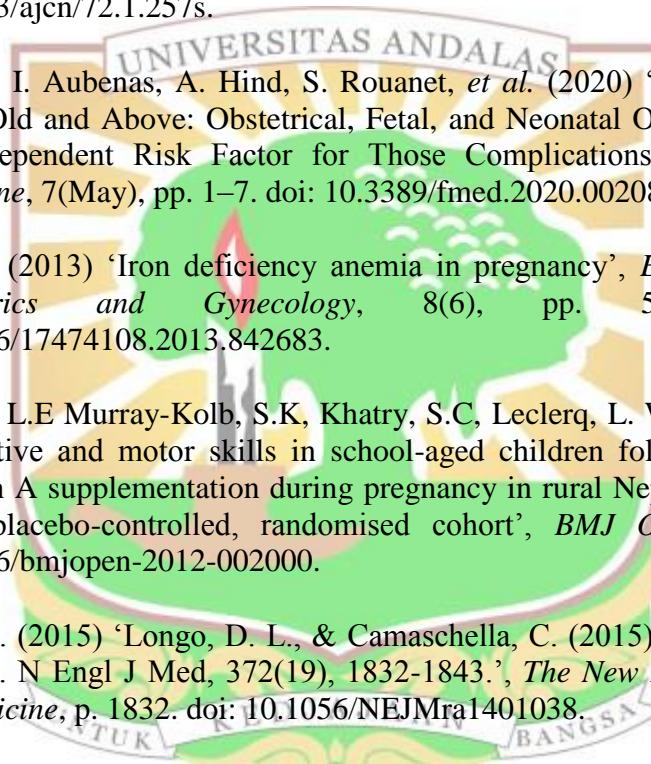


DAFTAR PUSTAKA

- Abbaspour, N., Hurrell, R. and Kelishadi, R. (2014) ‘Review on iron and its importance for human health’, *Journal of Research in Medical Sciences*, 19(2), pp. 164–174.
- Achebe, M. M. and Gafter-Gvili, A. (2017) ‘How I treat anemia in pregnancy: Iron, cobalamin, and folate’, *Blood*, 129(8), pp. 940–949. doi: 10.1182/blood-2016-08-672246.
- Ackland, M. L. and Michalczyk, A. A. (2016) ‘Zinc and infant nutrition’, *Arch. Biochem. Biophys.*, (611), pp. 51–57.
- Adediran, A. A. Gbadegesin, TA. Adeyemo, AA. Akinbami, *et al* (2011) ‘Haemoglobin and ferritin concentrations of pregnant women at term’, *Obstetric Medicine*, 4(4), pp. 152–155. doi: 10.1258/om.2011.110033.
- Adriyani, M. and Wijatmadi, B. (2012) *Pengantar Gizi Masyarakat*. Jakarta: Kencana Prenada Media Group.
- Afsana, Kaosar, K. Shiga, S. Ishizuka, H.Hara (2004) ‘Reducing effect of ingesting tannic acid on the absorption of iron, but not of zinc, copper and manganese by rats’, *Bioscience, Biotechnology and Biochemistry*, 68(3), pp. 584–592. doi: 10.1271/bbb.68.584.
- Agbozo, F., A. Abubakari, J. Der, A. Jahn (2020) ‘Maternal dietary intakes, red blood cell indices and risk for anemia in the first, second and third trimesters of pregnancy and at predelivery’, *Nutrients*, 12(3), pp. 1–16. doi: 10.3390/nu12030777.
- Agedew, Eskeziaw, B. Tsegaye, A. Bante, E. Zerihun, *et al*. (2022) ‘Zinc deficiency and associated factors among pregnant women’s attending antenatal clinics in public health facilities of Konso Zone, Southern Ethiopia,PloS one, 17(7), p. e0270971. doi: 10.1371/journal.pone.0270971
- Alleyne, M., Horne, M. K. and Miller, J. L. (2008) ‘Individualized Treatment for Iron-deficiency Anemia in Adults’, *American Journal of Medicine*, 121(11), pp. 943–948. doi: 10.1016/j.amjmed.2008.07.012.
- Almatsier, S. (2010) *Prinsip Dasar Ilmu Gizi. Cetakan Kesembilan*. Jakarta: PT Gramedia Pustaka Utama.
- Almatsier, S. (2012) *Prinsip Dasar Ilmu Gizi*. Jakarta: PT Gramedia Pustaka Utama.

- Al-mekhlafi, HM., EM. Al-zabedi, MT. Al-maktari, WM. Atroosh, *et al.* (2014) ‘Effects of Vitamin A Supplementation on Iron Status Indices and Iron Deficiency Anaemia: A Randomized Controlled Trial’, (December 2013), pp. 190–206. doi: 10.3390/nu6010190.
- Aloy-A, Oluchi, AU. Akujobi, Jk. Nnodim, J. Ndudim-Dike *et al.* (2020) ‘Serum Ferritin and Iron/TIBC of Pregnant Women Attending Nnamdi Azikiwe University Teaching Hospital, Nnewi, Anambra State, Nigeria: A Longitudinal Study’, *Clinical Research in Obstetrics and Gynecology*, 3(2), pp. 1–6. doi: 10.4135/9781529714401.n258.
- Amuthenie, S. and Sivakanesan, R. (2020) ‘Impact of dietary practices on serum ferritin content of pregnant mothers in the Batticaloa district Sri Lanka’, *AGRIEAST: Journal of Agricultural Sciences*, 14(1), p. 44. doi: 10.4038/agrieast.v14i1.84.
- Ani LS. (2013) *Buku Saku: Anemia Defisiensi Besi Masa Prahamil & Hamil*. Jakarta: EGC.
- Armini, N. K. A., Hidayati, N. and Kusumaningrum, T. (2020) ‘Determinants of Nutritional Status Among Pregnant Women: a Transcultural Nursing Approach’, *Jurnal Ners*, 15(2), p. 214. doi: 10.20473/jn.v15i2.21388.
- Asmawati (2013) *Studi Validasi Semi-Quantitative Food Frequency Questionnaire (FFQ) dan Recall 24 Jam terhadap Asupan Zat Gizi Makro Ibu Hamil di Puskesmas Kassi-Kassi Kota Makassar*. Universitas Hassanudin.
- Atmasier, S. (2015) *Prinsip Dasar Ilmu Gizi*. Jakarta: PT. Gramedia Pustaka Utama.
- Atmasier, S. (2016) *Prinsip Dasar Ilmu Gizi*. Jakarta: PT. Gramedia Pustaka Utama.
- Avantika Gupta (2018) ‘Iron Deficiency Anaemia in Pregnancy: Developed Versus Developing Countries - European Medical Journal’, *EMJ Hematol*, (August), pp. 101–109. Available at: <https://www.emjreviews.com/hematology/article/iron-deficiency-anaemia-in-pregnancy-developed-versus-developing-countries/>.
- Ayensu, J., R. Annan, H. Lutterodt, A. Edusei, et al *et al.* (2020) ‘Prevalence of anaemia and low intake of dietary nutrients in pregnant women living in rural and urban areas in the Ashanti region of Ghana’, pp. 1–15. doi: 10.1371/journal.pone.0226026.

- Azhar, B. S., Islam, M. S. and Karim, M. R. (2021) 'Prevalence of anemia and associated risk factors among pregnant women attending antenatal care in Bangladesh: A cross-sectional study', *Primary Health Care Research and Development*, 22. doi: 10.1017/S146342362100061X.
- Bailey, R. L., West, K. P. and Black, R. E. (2015) 'The epidemiology of global micronutrient deficiencies', *Annals of Nutrition and Metabolism*, 66(suppl 2), pp. 22–33. doi: 10.1159/000371618.
- Bain, Bates, I, Laffan, MA, Levis SM, et al. (2012) *Basic Haematological Techniques: Dacie and Lewis Practical Haematology*. 11th ed. Amsterdam, Netherlands: Elsevier.
- Balarajan, Y., Usha, R., Emre, Ö, Anuraj H, S, et al. (2011) 'Anaemia in low-income and middle-income countries', *The Lancet*, 378(9809), pp. 2123–2135. doi: 10.1016/S0140-6736(10)62304-5.
- Banjari, I. (2018) 'Iron Deficiency Anemia and Pregnancy Iron Deficiency Anemia and Pregnancy', *InTech*. doi: 10.5772/intechopen.69114.
- Barragán-Ibañez, G., A. Santoyo-Sánchez, C. O. and Nafiel, R.-P. (2016) 'Iron deficiency anaemia', *Hospital General De Mexico*, 27(11), pp. 527–529. doi: 10.1016/j.paed.2017.08.004.
- Bauty, V. A., Rasyid, R. and Lipoeto, N. I. (2020) 'The Relationship of Vitamin A and Zinc Consumption on Ferritin Levels in First Trimester Pregnant Women in Agam District Health Center in 2019', 7(June), pp. 120–128.
- Beck, K. L., Cathryn, AC. Rozanne, K., Jane C. (2014) 'Dietary determinants of and possible solutions to iron deficiency for young women living in industrialized countries: A review', *Nutrients*, 6(9), pp. 3747–3776. doi: 10.3390/nu6093747.
- Belay, W. S., Admasu, E. and Bishaw, E. (2022) 'Dietary practice during pregnancy and associated factors among pregnant women in Farta district , South Gondar Zone , Northwest Ethiopia , 2021', *Clinical Epidemiology and Global Health*, 14(January), p. 100968. doi: 10.1016/j.cegh.2022.100968.
- Bencaiova, G. and Breymann, C. (2014) 'Mild anemia and pregnancy outcome in a swiss collective', *Journal of Pregnancy*, 2014. doi: 10.1155/2014/307535.
- Beutler, E. Thomas, H B. Robert, WC. Arn, GM. et al. (2006) *Heditary Hemochromatosis*. New York, USA: The McGraw-Hill Companies.
- Bianchi, V. E. (2016) 'Role of nutrition on anemia in elderly', *Clinical Nutrition ESPEN*, 11, pp. e1–e11. doi: 10.1016/j.clnesp.2015.09.003.

