**How Grains Inflame Your Brain and Lead to Alzheimer’s**

By Dr. Ramona Warren

After I finished writing my last column on Alzheimer’s Disease, I received a newsletter with an interesting article by Vera Tweed, titled *“Do You Have Grain Brain?”* There were many important points shared in the article, so I’d like to take a moment to summarize some of the included information and give you the highlights of recent research.

Dr. David Perlmutter, M.D., a professor at the University of Miami School of Medicine and a board certified neurologist, has recently written a book titled, *“Grain Brain: The Surprising Truth about Wheat, Carbs and Sugar -- Your Brain’s Silent Killers.”* Dr. Mehmet Oz, Dr. Andrew Weil and many others have been very supportive of Dr. Perlmutter’s work. In his book, Dr. Perlmutter says by avoiding certain foods, eating the right ones and getting plenty of aerobic exercise, senile dementia can definitely be prevented and most anyone can stay mentally sharp well into old age.

Most past research on Alzheimer’s disease has focused on plaque formation found in the brain and the belief that these plaques cause Alzheimer’s. Dr. Perlmutter states that “medications developed to get rid of brain plaque have failed. In fact, they make people worse, even more thinking-impaired.” Perlmutter believes the real cause of Alzheimer’s is brain inflammation. He goes on to state that the wrong foods can trigger this inflammation and/or symptoms in those with a genetic predisposition for dementia.

The high-carbohydrate diet most Americans eat is very toxic to the brain and keeps blood sugar levels too high. When blood sugar is elevated over a long period of time, it causes the loss of brain cells and inflammation. Dr. Perlmutter recommends everyone monitor their blood sugar levels by having a hemoglobin A1c test (the same test used to diagnose and monitor diabetes). The test determines what a person’s blood sugar level has been over a three-month period. In order to prevent Alzheimer’s, Dr. Perlmutter recommends keeping your A1c at 5.2 or below. It is important for everyone to have this test done, not just diabetics. The test can be ordered by your general practitioner. Some chain drugstores also offer the test for about $35.

Some foods historically thought to be “healthy” – such as grains -- tend to elevate blood sugar levels over long periods of time. Dr. Perlmutter is not a fan of either whole or refined grains, and points to many studies that have shown gluten to be a trigger for brain inflammation. “Far more people are sensitive to gluten than know it,” he adds. By eliminating grain from the diet, you eliminate gluten and reduce your carb intake, and help to calm inflammation.

Fruit juices and fruits are also a concern because of the high sugar content. While fruit contains many beneficial nutrients, antioxidants and fiber, it needs to be consumed in moderation. Perlmutter recommends limiting your intake to one piece of fruit each day or one small bowl of berries. For my patients working to get their blood sugar balanced and/or lose weight, I recommend no more than two fruits per day, with the choices being an apple, ½ cup of berries or a half a grapefruit.

Surprisingly, certain vegetables – primarily root vegetables such as potatoes, beets and carrots -- can also cause blood sugar imbalances. Vegetables grown below the ground are higher in starch, which converts quickly into sugar. Dr. Perlmutter suggests focusing on vegetables that grow above ground, such as leafy greens, peppers, celery, asparagus, cabbage, broccoli, cauliflower, Brussels sprouts, onions and garlic.

Omega-3 fats from fish and olive oil are anti-inflammatory and known to be good for brain health. However, Dr. Perlmutter notes that saturated fats from meats can also be brain healthy. Several recent studies discussed in the journal *“Advances in Nutrition”* determined that “saturated fats are benign with regard to inflammatory effects,” and eating a low-fat, high-carbohydrate diet increases inflammation, which leads to heart disease and Alzheimer’s. Dr. Perlmutter cites saturated fat as an important building block for the brain, but stresses the importance of choosing the right fats such as meat, eggs, dairy and butter from grass fed, free-range animals that are hormone, antibiotic and pesticide free.

Exercise that raises the heart rate for at least 30 minutes a day is also very important to reduce inflammation in your brain and help regenerate brain cells. Exercise has also been shown to cut a person’s risk of Alzheimer’s in half. Find something you enjoy doing and be consistent.