

DAFTAR PUSTAKA

- Abdel-Misih, S.R.Z., Bloomston, M., 2010. Liver anatomy. *Surg. Clin. North Am.* 90, 643–653. <https://doi.org/10.1016/j.suc.2010.04.017>
- Allen, A.M., Van Houten, H.K., Sangaralingham, L.R., Talwalkar, J.A., McCoy, R.G., 2018. Healthcare Cost and Utilization in Nonalcoholic Fatty Liver Disease: Real-World Data From a Large U.S. Claims Database. *Hepatology* 68, 2230–2238. <https://doi.org/10.1002/hep.30094>
- Alves-Bezerra, M., Cohen, D.E., 2017. Triglyceride Metabolism in the Liver. *Compr. Physiol.* 8, 1–8. <https://doi.org/10.1002/cphy.c170012>
- Aggarwal, A., & Bagri, N. (2022). In response to the article “The relationship between renal sinus lipomatosis detected at abdominal computed tomography and abdominal visceral and subcutaneous fat accumulation and metabolic risk factors”. *Pol J Radiol* 2020; 85: e62-e66. *Polish Journal of Radiology*, 87(1), e232. <https://doi.org/10.5114/pjr.2022.115807>
- Alberto, C. C. L., Ialah, M. G., Eugenia, I. C. M., Julio, T. R., Víctor, A. A., Mario, R. C., & Julio, L. R. (2021). Clinical relevance of lipid panel and aminotransferases in the context of hepatic steatosis and fibrosis as measured by transient elastography (fibroscan®). *Journal of Medical Biochemistry*, 40(1), 40–66. <https://doi.org/10.5937/jomb0-24689>
- Alvarez, G. A. S., Galvez, S. M. P., Mora, U. G., Contreras, A. D. C., Rosas, C. D., Priego-Parra, B. A., Romero, A. T., Balmori, M. A., Dietlen, F. R., Vazquez, S. E. M., Guerrero, I. O. M., Chi-Cervera, L. A., Reyes, R. B., Roriguez, L. A. M., Chavez, M. E. I., & Troche, J. M. R. (2022). Higher cardiovascular risk scores and liver fibrosis risk estimated by biomarkers in patients with metabolic-dysfunction-associated fatty liver disease. *World Journal of Hepatology*, 14(8), 1633–1642. <https://doi.org/10.4254/wjh.v14.i8.1633>
- Antunes, C., Azadfard, M., Hoilat, G.J., Gupta, M., 2022. Fatty Liver. *Treasure Island (FL)*.
- Arshad, T., Golabi, P., Henry, L., Younossi, Z.M., 2020. Epidemiology of Non-holic Fatty Liver Disease in North America. *Curr. Pharm. Des.* 2633, 993–
<https://doi.org/10.2174/1381612826666200303114934>
- , Ahmed, Z., Arora, S., Haas, A., Kuo, Y.-F., Kamath, P.S., Singal, A.K.,
3. NASH Is the Most Rapidly Growing Etiology for Acute-on-Chronic Liver



- Failure-Related Hospitalization and Disease Burden in the United States: A Population-Based Study. *Liver Transplant. Off. Publ. Am. Assoc. Study Liver Dis. Int. Liver Transplant. Soc.* 25, 695–705. <https://doi.org/10.1002/lt.25443>
- Bataller, R., & Brenner, D. A. (2005). Liver fibrosis. *The Journal of Clinical Investigation*, 115(2), 209–218. <https://doi.org/10.1172/JCI24282>
- Boëlle, P. Y., Debray, D., Guillot, L., Clement, A., & Corvol, H. (2019). Cystic Fibrosis Liver Disease: Outcomes and Risk Factors in a Large Cohort of French Patients. *Hepatology*, 69(4), 1648–1656. <https://doi.org/10.1002/hep.30148>
- Baek, J., Jung, S.J., Shim, J.-S., Jeon, Y.W., Seo, E., Kim, H.C., 2020. Comparison of Computed Tomography-based Abdominal Adiposity Indexes as Predictors of Non-alcoholic Fatty Liver Disease Among Middle-aged Korean Men and Women. *J. Prev. Med. Public Health* 53, 256–265. <https://doi.org/10.3961/jpmph.20.140>
- Belew, G.D., Jones, J.G., 2022. De novo lipogenesis in non-alcoholic fatty liver disease: Quantification with stable isotope tracers. *Eur. J. Clin. Invest.* 52, e13733. <https://doi.org/10.1111/eci.13733>
- Benedict, M., Zhang, X., 2017. Non-alcoholic fatty liver disease: An expanded review. *World J. Hepatol.* 9, 715–732. <https://doi.org/10.4254/wjh.v9.i16.715>
- Braude, M., Roberts, S., Majeed, A., Lubel, J., Prompen, J., Dev, A., Sievert, W., Bloom, S., Gow, P., Kemp, W., 2023. Liver stiffness (Fibroscan®) is a predictor of all-cause mortality in people with non-alcoholic fatty liver disease. *Liver Int.* 43, 90–99. <https://doi.org/10.1111/liv.15415>
- Carr, R.M., Oranu, A., Khungar, V., 2016. Nonalcoholic Fatty Liver Disease: Pathophysiology and Management. *Gastroenterol. Clin. North Am.* 45, 639–652. <https://doi.org/10.1016/j.gtc.2016.07.003>
- Castéra, L., Foucher, J., Bernard, P., Carvalho, F., Allaix, D., Merrouche, W., Couzigou, P., de Lédinghen, V., 2010. Pitfalls of liver stiffness measurement: a 5-year prospective study of 13,369 examinations. *Hepatology* 51, 828–835.
- Caprio, S. (1999). Relationship between abdominal visceral fat and metabolic risk factors in obese adolescents. *American Journal of Human Biology*, 11(2), 259–266. [https://doi.org/10.1002/\(sici\)1520-6300\(1999\)11:2<259::aid-13>3.3.co;2-n](https://doi.org/10.1002/(sici)1520-6300(1999)11:2<259::aid-13>3.3.co;2-n)
- Devanand, V., Chelladurai, A., Balasubramaniam, S., S., S.,



- Nazarene, A., & Vivekkumar, P. (2022). Abdominal fat distribution and its relationship to sagittal abdominal diameter (SAD) and SAD-height ratio – An analytical cross-sectional study in the South Indian population. *National Journal of Physiology, Pharmacy and Pharmacology*, 0, 1. <https://doi.org/10.5455/njppp.2022.12.062951202217862022>
- Chen, D. Z., Ganapathy, A., Nayak, Y., Mejias, C., Bishop, G. L., Mellnick, V. M., & Ballard, D. H. (2023). Analysis of Superficial Subcutaneous Fat Camper's and Scarpa's Fascia in a United States Cohort. *Journal of Cardiovascular Development and Disease*, 10(8). <https://doi.org/10.3390/jcdd10080347>
- Chiyanika, C., Chan, D. F. Y., Hui, S. C. N., So, H. kwan, Deng, M., Yeung, D. K. W., Nelson, E. A. S., & Chu, W. C. W. (2020). The relationship between pancreas steatosis and the risk of metabolic syndrome and insulin resistance in Chinese adolescents with concurrent obesity and non-alcoholic fatty liver disease. *Pediatric Obesity*, 15(9). <https://doi.org/10.1111/ijpo.12653>
- Chou, Y. T., Sun, Z. J., Shen, W. C., Yang, Y. C., Lu, F. H., Chang, C. J., Li, C. Y., & Wu, J. S. (2022). Cumulative Betel Quid Chewing and the Risk of Significant Liver Fibrosis in Subjects With and Without Metabolic Syndrome. *Frontiers in Nutrition*, 9. <https://doi.org/10.3389/fnut.2022.765206>
- Ciardullo, S., Oltolini, A., Cannistraci, R., Muraca, E., & Perseghin, G. (2022). Sex-related association of nonalcoholic fatty liver disease and liver fibrosis with body fat distribution in the general US population. *American Journal of Clinical Nutrition*, 115(6), 1528–1534. <https://doi.org/10.1093/ajcn/nqac059>
- Cristóbal Serrano, G., Francisco Barrera, M., Riquelme, C., Hugo Vidal, A., Labbé, P., Francisco Cruz, O., Marco Arrese, J., Pablo Irrázaval, M., Cristián Tejos, N., & Sergio Uribe, A. (2012). Volumetric measurement of abdominal visceral fat by MRI and its relation to transient elastography in a diabetic population. *Revista Chilena de Radiología*, 17(4), 183–191. <https://doi.org/10.4067/s0717-93082011000400008>
- Castéra, L., Vergniol, J., Foucher, J., Le Bail, B., Chanteloup, E., Haaser, M., Darriet, M., Couzigou, P., De Lédinghen, V., 2005. Prospective comparison of transient elastography, Fibrotest, APRI, and liver biopsy for the assessment of liver fibrosis in chronic hepatitis C. *Gastroenterology* 128, 343–350. <https://doi.org/10.1053/j.gastro.2004.11.018>
- W., 2021. Advances in Understanding of the Role of Lipid Metabolism in



Aging. Cells 10. <https://doi.org/10.3390/cells10040880>

Das NK, Islam AFMN, & Zaki KMJ. (2023). Relationship between Liver Stiffness Measured by Fibroscan and the Presence and Grading of Esophageal Varices by Endoscopy in Patients with Liver Cirrhosis. *The Journal of Sylhet Women's Medical College*, 13(Number 2), 84–89. <https://doi.org/10.47648/jswmc2023v13-02-81>

Davis, L. (2017). *The relationship between BMI/body composition and survival of heart failure patients.*