- Bjørklund, G., J. Aaseth, AV. Skalny, J. Suliburska, *et al.* (2017) 'Interactions of iron with manganese, zinc, chromium, and selenium as related to prophylaxis and treatment of iron deficiency', *Journal of Trace Elements in Medicine and Biology*, 41(8610), pp. 41–53. doi: 10.1016/j.jtemb.2017.02.005.
- Black, R. E., C.G, Victora, S.P. Walker, Z.A, Bhutta *et al.* (2013) 'Maternal and child undernutrition and overweight in low-income and middle-income countries', *The Lancet*, 382(9890), pp. 427–451. doi: 10.1016/S0140-6736(13)60937-X.
- Bothwell, T. H. (2000) 'Iron requirements in pregnancy and strategies to meet them', *American Journal of Clinical Nutrition*, 72(1 SUPPL.). doi: 10.1093/ajcn/72.1.257s.
- Bouzaglou, A. I. Aubenas, A. Hind, S. Rouanet, *et al.* (2020) 'Pregnancy at 40 years Old and Above: Obstetrical, Fetal, and Neonatal Outcomes. Is Age an Independent Risk Factor for Those Complications?', *Frontiers in Medicine*, 7(May), pp. 1–7. doi: 10.3389/fmed.2020.00208.
- Breymann, C. (2013) 'Iron deficiency anemia in pregnancy', *Expert Review of Obstetrics and Gynecology*, 8(6), pp. 587–596. doi: 10.1586/17474108.2013.842683.
- Buckley, G. J. L.E Murray-Kolb, S.K, Khatry, S.C, Leclercq, L. Wu, *et al.* (2013) 'Cognitive and motor skills in school-aged children following maternal vitamin A supplementation during pregnancy in rural Nepal: A follow-up of a placebo-controlled, randomised cohort', *BMJ Open*, 3(5). doi: 10.1136/bmjopen-2012-002000.
- Camashella, C. (2015) 'Longo, D. L., & Camaschella, C. (2015). Iron-deficiency anemia. N Engl J Med, 372(19), 1832-1843.', *The New England Journal of Medicine*, p. 1832. doi: 10.1056/NEJMra1401038.
- Cañete, A. Elena, C. Ramon, M. Rita, C, *et al.* (2017) 'Role of vitamin a/retinoic acid in regulation of embryonic and adult hematopoiesis', *Nutrients*, 9(2), pp. 1–18. doi: 10.3390/nu9020159.
- Cappellini, M. D., Musallam, K. M. and Taher, A. T. (2020) 'Iron deficiency anaemia revisited', *Journal of Internal Medicine*, 287(2), pp. 153–170. doi: 10.1111/joim.13004.
- Cepeda-Lopez, A. C., Aeberli, I. and Zimmermann, M. B. (2010) 'Does obesity increase risk for iron deficiency? A review of the literature and the potential mechanisms', *International Journal for Vitamin and Nutrition Research*, 80(4-5), pp. 263–270. doi: 10.1024/0300-9831/a000033.

- Chen, H. A. N. Nianfeng, Q. Liyu, Y. and Hongqing, J *et al.* (2018) 'Role of serum vitamin a and e in pregnancy', *Experimental and Therapeutic Medicine*, 16(6), pp. 5185–5189. doi: 10.3892/etm.2018.6830.
- Chen, Y. H., Feng, H. L. and Jeng, S. S. (2018) 'Zinc supplementation stimulates red blood cell formation in rats', *International Journal of Molecular Sciences*, 19(9). doi: 10.3390/ijms19092824.
- Chlon, T. M. and Crispino, J. D. (2012) 'Combinatorial regulation of tissue specification by GATA and FOG factors', *Development (Cambridge)*, 139(21), pp. 3905–3916. doi: 10.1242/dev.080440.
- Chomaria, A. (2012) *Makanan Sehat Seimbang untuk Ibu Hamil*. Jakarta: PT Elex Media Komputindo.
- Chong, M. F. Ai-Ru, C. Marjorelee, C. Mya-Thway T. *et al.* (2021) 'Maternal Protein Intake during Pregnancy Is Not Associated with Offspring Birth Weight in a', *The Journal of Nutrition*, pp. 1303–1310. doi: 10.3945/jn.114.205948.1303.
- Christian, P. Labrique, A.B. Ali, H. Richman, M.J *et al.* (2011) 'Maternal vitamin A and beta-carotene supplementation and risk of bacterial vaginosis: A randomized controlled trial in rural Bangladesh', *Am. J. Clin. Nutr.*, 94, pp. 1643–1649.
- Citelli, M. Luciana, LB. Simone, VS. Anna, PT. *et al.* (2012) 'Vitamin A modulates the expression of genes involved in iron bioavailability.', *Biological trace element research*, 149(1), pp. 64–70. doi: 10.1007/s12011-012-9397-6.
- Citu, I., M. Cosmin, C. Madalin-M.M. Marius, C *et al.* (2022) 'Calcium, Magnesium, and Zinc Supplementation during Pregnancy: The Additive Value of Micronutrients on Maternal Immune Response after SARS-CoV-2 Infection', *Nutrients*, 14(7), pp. 1–13. doi: 10.3390/nu14071445.
- Clark, D. C. (2018) 'Association of Dairy Protein Intake During Pregnancy with Birth Weight', *Food and Nutrition Bulletin*, 39(2_suppl), pp. S54–S59. doi: 10.1177/0379572118775824.
- Claudil, M. A. and Stipanuk, M. H. (2013) *Biochemical, Physiological, and Molecular Aspects of Human Nutrition*. 3 rd editi. St Louis, MO, USA: Saunders:
- Cruz, S., da Cruz, S. . and Ramalho, A. (2018) 'Impact of Vitamin A Supplementation on Pregnant Women and on Women Who Have Just Given Birth: A Systematic Review', *J. Am. Coll. Nutr.*, 37, pp. 243–250.

- Cunha, M. de S. B. da, Hankins, N. A. C. and Arruda, S. F. (2018) 'Effect of vitamin A supplementation on iron status in humans : a systematic review and meta-analysis', 8398. doi: 10.1080/10408398.2018.1427552.
- Cunningham, F. G. Kenneth, JL. Steven, BL. Jodi, SD. *et al.* (2018) 'Chapter 4 Maternal Physiology', in *Williams Obstetrics*. 25 th ed. United States: McGraw-Hill Education, pp. 57–63.
- D'Ambrosio, D. N., Clugston, R. D. and Blaner, W. S. (2011) 'Vitamin A metabolism: An update', *Nutrients*, 3(1), pp. 63–103. doi: 10.3390/nu3010063.
- Dahlan, S. (2015) *Statistik untuk Kedokteran dan Kesehatan*. Edisi Keen. Jakarta: Epidemiologi Indonesia.
- Dahlan, S. (2020) *Statistik Untuk Kedokteran Dan Kesehatan: Deskriptif, Bivariat, dan Multivariat Dilengkapi Aplikasi Menggunakan SPSS*. Edisi 6 Ce. Jakarta: Epidemiologi Indonesia.
- Darroch, J. E., Woog, V. and Bankole, A. (2016) 'ADDING IT UP : Costs and Benefits of Meeting the Contraceptive Needs of Adolescents', *New York: Guttmacher Institute*, (May), pp. 1–16.
- Daru, J. Javie, Z. Borja, MF., Joshua, V.*et al.* (2018) 'Risk of maternal mortality in women with severe anaemia during pregnancy and post partum: a multilevel analysis', *The Lancet Global Health*, 6(5), pp. e548–e554. doi: 10.1016/S2214-109X(18)30078-0.
- Das, J. K., Salam, R. A., Thurnburg, K. L., Prentice, A. M. *et al.* (2017) 'Nutrition in adolescents: physiology, metabolism, and nutritional needs', *Annals of the New York Academy of Sciences*, 1393(1), pp. 21–33. doi: 10.1111/nyas.13330.
- Delimont, N. M., Haub, M. D. and Lindshield, B. L. (2017) 'The impact of tannin consumption on iron bioavailability and status: A narrative review', *Current Developments in Nutrition*, 1(2), pp. 1–12. doi: 10.3945/cdn.116.000042.
- Diana, R. Ali, K., Faisal A., Dyan FC *et al.* (2019) 'Dietary Quantity and Diversity among Anemic Pregnant Women in Madura Island, Indonesia', *Journal of Nutrition and Metabolism*, 2019. doi: 10.1155/2019/2647230.
- Dibley, M. J. and Jeacocke, D. A. (2001) 'Vitamin A in pregnancy: Impact on maternal and neonatal health', *Food and Nutrition Bulletin*, 22(3), pp. 267–284. doi: 10.1177/156482650102200305.

