

## REFERENCES

- Adibuduge, Yvonne, & Mahinda Senevirathne. (2023). Potential of Nutmeg (*Myristica Fragrans* Houtt) Leaf Extracts as a Source of Functional Ingredients with Antibacterial, Antifungal and Antioxidant Activities 18 (May):221–36. <https://doi.org/10.4038/jas.v18i2.10255>.
- Alhoshani, Norah M., Mohammed Al-Zharani, Bader Almutairi, Nada H. Aljarba, Norah S. AL-Johani, Nora Alkeraishan, Abdullah A. AlKahtane, Saud Alarifi, Daoud Ali, & Saad Alkahtani. (2022). Antioxidant and Anti-Inflammatory Activities of Lycopene against 5-Fluorouracil-Induced Cytotoxicity in Caco2 Cells. *Saudi Pharmaceutical Journal* 30 (11): 1665–71. <https://doi.org/10.1016/j.jsps.2022.09.011>.
- Andarwulan, Nuri, Ratna Batari, Diny Agustini Sandrasari, Bradley Bolling, and Hanny Wijaya. 2010. “Flavonoid Content and Antioxidant Activity of Vegetables from Indonesia.” *Food Chemistry* 121 (4): 1231–35. <https://doi.org/10.1016/j.foodchem.2010.01.033>.
- Araujo-Padilla, Xelha, Eva Ramón-Gallegos, Francisco Díaz-Cedillo, & Rafael Silva-Torres. (2022). Astragalin Identification in Graviola Pericarp Indicates a Possible Participation in the Anticancer Activity of Pericarp Crude Extracts: In Vitro and in Silico Approaches. *Arabian Journal of Chemistry* 15 (4): 103720. <https://doi.org/10.1016/j.arabjc.2022.103720>.
- Aryanti, Nita, A. Nafiunisa, & Dyah Wardhani. (2019). Conventional and Ultrasound-Assisted Extraction of Anthocyanin from Red and Purple Roselle (*Hibiscus Sabdariffa* L.) Calyces and Characterisation of Its Anthocyanin Powder. *International Food Research Journal* 26 (January): 529–35.
- Barba, F. J., Mariutti, L. R. B., Bragagnolo, N., Mercadante, A. Z., Barbosa-Cánovas, G. V., & Orlie, V. (2017). Bioaccessibility of bioactive compounds from fruits and vegetables after thermal and nonthermal processing. *Trends in Food Science and Technology*, 67, 195–206.
- Basak, Debasish, Mohammad Uddin, & Jake Hancock. (2020). The Role of Oxidative Stress and Its Counteractive Utility in Colorectal Cancer (CRC). *Cancers* 12 (November): 3336. <https://doi.org/10.3390/cancers12113336>.
- Batran, R.Z., E.Y. Ahmed, H.M. Awad, K.A. Ali, & N.A. Abdel Latif. (2023). “EGFR and PI3K/m-TOR Inhibitors: Design, Microwave Assisted Synthesis and Anticancer Activity of Thiazole-Coumarin Hybrids.” *RSC Advances* 13 (42): 29070–85. <https://doi.org/10.1039/d3ra03483f>.
- Bazhin, Alexandr V., Pavel P. Philippov, & Svetlana Karakhanova. (2016). Reactive Oxygen Species in Cancer Biology and Anticancer Therapy. *Oxidative Medicine and Cellular Longevity* 2016: 4197815. <https://doi.org/10.1155/2016/4197815>.
- Ben Hlel, Takoua, Thays Borges, Ascensión Rueda, Issam Smaali, M. Nejib Marzouki, & Isabel Seiquer. (2019). Polyphenols Bioaccessibility and Bioavailability Assessment in Ipecac Infusion Using a Combined Assay of Simulated *in vitro* Digestion and Caco-2 Cell Model. *International Journal of Food Science & Technology* 54 (5): 1566–75. <https://doi.org/10.1111/ijfs.14023>.

- Bravo, L. (1998). Polyphenols: Chemistry, Dietary Sources, Metabolism, and Nutritional Significance. *Nutrition Reviews* 56 (11): 317–33. DOI: <https://doi.org/10.1111/j.1753-4887.1998.tb01670.x>.
- Cañas, Silvia, Miguel Rebollo-Hernanz, María Martín-Trueba, Cheyenne Braojos, Alicia Gil-Ramirez, Vanesa Benítez, María A. Martín-Cabrejas, & Yolanda Aguilera. (2023). Exploring the Potential of Phenolic Compounds from the Coffee Pulp in Preventing Cellular Oxidative Stress after in Vitro Digestion. *Food Research International*, June, 113116. <https://doi.org/10.1016/j.foodres.2023.113116>.
- Carbonell-Capella, J. M., Buniowska, M., Barba, F. J., Esteve, M. J., & Frígola, A. (2014). Analytical methods for determining bioavailability and bioaccessibility of bioactive compounds from fruits and vegetables: a review. *Comprehensive Reviews in Food Science and Food Safety*, 13(2), 155–171.
