

DAFTAR PUSTAKA

- Aberle, E. D., J. C. Forrest, D. E. Gerrad, E. W. Mills, H. B. Heddrick, M. D. Judge and R. A. Merkel. 2001. Principles of meat science , 5th ed. Kendall Hunt Publishing Co. Dubuque. Iowa.
- Aboel-Zahab H, El-Khyat Z, Sidhom G, Awadallah R, Abdel-al W, Mahdy K (1997). Physiological effects of some food coloring additives on rats. *Boll. Chim. Farm.* 136 (10) :615-627. PMID: **9528169**.
- Agbor G.A, J.A. Vinson, and P.E. Donnelly. 2014. Folin-ciocalteau reagent for polyphenolic assay. *International Journal of Food Science, Nutrition and Dietetics.* 3 (8) : 147-156. DOI: [10.19070/2326-3350-1400028](https://doi.org/10.19070/2326-3350-1400028)
- Agrawal, A. 2013. Scope of betalains as a food colorant. *International Journal of Advanced Sciences and Technical Research* 3 (3) : 22-36. ISSN 2249-9954.
- Aktas, N. and H. Gencelep 2006. Effect of starch type and its modifications on Physicochemical properties of bologna-type sausage produced with sheep tail fat. *Meat Sci.* 74 : 404 – 408.
- Aminzare M, M. Hashemi, E. Ansarian, M. Bimkar, H.H. Azar, M.R. Mehrasbi, S. Daneshamooz, M. Raeisi, B. Jannat, and A. Afshari. 2019. Using natural antioxidants in meat and meat products as preservatives: a review. *Adv. Anim. Vet. Sci.* 7 (5): 417 - 426. DOI: [10.17582/journal.aavs/2019/7.5.417.426](https://doi.org/10.17582/journal.aavs/2019/7.5.417.426).
- Andarwulan, N, F. Kusnandar, dan D. Herawati. 2011. Analisis Pangan. Dian Rakyat. Jakarta.
- Antigo, J.L.D., R. C. Bergamasco, and G. S Madrona. 2018. Effect Of Ph On The Stability Of Red Beet Extract (*Beta Vulgaris* L.) Microcapsules Produced By Spray Drying Or Freeze Drying. *Food Sci. Technol, Campinas*, 38(1): 72-77. DOI: 10.1590/1678-457x.34316.
- Arnold LE, Lofthouse N, Hurt E. Artificial food colors and attention-deficit/hyperactivity symptoms: conclusions to dye for. *Neurotherapeutics.* 2012;9(3):599-609. DOI:10.1007/s13311-012-0133-x
- Brewer, M.S. 2011. Natural antioxidants: Sources, compounds, mechanisms of action, and potential applications. *Comprehensive Reviews in Food Science and Food Safety*, 10(4) 221-247. DOI. 10.1111/j.1541-4337.2011.00156.x.
- Badan Standarisasi Nasional. 2015. SNI Sosis Daging (SNI 3820-2015). Jakarta:Badan Standarisasi Nasional.
- Barbut, S. 1992. Poultry Processing And Product Technology. Encyclopedia Of Food Science And Technology, New York.
- Bystrická, J. P. Kavalcová, J. Musilová, A. Vollmannová, T. Tóth, and M. Lenková. 2015. Carrot (*Daucus Carota* L. Ssp. *Sativus* (Hoffm.) Arcang.) As Source Of Antioxidants. *Acta Agriculturae Slovenica*, 105 (2) : 303 – 311. DOI: 10.14720/aas.2015.105.2.13.