- Dijkhuizen, M. A. Frank T.W., Clive E.W., Sri M. *et al.* (2001) ‘Effects of iron and zinc supplementation in Indonesian infants on micronutrient status and growth’, *Journal of Nutrition*, 131(11), pp. 2860–2865. doi: 10.1093/jn/131.11.2860.
- Dinas Kesehatan Provinsi Sumatera Barat (2018) *Laporan Kinerja Dinas Kesehatan Provinsi Sumatera Barat Tahun 2017*. Padang: Dinas Kesehatan Provinsi Sumatera Barat.
- Dinkes Kota Padang (2019) *Laporan Tahunan Tahun 2018*. Padang: Dinas Kesehatan Kota Padang.
- Dinkes Kota Padang (2020) *Laporan Tahunan Tahun 2019 Edisi 2020*. Kota Padang: Dinkes Kota Padang Tahun 2020.
- Donangelo, C. M. *et al.* (2020) ‘Supplemental zinc lowers measures of iron status in young women with low iron reserves’, *Journal of Nutrition*, 132(7), pp. 1860–1864. doi: 10.1093/jn/132.7.1860.
- Donangelo, C. M. and King, J. C. (2012) ‘Maternal zinc intakes and homeostatic adjustments during pregnancy and lactation’, *Nutrients*, 4(7), pp. 782–798. doi: 10.3390/nu4070782.
- Elango, R. and Ball, R. O. (2016) ‘Protein and Amino Acid Requirements during Pregnancy’, *Advances in nutrition (Bethesda, Md.)*, 7(4), p. 839S–844S. doi: 10.3945/an.115.011817.
- FAO (1998) *Chapter 3: Calculation of the Energy Content of Foods - Energy Conversion Factors Available at:<http://www.fao.org/3/Y5022E/y5022e04.htm>* (Accessed: 22 April 2022).
- FAO and FHI (2016) *Minimum Dietary Diversity for Women: A Guide to Measurement*. Rome, Italy.
- Farias, P. M., Gabriela, M., Lidiani F.S., Eliane B.A., *et al.* (2020) ‘Minerals in Pregnancy and Their Impact on Child Growth and Development’, pp. 13–24. doi: 10.5810/kentucky/9780813125237.003.0006.
- Fishman, S. M., Christian, P. and Jr, K. P. W. (2000) ‘The Role of Vitamins in The Prevention and Control of Anaemia’, *Public Health Nutrition*, 3(2), pp. 125–150. doi: 10.1054/ebcm.2000.0315.
- Fitriani, S. and Pamungkasari, E. P. (2020) ‘Correlation between Protein Intake, Parity and Miscarriage History Anemic Pregnant Women in Sukoharjo Regency, Indonesia with Low Birth Weight Incidence: A Case Control Study.’, *Indian Journal of Public Health Research & Development*, 11((1)).

- Friedrisch dan Bruno (2017) 'Prophylactic Iron Supplementation in Pregnancy : A Controversial Issue', *Biochemistry Insight*, 10, pp. 1–7. doi: 10.1177/1178626417737738.
- Ganong, W. F. (2005) *Review of Medical Physiology*. San Francisco: Mc Graw Hill.
- Garcêz, L.S., Geania, P.L., Adriana, A.P., Suzana, M.R. et al. (2016) 'Serum Retinol Levels in Pregnant Adolescents and Their Relationship with Habitual Food Intake , Infection and Obstetric , Nutritional and', *Nutrients*, 8(669), pp. 1–11. doi: 10.3390/nu8110669.
- Garzon, S., Patrizia, M., Camilla, Calogero et al. (2020) 'Iron deficiency anemia in pregnancy: Novel approaches for an old problem', *Oman Medical Journal*, 35(5), pp. 1–9. doi: 10.5001/omj.2020.108.
- Gebremedhin, S. and Enquselassie, F. (2011) 'Correlates of anemia among women of reproductive age in Ethiopia: Evidence from Ethiopian DHS 2005', *Ethiopian Journal of Health Development*, 25(1), pp. 22–30. doi: 10.4314/ejhd.v25i1.69842.
- Gebreselassie, S. G., Gase, F. E., and Deressa, M. U. (2018). 'Prevalence and correlates of prenatal vitamin A deficiency in rural Sidama, Southern Ethiopia', *Journal of health, population, and nutrition*, 31(2), 185–194. <https://doi.org/10.3329/jhpn.v31i2.16382>
- Geissler, C. and Hilary (2005) *Human Nutrition*. 12th Editi. London: Elsevier Churchill Livingstone.
- Georgieff, M. K. (2020) 'Iron deficiency in pregnancy', *American Journal of Obstetrics and Gynecology*, 223(4), pp. 516–524. doi: 10.1016/j.ajog.2020.03.006.
- Geraghty, A. A. Eileen C.O., Goiuri, A., Mary K.H. et al. (2018) 'Maternal protein intake during pregnancy is associated with child growth up to 5 years of age, but not through insulin-like growth factor-1: Findings from the ROLO study', *British Journal of Nutrition*, 120(11), pp. 1252–1261. doi: 10.1017/S0007114518002611.
- Gibore, N. S., Agatha, F.N, Mariam, J.M.,1 Mwanaisha, M.A (2021) 'Dietary Habits Associated with Anemia in Pregnant Women Attending Antenatal Care Services', *Current Developments in Nutrition*, 5(1), pp. 1–8. doi: 10.1093/cdn/nzaa178.
- Gibson, R. S. (2012) 'A historical review of progress in the assessment of dietary zinc intake as an indicator of population zinc status', *Advances in Nutrition*, 3(6), pp. 772–782. doi: 10.3945/an.112.002287.

- Godswill, A. G. Victory,S., Ikechukwu, Echeta *et al.* (2020) 'Health Benefits of Micronutrients (Vitamins and Minerals) and their Associated Deficiency Diseases: A Systematic Review', *International Journal of Food Sciences*, 3(1), pp. 1–32. doi: 10.47604/ijf.1024.
- Gopalan, C. and Rao, K. S. J. (2006) 'Nutrition in Pregnancy', *Tropical Doctor*, 2(4), pp. 188–192. doi: 10.1177/004947557200200410.
- Gower-Winter, S. D. and Levenson, C. W. (2012) 'Zinc in the central nervous system: From molecules to behavior', *BioFactors*, 38(3), pp. 186–193. doi: 10.1002/biof.1012.
- Grüngreiff, K., Gottstein, T. and Reinhold, D. (2020) 'Zinc deficiency—an independent risk factor in the pathogenesis of haemorrhagic stroke?', *Nutrients*, 12(11), pp. 1–11. doi: 10.3390/nu12113548.
- Grzeszczak, K., Kwiatkowski, S. and Kosik-Bogacka, D. (2020) 'The role of fe, zn, and cu in pregnancy', *Biomolecules*, 10(8), pp. 1–33. doi: 10.3390/biom10081176.
- Gumilang, L. Tina D.J., Sefita, A.N., Ari, W (2021) 'Higeia Journal of Public Health', *Higeia Journal of Public Health Research and Development*, 5(2), pp. 231–241. doi: <https://doi.org/10.15294/higeia/v2i3/44805>.
- Guyton (2016) *Textbook of medical physiology*. 13th ed. Philadelphia: Saunders/Elsevier;
- Hajianfar, H., Khadijeh, A., Leila A., Ahmad E. *et al.* (2020) 'The Association between Maternal Dietary Iron Intake during the First Trimester of Pregnancy with Pregnancy Outcomes and Pregnancy-Related Complications', 9(1), pp. 52–62.
- Hamdy, A. M., Abdel Aleem, M.M. and El-Shazly, A. A. (2013) 'Maternal Vitamin A Deficiency during Pregnancy and Its Relation with Maternal and Neonatal Hemoglobin Concentrations among Poor Egyptian Families', *ISRN Pediatrics*, 2013, pp. 1–6. doi: 10.1155/2013/652148.
- Hardisman (2021) *Metodologi Penelitian Kesehatan*. Yogyakarta: Gosyen Publishing.
- Harvey, L. and Boksa, P. (2014) 'Additive effects of maternal iron deficiency and prenatal immune activation on adult behaviors in rat offspring', *Brain, Behavior, and Immunity*, 40, pp. 27–37. doi: 10.1016/j.bbi.2014.06.005.
- Heffner, L. J. and Schust, D. J. (2010) *At a Glance: Sistem Reproduksi*. Edisi Kedu. Jakarta: Erlangga.

