

# What nutrients do babies need for brain development?

SPHINGOMYELIN IN MILK

ARTICLE

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Your growing child's nutrient intake for early cognitive development is important to ensure that he or she has good mental performance, memory, and intelligence in the long run.

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*Health experts consider the first 1,000 days of life to be a make-or-break time for brain development*

As you watch your baby grow physically, you also want to ensure that their brain is developing well. Health experts consider the first 1,000 days of life to be a make-or-break time for brain development.<sup>1</sup> And what your baby consumes plays a huge role in how this growth plays out.

With a diet rich in the nutrients listed below, your baby's brain development has a better chance to work out for the best.

## Iron

Iron deficiencies are no laughing matter: babies who are iron deficient have a risk of acute brain dysfunction which could produce abnormalities even long after their iron consumption has increased.<sup>2</sup>

For the first six months of life, babies have a store of iron in their bodies,<sup>3</sup> supplied by their mother's blood while they were in the womb. As they're developing, they need a regular iron intake to meet their body's needs.

Iron-fortified baby cereals should be top priority for mums. Once your baby is on solids, feed them pureed meats and fish, as well as iron-fortified cereals. Other sources of iron include beans, lentils and dark leafy vegetables. Fun fact: a common cause of iron deficiency between the ages of six months to one year is babies who are

introduced to solids late.<sup>4</sup>

## Protein

This nutrient helps the brain to think clearly, concentrate and learn. A study from 2008 found that children with chronic protein energy malnutrition fail to perform well in tests related to memory, working memory and learning.<sup>5</sup> Foods rich in protein include fish, eggs, poultry, meat, beans and soy products.

## Zinc

Not only does zinc help in the growth and development of your baby's brain, it also contributes to the normal functioning of the immune system. Zinc deficiency has been linked to learning disabilities, impaired memory and a poor attention span.<sup>6</sup> Give your baby tofu, fish, red meat and dairy products, for their daily recommended dose of zinc.

## Folate

Most pregnant women know that folate – known as 'folic acid' when taken as a supplement – should be an essential part of their diet as it protects the foetus against certain birth defects. In fact, supplementation has also been linked to healthy brain development throughout childhood.<sup>7</sup>

But did you know that folate should also be given to babies in their early years? Folate helps with your baby's brain formation and development. Spinach, brussels sprouts and asparagus have a high folate content. Folate can also be found in fruits, nuts, beans and fortified cereals and breads.

## Vitamin D

This is usually referred to as the 'sunshine vitamin', as our bodies naturally produce it when we're exposed to the ultraviolet rays in sunlight. Vitamin D is important for brain development and mental functioning, and also aids in learning and memory.<sup>8</sup>

Foods such as fatty fish (salmon, tuna etc) are good sources and some products such as milk are fortified with it. If your child is low on vitamin D, it's possible to give them a supplement but check with your doctor first.

# DHA

Fish is often described as 'brain food', especially with regards to children. This is because fish is high in omega-3 fatty acids, one of which is Docosahexanoic acid (DHA). DHA helps brain cells to communicate with each other and may also influence the brain's neurotransmitters.<sup>9</sup> Fatty fishes such as mackerel, salmon, sardines and tuna are rich in DHA.

# Sphingomyelin

Sphingomyelin, a type of fat found in animal cells, supports your child's cognitive development. Higher doses of sphingomyelin in a child's diet has been found to lead to positive changes in verbal development during their first two years of life.<sup>10</sup> It also aids children's mental performance, heightening memory and intelligence.<sup>11</sup> It's not a rare nutrient by any means – your baby will get their dose of sphingomyelin through milk and dairy products. You may need to seek out this ingredient when reading labels, as not all formula milk products contain sphingomyelin.

## References:

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