

High on the list of reasons I love summer would be the accessibility of fresh vegetables. I love to walk to the garden, pick what is ripe, and return them to the kitchen where my wife transforms them into a panoply of culinary delights. You just can't beat the fresh taste of vegetables and herbs picked minutes before ingestion.

If you garden, you know that what you put into the garden determines what you get out of it. The soil is key and needs the proper nutrients, best gained through organic matter. Many vegetables, like melons, will have stunted growth without water. Sunlight and temperature are often the determining factors for when the fruits will ripen.

A brain is like a garden in that it needs proper nutrients to produce. We all think about proper nutrition in relation to healthy bodies but the research is clear: we cannot learn if our brains are not properly fed.

This clearly established link between brain nutrition and learning is the reason I question the approach often taken to a child's learning or behavioral difficulties. We will prescribe psychotropic medication long before we even think about doing a nutritional profile and questioning and counseling the parents on how to feed their family.

We follow a prescribed procedure called Response to Intervention when a child is having learning difficulties of any type. Many strategies are attempted in the process to help the child but a critical one, nutrition, is not a variable. If we had the money, I would love to have a certified nutritionist on staff to complete a profile for each child. I would also love to see a traveling kitchen, a modern chuck wagon, going into neighborhoods with an instructor to teach healthy cooking.

In the absence of a certified nutritionist and chuck wagon, allow me to offer my tips for healthy eating based on my study of the human brain and my training as a personal trainer.

Slight the white. The typical American diet is way overboard on simple carbohydrates. Simple carbohydrates go into your system fast, create an energy spike and if not immediately used, get stored as fat. Simple carbohydrates are generally white: white refined sugar, white bread, white potatoes, white rice. Many drinks kids like are filled with simple carbs in the form of white sugar.

If your children have nothing but simple carbohydrates for breakfast, they are not prepared for an effective day of learning. Pop tarts do not a breakfast make. Let me say that again: Pop tarts do not a breakfast make. Sugary cereal does not constitute a good breakfast either. The surge of energy from that breakfast laced with simple carbs will subside mid-morning and the body and brain will go into "park."

In the place of simple carbohydrates substitute complex carbohydrates. Think brown: whole grains, brown rice, sweet potatoes, vegetables and fruits. These give you sustained energy without that mid morning crash.

AmP the day. AmP the day has a double meaning. First, it means protein in the a.m. We need a breakfast that is high in protein to thwart the catabolism (muscle wasting) that has occurred overnight as we were in a fasted state. The amino acids that come from proteins are needed to fire the neurotransmitters in the brain. In my observations and discussions with students, they are woefully short in the protein department of their diets. Is it any wonder then that learning is slowed knowing protein is required to fire neurons?

A lunch laden with simple carbohydrates means a sluggish afternoon. The other meaning for **AmP the day** is to keep protein in your system all day long. To maintain your weight, 20% of your day's calories should come from protein. To lose weight, 25% of your calories should

come from protein (your body has to burn more calories to process protein). When I've asked high school students to tell me what they've eaten in a day, their protein content is seldom as high as it should be and that takes its toll on their brain neurons.

Be a fathead. According to Dr. Paul Nussbaum, Clinical Neuropsychologist, our brains are 60% fat. (When you are called a fathead, it may actually be a medical statement, not an insult.) Of course, that does not mean we should eat the fatty foods we love (darn). Omega 3 fatty acids are critical for brain health. Fish has abundant Omega-3 fatty acids and certain types, such as salmon, albacore tuna and lake trout, have more Omega-3's than other fish. If you are not eating fish (Mrs. Paul's doesn't count) once a week, try to make that change. Omega-3's are going to help your children learn and for us more "mature" types, it has also been shown to reduce the risk of dementia.

Eat plenty of food packaged by nature. Consider the banana. It is nutritious and comes in its own packaging that uses color coding to indicate freshness; and, it is biodegradable packaging at that. Cellophane is no match. Fruits and vegetables rule! Processed foods do not.

If you'd like to get a sense of the proportion of macronutrients (protein, carbs and fat) in the diet of you or your child, you can go to www.fitday.com and sign up for a free account. You will enter everything you eat for a day (you must know quantity) and it will give you the percentage of each macronutrient.

So as you take your children school shopping this month, give some thought as to what they need to prepare their brains for school as well as their bodies.