## **Decreasing Your Risk of Dementia**

Nutrition Newsletter: Winter 2016

Dementia and cognitive decline are on the rise in our country and are becoming the focus of multiple studies and medical research. Though we do not have a cure for Alzheimer's disease, dementia and different forms of cognitive decline, we have found different dietary and lifestyle interventions that can help reduce one's risk for developing these diseases. Below are some lifestyle changes that have been shown in the scientific literature to assist with risk reduction through preserving brain volume, specifically in the areas that function with short-term memory, reducing inflammation in the brain and promoting whole body health and wellness.

*Exercise:* Numerous studies have shown the positive impact of regular exercise on brain health including preserving hippocampal volume. The hippocampus is the area of the brain responsible for short term memory and the bigger the hippocampus the better the memory. Exercise also promotes the production of new blood vessels which assist with getting more oxygen and nutrients to the brain tissue. All the more reason to lace up those tennis shoes!

*Flavonoid Rich Foods*: Flavonoids are compounds found in plant-based foods that function as antioxidants in the body and can specifically help reduce oxidative damage to cells in our brains. Foods that contain high levels of flavonoids are blueberries, spinach, cocoa (look for dark chocolate with 72% or more cocoa content), resveratrol, and black or green tea which both contain compounds that promote the production of L-Theanine which assist with relaxation.

*Meditation*: The Book "Boost Your Brain" by Dr. Majid Fotuhi discusses research that links meditation and mindfulness to preserving brain volume, reducing cortisol level and also boosting compounds that help preserve brain and hippocampal volume. Try taking five to ten minutes every day to do some deep breathing or use guided meditation apps like "Guided Journey Meditation" or "Insight Peace in our Timer" to implement meditation into your daily routine.

*Coffee*: Inflammation and Type 2 Diabetes are both risk factors for the development of Alzheimer's dementia and multiple studies are showing improvements in both risk factors from drinking 3-5 cups of coffee per day. Possible mechanisms for this neuro-protective effect include coffee having a high content of magnesium, which is linked with improved insulin sensitivity, and coffee containing high levels of polyphenols which are anti-inflammatory compounds.









*Turmeric*: Turmeric, or specifically Curcumin which is one of the beneficial compounds in Turmeric, has been studied for decades to better understand its anti-inflammatory and anti-oxidant properties in the brain. Research agrees that since inflammation has been highly linked to the development of Alzheimer's including this spice in your diet daily could help reduce your risk. You can add Turmeric to your smoothies or spice mixes (*1.5tsp. of turmeric will provide roughly 150mg of curcumin*) or you can take it in a supplement form (*but aim for 500mg per day*).

*Mediterranean Diets*: A study completed in 2015 showed that adults who followed a Mediterranean style diet showed reduction in rate and risk of developing Alzheimer's disease along with preserving brain volume. Even moderate adoption of this diet appeared to reduce the risk of these diseases. A good start point for implementing this dietary change is to aim for at least one fish entrée per week, two servings of berries per week and two servings of vegetables daily. Moving away from processed foods and focusing on fresh produce, nuts, olive oil and lean proteins can not only reduce your risk of cognitive decline but also improve overall health.

*Vitamins:* Two vitamins have been linked with brain health. Vitamin B12 is very important to the myelin sheath which surrounds nerve cells and is integral in cell signaling. Vitamin B12 comes from any animal protein like chicken, fish and eggs but levels tend to decline with age due to decreased absorption and medication interactions. Ask your physician about checking your levels of B12 and possibly supplementing with the vitamin when appropriate. Also ensure you are consuming some form of animal protein daily. If you are a vegan you need to be supplementing B12 since you do not consume any in your diet. Vitamin D deficiency has also been linked with reduced brain volume. Again have your blood levels of vitamin D checked with your physician during your annual visit and discuss supplementation when appropriate.



Jessica Murgueytio MS.RD.LD.CDE Adapted from Dr. Louis Malinow's "Preventing Dementia" MDVIP Academy



