## **Get Smart**

## Feed Your Brain and Increase Your Intelligence



Let's start by busting a big myth many people have. It's the idea that your intelligence is something that was "set" by your genetics and there is nothing you can do to increase your brain power. The fact is, that unless you have some kind of organic brain damage, the idea that you were born "smart" or "stupid" is absolutely false. The fact is that you can increase your intelligence when you feed your brain right.

It is true that different people have different aptitudes, which means each of us finds certain subjects easier to master than others. However, this does not mean people are born with a "fixed" amount of intelligence. So, whatever your IQ, you have the capacity to boost your brain power and increase your intelligence if you feed your brain with good nutrition and new information.

In this issue of *Sunshine Sharing*, we're going to share some tips to help you "get smart" or "smarter," as the case may be. Specifically, we're going to discuss how the right kinds of nutrients can improve your brain function and make you "brighter." But first, we want you to understand that...

## ...You Are Already Genius!

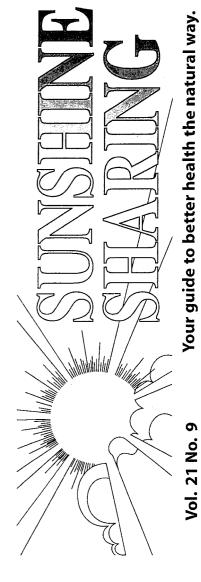
The fact is, you are probably a lot smarter than you probably believe you are. There are many different aptitudes, and aptitude testing suggests that everyone is a genius in at least one area. Unfortunately, public education focuses on a very limited number of these aptitudes, which can make certain people feel "dumb" because they didn't do well in the areas that school emphasizes.

If you are one of someone who didn't feel very "smart" in school, just remember that many of the greatest geniuses of our age, including Albert Einstein and Thomas Edison, did very poorly in public school. So, don't you dare assume that means you aren't smart and capable of being smarter.

Because learning is associative, the more you learn, the more you increase your capacity to learn. So, besides feeding your brain with good nutrition, it's always a good idea to be continually learning something new. Anytime you start learning something new, it increases the number of neural connections in your brain, which actually makes you smarter.

Furthermore, if you get off of the standard American diet that is loaded with sugar, refined carbohydrates and processed fats and oils, it will automatically make you smarter. A junk food diet creates a junk food brain (and body), while a healthier diet will give you a clearer, more alert and healthier mind.

Turn the page and learn how to boost your brain power



### Important Notice

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## Food for Thought

Body builders take extra protein and nutrients to help them build their muscles, because it's well established that the right diet and nutritional supplements

can enhance athletic performance. So, why should the brain be any different?

When we're "working out" (learning something new) to build our mental muscle, shouldn't we think about optimum nutrition for the mind? Of course we should. The brain simply functions better when you give it the right raw materials to work with in the first place.

In fact, your brain is the most chemically sensitive organ in your body and nutritional problems tend to show up in your thoughts and mood before they show up as physical illness. So, let's begin by learning how to give the brain what it needs.

#### Get Water on the Brain

Your brain is 70% water and is very sensitive to dehydration. A mere 2% drop in body water can trigger problems like fuzzy short-term memory and trouble with basic math. Dehydration can also make it difficult for you to focus on a printed page or a computer screen. So, start your journey to a better brain by drinking adequate quantities of pure water.

### **Become a Fat Head**

We often call someone who is dull of thinking a "fat head," but it's really the smart people who are "fat heads." If you remove the water from the brain 50% of what is left is fat. That's why children who receive plenty of good fats in the womb and earlier childhood have better brain development. The bottom line is that low fat diets are harmful to the brains of both developing children and adults.

Not just any fats will do, however. You need the right kinds of fats to become a smart "fat head." What your brain primarily needs is more omega-3 essential fatty acids, which are deficient in most American diets. One of these omega-3 fatty acids is DHA, the most abundant phospholipid in the brain. It is highest in the frontal cortex and critical to the developing brains of infants.

Deficiencies in DHA result in reduced learning ability in both infants and adults. Low levels also result in a reduction of brain serotonin levels, which can lead to depression. Deficiencies have also been associated with ADHD and Alzheimer's disease.