PRODUKSI SOSIS AYAM YANG DISUBSTITUSI DENGAN TEPUNG UMBI SEBAGAI PANGAN FUNGSIONAL

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GADJAH MADA

- Cai Y., M. Sun and H. Corke. 2003. Antioxidant activity of betalains from plants of the amaranthaceae. *Journal of Agricultural and Food Chemistry* 51 (8) : 2288-2294. DOI: 10.1021/jf030045u.
- Cai Y., M. Sun and H. Corke. 2005. HPLC characterization of betasianins from plants in the Amaranthaceae, *J. Chromatogr. Sci.*, 43, 454-460
- Cai, Y., M. Sun and H. Corke. 2001. Identification and distribution of simple acylated betacyanin pigments in the Amaranthaceae. *J. Agric. Food Chem.* 49:1971-1978.
- Ceballos, A. G. I., Maria, Giraldo, and C. E., Orrego. 2012. Effect of freezing rate on quality parameter of freeze dried soursoup fruit pulp. *Journal of Food Enggining* 111 : 360-365. DOI: [10.1016/j.jfoodeng.2012.02.010](https://doi.org/10.1016/j.jfoodeng.2012.02.010).
- Charles, A., Chang, Y., Ko, W., Sriroth, K., and Huang, T. 2005. Influence of Amylopectin Structure and Amylose Content on the Gelling Properties of Five Cultivars of Cassava Starches. *J. Agric. Food Chem.*, 53 : 2717-2725. DOI :10.1021/jf048376.
- Charoensiri, R., R. Kongkachuicha, S. Suknicom, and P. Sungpuag. 2009. Betacarotene, lycopene and alpha-tocopherol contents of selected Thai fruits. *Food Chem.* 113,202e207. DOI : [10.1016/j.foodchem.2008.07.074](https://doi.org/10.1016/j.foodchem.2008.07.074)
- Chen, Z.Y., Ying, K., Liang, Y., Peng, C and Zuo, Y. 2011. Role and classification of cholesterol-lowering functional foods. *Journal of Functional Foods* (3) : 61-69. DOI : 10.1016/j.jff/2011.02.003.
- Choi, Y.S., Kim, T.K., Jeon, K.,H., Kim, Y.B., and Hwang K.,E. 2017. Effects of Pre-Converted Nitrite from Red Beet and Ascorbic Acid on Quality Characteristics in Meat Emulsions. [Korean journal for food science of animal resources](https://doi.org/10.5851/kosfa.2017.37.2.288) 37(2):288-296. DOI: 10.5851/kosfa.2017.37.2.288
- Chung, J.,G. 1999. Effects of Butylated Hydroxyanisole (BHA) and Butylated Hydroxytoluena (BHT) on Acetylation of 2-Aminofluorene and DNA-2-Aminifluorene Adducts in the Rat. *Toxicological Sciences*, 51 : 202-210. DOI : [10.1093/toxsci/51.2.202](https://doi.org/10.1093/toxsci/51.2.202).
- Cui,Z.W., C.Y., Li., and C.F., Song. 2008. Combined microwave-vacuum and freeze drying of carrot and apple chips. *Drying Technology*, 26(12) : 1517-1523. DOI : 10.1080/07373930802463960.
- Cuvelier, M.E., H. Richards, and C. Besset. 1994. Comparison of the antioxidative activity of some acid phenols: Structure-Activity Relationship, *Biosci. Biotech. Biochem.*, 56 (2) : 324-32. DOI : [10.1271/bbb.56.324](https://doi.org/10.1271/bbb.56.324)
- De Man, J. 1999. *Principles of food chemistry*. 3rd edition. Aspen Publishers, Inc. Gaithersburg, Maryland.
- Delgado-Vargas, F., A.R., Jimenez, and O.L., Paredes., 2000. Natural pigments: carotenoids, anthocyanins, and betanins – characteristics, biosynthesis, processing, and stability. *Critical Reviews in Food Science and Nutrition* 40 (3) : 173-289. DOI: [10.1080/10408690091189257](https://doi.org/10.1080/10408690091189257).
- Estiasih, T. 2005. *Kimia Teknologi dan Aplikasi Polisakarida*. Universitas Brawijaya Malang
- Fennema, O.R. 1996. *Food Chemistry* Third Edition. Marcel Dekker Inc. New York.

