



DAFTAR PUSTAKA

- Abdulkadir, A.G. dan Jimoh, W.L.O., 2013. Comparative analysis of physico-chemical properties of extracted and collected palm oil and tallow. *ChemSearch Journal*, 4(2), pp.44-54.
- Agustina, T., 2014. Kontaminasi logam berat pada makanan dan dampaknya pada kesehatan. *TEKNOBUGA: Jurnal Teknologi Busana Dan Boga*, 1(1).
- Alao, B.O., Falowo, A.B., Chulayo, A. dan Muchenje, V., 2017. The potential of animal by-products in food systems: Production, prospects and challenges. *Sustainability*, 9(7), p.1089.
- AOAC. 1995. Official methods of analysis. Association of Official Analytical Chemists, Arlington, VA: AOAC International; 15th Ed.
- AOAC. 2005. Official Methods of Analysis of the Association of Official Analytical Chemists. Published by the Association of Official Analytical Chemist. Marlyand.
- AOCS. 2005. Official Method and Recommended Practices of The AOCS. 5th ed. USA: AOCS Press.
- AOAC. 2012. Official Methods 920.159 Iodine Absorption Number of Oil and Fats. 19th Edition Oils & Fats.
- Auvermann, B., A. Kalbasi, A. Ahmed, dan M. Schutz. 2004. Carcass Disposal: A Comprehensive Review 4 Rendering. National Agricultural Biosecurity Center Consortium, New York.
- Badan Pengawas Obat dan Makanan (BPOM). 2019. Kategori Pangan Nomor 34 Tahun 2019. <https://dih.pom.go.id/download/product/827/34/2019>.
- Bendini, A., Cerretani, L., Di Virgilio, F., Belloni, P., BONOLI-CARBOGNIN, M.A.T.T.E.O. dan Lercker, G., 2007. Preliminary evaluation of the application of the FTIR spectroscopy to control the geographic origin and quality of virgin olive oils. *Journal of Food Quality*, 30(4), pp.424-437.
- Berthomieu, C. dan Hienerwadel, R., 2009. Fourier transform infrared (FTIR) spectroscopy. *Photosynthesis research*, 101, pp.157-170.
- BPS, 2022. Statistik Pemotongan Ternak 2022. Badan Pusat Statistik : Jakarta. ISSN : 2745-4002.
- Buana, D.L. dan Fajriati, I., 2019. Karakterisasi Lemak Sapi dan Lemak Babi dalam Bakso Menggunakan FTIR Spectroscopy. *Indonesia Journal of Halal*, 2(1), pp.15-22.
- CIS. 2020. Tallow Quality Testing : An introductory Guide. CIS-Whitepaper-Tallow-Quality-Testing.pdf (cis-controlunion.com) (Diakses tanggal 16 Oktober 2023).



Codex Alimentarius. 1999. Codex standard for named animal fats (CODEX-STAN 211-1999). FAO/WHO.

Devine, C. dan W. K. Jensen. 2014. *Encyclopedia of meat sciences Second Edition*. Academic Press.

Efendi, S.C., Anggo, A.D. and Wijayanti, I., 2020. Pengaruh suhu ekstraksi pada metode dry rendering terhadap kualitas minyak kasar hati ikan manyung (*Arius thalassinus*). *Jurnal Ilmu dan Teknologi Perikanan*, 2(1), pp.64-69.

EFSA. 2021. Animal By-Product. <https://www.efsa.europa.eu/el/topics/animal-by-products> (Diakses tanggal 29 September, 2023).

Galanakis, C.M. ed., 2019. *Lipids and Edible Oils: Properties, processing and applications*. Academic Press.

Hasanah, A.N.U., 2015, Karakterisasi Asam Lemak Sapi dan Asam Lemak Babi Secara Voltametri Siklik. Laporan Penelitian. Yogyakarta: Universitas Islam Negeri Sunan Kalijaga.

Hernando, D., D. Septinova, dan K. Adhianto. 2015. Kadar Air Dan Total Mikroba Pada Daging Sapi Di Tempat Pemotongan Hewan (TPH) Bandar Lampung. *Jurnal Ilmiah Peternakan Terpadu* 3(1): 61–67.

IGNOU. 2017. Unit-4 : *Rendering and Poultry By-product*. <https://egyankosh.gkpad.com/page/10816> (Diakses tanggal 11 November, 2023).

IUPAC. 1981. Standard Methods For The Analysis Of Oils, Fats and Derivatives : 6th Edition.

Jaswir, Irwandi. 2007. Metode Cepat Analisa Lemak Babi dengan FTIR, Halal Guide - Metode Cepat Analisa Lemak Babi dengan FTIR.htm.