Dehnavi, Z., Barghchi, H., Roudi, F., Naseri, M. B., Ostad, A. N., Khorasanchi, Z., Nematy, M., & Razmpour, F. (2021). On the relationship between non-alcoholic fatty liver disease with body composition and bone mineral density in overweight/obese adolescents. *Hepatitis Monthly*, 21(3). <https://doi.org/10.5812/hepatmon.112184>

Dai, W., Ye, L., Liu, A., Wen, S.W., Deng, J., Wu, X., Lai, Z., 2017. Prevalence of nonalcoholic fatty liver disease in patients with type 2 diabetes mellitus: A meta-analysis. *Medicine (Baltimore)*. 96, e8179. <https://doi.org/10.1097/MD.00000000000008179>

DeBose-Boyd, R.A., Ye, J., 2018. SREBPs in Lipid Metabolism, Insulin Signaling, and Beyond. *Trends Biochem. Sci.* 43, 358–368. <https://doi.org/10.1016/j.tibs.2018.01.005>

Degos, F., Perez, P., Roche, B., Mahmoudi, A., Asselineau, J., Voitot, H., Bedossa, P., 2010. Diagnostic accuracy of FibroScan and comparison to liver fibrosis biomarkers in chronic viral hepatitis: A multicenter prospective study (the FIBROSTIC study). *J. Hepatol.* 53, 1013–1021. <https://doi.org/10.1016/j.jhep.2010.05.035>

Dietrich, C.F., 2022. Noninvasive assessment of hepatic fibrosis: Ultrasound-based elastography - UpToDate [WWW Document]. UpToDate. URL https://www.uptodate.com/contents/noninvasive-assessment-of-hepatic-fibrosis-ultrasound-based-elastography?search=fibroscan&source=search_result&selectedTitle=2~47age_type=default&display_rank=2#H8550276 (accessed 5.1.23).

C.F., Bamber, J., Berzigotti, A., Bota, S., Cantisani, V., Castera, L., grove, D., Ferraioli, G., Friedrich-Rust, M., Gilja, O.H., Goertz, R.S., as, T., De Knegt, R., De Ledinghen, V., Piscaglia, F., Procopet, B.,



- Saftoiu, A., Sidhu, P.S., Sporea, I., Thiele, M., 2017. EFSUMB Guidelines and Recommendations on the Clinical Use of Liver Ultrasound Elastography, Update 2017 (Long Version), *Ultraschall in der Medizin*. <https://doi.org/10.1055/s-0043-103952>
- Doval, E., Lopez, S.R., Albarran, A., Sosa, E., Ramirez, C., Ferreira, A., Espinosa, E., 2021. Changes in Visceral Fat and Its Correlation With Changes in Metabolic Variables After Bariatric Surgery. *J. Endocr. Soc.* <https://doi.org/10.1210/jendso/bvab048.012>
- Emamat, H., Farhadnejad, H., Movahedian, M., Tangestani, H., Mirmiran, P., & Hekmatdoost, A. (2020). Dietary sodium intake in relation to non-alcoholic fatty liver disease risk: a case-control study. *Nutrition and Food Science*, 51(3), 541–550. <https://doi.org/10.1108/NFS-05-2020-0183>
- ENZYME, A. S. O. S. O. A. O. M. R. F. A. D. O. H. S. W. R. O. L. E. A. O. M. R. F. A. D. O. H. S. W. R. O. L. (2023). *A STUDY ON ASSOCIATION OF METABOLIC RISK FACTORS AND DEGREE OF HEPATIC STEATOSIS WITH RISE OF LIVER ENZYME*.
- Fabbrini, E., Sullivan, S., Klein, S., 2010. Obesity and nonalcoholic fatty liver disease: biochemical, metabolic, and clinical implications. *Hepatology* 51, 679–689. <https://doi.org/10.1002/hep.23280>
- Feingold, K.R., 2022. Lipid and Lipoprotein Metabolism. *Endocrinol. Metab. Clin. North Am.* 51, 437–458. <https://doi.org/10.1016/j.ecl.2022.02.008>
- Fitzpatrick, E., Dhawan, A., 2014. Noninvasive biomarkers in non-alcoholic fatty liver disease: current status and a glimpse of the future. *World J. Gastroenterol.* 20, 10851–10863. <https://doi.org/10.3748/wjg.v20.i31.10851>
- Fernandes, S. A., Tovo, C. V., da Silva, A. L. M., Pinto, L. P., Carteri, R. B., & Mattos, A. A. (2022). Relationship between phase angle, steatosis, and liver fibrosis in patients coinfectd with human immunodeficiency virus/hepatitis C virus. *World Journal of Hepatology*, 14(6), 1173–1181. <https://doi.org/10.4254/wjh.v14.i6.1173>
- Fernando, J. N., Alba, R. L., & Alba, W. (2019). Factors associated with the severity of findings on hepatic transient elastography among persons with type 2 diabetes and fatty liver. *Journal of the ASEAN Federation of Endocrine Societies*, 34(2), 134–143. <https://doi.org/10.15605/jafes.034.02.03>
- 3., Kleiner, D.E., 2020. Liver Histology: Diagnostic and Prognostic



- Features. *Clin. Liver Dis.* 24, 61–74. <https://doi.org/10.1016/j.cld.2019.09.004>
- Graffy, P.M., Pickhardt, P.J., 2016. Quantification of hepatic and visceral fat by CT and MR imaging: relevance to the obesity epidemic, metabolic syndrome and NAFLD. *Br. J. Radiol.* 89, 20151024. <https://doi.org/10.1259/bjr.20151024>
- Gadhavi, R., Solanki, D., Rami, K., Bhagora, S., & Thakor, N. (2015). Relationship between blood pressure and BMI: a cross sectional study among government employees of Gujarat state, India. *International Journal of Research in Medical Sciences*, 1637–1640. <https://doi.org/10.18203/2320-6012.ijrms20150243>
- Gürbüz, A. F., Keven, A., Elasan, S., & Çevikol, C. (2023). Evaluation of the relationship between abdominal fat distribution and osteoporotic vertebral compression fracture with MRI. *Skeletal Radiology*, 52(6), 1203–1210. <https://doi.org/10.1007/s00256-022-04247-7>
- Hu, Q., Han, K., Shen, J., Sun, W., Gao, L., & Gao, Y. (2023). Association of weight-adjusted-waist index with non-alcoholic fatty liver disease and liver fibrosis: a cross-sectional study based on NHANES. *European Journal of Medical Research*, 28(1). <https://doi.org/10.1186/s40001-023-01205-4>
- HUANG, Z., LEE, C. H., FONG, H. Y., & LAM, K. S. (2018). Association between Metabolic Syndrome Components and Indices of Liver Steatosis and Stiffness by Transient Elastography in Patients with Type 2 Diabetes and Imaging-Confirmed Nonalcoholic Fatty Liver Disease. *Diabetes*, 67(Supplement_1). <https://doi.org/10.2337/db18-617-p>
- Hung, C. S., Yang, C. Y., Hsieh, H. J., Wei, J. N., Ma, W. Y., & Li, H. Y. (2012). BMI correlates better to visceral fat and insulin sensitivity than BAI. *Obesity*, 20(6), 1141. <https://doi.org/10.1038/oby.2012.86>
- Hunter, G. R., Gower, B. A., & Kane, B. L. (2010). Age Related Shift in Visceral Fat. *International Journal of Body Composition Research*, 8(3), 103–108.
- Heeren, J., Scheja, L., 2021. Metabolic-associated fatty liver disease and lipoprotein metabolism. *Mol. Metab.* 50, 101238. <https://doi.org/10.1016/j.molmet.2021.101238>
- ., Ebner, L., Heverhagen, J.T., Christe, A., 2015. State-of-the-art imaging for liver fibrosis and cirrhosis: A comprehensive review of current applications and future perspectives. *Eur. J. Radiol. open* 2, 90–100. <https://doi.org/10.1016/j.ejro.2015.05.002>



- Huh, Y., Cho, Y.J., Nam, G.E., 2022. Recent Epidemiology and Risk Factors of Nonalcoholic Fatty Liver Disease. *J. Obes. Metab. Syndr.* 31, 17–27. <https://doi.org/10.7570/jomes22021>
- Hussain, M.M., 2014. Intestinal lipid absorption and lipoprotein formation. *Curr. Opin. Lipidol.* 25, 200–206. <https://doi.org/10.1097/MOL.0000000000000084>
- Ichida, H., Imamura, H., Yoshioka, R., Mizuno, T., Mise, Y., Kuwatsuru, R., Kawasaki, S., Saiura, A., 2021. Re-evaluation of the Couinaud classification for segmental anatomy of the right liver, with particular attention to the relevance of cranio-caudal boundaries. *Surgery* 169, 333–340. <https://doi.org/10.1016/j.surg.2020.08.029>
- Idalsoaga, F., Kulkarni, A. V, Mousa, O.Y., Arrese, M., Arab, J.P., 2020. Non-alcoholic Fatty Liver Disease and Alcohol-Related Liver Disease: Two Intertwined Entities. *Front. Med.* 7, 448. <https://doi.org/10.3389/fmed.2020.00448>
- Ikram, H., Jaffar, S. R., Hayat, A., Khattak, M., Majeed, N., & Naeem, A. (2022). Fibroscan Compared to Aspartate Aminotransferase to Platelet Ratio Index (APRI) and Aspartate Aminotransferase to Alanine Aminotransferase Ratio (AST to ALT) in the Assessment of Liver Fibrosis in Patients with Non Alcoholic Fatty Liver Disease in a Terti. *Pakistan Armed Forces Medical Journal*, 72(2), 776–780. <https://doi.org/10.51253/pafmj.v72i2.7152>
- Iizuka, K., 2021. The Roles of Carbohydrate Response Element Binding Protein in the Relationship between Carbohydrate Intake and Diseases. *Int. J. Mol. Sci.* 22. <https://doi.org/10.3390/ijms222112058>
- Imamura, F., Fretts, A.M., Marklund, M., Ardisson Korat, A. V, Yang, W.-S., Lankinen, M., Qureshi, W., Helmer, C., Chen, T.-A., Virtanen, J.K., Wong, K., Bassett, J.K., Murphy, R., Tintle, N., Yu, C.I., Brouwer, I.A., Chien, K.-L., Chen, Y.-Y., Wood, A.C., Del Gobbo, L.C., Djousse, L., Geleijnse, J.M., Giles, G.G., de Goede, J., Gudnason, V., Harris, W.S., Hodge, A., Hu, F., Koulman, A., Laakso, M., Lind, L., Lin, H.-J., McKnight, B., Rajaobelina, K., Riserus, U., Robinson, J.G., Samieri, C., Senn, M., Siscovick, D.S., Soedamah-Muthu, Sotoodehnia, N., Sun, Q., Tsai, M.Y., Tuomainen, T.-P., Uusitupa, M., Jenknecht, L.E., Wareham, N.J., Wu, J.H.Y., Micha, R., Lemaitre, R.N., affarian, D., Forouhi, N.G., 2020. Fatty acids in the de novo lipogenesis way and incidence of type 2 diabetes: A pooled analysis of prospective