- Fessenden, R.J. and Fessenden, J.S., 1986, Organic chemistry, diterjemahkan oleh Pudjaatmaka, H.A., Edisi ketiga, Jilid 1, 223-224, 240, Erlangga, Jakarta.
- Forrest, G.J., Aberle, H.B. Hendrick, M.D. Judge and R.A. Merkel. 1975. Principles of meat science. W.H. Freeman and Company, San Francisco.
- Fox, J.G., B.J. Cohen and F.M. Loew. 1984. Laboratory animal Medicine. Academic Press Inc. p. 91-120.
- Gaonkar, A. G. 1995. Ingredient interactions effects on food quality. Marcel Dekker. New York.
- Gengatharan, A., G. Dykes. and W. Choo. 2015. Betalains: Natural plant pigments with potential application in functional foods. LWT - Food Science and Technology. 64 (2): 645-649. DOI. [10.1016/j.lwt.2015.06.052](https://doi.org/10.1016/j.lwt.2015.06.052).
- Georgiev V.G, J. Weber, E.M. Kneschke, P.N. Denev, T. Bley, and A.I. Pavlov. 2010. Antioxidant activity and phenolics content of betalain extracts from intact plants and hairy root cultures of the red beetroot *Beta vulgaris* cv. Detroit dark red. Plant Foods for Human Nutr., (Formerly *Qualitas Plantarum*), 65(2): 105-111. DOI : 10.1007/s11130-010-0156-6.
- Golden, D. A., M. J. Loessner., & J. M. Jay. 2005. Modern food microbiology. 7th edition. Springer, New York.
- Goncalves EM, J. Pinheiro, M. Abreu, T.R.S Brandao, and C.L.M. Silva. 2010. Carrot (*Daucus carota* L.) peroxidase inactivation, phenolic content and physical changes kinetics due to blanching. Journal of Food Engineering, 97: 574–81.
- Hager TJ, and L.R. Howard. 2006. Processing effects on carrot phytonutrients. *Hortscience*. 4(1): 74-79. DOI: [10.21273/HORTSCI.41.1.74](https://doi.org/10.21273/HORTSCI.41.1.74).
- Harborne, J.B. 1987. *Phytochemical methods*. Chapman and Hall Ltd. London.
- Hardman, T. M. 1989. Water and food quality. Elsevier Science Publisher Ltd. England.
- Heinz, G. and P. Hautzinger. 2007. Meat Processing Technology for Small – to Medium Scale Producers. Food And Agriculture Organization Of The United Nations Regional Office For Asia And The Pacific. Bangkok. ISBN: 978-974-7946-99-4.
- Hemung B., Chin K. B. Effect of pH-treated fish sarcoplasmic proteins on the functional properties of chicken myofibrillar protein gel mediated by microbial transglutaminase. Korean J. Food Sci. An. (2014);34:1–9. doi: 10.5851/kosfa.2014.34.1.1.
- Hui, F H. 1992. Encyclopedia of food science and technology. John Willy and Sons, Inc. USA.
- Hwang, K. E., Y.S. Choi, J.H. Choi, H.Y. Kim, H.W. Kim, M.A. Lee, H.K. Chung, and C.J. Kim. 2011. Effect of ganghwayakssuk (*Artemisia princeps* Pamp.) on oxidative stability of deep fried chicken nuggets. Food Sci. Biotechnol. 20, 1381-1388. DOI : 10.1007/s10068-011-0190-7.
- Ijaola T.O, A.A. Osunkiyesi, A.A. Taiwo, O.A.Oseni , Y.A Lanrelyanda, J.O. Ajayi and R.T. Oyede. 2014. Antidiabetic effect of Ipomoea Batatas in normal and alloxan-induced diabetic rats. IOSR Journal of Applied Chemistry, 7 (5) :16-25. (IOSR-JAC) e-ISSN: 2278-5736.



