



# Nutrition to Help You Learn and Study Better

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Healthy eating has been linked to higher grades, better memory, more alertness, faster information processing and improved health leading to better school attendance.

Although there are a number of ways to help with increasing attention and cognitive functioning. Nutrition is one way that can help support better attention in the classrooms and even better marks. Here are five nutrition strategies to assist with this.

## 1. Don't Skip Breakfast

We are all told that breakfast is the most important meal of the day and this couldn't be more true for students.

Research has shown that children who eat breakfast have improved attention in late-morning performance tasks, retrieve information more quickly and accurately, make fewer errors in problem-solving activities, concentrate better and perform more complex tasks<sup>10</sup>.

Nutritionally, there are several mechanisms involved in improved academic performance. Breakfast serves to break the overnight fast and replenish blood glucose levels that a child's brain needs to perform well academically. Children's brains use more glucose than adult brains, indicating that regular breakfasts may assist brain function by providing the necessary level of glucose<sup>4</sup>.

Without an adequate daily intake of nutrients from food, the body puts learning on a lower shelf below its need to sustain life-support functions. Therefore, in many cases, skipping a meal can negatively affect the body and its learning ability.

## 2. Eat Appropriate foods at Breakfast

It is not just important to eat breakfast, but it is also important on what a child eats for breakfast. A breakfast comprised of protein, fat, and complex carbohydrates will prevent drops in blood sugar for several hours, whereas, a breakfast of just starch and sugar will sustain a child for only about two hours. Research shows a meal that included food from several food groups was the best for a child who was expected to perform at his or her best in school, educationally and physically<sup>1</sup>.

A study of students 12 to 13 years old, showed that the average mark increased as breakfast quality improved. In another study of students aged 11 to 14, eating breakfast with foods low on the Glycemic Index (GI) was associated with faster information processing<sup>2</sup>.

Meyers and colleagues compared one school district's standardized test scores before and after a school breakfast implementation. Participation in the school breakfast program was associated with decreased tardiness, reduced absenteeism, and significantly greater increases in standardized test scores compared with nonparticipation<sup>3</sup>.

### Examples of Healthy Breakfasts

- Protein shake with almond milk, choice of fruit and vegetables
- Omelet/scrambled egg on toast with some berries
- Plain Greek yoghurt with berries and nuts and seeds

- Avocado on whole grain toast
- Rolled oats with unsweetened apple sauce, sprinkle of hemp seeds
- Chia pudding with fruit

### 3. Avoid Sugar Sweetened Beverages

Soda is the number one source of added sugar in children's diets, followed by fruit drinks. Many of these beverages don't provide nutrients that support children's growth and development, and some, such as sodas and energy drinks, may provide potentially detrimental substances such as caffeine and certain herbal stimulants.

When people consume a lot of sugar and then attempt challenging tasks, like math problems, the brain's hypothalamus tells the body to release a lot of cortisol. Known as the stress hormone, this substance impedes memory. When children's bodies are flooded with cortisol at school, they struggle to pay attention to their lessons and find it difficult to sit quietly. When their attention is elsewhere, they find it difficult to retain information they're taught<sup>5</sup>.

Correlations between soda intake and academic performance in more than 16,000 students in grades 9 through 12 showed that drinking a soda at least once daily was associated with an increased likelihood of mostly B, C, or D/F grades compared with mostly A grades<sup>6</sup>.

Another study looked specifically at fifth-grade students, surveying 1,095 students in 11 elementary schools in Colorado. The authors found that drinking more than one soda each day was associated with reduced academic performance<sup>7</sup>.

So switch out the sugar laden fruit juices, pop, chocolate milks and have your child consume good old fashioned water, coconut water, stevia sweetened pops and/or sparkling water.

### 4. Eat Good fats

A deficiency in Omega-3 fatty acids can lead to increased risk of attention-deficit disorder and dyslexia. According to Gomez-Pinilla, children who had an increase of Omega-3 fatty acids performed better in reading, spelling, and exhibited fewer behavioural problems<sup>8</sup>.

An Australian study of 396 children between the ages of 6 and 12 were given a drink consisting of Omega-3 fatty acids, along with other nutrients like iron, zinc, folic acid and vitamins A, B6, B12, and C. The students consuming these drinks showed higher scores on tests measuring verbal intelligence, learning skills, and memory after six months and one year as compared to a control group of students who did not receive the drink<sup>8</sup>.

Therefore, incorporating more good fats into your child's diet such as avocado, nuts and seeds, fish, and coconut oil and even taking an children's supplement maybe a great way to help boost attention and learning abilities.

### 5. Eat Your Fruits and Vegetables

The World Health Organization recommends that children should be consuming 5 servings of fruit and vegetables a day. Fewer than one in 10 Canadian children and youth are reaching this. When a child's diet is lacking in these types of foods, they can be deficient in vitamins A, D, B12, calcium, fiber, protein and magnesium.

A 2017 study at the University of British Columbia's Department of Food, Nutrition and Health looked at nearly 5000 kids aged 6 to 17 and found that intake of whole grains, dark greens and orange vegetables was practically non-existent during school hours.

Canadian Community Health Survey (CCHS) indicate that approximately 70% of children aged four to eight years and 65% aged nine to 13 years do not consume the recommended minimum five servings of fruits and vegetables (FV) daily.

Research has shown that students who had inadequate intake of fruits and vegetables showed poor school performance as compared to those students who consumed adequate amounts<sup>9</sup>. It is important that your child consumes the recommended amount of fruit and vegetables daily. Incorporating them into each meal and consuming the rainbow of different colours is important to get the full spectrum of nutrients and antioxidants.

Health Canada recommendations for Fruit and Vegetable Intakes

Children 11 and under should be consuming 5 servings of fruit and vegetables daily

Children 12 to 13 years: 6 servings of fruits and vegetables daily

Females 14 to 50 years: 7 servings of fruits and vegetables daily

Males 14 to 50 years: 8 servings of fruits and vegetables daily

### References

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