

DAFTAR PUSTAKA

- AACC. (2000). *Approved methods of the AACC* (10th ed.). American Association of Cereal Chemists.
- Abboud, A. M., Rubenthaler, G. L., & Hosene, R. C. (1985). Effect of fat and sugar in sugar-snap cookies and evaluation of tests to measure cookie flour quality. *Cereal Chemistry*, *62*(2), 124–129.
- Adebiyi, J. A., Obadina, A. O., Mulaba-Bafubandi, A. F., Adebo, O. A., & Kayitesi, E. (2016). Effect of fermentation and malting on the microstructure and selected physicochemical properties of pearl millet (*Pennisetum glaucum*) flour and biscuit. *Journal of Cereal Science*, *70*, 132–139. <https://doi.org/10.1016/j.jcs.2016.05.026>
- Adeyeye, S. A. O., Adebayo-Oyetero, A. O., & Omoniyi, S. A. (2017). Quality and sensory properties of maize flour cookies enriched with soy protein isolate. *Cogent Food and Agriculture*, *3*(1). <https://doi.org/10.1080/23311932.2017.1278827>
- Ahn, H. J., Kim, J. H., & Ng, P. K. W. (2005). Functional and thermal properties of wheat, barley, and soy flours and their blends treated with a microbial transglutaminase. *Journal of Food Science*, *70*(6), c380–c386. <https://doi.org/10.1111/j.1365-2621.2005.tb11433.x>
- Akesowan, A. (2016). Influence of konjac flour on foaming properties of milk protein concentrate and quality characteristics of gluten-free cookie. *International Journal of Food Science and Technology*, *51*(7), 1560–1569. <https://doi.org/10.1111/ijfs.13125>
- Al-Ghazzewi, F. H., Khanna, S., Tester, R. F., & Piggott, J. (2007). The potential use of hydrolysed konjac glucomannan as a prebiotic. *Journal of the Science of Food and Agriculture*, *87*, 1758–1766.
- Ali, M. A. M., Tinay, A. H. E., Elkhailifa, A. E. O., Mallasy, L. O., & Babiker, E. E. (2012). Effect of Different Supplementation Levels of Soybean Flour on Pearl Millet Functional Properties. *Food and Nutrition Sciences*, *3*, 1–6. <https://doi.org/http://dx.doi.org/10.4236/fns.2012.31001>
- Allan, M. C., Rajwa, B., & Mauer, L. J. (2018). Effects of sugars and sugar alcohols on the gelatinization temperature of wheat starch. *Food Hydrocolloids*, *84*, 593–607. <https://doi.org/10.1016/j.foodhyd.2018.06.035>
- Anggela, Harmayani, E., Setyaningsih, W., & Wichienchot, S. (2022). Prebiotic effect of porang oligo-glucomannan using fecal batch culture fermentation. *Food Science and Technology (Brazil)*, *42*, 1–7. <https://doi.org/10.1590/fst.06321>
- Anggraeni, A. A., Handayani, T. H. W., & Palupi, S. (2017a). Physical and Sensory Properties of Gluten-Free Modified Cassava Flour-Based Cookies. *The 7th*

International Seminar on Tropical Animal Production, 387–394.
<https://journal.ugm.ac.id/istaproceeding/article/view/29849>

Anggraeni, A. A., Handayani, T. H. W., & Palupi, S. (2017b). Sensory characteristic of gluten-free popular Indonesian cookies. *Advances in Social Science, Education and Humanities Research, 1st International Conference on Technology and Vocational Teachers (ICTVT 2017)*, 8–11.
<https://doi.org/https://doi.org/10.2991/ictvt-17.2017.3>

AOAC. (2000). *Official methods of analysis of AOAC International* (14th ed.). Association of Official Analytical Chemists.

Arepally, D., Reddy, R. S., Goswami, T. K., & Datta, A. K. (2020). Biscuit baking: A review. *LWT - Food Science and Technology*, 131, 109726.
<https://doi.org/10.1016/j.lwt.2020.109726>

Ariestanti, C. A., Seechamnaturakit, V., Harmayani, E., & Wichienchot, S. (2019). Optimization on production of konjac oligo-glucomannan and their effect on the gut microbiota. *Food Science and Nutrition*, 7(2), 788–796.
<https://doi.org/10.1002/fsn3.927>

Arufe, S., Sineiro, J., & Moreira, R. (2019). Determination of thermal transitions of gluten-free chestnut flour doughs enriched with brown seaweed powders and antioxidant properties of baked cookies. *Heliyon*, 5(1), e01805.
<https://doi.org/10.1016/j.heliyon.2019.e01805>

Asadi, S. Z., Khan, M. A., & Chamarthy, R. V. (2021). Development and quality evaluation of cookies supplemented with concentrated fiber powder from chiku (*Manilkara zapota* L.). *Journal of Food Science and Technology*, 58(5), 1839–1847. <https://doi.org/10.1007/s13197-020-04695-w>

Atkinson, G. (2011). Fats and oils as biscuit ingredients. In *Manley's Technology of Biscuits, Crackers and Cookies* (Fourth, pp. 160–180). Wodhead Publishing Limited.

Ayyappan, P., Abirami, A., Anbuahini, N. A., Kumaran, P. S. T., Naresh, M., Malathi, D., & Antony, U. (2015). Physicochemical properties of cookies enriched with xylooligosaccharides. *Food Science and Technology International*, 22(5), 420–428. <https://doi.org/10.1177/1082013215617567>

Aziah, A. A. N., Ho, L. H., Abidin, N. S. A., & Bhat, R. (2012). Quality evaluation of steamed wheat bread substituted with green banana flour. *International Food Research Journal*, 19(3), 869–876.
<https://doi.org/10.13140/2.1.3178.5607>

Badan Pusat Statistik. (2021). *Impor Biji Gandum dan Meslin Menurut Negara Asal Utama, 2010-2020*.
<https://www.bps.go.id/statictable/2019/02/14/2016/impor-biji-gandum-dan-meslin-menurut-negara-asal-utama-2010-2017.html>

Badan Standarisasi Nasional Indonesia. (2018). *SNI 2973:2018 Biskuit*.

<https://bsn.go.id/>

Bahaji, A., Li, J., Sánchez-López, Á. M., Baroja-Fernández, E., Muñoz, F. J., Ovecka, M., Almagro, G., Montero, M., Ezquer, I., Etxeberria, E., & Pozueta-Romero, J. (2014). Starch biosynthesis, its regulation and biotechnological approaches to improve crop yields. *Biotechnology Advances*, *32*(1), 87–106. <https://doi.org/10.1016/j.biotechadv.2013.06.006>

Balet, S., Guelpa, A., Fox, G., & Manley, M. (2019). Rapid Visco Analyser (RVA) as a Tool for Measuring Starch-Related Physiochemical Properties in Cereals: a Review. *Food Analytical Methods*, *12*(10), 2344–2360. <https://doi.org/10.1007/s12161-019-01581-w>

Baltsavias, A., Jurgens, A., & Van Vliet, T. (1999). Rheological properties of short doughs at large deformation. *Journal of Cereal Science*, *29*(1), 33–42. <https://doi.org/10.1006/jcrs.1998.0219>

Behera, S. S., & Ray, R. C. (2016). Konjac glucomannan, a promising polysaccharide of *Amorphophallus konjac* K. Koch in health care. *International Journal of Biological Macromolecules*, *92*, 942–956. <https://doi.org/10.1016/j.ijbiomac.2016.07.098>

Behera, S. S., & Ray, R. C. (2017). Nutritional and potential health benefits of konjac glucomannan, a promising polysaccharide of elephant foot yam, *Amorphophallus konjac* K. Koch: A review. *Food Reviews International*, *33*(1), 22–43. <https://doi.org/10.1080/87559129.2015.1137310>

Belorio, M., Sahagún, M., & Gómez, M. (2019). Influence of flour particle size distribution on the quality of maize gluten-free cookies. *Foods*, *8*(2), 83. <https://doi.org/10.3390/foods8020083>

Bemiller, J. N. (2011). Pasting, paste, and gel properties of starch-hydrocolloid combinations. *Carbohydrate Polymers*, *86*(2), 386–423. <https://doi.org/10.1016/j.carbpol.2011.05.064>

Bernussi, A. L. M., Chang, Y. K., & Martínez-Bustos, F. (1998). Effects of production by microwave heating after conventional baking on moisture gradient and product quality of biscuits (cookies). *Cereal Chemistry*, *75*(5), 606–611. <https://doi.org/10.1094/CCHEM.1998.75.5.606>

Biddle, A., Stewart, L., Blanchard, J., & Leschine, S. (2013). Untangling the Genetic Basis of Fibrolytic Specialization by Lachnospiraceae and Ruminococcaceae in Diverse Gut Communities. *Diversity*, *5*, 627–640. <https://doi.org/10.3390/d5030627>

Boulos, N. N., Greenfield, H., & Wills, R. B. H. (2000). Water holding capacity of selected soluble and insoluble dietary fibre. *International Journal of Food Properties*, *3*(2), 217–231. <https://doi.org/10.1080/10942910009524629>

Boz, H. (2019). Effect of flour and sugar particle size on the properties of cookie dough and cookie. *Czech Journal of Food Sciences*, *37*(2), 120–127.