- cohort studies. *PLoS Med.* 17, e1003102. <https://doi.org/10.1371/journal.pmed.1003102>
- Iqbal, U., Perumpail, B.J., Akhtar, D., Kim, D., Ahmed, A., 2019. The Epidemiology, Risk Profiling and Diagnostic Challenges of Nonalcoholic Fatty Liver Disease. *Medicines*. <https://doi.org/10.3390/medicines6010041>
- Jang, S., Lee, C.H., Choi, K.M., Lee, J., Choi, J.W., Kim, K.A., Park, C.M., 2011. Correlation of fatty liver and abdominal fat distribution using a simple fat computed tomography protocol. *World J. Gastroenterol.* 17, 3335–3341. <https://doi.org/10.3748/wjg.v17.i28.3335>
- Jang, S., Lee, C. H., Choi, K. M., Lee, J., Choi, J. W., Kim, K. A., & Park, C. M. (2011). Correlation of fatty liver and abdominal fat distribution using a simple fat computed tomography protocol. *World Journal of Gastroenterology*, 17(28), 3335–3341. <https://doi.org/10.3748/wjg.v17.i28.3335>
- Ju, S. H., & Yi, H. S. (2022). Implication of Sex Differences in Visceral Fat for the Assessment of Incidence Risk of Type 2 Diabetes Mellitus. *Diabetes and Metabolism Journal*, 46(3), 414–416. <https://doi.org/10.4093/dmj.2022.0089>
- Jung, C. H., Rhee, E. J., Kwon, H., Chang, Y., Ryu, S., & Lee, W. Y. (2020). Visceral-to-subcutaneous abdominal fat ratio is associated with nonalcoholic fatty liver disease and liver fibrosis. *Endocrinology and Metabolism*, 35(1), 165–176. <https://doi.org/10.3803/EnM.2020.35.1.165>
- Jura, M., & Kozak, L. P. (2016). Obesity and related consequences to ageing. *Age (Dordrecht, Netherlands)*, 38(1), 23. <https://doi.org/10.1007/s11357-016-9884-3>
- Khoonsari, M., Mohammad Hosseini Azar, M., Ghavam, R., Hatami, K., Asobar, M., Gholami, A., Rajabi, A., Safarnezhad Tameshkel, F., Amirkalali, B., Sohrabi, M., 2017. Clinical Manifestations and Diagnosis of Nonalcoholic Fatty Liver Disease. *Iran. J. Pathol.* 12, 99–105.
- Kim, T. H., Jeong, C. W., Lee, C. S., Noh, S. H., Lim, D. W., Kim, J. W., Kim, H. J., & Kim, Y. R. (2023). Association between Body Composition Contents and Hepatic Fibrosis in Sarcopenic Obesity. *Journal of Clinical Medicine*, 12(13). <https://doi.org/10.3390/jcm12134279>
- Cholankeril, G., Li, A.A., Kim, W., Tighe, S.P., Hameed, B., Kwo, P.Y., Ison, S.A., Younossi, Z.M., Ahmed, A., 2019. Trends in hospitalizations for chronic liver disease-related liver failure in the United States, 2005-2014.



- Liver Int. Off. J. Int. Assoc. Study Liver 39, 1661–1671. <https://doi.org/10.1111/liv.14135>
- Kinner, S., Reeder, S.B., Yokoo, T., 2016. Quantitative Imaging Biomarkers of NAFLD. Dig. Dis. Sci. 61, 1337–1347. <https://doi.org/10.1007/s10620-016-4037-1>
- Lee, D.H., 2017. Imaging evaluation of non-alcoholic fatty liver disease: focused on quantification. Clin. Mol. Hepatol. 23, 290–301. <https://doi.org/10.3350/cmh.2017.0042>
- Lee, S.S., Park, S.H., 2014. Radiologic evaluation of nonalcoholic fatty liver disease. World J. Gastroenterol. 20, 7392–7402. <https://doi.org/10.3748/wjg.v20.i23.7392>
- Lee, Y., Doumouras, A.G., Yu, J., Brar, K., Banfield, L., Gmora, S., Anvari, M., Hong, D., 2019. Complete Resolution of Nonalcoholic Fatty Liver Disease After Bariatric Surgery: A Systematic Review and Meta-analysis. Clin. Gastroenterol. Hepatol. Off. Clin. Pract. J. Am. Gastroenterol. Assoc. 17, 1040-1060.e11. <https://doi.org/10.1016/j.cgh.2018.10.017>
- Lent-Schochet, D., Jialal, I., 2022. Biochemistry, Lipoprotein Metabolism. Treasure Island (FL).
- Laura SOLDEVILA1*. (2020). *Association between visceral abdominal fat accumulation and severity of liver fibrosis in nondiabetic individuals coinfectd by HIV and HCV.*
- Lee, S. P., Ahn, Y. W., Lee, O. Y., Lee, K. N., Sohn, W., Lee, H. L., Jun, D. W., Yoon, B. C., & Choi, H. S. (2014). The relationship between colonic diverticulosis and abdominal visceral and subcutaneous fat accumulation measured by abdominal CT scan. *Turkish Journal of Gastroenterology*, 25(2), 192–197. <https://doi.org/10.5152/tjg.2014.4581>
- Lee, Y. A., Wallace, M. C., & Friedman, S. L. (2015). Pathobiology of liver fibrosis: a translational success story. *Gut*, 64(5), 830–841. <https://doi.org/10.1136/gutjnl-2014-306842>
- Li, G., Tang, L. J., Zhu, P. W., Huang, O. Y., Rios, R. S., Zheng, K. I., Chen, S. D., H. L., Targher, G., Byrne, C. D., Pan, X. Y., & Zheng, M. H. (2022). 'LA3 rs738409 C>G Variant Influences the Association Between Visceral and Significant Fibrosis in Biopsy-proven Nonalcoholic Fatty Liver Disease. *Journal of Clinical and Translational Hepatology*, 10(3), 439–448.



<https://doi.org/10.14218/JCTH.2021.00286>

- Liedtke, C., Nevzorova, Y. A., Luedde, T., Zimmermann, H., Kroy, D., Strnad, P., Berres, M.-L., Bernhagen, J., Tacke, F., Nattermann, J., Spengler, U., Sauerbruch, T., Wree, A., Abdullah, Z., Tolba, R. H., Trebicka, J., Lammers, T., Trautwein, C., & Weiskirchen, R. (2022). Liver Fibrosis—From Mechanisms of Injury to Modulation of Disease . In *Frontiers in Medicine* (Vol. 8). <https://www.frontiersin.org/articles/10.3389/fmed.2021.814496>
- Liutsko, L., Leonov, S., Pashenko, A., & Polikanova, I. (2023). *Frequency of Practicing of Different Types of Physical Activity, BMI and Tobacco/Alcohol Consumption Relationship: How They Are Associated with Our Physical and*.
- Lopez-Pentecost, M., Hallmark, B., Thomson, C., Chilton, F., & Garcia, D. (2022). Abstract 5956: Relationship between fatty acid intake and liver steatosis and fibrosis among overweight and obese Mexican-origin adults. *Cancer Research*, 82(12_Supplement), 5956–5956. <https://doi.org/10.1158/1538-7445.am2022-5956>
- Lubis, A. I., Putri, S. E., Safrida, S., Ayunda, H. M., & Iskandar, A. (2021). Relationship between Body Mass Index and Visceral Fat of Participants EXPO 2021 Universitas Teuku Umar. *Journal of Nutrition Science*, 2(2), 48. <https://doi.org/10.35308/jns.v2i2.4377>
- Li, J., Zou, B., Yeo, Y.H., Feng, Y., Xie, X., Lee, D.H., Fujii, H., Wu, Y., Kam, L.Y., Ji, F., Li, X., Chien, N., Wei, M., Ogawa, E., Zhao, C., Wu, X., Stave, C.D., Henry, L., Barnett, S., Takahashi, H., Furusyo, N., Eguchi, Y., Hsu, Y.-C., Lee, T.-Y., Ren, W., Qin, C., Jun, D.W., Toyoda, H., Wong, V.W.-S., Cheung, R., Zhu, Q., Nguyen, M.H., 2019. Prevalence, incidence, and outcome of non-alcoholic fatty liver disease in Asia, 1999-2019: a systematic review and meta-analysis. *lancet. Gastroenterol. Hepatol.* 4, 389–398. [https://doi.org/10.1016/S2468-1253\(19\)30039-1](https://doi.org/10.1016/S2468-1253(19)30039-1)
- Li, Q., Dhyani, M., Grajo, J.R., Sirlin, C., Samir, A.E., 2018. Current status of imaging in nonalcoholic fatty liver disease. *World J. Hepatol.* 10, 530–542. <https://doi.org/10.4254/wjh.v10.i8.530>



d, P., Raman, S.S., Lassman, C., Sayre, J., Ghobrial, R.M., Busuttil, R.W., b, S., Lu, D.S.K., 2004. Macrovesicular Hepatic Steatosis in Living tted Liver Donors: Correlation between CT and Histologic Findings. *iology* 230, 276–280. <https://doi.org/10.1148/radiol.2301021176>

