

REFERENCES

- Abbas, S., Sharif, M. K., Sibte-Abbas, M., Fikre Teferra, T., Sultan, M. T., & Anwar, M. J. (2022). Nutritional and therapeutic potential of sesame seeds. *Journal of Food Quality*, 2022, 1-9.
- Abdelmoez, W., & Yoshida, H. (2013). Production of amino and organic acids from protein using sub-critical water technology. *International Journal of Chemical Reactor Engineering*, 11(1), 369-384.
- Adebisi, A. K., Stephen, E. C., Chinedu, I., & Emmanuel, U. (2017). Quantification of protein and amino acid composition in some oilseeds. *Mol. Biol*, 2, 8-11.
- Ahmed, I. A. M., Uslu, N., Özcan, M. M., Juhaimi, F. A., Ghafoor, K., Babiker, E. E., ... & Alqah, H. A. (2021). Effect of conventional oven roasting treatment on the physicochemical quality attributes of sesame seeds obtained from different locations. *Food chemistry*, 338, 128109.
- Alfaro-Diaz, A., Urías-Silvas, J. E., Loarca-Piña, G., Gaytan-Martínez, M., Prado-Ramirez, R., & Mojica, L. (2021). Techno-functional properties of thermally treated black bean protein concentrate generated through ultrafiltration process. *Lwt*, 136, 110296.
- Ali, M. A. M., Mahmoud, H. A., Aldoma, M., & My, H. (2020). Proximate composition of Sudanese *Sesamum indicum* L.(white and brown) sesame seeds. *An Archive of Organic and Inorganic Chemical Sciences*, 4(4), 574-577.

- Al-Ismail, K., Alawamleh, N., & Al-Dabbas, M. (2018). Effect of roasting and dehulling on antioxidant activity, oil quality and protein functionality of sesame seeds used in tahina and halawa. *Madridge J Food Technol*, 1, 109-114.
- AOAC. (2000). Official Methods of Analysis. 17th ed. Association of Official Analytical Chemists International, Gaithersburg, MD.
- Apichartsrangkoon, A., Tiampakdee, A., Tameeya, W., Kreungngern, D., Srisajjalertwaja, S., & Supraditareporn, W. (2022). Comparison of phytochemicals in sesame and Perilla (seeds and oils) grown at Mae Hong Son Thailand.
- Arslan, H., Ekin, Z., & Hatipoglu, H. (2018). Performances of sesame genotypes (*Sesamum indicum* L.) with different seed shell colors in semi-arid climate conditions. *Fresenius Environmental Bulletin*, 27.
- Babiker, E. E., Uslu, N., Al Juhaimi, F., Ahmed, I. A. M., Ghafoor, K., Özcan, M. M., & Almusallam, I. A. (2021). Effect of roasting on antioxidative properties, polyphenol profile and fatty acids composition of hemp (*Cannabis sativa* L.) seeds. *Lwt*, 139, 110537.
- Berensmeier, S., & Franzreb, M. (2024). Enzyme Purification. In *Introduction to Enzyme Technology* (pp. 199-217). Cham: Springer International Publishing.
- Berk, E., Hamzalıoğlu, A., & Gökmen, V. (2019). Investigations on the Maillard reaction in sesame (*Sesamum indicum* L.) seeds induced by roasting. *Journal of agricultural and food chemistry*, 67(17), 4923-4930.

- Bhardwaj, N., Kumar, B., & Verma, P. (2019). A detailed overview of xylanases: an emerging biomolecule for current and future prospective. *Bioresources and Bioprocessing*, 6(1), 1-36.
- Bodoira, R., Velez, A., Andreatta, A. E., Martínez, M., & Maestri, D. (2017). Extraction of bioactive compounds from sesame (*Sesamum indicum* L.) seeds using water and ethanol under sub-critical conditions. *Food Chemistry*, 237, 114-120.
- Byarugaba, R., Nabubuya, A., Muyonga, J., & Mwakha, A. (2023). Effects of roasting conditions on the proximate composition and functional properties of common bean (*Phaseolus vulgaris*) flours. *Tanzania Journal of Science*, 49(2), 546-558.
- Campos, B. E., Ruivo, T. D., da Silva Scapim, M. R., Madrona, G. S., & Bergamasco, R. D. C. (2016). Optimization of the mucilage extraction process from chia seeds and application in ice cream as a stabilizer and emulsifier. *LWT-Food Science and Technology*, 65, 874-883.
- Chang, K., Jiang, W., & Liu, J. (2022). Effect of subcritical water treatment on the structure and foaming properties of egg white protein. *Food Hydrocolloids*, 124, 107241.
- Cheetangdee, N. (2014). Effects of rice bran protein hydrolysates on the physicochemical stability of oil-in-water emulsions. *Journal of Oleo Science*, 63(12), 1231-1241.