Jayathilakan, K., Sultana, K., Radhakrishna, K. dan Bawa, A.S., 2012. Utilization of byproducts and waste materials from meat, poultry and fish processing industries: a review. *Journal of food science and technology*, 49, pp.278-293.

Johnson E.R., R.M. Butterfield, W.J. Pryor. 1972. Studies offat distribution in the bovine carcass. 1. The partition of fatty tissues between depots. *Aust J Agric Res* 23(2):381–388.

Kalbasi-Ashtari, A., Schutz, M.M. dan Auvermann, B.W., 2008. Carcass rendering systems for farm mortalities: A review. *Journal of Environmental Engineering and Science*, 7(3), pp.199-211.

Ketaren, S. 1986. Minyak dan Lemak Pangan. Universitas Indonesia. Jakarta.

Lee, J.Y., Park, J.H., Mun, H., Shim, W.B., Lim, S.H. dan Kim, M.G., 2018. Quantitative analysis of lard in animal fat mixture using visible Raman spectroscopy. *Food Chemistry*, 254, pp.109-114.



- Limmatvapirat, C. S. Limmatvapirat, W. Krongrawa, J. Ponphaiboon, T. Witchuchai, P. Jiranuruxwong, P. Theppitakpong, P. Pathomcharoensukchai . 2021. Beef Tallow: Extraction, Physicochemical Property, Fatty Acid Composition, Antioxidant Activity, and Formulation of Lotion Bars. *Journal of Applied Pharmaceutical Science* 11(9): 018–028.
- Lin, K. L., dan F. J. Tan. 2017. Influence of Rendering Methods on Yield and Quality of Chicken Fat Recovered from Broiler Skin. *Asian-Australasian Journal of Animal Sciences* 30(6): 872–77.
- Lisitsyn, A. B., I. M. Chernukha, dan A. N. Ivankin. 2013. Comparative Study of Fatty Acid Composition of Meat Material from Various Animal Species Original Article Comparative Study of Fatty Acid Composition of Meat Material from Various Animal Species *Scientific Journal of Animal Science*.
- Mamuaja, C. F. 2017. Lipida. Unsrat Press. Manado.
- Matsjeh, S., Ratmoko, S., (2011), Penentuan kadar lemak babi dalam lemak sapi menggunakan spektrofotometri infra merah dan kromatografi gas cair. Prosiding Seminar Nasional Kimia. Universitas Islam Indonesia. Yogyakarta.
- McClements, D. J., Vieira, A. dan Poletto, M. 2013. The effect of heating on the oxidation of beef tallow. *Journal of Food Science*, 78(5), C609-C615.
- Meeker, D. L., dan C. R. Hamilton. 2006. An overview of the rendering industry. In: D. L. Meeker, editor, Essential rendering. National Renderers Association, Alexandria, VA. p. 1–16.
- Mora, L., Toldrá-Reig, F., Prates, J.A. dan Toldrá, F., 2019. Cattle Byproducts. *Byproducts from Agriculture and Fisheries: Adding Value for Food, Feed, Pharma, and Fuels*, pp.43-55.
- Mulyani, M.E., 2011. Analisis proksimat beras merah (*oryza sativa*) varietas slegreng dan aek sibundong. *Prosiding Tugas Akhir Semester Genap, Jurusan Kimia Fakultas Matematika dan Ilmu Pengetahuan Alam Institut Teknologi Sepuluh Nopember*.
- Ponphaiboon, J., S. Limmatvapirat, A. Chaidedgumjorn, dan C. Limmatvapirat. 2018. Physicochemical Property, Fatty Acid Composition, and Antioxidant Activity of Ostrich Oils Using Different Rendering Methods. *Lwt* 93(February): 45–50. <https://doi.org/10.1016/j.lwt.2018.03.024>.
- Pudtikajorn, K., dan S. Benjakul. 2020. Simple Wet Rendering Method for Extraction of Prime Quality Oil from Skipjack Tuna Eyeballs. *European Journal of Lipid Science and Technology* 122(8): 1–10.
- Purnamasari, E., Nurhasni, N. dan Zain, W.N.H., 2012. Nilai thiobarbituric acid (tba) dan kadar lemak dendeng daging kambing yang direndam dalam jus daun sirih (*piper betle* l.) Pada konsentrasi dan lama penyimpanan yang berbeda. *Jurnal Peternakan*, 9(2).



Purwasih, R. 2021. Analisis Pangan. Polsub Press, Subang. ISBN : 978-623-96622-2-6.

Ranjitha, J., S. G. Raghavendra, S. Vijayalakshmi, dan B. Deepanraj. 2020. Production, Optimisation and Engine Characteristics of Beef Tallow Biodiesel Rendered from Leather Fleshing and Slaughterhouse Wastes. *Biomass Conversion and Biorefinery* 10(3): 675–88.

