

BRAIN -

School's Out! Don't Let Your Brain Collapse into a Summertime Recession

“What time is it? Summertime! It's our vacation”. You can hear that popular tune on iPods everywhere. Children and parents are once again thrilled to have reached the end of yet another academic year; putting their brains in storage while they enjoy a plethora of summertime activities. Other students have completed a higher education degree and celebrate the end of hours of homework, studying, examinations and instruction with hopes of permanently storing their academic brain on a shelf with their new diploma.

However, when is it OK to stop learning? Hopefully, you answered never! Our brain is our most precious resource and we should learn as much as possible about what is needed to keep it healthy and functioning at its maximum potential.

The Brain Crisis

More than 2.5 million children are diagnosed with ADHD or some other form of mental or mood disorder. (1) Mental disorders in children are consuming more than three times the health care dollars of the next three childhood illnesses combined. Children aren't the only ones with unhealthy brains; “an estimated 26.2 percent of Americans ages 18 and older — about one in four adults — suffer from a diagnosable mental disorder in a given year. When applied to the 2004 U.S. Census residential population estimate for ages 18 and older, this figure translates to 57.7 million people with unhealthy brains.” (2) The most severe form of brain deterioration is Alzheimer's Disease. Currently more than 4.6 million Americans suffer from the disease, and this number is predicted to soar to 16 million over the next forty years. Alarming isn't it? As always, the key is early diagnosis and treatment. Dementia begins an average of 30 years prior to symptom onset. That's right 30 years! (3) So it's never too early for brain “aerobics”. The brain is just like the body; use it or lose it.

Stronger, Smarter, Better Brains!

There are 4 keys to brain health and fitness:

1. Good Nutrition
2. Physical Exercise
3. Cognitive challenges such as learning new things, puzzles and problem solving
4. Stress management

An abundance of information is available online and at the local library regarding the benefits of good nutrition. If you are concerned about your diet, consult a local nutritionist, registered dietician, physician or other health care expert in the area of nutrition to develop a brain and body healthy diet.

The brain operates like a massive furnace and requires proper fuel to function optimally. Just as you would not want to put oil in a wood burning stove, you do not want to give the brain poor quality or ineffective materials to work with. The brain doesn't make its own fuel; it requires assistance to receive quality operational materials. Unfortunately, many brains aren't getting the necessary resources for proper function, hence the brain health crisis. First the brain needs water, and lots of it; not corn syrup, refined sugars or artificial sweeteners; just plain H₂O. Next, the brain needs glucose as a primary fuel source. Again, not corn syrup, refined sugars or artificial sweeteners, but complex carbohydrates that are sustainable and not burned up instantly. The brain also needs lots of antioxidants from fruits and vegetables. Antioxidants help prevent damage to the brain just as a fire screen prevents sparks from burning holes in the carpet nearby. Finally, Omega-3 fatty acids aren't just good for the heart, they are an

essential fatty acid needed to insulate brain cells and to help those cells communicate with each other, so oily fish, nuts, avocados and even cod liver oil should be making their way back into kitchen cabinets.

Nutrition is the first step to a healthy brain and physical fitness is the second step.! Yes, physical activity builds muscles, bones and brain cells! Now that is a good reason to get moving! The “brain” benefits of regular voluntary gross motor exercise include: growth of new brain cells, increased brain cell communication, more oxygen to the brain and increased brain chemicals that cause you to feel happy and calmer. Exercise can even provide the brain with additional glucose if the supply is running low. The key is consistency. A simple walk, 30 minutes a day, can change your brain! The age of electronics has sidelined many of today’s youth, so it is extremely important that children from toddlers on up get regular physical exercise – year round, not just during their favorite sport season.

Challenging the brain is an essential element in keeping it healthy. Use it or lose it really applies here. Brains of all ages need mental games, puzzles, problems to solve, new information and novelty. Classrooms should be filled with activities that engage students and elicit problem solving, not just lectures and lessons on information to be regurgitated at a later date. That type of short-term memory learning requires lots and lots of repetition and often results in much of the information “lost” or “misfiled” in the brain. Information learned through trial and error, high emotion, intensity that has a meaningful connection to the student is easily imprinted in the “memory banks” and accessible later. It also provides a more fertile garden for brain cells to flourish. Adding an element of novelty to your day can instantly give your brain cells a wake up call. Try driving to work by taking a different route, brush your teeth with your non-dominant hand, shower and dress with your eyes closed, or try out a new candle. “Neurobics” classes and books are growing in popularity throughout the United States as students of all ages want to avoid becoming one of the unhealthy brain statistics. You can call the Core Institute for upcoming brain fitness classes in Sumter, SC.

The final ingredient is stress management. Stress levels will decrease to some extent by implementing good nutrition, exercise and brain challenges. Massage, yoga, meditation and prayer, all of which have a calming effect on the brain and body, have all been found to positively alter brain health and function. Another key to managing stress is recognizing that stress is actually a thought pattern, not an actual “thing” to be managed, and at any point in time you can change your mind or thoughts. You can change your unhealthy thought patterns today or your brain will do it for you later in life in the form of dementia. A healthy first start is to identify what matters most to you in life and make choices with those values in mind. We are often more free to choose than we want to believe.

The brain will prefer the “routine,” “status quo,” and “how it’s always been.” It’s just seeking to predict patterns and understand the environment. For most, the thirty year dementia process has already started, however, it’s never too late to halt or even reverse the deterioration. It’s up to you, the brain operator, to push out of your comfort zone and make a conscious choice for greater health. The mind is a terrible thing to lose. Change your brain. You are worth it!

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Sources:

1. www.cdc.gov/mmwr/preview/mmwrhtml/mm5434a2.htm
2. <http://www.nimh.nih.gov/health/topics/statistics/index.shtml>
3. Khalsa, MD, Dharma Singh. *The Better Memory Book*. Carlsbad, CA: Hay House, Inc., 2004. Print.