<https://doi.org/10.17221/161/2017-CJFS>

- Callahan, B. J., McMurdie, P. J., Rosen, M. J., Han, A. W., Johnson, A. J. A., & Holmes, S. P. (2016). DADA2: High resolution sample inference from Illumina amplicon data. *Nature Methods*, *13*(7), 581–583. <https://doi.org/10.1038/nmeth.3869>
- Canalis, M. S. B., León, A. E., & Ribotta, P. D. (2019). Incorporation of dietary fiber on the cookie dough. Effects on thermal properties and water availability. *Food Chemistry*, *271*, 309–317. <https://doi.org/10.1016/j.foodchem.2018.07.146>
- Canalis, M. S. B., Valentinuzzi, M. C., Acosta, R. H., León, A. E., & Ribotta, P. D. (2018). Effects of Fat and Sugar on Dough and Biscuit Behaviours and their Relationship to Proton Mobility Characterized by TD-NMR. *Food and Bioprocess Technology*, *11*(5), 953–965. <https://doi.org/10.1007/s11947-018-2063-z>
- Cantu-Jungles, T. M., & Hamaker, B. R. (2023). Tuning Expectations to Reality: Don't Expect Increased Gut Microbiota Diversity with Dietary Fiber. *The Journal of Nutrition*, *153*(11), 3156–3163. <https://doi.org/10.1016/j.tjnut.2023.09.001>
- Cao, Y., Dong, Q., Wang, D., Zhang, P., Liu, Y., & Niu, C. (2022). Genome analysis microbiomeMarker: an R/Bioconductor package for microbiome marker identification and visualization. *Bioinformatics*, *38*(16), 4027–4029. <https://doi.org/10.1093/bioinformatics/btac438>
- Cappa, C., Kelly, J. D., & Ng, P. K. W. (2018). Seed characteristics and physicochemical properties of powders of 25 edible dry bean varieties. *Food Chemistry*, *253*, 305–313. <https://doi.org/10.1016/j.foodchem.2018.01.048>
- Cappa, C., Kelly, J. D., & Ng, P. K. W. (2020). Baking performance of 25 edible dry bean powders: Correlation between cookie quality and rapid test indices. *Food Chemistry*, *302*, 125338. <https://doi.org/10.1016/j.foodchem.2019.125338>
- Capriles, V. D., Soares, R. A. M., Pinto, M. E. M., & Areas, J. A. G. (2009). Effect of fructans-based fat replacer on chemical composition, starch digestibility and sensory acceptability of corn snacks. *International Journal of Food Science & Technology*, *44*, 1895–1901. <https://doi.org/10.1111/j.1365-2621.2009.01915.x>
- Carroll, I. M., Ringel-Kulka, T., Siddle, J. P., & Ringel, Y. (2012). Alterations in composition and diversity of the intestinal microbiota in patients with diarrhea-predominant irritable bowel syndrome. *Neurogastroenterology and Motility*, *24*(6), 521–530. <https://doi.org/10.1111/j.1365-2982.2012.01891.x>
- Cesic, D., Mihic, L. L., Ozretic, P., Lojkic, I., Buljan, M., Situm, M., Zovak, M., Vidovic, D., Mijic, A., Galic, N., & Andrasevic, A. T. (2023). Association of

- Gut Lachnospiraceae and Chronic Spontaneous Urticaria. *Life*, 13(1280), 1–15. <https://doi.org/10.3390/life13061280>
- Chandra, S., & Samsher. (2013). Assessment of functional properties of different flours. *African Journal of Agricultural Research*, 8(38), 4849–4852. <https://doi.org/10.5897/AJAR2013.6905>
- Cheang, K. U., Chen, C. M., Chen, C. Y. O., Liang, F. Y., Shih, C. K., & Li, S. C. (2017). Effects of Glucomannan Noodle on Diabetes Risk Factors in Patients with Metabolic Syndrome: A Double-Blinded, Randomized Crossover Controlled Trial. *Journal of Food and Nutrition Research*, 5(8), 622–628. <https://doi.org/10.12691/jfnr-5-8-13>
- Chen, H. L., Cheng, H. C., Liu, Y. J., Liu, S. Y., & Wu, W. T. (2006). Konjac acts as a natural laxative by increasing stool bulk and improving colonic ecology in healthy adults. *Nutrition*, 22(11–12), 1112–1119. <https://doi.org/10.1016/j.nut.2006.08.009>
- Cheng, Y. F., & Bhat, R. (2016). Functional, physicochemical and sensory properties of novel cookies produced by utilizing underutilized jering (*Pithecellobium jiringa* Jack.) legume flour. *Food Bioscience*, 14, 54–61. <https://doi.org/10.1016/j.fbio.2016.03.002>
- Chevallier, S., Colonna, P., Della Valle, G., & Lourdin, D. (2000). Contribution of major ingredients during baking of biscuit dough systems. *Journal of Cereal Science*, 31(3), 241–252. <https://doi.org/10.1006/jcrs.2000.0308>
- Cho, S., & Finocchiaro, T. (2010). *Handbook of Prebiotics and Probiotics Ingredients. Health Benefits and Food Applications* (First). CRC Press, Taylor Francis Group.
- Christ-Ribeiro, A., Chiattoni, L. M., Mafaldo, C. R. F., Badiale-Furlong, E., & Souza-Soares, L. A. de. (2021). Fermented rice-bran by *Saccharomyces cerevisiae*: Nutritious ingredient in the formulation of gluten-free cookies. *Food Bioscience*, 40, 100859. <https://doi.org/10.1016/j.fbio.2020.100859>
- Coffmann, C. W., & Garcia, V. V. (1977). Functional properties and amino acid content of a protein isolate from mung bean flour. *International Journal of Food Science and Technology*, 12, 473–484. <https://doi.org/10.1111/j.1365-2621.1977.tb00132.x>
- Conforti, F. D., & Archilla, L. (2001). Evaluation of a maltodextrin gel as a partial replacement for fat in a high-ratio white-layer cake. *International Journal of Consumer Studies*, 25, 238–245. <https://doi.org/10.1046/j.1470-6431.2001.00178.x>
- Consumi, M., Tamasi, G., Pepi, S., Leone, G., Bonechi, C., Magnani, A., Donati, A., & Rossi, C. (2022). Analytical composition of flours through thermogravimetric and rheological combined methods. *Thermochimica Acta*, 711, 179204. <https://doi.org/10.1016/j.tca.2022.179204>

- Conterno, L., Fava, F., Viola, R., & Tuohy, K. M. (2011). Obesity and the gut microbiota: Does up-regulating colonic fermentation protect against obesity and metabolic disease? *Genes and Nutrition*, 6(3), 241–260. <https://doi.org/10.1007/s12263-011-0230-1>
- Coultrate, T. P. (2009). *Food: The Chemistry of its Components* (Fourth). Royal Society of Chemistry. [https://doi.org/10.1016/0144-8617\(92\)90070-7](https://doi.org/10.1016/0144-8617(92)90070-7)
- Curti, E., Federici, E., Diantom, A., Carini, E., Pizzigalli, E., Wu Symon, V., Pellegrini, N., & Vittadini, E. (2018). Structured emulsions as butter substitutes: effects on physicochemical and sensory attributes of shortbread cookies. *Journal of the Science of Food and Agriculture*, 98(10), 3836–3842. <https://doi.org/10.1002/jsfa.8899>
- Dai, S., Corke, H., & Shah, N. P. (2016). Utilization of konjac glucomannan as a fat replacer in low-fat and skimmed yogurt. *Journal of Dairy Science*, 99(9), 7063–7074. <https://doi.org/10.3168/jds.2016-11131>
- Dai, S., Jiang, F., Corke, H., & Shah, N. P. (2018). Physicochemical and textural properties of mozzarella cheese made with konjac glucomannan as a fat replacer. *Food Research International*, 107, 691–699. <https://doi.org/10.1016/j.foodres.2018.02.069>
- Davani-Davari, D., Negahdaripour, M., Karimzadeh, I., Seifan, M., Mohkam, M., Masoumi, S. J., Berenjian, A., & Ghasemi, Y. (2019). Prebiotics: Definition, types, sources, mechanisms, and clinical applications. *Foods*, 8(3), 1–27. <https://doi.org/10.3390/foods8030092>
- Davidson, I. (2016). *Biscuit Baking Technology: Processing and Engineering Manual* (Second). Academic Press, Elsevier.
- Davidson, I. (2023). *Biscuit Baking Technology: Processing and Engineering Manual* (Third). Academic Press.
- Deehan, E. C., Yang, C., Perez-Muñoz, M. E., Zhang, Z., Nguyen, N. K., Cheng, C. C., Triador, L., Bakal, J. A., & Walter, J. (2020). Precision Microbiome Modulation with Discrete Dietary Fiber Structures Directs Short-Chain Fatty Acid Production. *Cell Host and Microbe*, 27(3), 389-404.e6. <https://doi.org/10.1016/j.chom.2020.01.006>
- Deng, J., Zhong, J., Long, J., Zou, X., Wang, D., Song, Y., Zhou, K., Liang, Y., Huang, R., Wei, X., Li, M., & Sun, Y. (2020). Hypoglycemic effects and mechanism of different molecular weights of konjac glucomannans in type 2 diabetic rats. *International Journal of Biological Macromolecules*, 165, 2231–2243. <https://doi.org/10.1016/j.ijbiomac.2020.10.021>
- Devi, A., & Khatkar, B. S. (2016). Physicochemical, rheological and functional properties of fats and oils in relation to cookie quality: a review. *Journal of Food Science and Technology*, 53(10), 3633–3641. <https://doi.org/10.1007/s13197-016-2355-0>

- Dhal, S., Anis, A., Shaikh, H. M., Alhamidi, A., & Pal, K. (2023). Effect of Mixing Time on Properties of Whole Wheat Flour-Based Cookie Doughs and Cookies. *Foods*, *12*(5), 941. <https://doi.org/10.3390/foods12050941>
- Díaz, A., García, M. A., & Dini, C. (2022). Jerusalem artichoke flour as food ingredient and as source of fructooligosaccharides and inulin. *Journal of Food Composition and Analysis*, *114*, 104863. <https://doi.org/10.1016/j.jfca.2022.104863>
- Dixon, P. (2003). VEGAN, a package of R functions for community ecology. *Journal of Vegetation Science*, *14*(6), 927–930. <https://www.jstor.org/stable/3236992>
- Donmez, D., Pinho, L., Patel, B., Desam, P., & Campanella, O. H. (2021). Characterization of starch–water interactions and their effects on two key functional properties: starch gelatinization and retrogradation. *Current Opinion in Food Science*, *39*, 103–109. <https://doi.org/10.1016/j.cofs.2020.12.018>
- Douglas, L. C., & Sanders, M. E. (2008). Probiotics and Prebiotics in Dietetics Practice. *Journal of the American Dietetic Association*, *108*(3), 510–521. <https://doi.org/10.1016/j.jada.2007.12.009>
- Drakos, A., Andrioti-Petropoulou, L., Evageliou, V., & Mandala, I. (2019). Physical and textural properties of biscuits containing jet milled rye and barley flour. *Journal of Food Science and Technology*, *56*(1), 367–375. <https://doi.org/10.1007/s13197-018-3497-z>
- Duyvejonck, A. E., Lagrain, B., Dornez, E., Delcour, J. A., & Courtin, C. M. (2012). Suitability of solvent retention capacity tests to assess the cookie and bread making quality of European wheat flours. *LWT - Food Science and Technology*, *47*(1), 56–63. <https://doi.org/10.1016/j.lwt.2012.01.002>
- Elias, S. L., & Innis, S. M. (2002). Bakery foods are the major dietary source of trans-fatty acids among pregnant women with diets providing 30 percent energy from fat. *Journal of the American Dietetic Association*, *102*(1), 46–51. [https://doi.org/10.1016/S0002-8223\(02\)90015-5](https://doi.org/10.1016/S0002-8223(02)90015-5)
- Fessas, D., & Schiraldi, A. (2001). Water properties in wheat flour dough. I: Classical thermogravimetry approach. *Food Chemistry*, *72*(2), 237–244. [https://doi.org/10.1016/S0308-8146\(00\)00220-X](https://doi.org/10.1016/S0308-8146(00)00220-X)
- Franck, A. (2002). Technological functionality of inulin and oligofructose. *British Journal of Nutrition*, *87*(Suppl. 2), S287–S291. <https://doi.org/10.1079/BJN/2002550>
- Fu, J., Mulvaney, S. J., & Cohen, C. (1997). Effect of added fat on the rheological properties of wheat flour doughs. *Cereal Chemistry*, *74*(3), 304–311. <https://doi.org/10.1094/CCHEM.1997.74.3.304>
- Fusco, W., Lorenzo, M. B., Cintoni, M., Porcari, S., Rinninella, E., Kaitsas, F.,