- Herring, C. M., Fuller W.B, Gregory AJ, Guoyao W (2018) ‘Impacts of maternal dietary protein intake on fetal survival, growth, and development’, *Experimental Biology and Medicine*, 243(6), pp. 525–533. doi: 10.1177/1535370218758275.
- Hidayat, A. (2014) *Metode Penelitian keperawatan dan Teknis Analisis Data*. Jakarta: Salemba Medika.
- Hoffbrand, A. V. and Moss, P. A. H. (2016) *Hoffbrand's Essential Haematology*. 7th ed. United Kingdom: John Wiley & Sons Ltd.
- Holzman, R. K., Senagore, Wang, Tian *et al.* (2009) ‘Placental vascular pathology findings and pathways to preterm delivery’, *American Journal of Epidemiology*, 170(2), pp. 148–158. doi: 10.1093/aje/kwp131.
- Hooda, J., Shah, A. and Zhang, L. (2014) ‘Heme, an essential nutrient from dietary proteins, critically impacts diverse physiological and pathological processes’, *Nutrients*, 6(3), pp. 1080–1102. doi: 10.3390/nu6031080.
- Hou, J., Suzanne, P.C., Tsunenobu, T., Kelly E.J.*et al.* (2000) ‘Maternal serum ferritin and fetal growth’, *Obstetrics and Gynecology*, 95(3), pp. 447–452. doi: 10.1016/S0029-7844(99)00562-1.
- Hu, P. J., Sylvia, H.L., Shilpa, N.B., Yanping, L. *et al.* (2018) ‘Associations of dietary , lifestyle , and sociodemographic factors with iron status in Chinese adults : a cross-sectional study in the China Health and Nutrition Survey 1 , 2’ , *ASN*, (1), pp. 4–6. doi: 10.3945/ajcn.116.136861.2.
- Hussain, T. Bie, T., Ghulam, M., Elsayed, M. *et al.* (2020) ‘Role of Dietary Amino Acids and Nutrient Sensing System in Pregnancy Associated Disorders’ , *Frontiers in Pharmacology*, 11(December), pp. 1–17. doi: 10.3389/fphar.2020.586979.
- Hwang, J. Y., Ji-Yeon, L., Ki-Nam, K., Hyesook, K. *et al.* (2013) ‘Maternal iron intake at mid-pregnancy is associated with reduced fetal growth: Results from Mothers and Children’s Environmental Health (MOCEH) study’ , *Nutrition Journal*, 12(1), pp. 1–7. doi: 10.1186/1475-2891-12-38.
- Hyttén, E. and Saxena, B. N. (2009) ‘The caloric cost of pregnancy’ , *Nutrition Reviews*, 31(6), pp. 177–179. doi: 10.1111/j.1753-4887.1973.tb05170.x.
- Iqbal, S. and Ali, I. (2021) ‘Effect of maternal zinc supplementation or zinc status on pregnancy complications and perinatal outcomes: An umbrella review of meta-analyses’ , *Heliyon*, 7(7), p. e07540. doi: 10.1016/j.heliyon.2021.e07540.

- Johnson Wimbley, T. D. and Graham, D. Y. (2011) 'Diagnosis and management of iron deficiency anemia in the 21st century', *Therapeutic Advances in Gastroenterology*, 4(3), pp. 177–184. doi: 10.1177/1756283X11398736.
- Jusoh, N., Ismail, T. A. T. and Daud, A. (2015) 'Anemia among teenage pregnancy in Northwestern Malaysia: What are the factors?', *International Journal of Collaborative Research on Internal Medicine & Public Health*, 7(12), pp. 196–205.
- Juul, S. E., Derman, R. J. and Auerbach, M. (2019) 'Perinatal Iron Deficiency: Implications for Mothers and Infants', *Neonatology*, 115(3), pp. 269–274. doi: 10.1159/000495978.
- Jyotsna, S., Amit, A. and Kumar, A. (2015) 'Study of serum zinc in low birth weight neonates and its relation with maternal zinc', *Journal of Clinical and Diagnostic Research*, 9(1), pp. SC01–SC03. doi: 10.7860/JCDR/2015/10449.5402.
- Kalantar-Zadeh, K. and Lee, G. H. (2006) 'The fascinating but deceptive ferritin: to measure it or not to measure it in chronic kidney disease?', *Clinical journal of the American Society of Nephrology : CJASN*, 1 Suppl 1, pp. 9–18. doi: 10.2215/CJN.01390406.
- Kambe, T., Tokuji, T., Ayako, H., Naoya, I. (2015) 'The physiological, biochemical, and molecular roles of zinc transporters in zinc homeostasis and metabolism', *Physiological Reviews*, 95(3), pp. 749–784. doi: 10.1152/physrev.00035.2014.
- Karimi, A., Sepideh, B., Mohsen, N., Masumeh, S. (2012) 'Zinc Deficiency in Pregnancy and Fetal - Neonatal Outcomes and Impact of the Supplements on Pregnancy Outcomes', *Iranian Journal of Neonatology IJN*, 3(2), pp. 77–83. Available at: https://ijn.mums.ac.ir/article_270.html.
- Katsumura, K. R., Andrew, W.D., Nathaniel, J.P., Kirby, D.J. et al. (2013) 'Transcriptional mechanisms underlying hemoglobin synthesis', *Cold Spring Harbor Perspectives in Medicine*, 3(9), pp. 1–19. doi: 10.1101/cshperspect.a015412.
- Kemenkes RI (2018) 'Laporan Nasional Riset Kesehatan Dasar', *Kemenkes RI*, pp. 1–582. Available at: <https://dinkes.kalbarprov.go.id/wp-content/uploads/2019/03/Laporan-Riskesdas-2018-Nasional.pdf>.
- King, J. C. (2000) 'Determinants of maternal zinc status during pregnancy', *American Journal of Clinical Nutrition*, 71(5 SUPPL.), pp. 1334–1343. doi: 10.1093/ajcn/71.5.1334s.
- King, T. I., Mary, C.B., Kathryn, O., Cecilia M.J. (2019) *Varney's Midwifery*. Sixth Edit. USA: Jones & Bartlett Learning, LLC.

Kirana Dian Purwitaningtyas (2011) *Hubungan Asupan Zat Gizi Dan Pola Menstruasi Dengan Kejadian Anemia Pada Remaja Putri di SMA N 2 Semarang, Artikel Penelitian*. Universitas Diponegoro.

Knovich, M. A., Jonathan, A. S., Lan, G.C., Suzy, V.T., et al. (2009) ‘Ferritin for the clinician’, *Blood Reviews*, 23(3), pp. 95–104. doi: 10.1016/j.blre.2008.08.001.

Kominiarek, M. A. and Rajan, P. (2016) ‘Nutrition Recommendations in Pregnancy and Lactation’, *Medical Clinics of North America*, 100(6), pp. 1199–1215. doi: 10.1016/j.mcna.2016.06.004.

Kozuki, N. et al. (2013) ‘The associations of birth intervals with small-for-gestational-age, preterm, and neonatal and infant mortality: A meta-analysis’, *BMC Public Health*, 13(SUPPL.3). doi: 10.1186/1471-2458-13-S3-S3.

Krisnanda, R. (2020) ‘Vitamin C Mmeantu dalam Absorpsi Zat Besi pada Anemia Defisiensi Besi’, *Jurnal Penelitian Perawat Profesional*, 2(3), pp. 279–286. Available at: <http://jurnal.globalhealthsciencegroup.com/index.php/JPPP/article/download/83/65>.

Laghari, Z. A. Nimra, B., Feraz, M., Fouzia, P., et al. (2017) ‘Correlation of BMI and MUAC with anemia among Sindh University Students, Jamshoro, Pakistan’, *Sindh University Research Journal -Science Series*, 49(003), pp. 553–556. doi: 10.26692/surj/2017.09.15.

Lebso, M., Anato, A. and Loha, E. (2017) ‘Prevalence of anemia and associated factors among pregnant women in Southern Ethiopia: A community based cross-sectional study’, *PLoS ONE*, 12(12), pp. 1–11. doi: 10.1371/journal.pone.0188783.

Li, N., Guangjie, Z., Wanling, W., Mengxue, Z. et al (2020) ‘The Efficacy and Safety of Vitamin C for Iron Supplementation in Adult Patients With Iron Deficiency Anemia: A Randomized Clinical Trial’, *JAMA network open*, 3(11), p. e2023644. doi: 10.1001/jamanetworkopen.2020.23644.

Li, Y., Jiang, H. and Huang, G. (2017) ‘Protein hydrolysates as promoters of non-haem iron absorption’, *Nutrients*, 9(6), pp. 1–18. doi: 10.3390/nu9060609.

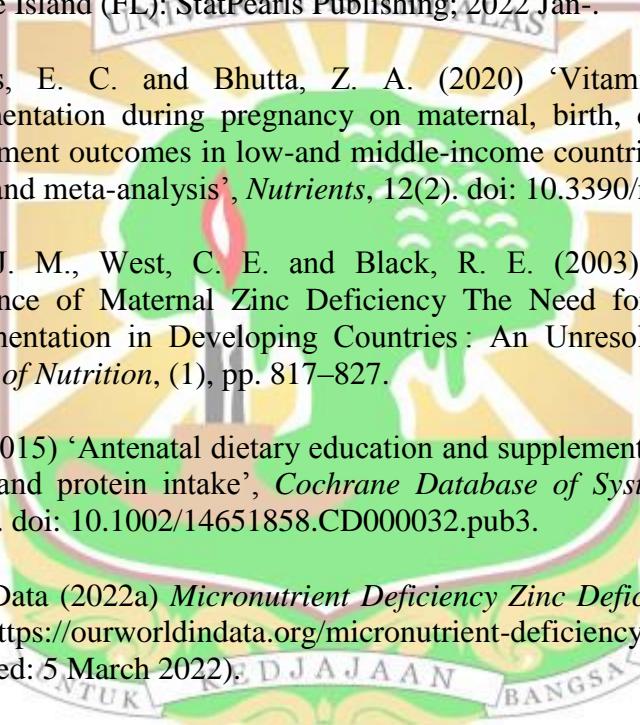
Linder, M. C. (2006) *Nutritional Biochemistry and Metabolism with Clinical Application*. 2nd Ed. USA: Appeton & Lange.

