

- Arias, A.V., Lintner-Rivera, M., Shafi, N.I., Abbas, Q., Abdelhafeez, A.H., Ali, M., Ammar, H., *et al.*, 2024, 'Pediatric Acute Lung Injury and Sepsis Investigators (PALISI) Network on behalf of the PALISI Global Health Subgroup. A research definition and framework for acute paediatric critical illness across resource-variable settings: a modified Delphi consensus'. *Lancet Glob Health*. Feb;12(2):e331-e340. doi: 10.1016/S2214-109X(23)00537-5
- Bagri, N.K., Jose, B., Shah, S.K., Bhutia, T.D., Kabra, S.K., Lodha, R., 2015 'Impact of Malnutrition on the Outcome of Critically Ill Children'. *Indian J Pediatr*. Jul;82(7):601-5. doi: 10.1007/s12098-015-1738-y
- Bockenkamp, B., Philippe, J., Valérie, A., Marie, B., and Véronique-Anne, P., 2009 'Assessment of calories prescribed and delivered to critically ill children', *e-SPEN, the European e-Journal of Clinical Nutrition and Metabolism*, Volume 4, Issue 4, Pages e172-e175, ISSN 1751-4991, <https://doi.org/10.1016/j.eclnm.2009.04.001>.
- Briassoulis, G., Briassouli, E., Ilia, S., Briassoulis, P., 2022, 'External Validation of Equations to Estimate Resting Energy Expenditure in Critically Ill Children and Adolescents with and without Malnutrition: A Cross-Sectional Study'. *Nutrients*. Oct 6;14(19):4149. doi: 10.3390/nu14194149
- Briassoulis, G., Ilia, S., Briassouli, E., 2024, 'Personalized Nutrition in the Pediatric ICU: Steering the Shift from Acute Stress to Metabolic Recovery and Rehabilitation'. *Nutrients*, 16, 3523. <https://doi.org/10.3390/nu16203523>
- Brown, R., Minard, G., and Ziegler, T., 2014, 'Parenteral Nutrition-Modern Nutrition in Health and Disease', in Ross, A.C., Caballero, B., Cousins, R.J., Tucker, K.L., and Ziegler, T.R., 11th edn, Lippincott Williams and Wilkins, Philadelphia, page 1142-1146
- Burns, J.P., Sellers, D.E., Meyer, E.C., Lewis-Newby, M., Truog, R.D., 2014, 'Epidemiology of death in the PICU at five U.S. teaching hospitals'. *Crit Care Med*. Sep;42(9):2101-8. doi: 10.1097/CCM.0000000000000498
- Coss-Bu JA, Jefferson LS, Walding D, David Y, Smith EO, Klish WJ. 1998 'Resting energy expenditure in children in a pediatric intensive care unit: comparison of Harris-Benedict and Talbot predictions with indirect calorimetry values'. *Am J Clin Nutr*. Jan;67(1):74-80. doi: 10.1093/ajcn/67.1.74
- Chaudhry, H., Zhou, J., Zhong, Y., Ali, M.M., McGuire, F., Nagarkatti, P.S., *et al.*, 2013, 'Role of Cytokines as a Double-edged Sword in Sepsis', *In Vivo*;27(6):669-684
- Chwals, W.J., 2015, 'The Acute Metabolic Response to Injury In Children-Pediatric Critical Care Nutrition' in Goday, P.S., and Mehta, N.M, McGraw Education, p 3-12
- Delgado, A.F., Okay, T.S., Leone, C., Nichols, B., Del Negro, G.M., Vaz, F.A., 2008, 'Hospital malnutrition and inflammatory response in critically ill children and adolescents admitted to a tertiary intensive care unit'. *Clinics (Sao Paulo)*. Jun; 63(3):357-62. doi: 10.1590/s1807-59322008000300012
- Dewi, R and Fatimatuzzuhroh 2019 'Profil Pasien Sakit Kritis yang Dirawat di PICU RSCM berdasarkan sistem scoring PELOD -2', *Sari Pediatri*, 21(1), pp. 37-43
- Fuentes-Servín, J., Avila-Nava, A., González-Salazar, L.E., Pérez-González, O.A., Servín-Rodas, M.D.C., Serralde-Zuñiga, A.E., *et al.*, 2021. 'Resting Energy Expenditure Prediction Equations in the Pediatric Population: A Systematic Review' *Front Pediatr*. Dec 6;9:795364. doi: 10.3389/fped.2021.795364
- Gathinji, M., Harris, Z.L., 2008 'Principles of Nutrition and Metabolism-Rogers' Textbook of Pediatric Intensive Care' in Nichols, D.G., Ackerman, A.D., Argent, A.C., Biagas, K., Carcillo, Jr., J.A., Dalton, H.J., *et al.*, 4th ed.
