Impact of diet and nutrition on child's learning ability.

Emir Ozen*

Department of Pediatric Nutrition Başkent University, Ankara, Turkey

Accepted on 17 February, 2021

Description

Children with insufficient diets are frequently reported to have many problems with health, their academic learning, and also psychosocial behaviour. Malnutrition seems to result in the long-term neural issues in the brain, which can majorly impact a child's emotional responses, reactions to stress, learning disabilities, and other medical complications. While the intake of food is vital for our proper performance, many of the widely available and popular foods in the schools today are actually hindering the children's abilities to learn [1]. Loaded with sugars, caffeine, sodium, chemicals and many more popular menu items are leaving our kids tired, unfocused on what they are doing, jittery, and even sick—which not only impacts on students' grades and performance, but also influences their behaviour and moods. According to the Society for Neuroscience, recent studies revealed that diets with higher levels of saturated fats actually impair ones' learning and memory. Unfortunately, foods with saturated fats are often considered the most affordable and widely available in the schools. French fries, cheeseburgers, sugary desserts, chicken nuggets and other cafeteria staples are filling kids with food which actually lowers their brain power before sending them back to class [2].

Discussion

One of the theories that explain the link between the saturated fats and brain power is the effects of glucose and sugars in the higher-fat foods. Essentially, glucose comes from the carbohydrates, and while glucose is vital for the energy, foods that are too high in glucose actually cause our body’s energy levels to drop. As glucose is ingested, our body releases insulin to process the newly acquired foods [3]. Generally, after a healthy meal, glucose levels must rise slightly, and our body should feel energized after taking in nutrition. Physical maturation follows the same course for all the children, although the rates will differ between the individuals. Post-natal growth spans three age periods: infancy, which is the first year of life; childhood, which extends from the infancy to nearly 10 years of age; and adolescence, which is stated as between 10 and 18 years of age. Across all the developmental stages or changes in the body proportions and the mastering of fundamental motor skills is all the part of biological maturation. Child malnutrition includes the under-nutrition and the over-nutrition, both of which are extreme deficiency diseases caused by inadequate or improper nutrition. During the childhood, under-nutrition causes the children to have a very less energy and less interest for their learning their skills, which negatively influences the cognitive development and their academic performance [4]. Under-nutrition will also affect physical growth and maturation, thus affecting the growth rate, body weight and ultimately, height. Obesity is a special form of malnutrition, as this type of diet is likely to have the low nutrient-density as well as high fat and high carbohydrate content. There are growing concerns about the prevalence of paediatric obesity, as this comes with an increased risk of developing the cardio metabolic disease in adolescence and adulthood. Obesity in children also affects their confidence and competence during physical activity and thus which results in compounds of proper growth and development [5].

Conclusion

Healthy meals and snacks should consist of natural fruits and vegetables, whole grains, nuts and lean proteins like chicken, fish and eggs. Also specific vitamins can also be incorporated to target the definite functions. For example, to improve memory, individuals should invest foods rich in the lecithin, such as peanuts, soya beans, and wheat germ and many. Potassium also aids in the energy and brain functioning, and can be derived from the oranges, bananas, apricots, avocados, melons, peaches, and nectarines and other fruits. Avoiding processed foods and incorporated natural fare into their daily diet will ultimately promote a healthier body, behaviour and develops brain power.

References


*Correspondence to

Dr. Emir Ozen
Department of Pediatric Nutrition
Başkent University
Ankara
Turkey