- Lorente, S., Hautefeuille, M., Sanchez-Cedillo, A., 2020. The liver, a functionalized vascular structure. *Sci. Rep.* 10, 16194. <https://doi.org/10.1038/s41598-020-73208-8>
- Lu, Y.-C., Chang, C.-C., Wang, C.-P., Hung, W.-C., Tsai, I.-T., Tang, W.-H., Wu, C.-C., Wei, C.-T., Chung, F.-M., Lee, Y.-J., Hsu, C.-C., 2020. Circulating fatty acid-binding protein 1 (FABP1) and nonalcoholic fatty liver disease in patients with type 2 diabetes mellitus. *Int. J. Med. Sci.* 17, 182–190. <https://doi.org/10.7150/ijms.40417>
- Makbul, A., Pradana, S., Soebagijo, A., Putu, M., Wismandari., Hendra, Z., Ruli, R., Olivia, C., Marina, E., 2021. Panduan Pengelolaan Dislipidemia di Indonesia. Indonesia. Tim Penyusun Buku Pedoman Pengelolaan Dislipidemia di Indonesia.
- Mahaling, D.U., Basavaraj, M.M., Bika, A.J., 2013. Comparison of lipid profile in different grades of non-alcoholic fatty liver disease diagnosed on ultrasound. *Asian Pac. J. Trop. Biomed.* 3, 907. [https://doi.org/10.1016/S2221-1691\(13\)60177-X](https://doi.org/10.1016/S2221-1691(13)60177-X)
- M. Maheshwari. (2015). *Review Article Relationship between Cardiovascular Parameter and General and Visceral Obesity Indices- A Review.*
- Martínez-Escudé, A., Pera, G., Costa-Garrido, A., Rodríguez, L., Arteaga, I., Expósito-Martínez, C., Torán-Monserrat, P., & Caballería, L. (2021). TSH levels as an independent risk factor for NAFLD and liver fibrosis in the general population. *Journal of Clinical Medicine*, 10(13). <https://doi.org/10.3390/jcm10132907>
- Mateo-Gallego, R., Bea, A. M., Jarauta, E., Perez-Ruiz, M. R., & Civeira, F. (2012). Age and sex influence the relationship between waist circumference and abdominal fat distribution measured by bioelectrical impedance. *Nutrition Research (New York, N.Y.)*, 32(6), 466–469. <https://doi.org/10.1016/j.nutres.2012.05.004>
- Méndez-Sánchez, N., Cerda-Reyes, E., Higuera-de-la-Tijera, F., Salas-García, A. K., Cabrera-Palma, S., Cabrera-Álvarez, G., Cortez-Hernández, C., Pérez-dondo, L. A., Purón-González, E., Coronado-Alejandro, E., Panduro, A., ríguez-Hernández, H., Cruz-Ramón, V. C., Valencia-Rodríguez, A., Qí, ldamdan-Pérez, N., Aguilar-Olivos, N. E., Barranco-Fragoso, B., Ramírez- z, O., & Vera-Barajas, A. (2020). Dyslipidemia as a risk factor for liver



fibrosis progression in a multicentric population with non-alcoholic steatohepatitis. *F1000Research*, 9. <https://doi.org/10.12688/f1000research.21918.1>

Mansour-Ghanaei, R., Mansour-Ghanaei, F., Naghipour, M., Joukar, F., 2019. Biochemical markers and lipid profile in nonalcoholic fatty liver disease patients in the PERSIAN Guilan cohort study (PGCS), Iran. *J. Fam. Med. Prim. Care* 8, 923. https://doi.org/10.4103/JFMPC.JFMPC_243_18

Mathew, R.P., Venkatesh, S.K., 2018. Liver vascular anatomy: a refresher. *Abdom. Radiol. (New York)* 43, 1886–1895. <https://doi.org/10.1007/s00261-018-1623-z>

Maurice, J., Manousou, P., 2018. Non-alcoholic fatty liver disease. *Clin. Med.* 18, 245–250. <https://doi.org/10.7861/clinmedicine.18-3-245>

Miwah, R., Ken, K., Tadashi, N., Tohru, Y., Tohru, F., Iichiro, S. 2014. Clinical Significance of Visceral Adiposity Assessed by Computed Tomography: A Japanese Perspective

Murag, S., Ahmed, A., Kim, D., 2021. Recent Epidemiology of Nonalcoholic Fatty Liver Disease. *Gut Liver* 15, 206–216. <https://doi.org/10.5009/gnl20127>

Nassir, F., Rector, R.S., Hammoud, G.M., Ibdah, J.A., 2015. Pathogenesis and Prevention of Hepatic Steatosis. *Gastroenterol. Hepatol. (N. Y.)* 11, 167–175.

Naveau, S., Dobrin, A. S., Balian, A., Njiké-Nakseu, M., Nohra, P., Asnacios, A., Prévot, S., & Perlemuter, G. (2013). Body Fat Distribution and Risk Factors for Fibrosis in Patients with Alcoholic Liver Disease. *Alcoholism: Clinical and Experimental Research*, 37(2), 332–338. <https://doi.org/10.1111/j.1530-0277.2012.01927.x>

Nazare, J. A., Smith, J. D., Borel, A. L., Haffner, S. M., Balkau, B., Ross, R., Massien, C., Alméras, N., & Després, J. P. (2012). Ethnic influences on the relations between abdominal subcutaneous and visceral adiposity, liver fat, and cardiometabolic risk profile: The international study of prediction of intra-abdominal adiposity and its relationship with cardiometabolic risk/intra-abdominal adiposity. *American Journal of Clinical Nutrition*, 96(4), 714–726.

[s://doi.org/10.3945/ajcn.112.035758](https://doi.org/10.3945/ajcn.112.035758)

ao, L., Zhang, Y., Xu, J., Zhang, Y., Zhang, X., Du, Y., Sun, Z., & Wang, (2021). Correlation between the distribution of abdominal, pericardial and subcutaneous fat and muscle and age and gender in a middle-aged and



- elderly population. *Diabetes, Metabolic Syndrome and Obesity*, 14, 2201–2208. <https://doi.org/10.2147/DMSO.S299171>
- Nishizawa, A., Cuelho, A., De Farias-Itao, D. S., Campos, F. M., Leite, R. E. P., Ferretti-Rebustini, R. E. L., Grinberg, L. T., Nitrini, R., Jacob-Filho, W., Pasqualucci, C. A., & Suemoto, C. K. (2019). Direct measurements of abdominal visceral fat and cognitive impairment in late life: Findings from an autopsy study. *Frontiers in Aging Neuroscience*, 11(MAY). <https://doi.org/10.3389/fnagi.2019.00109>
- Natesan, V., Kim, S.-J., 2021. Lipid Metabolism, Disorders and Therapeutic Drugs - Review. *Biomol. Ther.* (Seoul). 29, 596–604. <https://doi.org/10.4062/biomolther.2021.122>
- Oni, E.T., Figueredo, V., Aneni, E., Veladar, E., McEvoy, J.W., Blaha, M.J., Blumenthal, R.S., Conceicao, R.D., Carvalho, J.A.M., Santos, R.D., Nasir, K., 2020. Non-Alcoholic Fatty Liver Disease Modifies Serum Gamma-Glutamyl Transferase in Cigarette Smokers. *J. Clin. Med. Res.* 12, 472–482. <https://doi.org/10.14740/jocmr3932>
- Paige, J.S., Bernstein, G.S., Heba, E., Costa, E.A.C., Fereirra, M., Wolfson, T., Gamst, A.C., Valasek, M.A., Lin, G.Y., Han, A., Erdman, J.W.J., O'Brien, W.D.J., Andre, M.P., Loomba, R., Sirlin, C.B., 2017. A Pilot Comparative Study of Quantitative Ultrasound, Conventional Ultrasound, and MRI for Predicting Histology-Determined Steatosis Grade in Adult Nonalcoholic Fatty Liver Disease. *AJR. Am. J. Roentgenol.* 208, W168–W177. <https://doi.org/10.2214/AJR.16.16726>
- Pei, K., Gui, T., Kan, D., Feng, H., Jin, Y., Yang, Y., Zhang, Q., Du, Z., Gai, Z., Wu, J., Li, Y., 2020. An Overview of Lipid Metabolism and Nonalcoholic Fatty Liver Disease. *Biomed Res. Int.* 2020, 4020249. <https://doi.org/10.1155/2020/4020249>
- Pérez-Montes de Oca, A., Julián, M. T., Pera, G., Caballería, L., Morillas, R., Torán, P., Expósito, C., Franch-Nadal, J., Mauricio, D., & Alonso, N. (2022). Dysglycemia in young women attenuates the protective effect against fatty disease. *Frontiers in Endocrinology*, 13. <https://doi.org/10.3389/fendo.2022.971864>
- G., 2022. Role of Ultrasound Methods for the Assessment of NAFLD. *J. Med.* 11. <https://doi.org/10.3390/jcm11154581>