- Goday, P.S., Mehta, N.M. 2015 'Pediatric Critical Care Nutrition Chapter 3: Energy and

- Gutiérrez-Marín, D., Escribano, J., Closa-Monasterolo, R., Ferré, N., Venables, M., Singh, P., *et al* 2021, 'Validation of bioelectrical impedance analysis for body composition assessment in children with obesity aged 8-14y' Clin Nutr. Jun; 40(6):4132-4139. doi: 10.1016/j.clnu.2021.02.001
- Hammarqvist, F., Wernerman, J. and Allison, S. 2009 'Basics in clinical nutrition: Injury and sepsis - The neuroendocrine response', *e-SPEN*, 4(1), pp. e4–e6.
- Hulst, J.M., Joosten, K.F.M., 2015 'Intensive Care-Pediatric Nutrition in Practice' in Koletzko, B., Bhatia, J., Bhutta, Z.A., Cooper, P., Makrides, M., Uauy, R. *et al* vol 113, p271-275
- Irving, S., Albert, B., Mehta, N., Srinivasan, V. 2022 'Strategies to optimize enteral feeding and nutrition in the critically ill child: a narrative review'. *Pediatr Med*, 2022;5:9 North America, <http://dx.doi.org/10.21037/pm-21-6>
- Jeschke, M.G., Mlcak, R.P., Finnerty, C.C., Norbury, W.B., Przkora, R., Kulp, G.A., *et al* 2008 'Gender differences in pediatric burn patients: does it make a difference?' *Ann Surg*. Jul;248(1):126-36. doi: 10.1097/SLA.0b013e318176c4b3
- Joosten, K., Verbruggen, S., 2022 'PN Administration in Critically Ill Children in Different Phases of the Stress Response'. *Nutrients*. Apr 27;14(9):1819. doi: 10.3390/nu14091819
- Jotterand Chaparro, C., Taffé, P., Moullet, C., Laure Depeyre, J., Longchamp, D., Perez, M.H., *et al*. 2016, 'Performance of Predictive Equations Specifically Developed to Estimate Resting Energy Expenditure in Ventilated Critically Ill Children' *J Pediatr*. 2017 May;184:220-226.e5. doi: 10.1016/j.jpeds.2016.12.063
- Jotterand Chaparro, C., Moullet, C., Taffé, P., Laure Depeyre, J., Perez, M.H., Longchamp, D., *et al*. 2018, 'Estimation of Resting Energy Expenditure Using Predictive Equations in Critically Ill Children: Results of a Systematic Review' *JPEN J Parenter Enteral Nutr*. Aug;42(6):976-986. doi: 10.1002/jpen.1146
- Kerklaan, D., Fivez, T., Mehta, N.M., Mesotten, D., van Rosmalen, J., Hulst, J.M., *et al*. 2016 'Worldwide Survey of Nutritional Practices in PICUs. *Pediatr Crit Care Med*. Jan;17(1):10-8. doi: 10.1097/PCC.0000000000000542
- Kleinman, R.E., and Greer, F.R., 2020 'Nutrition of Children Who are Critically Ill-Pediatric Nutrition' 8th Edn, AAP, p 1065-1072
- Kratochvíl, M., Klučka, J., Klabusayová, E., Musilová, T., Vafek, V., Skříšiovská, T., *et al*, 2022, Nutrition in Pediatric Intensive Care: A Narrative Review. *Children (Basel)*. 2022 Jul 11;9(7):1031. doi: 10.3390/children 9071031
- Krüger, J., Kraft, M., Gründling, M., Friessecke, S., Gärtner, S., and Vogt, L.J., *et al*, 2016 'Evaluation of a non-invasive multisensor accelerometer for calculating energy expenditure in ventilated intensive care patients compared to indirect calorimetry and predictive equations'. *J Clin Monit Comput*. Oct;31(5):1009-1017. doi: 10.1007/s10877-016-9934-5
