



Human Milk and Preterm Infant Brain Development

Guidelines for Healthcare Providers

- American Academy of Pediatrics (AAP) Policy Statement: Advocacy for Improving Nutrition in the First 1000 Days to Support Childhood Development and Adult Health
 - <https://publications.aap.org/pediatrics/article/141/2/e20173716/38085/Advocacy-for-Improving-Nutrition-in-the-First-1000>
- AAP Policy Statement: Breastfeeding and the Use of Human Milk
 - <https://publications.aap.org/pediatrics/article/150/1/e2022057988/188347/Policy-Statement-Breastfeeding-and-the-Use-of>
- AAP Clinical Report: Promoting Human Milk and Breastfeeding for the Very Low Birth Weight Infant
 - <https://publications.aap.org/pediatrics/article/148/5/e2021054272/181366/Promoting-Human-Milk-and-Breastfeeding-for-the>
- ESPGHAN Position Paper: Enteral Nutrition in Preterm Infants
 - <https://onlinelibrary.wiley.com/doi/10.1097/MPG.0000000000003642>

Clinician Resources

- AAP training modules and tips for early brain development
 - <https://www.aap.org/en/patient-care/early-childhood/early-childhood-health-and-development/early-brain-development/>
- Preterm infant nutrition assessment
 - Intrauterine growth curves
 - Fenton growth charts: <https://live-ucalgary.ucalgary.ca/resource/preterm-growth-chart/2013-preterm-growth-chart>
 - Olsen growth charts: https://pnce.org/documents/55140-15_AdditionalResources01.pdf
 - INTERGROWTH-21st preterm infant reference standards and tools
 - <https://intergrowth21.tghn.org/standards-tools/>
 - Anthropometric measurements
 - <https://www.aap.org/en/patient-care/newborn-and-infant-nutrition/newborn-and-infant-nutrition-assessment-tools/anthropometric-measurements/>
 - Nutrition-focused physical exam tool
 - https://www.nutritioncare.org/uploadedFiles/Documents/Malnutrition/MAW_2023/NFPE-for-Infants.pdf



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Key Publications

- Belfort MB, Knight E, Chandarana S, et al. Associations of Maternal Milk Feeding With Neurodevelopmental Outcomes at 7 Years of Age in Former Preterm Infants. *JAMA Netw Open*. 2022;5(7):e2221608. doi:10.1001/jamanetworkopen.2022.21608
 - <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2794168>
- Colaizy TT, Poindexter BB, McDonald SA, et al. Neurodevelopmental Outcomes of Extremely Preterm Infants Fed Donor Milk or Preterm Infant Formula: A Randomized Clinical Trial. *JAMA*. 2024;331(7):582-591. doi:10.1001/jama.2023.27693
 - <https://jamanetwork.com/journals/jama/fullarticle/2814657>
- Gould JF, Makrides M, Gibson RA, et al. Neonatal Docosahexaenoic Acid in Preterm Infants and Intelligence at 5 Years. *N Engl J Med*. 2022;387(17):1579-1588. doi:10.1056/NEJMoa2206868
 - <https://www.nejm.org/doi/10.1056/NEJMoa2206868>
- Villar J, Giuliani F, Barros F, et al. Monitoring the Postnatal Growth of Preterm Infants: A Paradigm Change. *Pediatrics*. 2018;141(2):e20172467. doi:10.1542/peds.2017-2467
 - <https://publications.aap.org/pediatrics/article-abstract/141/2/e20172467/38069/Monitoring-the-Postnatal-Growth-of-Preterm-Infants>

Parent Resources

- University of Georgia Extension fact sheets on early brain development
 - <https://www.bbbgeorgia.org/fact-sheets>
- Parent-Infant Foundation Baby Brain Facts
 - <https://parentinfantfoundation.org.uk/wp-content/uploads/2020/06/F1001D-Baby-Brain-Infographic.pdf>



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