- Chan, E. W. C., Y. Y. Lim, & Mohammed Omar. (2007). Antioxidant and Antibacterial Activity of Leaves of *Etlingera* Species (Zingiberaceae) in Peninsular Malaysia. *Food Chemistry* 104 (4): 1586–93. DOI: <https://doi.org/10.1016/j.foodchem.2007.03.023>.
- Chen, Guan-Lin, Song-Gen Chen, Ying-Ying Zhao, Chun-Xia Luo, Juan Li, & Yong-Qing Gao. (2014). Total Phenolic Contents of 33 Fruits and Their Antioxidant Capacities before and after in Vitro Digestion. *Industrial Crops and Products* 57 (June):150–57. <https://doi.org/10.1016/j.indcrop.2014.03.018>.
- Chiang, Chia-Jung, Hoda Kadouh, & Kequan Zhou. (2013). Phenolic Compounds and Antioxidant Properties of Gooseberry as Affected by in Vitro Digestion. *LWT - Food Science and Technology* 51 (2): 417–22. <https://doi.org/10.1016/j.lwt.2012.11.014>.
- Choon, S.Y., & P. Ding. 2016. Growth Stages of Torch Ginger (*Etlingera Elatior*) Plant. *Sains Malaysiana* 45 (4): 507–15.
- Cvjetko Bubalo, Marina, Senka Vidović, Ivana Radojčić Redovniković, & Stela Jokić. (2018). New Perspective in Extraction of Plant Biologically Active Compounds by Green Solvents. *Food and Bioproducts Processing* 109 (May): 52–73. DOI: <https://doi.org/10.1016/j.fbp.2018.03.001>.
- Dewi, Angela, Umar Santoso, Yudi Pranoto, & Djagal Marseno. (2024). Phytochemical and Antioxidant Activity of Akway (*Drymis Piperita* Hook f.) Stem Bark Ethanol Extract 6 (July):0240307-01 ~ 0240307. <https://doi.org/10.26877/asset.v6i3.598>.
- Diab, Farah, Mohamad Khalil, Giulio Lupidi, Hawraa Zbeeb, Annalisa Salis, Gianluca Damonte, Massimo Bramucci, Piero Portincasa, & Laura Vergani. (2022). “Influence of Simulated In Vitro Gastrointestinal Digestion on the Phenolic Profile, Antioxidant, and Biological Activity of *Thymbra Spicata* L. Extracts. *Antioxidants* (Basel, Switzerland) 11 (9): 1778. <https://doi.org/10.3390/antiox11091778>.
- Do, Quy Diem, Artik Elisa Angkawijaya, Phuong Lan Tran-Nguyen, Lien Huong Huynh, Felycia Edi Soetaredjo, Suryadi Ismadji, & Yi-Hsu Ju. (2014). Effect of Extraction Solvent on Total Phenol Content, Total Flavonoid Content, and Antioxidant Activity of *Limnophila Aromatica*. *Journal of Food and Drug Analysis* 22 (3): 296–302. <https://doi.org/10.1016/j.jfda.2013.11.001>.

- Donhowe, E., Flores, F., Kerr, W., Wicker, L., & Kong, F. (2014). Characterization and in vitro bioavailability of beta-carotene: Effects of microencapsulation method and food matrix. *LWT-Food Science and Technology*, 57(1), 42–48. <https://doi.org/10.1016/j.lwt.2013.12.037>.
- Farid, A., D. Mohamed, D. Mostafa, R. Tarek, V. Sherif, & G. Safwat. (2023). Novel Grape Seed Extract Nanoparticles Attenuate Amikacin-Induced Nephrotoxicity in Rats. *AMB Express* 13 (1). <https://doi.org/10.1186/s13568-023-01639-3>.
- Forman, Henry J., Kelvin J. A. Davies, & Fulvio Ursini. (2014). How Do Nutritional Antioxidants Really Work: Nucleophilic Tone and Para-Hormesis versus Free Radical Scavenging in Vivo. *Free Radical Biology & Medicine* 66 (January): 24–35. DOI: <https://doi.org/10.1016/j.freeradbiomed.2013.05.045>.
- Forman, Henry Jay, & Hongqiao Zhang. (2021). Targeting Oxidative Stress in Disease: Promise and Limitations of Antioxidant Therapy. *Nature Reviews Drug Discovery* 20 (9): 689–709. DOI: <https://doi.org/10.1038/s41573-021-00233-1>.
- Forman, Henry Jay, Matilde Maiorino, & Fulvio Ursini. (2010). Signaling Functions of Reactive Oxygen Species. *Biochemistry* 49 (5): 835–42. DOI: <https://doi.org/10.1021/bi9020378>.
- Funakoshi-Tago, Megumi, Mari Matsutaka, Shingo Hokimoto, Kenji Kobata, Kenji Tago, & Hiroomi Tamura. (2022). Coffee Ingredients, Hydroquinone, Pyrocatechol, and 4-Ethylcatechol Exhibit Anti-Inflammatory Activity through Inhibiting NF-KB and Activating Nrf2. *Journal of Functional Foods* 90 (March):104980. <https://doi.org/10.1016/j.jff.2022.104980>.