- Chen, Q., Li, M., & Wang, X. (2016). Enzymology properties of two different xylanases and their impacts on growth performance and intestinal microflora of weaned piglets. *Animal Nutrition*, 2(1), 18-23.
- Cheng, Y., Xue, F., Yu, S., Du, S., & Yang, Y. (2021). Subcritical water extraction of natural products. *Molecules*, 26(13), 4004.
- Cuong, T.V., Ling, L.H., Quan, G.K., Tiep, T.D., & Nan, X., Qing, C.X., & Linh, T.L. (2014). Effect of roasting conditions on several chemical constituents of Vietnam Robusta coffee. *The Annals of the University Dunarea de Jos of Galati. Fascicle VI – Food Technology*, 38(2), 43-56.
- Daud, N. S., Sabli, N., Yoshida, H., & Izhar, S. (2024). Wheat Germ Protein Extraction Via Subcritical Water For Water Treatment Process. *Journal of Applied Science and Engineering*, 28(1), 205-213.
- Deleu, L. J., Lambrecht, M. A., Van de Vondel, J., & Delcour, J. A. (2019). The impact of alkaline conditions on storage proteins of cereals and pseudo-cereals. *Current opinion in food science*, 25, 98-103.
- Díaz-Reinoso, B., Rivas, S., Rivas, J., & Domínguez, H. (2023). Subcritical water extraction of essential oils and plant oils. *Sustainable Chemistry and Pharmacy*, 36, 101332.
- Diedericks, C. F., Venema, P., Mubaiwa, J., Jideani, V. A., & van der Linden, E. (2020). Effect of processing on the microstructure and composition of Bambara groundnut (*Vigna subterranea* (L.) Verdc.) seeds, flour and protein isolates. *Food Hydrocolloids*, 108, 106031.

- Dravie, E. E., Kortei, N. K., Essuman, E. K., Tettey, C. O., Boakye, A. A., & Hunkpe, G. (2020). Antioxidant, phytochemical and physicochemical properties of sesame seed (*Sesamum indicum* L). *Scientific African*, 8, e00349.
- Du, L., Arauzo, P. J., Meza Zavala, M. F., Cao, Z., Olszewski, M. P., & Kruse, A. (2020). Towards the properties of different biomass-derived proteins via various extraction methods. *Molecules*, 25(3), 488.
- Duan, F., & Lu, X. (2012). Enzymatic properties and kinetics of an endo- β -1, 3-glucanase of *Mitsuaria chitosanitabida* H12 and preparation of 1, 3- β -D-glucooligosaccharides from yeast β -glucan. *Annals of microbiology*, 62, 307-312.
- del Mar Contreras, M., Lama-Muñoz, A., Gutiérrez-Pérez, J. M., Espínola, F., Moya, M., & Castro, E. (2019). Protein extraction from agri-food residues for integration in biorefinery: Potential techniques and current status. *Bioresource Technology*, 280, 459-477.
- Edison, L. K., Reji, S. R., & Pradeep, N. S. (2022). Beta-Glucanase in Breweries. In *Microbial Beta Glucanases: Molecular Structure, Functions and Applications* (pp. 85-98). Singapore: Springer Nature Singapore.
- Elagamey, E., Narula, K., Chakraborty, N., & Chakraborty, S. (2020). Extracellular matrix proteome: Isolation of ECM proteins for proteomics studies. *Nitrogen Metabolism in Plants: Methods and Protocols*, 155-172.
- Estiasih, T., & Ahmadi, A. (2017). Teknologi Pengolahan Pangan. Bumi Aksara. Jakarta.

Eze, C. R., Kwofie, E. M., Adewale, P., Lam, E., & Ngadi, M. (2022). Advances in legume protein extraction technologies: A review. *Innovative Food Science & Emerging Technologies*, 103199.

FAOSTAT. The Food and Agriculture Organization Corporate Statistical Database (FAOSTAT), Rome, Italy. 2020. Available online: <http://www.fao.org/faostat/en/#data/QC> (accessed on 25th May 2024).

Feng, H., Jin, H., Gao, Y., Yan, S., Zhang, Y., Zhao, Q., & Xu, J. (2020). Effects of freeze-thaw cycles on the structure and emulsifying properties of peanut protein isolates. *Food chemistry*, 330, 127215.

Gao, Z., Shen, P., Lan, Y., Cui, L., Ohm, J. B., Chen, B., & Rao, J. (2020). Effect of alkaline extraction pH on structure properties, solubility, and beany flavor of yellow pea protein isolate. *Food Research International*, 131, 109045.

Ghosh, P., Ghosal, P., Thakur, S., Lerouge, P., Loutelier-Bourhis, C., Driouich, A., & Ray, B. (2005). Polysaccharides from *Sesamum indicum* meal: Isolation and structural features. *Food chemistry*, 90(4), 719-726.

Gowdhaman, D., & Ponnusami, V. (2019). Xylanases: a biotechnological potential enzyme. In *Phytopharmaceuticals and Drug Delivery Approaches* (pp. 02-15). Avid Science.