- Landis, J.R., Koch, G.G., 1977 'The measurement of observer agreement for categorical data' *Biometrics*. Mar;33(1):159-74
- Latief, A. *et al*. 2016 'Buku panduan pelayanan emergensi, rawat intermediate, dan rawat intensif anak', *UKK Emergensi dan Rawat Intensif Anak IDAI*, p. h.1-42.
- Lowry, S.F., Coyle, S.M., 2014 'Hypercatabolic State-Modern Nutrition in Health and Disease' in Ross, A.C., Caballero, B., Cousins, R.J., Tucker, K.L., Ziegler, T.R., 11th ed Lippincott Williams & Wilkins
- Matarese, L.E., Gottschlich, M.M., 2014 'Enteral Feeding-Modern Nutrition in Health and Disease' in Ross, A.C., Caballero, B., Cousins, R.J., Tucker, K.L., and Ziegler, T.R 11th Ed. Lippincott Williams & Wilkins
- Mehta, N.M., Skillman, H.E., Irving, S.Y., Coss-Bu, J.A., Vermilyea, S., Farrington, E.A., *et al*, 2017 'Guidelines for the Provision and Assessment of Nutrition Support Therapy in the

- Pediatric Critically Ill Patient: Society of Critical Care Medicine and American Society for Parenteral and Enteral Nutrition'. *JPEN J Parenter Enteral Nutr.* Jul;41(5):706-742. doi: 10.1177/0148607117711387
- Melibeu Bentes, C., Luiz Bezerra da Silveira, A., Di Masi, F., Resende, M., Netto, C., Marinheiro, L.P.F., 2021. 'Reliability of bioimpedance and indirect calorimetry to evaluate resting metabolic rate in Brazilian women with metabolic syndrome' *Diabetes Metab Syndr.* Mar-Apr;15(2):493-497. doi: 10.1016/j.dsx.2021.02.018.
- Moonen, H.P.F.X., Beckers, K.J.H., van Zanten, A.R.H., 2021 'Energy expenditure and indirect calorimetry in critical illness and convalescence: current evidence and practical considerations' *J Intensive Care.* Jan 12;9(1):8. doi: 10.1186/s40560-021-00524-0
- Moonen, H.P.F.X., Van Zanten, A.R.H., 2021 'Bioelectric impedance analysis for body composition measurement and other potential clinical applications in critical illness' *Curr Opin Crit Care.* Aug 1;27(4):344-353. doi: 10.1097/MCC.0000000000000840
- Mtaweh, H., Tuira, L., Floh, A.A., Parshuram, C.S., 2018 'Indirect Calorimetry: History, Technology, and Application' *Front Pediatr.* Sep 19;6:257. doi: 10.3389/fped.2018.00257
- Orellana, R.A., Coss-Bu, J.A., 2021 'Metabolic Alteration in The Critically Child: A Narrative Review' *Pediatr Med* 1;4:8
- Parshuram, G.A., Tuira, L., Dazo, F., El Hariri, N., Hulst, J.M., Mtaweh, H., 2024, 'Components of Total Energy Expenditure in Healthy and Critically Ill Children: A Comprehensive Review' *Nutrients*, 16, 2581. <https://doi.org/10.3390/nu16162581>
- Patki, V.K., Antin, J.V., Khare, S.H., 2017 'Persistent Hyperlactatemia as the Predictor of Poor Outcome in Critically Ill Children: A Single-Center, Prospective, Observational Cohort Study' *J Pediatr Intensive Care.* Sep;6(3):152-158. doi: 10.1055/s-0036-1593886
- Praptiwi, A *et al.*, 2016 'Hubungan Kadar Gula Darah Terhadap Mortalitas dan Morbiditas pada Anak Sakit Kritis di Pediatric Intensive Care Unit', *Sari Pediatri*, 14(5), p. 298. Available at: <https://doi.org/10.14238/sp14.5.2013.298-302>.