- Lener, E., Mele, M. C., Gasbarrini, A., Collado, M. C., Cammarota, G., & Ianiro, G. (2023). Short-Chain Fatty-Acid-Producing Bacteria: Key Components of the Human Gut Microbiota. *Nutrients*, *15*, 2211. <https://doi.org/10.3390/nu15092211>
- Gama, D. B., Harmayani, E., Lestari, L. A., & Huriyati, E. (2020). Comparison of chemical properties, glycemic index , and glycemic load, between arrowroot (*Maranta arundinaceae*) cookies containing glucomannan extract with palm sugar addition. *BIO Web of Conferences*, *28*, 03002. <https://doi.org/10.1051/bioconf/20202803002>
- Geraldo, N. F. (2020). *Physico-chemical and sensory properties of kluiklui supplemented with porang glucomannan and banana flour*. Universitas Gadjah Mada.
- Ghoshal, G., & Kaushik, P. (2020). Development of soymeal fortified cookies to combat malnutrition. *Legume Science*, *2*(3), e43. <https://doi.org/10.1002/leg3.43>
- Ghotra, B. S., Dyal, S. D., & Narine, S. S. (2002). Lipid shortenings: A review. *Food Research International*, *35*(10), 1015–1048. [https://doi.org/10.1016/S0963-9969\(02\)00163-1](https://doi.org/10.1016/S0963-9969(02)00163-1)
- Gibson, G. R., Hutkins, R., Sanders, M. E., Prescott, S. L., Reimer, R. A., Salminen, S. J., Scott, K., Stanton, C., Swanson, K. S., Cani, P. D., Verbeke, K., & Reid, G. (2017). Expert consensus document: The International Scientific Association for Probiotics and Prebiotics (ISAPP) consensus statement on the definition and scope of prebiotics. *Nature Reviews Gastroenterology and Hepatology*, *14*(8), 491–502. <https://doi.org/10.1038/nrgastro.2017.75>
- Gibson, G. R., & Roberfroid, M. B. (2008). *Handbook of prebiotics* (First). CRC Press, Taylor Francis Group.
- Gisslen, W. (2013). *Professional Baking* (Sixth). John Wiley & Sons.
- Glicksman, M. (2019). *Food Hydrocolloids Volume III*. CRC Press, Taylor Francis Group.
- Gökmen, V., Açar, Ö. Ç., Serpen, A., & Morales, F. J. (2008). Effect of leavening agents and sugars on the formation of hydroxymethylfurfural in cookies during baking. *European Food Research and Technology*, *226*(5), 1031–1037. <https://doi.org/10.1007/s00217-007-0628-6>
- Gu, X., Campbell, L. J., & Euston, S. R. (2009). Effects of different oils on the properties of soy protein isolate emulsions and gels. *Food Research International*, *42*(8), 925–932. <https://doi.org/10.1016/j.foodres.2009.04.015>
- Gu, X., Sim, J. X. Y., Lee, W. L., Cui, L., Low, G., Eric, J., Teh, Y. E., Zhang, A., Armas, F., Chandra, F., Chen, H., & Zhao, S. (2022). Gut Ruminococcaceae levels at baseline correlate with risk of antibiotic-associated diarrhea. *ISCIENCE*, *25*(1), 103644. <https://doi.org/10.1016/j.isci.2021.103644>

- Gulia, N., Dhaka, V., & Khatkar, B. S. (2014). Instant Noodles: Processing, Quality, and Nutritional Aspects. *Critical Reviews in Food Science and Nutrition*, 54(10), 1386–1399. <https://doi.org/10.1080/10408398.2011.638227>
- Gunawan, S., Widjaja, T., Zullaikah, S., Ernawati, L., Istianah, N., Aparamarta, H. W., & Prasetyoko, D. (2015). Effect of fermenting cassava with *Lactobacillus plantarum*, *Saccharomyces cerevisiae*, and *Rhizopus oryzae* on the chemical composition of their flour. *International Food Research Journal*, 22(3), 1280–1287. [http://ifrj.upm.edu.my/22\(03\)2015/\(55\).pdf](http://ifrj.upm.edu.my/22(03)2015/(55).pdf)
- Guzman, C., Mondal, S., Govindan, V., Autrique, J. E., Posadas-Romano, G., Cervantes, F., Crossa, J., Vargas, M., Singh, R. P., & Pena, R. J. (2016). Use of rapid tests to predict quality traits of CIMMYT bread wheat genotypes grown under different environments. *LWT - Food Science and Technology*, 69, 327–333. <https://doi.org/10.1016/j.lwt.2016.01.068>
- Handa, C., Goomer, S., & Siddhu, A. (2012). Physicochemical properties and sensory evaluation of fructoligosaccharide enriched cookies. *Journal of Food Science and Technology*, 49(2), 192–199. <https://doi.org/10.1007/s13197-011-0277-4>
- Handayani, T. D. (2015). *Glukomanan porang (Amorphophallus oncophyllus): karakteristik, potensi prebiotik, dan aplikasinya pada pembuatan jelly*. Universitas Gadjah Mada.
- Hao, L., Ma, L., Li, Z., & Ma, X. (2021). Evolution of the Gut Microbiota and Its Fermentation Characteristics of Ningxiang Pigs at the Young Stage. *Animals*, 11(3). <https://doi.org/10.3390/ani11030638>
- Harmayani, E., Aprilia, V., & Marsono, Y. (2014). Characterization of glucomannan from *Amorphophallus oncophyllus* and its prebiotic activity in vivo. *Carbohydrate Polymers*, 112, 475–479. <https://doi.org/10.1016/j.carbpol.2014.06.019>
- He, Y., Guo, J., Ren, G., Cui, G., Han, S., & Liu, J. (2020). Effects of konjac glucomannan on the water distribution of frozen dough and corresponding steamed bread quality. *Food Chemistry*, 330, 127243. <https://doi.org/10.1016/j.foodchem.2020.127243>
- Helmi, R. L., Khasanah, Y., Damayanti, E., Kurniadi, M., & Mahelingga, D. E. (2020). Modified Cassava Flour (Mocaf): Optimalisasi Proses dan Potensi Pengembangan Industri Berbasis UMKM. In *Modified Cassava Flour (Mocaf): Optimalisasi Proses dan Potensi Pengembangan Industri Berbasis UMKM*. LIPI Press. <https://doi.org/10.14203/press.43>
- Ho, L. H., & Abdul Latif, N. W. (2016). Nutritional composition, physical properties, and sensory evaluation of cookies prepared from wheat flour and pitaya (*Hylocereus undatus*) peel flour blends. *Cogent Food and Agriculture*, 2, 113636. <https://doi.org/10.1080/23311932.2015.1136369>

- Huang, L., Zhang, X., Zhang, H., & Wang, J. (2018). Interactions between dietary fiber and ferulic acid changed the aggregation of gluten in a whole wheat model system. *LWT - Food Science and Technology*, *91*, 55–62. <https://doi.org/10.1016/j.lwt.2018.01.027>
- Isleroglu, H., Kemerli, T., Sakin-Yilmazer, M., Guven, G., Ozdestan, O., Uren, A., & Kaymak-Ertekin, F. (2012). Effect of Steam Baking on Acrylamide Formation and Browning Kinetics of Cookies. *Journal of Food Science*, *77*(10), 1–7. <https://doi.org/10.1111/j.1750-3841.2012.02912.x>
- Jia, M., Yu, Q., Chen, J., He, Z., Chen, Y., Xie, J., Nie, S., & Xie, M. (2020). Physical quality and in vitro starch digestibility of biscuits as affected by addition of soluble dietary fiber from defatted rice bran. *Food Hydrocolloids*, *99*, 105349. <https://doi.org/10.1016/j.foodhyd.2019.105349>
- Johnson, K. V. A. (2020). Gut microbiome composition and diversity are related to human personality traits. *Human Microbiome Journal*, *15*, 100069. <https://doi.org/10.1016/j.humic.2019.100069>
- Kala, A. L. A. (2014). Studies on saturated and trans fatty acids composition of few commercial brands of biscuits sold in Indian market. *Journal of Food Science and Technology*, *51*(11), 3520–3526. <https://doi.org/10.1007/s13197-014-1421-8>
- Kao, W. T., & Lin, K. W. (2006). Quality of reduced-fat frankfurter modified by konjac-starch mixed gels. In *Journal of Food Science* (Vol. 71, Issue 4). <https://doi.org/10.1111/j.1750-3841.2006.00003.x>
- Karang, A. A. A. P. P. S. (2016). *Pengaruh penambahan tepung glukomanan porang (*Amorphophallus oncophyllus*) dan STPP (*sodium tripolyphosphate*) terhadap sifat fisik dan sensoris sosis ayam*. Universitas Gadjah Mada.
- Kaur, A., Singh, N., Kaur, S., Ahlawat, A. K., & Singh, A. M. (2014). Relationships of flour solvent retention capacity, secondary structure and rheological properties with the cookie making characteristics of wheat cultivars. *Food Chemistry*, *158*, 48–55. <https://doi.org/10.1016/j.foodchem.2014.02.096>
- Kaur, A., Tuncil, Y. E., Sikaroodi, M., Gillevet, P., Patterson, J. A., Keshavarzian, A., & Hamaker, B. R. (2018). Alterations in the amounts of microbial metabolites in different regions of the mouse large intestine using variably fermentable fibres. *Bioactive Carbohydrates and Dietary Fibre*, *13*, 7–13. <https://doi.org/10.1016/j.bcdf.2018.01.001>
- Khatkar, B. S., Barak, S., & Mudgil, D. (2013). Effects of gliadin addition on the rheological, microscopic and thermal characteristics of wheat gluten. *International Journal of Biological Macromolecules*, *53*, 38–41. <https://doi.org/10.1016/j.ijbiomac.2012.11.002>
- Khatkar, B. S., & David Schofield, J. (2002). Dynamic rheology of wheat flour dough. I. Non-linear viscoelastic behaviour. *Journal of the Science of Food*

