3 Signs of A Healthy Baby's Brain Development – and the Nutrients Behind Them

SPHINGOMYELIN IN MILK

ARTICLE

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Sphingomyelin, iron, and choline are important in boosting a growing child's brain performance, memory and playfulness. A healthy and balanced food intake can help provide complete nutrition.

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There's a link between what one eats during pregnancy and the baby's brain development: that's certainly not rocket science. But what do we know about how a baby's brain develops depending on what they consume during the first two years of life?

Research has shown that a baby's first thousand days – during pregnancy and the first two years – are crucial for brain development, and food plays a big part in this evolution.[1] In fact, how your baby's brain develops during this period defines how it will work for the rest of their lives. Yes, it really is that important.

Because brain growth cannot be undone or reversed, it's important to give your baby the right nutrients that allow them to hit the right brain development goals at the right time. Take a look at the nutrients listed here – and make sure your baby's diet has these all in the proper amounts.

Better brain performance: sphingomyelin

You can help your child do well in their tests far into the future, just by introducing more sphingomyelin into their diet. Sphingomyelin is a fatty compound that occurs

naturally in human milk, and represents a major supplemented nutrient in certain milk formulae.

Scientists have found that sphingomyelin is a key ingredient in coating nerve fibers with a protective sheath (myelination); by helping improve communication between neurons, sphingomyelin builds a foundation for your child's improved cognitive development. This leads to faster performance of mental operations, for better memory, intelligence and language skills.[2]

The research bears this out. A study found that babies receiving sphingomyelin-fortified milk, and thus had slightly higher levels of sphingomyelin in their blood, performed better on certain cognitive tests.[3]

More playfulness: iron

A playful baby is a healthy baby; it’s their way of discovering the world around them, and their natural tendency to play is a major indicator of their brain health.

This is where iron comes in – the science shows that this micronutrient looms large in a baby’s ability to perceive the world and engage with it. Studies show that children with less iron in their diet become tired more easily, made fewer attempts to play with items, interacted less with grownups, and were less playful overall.[4]

Your baby will need a constant supply of iron after their first six months; 11mg daily is recommended for babies 7-12 months of age.[5] The body absorbs iron from animal sources more easily; give your child beef, pork, poultry or fish. Plant-based sources include tofu, dark leafy vegetables like spinach, and legumes like lentils and chickpeas. Iron-fortified formula, cereals and bread are good options too.

Do note that vitamin C aids in the body's absorption of iron,[6] so load your child up with vitamin-C-rich foods such as oranges, grapefruit, strawberries, broccoli and capsicum.

Better memory: choline

Good memory is a sign of a brain functioning on all cylinders. Among the nutrients essential to a baby’s early development,[7] choline seems to have the strongest connection to memory.[8]

To ensure your child has enough choline in their diet, give them eggs (choline is present in the yolk), meat, poultry, fish, nuts and cruciferous vegetables like broccoli, bok choy, cabbage and cauliflower. Also look out for milk formula that contains

choline.

Weaning children need more choline in their diets. The recommended daily amount of choline rises from 125 mg to 150 mg daily from the ages of 7-12 months; and rises to 200mg for a child aged 1 to 3 years old.[9]

References:

1. https://www.health.harvard.edu/blog/brain-food-children-nutrition-2018012313168
2. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6709232/
3. https://pubmed.ncbi.nlm.nih.gov/22633446/
4. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3795923/
5. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2528681/
6. https://pubmed.ncbi.nlm.nih.gov/2507689/
7. https://ods.od.nih.gov/factsheets/Choline-HealthProfessional/
8. https://uncnri.org/2019/05/16/choline-in-human-milk-plays-crucial-role-in-infant-memory/#:~:text=Choline%20deficiency%20is%20thought%20to,development%20%5B2%2C3%5D
9. https://ods.od.nih.gov/factsheets/Choline-HealthProfessional/