So, to be smart increase your intake of DHA and other good fats. Deep ocean-fish and grass fed meats are good sources of brainhealthy fats. So are dark green leafy vegetables, omega-3 eggs and certain nuts and seeds (like walnuts, macadamia nuts, flax seeds and hemp seeds). Also consider supplements like DHA, Krill Oil, Super Omega-3 EPA and Flax Seed Oil.

## Is It Time to Change Your Genes?

On the first page we indicated that your intelligence isn't predetermined at birth. That's because your diet and lifestyle actually regulate how your genes express themselves. A new science called epigenetics shows that the body has markers (the epigenome) that switch genes on or off. This means that a healthy diet or lifestyle can improve the way your genetics express themselves. The reverse is also true. An unhealthy lifestyle will adversely affect your genetics expression.

The amazing part of this discovery is that epigenetic information is transmitted to your offspring. This means that if you eat well and develop your brain with ongoing learning, you'll not only improve your own brain power, you'll help your children be smarter.

The February 2009 Journal of Neuroscience published a paper showing that memory can be improved from one generation to the next via epigenetics. Mice with genetic memory problems were exposed to a learning rich environment (toys, exercise and extra attention) and the mice showed improvement in long-term memory formation. Their offspring also showed improvement even though they didn't get the extra attention. (Why Your DNA Isn't Your Destiny by John Cloud, Time Magazine, Jan 6, 2010)

There's even a new book out about this concept called *The Genius in All of Us: Why Everything You've Been Told About Genetics, Talent, and IQ Is Wrong* by David Shenk. So, if you start taking better care of your brain (nutritionally and otherwise), it won't just benefit you, it will also benefit your posterity. That's some real "food for thought," isn't it?

## **Amino Acids Aid Intelligence**

Brain cells talk to each other by sending messages via chemicals called neurotransmitters. All neurotransmitters are built from amino acids, the building blocks of protein. So, not only do low fat diets reduce your brain power, so do low protein diets. Without adequate levels of amino acids from proteins, you brain cells can't communicate properly with each other.

Studies have shown that children who start the day with a traditional breakfast that contains high protein foods like eggs, perform better in school than children who eat sugar-sweetened breakfast cereals. It's the same for adults.

This doesn't mean you need to eat bacon and eggs for breakfast to stay smart, but it does mean you should have some kind of high quality protein at the beginning of your day. Try a protein shake or fruit smoothie made with a protein powder like **Love and Peas** or **Everybody's Protein Powder**.

A great supplement to get more amino acids is **Super Algae**. This product is a blend of spirulina, blue-green algae and chlorella, all great vegetarian sources of amino acids. Super Algae tends to balance blood sugar levels, increase energy, stabilize mood and increase mental clarity. Try taking two Super Algae with breakfast, two again with lunch and two more mid-afternoon.



## B Vitamins are an A+ for Your Brain

Synthesizing neurotransmitters from amino acids takes other nutrients, particularly B vitamins. They are found naturally

in most complex carbohydrates like fruits, vegetables and whole grains. They are missing, however, from refined carbohydrates like white sugar, white flour and white rice, which is why most Americans aren't getting enough B's to keep their brain working at the A+ level.

To better the "grade" your brain gets, try taking **Balanced B-Complex** or **Nutri-Calm**. These formulas supply B vitamins that will calm your nerves and clarify your thoughts. Nutri-Calm will also reduce your stress level, help you feel calmer and give you better energy at the same time.

B vitamins are important for the epigenome that marks whether genes should be turned on or off. (See Genes sidebar.) So, B vitamins can help you change your genes, too.

### Ban Sugar for a Better Brain

If you want a clear, sharp mind it's best to avoid refined carbohy-drates like refined sugar and white flour products. These foods spike your blood sugar and then allow it to drop dramatically a couple of hours later. This is bad for the brain, since the amount of sugar reaching your brain affects your memory, focus and mental clarity.

When your blood sugar is too high, your brain is over stimulated, which will make you hyperactive and irritable. You'll feel agitated, excitable and restless, but have difficulty concentrating. When your blood sugar is too low, your brain won't function properly. You'll feel sluggish and lethargic or angry and irrational.

So, for example, eat complex carbohydrates like fresh fruits, vegetables and whole grains for breakfast instead of processed cereals, white toast, pancakes or waffles (covered with sugar-laden jam or syrup) and fruit juices. Complex carbohydrates will give you a more stable brain, which will make your mind clear and sharp instead of muddled and confused.