Lipoeto, et al (2004) ‘Dietary intake and the risk of coronary heart disease among the coconut-consuming Minangkabau in West Sumatra, Indonesia.’, *Asia Pacific journal of clinical nutrition*, 13(4), pp. 377–384.

- Lipoeto, N.I., Masrul, Ricvan, D.N. (2020) 'Nutritional contributors to maternal anemia in Indonesia: Chronic energy deficiency and micronutrients.', *Asia Pacific journal of clinical nutrition*, 29((Suppl 1)), pp. S9–S17. doi: [https://doi.org/10.6133/apjcn.202012_29\(S1\).02](https://doi.org/10.6133/apjcn.202012_29(S1).02).
- Livingstone, C. (2015) 'Zinc: Physiology, deficiency, and parenteral nutrition', *Nutrition in Clinical Practice*, 30(3), pp. 371–382. doi: [10.1177/0884533615570376](https://doi.org/10.1177/0884533615570376).
- Londero, A. P., Emma, R., Pitti, C., Angelo, C *et al.* (2019) 'Maternal age and the risk of adverse pregnancy outcomes: A retrospective cohort study', *BMC Pregnancy and Childbirth*, 19(1), pp. 1–10. doi: [10.1186/s12884-019-2400-x](https://doi.org/10.1186/s12884-019-2400-x).
- Loy, S. L., Li Min, L., Shiao-Yng, C., Pei Ting, T *et al.* (2019) 'Iron status and risk factors of iron deficiency among pregnant women in Singapore: a cross-sectional study', *BMC public health*, 19(1), p. 397. Available at: <http://dx.doi.org/10.1186/s12889-019-6736-y>.
- Ma, Y., Yanbo, M., Xiuqing, Z., Xuejing, W. *et al.* (2022) 'Changes of Serum Ferritin , Hemoglobin , and Serum Iron (SI) and Treatment Effect of Iron Proteinsuccinylate Oral Solution Combined with Vitamin A and D Drops on Children with Nutritional Iron Deficiency Anemia', 2022, pp. 10–15.
- Machmud, P. B., Hatma, R. D. and Syafiq, A. (2019) 'Tea Consumption and Iron-Deficiency Anemia Among Pregnant Woman in Bogor District, Indonesia', *Media Gizi Mikro Indonesia*, 10(2), pp. 91–100. doi: [10.22435/mgmi.v10i2.1384](https://doi.org/10.22435/mgmi.v10i2.1384).
- Maggio, M., Francesca, D.V., Fulvio, L., Valeria, B. *et al.* (2013) 'IGF-1, the cross road of the nutritional, inflammatory and hormonal pathways to frailty', *Nutrients*, 5(10), pp. 4184–4205. doi: [10.3390/nu5104184](https://doi.org/10.3390/nu5104184).
- Mahan, L. K., Escott-Stump, S. and Janice L. Raymond, . (2012) *Krause 's Food & the Nutrition Care Process*. 13th edn. St. Louis, Missouri 63043: Elsevier Sauders.
- Maia, B. S., Maria, C.C., Suzana, L.S., Alex, R.S. *et al.* (2018) 'The prevalence of vitamin A deficiency and associated factors in pregnant women receiving prenatal care at a reference maternity hospital in Northeastern Brazil', *Nutrients*, 10(9), pp. 1–14. doi: [10.3390/nu10091271](https://doi.org/10.3390/nu10091271).
- Mandal, K. and Lu, H. (2017) 'Zinc Deficiency In Children', 6(1), pp. 9–19.
- Mann, J. and A. S. T. (ed) (2005) *Buku Ajar Ilmu Gizi Edisi 4*. New York: Oxford University Press.

- Mann, J. and Truswell, A. S. (2005) *Essentials of Human Nutrition*. Second edi. United States: Oxford University Press.
- Manuaba, I. A. C. (2014) *Ilmu Kebidanan Penyakit Kandungan dan KB. Edisi 2*. Jakarta: EGC.
- Marshall, N. E. Barbara, A., Linda, A.B., Patrick, C *et al.* (2022) ‘Expert Review The importance of nutrition in pregnancy and lactation: lifelong consequences’, *The American Journal of Obstetrics & Gynecology*, 226(5), pp. 607–632. doi: 10.1016/j.ajog.2021.12.035.
- McCauley, M. E, Broek, N, Dou, L, Othman, M. (2015) ‘Vitamin A supplementation during pregnancy for maternal and newborn outcomes’, *Cochrane Database of Systematic Reviews*, 2016(3). doi: 10.1002/14651858.CD008666.pub3.
- McKinnon, E. J. Enrico, R., John, P.B., Debbie, Tr *et al.* (2014) ‘Factors that affect serum levels of ferritin in Australian adults and implications for follow-up’, *Clinical Gastroenterology and Hepatology*, 12(1), pp. 101–108.e4. doi: 10.1016/j.cgh.2013.07.019.
- Means, R. T. (2020) ‘Iron deficiency and iron deficiency anemia: Implications and impact in pregnancy, fetal development, and early childhood parameters’, *Nutrients*, 12(2), pp. 1–16. doi: 10.3390/nu12020447.
- Meiriska, I. P., Anggraini, D. and Susanti, M. (2022) ‘Hubungan Kadar Ferritin Serum Pada Ibu Hamil Dengan Berat Badan Bayi Baru Lahir di RSI Siti Rahmah Padang Tahun 2018-2019’, *Scientific Journal*, 1(1), pp. 01–10. doi: 10.56260/scienza.v1i1.12.
- Michelazzo, F. B., Oliveira, J., Juliana, S., Liania, L. *et al.* (2013) ‘The influence of vitamin A supplementation on iron status’, *Nutrients*, 5(11), pp. 4399–4413. doi: 10.3390/nu5114399.
- Middleton, P., Gomersall, JC., Gould, JF., Shepherd, E. *et al.* (2019) ‘Omega-3 Fatty Acid Addition during Pregnancy’, *Obstetrical and Gynecological Survey*, 74(4), pp. 189–191. doi: 10.1097/01.ogx.0000554434.11750.dc.
- Monk, C., Michael K. G. Dongrong, Xu, Xuejun, Hu., *et al.* (2016) ‘Maternal prenatal iron status and tissue organization in the neonatal brain’, *Pediatric Research*, 79(3), pp. 482–488. doi: 10.1038/pr.2015.248.
- Moreira, A. C., Mesquita, G. and Gomes, M. S. (2020) ‘Ferritin: An inflammatory player keeping iron at the core of pathogen-host interactions’, *Microorganisms*, 8(4), pp. 1–20. doi: 10.3390/microorganisms8040589.

- Morgan, T. K. (2016) ‘Role of the Placenta in Preterm Birth: A Review.’, *American journal of perinatology*, 33(3), pp. 258–266. doi: 10.1055/s-0035-1570379.
- Mostafa, E. Hashem F. M., Enas, M. M., Asmaa, M. A. (2022) ‘Prevalence and risk factors of iron deficiency anaemia with pregnancy at Minia University Hospital’, *MJMR*, 33(2), pp. 49–58.
- Mousa, A., Naqash, A. and Lim, S. (2019) ‘Macronutrient and micronutrient intake during pregnancy: An overview of recent evidence’, *Nutrients*, 11(2), pp. 1–20. doi: 10.3390/nu11020443.
- Muchtadi, D. (2010) *Kedelai: Komponen Bioaktif untuk Kesehatan*. Bandung: AlfaBeta.
- Mulyantoro, D. K. and Kusrini, I. (2021) ‘Protein Energy Deficiency Increases the Risk of Anemia in Pregnant Women’, *IOP Conference Series: Earth and Environmental Science*, 810(1), pp. 8–13. doi: 10.1088/1755-1315/810/1/012043.
- Muñoz, M., García-Erce, J. A. and Remacha, Á. F. (2011) ‘Disorders of iron metabolism. Part II: Iron deficiency and iron overload’, *Journal of Clinical Pathology*, 64(4), pp. 287–296. doi: 10.1136/jcp.2010.086991.
- Murray, R.K, Granner, D.K & Rodwell, V. W. (2009) *Biokimia Herper*. Jakarta: EGC.
- Murray, R. K. and Granner, D. K. (2009) *Biokimia Harper*. edisi 27. Jakarta: EGC.
- Næss-Andresen, M. L. et al. (2019) ‘Serum ferritin, soluble transferrin receptor, and total body iron for the detection of iron deficiency in early pregnancy: A multiethnic population-based study with low use of iron supplements’, *American Journal of Clinical Nutrition*, 109(3), pp. 576–585. doi: 10.1093/ajcn/nqy366.
- Naghmi, Khalid and Shaleen (2007) ‘Comparison of serum ferritin levels in the trimesters of pregnancy and their correlation with increasing gravity’, *Int J Pathol*, 5(5), pp. 26–30.
- Neves, P. A. Saunders, Barror, Ramalho (2015) ‘Vitamin A supplementation in Brazilian pregnant and postpartum women: A systematic review’, *Rev. Bras. De Epidemiol. Braz. J. Epidemiol*, (18), pp. 824–836.
- Noori, N. Joshua ,L.E., Yvette, E., Oron, A.P. et al. (2022) ‘Effect of adolescent pregnancy on child mortality in 46 countries’, *BMJ Global Health*, 7(5), pp. 1–12. doi: 10.1136/bmjgh-2021-007681.