Rezaei, F., M. Gharachorloo, R. Azizinejad. 2013. Fractionation of Iranian Beef Tallow - Chemical and Physical Evaluations of the Fractions. (1981): 73–80.

Santativongchai, P., W. Fungfuang, V. Boonyawiwat, U. Pongchairerk, P. Tulayakul. 2020. Comparison of Physicochemical Properties and Fatty Acid Composition of Crocodile Oil (*Crocodylus Siamesis*) Extracted by Using Various Extraction Methods. *International Journal of Food Properties* 23(1): 1465–74. <https://doi.org/10.1080/10942912.2020.1814324>.

Sayyad, R., dan M. Ghomi. 2017. Evaluation of Fatty Acid Profile, Color Characteristics, Oxidative Quality and Stability of Common Kilka (*Clupeonella Cultriventris Caspia*) Oil Obtained by Various Extraction Techniques. *Journal of Food Science and Technology* 54(6): 1377–83.

Sharma, H., R. Giriprasad, dan M. Goswami. 2013. Animal Fat-Processing and Its Quality Control. *Food Processing and Technology*. DOI: 10.4172/2157-7110.1000252.

Sheu, K. S., dan T. C. Chen. 2002. Yield and Quality Characteristics of Edible Broiler Skin Fat as Obtained from Five Rendering Methods. *Journal of Food Engineering* 55(3): 263–69.

Shin, D. M., Do, H. K., Jong, H. Y., Hyuk, C. K., Hyo, J. K., Han, G. S., dan Sung, G. H. 2019. Oxidative stability and quality characteristics of duck, chicken, swine and bovine skin fats extracted by pressurized hot water extraction. *Food Science of Animal Resources*. 39(3): 446 – 458.

Smith, B.C., 2011. *Fundamentals of Fourier transform infrared spectroscopy*. CRC press.

SNI. 2009. Batas maksimum cemaran logam berat dalam pangan. Standar Nasional Indonesia. Direktorat Standardisasi Pangan Olahan (pom.go.id) (Diakses 18 Oktober 2023).

Syaputra, R. dan Sofiyanurriyanti, S.S., 2022. Analisis Pengendalian Mutu pada Asam Lemak Bebas Minyak Kelapa Sawit Menggunakan Metode SQC. *Jurnal Teknik Industri: Jurnal Hasil Penelitian dan Karya Ilmiah dalam Bidang Teknik Industri*, 8(1), pp.59-66.

Symoniuk, E., K. Ratusz, dan K. Krygier. 2019. Evaluation of the oxidative stability of cold-pressed rapeseed oil by rancimat and pressure differential scanning calorimetry measurements. *European Journal of Lipid Science and Technology*, 121(2), p.1800017.



Tarladgis, B.G., A. M. Pearson, dan L.D. Jun. 1962. Chemistry of the 2-thiobarbituric acid test for determination of oxidative rancidity in foods. *J. Am. Oil Chem. Soc.*, 39 (1) : 34-39.

Tougan, U.P., Youssao, I.A., Yayi, E.L., Kpodekon, M.T., Heuskin, S., Beckers, Y., Mensah, G.A., Koutinhouin, B.G., Lognay, G. dan Thewis, A., 2018. Fatty Acids Composition of Meat of Five Native Chicken (*Gallus gallus*)-Ecotypes of Benin Reared under Organic or Conventional system. *Journal of Experimental Food Chemistry*, 4(2).

Troutt, H. F., D. Schaeffer, D. I. Kakoma, dan G. G. Pearl. 2001. Prevalence of selected foodborne pathogens in final rendered products. Directors digest #312. Fats and Proteins Research Foundation, Inc., Alexandria, VA.

USDA. 2019. Fat, beef tallow. FoodData Central (usda.gov) (Diakses tanggal 29 September, 2023).

Wehling, R.L., 2010. Infrared spectroscopy. *Food analysis*, 4, pp.407-20.

Winarno, F. G. 1991. Kimia Pangan dan Gizi. PT Gramedia Pustaka Utama. Jakarta.

Winarno. 2004. Kimia Pangan dan Gizi. Gramedia Pustaka Utama, Jakarta.

Woodgate, S. dan Van Der Veen, J., 2004. The role of fat processing and rendering in the European Union animal production industry. *BASE*.

Zamora, R., dan F. J. Hidalgo. 2005. Coordinate Contribution of Lipid Oxidation and Maillard Reaction to the Nonenzymatic Food Browning. *Critical Reviews in Food Science and Nutrition* 45(1): 49–59.

Zhang, L., Yin, B., dan Rui, H. 2013. Effects of microwave rendering on the yield and characteristics of chicken fat from broiler abdominal fat tissue. *Journal of Food Science and Technology*. 50(6): 1151-1157.