# Prenatal and Early Childhood Cognition



Help every child reach their full potential by raising awareness of the importance of nutrition in the first 1,000 days to ensure an early foundation for optimal brain development.

## **Overview**

The first 1,000 days between pregnancy and a child's second birthday are a brief but important window of opportunity to nourish early brain development and help each child reach their full potential. Good nutrition during the first 1,000 days provides the building blocks for healthy brain development. Conversely, failure to provide key nutrients during this critical period can have a lifelong impact.<sup>1,2</sup>

## **Supporting Research**

- During the first 1,000 days, the brain grows faster than at any other time, laying down the foundation for cognitive abilities, motor skills and socio-emotional development, which, in turn, profoundly influences success in school and opportunities later in life. Throughout the first 1,000 days, the right nutrients are needed at the right time to nourish the brain's rapid development. Nutrients that affect early brain development include protein, specific fats, glucose, zinc, copper, iodine, iron, selenium, vitamins B6, B12, A, and K, folate and choline.<sup>1,2</sup>
- Nearly 15% of households with children report food insecurity at some time during the year. Single mothers are more than three times as likely to experience food insecurity. Black and Hispanic households also experience substantially higher rates of food insecurity.<sup>3</sup>
- At just 20 cents a serving, dairy milk provides 7 of the 14 nutrients that affect early brain development, including iodine, which was recognized by the 2020-2025 Dietary Guidelines Advisory Committee as a nutrient of concern for pregnant women.<sup>2,4,5</sup>
- lodine needs increase by more than 50% during pregnancy and many women of childbearing age are iodine deficient before they even become pregnant; especially those who do not regularly consume dairy foods, eggs, seafood or use iodized table salt.<sup>5,6,7</sup>
- Prenatal iodine deficiency may lead to irreversible neurocognitive defects and lower childhood IQ.<sup>5,8</sup>
- About half the prenatal multivitamin supplements on the market in the U.S. do not contain iodine.<sup>8</sup>

#### **Key Points and Statistics**

- Nourish a child's future by focusing on nutrition in the first 1,000 days.
- The first 1000 days is the time for maternal and child health providers to help patients become familiar with foods that provide critical nutrients needed for brain development.
- It is important for maternal and child health providers to screen for food and nutrition security and support and encourage participation in WIC and other feeding programs if needed
- Dairy's cognitive bundle of nutrients (e.g., iodine, choline and B12) make a difference when it comes to baby's brain development.
- For an affordable price, dairy foods offer a lifetime of benefits.
- Dairy foods provide a nutrient value for moms-to-be and young children. In fact, at just 20 cents a serving dairy milk provides 7 of the 14 nutrients that help early brain development.
- Unlike dairy milk, plant-based beverages, such as soy and almond beverages, do not provide significant amounts of iodine, a critical nutrient for baby's brain development.

#### REFERENCES

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