

Brain Basics II



Health Matters

By Kerry Sauser

Last month I began discussing how a nutritional approach can be effective in supporting emotional, behavioral and cognitive brain function. Now I'd like to finish by exploring a few more strategies to support healthy mental function in children, adults and the elderly.

Consider this:

- * The brain needs specific substances to function & maintain it.

- * It requires sufficient quantities of these beneficial substances to work properly.

- * The brain can be damaged or disrupted by the wrong types of substances. The damaging effect is often cumulative.

- * The brain functions poorly when damaged or disrupted.

These observations may seem evident, but diligently applying them can be life changing. The trick is to figure out what is beneficial to the brain, what is harmful, and how to get enough of the good stuff in while keeping the bad stuff out of the brain.

Luckily, research has uncovered much of the "good stuff" for optimum brain function. The following are crucial:

Omega-3 essential fatty acids (DHA & EPA found in fish oil) are critical to transmission of brain signals and formation of brain cells. Sufficient levels can improve ADHD related symptoms in children, and it is significantly effective in treatment of depression and bipolar disorder. In older

adults, it can slow memory impairment and cognitive decline associated with aging such as dementia and Alzheimer's disease.

Our brain needs energy to fuel it, and that energy is supplied in the form of glucose obtained from digestion and transported in our blood (blood sugar). Fluctuations in blood sugar directly impact the brain. That's why many people are groggy without breakfast or get grouchy when hungry. Eating small amounts of healthy foods regularly (fruits, vegetables, nuts, whole grains) can keep your thinking and moods on an even keel—this is especially relevant for children with attention problems. Avoid foods that spike blood sugar (white sugar, white flour, fast foods and processed foods) to avoid mood swings and focus problems.

Sleep is required for the brain to repair and rejuvenate. Not enough, and memory, cognitive function and moods are affected.

B Vitamins are key nutrients in supporting brain vitality. Deficiencies in the various forms of Vitamin B can contribute to schizophrenia, strokes, dementia, depression, poor concentration, irritability and more.

Exercise body and mind. Both help keep the brain functioning well.

The source of brain dysfunction can be due to deficiencies or blockages in the supply of good nutrients, but it can also be due to the presence of damaging substances. The following damage the brain and can cause changes in behavior, focus, intelligence, body function and memory:

Toxic food can come from many sources including fast or processed food. Most contain one or more of the following-- trans-fats, chemical additives, preservatives, heavy metals and hormones. Even seemingly healthy food can harbor pesticides, radiation, or genetically modified ingredients if not organic. These

substances can be particularly harmful to the developing brains of children, and play a role in numerous behavioral disorders.

Environmental Toxins can be in many forms, work chemicals, home cleaning products, paint, cigarette smoke, car exhaust and more. These substances can have subtle or dramatic effects on our mental function, but can be easily overlooked as possible culprits.

Some prescription drugs benefit one part of the body and adversely affect the brain. In 2009, an Iowa State University biophysics professor found that cholesterol-reducing drugs (statins) can reduce brain function. (Cholesterol is vital for communication within the brain, and is necessary for memory and thinking.) When taking medications, be sure to note any changes in memory, mood or other brain functions with your health care provider.

Excess stress affects the hormones that regulate our brain, so take serious measures to manage stress like deep breathing, exercise or meditation.

Many of these "bad things" cause damage by forming free radicals. Free radicals are unstable molecules that set up a chain reaction of destruction in our body's cells. They are especially dangerous in the brain. Though our bodies have mechanisms to fight free radicals, with age those mechanisms become less effective—one reason brain function declines with age. The negative impacts of free radical activity can be minimized by foods or supplements that contain anti-oxidants such as these:

Blueberries and turmeric are two foods that rank high in antioxidant content. Consuming them regularly can help protect your brain.

CoQ10 is a supplement that increases cellular effi-

ciency and counteracts free radicals. Preliminary research indicates that CoQ10 may be beneficial to those with Alzheimer's, Parkinson's and ALS.

Ginkgo Biloba has been observed to enhance short term memory. It has antioxidant qualities and enhances the flow of blood to the brain.

Speaking of blood flow to the brain, vitality of the vascular system is an important factor in older brain function; many cognitive and memory problems are traced to poor blood supply to the brain. Consequently, anything that assists the vascular system will support brain health, including antioxidants, B-vitamins, a healthy diet and exercise.

So remember, there are a myriad of brain/neurological disorders; most are caused by a combination of conditions that can be difficult to pinpoint. The good news, though, is that employing a nutritional approach to brain conditions can get surprising results—and that's a great thought to keep in mind!

Until next month...Heal well, be well...naturally!

K.S.

PS. For more on a diet that's great for the brain, check out www.oldwayspt.org/mediterraneanandiet

(Dr. Kerry Sauser, ARNP, ND, PhD, practices functional health care at the Natural Health Center in Atlantic. Her offices are located in the Complementary Care Center at the corner of 2nd and Linn Street. The CCC is open to the public and hosts a natural food store, and health care services including, massage, Ortho-Bionomy, digital thermography, reflexology, hypnosis, acupuncture and far-infrared sauna therapy.)

Tuesday, August 2, 2011