- Rocha, G.A., Rocha, E.J., Martins, C.V., 2006 'The effects of hospitalization on the nutritional status of children' *J Pediatr (Rio J)* Jan-Feb;82(1):70-4. doi: 10.2223/JPED.1440
- Ross, P.A., Newth, C.J., Leung, D., Wetzel, R.C., Khemani, R.G., 2016, 'Obesity and Mortality Risk in Critically Ill Children' *Pediatrics* Mar;137(3):e20152035. doi: 10.1542/peds.2015-2035
- Rusmawatiningtyas, D., Oktaria, V., Pudjiadi, A.H., Makrufardi, F., Woensel, J.B.M.V., 2024, 'Clinical characteristics and outcome of critically ill children referred to a tertiary hospital in Indonesia: a prospective observational study' *BMC Pediatr.* Jul 27;24(1):478. doi: 10.1186/s12887-024-04940-7
- Saengnipanthkul, S., Chongviriyaphan, N., Densupsoontorn, N., Apiraksakorn, A., Chaiyarit, J., Kunnangja, S., *et al.* 2021 'Hospital-acquired malnutrition in paediatric patients: a multicentre trial focusing on prevalence, risk factors, and impact on clinical outcomes' *Eur J Pediatr.* Jun;180(6):1761-1767. doi: 10.1007/s00431-021-03957-9. Epub 2021 Jan 25. Erratum in: *Eur J Pediatr.* 2022 Mar;181(3):1305. doi: 10.1007/s00431-021-04299-2.
- Silva-Gburek, J., Zhu, P.H., Mansour, M., Walding, D., Coss-Bu, J.A., 2022 'A methodological and clinical approach to measured energy expenditure in the critically ill pediatric patient' *Front Pediatr.* Oct 24;10:1027358. doi: 10.3389/fped.2022.1027358
- Singer, P., Blaser, A.R., Berger, M.M., Alhazzani, W., Calder, P.C., Casaer MP, *et al.* 2019, ESPEN guideline on clinical nutrition in the intensive care unit. *Clin Nutr.* Feb;38(1):48-79. doi: 10.1016/j.clnu.2018.08.037
- de Souza Menezes, F., Leite, H.P., Koch Nogueira, P.C., 2012, 'Malnutrition as an independent predictor of clinical outcome in critically ill children' *Nutrition.* Mar;28(3):267-70. doi: 10.1016/j.nut.2011.05.015
- Srinivasan, V., Lee, J., Menon, K., Zimmerman, J., Bembea, M., & Agus, M., 2022 'Endocrine

- Sudarmadji, S., Wati, D.K. and Sidiartha, L. 2016 'Faktor Risiko pada Lama Rawat dan Luaran Pasien Perawatan di Unit Perawatan Intensif Anak RSUP Sanglah Denpasar', *Sari Pediatri*, 17(6), p. 455, <https://doi.org/10.14238/sp17.6.2016.455-62>.