- and Agriculture*, 82(8), 827–829. <https://doi.org/10.1002/jsfa.1109>
- Kirk, K. F., Andersen, K. L., Tarpgaard, I. H., & Nielsen, H. L. (2021). Three cases of *Sutterella wadsworthensis* bacteremia secondary to abdominal infections. *Anaerobe*, 72, 102460. <https://doi.org/10.1016/j.anaerobe.2021.102460>
- Kovacs, A., Yacoby, K., & Gophna, U. (2010). A systematic assessment of automated ribosomal intergenic spacer analysis (ARISA) as a tool for estimating bacterial richness. *Research in Microbiology*, 161(3), 192–197. <https://doi.org/10.1016/j.resmic.2010.01.006>
- Krystyan, M., Gumul, D., Ziobro, R., & Sikora, M. (2015). The effect of inulin as a fat replacement on dough and biscuit properties. *Journal of Food Quality*, 38, 305–315. <https://doi.org/10.1111/jfq.12148>
- Kumar, K. A., & Sudha, M. L. (2021). Effect of fat and sugar replacement on rheological, textural and nutritional characteristics of multigrain cookies. *Journal of Food Science and Technology*, 58(7), 2630–2640. <https://doi.org/10.1007/s13197-020-04769-9>
- Kusuma, R. J., Widada, J., Huriyati, E., & Julia, M. (2021). Naturally acquired lactic acid bacteria from fermented cassava improves nutrient and anti-dysbiosis activity of soy tempeh. *Open Access Macedonian Journal of Medical Sciences*, 9, 1148–1155. <https://doi.org/10.3889/oamjms.2021.7540>
- Kusuma, R. J., Widada, J., Huriyati, E., & Julia, M. (2022). Therapeutic Effects of Modified Tempeh on Glycemic Control and Gut Microbiota Diversity in Diabetic Rats. *Current Nutrition & Food Science*, 18(8), 765–774. <https://doi.org/10.2174/1573401318666220329101437>
- Kweon, M., Slade, L., & Levine, H. (2011). Solvent retention capacity (SRC) testing of wheat flour: Principles and value in predicting flour functionality in different wheat-based food processes and in wheat breeding-A review. *Cereal Chemistry*, 88(6), 537–552. <https://doi.org/10.1094/CCHEM-07-11-0092>
- Kweon, M., Slade, L., Levine, H., Martin, R., & Souza, E. (2009). Exploration of Sugar Functionality in Sugar-Snap and Wire-Cut Cookie Baking: Implications for Potential Sucrose Replacement or Reduction. *Cereal Chemistry*, 86(4), 425–433. <https://doi.org/10.1094/CCHEM-86-4-0425>
- Labuschagne, M., Guzmán, C., Phakela, K., Wentzel, B., & van Biljon, A. (2021). Solvent retention capacity and gluten protein composition of durum wheat flour as influenced by drought and heat stress. *Plants*, 10(5), 1–14. <https://doi.org/10.3390/plants10051000>
- Lai, H. M., & Lin, T. C. (2006). Bakery Products: Science and Technology. In Y. H. Hui (Ed.), *Bakery Products: Science and Technology* (First, pp. 3–68). Blackwell Publishing Inc. <https://doi.org/10.1002/9780470277553.ch1>
- Laurence, & Bacharach, A. L. (1964). *Evaluation of Drug Activities: Pharmacometrics*. (Vol. 1). Academic Press Inc. (London) Ltd.

<https://doi.org/10.1021/jm00321a067>

- Lestari, L. A., Gama, D. B., Huriyati, E., Prameswari, A. A., & Harmayani, E. (2020). Glycemic index and glycemic load of arrowroot (*Maranta arundinaceae*) cookies with the addition of cinnamon (*cinnamomum verum*) and porang (*amorphophallus oncophyllus*) glucomannan. *Food Research*, 4(3), 866–872. [https://doi.org/10.26656/fr.2017.4\(3\).401](https://doi.org/10.26656/fr.2017.4(3).401)
- Li, F., Sun, X., Yu, W., Shi, C., Zhang, X., Yu, H., & Ma, F. (2021). Enhanced konjac glucomannan hydrolysis by lytic polysaccharide monoxygenases and generating prebiotic oligosaccharides. *Carbohydrate Polymers*, 253, 117241. <https://doi.org/10.1016/j.carbpol.2020.117241>
- Li, M. Z., Huang, X. J., Hu, J. L., Cui, S. W., Xie, M. Y., & Nie, S. P. (2020). The protective effects against cyclophosphamide (CTX)-induced immunosuppression of three glucomannans. *Food Hydrocolloids*, 100, 105445. <https://doi.org/10.1016/j.foodhyd.2019.105445>
- Liu, C., Cui, Y., Li, X., & Yao, M. (2021). microeco: an R package for data mining in microbial community ecology. *FEMS Microbiology Ecology*, 97(2), fiaa255 doi: <https://doi.org/10.1093/femsec/fiaa255>
- Liu, H., Cheng, Y., Qu, Y., & Wu, G. (2023). Unraveling the gut microbiota and short-chain fatty acids characteristics and associations in a cancer cachexia mouse model. *Microbial Pathogenesis*, 183, 106332. <https://doi.org/10.1016/j.micpath.2023.106332>
- Liu, J., Xu, Q., Zhang, J., Zhou, X., Lyu, F., & Zhao, P. (2015). Preparation , composition analysis and antioxidant activities of konjac oligo-glucomannan. *Carbohydrate Polymers*, 130, 398–404. <https://doi.org/10.1016/j.carbpol.2015.05.025>
- Liu, X., Mu, T., Yamul, D. K., Sun, H., Zhang, M., Chen, J., Fauconnier, M. L., & Andrea, P. V. (2017). Evaluation of different hydrocolloids to improve dough rheological properties and bread quality of potato–wheat flour. *Journal of Food Science and Technology*, 54(6), 1597–1607. <https://doi.org/10.1007/s13197-017-2591-y>
- López, A. M. M., & Simsek, S. (2021). Solvent retention capacity: Supplemental solvents for evaluation of gluten quality. *Journal of Cereal Science*, 102, 103339. <https://doi.org/10.1016/j.jcs.2021.103339>
- Lu, Y., Zhang, J., Zhang, Z., Liang, X., Liu, T., Yi, H., Gong, P., Wang, L., Yang, W., Zhang, X., Zhang, L., Yang, L., & Shi, H. (2021). Konjac glucomannan with probiotics acts as a combination laxative to relieve constipation in mice by increasing short-chain fatty acid metabolism and 5-hydroxytryptamine hormone release. *Nutrition*, 84, 111112. <https://doi.org/10.1016/j.nut.2020.111112>
- Ma, L., Ni, Y., Wang, Z., Tu, W., Ni, L., Zhuge, F., Zheng, A., Hu, L., Zhao, Y.,

- Zheng, L., & Fu, Z. (2020). Spermidine improves gut barrier integrity and gut microbiota function in diet-induced obese mice. *Gut Microbes*, *12*(1), 1–19. <https://doi.org/10.1080/19490976.2020.1832857>
- Maache-Rezzoug, Z., Bouvier, J. M., Allaf, K., & Patras, C. (1998). Effect of Principal Ingredients on Rheological Behaviour of Biscuit Dough and on Quality of Biscuits. *Journal of Food Engineering*, *35*(1), 23–42. [https://doi.org/10.1016/S0260-8774\(98\)00017-X](https://doi.org/10.1016/S0260-8774(98)00017-X)
- Macfie, H. J. ., Bratchell, N., Greenhoff, K., & Vallis, L. V. (1989). Designs To Balance the Effect of Order of Presentation and First-Order Carry-Over Effects in Hall Tests. *Journal of Sensory Studies*, *4*(2), 129–148. <https://doi.org/10.1111/j.1745-459X.1989.tb00463.x>
- MacRitchie, F. (2016). Physicochemical Processes in Mixing. In J. M. V Blanshard, P. J. Frazier, & T. Galliard (Eds.), *Chemistry and Physics of Baking* (Issue July, pp. 132–154). The Royal Society of Chemistry.
- Maghaydah, S., Abdul-Hussain, S., Ajo, R., Obeidat, B., & Yawalbeh, Y. (2013). Enhancing the Nutritional Value of Gluten-Free Cookies with Inulin. *Advance Journal of Food Science and Technology*, *5*(7), 866–870. <https://doi.org/10.19026/ajfst.5.3174>
- Magne, F., Gotteland, M., Gauthier, L., Zazueta, A., Poeso, S., Navarrete, P., & Balamurugan, R. (2020). The Firmicutes/Bacteroidetes Ratio: A Relevant Marker of Gut Dysbiosis in Obese Patients? *Nutrients*, *12*, 1474. <https://doi.org/10.3390/nu12051474>
- Mahmood, K., Kamilah, H., Shang, P. L., Sulaiman, S., Ariffin, F., & Alias, A. K. (2017). A review: Interaction of starch/non-starch hydrocolloid blending and the recent food applications. *Food Bioscience*, *19*, 110–120. <https://doi.org/10.1016/j.fbio.2017.05.006>
- Maia-Landim, A., Lancho, C., Poblador, M. S., Lancho, J. L., & Ramírez, J. M. (2021). Garcinia cambogia and Glucomannan reduce weight, change body composition and ameliorate lipid and glucose blood profiles in overweight/obese patients. *Journal of Herbal Medicine*, *26*, 100424. <https://doi.org/10.1016/j.hermed.2021.100424>
- Majeed, M., Anwar, S., Khan, M. U., Asghar, A., Shariati, M. A., Semykin, V., & Fazel, M. (2017). Study of the combined effect of pectin and banana powder as carbohydrate based fat replacers to develop low fat cookies. *Foods and Raw Materials*, *5*(2), 62–69. <https://doi.org/10.21603/2308-4057-2017-2-62-69>
- Mamat, H., & Hill, S. E. (2014). Effect of fat types on the structural and textural properties of dough and semi-sweet biscuit. *Journal of Food Science and Technology*, *51*(9), 1998–2005. <https://doi.org/10.1007/s13197-012-0708-x>
- Mancebo, C. M., Picón, J., & Gómez, M. (2015). Effect of flour properties on the quality characteristics of gluten free sugar-snap cookies. *LWT - Food Science*