If you crave sugar, try using xylitol as a sweetener instead of refined sugar. It doesn't spike your blood sugar and actually helps reduce carbohydrate cravings. You can also take licorice root to help stabilize your blood sugar levels and reduce sugar cravings.

## Additional Help and Information

For more information about how to improve your memory and intelligence, contact the person who gave you this newsletter. Their contact information should be found at the top of page four. They have additional handouts and resource materials to help you. You can also consult some of the following sources:

Boost Your Brain Power DVD by Tree of Light Publishing
Smart Food: Diet and Nutrition for Maximum Brain Power by Arthur
Winter, M.D. and Ruth Winter, M.S.
The Secrets of Successful Students by Daniel G. Amen, M.D.

The Brain Diet by Alan C. Logan, ND

#### **Herbal Brain Boosters**

Besides basic good nutrition, there are some specific herbs that have been shown to help your brain function better. These include ginkgo, gotu kola, bacopa, rosemary and sage.

**Ginkgo** improves alpha-wave activity in the brain and can help with problems like absentmindedness, confusion and dizziness. It has been shown to help prevent cognitive decline in the elderly.

Gotu Kola has been widely used in Indian medicine as a nerve tonic in the treatment of mental and nervous ailments such as epilepsy, schizophrenia and memory loss. Gotu kola also contains theobromine, which is presumed to help increase oxygen to the brain, thereby promoting greater mental capacity and vitality. Have you heard the saying, "An elephant never forgets?" Well, folk tradition suggests that it's because elephants like gotu kola.

## **Continued on page 4**

# Want to Learn Faster and Remember Better?



## **Make Learning Fun and Stress Free!**

If you think about it, you'll readily see that learning is a game for young children. It's something that's supposed to be natural and fun. The rewards and punishments parents and schools tend to introduce to "encourage" learning, actually interfere with memory and our ability to learn. Here's why.

The hypothalamus is the "switching station" in our brain. It determines what information should be placed into long-term memory. When an experience is unpleasant, the hypothalamus resists storing the memory of that experience. It more readily transfers information to memory that is fun, entertaining and unusual. So, the truth is that the way children learn in kindergarten and preschool is the way we should be learning our whole lives.

Thus, the problems you encounter with certain subjects may simply be the result of a teacher who made that subject unpleasant for you. In contrast, think of how much more you remember information where you had teachers that made learning exciting and fun.

You can take advantage of this whenever you want to learn something new. Make a game out of it. Use bright colored markers to write things down, put some enjoyable (but not distracting) music on in the background and make crazy and fun mental pictures to attach new ideas to. The more fun you make the learning process, the more easily you'll commit the new information to memory.

If trying to learn something makes you feel stressed, try taking an adaptogen like **Eleuthero Root** or **Suma Combination** an hour or two before studying. Adaptogens reduce the output of stress hormones, which has been shown to improve both physical and mental performance.



## **Boost Your Brain Power**

Improve Your Memory
Enhance Your Intelligence
And Get Smarter
With Better Nutrition



### Continued from Page Three

Bacopa contains the memory boosting compounds bacopaside-A and bacopaside-B and well-known antioxidants that help protect the brain's memory centers from free radical damage. It increases the neurotransmitter acetylcholine, which means it helps promote better memory, reaction times and learning during stressful periods. It helps slow aging and degeneration of the brain.

**Ginkgo/Gotu Kola with Bacopa** combines the three previous herbs in a formula that helps to promote mental clarity and alertness. It can be used to enhance learning and to slow memory loss in aging.

Rosemary is an antioxidant herb that protects the brain. The traditional phrase "rosemary for remembrance" shows its reputation as an herb to enhance mental clarity. It enhances acetylcholine, the neurotransmitter involved in memory.

Sage also enhances acetylcholine. It's traditional use as a memory-enhancing herb is part of the reason a wise person is called a sage. Both rosemary and sage are found in the herbal formula HSN-W, which is traditionally used for improving hair, skin and nails, but also helps the nervous system and memory.

**Brain Protex** is a formula designed to supply nutrients to enhance the production of acetylcholine. It also contains antioxidants, which help to protect the brain from free radical damage and inflammation.

Focus Attention was formulated to help calm overactive mental activity. It also contains ingredients to enhance acetylcholine and can be helpful with overcoming forgetfulness, being easily distracted, lack of concentration, hyperactivity and impatience. It encourages restful, balanced mental activity and promotes decision-making and task completion.