- Polyzos, S.A., Kountouras, J., Mantzoros, C.S., 2019. Obesity and nonalcoholic fatty liver disease: From pathophysiology to therapeutics. *Metabolism*. 92, 82–97. <https://doi.org/10.1016/j.metabol.2018.11.014>
- Ponziani, F.R., Pecere, S., Gasbarrini, A., Ojetti, V., 2015. Physiology and pathophysiology of liver lipid metabolism. *Expert Rev. Gastroenterol. Hepatol.* 9, 1055–1067. <https://doi.org/10.1586/17474124.2015.1056156>
- Pouwels, S., Sakran, N., Graham, Y., Leal, A., Pintar, T., Yang, W., Kassir, R., Singhal, R., Mahawar, K., Ramnarain, D., 2022. Non-alcoholic fatty liver disease (NAFLD): a review of pathophysiology, clinical management and effects of weight loss. *BMC Endocr. Disord.* 22, 63. <https://doi.org/10.1186/s12902-022-00980-1>
- Rhee, E.-J., Kim, H.C., Kim, J.H., Lee, E.Y., Kim, B.J., Kim, E.M., Song, Y., Lim, J.H., Kim, H.J., Choi, S., Moon, M.K., Na, J.O., Park, K.-Y., Oh, M.S., Han, S.Y., Noh, J., Yi, K.H., Lee, S.-H., Hong, S.-C., Jeong, I.-K., 2019. 2018 Guidelines for the management of dyslipidemia. *Korean J. Intern. Med.* 34, 723–771. <https://doi.org/10.3904/kjim.2019.188>
- Ramírez-Manent, J. I., Martínez-Almoyna, E., López, C., Busquets-Cortés, C., González San Miguel, H., & López-González, Á. A. (2022). Relationship between Insulin Resistance Risk Scales and Non-Alcoholic Fatty Liver Disease and Liver Fibrosis Scales in 219,477 Spanish Workers. *Metabolites*, 12(11). <https://doi.org/10.3390/metabo12111093>
- Samovski, D., Abumrad, N.A., 2019. Regulation of lipophagy in NAFLD by cellular metabolism and CD36. *J. Lipid Res.* 60, 755–757. <https://doi.org/10.1194/jlr.C093674>
- Sanders, F.W.B., Griffin, J.L., 2016. De novo lipogenesis in the liver in health and disease: more than just a shunting yard for glucose. *Biol. Rev. Camb. Philos. Soc.* 91, 452–468. <https://doi.org/10.1111/brv.12178>
- Sanyal, D., Mukherjee, P., Raychaudhuri, M., Ghosh, S., Mukherjee, S., Chowdhury, S., 2015. Profile of liver enzymes in non-alcoholic fatty liver disease in patients with impaired glucose tolerance and newly detected treated type 2 diabetes. *Indian J. Endocrinol. Metab.* 19, 597–601. <https://doi.org/10.4103/2230-8210.163172>
- R., Pierce, N., Koppe, S., 2018. Obesity and nonalcoholic fatty liver disease: current perspectives. *Diabetes. Metab. Syndr. Obes.* 11, 533–542.



<https://doi.org/10.2147/DMSO.S146339>

- Seonah,J., Chang,L., Kyung,M., Jongmee,L., Jae,W.,Kyeong,A., Cheol,M. 2011. Correlation of Fatty Liver and Abdominal Fat Distribution Using A Simple Fat Computed Tomography Protocol
- Silveira, L. S., Monteiro, P. A., Antunes, B. de M. M., Seraphim, P. M., Fernandes, R. A., Christofaro, D. G. D., & Júnior, I. F. F. (2013). Intra-abdominal fat is related to metabolic syndrome and non-alcoholic fat liver disease in obese youth. *BMC Pediatrics*, 13(1). <https://doi.org/10.1186/1471-2431-13-115>
- STAELS, B., RATZIU, V., SANYAL, A. J., FRANCQUE, S., HARRISON, S. A., ROUDOT, A., BROZEK, J., HAJJI, Y., MEGNIEN, S., HUM, D. W., BIRMAN, P., HANF, R., & CARIOU, B. (2019). 278-LB: Type 2 Diabetes (T2D) as a Risk Factor for NASH and Significant Liver Fibrosis (F>2) in an International Cohort of 2,363 Patients with Metabolic Steatosis. *Diabetes*, 68(Supplement_1). <https://doi.org/10.2337/db19-278-lb>
- Sharma, P., Arora, A., 2020. Clinical presentation of alcoholic liver disease and non-alcoholic fatty liver disease: spectrum and diagnosis. *Transl. Gastroenterol. Hepatol.* 5, 19. <https://doi.org/10.21037/tgh.2019.10.02>
- Sherwood, L., 2016. *Human Physiology : from cells to system*, Ninth Edition 9th ed. Cengage Learning, Belmont, CA.
- Sibulesky, L., 2013. Normal liver anatomy. *Clin. liver Dis.* 2, S1–S3. <https://doi.org/10.1002/cld.124>
- Smith, G.I., Shankaran, M., Yoshino, M., Schweitzer, G.G., Chondronikola, M., Beals, J.W., Okunade, A.L., Patterson, B.W., Nyangau, E., Field, T., Sirlin, C.B., Talukdar, S., Hellerstein, M.K., Klein, S., 2020. Insulin resistance drives hepatic de novo lipogenesis in nonalcoholic fatty liver disease. *J. Clin. Invest.* 130, 1453–1460. <https://doi.org/10.1172/JCI134165>
- Song, Z., Xiaoli, A.M., Yang, F., 2018. Regulation and Metabolic Significance of De Novo Lipogenesis in Adipose Tissues. *Nutrients*. <https://doi.org/10.3390/nu10101383>
- Tajiri, K., Shimizu, Y., 2013. Liver physiology and liver diseases in the elderly. *Id J. Gastroenterol.* <https://doi.org/10.3748/wjg.v19.i46.8459>
- r, J.A., Kurtz, D.M., Schoenleber, S.J., West, C.P., Montori, V.M., 2007. figure is presented}Ultrasound-Based Transient Elastography for the detection of Hepatic Fibrosis: Systematic Review and Meta-analysis. *Clin.*



- Gastroenterol. Hepatol. 5, 1214–1220.
<https://doi.org/10.1016/j.cgh.2007.07.020>
- Tominaga, K., Kurata, J. H., Chen, Y. K., Fujimoto, E., Miyagawa, S., Abe, I., & Kusano, Y. (1995). Prevalence of fatty liver in Japanese children and relationship to obesity. *Digestive Diseases and Sciences*, 40(9), 2002–2009.
<https://doi.org/10.1007/bf02208670>
- Turck, D., Bresson, J., Burlingame, B., Dean, T., Fairweather-Tait, S., Heinonen, M., Hirsch-Ernst, K. I., Mangelsdorf, I., McArdle, H. J., Naska, A., Neuhäuser-Berthold, M., Nowicka, G., Pentieva, K., Sanz, Y., Sjödin, A., Stern, M., Tomé, D., Van Loveren, H., Vinceti, M., ... Siani, A. (2017). Stablor® and reduction of visceral fat while maintaining lean mass: evaluation of a health claim pursuant to Article 13(5) of Regulation (EC) No 1924/2006. *EFSA Journal*, 15(2). <https://doi.org/10.2903/j.efsa.2017.4723>
- Unger, L. W., Forstner, B., Schneglbberger, S., Muckenhuber, M., Eigenbauer, E., Scheiner, B., Mandorfer, M., Trauner, M., & Reiberger, T. (2019). Patterns and prevalence of dyslipidemia in patients with different etiologies of chronic liver disease. *Wiener Klinische Wochenschrift*, 131(17–18), 395–403.
<https://doi.org/10.1007/s00508-019-01544-5>
- Urata, N., Kawanaka, M., Nishino, K., Ishii, K., Tanikawa, T., Suehiro, M., Sasai, T., Haruma, K., Kawamoto, H., Nakamura, J., Manabe, N., & Kamada, T. (2020). Fatty liver, and not visceral fat, is more associated with liver fibrosis and diabetes in non-obese Japanese individuals: A cross-sectional study. *Life*, 10(9), 1–11. <https://doi.org/10.3390/life10090175>
- Villa, G., Owusu, D., Smith, C., Azumah, M., Abdullahi, A., Phillips, S., Sayeed, L., Austin, H., Chadwick, D., Phillips, R. O., & Geretti, A. M. (2022). Liver steatosis and fibrosis in people with human immunodeficiency virus in West Africa and the relationship with hepatitis B virus coinfection. *Hepatology Communications*, 6(11), 3036–3051. <https://doi.org/10.1002/hep4.2000>
- Wang, M.-D., Wang, N.-Y., Zhang, H.-L., Sun, L.-Y., Xu, Q.-R., Liang, L., Li, C., Huang, D.-S., Zhu, H., Yang, T., 2021. Fatty acid transport protein-5 (FATP5)



iciency enhances hepatocellular carcinoma progression and metastasis by programming cellular energy metabolism and regulating the AMPK-mTOR signaling pathway. *Oncogenesis* 10, 74. <https://doi.org/10.1038/s41389-021-34-5>