Guldiken, B., Konieczny, D., Franczyk, A., Satiro, V., Pickard, M., Wang, N., ... & Nickerson, M. T. (2022). Impacts of infrared heating and tempering on the chemical composition, morphological, functional properties of navy bean and chickpea flours. *European Food Research and Technology*, 1-15.

Guo, Q., Xu, S., Liu, H. M., Liu, M. W., Wang, C. X., Qin, Z., & Wang, X. D. (2022).

Effects of roasting temperature and duration on color and flavor of a sesame oligosaccharide-protein complex in a Maillard reaction model. *Food Chemistry: X*, 16, 100483.

Hadidi, M., Aghababaei, F., & McClements, D. J. (2023). Enhanced alkaline extraction techniques for isolating and modifying plant-based proteins. *Food Hydrocolloids*, 109132.

Hadidi, M., Khaksar, F. B., Pagan, J., & Ibarz, A. (2020). Application of Ultrasound-Ultrafiltration-Assisted alkaline isoelectric precipitation (UUAIP) technique for producing alfalfa protein isolate for human consumption: Optimization, comparison, physicochemical, and functional properties. *Food Research International*, 130, 108907.

Hadimani, L., & Mittal, N. (2019). Development of a computer vision system to estimate the colour indices of Kinnow mandarins. *Journal of food science and technology*, 56, 2305-2311.

Harivaindaran, K. V., Hữu Tiên, N., Nguyễn Song Đình, T., Samsudin, H., Ariffin, F., & Mohammadi Nafchi, A. (2023). The effects of superheated steam roasting on proximate analysis, antioxidant activity, and oil quality of black seed (*Nigella sativa*). *Food Science & Nutrition*, 11(11), 7296-7310.

Hassan, M. A. (2012). Studies on Egyptian sesame seeds (*Sesamum indicum* L.) and its products 1-physicochemical analysis and phenolic acids of roasted Egyptian sesame seeds (*Sesamum indicum* L.).

- He, D., Zhang, Z., Li, H., Xia, Y., Li, X., & Chen, T. (2018). Optimizing functional properties of perilla protein isolate using the response surface methodology. *Food Science and Technology*, 38, 348-355.
- He, S., Pan, T., Zhang, Z., Wu, Y., Sun, H., Ma, Y., & Zhang, Y. (2023). Interactive effect of hot air roasting processes on the sensory property, allergenicity, and oil extraction of sesame (*Sesamum indicum* L.) seeds. *Grain & Oil Science and Technology*, 6(2), 71-81.
- Huang, V. T., & Perdon, A. A. (2020). Major changes in cereal biopolymers during ready-to-eat cereal processing. In *Breakfast cereals and how they are made* (pp. 109-140). AACC International Press.
- Huyen, T. T. T., Mui, N. V., & Bang, C. P. (2016). amino acid composition and nutritional value of seed proteins in Sesame (*Sesamum Indicum* L.) cultivars grown in Vietnam. *International Journal of Agricultural Technology*, 12(5), 939-946.
- Idowu, A. O., Alashi, A. M., Nwachukwu, I. D., Fagbemi, T. N., & Aluko, R. E. (2021). Functional properties of sesame (*Sesamum indicum* Linn) seed protein fractions. *Food Production, Processing and Nutrition*, 3, 1-16.
- In, M. J. (2020). Improvement of protein extraction efficiency from defatted sesame meal with thermal and enzymatic treatments. *Journal of Applied Biological Chemistry*, 63(4), 291-295.
- Jeong, H., Park, D. H., Seo, H. G., Choi, M. J., & Cho, Y. (2020). Physicochemical Properties of Dried Ginseng Powder Manufactured using Different Roasting Pretreatments and Cryogenic Milling conditions.

- Kadhim, A. M., & Shakir, K. A. (2019). Prepration of Sesame Seed Protein Isolate and Studying The Effect of Enzymtic Hydrolysis in Antioxidant Activities. *The Iraqi Journal of Agricultural Science*, 50(2), 713-720.
- Kaewjumpol, G., Oruna-Concha, M. J., Niranjana, K., & Thawornchinsombut, S. (2018). The production of hydrolysates from industrially defatted rice bran and its surface image changes during extraction. *Journal of the Science of Food and Agriculture*, 98(9), 3290-3298.
- Karaca, A. C., Low, N., & Nickerson, M. (2011). Emulsifying properties of chickpea, faba bean, lentil and pea proteins produced by isoelectric precipitation and salt extraction. *Food research international*, 44(9), 2742-2750.
- Karbasi, M., & Madadlou, A. (2018). Interface-related attributes of the Maillard reaction-born glycoproteins. *Critical reviews in food science and nutrition*, 58(10), 1595-1603.
- Karma, I. G. M. (2020). Determination and measurement of color dissimilarity. *Int. J. Eng. Emerg. Technol*, 5(1), 67-71.
- Khanahmadi, M., ahmad Ataei, S., & Danafar, F. (2024). Purification and characterization of beta 1, 3-1, 4 glucanase from *Aspergillus niger* CCUG33991. *Authorea Preprints*.
- Kumar, M., Tomar, M., Potkule, J., Verma, R., Punia, S., Mahapatra, A., ... & Kennedy, J. F. (2021). Advances in the plant protein extraction: Mechanism and recommendations. *Food Hydrocolloids*, 115, 106595.