- Ghasemzadeh, Ali, Hawa Z. E. Jaafar, Asmah Rahmat, & Sadegh Ashkani. (2015). Secondary Metabolites Constituents and Antioxidant, Anticancer and Antibacterial Activities of *Etlingera Elatior* (Jack) R.M.Sm Grown in Different Locations of Malaysia. *BMC Complementary and Alternative Medicine* 15 (1): 335. DOI: <https://doi.org/10.1186/s12906-015-0838-6>.
- Grzelczyk, Joanna, Dominik Szwajgier, Ewa Baranowska-Wójcik, Grażyna Budryn, Małgorzata Zakłós-Szyda, & Bożena Sosnowska. (2022). Bioaccessibility of Coffee Bean Hydroxycinnamic Acids during in Vitro Digestion Influenced by the Degree of Roasting and Activity of Intestinal Probiotic Bacteria, and Their Activity in Caco-2 and HT29 Cells. *Food Chemistry* 392 (October):133328. <https://doi.org/10.1016/j.foodchem.2022.133328>.
- Guan, Hui, Wenyuan Zhang, Hui Liu, Yang Jiang, Feng Li, Dan Wang, & Yang Liu. 2024. Simultaneous Binding of Quercetin and Catechin to FOXO3 Enhances IKK $\alpha$  Transcription Inhibition and Suppression of Oxidative Stress-Induced Acute Alcoholic Liver Injury in Rats. *Journal of Advanced Research*, January. <https://doi.org/10.1016/j.jare.2024.01.030>.
- Guerra, A., Etienne-Mesmin, L., Livrelli, V., Denis, S., Blanquet-Diot, S., & Alric, M. (2012). Relevance and challenges in modeling human gastric and small intestinal digestion. *Trends in Biotechnology*, 30(11), 591–600.
- Guo, R., Chang, X., Guo, X.; Brennan, C.S., Li, T.; Fu, X., & Liu, R.H. (2017). Phenolic Compounds, Antioxidant Activity, Antiproliferative Activity and Bioaccessibility of Sea Buckthorn (*Hippophaë Rhamnoides* L.) Berries as Affected by in Vitro Digestion. *Food Funct.*, 8, 4229–4240.

- Guo, Yao, Bing Liu, Yaping Geng, Ke Chen, Junyan Li, Xiangju Yin, & Shenshen Zhang. (2024). Fisetin, a Dietary Flavonoid, Promotes Transintestinal Cholesterol Excretion through the Activation of PPAR $\delta$ . *Food Research International* 175 (January):113783. <https://doi.org/10.1016/j.foodres.2023.113783>.
- Guzelmeric, E., H. Sipahi, Y. Özhan, M. Hamitoğlu, S. Helvacıoğlu, G. Düz, & İ.E. Akyıldız. (2023). Comprehensive Estrogenic/Anti-Estrogenic, Anticancer, Mutagenic/Anti-Mutagenic, and Genotoxic/Anti-Genotoxic Activity Studies on Chemically Characterized Black Poplar and Eurasian Aspen Propolis Types. *Journal of Pharmaceutical and Biomedical Analysis* 226. <https://doi.org/10.1016/j.jpba.2023.115241>.
- Hamaguchi, Tsuyoshi, Kenjiro Ono, Atsushi Murase, & Masahito Yamada. (2009). Phenolic Compounds Prevent Alzheimer's Pathology through Different Effects on the Amyloid-Beta Aggregation Pathway. *The American Journal of Pathology* 175 (6): 2557–65. DOI: <https://doi.org/10.2353/ajpath.2009.090417>.
- Hamza, Ali, Muhammad Umar Ijaz, Nazia Ehsan, Hammad Ahmad Khan, Saad Alkahtani, & Usman Atique. (2023). Hepatoprotective Effects of Astragaloside against Polystyrene Microplastics Induced Hepatic Damage in Male Albino Rats by Modulating Nrf-2/Keap-1 Pathway. *Journal of Functional Foods* 108 (September):105771. <https://doi.org/10.1016/j.jff.2023.105771>.
- Hanasaki, Yukiko, Shunjiro Ogawa, & Shozo Fukui. 1994. The Correlation between Active Oxygens Scavenging and Antioxidative Effects of Flavonoids. *Free Radical Biology and Medicine* 16 (6): 845–50. DOI: [https://doi.org/10.1016/0891-5849\(94\)90202-X](https://doi.org/10.1016/0891-5849(94)90202-X).
- Hayashi, T., K. Sawa, M. Kawasaki, M. Arisawa, M. Shimizu, & N. Morita. (1988). Inhibition of Cow's Milk Xanthine Oxidase by Flavonoids. *Journal of Natural Products* 51 (2): 345–48. DOI: <https://doi.org/10.1021/np50056a030>.
- Hayouni, El Akrem, Manaf Abedrabba, Marielle Bouix, & Moktar Hamdi. (2007). The Effects of Solvents and Extraction Method on the Phenolic Contents and Biological Activities *In Vitro* of Tunisian *Quercus Coccifera* L. and *Juniperus Phoenicea* L. Fruit Extracts. *Food Chemistry* 105 (3): 1126–34. <https://doi.org/10.1016/j.foodchem.2007.02.010>.