- Xu, F., Earp, J. E., Adami, A., Lofgren, I. E., Delmonico, M. J., Greene, G. W., & Riebe, D. (2022). The Sex and Race/Ethnicity-Specific Relationships of Abdominal Fat Distribution and Anthropometric Indices in US Adults. *International Journal of Environmental Research and Public Health*, 19(23). <https://doi.org/10.3390/ijerph192315521>
- Zarini, G., Sales Martinez, S., Campa, A., Sherman, K., Tamargo, J., Hernandez Boyer, J., Teeman, C., Johnson, A., Degarege, A., Greer, P., Liu, Q., Huang, Y., Mandler, R., Choi, D., & Baum, M. K. (2020). Sex Differences, Cocaine Use, and Liver Fibrosis among African Americans in the Miami Adult Studies on HIV Cohort. *Journal of Women's Health*, 29(9), 1176–1183. <https://doi.org/10.1089/jwh.2019.7954>
- Zhang, X., He, Z., Si, Q., Hu, X., Yang, L., Gu, X., Du, L., Wang, L., Pan, L., Li, Y., Li, J., Yang, B., & Gu, X. (2022). The Association of Sarcopenia and Visceral Obesity with Lean Nonalcoholic Fatty Liver Disease in Chinese Patients with Type 2 Diabetes Mellitus. *Journal of Diabetes Research*, 2022. <https://doi.org/10.1155/2022/2229139>
- Zhu, C., Huang, D., Ma, H., Qian, C., You, H., Bu, L., & Qu, S. (2022). High-Sensitive CRP Correlates With the Severity of Liver Steatosis and Fibrosis in Obese Patients With Metabolic Dysfunction Associated Fatty Liver Disease. *Frontiers in Endocrinology*, 13. <https://doi.org/10.3389/fendo.2022.848937>
- Zhang, J.-Z., Cai, J.-J., Yu, Y., She, Z.-G., Li, H., 2019. Nonalcoholic Fatty Liver Disease: An Update on the Diagnosis. *Gene Expr.* 19, 187–198. <https://doi.org/10.3727/105221619X15553433838609>
- Zhang, Y.N., Fowler, K.J., Hamilton, G., Cui, J.Y., Sy, E.Z., Balanay, M., Hooker, J.C., Szeverenyi, N., Sirlin, C.B., 2018. Liver fat imaging-a clinical overview of ultrasound, CT, and MR imaging. *Br. J. Radiol.* 91, 20170959. <https://doi.org/10.1259/bjr.20170959>
- Zhao, L., Li, Yuqi, Ding, Q., Li, Yanping, Chen, Y., Ruan, X.Z., 2021. CD36 Senses Dietary Lipids and Regulates Lipids Homeostasis in the Intestine. *Front. Physiol.* 12, 669279. <https://doi.org/10.3389/fphys.2021.669279>



LAMPIRAN 1 REKOMENDASI PERSETUJUAN ETIK



REKOMENDASI PERSETUJUAN ETIK

Nomor : 604/UN4.6.4.5.31/ PP36/ 2023

Tanggal: 30 Agustus 2023

Dengan ini Menyatakan bahwa Protokol dan Dokumen yang Berhubungan Dengan Protokol berikut ini telah mendapatkan Persetujuan Etik :

No Protokol	UH23080600	No Sponsor	
Peneliti Utama	dr. Dina Wati Amaliah Rahman, S.Ked	Sponsor	
Judul Peneliti	KORELASI FATTY LIVER DENGAN DISTRIBUSI LEMAK VISCERAL ABDOMEN PADA CT SCAN ABDOMEN BERDASARKAN IMT, PROFIL LIPID DARAH DAN FIBROSCAN		
No Versi Protokol	1	Tanggal Versi	16 Agustus 2023
No Versi PSP	1	Tanggal Versi	16 Agustus 2023
Tempat Penelitian	RSUP Dr. Wahidin Sudirohusodo Makassar		
Jenis Review	☐ Exempted ☒ Expedited ☐ Fullboard Tanggal	Masa Berlaku 30 Agustus 2023 sampai 30 Agustus 2024	Frekuensi review lanjutan
Ketua KEP Universitas Hasanuddin	Nama Prof.Dr.dr. Suryani As'ad, M.Sc.,Sp.GK (K)	Tanda tangan 	
Sekretaris KEP Universitas Hasanuddin	Nama dr. Agussalim Bukhari, M.Med.,Ph.D.,Sp.GK (K)	Tanda tangan 	

Kewajiban Peneliti Utama:

- Menyerahkan Amandemen Protokol untuk persetujuan sebelum di implementasikan
- Menyerahkan Laporan SAE ke Komisi Etik dalam 24 Jam dan dilengkapi dalam 7 hari dan Lapor SUSAR dalam 72 Jam setelah Peneliti Utama menerima laporan
- Menyerahkan Laporan Kemajuan (progress report) setiap 6 bulan untuk penelitian resiko tinggi dan setiap setahun untuk penelitian resiko rendah
- Menyerahkan laporan akhir setelah Penelitian berakhir
- Melaporkan penyimpangan dari prokol yang disetujui (protocol deviation / violation)
- Mematuhi semua peraturan yang ditentukan



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LAMPIRAN 2 DATA SAMPEL PENELITIAN

Jenis Kelamin

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Laki-laki	22	34.9	34.9	34.9
	Perempuan	41	65.1	65.1	100.0
	Total	63	100.0	100.0	

Usia

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<=45	29	46.0	46.0	46.0
	>45	34	54.0	54.0	100.0
	Total	63	100.0	100.0	

IMT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Obesitas	18	28.6	28.6	28.6
	Non Obesitas	45	71.4	71.4	100.0
	Total	63	100.0	100.0	

Fatty Liver

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ringan	52	82.5	82.5	82.5
	Sedang	5	7.9	7.9	90.5
	Parah	6	9.5	9.5	100.0
	Total	63	100.0	100.0	



Profil Lipid

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Non Dyslipidemia	3	4.8	4.8	4.8
	Dyslipidemia	60	95.2	95.2	100.0
	Total	63	100.0	100.0	

Lemak Visceral

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ya	50	79.4	79.4	79.4
	Tidak	13	20.6	20.6	100.0
	Total	63	100.0	100.0	

Fibroscan

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Non Fibroscan	36	57.1	57.1	57.1
	Fibroscan	27	42.9	42.9	100.0
	Total	63	100.0	100.0	

Crosstab

			Lemak Visceral		Total
			Ya	Tidak	
Jenis Kelamin	Laki-laki	Count	19	3	22
		% within Jenis Kelamin	86.4%	13.6%	100.0%
	Perempuan	Count	31	10	41
		% within Jenis Kelamin	75.6%	24.4%	100.0%
		Count	50	13	63
		% within Jenis Kelamin	79.4%	20.6%	100.0%



Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.011 ^a	1	.315		
Continuity Correction ^b	.461	1	.497		
Likelihood Ratio	1.064	1	.302		
Fisher's Exact Test				.515	.253
Linear-by-Linear Association	.995	1	.319		
N of Valid Cases	63				

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.54.

b. Computed only for a 2x2 table

rosstab

			Fibroscan		Total
			Non Fibroscan	Fibroscan	
Jenis Kelamin	Laki-laki	Count	13	9	22
		% within Jenis Kelamin	59.1%	40.9%	100.0%
	Perempuan	Count	23	18	41
		% within Jenis Kelamin	56.1%	43.9%	100.0%
Total		Count	36	27	63
		% within Jenis Kelamin	57.1%	42.9%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.052 ^a	1	.819		
Continuity Correction ^b	.000	1	1.000		
Likelihood Ratio	.052	1	.819		
Fisher's Exact Test				1.000	.517
Linear-by-Linear Association	.052	1	.820		
N of Valid Cases	63				



0.0%) have expected count less than 5. The minimum expected count is 9.43.

ed only for a 2x2 table

Crosstab

			Lemak Visceral		Total
			Ya	Tidak	
IMT	Obesitas	Count	16	2	18
		% within IMT	88.9%	11.1%	100.0%
	Non Obesitas	Count	34	11	45
		% within IMT	75.6%	24.4%	100.0%
Total	Count		50	13	63
	% within IMT		79.4%	20.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.396 ^a	1	.237		
Continuity Correction ^b	.700	1	.403		
Likelihood Ratio	1.533	1	.216		
Fisher's Exact Test				.316	.205
Linear-by-Linear Association	1.374	1	.241		
N of Valid Cases	63				

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 3.71.

b. Computed only for a 2x2 table

Crosstab

			Fibroscan		Total
			Non Fibroscan	Fibroscan	
IMT	Obesitas	Count	12	6	18
		% within IMT	66.7%	33.3%	100.0%
	Non Obesitas	Count	24	21	45
		% within IMT	53.3%	46.7%	100.0%
	Count		36	27	63
	% within IMT		57.1%	42.9%	100.0%



Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.933 ^a	1	.334		
Continuity Correction ^b	.468	1	.494		
Likelihood Ratio	.949	1	.330		
Fisher's Exact Test				.405	.248
Linear-by-Linear Association	.919	1	.338		
N of Valid Cases	63				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.71.

b. Computed only for a 2x2 table

Crosstab

			Lemak Visceral		Total
			Ya	Tidak	
Usia	<=45	Count	22	7	29
		% within Usia	75.9%	24.1%	100.0%
	>45	Count	28	6	34
		% within Usia	82.4%	17.6%	100.0%
Total	Count		50	13	63
	% within Usia		79.4%	20.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.403 ^a	1	.526		
Continuity Correction ^b	.104	1	.747		
Likelihood Ratio	.401	1	.526		
Fisher's Exact Test				.550	.372
Linear-by-Linear Association	.396	1	.529		
N of Valid Cases	63				



0.0%) have expected count less than 5. The minimum expected count is 5.98.

ed only for a 2x2 table

Crosstab

			Fibroscan		Total
			Non Fibroscan	Fibroscan	
Usia	<=45	Count	19	10	29
		% within Usia	65.5%	34.5%	100.0%
	>45	Count	17	17	34
		% within Usia	50.0%	50.0%	100.0%
Total	Count		36	27	63
	% within Usia		57.1%	42.9%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.539 ^a	1	.215		
Continuity Correction ^b	.970	1	.325		
Likelihood Ratio	1.550	1	.213		
Fisher's Exact Test				.307	.162
Linear-by-Linear Association	1.514	1	.218		
N of Valid Cases	63				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 12.43.

b. Computed only for a 2x2 table

Crosstab

			Lemak Visceral		Total
			Ya	Tidak	
Profil Lipid	Non Dyslipidemia	Count	3	0	3
		% within Profil Lipid	100.0%	0.0%	100.0%
	Dyslipidemia	Count	47	13	60
		% within Profil Lipid	78.3%	21.7%	100.0%
		Count	50	13	63
		% within Profil Lipid	79.4%	20.6%	100.0%



Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.819 ^a	1	.365		
Continuity Correction ^b	.030	1	.862		
Likelihood Ratio	1.425	1	.233		
Fisher's Exact Test				1.000	.494
Linear-by-Linear Association	.806	1	.369		
N of Valid Cases	63				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is .62.

b. Computed only for a 2x2 table

Crosstab

			Fibroscan		Total
			Non Fibroscan	Fibroscan	
Profil Lipid	Non Dyslipidemia	Count	1	2	3
		% within Profil Lipid	33.3%	66.7%	100.0%
	Dyslipidemia	Count	35	25	60
		% within Profil Lipid	58.3%	41.7%	100.0%
Total		Count	36	27	63
		% within Profil Lipid	57.1%	42.9%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.729 ^a	1	.393		
Continuity Correction ^b	.066	1	.798		
Likelihood Ratio	.724	1	.395		
Fisher's Exact Test				.572	.392
Linear-by-Linear Association	.718	1	.397		
n					
Cases	63				



50.0%) have expected count less than 5. The minimum expected count is 1.29.

ed only for a 2x2 table

Crosstab

			Lemak Visceral		Total
			Ya	Tidak	
Fatty Liver	Ringan	Count	42	10	52
		% within Fatty Liver	80.8%	19.2%	100.0%
	Sedang	Count	4	1	5
		% within Fatty Liver	80.0%	20.0%	100.0%
	Parah	Count	4	2	6
		% within Fatty Liver	66.7%	33.3%	100.0%
Total	Count	50	13	63	
	% within Fatty Liver	79.4%	20.6%	100.0%	

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.655 ^a	2	.721
Likelihood Ratio	.588	2	.745
Linear-by-Linear Association	.548	1	.459
N of Valid Cases	63		

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is 1.03.

rosstab

			Fibroscan		Total
			Non Fibroscan	Fibroscan	
Fatty Liver	Ringan	Count	30	22	52
		% within Fatty Liver	57.7%	42.3%	100.0%
	Sedang	Count	4	1	5
		% within Fatty Liver	80.0%	20.0%	100.0%
	Parah	Count	2	4	6
		% within Fatty Liver	33.3%	66.7%	100.0%
		Count	36	27	63
		% within Fatty Liver	57.1%	42.9%	100.0%



Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.462 ^a	2	.292
Likelihood Ratio	2.553	2	.279
Linear-by-Linear Association	.484	1	.487
N of Valid Cases	63		

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is 2.14.

Descriptives

	Jenis Kelamin	Statistic	Std. Error
HU	Laki-laki	Mean	-14.725
		95% Confidence Interval for Lower Bound	-19.751
		Mean Upper Bound	-9.700
		5% Trimmed Mean	-13.716
		Median	-12.165
		Variance	128.453
		Std. Deviation	11.3337
		Minimum	-44.6
		Maximum	-3.0
		Range	41.6
		Interquartile Range	10.5
		Skewness	-1.751
		Kurtosis	2.681
	Perempuan	Mean	-19.812
		95% Confidence Interval for Lower Bound	-25.624
		Mean Upper Bound	-14.000
		5% Trimmed Mean	-17.150
		Median	-14.300
		Variance	339.038
		Std. Deviation	18.4130
		Minimum	-111.5
		Maximum	-3.0
		Range	108.5



		Interquartile Range	12.3	
		Skewness	-3.458	.369
		Kurtosis	15.333	.724
Visceral	Laki-laki	Mean	.9032	.09472
		95% Confidence Interval for Mean	Lower Bound Upper Bound	.7062 1.1002
		5% Trimmed Mean	.8877	
		Median	.8400	
		Variance	.197	
		Std. Deviation	.44428	
		Minimum	.24	
		Maximum	1.84	
		Range	1.60	
		Interquartile Range	.55	
		Skewness	.651	.491
		Kurtosis	-.136	.953
	Perempuan	Mean	.6663	.09637
		95% Confidence Interval for Mean	Lower Bound Upper Bound	.4716 .8611
		5% Trimmed Mean	.5814	
		Median	.5400	
		Variance	.381	
		Std. Deviation	.61705	
		Minimum	.20	
		Maximum	4.27	
		Range	4.07	
		Interquartile Range	.35	
		Skewness	5.196	.369
		Kurtosis	30.605	.724



Descriptives

	Usia		Statistic	Std. Error
HU	<=45	Mean	-17.622	2.3653
		95% Confidence Interval for Mean	Lower Bound -22.467 Upper Bound -12.777	
		5% Trimmed Mean	-16.317	
		Median	-12.000	
		Variance	162.249	
		Std. Deviation	12.7377	
		Minimum	-57.6	
		Maximum	-4.8	
		Range	52.8	
		Interquartile Range	10.6	
		Skewness	-1.751	.434
		Kurtosis	2.667	.845
	>45	Mean	-18.389	3.2809
		95% Confidence Interval for Mean	Lower Bound -25.064 Upper Bound -11.714	
		5% Trimmed Mean	-15.631	
		Median	-14.550	
		Variance	365.979	
		Std. Deviation	19.1306	
		Minimum	-111.5	
		Maximum	-3.0	
		Range	108.5	
		Interquartile Range	13.8	
		Skewness	-3.741	.403
		Kurtosis	17.371	.788
Visceral	<=45	Mean	.5945	.03946
		95% Confidence Interval for Mean	Lower Bound .5136 Upper Bound .6753	
		5% Trimmed Mean	.5934	
		Median	.6000	
		Variance	.045	



	Std. Deviation	.21251	
	Minimum	.20	
	Maximum	1.03	
	Range	.83	
	Interquartile Range	.36	
	Skewness	.017	.434
	Kurtosis	-.655	.845
>45	Mean	.8809	.12535
	95% Confidence Interval for Mean	Lower Bound Upper Bound	.6259 1.1359
	5% Trimmed Mean	.7825	
	Median	.6650	
	Variance	.534	
	Std. Deviation	.73092	
	Minimum	.25	
	Maximum	4.27	
	Range	4.02	
	Interquartile Range	.62	
	Skewness	3.246	.403
	Kurtosis	13.845	.788

Descriptives

	IMT		Statistic	Std. Error
HU	Obesitas	Mean	-18.927	5.8413
		95% Confidence Interval for Mean	Lower Bound Upper Bound	-31.251 -6.603
		5% Trimmed Mean	-14.669	
		Median	-11.765	
		Variance	614.175	
		Std. Deviation	24.7826	
		Minimum	-111.5	
		Maximum	-3.0	
		Range	108.5	
		Interquartile Range	9.9	
		Skewness	-3.445	.536



		Kurtosis	12.831	1.038
Non Obesitas		Mean	-17.679	1.7650
		95% Confidence Interval for Mean	Lower Bound Upper Bound	-21.236 -14.122
		5% Trimmed Mean	-16.605	
		Median	-13.800	
		Variance	140.193	
		Std. Deviation	11.8403	
		Minimum	-57.6	
		Maximum	-4.6	
		Range	53.0	
		Interquartile Range	12.9	
		Skewness	-1.454	.354
		Kurtosis	2.074	.695
Visceral Obesitas		Mean	.9539	.21443
		95% Confidence Interval for Mean	Lower Bound Upper Bound	.5015 1.4063
		5% Trimmed Mean	.8115	
		Median	.7000	
		Variance	.828	
		Std. Deviation	.90976	
		Minimum	.20	
		Maximum	4.27	
		Range	4.07	
		Interquartile Range	.55	
		Skewness	3.162	.536
		Kurtosis	11.348	1.038
Non Obesitas		Mean	.6671	.05050
		95% Confidence Interval for Mean	Lower Bound Upper Bound	.5653 .7689
		5% Trimmed Mean	.6377	
		Median	.5700	
		Variance	.115	
		Std. Deviation	.33879	
		Minimum	.24	



Maximum	1.80	
Range	1.56	
Interquartile Range	.42	
Skewness	1.356	.354
Kurtosis	2.115	.695

Descriptives

	Fatty Liver	Statistic	Std. Error
HU	Ringan	Mean	.7567
		95% Confidence Interval for Mean	
		Lower Bound	-13.938
		Upper Bound	-10.900
		5% Trimmed Mean	-12.313
		Median	-11.550
		Variance	29.771
		Std. Deviation	5.4563
		Minimum	-25.0
		Maximum	-3.0
		Range	22.0
		Interquartile Range	8.0
		Skewness	-.330
		Kurtosis	-.605
	Sedang	Mean	1.2634
		95% Confidence Interval for Mean	
		Lower Bound	-33.902
		Upper Bound	-26.886
		5% Trimmed Mean	-30.451
		Median	-31.100
		Variance	7.981
		Std. Deviation	2.8250
		Minimum	-33.7
		Maximum	-26.1
		Range	7.6
		Interquartile Range	4.8
		Skewness	.788
		Kurtosis	.992
	Parah	Mean	11.3124



		95% Confidence Interval for Mean	Lower Bound	-85.491	
			Upper Bound	-27.332	
		5% Trimmed Mean		-54.226	
		Median		-43.950	
		Variance		767.818	
		Std. Deviation		27.7095	
		Minimum		-111.5	
		Maximum		-40.7	
		Range		70.8	
		Interquartile Range		30.3	
		Skewness		-2.194	.845
		Kurtosis		4.887	1.741
Visceral	Ringan	Mean		.7396	.08268
		95% Confidence Interval for Mean	Lower Bound	.5736	
			Upper Bound	.9056	
		5% Trimmed Mean		.6605	
		Median		.6100	
		Variance		.355	
		Std. Deviation		.59618	
		Minimum		.20	
		Maximum		4.27	
		Range		4.07	
		Interquartile Range		.40	
		Skewness		4.342	.330
		Kurtosis		24.338	.650
	Sedang	Mean		.7480	.13230
		95% Confidence Interval for Mean	Lower Bound	.3807	
			Upper Bound	1.1153	
		5% Trimmed Mean		.7539	
		Median		.8100	
		Variance		.088	
		Std. Deviation		.29584	
		Minimum		.36	
		Maximum		1.03	
		Range		.67	