- Lao, Y., Ye, Q., Wang, Y., Vongsvivut, J., & Selomulya, C. (2023). Quantifying the effects of pre-roasting on structural and functional properties of yellow pea proteins. *Food Research International*, 172, 113180.
- Lawal, S. O., Idowu, A. O., Malomo, S. A., Badejo, A. A., & Fagbemi, T. N. (2021). Effect of toasting on the chemical composition, functional and antioxidative properties of full fat and defatted sesame (*Sesamum indicum* L.) seed flours. *Journal of Culinary Science & Technology*, 19(1), 18-34.
- Li, P., Gasmalla, M. A. A., Zhang, W., Liu, J., Bing, R., & Yang, R. (2016). Effects of roasting temperatures and grinding type on the yields of oil and protein obtained by aqueous extraction processing. *Journal of Food Engineering*, 173, 15-24.
- Lim, H. B., & Kim, D. H. (2018). Effects of roasting conditions on physicochemical properties and antioxidant activities in Ginkgo biloba seeds. *Food science and biotechnology*, 27, 1057-1066.
- Liu, X. Y., Yu, H. Y., Liu, Y. Z., Qin, Z., Liu, H. M., Ma, Y. X., & Wang, X. D. (2022). Isolation and structural characterization of cell wall polysaccharides from sesame kernel. *Lwt*, 163, 113574.
- Lopez, G., Flores, I., Galvez, A., Quirasco, M. and Farres, A. (2003). Development of a liquid nutritional supplement using a *Sesamum indicum* L. protein isolate. *LWT-Food Science and Technology*, 36 (1), 64-74
- Lopes, M. R., de Souza, C. J., Rodrigues, M. Q., Costa, D. A., dos Santos, A. F., de Oliveira, L. L., ... & Fietto, L. G. (2014). Production and characterization of β -

glucanase secreted by the yeast *Kluyveromyces marxianus*. *Applied biochemistry and biotechnology*, 172, 2412-2424.

Lu, W., Chen, X. W., Wang, J. M., Yang, X. Q., & Qi, J. R. (2016). Enzyme-assisted subcritical water extraction and characterization of soy protein from heat-denatured meal. *Journal of Food Engineering*, 169, 250-258.

Maas, R. M., Verdegem, M. C., Lee, C. N., & Schrama, J. W. (2021). Effects and interactions between phytase, xylanase and β -glucanase on growth performance and nutrient digestibility in Nile tilapia. *Animal Feed Science and Technology*, 271, 114767.

Majors, R. E. (2006). Modern techniques for the extraction of solid materials: An update. *LC GC North America*, 24(sep), 73-81.

Mardjan, S.S., Purwanto, E.H., & Pratama, G.Y. (2022). Pengaruh suhu awal dan derajat penyangraian terhadap sifat fisikokimia dan citarasa kopi Arabika Solok. *Jurnal Keteknik Pertanian*, 10(2), 198-122.
<https://doi.org/10.19028/jtep.010.2.108-122>.

Martínez, E., García-Martínez, R., Álvarez-Ortí, M., Rabadán, A., Pardo-Giménez, A., & Pardo, J. E. (2021). Elaboration of gluten-free cookies with seed flours: effects on technological, nutritional, and consumer aspects. *Foods*, 10(10), 1213. doi: <https://doi.org/10.3390/foods10061213>

Mathews, A., Tangirala, A. S., Thirunavookarasu, N., Kumar, S., & Rawson, A. (2022). Protein extraction from sesame meal and its quality measurements. *The Pharma Innovation Journal*, 11(8), 1-6.

Mathews, A., Tangirala, A. S., Kumar, S., Anandharaj, A., & Rawson, A. (2023).

Extraction and Modification of Protein from Sesame Oil Cake by the Application of Emerging Technologies. *Food Chemistry Advances*, 100326.

McCleary, B. V. (2000). Importance of enzyme purity and activity in the measurement of total dietary fiber and dietary fiber components. *Journal of AOAC International*, 83(4), 997-1005.

McClements, D. J.; Newman, E.; McClements, I. F. Plant-Based Milks: A Review of the Science Underpinning Their Design, Fabrication, and Performance. *Compr. Rev. Food Sci. Food Saf.* 2019, 18(6), 2047–2067. DOI: 10.1111/1541-4337.12505.

Mesfin, N., Belay, A., & Amare, E. (2021). Effect of germination, roasting, and variety on physicochemical, techno-functional, and antioxidant properties of chickpea (*Cicer arietinum* L.) protein isolate powder. *Heliyon*, 7(9).