and Technology, 64(1), 264–269. <https://doi.org/10.1016/j.lwt.2015.05.057>

- Mancebo, C. M., Rodriguez, P., Martinez, M. M., & Gomez, M. (2018). Effect of the addition of soluble (nutriose, inulin and polydextrose) and insoluble (bamboo, potato and pea) fibres on the quality of sugar-snap cookies. *International Journal of Food Science and Technology*, 53(1), 129–136. <https://doi.org/10.1111/ijfs.13566>
- Manley, D. (2011a). Emulsifiers (surfactants) and antioxidants as biscuit ingredients. In *Manley's Technology of Biscuits, Crackers and Cookies* (Fourth, pp. 181–190). Wodhead Publishing Limited. <https://doi.org/10.1533/9780857093646.2.181>
- Manley, D. (2011b). *Manley's technology of biscuits, crackers and cookies* (Fourth). Wodhead Publishing Limited.
- Manley, D., Pareyt, B., & Delcour, J. A. (2011). Short dough biscuits. In *Manley's Technology of Biscuits, Crackers and Cookies* (Fourth, pp. 331–346). Wodhead Publishing Limited. <https://doi.org/10.1533/9780857093646.3.331>
- Manohar, R. S., & Rao, P. H. (1999). Effect of emulsifiers, fat level and type on the rheological characteristics of biscuit dough and quality of biscuits. *Journal of Food Science and Technology*, 79, 1223–1231. [https://doi.org/10.1002/\(SICI\)1097-0010\(19990715\)79:10<1223::AID-JSFA346>3.0.CO;2-W](https://doi.org/10.1002/(SICI)1097-0010(19990715)79:10<1223::AID-JSFA346>3.0.CO;2-W)
- Mao, Y. H., Xu, Y., Song, F., Wang, Z. M., Li, Y. H., Zhao, M., He, F., Tian, Z., & Yang, Y. (2022). Protective effects of konjac glucomannan on gut microbiome with antibiotic perturbation in mice. *Carbohydrate Polymers*, 290, 119476. <https://doi.org/10.1016/j.carbpol.2022.119476>
- Mardinawati, M. (2012). *Daya Pembengkakan (Swelling Power) Campuran Tepung Kimpul (Xanthosoma Sagittifolium) dan Tepung Terigu Terhadap Tingkat Pengembangan dan Kesukaan Sensorik Cake*. Universitas Muhammadiyah Surakarta.
- Mareta, D. T. (2015). *Glukomanan porang (Amorphophallus oncophyllus): karakteristik, potensi prebiotik, dan aplikasinya sebagai pengenyal bakso*. Universitas Gadjah Mada.
- Marín-Sáez, J., Lopez-Ruiz, R., Ferreira, I. M. P. L. V. O., & Cunha, S. C. (2023). Gastrointestinal bioaccessibility and fiber mitigation of tropane alkaloids assessed on tea and cookies by in vitro digestion. *Journal of the Science of Food and Agriculture*, 103(11), 5539–5546. <https://doi.org/10.1002/jsfa.12627>
- Marques, G. de A., São José, J. F. B. de, Silva, D. A., & Silva, E. M. M. da. (2016). Whey protein as a substitute for wheat in the development of no added sugar cookies. *LWT - Food Science and Technology*, 67, 118–126. <https://doi.org/10.1016/j.lwt.2015.11.044>

- Martin, M. (2011). Cutadapt removes adapter sequences from high-throughput sequencing reads. *EMBnet.Journal*, 17(1), 5–7. <https://doi.org/10.14806/ej.17.1.200>
- McMurdie, P. J., & Holmes, S. (2013). phyloseq: An R Package for Reproducible Interactive Analysis and Graphics of Microbiome Census Data. *PLOS ONE*, 8(4), e61217. <https://doi.org/10.1371/journal.pone.0061217>
- Meng, K., Gao, H., Zeng, J., Zhao, J., Qin, Y., Li, G., & Su, T. (2021). Rheological and microstructural characterization of wheat dough formulated with konjac glucomannan. *Journal of the Science of Food and Agriculture*, 101(10), 4373–4379. <https://doi.org/10.1002/jsfa.11078>
- Mert, B., & Demirkesen, I. (2016). Reducing saturated fat with oleogel/shortening blends in a baked product. *Food Chemistry*, 199, 809–816. <https://doi.org/10.1016/j.foodchem.2015.12.087>
- Milićević, N., Sakač, M., Hadnađev, M., Škrobot, D., Šarić, B., Hadnađev, T. D., Jovanov, P., & Pezo, L. (2020). Physico-chemical properties of low-fat cookies containing wheat and oat bran gels as fat replacers. *Journal of Cereal Science*, 95, 103056. <https://doi.org/10.1016/j.jcs.2020.103056>
- Mohanty, D., Misra, S., Mohapatra, S., & Sahu, P. S. (2018). Prebiotics and synbiotics: Recent concepts in nutrition. *Food Bioscience*, 26, 152–160. <https://doi.org/10.1016/j.fbio.2018.10.008>
- Morales-Hernandez, J. A., Chanona-Perez, J. J., Villanueva-Rodriguez, S. J., Perea-Flores, M. J., & Urias-Silvas, J. E. (2019). Technological and Structural Properties of Oat Cookies Incorporated with Fructans (Agave tequilana Weber). *Food Biophysics*, 14, 415–424. <https://doi.org/https://doi.org/10.1007/s11483-019-09589-9>
- Moriano, M. E., Cappa, C., & Alamprese, C. (2018). Reduced-fat soft-dough biscuits: Multivariate effects of polydextrose and resistant starch on dough rheology and biscuit quality. *Journal of Cereal Science*, 81, 171–178. <https://doi.org/10.1016/j.jcs.2018.04.010>
- Moriano, M. E., Cappa, C., Casiraghi, M. C., Ciappellano, S., Romano, A., Torri, L., & Alamprese, C. (2019). Reduced-fat biscuits: Interplay among structure, nutritional properties and sensory acceptability. *LWT - Food Science and Technology*, 109, 467–474. <https://doi.org/10.1016/j.lwt.2019.04.027>
- Myrasis, G., Aja, S., & Haros, C. M. (2022). Substitution of Critical Ingredients of Cookie Products to Increase Nutritional Value. *Biology and Life Sciences Forum*, 17(1), 15. <https://doi.org/10.3390/blsf2022017015>
- Nareswari, A. D. (2016). *Pengaruh penambahan glukomanan porang (Amorphophallus oncophyllus) dan kappa karaginan terhadap sifat fisik dan sensoris es krim*. Universitas Gadjah Mada.
- Narine, S. S., & Marangoni, A. G. (1999). Relating structure of fat crystal networks

to mechanical properties: a review. *Food Research International*, 32(4), 227–248. [https://doi.org/10.1016/S0963-9969\(99\)00078-2](https://doi.org/10.1016/S0963-9969(99)00078-2)

Nguyen, H. M., Pham, M LSTelzer, E. M., Plattner, E., Grabherr, R., Mathiesen, G., Peterbauer, C. K., Haltrich, D., & Nguyen, T. H. (2019). Constitutive expression and cell-surface display of a bacterial β -mannanase in *Lactobacillus plantarum*. *Microbial Cell Factories*, 18, 76. <https://doi.org/10.1186/s12934-019-1124-y>

Ning, Y., Cui, B., Yuan, C., Zou, Y., Liu, W., & Pan, Y. (2020). Effects of konjac glucomannan on the rheological, microstructure and digestibility properties of debranched corn starch. *Food Hydrocolloids*, 100, 105342. <https://doi.org/10.1016/j.foodhyd.2019.105342>

Nugraheni, M., Sutopo, Purwanti, S., & Handayani, T. H. W. (2019). Nutritional, physical and sensory properties of high protein gluten and egg-free cookies made with resistant starch type 3 of *Maranta arundinaceae* flour and flaxseed. *Food Research*, 3(6), 658–663.

Nurlathifah, A. (2016). *Pengaruh penambahan tepung glukomanan porang (Amorphophallus Oncophyllus) dan karaginan terhadap sifat fisik dan sensoris milkshake*. Universitas Gadjah Mada.

Ogunbusola, E. M., Alabi, O. O., Sanni, T. A., Seidu, K. T., Oke, H. O., & Akinwale, O. R. (2020). Assessment of gluten-free cookies made from rice and soy protein isolate blends. *Journal of Microbiology, Biotechnology and Food Sciences*, 9(5), 907–912. <https://doi.org/10.15414/jmbfs.2020.9.5.907-912>

Omowaye-Taiwo, O. A., Fagbemi, T. N., Ogunbusola, E. M., & Badejo, A. A. (2015). Effect of germination and fermentation on the proximate composition and functional properties of full-fat and defatted *Cucumeropsis mannii* seed flours. *Journal of Food Science and Technology*, 52(8), 5257–5263. <https://doi.org/10.1007/s13197-014-1569-2>

Ondov, B. D., Bergman, N. H., & Phillippy, A. M. (2011). Interactive metagenomic visualization in a Web browser. *BMC Bioinformatics*, 12(385). <https://doi.org/10.1186/1471-2105-12-385>

Oyeyinka, S. A., Ojuko, I. B., Oyeyinka, A. T., Akintayo, O. A., Adebisi, T. T., & Adeloje, A. A. (2018). Physicochemical properties of novel non-gluten cookies from fermented cassava root. *Journal of Food Processing and Preservation*, 42, e13819. <https://doi.org/10.1111/jfpp.13819>

Padalino, L., Mastromatteo, M., Sepielli, G., & Nobile, M. A. Del. (2011). Formulation Optimization of Gluten-Free Functional Spaghetti Based on Maize Flour and Oat Bran Enriched in β -Glucans. *Materials*, 4(12), 2119–2135. <https://doi.org/10.3390/ma4122119>

Pareyt, B., Brijs, K., & Delcour, J. A. (2010). Impact of fat on dough and cookie properties of sugar-snap cookies. *Cereal Chemistry*, 87(3), 226–230.