- Suskind, D.L., Lenssen, P., 2011 'Pediatric Nutrition Handbook An Algorithmic Approach' Wiley-Blackwell, p 142
- Talbot, 1938, 'Basal metabolism standards for children' *JAMA Pediatrics*, 1938, volum 55, pages 455-459, <https://api.semanticscholar.org/CorpusID:71433392>
- Tignanelli, C.J., Andrews, A.G., Sieloﬀ, K.M., Pleva, M.R., Reichert, H.A., Wooley, J.A., *et al.*, 2017 'Are Predictive Energy Expenditure Equations in Ventilated Surgery Patients Accurate?' *J Intensive Care Med.* May;34(5):426-431. doi: 10.1177/0885066617702077
- Tume, L.N., Valla, F.V., Joosten, K., Jotterand Chaparro, C., Latten, L., Marino, L.V., *et al.*, 2020, 'Nutritional support for children during critical illness: European Society of Pediatric and Neonatal Intensive Care (ESPNIC) metabolism, endocrine and nutrition section position statement and clinical recommendations' *Intensive Care Med.* 2020 Mar;46(3):411-425. doi: 10.1007/s00134-019-05922-5
- Veldscholte, K., Joosten, K. and Chaparro, C.J., 2020 'Energy expenditure in critically ill children', *Pediatric Medicine*, 3(August). Available at: <https://doi.org/10.21037/pm-20-62>.
- Ventura, J.C., Hauschild, D.B., Barbosa, E., Bresolin, N.L., Kawai, K., Mehta, N.M., *et al.*, 2019 'Undernutrition at PICU Admission Is Predictor of 60-Day Mortality and PICU Length of Stay in Critically Ill Children' *J Acad Nutr Diet.* Feb;120(2):219-229. doi: 10.1016/j.jand.2019.06.250
- De Waele, E., and van Zanten, A.R.H., 2022 'Routine use of indirect calorimetry in critically ill patients: pros and cons', *Critical Care*, 26(1), pp. 4–7, <https://doi.org/10.1186/s13054-022-04000-5>.
- Verger, J., 2014, 'Nutrition in The Pediatric Population in the Intensive Care Unit' *Crit Care Nurs Clin N Am* 26, 199-215
- Walter-Kroker, A., *et al.* 2011 'A practical guide to bioelectrical impedance analysis using the example of chronic obstructive pulmonary disease', *Nutrition Journal*, 10(1), pp. 2–9, <https://doi.org/10.1186/1475-2891-10-35>.
- Wasyluk, W., Zwolak, A., 2021 'Metabolic Alterations in Sepsis'. *J Clin Med.* May 29;10(11):2412. doi: 10.3390/jcm10112412
- WHO, 2016 'Updated guideline: paediatric emergency triage, assessment and treatment: care of critically-ill children', *World Health Organisation*, p. 7
- Yildirim, I., Dogan, I., Isik, O., Yildirim, Y., Karagoz, S., 2020, Investigation of the relationship between basal metabolic rate and body composition in young adults using CHAID analysis. *Progr Nutr [Internet]*. May 26 [cited 2024 Nov. 20];22(1-S):5-10. Available from: <https://www.mattioli1885journals.com/index.php/progressinnutrition/article/view/9761>
- Zaher, S., White, D., Ridout, J., Valla, F., Branco, R., Meyer, R., *et al.* 2019 'Association between enteral macronutrient delivery and inflammatory response in critically ill children'. *Clin Nutr.* Oct;38(5):2287-2296. doi: 10.1016/j.clnu.2018.10.001
- Zheng, W.H., Zhao, Y.H., Yao, Y., Huang, H.B., 2023 'Prognostic role of bioelectrical impedance phase angle for critically ill patients: A systemic review and meta-analysis'. *Front Med (Lausanne)* Jan 9;9:1059747. doi: 10.3389/fmed.2022.1059747
- Zimmerman, J.J., *et al.* 2022, 'Fuhrman and Zimmerman's Pediatric Critical Care'. sixth edition. Chapter 99: 'Nutrition of the critically ill child'. p 1177-1188