Mohamed Ahmed, I. A., Musa Özcan, M., Uslu, N., Juhaimi, F. A., Osman, M. A., Alqah, H. A., ... & Babiker, E. E. (2020). Effect of microwave roasting on color, total phenol, antioxidant activity, fatty acid composition, tocopherol, and chemical composition of sesame seed and oils obtained from different countries. *Journal of Food Processing and Preservation*, 44(10), e14807.

Momen, S., Alavi, F., & Aider, M. (2021). Alkali-mediated treatments for extraction and functional modification of proteins: Critical and application review. *Trends in Food Science & Technology*, 110, 778-797.

- Moore, A. E., & Stone, B. A. (1972). A β -1, 3-glucan hydrolase from *Nicotiana glutinosa* II. Specificity, action pattern and inhibitor studies. *Biochimica et Biophysica Acta (BBA)-Enzymology*, 258(1), 248-264.
- Mousa, I. A., & Kareem, A. A. (2023, April). Study of the Chemical Structure and Functional Properties of the Isolate of Cress (*Lepidium sativum* L.) Seed Protein. In *IOP Conference Series: Earth and Environmental Science* (Vol. 1158, No. 11, p. 112010). IOP Publishing.
- Mustafa, Y., & Hüseyin, G. (2023). Sesame seed protein: Amino acid, functional, and physicochemical profiles. *Foods and Raw materials*, 11(1), 72-83.
- Nahar, M. K., Zakaria, Z., Hashim, U., & Bari, M. F. (2017). Effect of pH and salt concentration on protein solubility of slaughtered and non-slaughtered broiler chicken meat. *Sains Malaysiana*, 46(5), 719-724.
- Naji, E. Z. (2016). Optimum conditions for the extraction of sesame seed (*sesamum indicum*) proteins and study some of its functional properties. *J. Food and Dairy Sci., Mansoura Univ*, 7(10), 427-433.
- Nasrollahzadeh, F., Roman, L., Swaraj, V. S., Ragavan, K. V., Vidal, N. P., Dutcher, J. R., & Martinez, M. M. (2022). Hemp (*Cannabis sativa* L.) protein concentrates from wet and dry industrial fractionation: Molecular properties, nutritional composition, and anisotropic structuring. *Food Hydrocolloids*, 131, 107755.
- Náthia-Neves, G., & Alonso, E. (2024). Optimization of the subcritical water treatment from sunflower by-product for producing protein and sugar extracts. *Biomass Conversion and Biorefinery*, 14(2), 1637-1650.

- Ndlela, S. C., De Moura, J. M. L. N., Olson, N. K., & Johnson, L. A. (2012). Aqueous extraction of oil and protein from soybeans with subcritical water. *Journal of the American Oil Chemists' Society*, 89, 1145-1153.
- Nouska, C., Deligeorgaki, M., Kyrkou, C., Michaelidou, A. M., Moschakis, T., Biliaderis, C. G., & Lazaridou, A. (2024). Structural and physicochemical properties of sesame cake protein isolates obtained by different extraction methods. *Food Hydrocolloids*, 109757.
- Ochoa-Rivas, A., Nava-Valdez, Y., Serna-Saldívar, S. O., & Chuck-Hernández, C. (2017). Microwave and ultrasound to enhance protein extraction from peanut flour under alkaline conditions: Effects in yield and functional properties of protein isolates. *Food and Bioprocess Technology*, 10, 543-555.
- Onsaard, E. (2012). Sesame proteins. *International Food Research Journal*, 19(4).
- Onsaard, E., Pomsamud, P., & Audtum, P. (2010). Functional properties of sesame protein concentrates from sesame meal. *Asian Journal of Food and Agro-Industry*, 3(4), 420-431.
- Padial-Domínguez, M., Espejo-Carpio, F. J., Pérez-Gálvez, R., Guadix, A., & Guadix, E. M. (2020). Optimization of the emulsifying properties of food protein hydrolysates for the production of fish oil-in-water emulsions. *Foods*, 9(5), 636.
- Pathak, N., Rai, A. K., Kumari, R., & Bhat, K. V. (2014). Value addition in sesame: A perspective on bioactive components for enhancing utility and profitability. *Pharmacognosy reviews*, 8(16), 147.

- Peng, W., Kong, X., Chen, Y., Zhang, C., Yang, Y., & Hua, Y. (2016). Effects of heat treatment on the emulsifying properties of pea proteins. *Food Hydrocolloids*, 52, 301-310.
- Perović, M. N., Jugović, Z. D. K., & Antov, M. G. (2020). Improved recovery of protein from soy grit by enzyme-assisted alkaline extraction. *Journal of Food Engineering*, 276, 109894.
- Perrot, T., Pauly, M., & Ramírez, V. (2022). Emerging roles of β -glucanases in plant development and adaptative responses. *Plants*, 11(9), 1119.
- Plaza, M., & Turner, C. (2015). Pressurized hot water extraction of bioactives. *TrAC Trends in Analytical Chemistry*, 71, 39-54.
- Pojić, M., Mišan, A., & Tiwari, B. (2018). Eco-innovative technologies for extraction of proteins for human consumption from renewable protein sources of plant origin. *Trends in Food Science & Technology*, 75, 93-104.
- Powell, T., Bowra, S., & Cooper, H. J. (2016). Subcritical water processing of proteins: An alternative to enzymatic digestion?. *Analytical chemistry*, 88(12), 6425-6432.
- Pratumteep, A., Sansernsuk, J., Nitisinprasert, S., & Apiraksakorn, J. (2010). Production, characterization and hydrolysatation products of xylanase from *Bacillus subtilis* GN156. *KKU Res J*, 15, 343-350.
- Pu, Y., Wang, J. X., Wang, D., Foster, N. R., & Chen, J. F. (2019). Subcritical water processing for nanopharmaceuticals. *Chemical Engineering and Processing-Process Intensification*, 140, 36-42.