- Hidalgo, Alyssa, Anita Ferraretto, Ivano De Noni, Michela Bottani, Stefano Cattaneo, Simone Galli, & Andrea Brandolini. (2018). Bioactive Compounds and Antioxidant Properties of Pseudocereals-Enriched Water Biscuits and Their *In Vitro* Digestates. *Food Chemistry* 240 (February):799–807. <https://doi.org/10.1016/j.foodchem.2017.08.014>.
- Hu, Binhong, Songqing Liu, Yuanyue Luo, Jingyu Pu, Xin Deng, Wenjing Zhou, & Yuqing Dong. (2023). Procyanidin B2 Alleviates Uterine Toxicity Induced by Cadmium Exposure in Rats: The Effect of Oxidative Stress, Inflammation, and Gut Microbiota. *Ecotoxicology and Environmental Safety* 263 (September):115290. <https://doi.org/10.1016/j.ecoenv.2023.115290>.
- Kamdi, Sandesh P., Hemant R. Badwaik, Amit Raval, Ajazuddin, and Kartik T. Nakhate. 2021. “Ameliorative Potential of Phloridzin in Type 2 Diabetes-Induced Memory Deficits in Rats.” *European Journal of Pharmacology* 913 (December):174645. <https://doi.org/10.1016/j.ejphar.2021.174645>.

- Kapoor, Mahendra P., Masaaki Sugita, Akinobu Nishimura, Akihiro Sudo, & Tsutomu Okubo. (2018). Influence of Acute Ingestion and Regular Intake of Green Tea Catechins on Resting Oxidative Stress Biomarkers Assays in a Paralleled Randomized Controlled Crossover Supplementation Study in Healthy Men. *Journal of Functional Foods* 45 (June):381–91. <https://doi.org/10.1016/j.jff.2018.04.016>.
- Karaś, M., Jakubczyk, A., Szymanowska, U., Złotek, U., & Zielińska, E. (2017). Digestion and Bioavailability of Bioactive Phytochemicals. *Int. J. Food Sci. Technol.*, 52, 291305. [CrossRef]
- Kazłowska, Katarzyna, Todd Hsu, Chia-Chung Hou, Wen-Chin Yang, & Guo-Jane Tsai. (2010). Anti-Inflammatory Properties of Phenolic Compounds and Crude Extract from *Porphyra Dentata*. *Journal of Ethnopharmacology* 128 (1): 123–30. <https://doi.org/10.1016/j.jep.2009.12.037>.
- Khamhae, Matthawan, Kanyanatt Kanokwiroon, Worrapanit Chansuwan, & Nualpun Sirinupong. (2020). Evaluation on Antioxidative Capacity, Nephroprotective Effect, and DNA Damage Protection of Mixed Low Potassium Vegetables and Fruits Juice Powder in HEK-293 Cells. *Functional Foods in Health and Disease* 10 (March):111–26. <https://doi.org/10.31989/ffhd.v10i3.698>.
- Korkina, Ludmila G., & Igor B. Afanas'Ev. (1996). Antioxidant and Chelating Properties of Flavonoids. *Advances in Pharmacology*, edited by Helmut Sies, 38:151–63. Academic Press. [https://doi.org/10.1016/S1054-3589\(08\)60983-7](https://doi.org/10.1016/S1054-3589(08)60983-7).
- Kurt-Celep, I., D. Zheleva-Dimitrova, K.I. Sinan, A.I. Uba, Nilofar, M.F. Mahomoodally, M.Z. Aumeeruddy, U. Cakilcioglu, S. Dall'Acqua, & G. Zengin. (2024). Uncovering Chemical Profiles, Biological Potentials, and Protection Effect against ECM Destruction in H<sub>2</sub>O<sub>2</sub>-Treated HDF Cells of the Extracts of *Stachys Tundjeliensis*. *Archiv Der Pharmazie* 357 (2). <https://doi.org/10.1002/ardp.202300528>.
- Lachumy, Subramanion Jo Thy, Sreenivasan Sasidharan, Vello Sumathy, & Zakaria Zuraini. (2010). Pharmacological Activity, Phytochemical Analysis and Toxicity of Methanol Extract of *Etilingera Elatior* (Torch Ginger) Flowers. *Asian Pacific Journal of Tropical Medicine* 3 (10): 769–74. [https://doi.org/10.1016/S1995-7645\(10\)60185-X](https://doi.org/10.1016/S1995-7645(10)60185-X).
- Lang, Yuxi, Ningxuan Gao, Zhihuan Zang, Xianjun Meng, Yang Lin, Shufang Yang, Yiyun Yang, Zhufeng Jin, & Bin Li. (2024). Classification and Antioxidant Assays of Polyphenols: A Review. *Journal of Future Foods*, Bioaccessibility of food-derived bioactive ingredients and their health-promoting mechanisms, 4 (3): 193–204. <https://doi.org/10.1016/j.jfutfo.2023.07.002>.
- Lee, J., N. Koo, & D. B. Min. (2004). Reactive Oxygen Species, Aging, and Antioxidative Nutraceuticals. *Comprehensive Reviews in Food Science and Food Safety* 3 (1): 21–33. <https://doi.org/10.1111/j.1541-4337.2004.tb00058.x>.