- Ingle, M., S.S. Thorat, P.M. Kotecha and C.A. Nimbalkar. 2017. Nutritional assessment of beetroot (*Beta vulgaris* L.) powder cookies. *Asian J. Dairy & Food Res*, 36 (3) : 222-228. DOI:10.18805/ajdr.v36i03.8963
- Jawi, M., I. W. Sumardika¹, dan N. M. Linawati. 2014. Pencegahan gangguan fungsi ginjal karena stres oksidatif pada tikus diabetes dengan ubi jalar ungu. *Jurnal Veteriner Juni 2014* Vol. 15 (2) : 274-280. ISSN : 1411 – 8327.
- Ji, H., H. Zhang, H. Li, and Y. Li. 2015. Analysis on the nutrition composition and antioxidant activity of different types of sweet *Potato Cultivars*. *Food and Nutrition Sciences*. 6: 161-167. DOI : 10.4236/fns.2015.61017.
- [Jin, S.K., Y.J. Kim., J.H. Park., C. Hur, S.H. Nam and D. Shin. 2012. Effects of purple-fleshed Sweet Potato \(*Ipomoea batatas* Cultivar Ayamurasaki\) powder addition on color and texture properties and sensory characteristics of cooked pork sausage during Storage. *Asian-Aust. J. Anim. Sci*, 25 \(9\) : 1329 -1337. DOI : 10.5713/ajas.2012.12125.](#)
- Jiao Y., Y. Jiang, W. Zhai, and Z. Yang. 2012. Studies on antioxidant capacity of anthocyanin extract of purple sweet potato (*Ipomoea batatas* L.). *African Journal of Biotechnology*, 11(27) : 7046-7054. DOI : [10.5897/AJB11.3859](#).
- Jones KW, and R.W. Mandigo. 1982. Effects Of chopping temperature on the microstructure of meat emulsions. *J Food Sci* 47(2):1930–5. DOI : [10.1111/j.1365-2621.1982.tb12916.x](#).
- Kamalakar, D., P. Rohini kumar., and L. Nageswara. 2016. Comparative studies of micro wave oven and tray drying on beetroot. *International Journal for Innovative Research in Science & Technology* 2(10) : 343-347. ISSN (Online) : 2349-6010.
- Kano, M, Takayanagi T., Harada, K. Makino, and F Ishikawa. 2005. Antioxidative activity of anthocyanins from purple sweet potato *ipomoea batatas cultivar ayamurasaki*. *Bioscience Biotechnology and Biochemistry* 69 : 979-988. DOI : [10.1271/bbb.69.979](#).
- Khaksar, R. M., Hosseini, H., Taslimi, A. Ramezani, A., Amiri, Z. and Sabzevari, A. 2010. Comparison of lipid changes in chicken frankfurters made by soybean and canola oils during storage. *Iranian Journal of Veterinary Research* 11(2): 154-163.
- Kim, S.-J., A.R., Cho, and J. Han. 2013. Antioxidant and antimicrobial activities of leafy green vegetable extracts and their application to meat product preservation. *Food Control*, 29, 112-120. DOI : [10.1016/j.foodcont.2012.05.060](#).
- Kumar Y., D.N. Yadav, T. Ahmad, and K. Narsaiah. 2015. Recent trends in use of the natural antioxidants for meat and meat product. *Comprehensive Reviews in Food Science and Food Safety*. 14: 796-812.
- Latorre, M.E., M. Francisca and A. M. Rojas. 2013. Blanching of red beet (*Beta vulgaris* L. var. conditiva) root. Effect of hot water or microwave radiation on cell wall characteristics. *LWT-Food Science and Technology* 50(1): 193-203. DOI : 10.1016/j.lwt.2012.06.004.
- Laugks J., L. Česonienė, and R. Karklelienė. 2013. The Influence of the sample preparation of carrots (*Daucus Carota* L. Neptun) on the antioxidant activity and phenolic compounds. *BIOLOGIJA*, 59 (2) : 187–194. DOI: [10.6001/biologija.v59i2.2751](#).