- Punnongwa, W., Wardkhean, N., Chatngern, A., Seedama, W., Hanprakhon, W., & Jantawa, A. Biologically active substances and their antioxidant activity. Khao Khaow Dawk Mali 105 Bioactive compounds and antioxidant activities of Khao Khaow Dawk Mali 105.
- Puri, M., Sharma, D., & Barrow, C. J. (2012). Enzyme-assisted extraction of bioactives from plants. *Trends in biotechnology*, 30(1), 37-44.
- Rababah, T., AL-U'DATT, M. U. H. A. M. M. A. D., AL-MAHASNEH, M. A. J. D. I., ODEH, A., AJOULY, T. E., & Feng, H. (2017). Effect of processing and storage at different temperatures on the physicochemical and minerals content of sesame seeds and tehina. *Bulgarian Journal of Agricultural Science*, 23(5).
- Raeisi Ardali, F., Sharifan, A., Mousavi, S. M., Mortazavian, A. M., & Jannat, B. (2023). Production of rice-by product protein isolate using the subcritical water extraction method. *Journal of Nutrition and Food Security*, 8(1), 47-57.
- Rommi, K. (2016). *Enzyme-aided recovery of protein and protein hydrolyzates from rapeseed cold-press cake: Dissertation*. [Dissertation, University of Helsinki]. VTT Technical Research Centre of Finland. <https://publications.vtt.fi/pdf/science/2016/S130.pdf>
- Rosset, M., Acquaro, V. R., & Beléia, A. D. P. (2014). Protein extraction from defatted soybean flour with V iscozyme
- Ruiz-Armenta, X. A., Ruiz-Armenta, J. E., Espinoza-Moreno, R. J., Gutiérrez-Dorado, R., Aguilar-Palazuelos, E., Zazueta-Morales, J. D. J., & Gómez-Favela, M. A. (2022). Use of sesame by-product and optimized extrusion to

obtain a functional flour with improved techno-functional, nutritional and antioxidant properties. *Acta universitaria*, 32.

Sá, A. G. A., Pacheco, M. T. B., Moreno, Y. M. F., & Carciofi, B. A. M. (2022).

Cold-pressed sesame seed meal as a protein source: Effect of processing on the protein digestibility, amino acid profile, and functional properties. *Journal of Food Composition and Analysis*, 111, 104634.

Şahin, S., & Elhussein, E. A. A. (2018). Assessment of sesame (*Sesamum indicum*

L.) cake as a source of high-added value substances: from waste to health. *Phytochemistry Reviews*, 17, 691-700.

Sari, Y. W., Mulder, W. J., Sanders, J. P., & Bruins, M. E. (2015). Towards plant

protein refinery: review on protein extraction using alkali and potential enzymatic assistance. *Biotechnology journal*, 10(8), 1138-1157.

Scarabattoli, L., Sangiorgio, S., Romagnuolo, F., Gelati, L., Cavuoto, D., Rabuffetti,

M., ... & Speranza, G. (2023). Use of carbohydrases to promote protein extraction from rice bran and soybean meal: A comparative study. *LWT*, 184, 115060.

Seid, F., & Mehari, B. (2022). Elemental and proximate compositions of sesame

seeds and the underlying soil from Tsegede, Ethiopia. *International Journal of Analytical Chemistry*, 2022.

Shafiqur, R., Islam, A., Rahman, M. M., Uddin, M. B., & Mazumder, A. R. (2018).

Isolation of protein from defatted peanut meal and characterize their nutritional profile. *Chem Res J*, 3(2), 187-196.