- Lee, Seung-Bin, Ji-Sun Shin, Hee-Soo Han, Hwi-Ho Lee, Jong Cheol Park, & Kyung-Tae Lee. (2018). Kaempferol 7-O-β-D-Glucoside Isolated from the Leaves of *Cudrania Tricuspidata* Inhibits LPS-Induced Expression of pro-Inflammatory Mediators through Inactivation of NF-κB, AP-1, and JAK-STAT in RAW 264.7 Macrophages. *Chemico-Biological Interactions* 284 (March):101–11. DOI: <https://doi.org/10.1016/j.cbi.2018.02.022>.

- Leyva-Soto, Aldo, Rocío Alejandra Chavez-Santoscoy, Omar Porras, Miltha Hidalgo-Ledesma, Aracely Serrano-Medina, Ana Alejandra Ramírez-Rodríguez, & Nydia Alejandra Castillo-Martinez. (2021). Epicatechin and Quercetin Exhibit *In Vitro* Antioxidant Effect, Improve Biochemical Parameters Related to Metabolic Syndrome, and Decrease Cellular Genotoxicity in Humans. *Food Research International* 142 (April):110101. <https://doi.org/10.1016/j.foodres.2020.110101>.
- Li, Chun Xiao, Fu Rong Wang, Bing Zhang, Ze Yuan Deng, & Hong Yan Li. (2023). Stability and Antioxidant Activity of Phenolic Compounds during *In Vitro* Digestion. *Journal of Food Science* 88 (2): 696–716. <https://doi.org/10.1111/1750-3841.16440>.
- Li, Huan, Wenjiang He, Saiqing Xu, Rongrong Wang, Shuai Ge, Haishan Xu, Yang Shan, & Shenghua Ding. (2024). Grafting Chlorogenic Acid Enhanced the Antioxidant Activity of Curdlan Oligosaccharides and Modulated Gut Microbiota.” *Food Chemistry: X* 21 (March):101075. <https://doi.org/10.1016/j.fochx.2023.101075>.
- Li, W.-Y., J.-Y. Liu, Z.-X. Wang, K.-Y. Wang, C.-X. Huang, W. He, & J.-L. Song. (2024). Sinapic Acid Attenuates Chronic DSS-Induced Intestinal Fibrosis in C57BL/6J Mice by Modulating NLRP3 Inflammasome Activation and the Autophagy Pathway. *ACS Omega* 9 (1): 1230–41. <https://doi.org/10.1021/acsomega.3c07474>.
- Liu, Guirong, Jiangzuo Luo, Wenwen Xiong, Tingyun Meng, Xinyi Zhang, Yali Liu, Changqi Liu, & Huilian Che. (2024). Chlorogenic Acid Alleviates Crayfish Allergy by Altering the Structure of Crayfish Tropomyosin and Upregulating TLR8. *Food Chemistry* 443 (June):138614. <https://doi.org/10.1016/j.foodchem.2024.138614>.
- Liu, Lei, Rencheng Wang, Ran Xu, Yuening Chu, & Weirong Gu. (2022). Procyanidin B2 Ameliorates Endothelial Dysfunction and Impaired Angiogenesis via the Nrf2/PPAR $\gamma$ /SFlt-1 Axis in Preeclampsia. *Pharmacological Research* 177 (March):106127. <https://doi.org/10.1016/j.phrs.2022.106127>.
- Liu, Yan, Tian-qi Li, Jin Bai, Wei-li Liu, Zi-rou Wang, Chong Feng, Ling-ling Pu, Xin-xing Wang, & Hui Liu. (2024). Isoquercitrin Attenuates the Osteoclast-Mediated Bone Loss in Rheumatoid Arthritis via the Nrf2/ROS/NF-KB Pathway. *Biochimica et Biophysica Acta (BBA) - Molecular Basis of Disease* 1870 (2): 166977. <https://doi.org/10.1016/j.bbadis.2023.166977>.
- McClements, D. J. (2010). Design of nano-laminated coatings to control bioavailability of lipophilic food components. *Journal of Food Science*, 75(1), R30–R42.
- Metodiewa, Diana, Agata Kochman, & Stefan Karolczak. (1997). Evidence for Antiradical and Antioxidant Properties of Four Biologically Active N, N-Diethylamioethyl Ethers of Flavanone Oximes: A Comparison with Natural Polyphenolic Flavonoid (Rutin) Action. *Biochemistry and Molecular Biology International* 41 (5): 1067–75. <https://doi.org/10.1080/15216549700202141>.
- Minekus, M., M. Alminger, P. Alvito, S. Ballance, T. Bohn, C. Bourlieu, & F. Carrière. (2014). A Standardised Static *In Vitro* Digestion Method Suitable for Food – an International Consensus. *Food & Function* 5 (6): 1113–24. <https://doi.org/10.1039/C3FO60702J>.

- Muhlack, Richard A., Ravichandra Potumarthi, & David W. Jeffery. (2018). Sustainable Wineries through Waste Valorisation: A Review of Grape Marc Utilisation for Value-Added Products. *Waste Management* 72 (February): 99–118. <https://doi.org/10.1016/j.wasman.2017.11.011>.