<https://doi.org/10.1094/CCHEM-87-3-0226>

- Pareyt, B., & Delcour, J. A. (2008). The role of wheat flour constituents, sugar, and fat in low moisture cereal based products: A review on sugar-snap cookies. *Critical Reviews in Food Science and Nutrition*, 48(9), 824–839. <https://doi.org/10.1080/10408390701719223>
- Pareyt, B., Talhaoui, F., Kerckhofs, G., Brijs, K., Goesaert, H., Wevers, M., & Delcour, J. A. (2009). The role of sugar and fat in sugar-snap cookies: Structural and textural properties. *Journal of Food Engineering*, 90(3), 400–408. <https://doi.org/10.1016/j.jfoodeng.2008.07.010>
- Park, E. Y., Kim, H. Y., Shin, H. Y., Jeon, Y. Il, Kim, J. M., Kim, S., & Kim, J. Y. (2019). Change in textural properties, starch digestibility, and aroma of nonfried instant noodles by substitution of konjac glucomannan. *Cereal Chemistry*, 96(4), 784–791. <https://doi.org/10.1002/cche.10180>
- Payling, L., Fraser, K., Loveday, S. M., Sims, I., Roy, N., & McNabb, W. (2020). The effects of carbohydrate structure on the composition and functionality of the human gut microbiota. *Trends in Food Science and Technology*, 97, 233–248. <https://doi.org/10.1016/j.tifs.2020.01.009>
- Peressini, D., Pin, M., & Sensidoni, A. (2011). Rheology and breadmaking performance of rice-buckwheat batters supplemented with hydrocolloids. *Food Hydrocolloids*, 25(3), 340–349. <https://doi.org/10.1016/j.foodhyd.2010.06.012>
- Petrofsky, K. E., & Hosenev, R. C. (1995). Rheological properties of dough made with starch and gluten from several cereal sources. *Cereal Chemistry*, 72(1), 53–58. http://www.aaccnet.org/cerealchemistry/backissues/1995/72_53.pdf
- Piteira, M. F., Maia, J. M., Raymundo, A., & Sousa, I. (2006). Extensional flow behaviour of natural fibre-filled dough and its relationship with structure and properties. *Journal of Non-Newtonian Fluid Mechanics*, 137(1–3), 72–80. <https://doi.org/10.1016/j.jnnfm.2006.03.008>
- Pokusaeva, K., Fitzgerald, G. F., & Sinderen, D. v. (2011). Carbohydrate metabolism in Bifidobacteria. *Genes and Nutrition*, 6, 285–306. <https://doi.org/10.1007/s12263-010-0206-6>
- Potter, M., Vlassopoulos, A., & Lehmann, U. (2018). Snacking recommendations worldwide: A scoping review. *Advances in Nutrition*, 9(2), 86–98. <https://doi.org/10.1093/advances/nmx003>
- Prescott, S. L. (2014). Disease prevention in the age of convergence - The need for a wider, long ranging and collaborative vision. *Allergology International*, 63(1), 11–20. <https://doi.org/10.2332/allergolint.13-RAI-0659>
- Putri, N. A., Herlina, H., & Subagio, A. (2018). Karakteristik Mocaf (Modified Cassava Flour) Berdasarkan Metode Penggilingan dan Lama Fermentasi. *Jurnal Agroteknologi*, 12(01), 79–89. <https://doi.org/10.19184/j->

agt.v12i1.8252

- Putri, S. N. (2016). *Pengaruh penambahan tepung porang (*Amorphophallus oncophyllus*) terhadap kualitas yoghurt*. Universitas Gadjah Mada.
- Putri, S. Y. (2016). *Pengaruh penambahan glukomanan porang (*Amorphophallus oncophyllus*) dan carboxymethyl cellulose (CMC) terhadap sifat fisik dan sensoris mie basah dengan substitusi mocaf (modified cassava flour)*. Universitas Gadjah Mada.
- Qiu, S., Punzalan, M. E., Abbaspourrad, A., & Padilla-Zakour, O. I. (2020). High water content, maltose and sodium dodecyl sulfate were effective in preventing the long-term retrogradation of glutinous rice grains - A comparative study. *Food Hydrocolloids*, 98, 105247. <https://doi.org/10.1016/j.foodhyd.2019.105247>
- Rahman, A. M. (2007). *Mempelajari kaarakteristik kimia dan fisik tepung tapioka dan mocaf (modified cassava flour) sebagai penyalut kacang pada produk kacang salut*. Institut Pertanian Bogor.
- Rakhmatulloh, S. (2017). *Efek imunomodulator kefir susu kambing dengan suplementasi glukomanan porang (*Amorphophallus oncophyllus*) pada tikus yang diberi pakan tinggi lemak dan tinggi fruktosa*. Universitas Gadjah Mada.
- Rathore, H., Sehwaq, S., Prasad, S., & Sharma, S. (2019). Technological, nutritional, functional and sensorial attributes of the cookies fortified with *Calocybe indica* mushroom. *Journal of Food Measurement and Characterization*, 13(2), 976–987. <https://doi.org/10.1007/s11694-018-0012-1>
- Ratnayake, W. S., & Jackson, D. S. (2009). Starch Gelatinization. In *Advances in Food and Nutrition Research* (Issue 55, pp. 221–268). [https://doi.org/10.1016/S0091-679X\(08\)92017-3](https://doi.org/10.1016/S0091-679X(08)92017-3)
- Ren, B., Xie, H., Guo, L., Zhong, K., Huang, Y., & Gao, H. (2020). Effect of Konjac Glucomannan on Sensory, Physical and Thermal Properties of Mochi. *International Journal of Food Engineering*, 16(3), 1–11. <https://doi.org/10.1515/ijfe-2019-0227>
- Rezende, E. S. V., Lima, G. C., & Naves, M. M. V. (2021). Dietary fibers as beneficial microbiota modulators: A proposal classification by prebiotic categories. *Nutrition*, 89, 111217. <https://doi.org/10.1016/j.nut.2021.111217>
- Rizzatti, G., Lopetuso, L. R., Gibiino, G., Binda, C., & Gasbarrini, A. (2017). Proteobacteria: A Common Factor in Human Diseases. *BioMed Research International*, 2017, 9351507. <https://doi.org/10.1155/2017/9351507>
- Roberfroid, M. B. (2002). Functional foods: concepts and application to inulin and oligofructose. *British Journal of Nutrition*, 87(Suppl.2), S139–S143. <https://doi.org/10.1079/BJN/2002529>

- Ruiz-Capillas, C., Triki, M., Herrero, A. M., & Jiménez-Colmenero, F. (2012). Biogenic amines in low- and reduced-fat dry fermented sausages formulated with konjac gel. *Journal of Agricultural and Food Chemistry*, *60*(36), 9242–9248. <https://doi.org/10.1021/jf302540c>
- Rustanti, N., Murdiati, A., Juffrie, M., & Rahayu, E. S. (2022). Effect of Probiotic *Lactobacillus plantarum* Dad-13 on Metabolic Profiles and Gut Microbiota in Type 2 Diabetic Women: A Randomized Double-Blind Controlled Trial. *Microorganisms*, *10*(9). <https://doi.org/10.3390/microorganisms10091806>
- Saeed, S. M. G., Ali, S. A., Ali, R., Sayeed, S. A., Mobin, L., & Ahmed, R. (2020). Exploring the potential of black gram (*Vigna mungo*) flour as a fat replacer in biscuits with improved physicochemical, microstructure, phytochemicals, nutritional and sensory attributes. *SN Applied Sciences*, *2*, 2083. <https://doi.org/10.1007/s42452-020-03797-6>
- Safitri, A. H., Tyagita, N., & Nasihun, T. (2017). Porang glucomannan supplementation improves lipid profile in metabolic syndrome induced rats. *Journal of Natural Remedies*, *17*(4), 131–143. <https://doi.org/10.18311/jnr/2017/18125>
- Saha, S., Gupta, A., Singh, S. R. K., Bharti, N., Singh, K. P., Mahajan, V., & Gupta, H. S. (2011). Compositional and varietal influence of finger millet flour on rheological properties of dough and quality of biscuit. *LWT - Food Science and Technology*, *44*(3), 616–621. <https://doi.org/10.1016/j.lwt.2010.08.009>
- Sahi, S. S. (1994). Interfacial properties of the aqueous phases of wheat flour doughs. *Journal of Cereal Science*, *20*, 119–127. <https://doi.org/10.1006/jcrs.1994.1052>
- Sahin, A. W., Zannini, E., Coffey, A., & Arendt, E. K. (2019). Sugar reduction in bakery products: Current strategies and sourdough technology as a potential novel approach. *Food Research International*, *126*, 108583. <https://doi.org/10.1016/j.foodres.2019.108583>
- Saleem, Q., Wildman, R. D., Huntley, J. M., & Whitworth, M. B. (2005). Material properties of semi-sweet biscuits for finite element modelling of biscuit cracking. *Journal of Food Engineering*, *68*(1), 19–32. <https://doi.org/10.1016/j.jfoodeng.2004.05.020>
- Saleh, N., Rahayuningsih, S. A., Radjit, B. S., Ginting, E., Harnowo, D., & Mejaya, I. M. J. (2015). *Tanaman Porang. Pengenalan, Budidaya, dan Pemanfaatannya*. Pusat Penelitian dan Pengembangan Tanaman Pangan.
- Salim, E. (2011). *Mengolah Singkong Menjadi Tepung Mocaf Bisnis Produk Alternatif Pengganti Terigu*. Andy Publisher.
- Santiago-García, P. A., Mellado-Mojica, E., León-Martínez, F. M., & López, M. G. (2017). Evaluation of *Agave angustifolia* fructans as fat replacer in the cookies manufacture. *LWT - Food Science and Technology*, *77*, 100–109.

<https://doi.org/10.1016/j.lwt.2016.11.028>

- Sanz, T., Laguna, L., & Salvador, A. (2015). Biscuit dough structural changes during heating: Influence of shortening and cellulose ether emulsions. *LWT - Food Science and Technology*, 62(2), 962–969. <https://doi.org/10.1016/j.lwt.2015.02.036>
- Sari, D. A. P. (2016). *Pengaruh penambahan tepung porang (Amorphophallus oncophyllus) terhadap kualitas susu Acidophilus*. Universitas Gadjah Mada.
- Satrapai, S., & Suphantharika, M. (2007). Influence of spent brewer's yeast β -glucan on gelatinization and retrogradation of rice starch. *Carbohydrate Polymers*, 67(4), 500–510. <https://doi.org/10.1016/j.carbpol.2006.06.028>
- Savitha, Y. S., Indrani, D., & Prakash, J. (2008). Effect of replacement of sugar with sucralose and maltodextrin on rheological characteristics of wheat flour dough and quality of soft dough biscuits. *Journal of Texture Studies*, 39(6), 605–616. <https://doi.org/10.1111/j.1745-4603.2008.00160.x>
- Schmelter, L., Rohm, H., & Struck, S. (2021). Gluten-free bakery products: Cookies made from different Vicia faba bean varieties. *Future Foods*, 4, 100038. <https://doi.org/10.1016/j.fufo.2021.100038>
- Schnorr, S. L., Candela, M., Rampelli, S., Centanni, M., Consolandi, C., Basaglia, G., Turrone, S., Biagi, E., Peano, C., Severgnini, M., Fiori, J., Gotti, R., De Bellis, G., Luiselli, D., Brigidi, P., Mabulla, A., Marlowe, F., Henry, A. G., & Crittenden, A. N. (2014). Gut microbiome of the Hadza hunter-gatherers. *Nature Communications*, 5, 3654. <https://doi.org/10.1038/ncomms4654>
- Schuchardt, J. P., Wonik, J., Bindrich, U., Heinemann, M., Kohrs, H., Schneider, I., Möller, K., & Hahn, A. (2016). Glycemic index and microstructure analysis of a newly developed fiber enriched cookie. *Food & Function*, 7, 464–474. <https://doi.org/10.1039/c5fo01137j>
- Segata, N., Izard, J., Waldron, L., Gevers, D., Miropolsky, L., Garrett, W. S., & Huttenhower, C. (2011). Metagenomic biomarker discovery and explanation. *Genome Biology*, 12(6), R60. <https://doi.org/10.1186/gb-2011-12-6-r60>
- Shah, B. R., Li, B., Wang, L., Liu, S., Li, Y., Wei, X., Weiping, J., & Zhenshun, L. (2015). Health benefits of konjac glucomannan with special focus on diabetes. *Bioactive Carbohydrates and Dietary Fibre*, 5(2), 179–187. <https://doi.org/10.1016/j.bcdf.2015.03.007>
- Shetty, S., & Lahti, L. (2022). *microbiomeutilities: microbiomeutilities: Utilities for Microbiome Analytics*. (R package version 1.00.17).
- Shi, X. D., Yin, J. Y., Cui, S. W., Wang, Q., Wang, S. Y., & Nie, S. P. (2020). Comparative study on glucomannans with different structural characteristics: Functional properties and intestinal production of short chain fatty acids. *International Journal of Biological Macromolecules*, 164, 826–835. <https://doi.org/10.1016/j.ijbiomac.2020.07.186>