- Sharma, L., Singh, C., & Sharma, H. K. (2016). Assessment of functionality of sesame meal and sesame protein isolate from Indian cultivar. *Journal of Food Measurement and Characterization*, 10, 520-526.
- Sharma, C., Singh, B., Hussain, S. Z., & Sharma, S. (2017). Investigation of process and product parameters for physicochemical properties of rice and mung bean (*Vigna radiata*) flour based extruded snacks. *Journal of food science and technology*, 54, 1711-1720.
- Shori, A. B. (2016). Influence of food matrix on the viability of probiotic bacteria: A review based on dairy and non-dairy beverages. *Food bioscience*, 13, 1-8.
- Skylas, D. J., Molloy, M. P., Willows, R. D., Blanchard, C. L., & Quail, K. J. (2017). Characterisation of protein isolates prepared from processed mungbean (*Vigna radiata*) flours. *Journal of Agricultural Science*, 9(12), 1-10.
- Stone, A. K., Parolia, S., House, J. D., Wang, N., & Nickerson, M. T. (2021). Effect of roasting pulse seeds at different tempering moisture on the flour functional properties and nutritional quality. *Food Research International*, 147, 110489.
- Sun, H., Fan, J., Sun, H., Jiang, G., Meng, Y., Zeng, X., ... & Liu, X. (2022). Study on protein structures of eight mung bean varieties and freeze-thaw stability of protein-stabilized emulsions. *Foods*, 11(21), 3343.
- Sunil, L., Appaiah, P., Prasanth Kumar, P. K., & Gopala Krishna, A. G. (2015). Preparation of food supplements from oilseed cakes. *Journal of food science and technology*, 52, 2998-3005.

- Tarafdar, A., Sirohi, R., Gaur, V. K., Kumar, S., Sharma, P., Varjani, S., ... & Sim, S. J. (2021). Engineering interventions in enzyme production: Lab to industrial scale. *Bioresource technology*, 326, 124771.
- Tenyang, N., Ponka, R., Tiencheu, B., Djikeng, F. T., Azmeera, T., Karuna, M. S., ... & Womeni, H. M. (2017). Effects of boiling and roasting on proximate composition, lipid oxidation, fatty acid profile and mineral content of two sesame varieties commercialized and consumed in Far-North Region of Cameroon. *Food chemistry*, 221, 1308-1316.
- Tirgar, M., Silcock, P., Carne, A., & Birch, E. J. (2017). Effect of extraction method on functional properties of flaxseed protein concentrates. *Food chemistry*, 215, 417-424.
- Truong, K. T., & Rumpagaporn, P. (2019). Oligosaccharides preparation from rice bran arabinoxylan by two different commercial endoxylanase enzymes. *Journal of nutritional science and vitaminology*, 65(Supplement), S171-S174. <https://doi.org/10.3177/jnsv.65.S171>
- Tsai, Y. J., Lin, L. Y., Yang, K. M., Chiang, Y. C., Chen, M. H., & Chiang, P. Y. (2021). Effects of roasting sweet potato (*Ipomoea batatas* l. lam.): Quality, volatile compound composition, and sensory evaluation. *Foods*, 10(11), 2602.
- Viana, L., & English, M. (2022). The impact of dehulling and germination on the physiochemical, protein solubility and water and oil holding capacities of yellow eye bean (*Phaseolus vulgaris* L.) protein concentrates. *Frontiers in Sustainable Food Systems*, 6, 855788.

- Viana, L., & English, M. (2022). The impact of dehulling and germination on the physiochemical, protein solubility and water and oil holding capacities of yellow eye bean (*Phaseolus vulgaris* L.) protein concentrates. *Frontiers in Sustainable Food Systems*, 6, 855788.
- Wan, Y., Zhou, Q., Zhao, M., & Hou, T. (2023). Byproducts of Sesame Oil Extraction: Composition, Function, and Comprehensive Utilization. *Foods*, 12(12), 2383.
- Wang, H., Xiang, L., Rao, P., Ke, L., Wu, B., Chen, S., ... & Su, P. (2022). Effects of pretreatments on structural and functional changes of oat protein isolate. *Cereal Chemistry*, 99(1), 90-99.
- Wang, J. L., Ruan, H., Zhang, H. F., Zhang, Q., Zhang, H. B., He, G. Q., & Shen, S. R. (2007). Characterization of a Thermostable and Acidic-Tolerable β -Glucanase from Aerobic Fungi *Trichoderma koningii* ZJU-T. *Journal of food science*, 72(9), C452-C456.
- Wang, K., Cao, R., Wang, M., Lin, Q., Zhan, R., Xu, H., & Wang, S. (2019). A novel thermostable GH10 xylanase with activities on a wide variety of cellulosic substrates from a xylanolytic *Bacillus* strain exhibiting significant synergy with commercial Celluclast 1.5 L in pretreated corn stover hydrolysis. *Biotechnology for biofuels*, 12, 1-13.
- Wei, P., Zhao, F., Wang, Z., Wang, Q., Chai, X., Hou, G., & Meng, Q. (2022). Sesame (*sesamum indicum* l.): A comprehensive review of nutritional value, phytochemical composition, health benefits, development of food, and industrial applications. *Nutrients*, 14(19), 4079.

