

Health Promotion & Disease Prevention  
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## “Water and the Brain”



What can children drink that will help them become smarter in school?  
Water!!!

Research has confirmed that dehydration is very common in healthy children across the United States, and dehydration has negative effects on many systems of the body including the immune system, hormones, brain, heart, stomach, muscle, and bones.

A study published in the Public Health Nutritional Journal, 2012 found that 75% of the kids did not drink water between when they woke up in the morning and when they went off to school. The study consisted of a group of children from the second and third grades and ask half of them to drink a cup of water, then give them a test to see who did better. The water drinkers scored higher than the non-water drinkers. The conclusion: children can increase their cognitive performance from drinking more water, especially in the mornings.

The experiment worked so well the researchers decided to try it on first graders. This time, the water group was just given some water and told to drink as much they wanted, and again found there was significant improvement in the performance of various mental tasks, leading to the same conclusion: “Even under conditions of mild dehydration, children’s cognitive performance can be improved by drinking water in the morning.”

According to another study published in the Journal of Appetite, December, 2012, also found children that were in a state of mild voluntary dehydration at the beginning of the school day, had more difficulty in remembering numbers. Though dehydration might affect some cognitive abilities more than others, it becomes more challenging for some children to show academic progress in school compared to other children.

The problem is, nutritionally speaking, juice and milk are not as hydrating to what the body needs. The levels of sodium, sugars, and amino acids in milk and juice can actually shrink cells and trigger the release of the hormone that signals dehydration. Water is vital to the brain, and the solution is simple; make the first drink of the day water!

For more information about how nutrition affects mental health, contact:

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