- Silva, D. F. D., Ferreira, S. B. D. S., Bruschi, M. L., Britten, M., & Matumoto-Pintro, P. T. (2016). Effect of commercial konjac glucomannan and konjac flours on textural, rheological and microstructural properties of low fat processed cheese. *Food Hydrocolloids*, *60*, 308–316. <https://doi.org/https://doi.org/10.1016/j.foodhyd.2016.03.034>
- Silva, T. F. D., & Conti-Silva, A. C. (2018). Potentiality of gluten-free chocolate cookies with added inulin/oligofructose: Chemical, physical and sensory characterization. *LWT - Food Science and Technology*, *90*, 172–179. <https://doi.org/10.1016/j.lwt.2017.12.031>
- Sim, S. Y., Noor Aziah, A. A., & Cheng, L. H. (2011). Characteristics of wheat dough and Chinese steamed bread added with sodium alginates or konjac glucomannan. *Food Hydrocolloids*, *25*(5), 951–957. <https://doi.org/10.1016/j.foodhyd.2010.09.009>
- Singamayum, K., Chakraborty, S., Das, M. J., Sit, N., & Deka, S. C. (2021). Wheat and Cassava Flour-Based Composite Formulation of Cookies: Optimization of the Ingredient's Level by Simplex Lattice Design and Sensory Evaluation Using Fuzzy Logic. *Journal of Biosystems Engineering*, *46*(1), 93–103. <https://doi.org/10.1007/s42853-021-00090-1>
- Singh, J., Singh, N., Sharma, T. R., & Saxena, S. K. (2003). Physicochemical, rheological and cookie making properties of corn and potato flours. *Food Chemistry*, *83*(3), 387–393. [https://doi.org/10.1016/S0308-8146\(03\)00100-6](https://doi.org/10.1016/S0308-8146(03)00100-6)
- Singh Sibian, M., & Singh Riar, C. (2021). Optimization and evaluation of composite flour cookies prepared from germinated triticale, kidney bean, and chickpea. *Journal of Food Processing and Preservation*, *45*(1), 1–11. <https://doi.org/10.1111/jfpp.14996>
- Sman, R. G. M. Van Der, & Renzetti, S. (2019). Understanding functionality of sucrose in biscuits for reformulation purposes. *Critical Reviews in Food Science and Nutrition*, *59*(14), 2225–2239. <https://doi.org/10.1080/10408398.2018.1442315>
- Soronja-Simovic, D., Pajin, B., Subaric, D., Dokic, L., Seres, Z., & Nikolic, I. (2016). Quality, Sensory and Nutritional Characteristics of Cookies Fortified with Chesnut Flour. *Journal of Food Processing and Preservation*, *00*. <https://doi.org/10.1111/jfpp.12887>
- Souza, C. B. D., Lima, G. P. P., Borges, C. V., Dias, L. C. G. D., Spoto, M. H. F., Castro, G. R., Corrêa, C. R., & Minatel, I. O. (2019). Development of a functional rice bran cookie rich in γ -oryzanol. *Journal of Food Measurement and Characterization*, *13*(2), 1070–1077. <https://doi.org/10.1007/s11694-018-00022-2>
- Statista. (2024). *Cookies & Crackers - Worldwide*. Statista. <https://www.statista.com/outlook/cmo/food/confectionery-snacks/snack-food/cookies-crackers/worldwide>

- Sudha, M. L., Srivastava, A. K., Vetrmani, R., & Leelavathi, K. (2007). Fat replacement in soft dough biscuits: Its implications on dough rheology and biscuit quality. *Journal of Food Engineering*, 80(3), 922–930. <https://doi.org/10.1016/j.jfoodeng.2006.08.006>
- Suliaman, A. A., Zhu, K. X., Peng, W., Hassan, H. A., Mahdi, A. A., & Zhou, H. M. (2019). Influence of fermented and unfermented *Agaricus bisporus* polysaccharide flours on the antioxidant and structural properties of composite gluten-free cookies. *LWT - Food Science and Technology*, 101, 835–846. <https://doi.org/https://doi.org/10.1016/j.lwt.2018.11.007>
- Sun, Y., Wang, M., Ma, S., & Wang, H. (2020). Physicochemical characterization of rice, potato, and pea starches, each with different crystalline pattern, when incorporated with Konjac glucomannan. *Food Hydrocolloids*, 101, 105499. <https://doi.org/10.1016/j.foodhyd.2019.105499>
- Sykes, G. B., & Davidson, I. (2020). *Biscuit, Cookie and Cracker: Process and Recipes*. Academic Press.
- Taji, R. N. A. S. (2020). *Karakteristik fisik dan sensoris dark chocolate dengan penambahan tepung glukomanan porang (Amorphophallus oncophyllus)*. Universitas Gadjah Mada.
- Tarancón, P., Salvador, A., Sanz, T., Fiszman, S., & Tárrega, A. (2015). Use of healthier fats in biscuits (olive and sunflower oil): Changing sensory features and their relation with consumers' liking. *Food Research International*, 69(1), 91–96. <https://doi.org/10.1016/j.foodres.2014.12.013>
- Tatirat, O., & Charoenrein, S. (2011). Physicochemical properties of konjac glucomannan extracted from konjac flour by a simple centrifugation process. *LWT - Food Science and Technology*, 44(10), 2059–2063. <https://doi.org/10.1016/j.lwt.2011.07.019>
- Tester, R., & Al-Ghazzewi, F. (2017). Glucomannans and nutrition. *Food Hydrocolloids*, 68, 246–254. <https://doi.org/10.1016/j.foodhyd.2016.05.017>
- Tester, R., & Al-Ghazzewi, F. H. (2016). Beneficial health characteristics of native and hydrolysed konjac (*Amorphophallus konjac*) glucomannan. *Journal of the Science of Food and Agriculture*, 96(10), 3283–3291. <https://doi.org/10.1002/jsfa.7571>
- Tester, R., Al-Ghazzewi, F., Shen, N., Chen, Z., Chen, F., Yang, J., Zhang, D., & Tang, M. (2012). The use of konjac glucomannan hydrolysates to recover healthy microbiota in infected vaginas treated with an antifungal agent. *Beneficial Microbes*, 3(1), 61–66. <https://doi.org/10.3920/BM2011.0021>
- Thomas, D. J., & Atwell, W. A. (1999). *Eagan Press Handbook Series: Starches*. Eagan Press.
- Thongram, S., Tanwar, B., Chauhan, A., & Kumar, V. (2016). Physicochemical and organoleptic properties of cookies incorporated with legume flours. *Cogent*

Food & Agriculture, 2, 1172389.
<https://doi.org/10.1080/23311932.2016.1172389>

Tidjani Alou, M., Lagier, J. C., & Raoult, D. (2016). Diet influence on the gut microbiota and dysbiosis related to nutritional disorders. *Human Microbiome Journal*, 1, 3–11. <https://doi.org/10.1016/j.humic.2016.09.001>

Tolstoguzov, V. (1997). Thermodynamic aspects of dough formation and functionality. *Food Hydrocolloids*, 11(2), 181–193.
[https://doi.org/10.1016/S0268-005X\(97\)80025-2](https://doi.org/10.1016/S0268-005X(97)80025-2)

Tuncil, Y. E., Thakkar, R. D., Arioglu-Tuncil, S., Hamaker, B. R., & Lindemann, S. R. (2020). Subtle Variations in Dietary-Fiber Fine Structure Differentially Influence the Composition and Metabolic Function of Gut Microbiota. *MSphere*, 5(3). <https://doi.org/10.1128/msphere.00180-20>

Tuohy, K. M., Probert, H. M., Smejka, C. W., & Gibson, G. R. (2003). Use of probiotics and prebiotics to improve gut health. *Drug Discovery Today*, 8(15), 692–700. [https://doi.org/10.1016/S1359-6446\(03\)02746-6](https://doi.org/10.1016/S1359-6446(03)02746-6)

US Department of Agriculture. (2007). *Commercial Item Description Cookies*. [https://www.ams.usda.gov/sites/default/files/media/CID Cookies.pdf](https://www.ams.usda.gov/sites/default/files/media/CID%20Cookies.pdf)

Vasques-Monteiro, I. M. L., Silva-Veiga, F. M., Miranda, C. S., de Andrade Gonçalves, É. C. B., Daleprane, J. B., & Souza-Mello, V. (2021). A rise in Proteobacteria is an indicator of gut-liver axis-mediated nonalcoholic fatty liver disease in high-fructose-fed adult mice. *Nutrition Research*, 91, 26–35. <https://doi.org/10.1016/j.nutres.2021.04.008>

Vázquez, M. J., Alonso, J. L., Domínguez, H., & Parajó, J. C. (2000). Xylooligosaccharides: manufacture and applications. *Trends in Food Science & Technology*, 11(11), 387–393. [https://doi.org/10.1016/S0924-2244\(01\)00031-0](https://doi.org/10.1016/S0924-2244(01)00031-0)

Wanders, A. J., Zock, P. L., & Brouwer, I. A. (2017). Trans fat intake and its dietary sources in general populations worldwide: A systematic review. *Nutrients*, 9(8), 1–14. <https://doi.org/10.3390/nu9080840>

Wang, K., & He, Z. (2002). Alginate-konjac glucomannan-chitosan beads as controlled release matrix. *International Journal of Pharmaceutics*, 244(1–2), 117–126. [https://doi.org/10.1016/S0378-5173\(02\)00324-1](https://doi.org/10.1016/S0378-5173(02)00324-1)

Wang, L., Xu, J., Fan, X., Wang, Q., Wang, P., Yuan, J., Yu, Y., Zhang, Y., & Cui, L. (2018). The effect of branched limit dextrin on corn and waxy corn gelatinization and retrogradation. *International Journal of Biological Macromolecules*, 106, 116–122. <https://doi.org/10.1016/j.ijbiomac.2017.07.181>

Wang, S., Xiao, Y., Tian, F., Zhao, J., Zhang, H., Zhai, Q., & Chen, W. (2020). Rational use of prebiotics for gut microbiota alterations: Specific bacterial phylotypes and related mechanisms. *Journal of Functional Foods*, 66, 103838.

