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Does it seem that things move faster today than they did 20 years ago? It does to me. I believe a large part of the fast pace we are experiencing today is a direct result of the amount of information available via computers and the Internet.

Along with this fast-paced, computer-enhanced world, comes the stress and fatigue that causes tension headaches, lethargy and apathy. This stressful lifestyle can even create free radicals that deteriorate or “rust” our bodies from the inside.

Computers play an essential part of our everyday lives by providing us with connections to our friends and family through websites or programs like Facebook, Skype, and Instant Messenger. They provide us with information we can use to conduct business, be entertained, and become informed. It also gives us an outlet to express our emotions and thoughts through blogs or the comment sections of news articles.

Sometimes, I think it would be nice to just go back to life before computers. I was reminded of this thought the other day when I saw a picture entitled a “Primitive Computer.” It was really just a pencil. One end was marked “Print” and the other end was marked “Delete.”

I was thinking about how simple life would be if we could just go back to that reality, and then I remembered that most of the “primitive computers” I used always seemed to have a broken print end or the delete button was all used up.

So what does all this discussion about pencils, computers, and fast-paced lifestyles have to do with this month’s article on the central nervous system?

Well, there are a lot of similarities between a computer and your central nervous system. So, this month, we will explore those similarities as well as discuss the kind of proper nutrition that will help keep your central nervous system well-tuned so that it can handle all the activity for which it is responsible.

**What is the Nervous System?**

Before we start making the comparison between the central nervous system (CNS) and a computer, we need to define the nervous system.

Our body is fearfully and wonderfully made! We possess the ability to feel, smell, see, taste, and hear. What gives us these
abilities is our nervous system which is composed of two parts: the peripheral nervous system and the central nervous system. The peripheral nervous system includes the nerves in our organs, muscles, arms, legs. The central nervous system includes the brain and the spinal cord.

How is the Central Nervous System Like a Computer?

The most amazing similarity between the CNS and a computer is electricity. Just as a computer needs electricity to operate, our bodies need low voltage electricity to perform their myriad of functions. This current runs through the 4.3 trillion nerve endings contained in our body.

The electricity is produced through the electrolytes we consume in our food. For example, minerals like potassium, sodium, magnesium, chloride, and calcium each contain free ions that make the substance electrically conductive. These electrolytes are the “sparkplugs” of the body because they are necessary to produce the electricity required to keep our nerves operational.

If you have ever opened up the back of a computer, you would see the motherboard. This is the usually green, flat part that has all the wires coming from it. You will also notice that there are gold-colored lines running from the Central Processing Unit (CPU) in every direction to form the circuits that make a function happen. These circuits eventually lead the electrical signal back to the CPU.

The wires that run from the CPU are like the nerves which run from the brain. These nerves are known as the efferent nerves or effector neurons. The neurons carry the signal from the brain to effectors like the muscles or glands or the cells in the inner ear. The nerves that run to the brain are called the afferent nerves or sensory neurons. These nerves carry responses from the sensory organs back to the brain.

Computer Problems

If you have been around computers for very long, you soon realize that there are many things that can (and do) go wrong. If the wires are missing some of the plastic coating around them or they have a short where the wire is broken, the computer will not function properly. The wires can also be connected to the wrong connector which will cause lots of problems in very short order. Computers are also susceptible to viruses that affect their response to commands.

Our bodies are the same way. Our nerves are surrounded by a substance called a myelin sheath. If this protective layer around the nerve becomes damaged, our bodies cannot work properly. We see this kind of damage in diseases like Multiple Sclerosis where the nerve covering (myelin sheath) is damaged, allowing the electrical impulse of the nerve to short circuit or exit the nerve someplace other than the nerve ending where it normally would pass on the signal. This short circuit causes a disruption of muscle control, speech problems, or many other symptoms.

Our CNS is also susceptible to viruses and bacteria that can cause a multitude of problems. Like a good anti-virus program that is installed on your computer, it is important to give our bodies the proper anti-virus whole food nutrition to help fight off the intruders that would take advantage of a weakened immune system.
Immune support is an important part of our central nervous system. If we have a well-fortified immune system, our CNS will help our bodies to fend off the intruders that would love to invade.

