Proven: Kids Get Smarter Just from Doing This One Simple Thing

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By Dr. Mercola

An extensive review of relevant research has demonstrated that the more physically active schoolchildren are, the better they do academically.

Researchers analyzed 14 studies, ranging in size from as few as 50 participants to as many as 12,000.

All of the studies involved children between the ages of 6 and 18.

According to the authors:

"Physical activity and sports are generally promoted for their positive effect on children's physical health; regular participation in physical activity in childhood is associated with a decreased cardiovascular risk in youth and adulthood.

There is also a growing body of literature suggesting that physical activity has beneficial effects on several mental health outcomes, including health-related quality of life and better mood states.

In addition... there is a strong belief that regular participation in physical activity is linked to enhancement of brain function and cognition, thereby positively influencing academic performance.

There are several hypothesized mechanisms for why exercise is beneficial for cognition, including:

(1) Increased blood and oxygen flow to the brain
Exercise and Academic Performance

Keeping kids active at school is a superb way to increase learning, focus and even test results. As many of you reading this have likely experienced, if your mind is feeling cluttered or you’re having a mid-afternoon slump, a brisk walk or a quick workout can give you a renewed sense of clarity and focus. This is certainly true for kids too.

Two years ago, ABC News reported on a special program being implemented at Naperville Central High School, where students could take part in a dynamic gym class at the beginning of the day, and had access to exercise bikes and balls throughout the day in their classrooms. The results were astounding. Those who participated nearly doubled their reading scores, and math scores increased 20-fold!

Research has shown that after 30 minutes on the treadmill, students solve problems up to 10 percent more effectively.

Although it's becoming more widely known that physical activity has a direct result on brain function, many schools in the US are removing rather than improving their phys ed programs... This means it's up to you to encourage your child to stay active after school and on weekends in order to reap the wonderful brain-boosting benefits that exercise has to offer.

How Exercise Boosts Brain Function

Exercise encourages your brain to work at optimum capacity by causing nerve cells to multiply, strengthening their interconnections and protecting them from damage. Animal tests have also illustrated that during exercise their nerve cells release proteins known as neurotrophic factors. One in particular, called brain-derived neurotrophic factor (BDNF),
triggers numerous other chemicals that promote neural health, and has a direct benefit on brain functions, including learning. Further, exercise provides protective effects to your brain through:

- The production of nerve-protecting compounds
- Greater blood flow to your brain
- Improved development and survival of neurons
- Decreased risk of cardiovascular diseases

A 2010 study on primates published in Neuroscience also revealed that regular exercise not only improved blood flow to the brain, but also helped the monkeys learn new tasks twice as quickly as non-exercising monkeys; a benefit the researchers believe would hold true for people as well.

Other Health Benefits of Regular Exercise

There's absolutely no doubt that kids need exercise, and that most kids aren't getting enough. Less than one-third of kids aged 6 to 17 get at least 20 minutes of daily exercise in one form or another. This is tragic, considering the multitude of short- and long-term health benefits your child can gain from a regular exercise regimen, including:

<table>
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<tr>
<th>Reduced risk of diabetes and pre-diabetes</th>
<th>Improved sleep</th>
<th>Stronger bones</th>
<th>Reduced restlessness or hyperactivity; helps decrease symptoms of ADHD</th>
</tr>
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<tbody>
<tr>
<td>Improved immune system function</td>
<td>Improved mood</td>
<td>Weight loss</td>
<td>Increased energy levels</td>
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How to Get Your Kids Moving

First, it's imperative to limit the amount of time your child spends watching TV, or playing computer and video games, and to replace some of these sedentary activities with exercise. Overweight and obese children need at least 30 minutes of exercise each day, and may benefit from closer to 60 minutes. But even if your child is not overweight, you should encourage him or her to take part in physically engaging activities after school and on the weekends. There are plenty to choose from, from sports and dance classes to gymnastics, bike riding and playing tag with friends.

Allow your child to choose activities that appeal to them, and which are age appropriate. Remember that the trick to getting kids interested in exercise at a young age is to keep it fun.
Also keep in mind that spontaneous bouts of exercise throughout the day is actually the ideal way of doing it.

Your child does not need to log 30-60 minutes in the gym or in a specific exercise class, unless that's really what they want to do. A game of tag here, a bike ride there... Short bursts of activity with periods of rest in between—this is actually the way your body was designed to move! And kids will typically fall into this behavior quite spontaneously, as long as they're outdoors, and not cooped up in front of a TV or computer screen... Like adults, kids also need variety in their exercise routines to reap the greatest rewards, so be sure your child is getting:

- Interval training
- Strength training
- Stretching
- Core-building activities

This may sound daunting, but if your child participates in a gymnastics class, sprints around the backyard after the dog often and rides his bike after school, he's covered. Also remember that acting as a role model by staying active yourself is one of the best ways to motivate and inspire your kids. If your child sees you embracing exercise as a positive and important part of your lifestyle, they will naturally follow suit. Plus, it's easy to plan active activities that involve the whole family and double up as fun ways to spend time together. Hiking, bike riding, canoeing, swimming and sports are all great options.

Think of it this way … by taking the time to get your kids interested in exercise now, you're giving them a gift that will keep them healthy and happy for the rest of their lives.

What about Peak 8 for Kids?

As I mentioned earlier, intermittent bouts of exercise, mimicking the hunter-gatherers from our ancestral past, is actually the ideal form of exercise and is a key component of my comprehensive Peak Fitness program. I call this component Peak 8, and this high-intensity, short burst-type exercise is perhaps the most natural of all exercises for children. In fact, when left to their own devices, children will do this naturally – going all out for short bursts of time, followed by longer "recovery" periods. You also see animals doing the same thing.

Humans were simply not designed to run at a steady pace for extended periods of time, and you almost never see that type of behavior in the wild either. The research is so clear about the superior benefits of this type of exercise – which mimics natural behavior -- that the American Heart Association and the American College of Sports Medicine have now changed their exercise cardio guidelines from slow but steady aerobic cardio to high-intensity interval training.

It's your future... be there healthy with WellnessOne™
Peak 8 Instructions

During Peak 8 exercises you raise your heart rate up to your anaerobic threshold (220 minus your age) for 20 to 30 seconds, followed by a 90-second recovery period. Depending on your child's current level of fitness, he may need to work his way up to 8 cycles. I recommend starting with 2-4 cycles, and gradually increasing to 8.

There are no rules for the specific manner in which this is achieved—your child could do this running in the backyard, or using a treadmill, elliptical machine, or recumbent bike (provided your child is old enough to use such machines safely, of course), or they could do it bicycling outdoors. Here are the core principles:

1. Warm up for three minutes
2. Then, go all out, as hard as you can for 30 seconds
3. Recover for 90 seconds
4. Repeat 7 more times, for a total of 8 repetitions
5. Cool down for a few minutes afterwards by cutting down your intensity by 50-80 percent.

Know that Peak 8 exercises have a number of health benefits that you simply cannot achieve with any other type of exercise. For adults over 30, the most important of these is the natural production of human growth hormone (HGH), which is essential for strength, overall fitness, and longevity. Naturally, children and teens don't need to worry too much about producing HGH, but high-intensity interval training can still provide magnificent benefits for this age group, as it can dramatically improve fat loss and helps build muscle. It also dramatically improves athletic speed and performance, which can greatly benefit aspiring youth athletes.

Overall, Peak 8 exercises will allow your child (and you!) to achieve her fitness goals much faster.