<https://doi.org/10.1016/j.jff.2020.103838>

- Watts, A. M., West, N. P., Zhang, P., Smith, P. K., Cripps, A. W., & Cox, A. J. (2021). The Gut Microbiome of Adults with Allergic Rhinitis Is Characterised by Reduced Diversity and an Altered Abundance of Key Microbial Taxa Compared to Controls. *International Archives of Allergy and Immunology*, 182(2), 94–105. <https://doi.org/10.1159/000510536>
- Weipert, D. (1990). The benefits of basic rheometry in studying dough rheology. *Cereal Chemistry*, 67(4), 311–317.
- Wickham, H. (2016). *ggplot2: Elegant Graphics for Data Analysis*. Springer-Verlag New York. <https://ggplot2.tidyverse.org>
- Woś, H., & Brzeziński, W. (2015). Triticale for Food - The Quality Driver. In F. Eudes (Ed.), *Triticale* (pp. 213–232). Springer International Publishing. <https://doi.org/10.1007/978-3-319-22551-7>
- Wu, J., Deng, X., & Lin, X. (2013). Swelling characteristics of konjac glucomannan superabsorbent synthesized by radiation-induced graft copolymerization. *Radiation Physics and Chemistry*, 83, 90–97. <https://doi.org/10.1016/j.radphyschem.2012.09.026>
- Xu, S., Zhan, L., Tang, W., Wang, Q., Dai, Z., Zhou, L., Feng, T., Chen, M., Wu, T., Hu, E., & Yu, G. (2023). MicrobiotaProcess: A comprehensive R package for deep mining microbiome. *The Innovation*, 4(2), 100388. <https://doi.org/10.1016/j.xinn.2023.100388>
- Xu, T., Huang, W., Liang, J., Zhong, Y., Chen, Q., Jie, F., & Lu, B. (2021). Tuber flours improve intestinal health and modulate gut microbiota composition. *Food Chemistry: X*, 12, 100145. <https://doi.org/10.1016/j.fochx.2021.100145>
- Xu, W., Xiong, Y., Li, Z., Luo, D., Wang, Z., Sun, Y., & Shah, B. R. (2020). Stability, microstructural and rheological properties of complex prebiotic emulsion stabilized by sodium caseinate with inulin and konjac glucomannan. *Food Hydrocolloids*, 105, 105772. <https://doi.org/10.1016/j.foodhyd.2020.105772>
- Yamul, D. K., & Navarro, A. S. (2020). Effect of hydrocolloids on structural and functional properties of wheat/potato (50/50) flour dough. *Food Structure*, 24, 100138. <https://doi.org/https://doi.org/10.1016/j.foostr.2020.100138>
- Yang, C., Mai, J., Cao, X., Burberry, A., Cominelli, F., & Zhang, L. (2023). Genome analysis ggpicrust2: an R package for PICRUSt2 predicted functional profile analysis and visualization. *Bioinformatics*, 39(8), btad470. <https://doi.org/10.1093/bioinformatics/btad470>
- Yang, J., Vittori, N., Wang, W., Shi, Y., Hoeflinger, J. L., Miller, M. J., & Pan, Y. (2017). Molecular weight distribution and fermentation of mechanically pre-treated konjac enzymatic hydrolysates. *Carbohydrate Polymers*, 159, 58–65. <https://doi.org/10.1016/j.carbpol.2016.12.014>

- Yanuriati, A., Marseno, D. W., Rochmadi, & Harmayani, E. (2017). Characteristics of glucomannan isolated from fresh tuber of Porang (*Amorphophallus muelleri* Blume). *Carbohydrate Polymers*, *156*, 56–63. <https://doi.org/10.1016/j.carbpol.2016.08.080>
- Yasumatsu, K., Sawada, K., Moritaka, S., Misaki, M., Toda, J., Wada, T., & Ishii, K. (1972). Whipping and Emulsifying Properties of Soybean Products. *Agricultural and Biological Chemistry*, *36*(5), 719–727. <https://doi.org/10.1080/00021369.1972.10860321>
- Yatsunencko, T., Rey, F. E., Manary, M. J., Trehan, I., Dominguez-Bello, M. G., Contreras, M., Magris, M., Hidalgo, G., Baldassano, R. N., Anokhin, A. P., Heath, A. C., Warner, B., Reeder, J., Kuczynski, J., Caporaso, J. G., Lozupone, C. A., Lauber, C., Clemente, J. C., Knights, D., ... Gordon, J. I. (2012). Human gut microbiome viewed across age and geography. *Nature*, *486*(7402), 222–227. <https://doi.org/10.1038/nature11053>
- Yazar, G., & Rosell, C. M. (2023). Fat replacers in baked products: their impact on rheological properties and final product quality. *Critical Reviews in Food Science and Nutrition*, *63*(25), 7653–7676. <https://doi.org/10.1080/10408398.2022.2048353>
- Yin, J. Y., Ma, L. Y., Xie, M. Y., Nie, S. P., & Wu, J. Y. (2020). Molecular properties and gut health benefits of enzyme-hydrolyzed konjac glucomannans. *Carbohydrate Polymers*, *237*, 116117. <https://doi.org/10.1016/j.carbpol.2020.116117>
- Yu, A. H. M., Phoon, P. Y., Ng, G. C. F., & Henry, C. J. (2020). Physicochemical characteristics of green banana flour and its use in the development of konjac-green banana noodles. *Journal of Food Science*, *85*(10), 3026–3033. <https://doi.org/10.1111/1750-3841.15458>
- Yu, T., Zheng, Y. P., Tan, J. C., Xiong, W. J., Wang, Y., & Lin, L. (2017). Effects of Prebiotics and Synbiotics on Functional Constipation. *American Journal of the Medical Sciences*, *353*(3), 282–292. <https://doi.org/10.1016/j.amjms.2016.09.014>
- Yue, Q., Li, M., Liu, C., Li, L., Zheng, X., & Bian, K. (2020). Extensional rheological properties in mixed and fermented / rested dough and relationships with steamed bread quality. *Journal of Cereal Science*, *93*, 102968. <https://doi.org/10.1016/j.jcs.2020.102968>
- Yulifianti, R., Ginting, E., & Utomo, J. S. (2012). Tepung Kasava Modifikasi Sebagai Bahan Substitusi Terigu Mendukung Diversifikasi Pangan. *Buletin Palawija*, *0*(23), 1–12. <https://doi.org/10.21082/bulpa.v0n23.2012.p1-12>
- Zhang, B., Qiao, D., Zhao, S., Lin, Q., Wang, J., & Xie, F. (2021). Starch-based food matrices containing protein: Recent understanding of morphology, structure, and properties. *Trends in Food Science and Technology*, *114*, 212–231. <https://doi.org/10.1016/j.tifs.2021.05.033>

- Zhang, L., Zeng, L., Wang, X., He, J., & Wang, Q. (2020). The influence of Konjac glucomannan on the functional and structural properties of wheat starch. *Food Science and Nutrition*, 8(6), 2959–2967. <https://doi.org/https://doi.org/10.1002/fsn3.1598>
- Zhang, Y., Zhao, Y., Yang, W., Song, G., Zhong, P., Ren, Y., & Zhong, G. (2022). Structural complexity of Konjac glucomannan and its derivatives governs the diversity and outputs of gut microbiota. *Carbohydrate Polymers*, 292, 119639. <https://doi.org/10.1016/j.carbpol.2022.119639>
- Zhao, D., Zhang, X., Wang, Y., Nan, J., Ping, W., & Ge, J. (2020). Purification, biochemical and secondary structural characterisation of β -mannanase from *Lactobacillus casei* HDS-01 and juice clarification potentia.pdf. *International Journal of Biological Macromolecules*, 154, 826–834. <https://doi.org/10.1016/j.ijbiomac.2020.03.157>
- Zhao, Y., Jayachandran, M., & Xu, B. (2020). In vivo antioxidant and anti-inflammatory effects of soluble dietary fiber Konjac glucomannan in type-2 diabetic rats. *International Journal of Biological Macromolecules*, 159, 1186–1196. <https://doi.org/10.1016/j.ijbiomac.2020.05.105>
- Zhou, D. N., Zhang, B., Chen, B., & Chen, H. Q. (2017). Effects of oligosaccharides on pasting, thermal and rheological properties of sweet potato starch. *Food Chemistry*, 230, 516–523. <https://doi.org/10.1016/j.foodchem.2017.03.088>
- Zhou, Y., Cao, H., Hou, M., Nirasawa, S., Tatsumi, E., Foster, T. J., & Cheng, Y. (2013). Effect of konjac glucomannan on physical and sensory properties of noodles made from low-protein wheat flour. *Food Research International*, 51(2), 879–885. <https://doi.org/10.1016/j.foodres.2013.02.002>
- Zhou, Y., Dhital, S., Zhao, C., Ye, F., Chen, J., & Zhao, G. (2021). Dietary fiber-gluten protein interaction in wheat flour dough: Analysis, consequences and proposed mechanisms. *Food Hydrocolloids*, 111, 106203. <https://doi.org/10.1016/j.foodhyd.2020.106203>
- Zhu, F. (2018). Modifications of konjac glucomannan for diverse applications. *Food Chemistry*, 256, 419–426. <https://doi.org/10.1016/j.foodchem.2018.02.151>
- Zhu, F., & Zhang, Y. (2019). Effect of konjac glucomannan on physicochemical properties of quinoa and maize starches. *Cereal Chemistry*, 00, 1–7. <https://doi.org/10.1002/cche.10188>
- Zoulias, E. I., Oreopoulou, V., & Tzia, C. (2002). Textural properties of low-fat cookies containing carbohydrate- or protein-based fat replacers. *Journal of Food Engineering*, 55(4), 337–342. [https://doi.org/10.1016/S0260-8774\(02\)00111-5](https://doi.org/10.1016/S0260-8774(02)00111-5)
- Zoulias, E. I., Piknis, S., & Oreopoulou, V. (2000). Effect of sugar replacement by polyols and acesulfame-K on properties of low-fat cookies. *Journal of the*

Science of Food and Agriculture, 80(14), 2049–2056.
[https://doi.org/10.1002/1097-0010\(200011\)80:14<2049::AID-JSFA735>3.0.CO;2-Q](https://doi.org/10.1002/1097-0010(200011)80:14<2049::AID-JSFA735>3.0.CO;2-Q)