**Diseases of the CNS**

In addition to Multiple Sclerosis, there are many other diseases that affect the CNS:

- Huntington’s - an inherited disease that causes uncontrollable movements
- Parkinson’s - a disease that affects the motor skills and speech
- Tourettes syndrome – an inherited neurological disorder that is characterized by physical and verbal tics
- Encephalitis – a viral infection of the brain that causes inflammation
- Meningitis – a bacterial or viral infection of the meninges of the brain and spinal cord
- Epilepsy – a disorder that causes over-activity of the cells in the brain, resulting in seizures

There are many other diseases of the CNS that can affect the body. One that we hear a lot about these days is Fibromyalgia. Little is known about this disease, and the only confirmation of the condition is tenderness to pressure at 11 of 18 points on the body.

There are a few substances that have been found to cause the persistent pain of Fibromyalgia. These substances, particularly one called “Substance P” which makes pain nerves much more sensitive, are usually elevated in the CNS of someone with Fibromyalgia. This indicates that Fibromyalgia is a CNS disorder, not a musculoskeletal disorder as most doctors originally thought.

It is interesting to note that many people with Fibromyalgia also have a history of an injury to their CNS.

**Diet for the Central Nervous System**

Like all parts of the body, proper nutrition is essential for maintaining and sustaining the central nervous system. Purity and sufficiency of our nutrients are vital for maintaining the proper function of our central nervous system. Here are a few examples of nutraceuticals that are especially important for a healthy CNS:

- Thiamine or vitamin B1 is a water-soluble vitamin that contains sulfur and is involved in many cellular processes
- Riboflavin or vitamin B2 is another water-soluble vitamin that is necessary for the absorption of vitamin B6 and iron
- Niacin or vitamin B3 is an enzyme mediator that helps the cells to fire across synaptic gap between the neurons
- Pyridoxine or vitamin B6 is a water-soluble vitamin essential for the synthesis of the neurotransmitters serotonin and norepinephrine
- Vitamin B12 is a water-soluble vitamin that helps to maintain healthy nerve cells
- Bilberry is closely related to the blueberry plant and is a natural source of Resveratrol, which has been shown to be a powerful anti-aging nutrient that supports neurological health
- Glycine is a non-essential amino acid that helps the body absorb calcium, one of the electrolytes we talked about
earlier in this article

- L-Histidine is an amino acid that is beneficial in the production of the myelin sheath surrounding all nerve cells and which allows impulses to transmit properly through the nerves.
- Schizandra is a great supplement for the central nervous system. It is known as an adaptogenic herb because it has the ability to wake you up in the morning or calm you down in the evening so you can sleep. It helps the body to maintain an ideal balanced state.
- Brussels sprouts are rich in vitamin A and folic acid which are essential for proper nutrition of the CNS.

All of these and many other nutrients are important for the proper function of the CNS. Like the computer, your body needs to be cleaned out on a regular basis, and by incorporating these nutrients in your daily diet you assist your body with this cleansing process.

Trévo is a remarkably powerful product that helps support the proper nutritional needs of the central nervous system. All of the above mentioned nutrients are contained in Trévo. With just two servings a day, Trévo will give your body the nutrition it needs to assist with the health and well-being of your central nervous system.

Oxidative Stress and the CNS

Since the brain and spinal cord are rich in unsaturated fats, the high lipid content in the CNS tissue is especially susceptible to oxidative damage. This oxidative stress is frequently referred to as free radicals. These free radicals are the elements in our bodies that cause them to “rust” on the inside. Antioxidants are essential for your body to fight off such harmful free radicals. If you read my article last month, you will remember the benefits that Trévo’s high ORAC value provides in preventing oxidative damage.

CNS versus Computer

While it is a good tool to help us understand how the central nervous system basically works, it is obvious from an engineering perspective that there really is no comparison between the central nervous system and a computer. As I said earlier, we are fearfully and wonderfully made. There is a complexity to our bodies that really is only beginning to be understood.

With each new discovery regarding functions of the human body, there are countless others just waiting their turn to be revealed. I believe that when we find out even more about the central nervous system, we will see more and more complex computers that will attempt to imitate the functions of the CNS.

The important thing to remember about your central nervous system is that it plays a crucial role in the functioning of all parts of your body. With that knowledge, it is vital that you give your body the “DREAM” health it requires.

As many of you know, my acronym for “DREAM” is Diet, Rest, Exercise, Alternative Care, and Motivation. Eat properly and in the right portions. Get the rest you need daily. Exercise regularly; it is incredible how well your body functions when it moves. Get the alternative care necessary when it is needed. Motivate yourself with positive and encouraging media. This will encourage you to do the right things daily.

When you give your body the things it needs, it will heal itself.