (2006). Nonvolatile taste components of *Grifola frondosa*, *Morchella esculenta* and *Termitomyces albuminosus* mycelia. *LWT*, 39(10), 1066–1071. <https://doi.org/10.1016/j.lwt.2005.07.017>
- Ulianych, O., Yatsenko, V., Didenko, I., Vorobiova, N., Kuhnyuk, O., Lazariev, O., & Tretiakova, S. (2019). Agrobiological evaluation of *Allium ampeloprasum* L. variety samples in comparison with *Allium sativum* L. cultivars. *Agronomy Research*, 17(4), 1788–1799. <https://doi.org/10.15159/AR.19.192>
- Usydus, Z., Szlinder-Richert, J., & Adamczyk, M. (2009). Protein quality and amino acid profiles of fish products available in Poland. *Food Chemistry*, 112(1), 139–145. <https://doi.org/10.1016/j.foodchem.2008.05.050>
- Walker, A. B., Fournier, H. R., Neefus, C. D., Nardi, G. C., & Berlinsky, D. L. (2009). Partial Replacement of Fish Meal with Laver *Porphyra* spp. in Diets for Atlantic Cod. *North American Journal of Aquaculture*, 71(1), 39–45.

<https://doi.org/10.1577/a07-110.1>

Wang, B., Adhikari, B., & Barrow, C. J. (2018). Highly stable spray dried tuna oil powders encapsulated in double shells of whey protein isolate-agar gum and gellan gum complex coacervates. *Powder Technology*, 358, 79–86. <https://doi.org/10.1016/j.powtec.2018.07.084>

Wang, D., Feng, Y., Liu, J., Yan, J., Wang, M., & Changlong, J. S. (2010). Black Garlic (*Allium sativum*) Extracts Enhance the Immune System. *Medicinal and Aromatic Plant Science and Biotechnology*.

Wang, W., & Zhou, W. (2012). Characterization of spray-dried soy sauce powders using maltodextrins as carrier. *Journal of Food Engineering*, 109(3), 399–405. <https://doi.org/10.1016/j.jfoodeng.2011.11.012>

Wang, W., Zhou, X., & Liu, Y. (2020). Characterization and evaluation of umami taste: A review. In *TrAC - Trends in Analytical Chemistry* (Vol. 127, p. 115876). Elsevier. <https://doi.org/10.1016/j.trac.2020.115876>

Watkins, T., White, A. R., Emblem, A., Crompton, G., Emblem, H., Farmer, N., Inns, G. R., Grayhurst, P., Page, B., Kerry, J., Hardwidge, M., Riley, A., Ewart, M., Stewart, B., & Mumby, R. (2018). Packaging Technology: Fundamentals, Materials and Processes. In A. Emblem & H. Emblem (Eds.), *Materials* (3rd ed.). Woodhead Publishing Limited.

Weiss, I. M., Muth, C., Drumm, R., & Kirchner, H. O. K. (2018). Thermal decomposition of the amino acids glycine, cysteine, aspartic acid, asparagine, glutamic acid, glutamine, arginine and histidine. *BMC Biophysics*, 11(1), 1–15. <https://doi.org/10.1186/s13628-018-0042-4>

Widyaningsih, T. D., Akbar, S. M., & Wijayanti, N. (2021). Optimization of maltodextrin concentration, drying temperature and drying time on total flavonoid content and antioxidant activity of black garlic (*Allium sativum* L.) aqueous extract powder using response surface methodology. *IOP Conference Series: Earth and Environmental Science*, 924(1). <https://doi.org/10.1088/1755-1315/924/1/012035>

Wijayasekara, K. N., & Wansapala, J. (2021). Comparison of a flavor enhancer made with locally available ingredients against commercially available Mono Sodium Glutamate. *International Journal of Gastronomy and Food Science*, 23, 100286. <https://doi.org/10.1016/j.ijgfs.2020.100286>

Wu, S., Fitzpatrick, J., Cronin, K., & Miao, S. (2020). Effect of sodium carbonate on the rehydration of milk protein isolate powder. *Food Hydrocolloids*, 99, 105305. <https://doi.org/10.1016/j.foodhyd.2019.105305>

Yaligar, A. A., Karakannavar, S. J., & Hilli, J. S. (2021). Microbial study on Masala Khara-Spicy chilly powder. *The Pharma Innovation*, 10(6), 1290–1292. <http://www.thepharmajournal.com>

Yanar, Y., & Çelik, M. (2006). Seasonal amino acid profiles and mineral contents of green tiger shrimp (*Penaeus semisulcatus* de Haan, 1844) and speckled shrimp

(*Metapenaeus monoceros* Fabricus, 1789) from the Eastern Mediterranean. *Food Chemistry*, 94(1), 33–36. <https://doi.org/10.1016/j.foodchem.2004.09.049>

Yang, X., Nisar, T., Liang, D., Hou, Y., Sun, L., & Guo, Y. (2018). Low methoxyl pectin gelation under alkaline conditions and its rheological properties: Using NaOH as a pH regulator. *Food Hydrocolloids*, 79, 560–571. <https://doi.org/10.1016/j.foodhyd.2017.12.006>

Yang, X., Zhang, Y., Kong, Y., Zhao, J., Sun, Y., & Huang, M. (2019). Comparative analysis of taste compounds in shiitake mushrooms processed by hot-air drying and freeze drying. *International Journal of Food Properties*, 22(1), 1100–1111. <https://doi.org/10.1080/10942912.2019.1628777>

