



Childs Brain Development

TODDLERHOOD

ARTICLE

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Children Upbringing in this Digital Era

Over the past few years, especially during the covid-19 pandemic, there has been a change in the lifestyle of all age-groups, particularly children. Children in this digital era are leading an increasingly sedentary lifestyle, as compared to children in the earlier generation. Nowadays, we barely see children playing on the streets or indulge in any physical activities. More and more children go online for everything, right from entertainment and social interaction to education. This, in numerous ways, this may pose a negative impact on their brain development. Recent research demonstrated that preschool children who used screens more than the recommended hour, had higher neurobiological risks and lower levels of white matter development in the brain- an area key to the development of the cognitive, literacy and language skills [1]. The finding offers insight into a healthy brain development. Children's brain develop most rapidly in the first five years, and early brain development has a lifelong effect on a child's capability to learn and succeed in life.

Brain Development in Children

Brain development is affected by several factors. Apart from the physical activity, proper nutrition plays a vital role in optimal brain development in early childhood. The foundation for smooth brain function is shaped if a child is fed adequately. Nutrient inadequacy in early toddlerhood may compromise the brain development, affect the behaviour and cognitive skills across a child's life, all the way up to adulthood. Brain is the fattiest organ in our body, comprises a minimum of 60% fat.

The role of essential fatty acids in brain development

Essential fatty acids e.g. DHA and EPA, are important components to shape our brain. Without essential fatty acids, brain cells will not perform to the optimal level. The accumulation of DHA in the brain is being processed up to the age of 3 years. The highest accumulation levels of DHA in the brain will be retained through life cycle [2]. Children are encouraged to consume a diet enriched with fatty acids, as it has a beneficial effect on the child's memory, language progress, cognitive function and learning skills.

Lutein, Choline and Brain Development

Besides essential fatty acids, research evidence suggested that both lutein and choline play a key role in brain development in early toddlerhood [3]. Emerging but constant evidence demonstrates that lutein has beneficial effect on the cognition through the lifespan. Additionally, several leading organizations have recognized that choline is an essential nutrient during early toddlerhood. It is one of the important nutrients that plays a key role in brain development. Basically, children require a healthy balanced diet, which including a variety of foods from all food group, to obtain a wide range of nutrients for them to stay healthily.

Nutrition and brain development in early life

Sufficient supply of nutrients is particularly important for brain development and lifelong cognition in early toddlerhood. Toddler and preschool children are predominantly vulnerable as they usually consume a diet provided by their parents. Therefore, they may be susceptible to poor parenting feeding. It can feel overwhelming to think that every parenting decision affects a child's brain development; however, if we can establish the correct foundation for children when they are young, it will surely assist to set the tone for promising years ahead.

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References

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