- Wongwatcharayothin, W., Thawornchinsombut, S., Jongjaeronrak, A. (2022). Effect of Carbohydrate-Hydrolyzing Enzyme Pre-treatments on Rice Bran Protein Extraction through Alkali Subcritical-Water Technique. *SSRN Electronic Journal*.
- Wu, J., Zhong, F., Li, Y., Shoemaker, C. F., Xia, W. (2013). Preparation and characterization of pullulan-chitosan and pullulan-carboxymethyl chitosan blended films. *Food Hydrocolloids*, 30 (1), 82-91.
- Yadav, P., Maharjan, J., Korpole, S., Prasad, G. S., Sahni, G., Bhattarai, T., & Sreerama, L. (2018). Production, purification, and characterization of thermostable alkaline xylanase from *Anoxybacillus kamchatkensis* NASTPD13. *Frontiers in bioengineering and biotechnology*, 6, 65.
- Yan, X., Wang, Y., Chen, Y., Xie, J., & Yu, Q. (2021). Effect of roasting duration on the solubility, structure, and IgE-binding capacity of cashew nut proteins. *Innovative Food Science & Emerging Technologies*, 68, 102635.
- Yaseen, G., Ahmad, M., Zafar, M., Akram, A., Sultana, S., Ahmed, S. N., & Kilic, O. (2021). Sesame (*Sesamum indicum* L.). In *Green Sustainable Process for Chemical and Environmental Engineering and Science* (pp. 253-269). Elsevier.
- Yilmaz, E., & Emir, D. D. (2016). Extraction and functional properties of proteins from pre-roasted and enzyme treated poppyseed (*Papaver somniferum* L.) press cakes. *Journal of oleo science*, 65(4), 319-329.
- Yu, J., Ahmedna, M., & Goktepe, I. (2007). Peanut protein concentrate: Production and functional properties as affected by processing. *Food chemistry*, 103(1), 121-129.

- Yulianto, M. E., Jos, B., & Budiyo, B. (2023). Kinetic Modelling of Liquid-Solid Extraction of Bioactive Compounds from Ginger Waste using Subcritical Water. *Saintekno: Jurnal Sains dan Teknologi*, 21(1), 28-35.
- Yusuf, A. A., Ayedun, H., & Sanni, L. O. (2008). Chemical composition and functional properties of raw and roasted Nigerian benniseed (*Sesamum indicum*) and bambara groundnut (*Vigna subterranean*). *Food Chemistry*, 111(2), 277-282.
- Zainan, N. H., Sapardi, M. A. M., Ho, B. C. H., Siajam, S. I., Kamal, S. M. M., Danquah, M. K., & Harun, R. (2022). Correction to: Kinetic and thermodynamic characterization of amino acids generation via subcritical water reaction of microalgae *Nannochloropsis* sp. biomass. *Biomass Conversion and Biorefinery*, 1-1.
- Zhang, C., Sanders, J. P., Xiao, T. T., & Bruins, M. E. (2015). How does alkali aid protein extraction in green tea leaf residue: a basis for integrated biorefinery of leaves. *PloS one*, 10(7), e0133046.
- Zhang, D., Li, X., Cao, Y., Wang, C., & Xue, Y. (2020). Effect of roasting on the chemical components of peanut oil. *Lwt*, 125, 109249.
- Zhang, D., Li, X., Zhang, Z., Zhang, J., Sun, Q., Duan, X., ... & Cao, Y. (2022). Influence of roasting on the physicochemical properties, chemical composition and antioxidant activities of peanut oil. *LWT*, 154, 112613.
- Zhang, J., Wen, C., Zhang, H., Duan, Y., & Ma, H. (2020). Recent advances in the extraction of bioactive compounds with subcritical water: A review. *Trends in Food Science & Technology*, 95, 183-195.

- Zhang, Q. T., Tu, Z. C., Wang, H., Huang, X. Q., Fan, L. L., Bao, Z. Y., & Xiao, H. (2015). Functional properties and structure changes of soybean protein isolate after subcritical water treatment. *Journal of food science and technology*, 52, 3412-3421.
- Zhang, X., Li, X., Liu, L., Wang, L., Bora, A. F. M., & Du, L. (2020). Covalent conjugation of whey protein isolate hydrolysates and galactose through Maillard reaction to improve the functional properties and antioxidant activity. *International Dairy Journal*, 102, 104584.
- Zhang, Y., Zhou, F., Zhao, M., Lin, L., Ning, Z., & Sun, B. (2018). Soy peptide nanoparticles by ultrasound-induced self-assembly of large peptide aggregates and their role on emulsion stability. *Food Hydrocolloids*, 74, 62-71.
- Zhang, Y., Chen, Y., Liu, C., Chen, F., & Yin, L. (2023). Effects of Roasting Temperatures on Peanut Oil and Protein Yield Extracted via Aqueous Enzymatic Extraction and Stability of the Oil Body Emulsion. *Foods*, 12(22), 4183.
- Zhao, J., Liu, D., Chen, F., and Liu, G. (2012). Functional properties of sesame seed protein prepared by two different methods. *Journal of Chemical Society of Pakistan* 34(5): 1101-1106
- Zhao, S., Huang, Y., McClements, D. J., Liu, X., Wang, P., & Liu, F. (2022). Improving pea protein functionality by combining high-pressure homogenization with an ultrasound-assisted Maillard reaction. *Food Hydrocolloids*, 126, 107441.