- Mustafa, Yasser Fakri. (2024). “Coumarins Derived from Natural Methoxystilbene as Oxidative Stress-Related Disease Alleviators: Synthesis and in Vitro-in Silico Study. *Journal of Molecular Structure* 1302 (April):137471. <https://doi.org/10.1016/j.molstruc.2023.137471>.
- Niki, Etsuo. (2010). Assessment of Antioxidant Capacity in Vitro and in Vivo. *Free Radical Biology and Medicine* 49 (4): 503–15. <https://doi.org/10.1016/j.freeradbiomed.2010.04.016>.
- Nor Asiah Muhamad, Nor, Noordin Liza, Bakar Nor Hidayah Abu, & Ahmad Wan Amir Nizam Wan. (2020). Evaluation of Antidiabetic Activities of *Etlingera elatior* Flower Aqueous Extract in Vitro and in Vivo. *Journal of Applied Pharmaceutical Science*, August. <https://doi.org/10.7324/JAPS.2020.10805>.
- Oliveira, Alane Cabral de, Iara Barros Valentim, Marília Oliveira Fonseca Goulart, Cícero Alexandre Silva, Etelvino José Henriques Bechara, & Maria Teresa Salles Trevisan. (2009). Fontes vegetais naturais de antioxidantes. *Química Nova* 32: 689–702. <https://doi.org/10.1590/S0100-40422009000300013>.
- Oueslati, Samia, Najla Trabelsi, Mondher Boulaaba, Jean Legault, Chedly Abdelly, & Riadh Ksouri. (2012). Evaluation of Antioxidant Activities of the Edible and Medicinal Suaeda Species and Related Phenolic Compounds. *Industrial Crops and Products* 36 (1): 513–18. <https://doi.org/10.1016/j.indcrop.2011.10.006>.
- Pai, Ming-Shang, Kaw-Chen Wang, Kun-Chieh Yeh, & Su-Jane Wang. (2023). Stabilization of Mitochondrial Function by Chlorogenic Acid Protects against Kainic Acid-Induced Seizures and Neuronal Cell Death in Rats. *European Journal of Pharmacology* 961 (December):176197. <https://doi.org/10.1016/j.ejphar.2023.176197>.
- Panche, A. N., A. D. Diwan, & S. R. Chandra. (2016). Flavonoids: An Overview. *Journal of Nutritional Science* 5: e47. <https://doi.org/10.1017/jns.2016.41>.
- Parada, J., & Aguilera, J. M. (2007). Food microstructure affects the bioavailability of several nutrients. *Journal of Food Science*, 72(2), R21–R32.
- Peredo Pozos, Gregorio Iván, Mario Alberto Ruiz-López, Juan Francisco Zamora Nátera, Carlos Álvarez Moya, Lucia Barrientos Ramírez, Mónica Reynoso Silva, & Ramón Rodríguez Macías. (2020). Antioxidant Capacity and Antigenotoxic Effect of *Hibiscus Sabdariffa* L. Extracts Obtained with Ultrasound-Assisted Extraction Process. *Applied Sciences* 10 (2): 560. <https://doi.org/10.3390/app10020560>.
- Petricevich, V.L., M. Cedillo-Cortezano, & R. Abarca-Vargas. (2022). Chemical Composition, Antioxidant Activity, Cytoprotective and In Silico Study of Ethanolic Extracts of *Bougainvillea × Buttiana* (Var. Orange and Rose). *Molecules* 27 (19). <https://doi.org/10.3390/molecules27196555>.
- Phuriyakorn, S., Seechamnaturakit, V., & Wichienhot, S. (2019). Antioxidant and Prebiotic Gut-Microbiota Effects of Dietary Phenolic Compounds in *Etlingera elatior* Extracts. *International Food Research Journal* 26(6): 1751-1761 (December 2019).

- Purba, Chrisyella Cendara, Yunika Mayangsari, Widiastuti Setyaningsih, Worrapanit Chansuwan, & Nualpun Sirinupong. (2024). Bioactive Compounds of Citrus Hystrix Peel Ethanolic Extract and Their Antioxidant Potential under Hydrogen Peroxide-Induced Oxidative Stress in Caco-2 Cells. *Future Foods* 9 (June):100350. <https://doi.org/10.1016/j.fufo.2024.100350>.
- Rachkeeree, Apinya, Kuttiga Kantadoung, Ratchuporn Suksathan, Ratchadawan Puangpradab, Paul Alexander Page, & Sarana Rose Sommano. (2018). Nutritional Compositions and Phytochemical Properties of the Edible Flowers from Selected Zingiberaceae Found in Thailand. *Frontiers in Nutrition* 5. <https://www.frontiersin.org/articles/10.3389/fnut.2018.00003>.