- Norwitz, E. R. and Caughey, A. B. (2011) 'Progesterone supplementation and the prevention of preterm birth.', *Reviews in obstetrics & gynecology*, 4(2), pp. 60–72. doi: 10.3909/riog0163.
- Notoatmodjo, S. (2011) *Pendidikan dan Perilaku Kesehatan*. Jakarta: PT. Rineka Cipta.
- Notoatmodjo, S. (2018) *Metodologi Penelitian Kesehatan*. Jakarta: Rineka Cipta.
- Obeng, E. (2021) 'Apoptosis (programmed cell death) and its signals - A review.', *Brazilian journal of biology = Revista brasileira de biologia*, 81(4), pp. 1133–1143. doi: 10.1590/1519-6984.228437.
- Ogun and Adeyinka (2022) *Biochemistry , Transferrin*. StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan-. 
- Oh, C., Keats, E. C. and Bhutta, Z. A. (2020) 'Vitamin and mineral supplementation during pregnancy on maternal, birth, child health and development outcomes in low-and middle-income countries: A systematic review and meta-analysis', *Nutrients*, 12(2). doi: 10.3390/nu12020491.
- Osendarp, S. J. M., West, C. E. and Black, R. E. (2003) 'Public Health Importance of Maternal Zinc Deficiency The Need for Maternal Zinc Supplementation in Developing Countries : An Unresolved Issue', *The Journal of Nutrition*, (1), pp. 817–827.
- Ota, E. et al. (2015) 'Antenatal dietary education and supplementation to increase energy and protein intake', *Cochrane Database of Systematic Reviews*, 2015(6). doi: 10.1002/14651858.CD000032.pub3.
- Our World in Data (2022a) *Micronutrient Deficiency Zinc Deficiency*. Available at: <https://ourworldindata.org/micronutrient-deficiency#zinc-deficiency> (Accessed: 5 March 2022).
- Our World in Data (2022b) *Prevalenceof Vitamin A Deficiency in Pregnant Women Region Asia*. Available at: <https://ourworldindata.org/grapher/prevalence-of-vitamin-a-deficiency-in-pregnant-women?region=Asia> (Accessed: 15 March 2022).
- Pakar Gizi Indonesia (2016) *Ilmu Gizi Teori & Aplikasi*. Edited by Hardiansyah dan Dewa Nyoman Supariasa. Jakarta: EGC.
- Pane, H. W. (2020) *Gizi dan Kesehatan*. Yayasan Kita Menulis.
- Paramashanti, B. A. (2020) *Gizi Bagi Ibu & Anak*. Edited by D. Rachmawati. Bantul Yogyakarta: PT. Pustaka Baru.

- Pasricha, S. R. S. et al. (2010) 'Diagnosis and management of iron deficiency anaemia: A clinical update', *Medical Journal of Australia*, 193(9), pp. 525–532. doi: 10.5694/j.1326-5377.2010.tb04038.x.
- Pavord, S., Bethan, M., Susa, R., Shubha, A., Jane, S., and Christina (2012) 'UK guidelines on the management of iron deficiency in pregnancy', *British Journal of Haematology*, 156(5), pp. 588–600. doi: 10.1111/j.1365-2141.2011.09012.x.
- Percy, L. and Mansour, D. (2017) 'Iron deficiency and iron-deficiency anaemia in women's health', *The Obstetrician & Gynaecologist*, 19(2), pp. 155–161. doi: 10.1111/tog.12368.
- Permenkes (2019) 'Peraturan Menteri Kesehatan Republik Indonesia Nomor 28 Tahun 2019 Tentang Angka Kecukupan Gizi Yang Dianjurkan Untuk Masyarakat Indonesia', (April), pp. 33–35.
- Petry, N., Ibironke, O., Erick, Moira, D.A., and Fabian (2016) 'The effect of low dose Iron and zinc intake on child micronutrient status and development during the first 1000 days of life: A systematic review and meta-analysis', *Nutrients*, 8(12), pp. 1–22. doi: 10.3390/nu8120773.
- Pobee, R. A. Sixtus, A., Esi, K.C., Alison D.G., and Laura E.M. (2020) 'Food insecurity and micronutrient status among ghanaiian women planning to become pregnant', *Nutrients*, 12(2), pp. 1–12. doi: 10.3390/nu12020470.
- Pontoh, S., Mayulu, N. and Engka, J. N. (2015) 'Hubungan Kadar Ferritin Dan Asupan Protein Pada Ibu Hamil Trimester II-III Di Kabupaten Bolaang Mongondow Utara', *Jurnal e-Biomedik*, 3(3). doi: 10.35790/ebm.3.3.2015.10159.
- Prasad, A. S. (2018) 'Clinical, immunological, anti-inflammatory and antioxidant roles of zinc', *Experimental Gerontology*, 43(5), pp. 370–377. doi: 10.1016/j.exger.2007.10.013.
- Prasetyani, D., Evy Apriani and Halimatusyadiyah, R. (2020) 'Hubungan Asupan Protein, Zat Besi Dan Pola Makan Terhadap Kejadian Anemia Pada Ibu Hamil Trimester III Di Wilayah Kerja Puskesmas Cilacap Utara 2', *Tens : Trends of Nursing Science*, 1, pp. 29–35. doi: 10.36760/tens.v1i1.108.
- Prawirohardjo, S. (2013) *Ilmu Kebidanan. Edisi Keempat. Cetakan Ketiga*. Jakarta: Bina Pustaka Sarwono Prawirohardjo.
- Prawirohardjo, S. (2014) *Ilmu Kebidanan Sarwono Prawirohardjo*. Jakarta: PT. Bina Pustaka Sarwono Prawirohardjo.

- Purwaningtyas, M. L. and Prameswari, G. N. (2017) ‘Faktor Kejadian Anemia pada Ibu Hamil’, *Higeia Journal of Public Health Research and Development*, 1(3), pp. 43–54.
- Putri, Y. and Vera, Y. (2020) ‘Faktor- Faktor Yang Berhubungan Dengan Kejadian Anemia Pada Ibu Hamil Di Puskesmas Bukit Sangkal Palembang Tahun 2019’, *Jurnal Kesehatan dan Pembangunan*, 10(19), pp. 114–125. doi: 10.52047/jkp.v10i19.68.
- Ramadhani, I. N. et al. (2021) ‘The relationship between socioeconomic status and nutritional status of pregnant women in temporary shelter, Talise, Palu’, *Gaceta Sanitaria*, 35, pp. S171–S175. doi: 10.1016/j.gaceta.2021.10.018.
- Ray, J. G., Berger, H. and Park, A. L. (2020) ‘Population-based study of serum ferritin in early pregnancy and adverse perinatal outcomes’, *Paediatric and Perinatal Epidemiology*, 34(6), pp. 706–712. doi: 10.1111/ppe.12687.
- Restrepo-gallego, M. et al. (2021) ‘Vitamin A deficiency regulates the expression of ferritin in young male Wistar rats’, *Rev Nutr*, 34(e200297), pp. 1–11. doi: [https://doi.org/10.1590/1678-9865202134e200297 Rev.](https://doi.org/10.1590/1678-9865202134e200297)
- Retnaningsih, Y., Sulistyani, I. A. and Purnamamingrum, Y. E. (2020) ‘Hubungan Asupan Protein , Fe , Vitamin C Serta Ketepatan Konsumsi Zat Tannin Dan Kafein Terhadap Kadar Hemoglobin Ibu Hamil Trimester III Di Puskesmas Kota Yogyakarta’, *Jurnal Nutrisia*, 22(1), pp. 8–15. doi: 10.29238/jnutri.v22i1.177.
- Ridwan, E. (2012) ‘Review of Interactions between Iron and Other Micronutrients in Supplementation’, *Panel Gizi Makanan*, 35(1), pp. 49–54.
- Ririn (2021) *Hubungan Asupan Zat Besi dan Vitamin A dengan Kadar Feritin pada Ibu Hamil Anemia Defisiensi Zat Besi Trimester III*. Universitas Andalas.
- Ririn, Yusrawati and Fika, T. . (2021) ‘Relation Between Iron and Vitamin A Intake with Feritin Levels In Pregnant Women With Trimester III Iron Deficiency Anemia’, *Science Midwifery journal*, 10(1), pp. 307–312.
- Rodwell, V. W., David, Botham, Kennelly, K.M., Peter J. et al. (2018) Harper’s Illustrated Biochemistry. United States: McGraw-Hill Education.
- Rodwell, V. W. David, Botham, Kennelly, K.M., Peter J. et al. (2020) *Biokimia Harper*. Edisi 31. Jakarta: EGC.

