Brain Foods and Nutrients for Kids - Boost Your Child's Learning Abilities!

SPHINGOMYELIN IN MILK

ARTICLE

DEC 28, 2021

Working memory, cognitive flexibility, and self-control are important skills for children to focus, remember and analyse information, plan and prioritise tasks, and regulate their emotions.

Every child is born with unlimited potential and a life full of possibility. With the right environment, nutrition and support, you can help your children unlock their learning potential and nurture the exceptional in them.

When we talk about learning abilities in children, it is important to understand how children learn. There is a crucial set of mental skills which the brain uses to think, read, learn, remember and reason.

These essential skills are called executive function skills, and these enable children to pay attention, remember and analyse information, plan and prioritise tasks, and regulate their emotions. All of these abilities are needed for effective and exceptional learning, now and in the future.

These executive function skills are classified into three broad areas:

Working memory

Working memory enables children to process, use, and remember information on a daily basis. In simple terms, it is the ability to retain the information children need to complete a task.

Think of working memory as a temporary workbench in your child's brain, where thoughts, ideas, and all the information needed to complete a related task, are placed.

Research by Psychologist Susan Gathercole indicates that children with poor working memory are more likely to struggle with subjects like mathematics and reading.

Cognitive flexibility

Cognitive flexibility (or flexible thinking) is all about how adaptive your child's brain is to the changes that are going on around him/her. It involves the use of skills such as changing perspective and being able to see multiple sides of a situation. It allows shifting focus from one event or task to another and thinking about multiple concepts, simultaneously.

Cognitive flexibility is a skill that is used throughout everyday life and is therefore very important to be honed in children early. Children with under-developed cognitive flexibility skills may face difficulties as they grow as they tend to get "stuck" in one way of perceiving things. Lack of cognitive flexibility will also result in them tending to be rigid, fearful of change and easily frustrated when faced with challenges as adults.

Self-control

Self-control is the ability to manage emotions and behaviour in accordance with the demands of the situation. Children with self-control are able to calm themselves down when they get upset, adjust to a change in the situation, as well as handle frustration without an outburst.

Impulse control, emotional control and movement control are all key components of self-control.

Research shows that children with strong self-control skills have higher academic achievement, and are less likely to act in impulsive or aggressive ways. They are also less likely to withdraw when they are overwhelmed. Meanwhile, they are also more likely to get along well with others and have strong social skills.

Each of these cognitive skills plays an important part in processing new information. So when one of these skills is weak in your child, his/her ability to properly understand, retain and use new information may be compromised.

For example, if your child wants to complete a puzzle, he/she will have to use self-control skills to stay focussed, cognitive flexibility to analyse and think of different ways to solve the puzzle, and working memory to hold the information in his/her head until the goal is achieved.

Parents have a big role to play to ensure the proper development of these skills in their children so that learning is effective and becomes a way of life, and children

grow up to be exceptional. One way of doing this is by nourishing their children’s cognitive abilities with good nutrition.

The connection between good nutrition and good cognition

According to the American Academy of Pediatrics (AAP) policy statement in Pediatrics , a child's nutritional environment during the first 1,000 days of life is critical to neurodevelopment and lifelong mental health. When this nutrition is not provided or incomplete, a child’s cognitive development may be negatively impacted, affecting learning in the process.

"Key nutrients provide the building blocks needed so that a child's brain can grow and develop normally," says Dr. Sarah Jane Schwarzenberg, MD, FAAP, lead author of the policy statement and an executive committee member of AAP's Committee on Nutrition.

Although all nutrients are necessary for brain growth, there are some key nutrients that support neurodevelopment and cognition. According to Dr. Schwarzenberg, "one of the smartest ways we can boost children's chances for the healthiest and most productive lives possible is by making sure they get the foods they need."

Parents will be happy to know that the nutrients present in S-26 GOLD support children’s brain processes and function, and enable learning:

Phospholipids

Phospholipids are a class of lipids that are a major component of all cell membranes, especially nerve cells. Phospholipids are critical for processes that promote fast and efficient connections in the brain, priming and honing it for absorbing and making sense of new information.

Sphingomyelin
Sphingomyelin is an important structural component of myelin, a fatty membrane formation around neuronal axons, that supports the efficient transportation of information throughout the brain. Myelin enables nerve cells to transmit information faster and allows for more complex brain processes.

DHA
Docosahexaenoic acid (DHA), is a major lipid in the brain recognised as essential for normal brain function. DHA is important for optimal visual and cognitive development and affects learning and behaviour.

Lutein
Lutein supports visual development. It also contains an antioxidant that filters harmful blue light and helps protect and maintain healthy cells in the eyes.

Choline
Choline is an essential nutrient which plays a significant role in a child's brain development. Choline is needed to produce acetylcholine, an important neurotransmitter for memory, mood, muscle control, and other brain and nervous system functions.

HM-O
Human milk oligosaccharides (HM-O) have been shown to support immunity, thereby enhancing a child's learning abilities.

Iron
Iron is a key nutrient that supports neurodevelopment. Early infancy iron deficiency is associated with long-term neurobehavioral damage that may not be reversible, even with iron treatment.

Iodine
Iodine is essential for the synthesis of the thyroid hormone, which is, in turn, crucial in neurodevelopment.

Vitamin B6 and B12
Vitamin B6 is essential for protein, fat and carbohydrate metabolism and the creation of red blood cells and neurotransmitters.
Vitamin B-12 is essential for brain development , neural myelination, and cognitive function. Inadequate vitamin B-12 during early childhood has been associated with adverse child health outcomes, including impaired cognitive development.

Folate
Folate is vital for making red blood cells, as well as the synthesis and repair of DNA and RNA, aiding rapid cell division and growth, enhancing brain health, and

supporting neurological development.

Zinc
Zinc is vital for the normal growth and development of the reproductive organs and brain and plays an important role in the normal functioning of the immune system. Zinc deficiency has been linked to decreased growth, increased colds and infections, impaired memory, learning disabilities, and poor attention span.

Vitamin A
Vitamin A plays an important role in vision and bone growth and helps protect your child’s body from infections.

Vitamin D
Vitamin D promotes healthy bones by regulating calcium levels in the body. It also contributes to the normal functioning of the immune system so that your child stays healthy and alert.