- Rodrigues, José A. G., Edfranck de S. O. Vanderlei, Luana M. C. M. Silva, Ianna W. F. de Araújo, Ismael N. L. de Queiroz, Gabriela A. de Paula, & Ticiana M. Abreu. (2012). Antinociceptive and Anti-Inflammatory Activities of a Sulfated Polysaccharide Isolated from the Green Seaweed *Caulerpa Cupressoides*. *Pharmacological Reports* 64 (2): 282–92. [https://doi.org/10.1016/S1734-1140\(12\)70766-1](https://doi.org/10.1016/S1734-1140(12)70766-1).
- Romero-Márquez, Jose M., María D. Navarro-Hortal, Tamara Y. Forbes-Hernández, Alfonso Varela-López, Juan G. Puentes, Cristina Sánchez-González, & Sandra Sumalla-Cano. (2024). Effect of Olive Leaf Phytochemicals on the Anti-Acetylcholinesterase, Anti-Cyclooxygenase-2 and Ferric Reducing Antioxidant Capacity. *Food Chemistry* 444 (June):138516. <https://doi.org/10.1016/j.foodchem.2024.138516>.
- Rotariu, Dragos, Emilia Elena Babes, Delia Mirela Tit, Madalina Moisi, Cristiana Bustea, Manuela Stoicescu, & Andrei-Flavius Radu. (2022). Oxidative Stress – Complex Pathological Issues Concerning the Hallmark of Cardiovascular and Metabolic Disorders. *Biomedicine & Pharmacotherapy* 152 (August): 113238. <https://doi.org/10.1016/j.biopha.2022.113238>.
- Ruijters, Erik J. B., Antje R. Weseler, Cécile Kicken, Guido R. M. M. Haenen, & Aalt Bast. (2013). The Flavanol (-)-Epicatechin and Its Metabolites Protect against Oxidative Stress in Primary Endothelial Cells via a Direct Antioxidant Effect. *European Journal of Pharmacology* 715 (1): 147–53. <https://doi.org/10.1016/j.ejphar.2013.05.029>.
- Salimi, Rahil, Roya Naderi, & Alireza Shirpoor. (2023). Involvement of MiR-27a/Smurf1/ TNF- $\alpha$  and Mitochondrial Apoptotic Pathway in Apoptosis Induced by Cerebral Ischemia–Reperfusion Injury in Rats: The Protective Effect of Chlorogenic Acid. *Neuroscience Letters* 817 (November):137529. <https://doi.org/10.1016/j.neulet.2023.137529>.
- Shaemi, Fatemeh, Majid Nejati, Haleh Sarrafnia, Mahmood Khaksary Mahabady, Zeinab Tamtaji, Abdolkarim Talebi Taheri, Michael R. Hamblin, Mohammad Reza Zolfaghari, Azhdar Heydari, & Hamed Mirzaei. (2023). Expression of Selected Long Non-Coding RNAs in Gastric Cancer Cells Treated with Coumarin: Possible Mechanisms for Anti-Cancer Activity. *Pathology - Research and Practice* 252 (December):154914. <https://doi.org/10.1016/j.prp.2023.154914>.
- Sies, Helmut, Carsten Berndt, & Dean P. Jones. (2017). Oxidative Stress. *Annual Review of Biochemistry* 86 (June): 715–48. <https://doi.org/10.1146/annurev-biochem-061516-045037>.

- Siripongvutikorn, Sunisa, Kanyamanee Pumethakul, Chutha Yupanqui, Vatcharee Seechamnaturakit, Preeyabhorn Detarun, Tanyarath Utaipan, Nualpun Sirinupong, Worrapanit Chansuwan, Thawien Wittaya, & Rajnibhas Samakradhamrongthai. (2024). Phytochemical Profiling and Antioxidant Activities of the Most Favored Ready-to-Use Thai Curries, Pad-Ka-Proa (Spicy Basil Leaves) and Massaman. *Foods* 13 (February):582. <https://doi.org/10.3390/foods13040582>.
- Subbiah, Viganini, Faezeh Ebrahimi, Osman Tuncay Agar, Frank R. Dunshea, Colin J. Barrow, & Hafiz A. R. Suleria. (2024). *In Vitro* Digestion and Colonic Fermentation of Phenolic Compounds and Their Antioxidant Potential in Australian Beach-Cast Seaweeds. *Scientific Reports* 14 (1): 4335. <https://doi.org/10.1038/s41598-024-54312-5>.
- Sun, Ting, & Chi-Tang Ho. (2005). Antioxidant Activities of Buckwheat Extracts. *Food Chemistry* 90 (4): 743–49. <https://doi.org/10.1016/j.foodchem.2004.04.035>.
- Sunghong, Bunleu, & Buavaroon Srichaikul. (2018). Antioxidant Activities, Acute Toxicity and Chemical Profiling of Torch Ginger (*Etlingera Elatior* Jack.) Inflorescent Extract. *Pharmacognosy Journal* 10 (5): 979–82. <https://doi.org/10.5530/pj.2018.5.166>.
- Tian, Shasha, Yingying Wei, Hongtao Hu, & Huajun Zhao. (2022). Mixed Computational-Experimental Study to Reveal the Anti-Metastasis and Anti-Angiogenesis Effects of Astragalin in Human Breast Cancer. *Computers in Biology and Medicine* 150 (November):106131. <https://doi.org/10.1016/j.combiomed.2022.106131>.