- Lawrie R.A. 2003. Ilmu Daging. Edisi Kelima. Terjemahan: Parakkasi. Jakarta: Universitas Indonesia.
- Lee CM,R.J. Carrol, and A. Abdollahi. 1981. A Microscopical study of the structure of meat emulsion and its relationship to thermal stability. *J Food Sci* 46(6):1789–804.
- Lee CH, M. Wettasinghe, B.W. Bolling, L.L.Ji, and K.L. Parkin. 2005. Betalains, phase II enzyme-inducing components from red beetroot (*Beta Vulgaris L.*) extracts. *J Nutr Cancer*. 53(1):91-103.
- Lida Y., Tuziuti, T., Yasui, K., Towata, A., and kozuka, A. 2006. Control of viscosity in starch and polysaccharide solution with ultrasound after gelatinization. *Innovative Food Science and Emerging Technology* (9) : 140-146. DOI : 10.1016/j.ifset.2007.03.029.
- Lindsay D. G, and S.B. Astley. 2002. European research on the functional effects of dietary antioxidants—EUROFEDA. *Molecular Aspects of Medicine.*, 23, 1-38. PMID: 12079769.
- Lurueña-Martínez, M.A., A.M. Vivar-Quintana and I. Revilla. 2004. Effect of locust bean/xanthan gum addition and replacement of porkfat with olive oil on the quality characteristics of low-fat frankfurters. *Meat Sci*. 68:383–389.
- Mayes, P.A. 1996. Lipid transport and storage. *Herper's Biochemistry*. 2nd ed. Prentice Hall International.
- Mongkolsilp S, I. Pongbupakit, N. Sae-lee, and W. Sitthithaworn. 2004. Radical scavenging activity and total phenolic content of medical plants used in primary health care. *J Pharm and Sci*. 9(1): 32-35.
- Molyneux, P., 2004, The Use of the stable free radical Diphenylpicryl-hydrazyl (DPPH) for estimating antioxidant activity, *Songklanakarin Journal of Science and Technology.*, 26(2), 21121.
- Murray, R.K., Granner, D.K. Mayes, P.A. Rodwell and Victor. 2003. *Harper's Illustrated Biochemistry*, 26th Edition. New York : Mc. Graw Hill.
- Nakai, S. and W. Modler. 2000. Food protein processing applications. *Whey-VHC, Inc.*, Ottawa.
- Naruki, S and S. Kanoni. 1992. Kimia dan pengolahan teknologi hasil ternak. PAU Pangan dan Gizi UGM, Yogyakarta.
- Nishinari, K., H. Zhang and S. Ikeda. 2000. Hydrocolloid gels of polysaccharides and proteins. *Curr. Opin. Colloid Interface Sci.*5: 195–201.
- Ockerman HW. 1983. Chemistry of meat tissue. 10th Ed. Dept. Of Animal Science. Ohio: The Ohio State University and The Ohio Agricultural Reserch And Development Center.
- Park., K., Y. Cho,i, H. Kim, H. Kim, D. Song, K. Hwang, S. Choi, and C. Kim. 2012. Quality characteristics of chicken emulsion sausages with different levels of makgeolli lees fiber. *Korean J. Food Sci. Ani. Resour.* Vol. 32, No. 1, pp. 54-61. DOI :[10.5851/kosfa.2012.32.1.54](http://dx.doi.org/10.5851/kosfa.2012.32.1.54).
- Pereira, J., Z. Guang-hong, Z. and Wan-gang. 2016. Effects of rice flour on emulsion stability, organoleptic characteristics and thermal rheology of emulsified sausage .*Journal of Food and Nutrition Research*, 2016, Vol. 4, No. 4, 216-222 Available online at.