Parah	Interquartile Range		.58	
	Skewness		-.453	.913
	Kurtosis		-2.130	2.000
	Mean		.8317	.23490
	95% Confidence Interval for Mean	Lower Bound	.2278	
		Upper Bound	1.4355	
	5% Trimmed Mean		.8063	
	Median		.7300	
	Variance		.331	
	Std. Deviation		.57538	
	Minimum		.28	
	Maximum		1.84	
	Range		1.56	
	Interquartile Range		.95	
	Skewness		1.172	.845
	Kurtosis		1.374	1.741

Descriptives

	Profil Lipid		Statistic	Std. Error
HU	Non Dyslipidem ia	Mean	-8.810	1.8435
		95% Confidence Interval for Mean	Lower Bound	-16.742
			Upper Bound	-.878
		5% Trimmed Mean		.
		Median		-8.000
		Variance		10.195
		Std. Deviation		3.1930
		Minimum		-12.3
		Maximum		-6.1
		Range		6.2
		Interquartile Range		.
		Skewness		-1.068
		Kurtosis		.
	Dyslipidem ia	Mean	-18.497	2.1485
		95% Confidence Interval for Mean	Lower Bound	-22.796
			Upper Bound	-14.198



				5% Trimmed Mean	-16.399	
				Median	-13.950	
				Variance	276.966	
				Std. Deviation	16.6423	
				Minimum	-111.5	
				Maximum	-3.0	
				Range	108.5	
				Interquartile Range	11.7	
				Skewness	-3.406	.309
				Kurtosis	16.170	.608
Visceral	Non Dyslipidem ia	Mean			.8867	.18774
		95% Confidence Interval for Mean	Lower Bound		.0789	
			Upper Bound		1.6944	
		5% Trimmed Mean			.	
		Median			1.0000	
		Variance			.106	
		Std. Deviation			.32517	
		Minimum			.52	
		Maximum			1.14	
		Range			.62	
		Interquartile Range			.	
		Skewness			-1.378	1.225
		Kurtosis			.	.
	Dyslipidem ia	Mean			.7422	.07499
		95% Confidence Interval for Mean	Lower Bound		.5921	
			Upper Bound		.8922	
		5% Trimmed Mean			.6654	
		Median			.6150	
		Variance			.337	
		Std. Deviation			.58087	
		Minimum			.20	
		Maximum			4.27	
		Range			4.07	
		Interquartile Range			.41	
		Skewness			4.122	.309



Kurtosis	23.003	.608
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Descriptives

	Lemak Visceral	Statistic	Std. Error
HU	Ya	Mean	-17.954
		95% Confidence Interval for Mean	2.4544
		Lower Bound	-22.887
		Upper Bound	-13.022
		5% Trimmed Mean	-15.474
		Median	-12.835
		Variance	301.196
		Std. Deviation	17.3550
		Minimum	-111.5
		Maximum	-3.0
		Range	108.5
		Interquartile Range	10.7
		Skewness	-3.662
		Kurtosis	.337
	Tidak	Mean	17.241
		95% Confidence Interval for Mean	.662
		Lower Bound	-25.891
		Upper Bound	-10.806
		5% Trimmed Mean	-17.954
		Median	-15.800
		Variance	155.774
		Std. Deviation	12.4809
		Minimum	-40.8
		Maximum	-3.0
		Range	37.8
		Interquartile Range	18.1
		Skewness	-1.191
		Kurtosis	.616
Visceral	Ya	Mean	.8620
		95% Confidence Interval for Mean	.08341
		Lower Bound	.6944
		Upper Bound	1.0296
		5% Trimmed Mean	.7779
		Median	.7150



		Variance	.348	
		Std. Deviation	.58982	
		Minimum	.42	
		Maximum	4.27	
		Range	3.85	
		Interquartile Range	.44	
		Skewness	4.248	.337
		Kurtosis	22.947	.662
Tidak	Mean		.3146	.01608
	95% Confidence Interval for	Lower Bound	.2796	
	Mean	Upper Bound	.3496	
	5% Trimmed Mean		.3168	
	Median		.3300	
	Variance		.003	
	Std. Deviation		.05797	
	Minimum		.20	
	Maximum		.39	
	Range		.19	
	Interquartile Range		.09	
	Skewness		-.674	.616
	Kurtosis		-.493	1.191

Descriptives

	Fibroscan		Statistic	Std. Error
HU	Non	Mean	-16.183	1.9021
	Fibroscan	95% Confidence Interval for	Lower Bound	-20.045
		Mean	Upper Bound	-12.322
	5% Trimmed Mean		-14.919	
	Median		-11.800	
	Variance		130.244	
	Std. Deviation		11.4124	
	Minimum		-57.6	
	Maximum		-3.0	
	Range		54.6	
	Interquartile Range		9.8	



			Skewness	-1.956	.393	
			Kurtosis	4.342	.768	
Fibroscan	Mean		-20.506	4.0969		
	95% Confidence Interval for Mean	Lower Bound	-28.927			
		Upper Bound	-12.084			
	5% Trimmed Mean		-17.363			
	Median		-14.300			
	Variance		453.182			
	Std. Deviation		21.2881			
	Minimum		-111.5			
	Maximum		-3.0			
	Range		108.5			
	Interquartile Range		13.3			
	Skewness		-3.259	.448		
	Kurtosis		13.049	.872		
	Visceral	Non Fibroscan	Mean	.8189	.11613	
			95% Confidence Interval for Mean	Lower Bound	.5831	
Upper Bound				1.0546		
5% Trimmed Mean			.7178			
Median			.6200			
Variance			.485			
Std. Deviation			.69677			
Minimum			.20			
Maximum			4.27			
Range			4.07			
Interquartile Range			.43			
Skewness			3.789	.393		
Kurtosis			17.512	.768		
Fibroscan			Mean	.6559	.06289	
			95% Confidence Interval for Mean	Lower Bound	.5267	
		Upper Bound		.7852		
		5% Trimmed Mean		.6374		
		Median		.5600		
		Variance		.107		
		Std. Deviation		.32677		





Minimum	.24	
Maximum	1.48	
Range	1.24	
Interquartile Range	.52	
Skewness	.700	.448
Kurtosis	-.066	.872

			Jenis Kelamin	Usia	IMT	Profil Lipid	Fibroscan
Spearman's rho	Jenis Kelamin	Correlation Coefficient	1.000	.125	-.021	.149	.029
		Sig. (2-tailed)	.	.329	.870	.244	.822
		N	63	63	63	63	63
	Usia	Correlation Coefficient	.125	1.000	.050	-.207	.156
		Sig. (2-tailed)	.329	.	.695	.104	.221
		N	63	63	63	63	63
	IMT	Correlation Coefficient	-.021	.050	1.000	.024	.122
		Sig. (2-tailed)	.870	.695	.	.855	.342
		N	63	63	63	63	63
	Profil Lipid	Correlation Coefficient	.149	-.207	.024	1.000	-.108
		Sig. (2-tailed)	.244	.104	.855	.	.401
		N	63	63	63	63	63
	Fibroscan	Correlation Coefficient	.029	.156	.122	-.108	1.000
		Sig. (2-tailed)	.822	.221	.342	.401	.
		N	63	63	63	63	63
	HU	Correlation Coefficient	-.179	-.001	-.117	-.189	-.089
		Sig. (2-tailed)	.627	.678	.769	.483	.487
		N	63	63	63	63	63



Visceral	Correlation					
	Coefficient	-.364**	.186	-.167	-.137	-.107
	Sig. (2-tailed)	.072	.078	.097	.401	.405
	N	63	63	63	63	63



LAMPIRAN 3 CURRICULUM VITAE

CURRICULUM VITAE

A. Data Pribadi

- Nama : dr. Dina Wati Amaliah Rahman
- Agama : Islam
- Tempat/Tgl Lahir : Makassar/ 19 September 1991
- Alamat : Jl. Tamangapa Raya 3, Perum. Taman
Makassar Indah A2/2, Bangkala, Manggala,
Kota Makassar
- Nama Ayah/Ibu : dr.Abd.Rahman Rahim/
DR.Mujizatullah, M.p.d.i
- Suami : dr. Arif Sumanto S. Dai
- Anak : Assyifa Rahmania Arif Dai

B. Riwayat Pendidikan

- SD : SDN Labuang Baji II
- SMP : SMPN 16 Bekasi
- SMA : SMAN 02 Makassar
- Perguruan Tinggi : Fakultas Kedokteran Universitas
Muhammadiyah Makassar
- Profesi Dokter : Fakultas Kedokteran Universitas
Muhammadiyah Makassar
- PPDS : Departemen Radiologi Fakultas Kedokteran
Universitas Hasanuddin Periode Januari 2020

C. Riwayat Pekerjaan

- Dokter Umum di Klinik Melviana, Bekasi 2017-2018
- Dokter Umum di Puskesmas Bongomeme, Desa Dulamayo, Kec.
Bongomeme, Kab Gorontalo 2018-2019

D. Makalah pada Seminar/ Konferens Ilmiah Nasional:

“Traumatic Diaphragmatic Hernia in a 15-Years Old Adolescent” pada
ertemuan Ilmiah Tahunan – Perhimpunan Dokter Spesialis Radiologi
linik Indonesia ke-16 “Role of Radiology in Emergency Setting : Current
nd Future Challenges” Manado, 11-12 Maret 202