- Turkmen, Nihal, Ferda Sari, & Y. Sedat Velioglu. 2006. Effects of Extraction Solvents on Concentration and Antioxidant Activity of Black and Black Mate Tea Polyphenols Determined by Ferrous Tartrate and Folin–Ciocalteu Methods. *Food Chemistry* 99 (4): 835–41. <https://doi.org/10.1016/j.foodchem.2005.08.034>.
- Uwanyagasani, Grace, Edinah Song'oro, Joseph Ndacyayisenga, Ermias M. Terefe, & Joseph Muriuki. (2024). *In Vitro* Activity of Various Kenyan Tea Extracts against HeLa Human Cervical Cancer Cell Line and Molecular Docking of Tea Catechins on High-Risk HPV16E6 Protein. *Informatics in Medicine Unlocked* 44 (January):101420. <https://doi.org/10.1016/j.imu.2023.101420>.
- Vidana Gamage, Gayan Chandrajith, & Wee Sim Choo. (2023). Hot Water Extraction, Ultrasound, Microwave and Pectinase-Assisted Extraction of Anthocyanins from Blue Pea Flower. *Food Chemistry Advances* 2 (October):100209. <https://doi.org/10.1016/j.focha.2023.100209>.
- Walker, Edward H., Michael E. Pacold, Olga Perisic, Len Stephens, Philip T. Hawkins, Matthias P. Wymann, & Roger L. Williams. (2000). Structural Determinants of Phosphoinositide 3-Kinase Inhibition by Wortmannin, LY294002, Quercetin, Myricetin, and Staurosporine. *Molecular Cell* 6 (4): 909–19. [https://doi.org/10.1016/S1097-2765\(05\)00089-4](https://doi.org/10.1016/S1097-2765(05)00089-4).
- Wijekoon, Jeevani Osadee, & R. Bhat. (2011). Evaluation of Nutritional Quality of Torch Ginger (*Etlingera Elatior* Jack.) Inflorescence. *International Food Research Journal* 18(4): 1415-1420 (2011).
- Wijekoon, M. M. Jeevani Osadee, Rajeev Bhat, & Alias A. Karim. (2011). Effect of Extraction Solvents on the Phenolic Compounds and Antioxidant Activities of Bunga Kantan (*Etlingera Elatior* Jack.) Inflorescence. *Journal*

- of Food Composition and Analysis, 8th International Food Data Conference: Quality food composition data, key for health and trade, 24 (4): 615–19. <https://doi.org/10.1016/j.jfca.2010.09.018>.
- Yang, Min, Wen-Yun Li, Jing Xie, Zi-Lin Wang, Yan-Long Wen, Cun-Chao Zhao, Liang Tao, Ling-Fei Li, Yang Tian, & Jun Sheng. (2021). Astragalins Inhibit the Proliferation and Migration of Human Colon Cancer HCT116 Cells by Regulating the NF- $\kappa$ B Signaling Pathway. *Frontiers in Pharmacology* 12. <https://www.frontiersin.org/journals/pharmacology/articles/10.3389/fphar.2021.639256>.
- Yang, Y.-X., Q. Wang, H.-Y. Huang, & Z.-J. Wang. (2023). “New 5-Methyl-4-Hydroxycoumarin Polyketide Derivatives from *Gerbera Delavayi* with Anti-Inflammatory Activity. *Fitoterapia* 169. <https://doi.org/10.1016/j.fitote.2023.105568>.
- Yang, Ying, Melvin R. Hayden, Susan Sowers, Sarika V. Bagree, & James R. Sowers. (2010). Retinal Redox Stress and Remodeling in Cardiometabolic Syndrome and Diabetes. *Oxidative Medicine and Cellular Longevity* 3 (6): 392–403. <https://doi.org/10.4161/oxim.3.6.14786>.
- Zeng, H. H., M. Ma, Y. L. Wang, M. H. Chen, & D. B. Huang. (2023). Hyperoside Attenuates Carbon Tetrachloride-Induced Hepatic Fibrosis via the Poly(ADP-Ribose) Polymerase-1-High Mobility Group Protein 1 Pathway. *European Journal of Pharmacology* 960 (December):176178. <https://doi.org/10.1016/j.ejphar.2023.176178>.
- Zhou, Yufeng, Yuanxiao Cao, Jiayun Li, Osman Tuncay Agar, Colin Barrow, Frank Dunshea, & Hafiz A. R. Suleria. (2023). Screening and Characterization of Phenolic Compounds by LC-ESI-QTOF-MS/MS and Their Antioxidant Potentials in Papaya Fruit and Their by-Products Activities. *Food Bioscience* 52 (April):102480. <https://doi.org/10.1016/j.fbio.2023.102480>.
- Zhu, Kaiye, Wentian Zhang, Qiuxue Wu, Qingzhu Yang, Zhian Gong, Shuli Shao, & Weiwei Zhang. 2023. Astragalins Protect the Liver from Oxidative Damage by Modulating the Lnc XIST/MiR-155-5p/Nrf2 Axis. *Journal of Functional Foods* 108 (September):105769. <https://doi.org/10.1016/j.jff.2023.105769>.