- Roohani, N. *et al.* (2012) 'Zinc and phytic acid in major foods consumed by a rural and a suburban population in central Iran', *Journal of Food Composition and Analysis*, 28(1), pp. 8–15. doi: 10.1016/j.jfca.2012.07.005.
- Roohani, N., Richard, Roya, Rainer (2013) 'Zinc and its importance for human health: An integrative review', *Journal of Research in Medical Sciences*, 18(2), pp. 144–157. doi: 10.1016/j.foodpol.2013.06.008.
- Rose, A. A. and Gopalan, D. U. (2015) 'Correlation of maternal age with placenta previa', *International Journal of Medical Research and Review*, 3(9), pp. 914–918. doi: 10.17511/ijmrr.2015.i9.171.
- Roussel, G., Valerie, S., Sarah, C., Harry J.M. (2017) 'The effect of amino acid deprivation on the transfer of iron through Caco-2 cell monolayers', *Journal of Trace Elements in Medicine and Biology*, 40, pp. 82–90. doi: 10.1016/j.jtemb.2016.12.016.
- Rumbold, A., Ota, E, Nagata, C, Shahrook, S., Crowther, C.A. (2015) 'Vitamin C supplementation in pregnancy', *Cochrane Database of Systematic Reviews*, 2016(3). doi: 10.1002/14651858.CD004072.pub3.
- Saaka, M. (2012) 'Combined iron and zinc supplementation improves haematologic status of pregnant women in Upper West Region of Ghana.', *Ghana medical journal*, 46(4), pp. 225–233.
- Saaka, M., Mutaru, S. and Osman, S. M. (2021) 'Determinants of dietary diversity and its relationship with the nutritional status of pregnant women', *Journal of Nutritional Science*, pp. 1–8. doi: 10.1017/jns.2021.6.
- Sandstead, H. H. (2003) 'Zinc is Essential for Brain Development and Function', *Journal of Trace Elements in Experimental Medicine*, 16(4), pp. 165–173. doi: 10.1002/jtra.10042.
- Sari, N. A. N. and Fauziah, M. (2021) 'The Factors Associated with the Incidence of Anemia in Pregnant Women in Pisangan Public Health Center Visitors in 2020', *Muhammadiyah Journal of Epidemiology*, 1(1), pp. 16–23. Available at: <https://jurnal.umj.ac.id/index.php/MJE/article/view/9376>.
- Sastroasmoro, S. (2013) *Dasar-Dasar Metodologi Penelitian Klinis*. Jakarta: CV Sagung Seto.
- Semba, R. D. and Bloem, M. W. (2002) 'The anemia of vitamin a deficiency: Epidemiology and pathogenesis', *European Journal of Clinical Nutrition*, 56(4), pp. 271–281. doi: 10.1038/sj.ejcn.1601320.

- Serbesa, M. L., Iffa, M. T. and Geleto, M. (2019) 'Factors associated with malnutrition among pregnant women and lactating mothers in Miesso Health Center , Ethioipia', pp. 1–5.
- Shah, T., Muhammad, S.K., Shafaq, A., Hazooran, L., Farheen, S., Asad, A.Z., *et al.* (2022) 'Gestational Anemia and its effects on neonatal outcome, in the population of Hyderabad, Sindh, Pakistan', *Saudi Journal of Biological Sciences*, 29(1), pp. 83–87. doi: 10.1016/j.sjbs.2021.08.053.
- Shah, T., Warsi, J. and Laghari, Z. (2020) 'Anemia and its association with parity.', *The Professional Medical Journal*, 27(05), pp. 968–972. doi: 10.29309/tpmj/2020.27.05.3959.
- Shao, J., Jingan, L., Raghavendra, R., Michael, K.G., Niko, K., *et al.* (2012) 'Maternal serum ferritin concentration is positively associated with newborn iron stores in women with low ferritin status in Late Pregnancy', *Journal of Nutrition*, 142(11), pp. 2004–2009. doi: 10.3945/jn.112.162362.
- Shi, H. Lian, C., Yuanyuan, W., Mengxing, S., Yijie, G., Shang, M., *et al.* (2022) 'Severity of Anemia During Pregnancy and Adverse Maternal and Fetal Outcomes.', *JAMA network open*, 5(2), p. e2147046. doi: 10.1001/jamanetworkopen.2021.47046.
- Shkembi, B. and Huppertz, T. (2021) 'Influence of dairy products on bioavailability of zinc from other food products: A review of complementarity at a meal level', *Nutrients*, 13(12). doi: 10.3390/nu13124253.
- Shrestha, V., Rajan, Dev R.M., Andrew L.T., Swetha, M., Archana, A. (2021) 'Factors associated with dietary diversity among pregnant women in the western hill region of Nepal : A community based cross- sectional study', *PLoS ONE*, 16(4), pp. 1–17. doi: 10.1371/journal.pone.0247085.
- Siagian, A. (2010) *Epidemiologi Gizi*. Jakarta: Erlangga.
- Sinha, S., Patro, N. and Patro, I. K. (2018) 'Maternal protein malnutrition: Current and future perspectives of spirulina supplementation in neuroprotection', *Frontiers in Neuroscience*, 12(December), pp. 1–18. doi: 10.3389/fnins.2018.00966.
- Smith, C., Marks, A. and Lieberman, M. (2005) *Marks' Basic Medical Biochemistry A Clinical Approach*. Second Edi. Maryland: Lippincott William & Wilkins.

- Soma-Pillay, P., Catherine N.P., Heli, T., Alexandre, M. (2016) ‘Physiological changes in pregnancy’, *Cardiovascular Journal of Africa*, 27(2), pp. 89–94. doi: 10.5830/CVJA-2016-021.
- Stephen, G., Melina, M., Tamara, H.H., Johnson, K., Babill S.P., and Sia E.M. (2018) ‘Anaemia in Pregnancy: Prevalence, Risk Factors, and Adverse Perinatal Outcomes in Northern Tanzania’, *Anemia*, 2018. doi: 10.1155/2018/1846280.
- Suega, K. (2015a) *Anemia Defisiensi besi*. In: *Buku Ajar Ilmu Penyakit Dalam*. 6th ed. Jakarta: Balai Penerbit FKUI.
- Suega, K. (2015b) *Aspek Biologik dan Klinik dari Besi : dari Anemia Defisiensi Besi sampai Anemia dengan Kelebihan Besi*. Denpasar: PT. Percetakan Bali.
- 
- Sugiyono (2018) *Statistika untuk Penelitian*. Bandung: Alfabeta.
- Suharno, D. (2017) *The Role of Vitamin A in Nutritional Anaemia*.
- Supariasa (2017) *Pendidikan Dan Konsultasi Gizi*. Jakarta: EGC.
- Susilawati, D. and Nilakesuma, N. F. (2021) ‘Individual Factors Associated With Dietary Practices During Pregnancy’, *Jurnal MIDPRO Universitas Islam Lamongan*, 13(02), pp. 203–214.
- Sutanto, A. V. and Fitriana, Y. (2014) *Asuhan Pada Kehamilan*. Yogyakarta: Pustaka Baru Press.
- Suzuki, H., Satoshi, Shusuke, Jiying, Chikara, et al. (2014) ‘Heme regulates gene expression by triggering Crm1-dependent nuclear export of Bach1’, *EMBO Journal*, 23(13), pp. 2544–2553. doi: 10.1038/sj.emboj.7600248.
- Syari, M., Serudji, J. and Mariati, U. (2015) ‘Peran Asupan Zat Gizi Makronutrien Ibu Hamil terhadap Berat Badan Lahir Bayi di Kota Padang’, *Jurnal Kesehatan Andalas*, 4(3), pp. 729–736. doi: 10.25077/jka.v4i3.355.
- Tarigan, N., Sitompul, L. and Zahra, S. (2021) ‘Asupan energi, protein, zat besi, asam folat dan status anemia ibu hamil di wilayah kerja puskesmas petumbukan’, *wahana Inovasi*, 10(1).
- Tarini, A., Mari S. M., Kenneth H. B., Mduduzi N. N., Mbuya, Laura A. R., Frederick et al. (2021) ‘Enablers and Barriers of Zinc Fortification; Experience from 10 Low- and Middle-Income Countries with Mandatory Large-Scale Food Fortification’, *Nutrients*, pp. 1–14.