- Pinna, M., S. Roberto, R. Milia, E. Marongiu, S. Olla, A. Loi, G. M. Migliaccio, J. Padulo, C. Orlandi F. Tocco, A. Concu and A. Crisafulli. 2014. Effect of Beetroot juice supplementation on aerobic response during swimming. *Nutrients* 2014, 6, 605-615; DOI:10.3390/nu6020605
- Race, S. 2009 Antioxidants : The truth about BHA, BHT, TBHQ and other antioxidants used as food additives. ISBN: 9781907119002.
- Ratti, C., 2012 *Freeze drying* process design. Handbook of food Process Design, Vol. 1, Blackwell Publishing. USA.
- Redha A. 2010. Flavonoid : struktur, sifat antioksidatif, dan peranannya dalam sistem biologis. *Jurnak Berlian* 9(2): 196-202.
- Reeves , P.G., F.H. Nielsen and G.C. Fahey Jr. 1993. AIN -93 Purified diets for laboratory rodents : Final report of the American Institute of Nutrition Ad Hoc Writing Committee on The Reformulation of The AIN-76A Rodents Diet. *The Journal of Nutrition*. Nov ; 123 (11) : 1939-1952.
- Robinson, T., 1995, Kandungan organik tumbuhan tinggi. ITB, Bandung. hal. 191-196, 209.
- Rompis JEG. 1998. Pengaruh kombinasi bahan pengikat dan bahan pengisi terhadap sifat fisik, kimia serta palatabilitas sosis sapi. [Tesis]. Bogor: Program Pasca Sarjana, Institut Pertanian Bogor.
- Rose, M.H., P.N. Sudha and K. Sudhakar. 2014. Effect of antioxidants and hepatoprotective activities of methanol extract of beet root (*Beta Vulgaris* L.) against carbon tetrachloride induced hepatotoxicity In Rat Models. *IJPSR, 2014; Vol. 5(6): 2536-2545*. E-ISSN: 0975-8232; P-ISSN: 2320-5148.
- Rosell, C. M., Rojas, J. A., & Benedito de Barber, C. 2001. Influence of hydrocolloids on dough rheology and bread quality. *Food Hydrocolloids*, 15(1), 75-81. [http://dx.doi.org/10.1016/S0268-005X\(00\)00054-0](http://dx.doi.org/10.1016/S0268-005X(00)00054-0)
- Ruban, S.W., A. Kalaikannan and V.A. Rao. 2009. Physico-chemical characteristics of pork sausage during refrigerated storage. *Veterinary World* 2: 95–97.
- Rust, R. E. (1987). Sausage Product. Dalam : The science of meat and meat product, 3rd ED. J. F. Price dan B. S. Schweigert (ED). Food and Nutrition Press. Inc., Westport Connecticut.
- Ruttarattanamongkol, K., S. Chittrakorn, M. Weerawatanakorn, and N. Dangpium. 2016. Effect of drying conditions on properties, pigments and antioxidant activity retentions of pretreated orange and purple-fleshed sweet potato powders. *Journal of Food Science and Technology*, 53(4):1811-22. DOI : 10.1007/s13197-015-2086-7.
- Salawu, S.O., A.A. Akindahunsi, C.T. Ojo, A. Fashuyi, B.E. Olukemi, and B. B. Ola-Salawu. 2012. Effect of boiling and drying methods on the nutrient composition and antioxidant properties of sweet potato (*Ipomea batatas*) powder. *Journal of Applied and Environmental Sciences*. 7 (1) : 20-26.



PRODUKSI SOSIS AYAM YANG DISUBSTITUSI DENGAN TEPUNG UMBI SEBAGAI PANGAN FUNGSIONAL

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UNIVERSITAS
GADJAH MADA

Singh, N., J. Singh, L. Kaur, S.N. Sodhi, and B.S. Gill. 2003. Morphology, thermal and rheological properties of starches from different botanical sources. *Food Chem.*, 81(20) : 219-231. DOI : [10.1016/S0308-8146\(02\)00416-8](https://doi.org/10.1016/S0308-8146(02)00416-8).

Slavin, J.L. 2005. Dietary fiber and body weight. *Nutrition*, Volume 21, Issue 3, March 2005, Pages 411-418.

Slavov, A., V.Karagyozev, P. Denev, M. Kratchanova and C. Krathanov. 2013. Antioxidant activity of red beet juices obtained after microwave and thermal pretreatments. *Crezh. Journal of Food Science.*, 31 (2):139-147.

Sudarmadji, S., H. Bambang dan Suhardi. 2010. *Analisa bahan makanan dan pertanian*. Liberty. Yogyakarta.

Sultana, T., J. Rana, S.R. Chakraborty, K.K. Das, T. Rahman, and R. Noor. 2014. Microbiological analysis of common preservatives used in food items and demonstration of their in vitro anti-bacterial activity. *Asian Pacific Journal of Tropical Diseases*,4(6) :452-456. DOI : [10.1016/S2222-1808\(14\)60605-8](https://doi.org/10.1016/S2222-1808(14)60605-8).