Yapıcı, E., Karakuzu-İkizler, B., & Yücel, S. (2021). Anticaking additives for food powders. In *Food Engineering Series* (pp. 109–123). Springer. https://doi.org/10.1007/978-3-030-48908-3_6

Yu, K. W., Hwang, J. H., Keum, J. H., & Lee, K. H. (2016). Quality Characteristics of Kimchi Seasoning with Black Garlic. *The Korean Journal of Food And Nutrition*, 29(5), 677–683. <https://doi.org/10.9799/ksfan.2016.29.5.677>

Yuan, H., Sun, L., Chen, M., & Wang, J. (2018). An analysis of the changes on intermediate products during the thermal processing of black garlic. *Food Chemistry*, 239, 56–61. <https://doi.org/10.1016/j.foodchem.2017.06.079>

Yun, H. M., Ban, J. O., Park, K. R., Lee, C. K., Jeong, H. S., Han, S. B., & Hong, J. T. (2014). Potential therapeutic effects of functionally active compounds isolated from garlic. In *Pharmacology and Therapeutics* (Vol. 142, Issue 2, pp. 183–195). Pergamon. <https://doi.org/10.1016/j.pharmthera.2013.12.005>

Zafar, U., Vivacqua, V., Calvert, G., Ghadiri, M., & Cleaver, J. A. S. (2017). A review of bulk powder caking. In *Powder Technology* (Vol. 313, pp. 389–401). Elsevier. <https://doi.org/10.1016/j.powtec.2017.02.024>

Zaragozá, F. T. (2015). Classification of Food Spices by Proximate Content : *Nereis*, 8, 23–33. <https://riucv.ucv.es/handle/20.500.12466/237>

Zhang, F., Zhang, M., Chen, Y., Ouyang, J., Wang, Y., Yang, H., Luo, X., Zhang, D., Lu, Y., Yu, H., & Wang, Y. (2021). Antimicrobial, anti-biofilm properties of three naturally occurring antimicrobial peptides against spoilage bacteria, and their synergistic effect with chemical preservatives in food storage. *Food Control*, 123. <https://doi.org/10.1016/j.foodcont.2020.107729>

Zhang, J., Sun-Waterhouse, D., Su, G., & Zhao, M. (2019). New insight into umami receptor, umami/umami-enhancing peptides and their derivatives: A review. In *Trends in Food Science and Technology* (Vol. 88, pp. 429–438). Elsevier Ltd. <https://doi.org/10.1016/j.tifs.2019.04.008>

Zhang, L., & Peterson, D. G. (2018). Identification of a novel umami compound in potatoes and potato chips. In *Food Chemistry* (Vol. 240, pp. 1219–1226). Elsevier. <https://doi.org/10.1016/j.foodchem.2017.08.043>

Zhang, M., Lei, N., Zhu, T., & Zhang, Z. (2013). Thermal processing effects on

the chemical constituent and antioxidant activity of s-alk(en)ylcysteine s-oxides (alliin) extract. *LWT - Food Science and Technology*, 51(1), 309–313.
<https://doi.org/10.1016/j.lwt.2012.09.024>

Zhang, T., Si, B., Tu, Y., Cui, K., Zhou, C., & Diao, Q. (2019). Effect of including different levels of moringa (*Moringa oleifera*) leaf meal in the diet of finishing pigs: Performance, pork quality, fatty acid composition, and amino acid profile. *Czech Journal of Animal Science*, 64(3), 141–149.
<https://doi.org/10.17221/204/2018-CJAS>

Zhang, X., Li, N., Lu, X., Liu, P., & Qiao, X. (2016). Effects of temperature on the quality of black garlic. *Journal of the Science of Food and Agriculture*, 96(7), 2366–2372. <https://doi.org/10.1002/jsfa.7351>

Zhang, Y., Venkitasamy, C., Pan, Z., Liu, W., & Zhao, L. (2017). Novel Umami Ingredients: Umami Peptides and Their Taste. In *Journal of Food Science* (Vol. 82, Issue 1, pp. 16–23). John Wiley & Sons, Ltd. <https://doi.org/10.1111/1750-3841.13576>

Zhang, Y., Zhang, Y., Li, H., Guo, T., Jia, J., Zhang, P., Wang, L., Xia, N., Qian, Q., Peng, H., Pan, Z., Liu, D., & Zhao, L. (2022). Comparison of Nutrition and Flavor Characteristics of Five Breeds of Pork in China. *Foods*, 11(17), 2704.
<https://doi.org/10.3390/foods11172704>

Zhang, Z., Lei, M., Liu, R., Gao, Y., Xu, M., & Zhang, M. (2015). Evaluation of Alliin, Saccharide Contents and Antioxidant Activities of Black Garlic during Thermal Processing. *Journal of Food Biochemistry*, 39(1), 39–47.
<https://doi.org/10.1111/jfbc.12102>

Zongqi, L., Chenjian, W., Xuewen, Y., Mingchang, C., Jingyu, L., Junlong, M., & Bing, D. (2021). Comparison of Nutrients and Volatile Compounds between Fruiting Bodies of White and Yellow *Flammulina filiformis*. *Acta Edulis Fungi*, 37(3), 102–111. <https://doi.org/10.16488/J.CNKI.1005-9873.2021.03.013>