- Thorne-Lyman, A. L. and Fawzi, W. W. (2012) 'Vitamin A and carotenoids during pregnancy and maternal, neonatal and infant health outcomes: A systematic review and meta-analysis.', *Paediatr. Perinat. Epidemiol.*, 26 ,((Suppl 1)), pp. 36–54.
- Timmer, T. C., Rosa, Judith J.M., Jeroen, Johannes, Corine W.M. et al. (2020) 'Dietary intake of heme iron is associated with ferritin and hemoglobin levels in Dutch blood donors: results from Donor InSight Correspondence', 105(10). doi: 10.3324/haematol.2019.229450.
- Tsegaye, D., Tamiru, D. and Belachew, T. (2020) 'Factors Associated with Dietary Practice and Nutritional Status of Pregnant Women in Rural Communities of Illu Aba Bor Zone , Southwest', *Nutrition and Dietary Supplements*, pp. 103–112.
- Ullah, I., Zahid, Shah, and Mudassir (2013) 'Testing the modeling capability of ORYZA2000 under nitrogen limit conditions in Northern Iran', *International Journal of Biosciences (IJB)*, 3(11), pp. 1–7. doi: 10.12692/ijb/3.11.1-7.
- Villalva Luna, J. L. and Villena Prado, J. (2021) 'Relationship between pregnant women with anaemia of maternal age at risk and low birth weight in a social security hospital in Peru', *Revista de la Facultad de Medicina Humana*, 21(1), pp. 101–107. doi: 10.25176/rfmh.v21i1.3155.
- Vionalita, G. and Permata, N. T. (2020) 'The Relationship Between Age of Pregnant Women and Parity With the Incidence of Anemia in Third Semester Pregnant Women', 30(Ichd), pp. 125–128. doi: 10.2991/ahsr.k.201125.021.
- Wahyuni, S. (2013) *Metabolisme Biokimia*. Denpasar: Udaya University Press.
- Wang, H., Gabriel J.W., Dan, Stephane, Xiuwen, C. et al. (2015) 'Induction of autophagy through the activating transcription factor 4 (ATF4) - dependent amino acid response pathway in maternal skeletal muscle may function as the molecular memory in response to gestational protein restriction to alert offspring to mate', pp. 519–532. doi: 10.1017/S0007114515002172.
- Wardlaw, G. M. (2007) *Perspective in Nutrition*. 7 Th ed. USA. 543-51.: McGrawHill.
- Wartonah, T. (2008) *Keperawatan Medikal Bedah Gangguan Sistem Hematologi*. Jakarta: Trans Info Media.
- Webster-Gandy, J. (2014) *Gizi & Dietetika*. Edisi 2. Edited by J. Webster-Gandy, A. Madden, and M. Holdsworth. Jakarta: EGC.

- Wessells, R. K. Césaire T.O., Rebecca R. Y., Thierno, F., Alex, B. and Sonja, Y.H. (2017) 'Micronutrient status among pregnant women in zinder, niger and risk factors associated with deficiency', *Nutrients*, 9(5). doi: 10.3390/nu9050430.
- WHO (2017a) *Nutritional Anaemias : Tools for Effective Prevention*, World Health Organization.
- WHO (2017b) *Nutritional anaemias: tool for effective prevention and control*. Geneva: World Health Organization, 2017.
- WHO (2020a) 'Serum ferritin concentrations for the assessment of iron status in individuals and populations: technical brief', (10), pp. 1–6. Available at: <https://apps.who.int/iris/handle/10665/331505>.
- WHO (2020b) *WHO Guidelines on use of ferritin concentrations to assess iron status in individual and populations*. Geneva: World Health Organization, 2020.
- WHO (2021a) *Prevalence of anaemia in pregnant women (aged 15-49) (%)*. Available at: <https://www.who.int/data/gho/data/indicators/indicator-details/GHO/prevalence-of-anaemia-in-pregnant-women--> (Accessed: 6 December 2021).
- WHO (2021b) *WHO Guidance Helps Detect Iron Deficiency and Protect Brain Development*. Available at: <https://www.who.int/news-room/detail/20-04-2020-who-guidance-helps-detect-iron-deficiency-and-protect-brain-development> (Accessed: 5 December 2021).
- Wibowo, N. Bardosono, S. I, Rima S, Inayah, Atikah, S. P., Natasya, P. et al. (2017) , *Med J Indones*, 26(1), pp. 109–15.
- Wieringa, F. T. et al. (2016) 'The High Prevalence of Anemia in Cambodian Children and Women Cannot Be Satisfactorily Explained by Nutritional Deficiencies or Hemoglobin Disorders'. doi: 10.3390/nu8060348.
- Wildayani, D., Yusrawati, Y. and Ali, H. (2018) 'Pengaruh Pemberian Tablet Zink dan Besi terhadap Kadar Hemoglobin dan Feritin pada Ibu Hamil Anemia Defisiensi Besi', *Jurnal Kesehatan Andalas*, 7(Supplement 4), p. 1. doi: 10.25077/jka.v7i0.913.
- Williams, I. O., Essien, E. U., and Eka, O. U. (2011). 'Socioeconomic factors and vitamin a status of pregnant women in Calabar urban, southeastern Nigeria'. *Maternal and child health journal*, 15(7), 943–948. <https://doi.org/10.1007/s10995-009-0541-7>
- Williamson, C. S. (2019) 'Nutrition in pregnancy', pp. 28–59.

- Wilson, R. L., Tina, B.M., Shalem, Y. L., Luke, E.G., Gustaaf A. D., Claire,T.R.(2018) 'Early pregnancy maternal trace mineral status and the association with adverse pregnancy outcome in a cohort of Australian women', *Journal of Trace Elements in Medicine and Biology*, 46(November 2017), pp. 103–109. doi: 10.1016/j.jtemb.2017.11.016.
- Wirth, J. P. Nicolai, Sherry, A. T. 2, Lisa, M. R., Erin, M., Alison, Greg, S. G. et al. (2017) 'Vitamin a supplementation programs and country-level evidence of vitamin A deficiency', *Nutrients*, 9(3), pp. 1–18. doi: 10.3390/nu9030190.
- Woldeamanuel, G. G. Teshome, G.G, Tesfaye, P.M., Mulualem, B.S., and Temesgen, A.B. (2019) 'Effect of nutritional status of pregnant women on birth weight of newborns at Butajira Referral Hospital, Butajira, Ethiopia', *SAGE Open Medicine*, 7, p. 205031211982709. doi: 10.1177/2050312119827096.
- Wolfe, R. R., Miller, S. L. and Editors (2002) 'Supplement: Protein metabolism in response to ingestion pattern and composition of proteins: Introduction', *Journal of Nutrition*, 132(10), pp. 3219–3224.
- Yang, C., Jing , Zhen, Chunfeng, Jianhua and Xiaoguang (2016) 'Prevalence and influence factors of Vitamin A deficiency of Chinese pregnant women', *Nutrition Journal*, 15(1), pp. 1–7. doi: 10.1186/s12937-016-0131-7.
- Yang, J., Qianqian, Xueye, Binyan, Lingxia, Hong, Shaonong, and Yue-Hua, (2022) 'Dietary protein intake during pregnancy and birth weight among Chinese pregnant women with low intake of protein', *Nutrition & Metabolism*, pp. 1–12. doi: 10.1186/s12986-022-00678-0.
- Yesuf, N. N. and Agegniche, Z. (2021) 'Prevalence and associated factors of anemia among pregnant women attending antenatal care at Felegehiwot Referral Hospital, Bahirdar City: Institutional based cross- sectional study', *International Journal of Africa Nursing Sciences*, 15, p. 100345. doi: 10.1016/j.ijans.2021.100345.
- Yulferina, D. Vaulinne, B., Dessy, A.and Nur Indrawaty, L. (2020) 'Relationship of Iron Consumption with Ferritin Levels in First-Trimester Pregnant Woman in Agam District , 2019', 9(3), pp. 1507–1515.
- Yusrawati, Y., Defrin, D. and Karmia, H. R. (2019) 'Neonatal Growth, Neurotrophine, Zinc, and Ferritin Concentration in Normal and Iron Deficiency Pregnancy: An Observational Analitic Study.', *Open access Macedonian journal of medical sciences*, 7(7), pp. 1114–1118. doi: 10.3889/oamjms.2019.202.

Zemrani, B. and Bines, J. E. (2020) 'Recent insights into trace element deficiencies: Causes, recognition and correction', *Current Opinion in Gastroenterology*, 36(2), pp. 110–117. doi: 10.1097/MOG.0000000000000612.

Zhang, Q., Xiao, Min Zhang, Chen-Ying, Si-Yuan, Shi-Fen, Cai-Yun, and Shan-Shan (2021) 'Adverse effects of iron deficiency anemia on pregnancy outcome and offspring development and intervention of three iron supplements', *Scientific Reports*, 11(1), pp. 1–11. doi: 10.1038/s41598-020-79971-y.

Zhao, L., Zhang, Shen, Fang, Wang (2015) 'Obesity and iron deficiency: A quantitative meta-analysis', *Obesity Reviews*, 16(12), pp. 1081–1093. doi: 10.1111/obr.12323.

Zimmermann, M. B., Ralf, Fabian, Abdeljawad, Christophe, Richard F.H., and Nourredine, C. (2006) 'Vitamin A supplementation in children with poor vitamin A and iron status increases erythropoietin and hemoglobin concentrations without changing total body iron', *American Journal of Clinical Nutrition*, 84(3), pp. 580–586. doi: 10.1093/ajcn/84.3.580.

Zuraida R, A. D. (2016) *Buku Penuntun Praktikum Penilaian Konsumsi Pangan*. Bandar Lampung: Fakultas Kedokteran Universitas Lampung.