Sumonsiri, Nutsuda, Barringer, and Sheryl. 2014. *Fruits and Vegetables - Processing Technologies and Applications*. Food Processing: Principles and Applications: Second Edition. p : 363-381. [10.1002/9781118846315.ch16](https://doi.org/10.1002/9781118846315.ch16).

Szekely, D., B. Illes, M. Steger and J. Monspart-Senyi. 2016. Effect of drying methods for inner parameters of red beetroot (*Beta vulgaris* L.). *Acta Univ. Sapientiae, Alimentaria*, 9 (2016) 60-68. DOI: [10.1515/ausal-2016-0006](https://doi.org/10.1515/ausal-2016-0006).

Tanaka, Y., S. Nobuhiro, and O. Akemi. Biosynthesis of plant Pigments: anthocyanins, betalains and carotenoids. *The Plant Journal* (2008) 54, 733–749. DOI : [10.1111/j.1365-3113X.2008.03447.x](https://doi.org/10.1111/j.1365-3113X.2008.03447.x)

Vergeldt, F.J., G.V. Dalen., A.J. Duijster., A. Voda., Khalloufi., L.J. Vliet, J.P.M. Duynhoven., R.G.M. Sman, and Van, H. 2014. Rehydration kinetics of freeze-dried carrots, *Innovative Food Science and Emerging Technologies*. 24: 40-47. DOI : [10.1016/j.ifset.2013.12.002](https://doi.org/10.1016/j.ifset.2013.12.002).

Wagner, H., and S. Bladt. 1996, *Plant drug analysis a thin layer chromatography atlas*, Second Edition, 6, 74, 305, 306, Springer-Verlag, Berlin

Wibawanto, N.R., K. A. Victoria dan R. Pratiwi. 2014. Produksi serbuk pewarna alami bit merah (*Beta vulgaris* L.) dengan metode oven drying. *Prosiding SNST ke-5 Tahun 2014*. Fakultas Teknik Wahid Hasyim Semarang. ISBN 978-602-99334-3-7.

Windhartono W., Z. Kamal dan E. Sasmito. 2013. Pengaruh infusa wortel (*Daucus carota* L.) terhadap histopatologi ginjal tikus jantan yang diinduksi uranium. The influence of carrot (*Daucus carota* L.) Infusion on the histopathology of kidney male rats induced by uranium. *Jurnal Kedokteran Yarsi* 21 (1) : 033-040. DOI : [10.33476/jky.v21i1.20](https://doi.org/10.33476/jky.v21i1.20).

Winarno, F. G. 2008. *Kimia pangan dan gizi*. Edisi terbaru. Gramedia Pustaka Utama. Jakarta.

Zargar F.A., S. Kumar, Z.F. Bhat Dan P. Kumar. 2017. Effect of incorporation of carrot on the quality characteristics of chicken sausages. *Indian Journal of Poultry Science*, 52(1): 91-95. DOI: [10.5958/0974-8180.2017.00019.8](https://doi.org/10.5958/0974-8180.2017.00019.8).



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GADJAH MADA

Zhang, W. G., Xiao, S., Himali, S., Lee, E. J. and D.U., Ahn. 2010. Improving functional value of meat products. *Meat Science*, 86 (1) :15-31. DOI : 10.1016/j.meatsci.2010.04.018

Zheng, W., and S.Y. Wang. 2001. Antioxidant activity and phenolic compounds in selected herbs. *Journal of Agricultural and Food Chemistry*, 49(11), 5165-5170. DOI : [10.1021/jf010697n](https://doi.org/10.1021/jf010697n).

Zu, A and F. Jiang. 2014. Modeling of mass transfer performance of hot-air drying of sweet potato (*Ipomoea batata* L.). *Chemical Industry and Chemical Engineering Quarterly*. Q. 20 (2) 171–181. DOI: 11.2298/CICEQ120509122Z.