Nutrition and Brain Health

Have you ever wondered if what you are eating is affecting your risk of neurodegenerative diseases and mental health issues? We all know that proper nutrition plays a huge role in how we look and feel, but what role does nutrition play for our brain health?

It has been proven that what you eat, or rather, what you don't eat - a diet lacking in nutrients, affects your mental health. Adding plenty of antioxidants, B vitamins, and omega 3's to your diet will help to keep your mind healthier. To understand what role antioxidants, play in the protection of our brain function, we must first discuss oxidative stress.

Oxidative Stress

Oxidative stress is an imbalance between free radicals and antioxidants in your body. "Free radicals are highly unstable molecules that are naturally formed when you exercise and when your body converts food to energy. Your body can also be exposed to free radicals from a variety of environmental sources, such as cigarette smoke, air pollution, and sunlight." When free radicals outnumber antioxidants, the free radicals can start doing damage to fatty tissues, DNA, and proteins in your body that can lead to diseases including neurodegenerative diseases, such as Parkinson's and Alzheimer's.

Antioxidants

Antioxidants are made up of Beta Carotene, Lutein, Lycopene, Selenium, vitamin A, C, and E are responsible for neutralizing free radicals in our bodies. There is a wide variety of brightly colored fruits and vegetables with high amounts of antioxidants. Below is a list of antioxidants that are accessible to us all year long:

- Artichoke (boiled)
- Cilantro
- Cinnamon
- Citrus Fruit
- Cocoa
- Cranberries
- Dark Chocolate
- Ginger
- Tumeric
- Oregano
- Pecans
- Tomatoes

- Blackberries, Blueberries, Raspberries, Strawberries
- Wheat Germ Oil
- Sunflower Seeds and Oil
- Almonds
- Peanuts and Peanut Butter
- Beet Greens, Collard Greens, and Spinach
- Red Bell Peppers
- Asparagus
- Mango

B Vitamins

B vitamins, particularly B12, thiamin, and niacin, have been shown to protect against Dementia, slow down Alzheimer's, and have been proven to be essential for good mental health. “B vitamins are essential parts of a healthy diet and may help alleviate symptoms of alcohol abuse, depression, schizophrenia, and cognitive impairment in some cases.” Fortunately, most of us are already eating many foods that are high in B vitamins. Below is a list of foods that have 10-19% of the Recommended Daily Intake (RDI) of vitamin B.

- Salmon
- Leafy greens, spinach, collard greens, turnip greens, romaine lettuce
- Liver and other organ meats
- Eggs
- Milk
- Oysters, Clams, Mussels
- Legumes
- Chicken and Turkey
- Yogurt
- Pork
- Fortified Cereal
- Trout
- Sunflower Seeds

B vitamins also help the body process omega-3s.

Omega-3's

There are three different types of Omega-3's. EPA, DHA, and ALA. EPA and DHA are both found in fatty fish, and ALA is found in plant sources. Omega-3's are types of fatty acids that our bodies can't make on their own. We rely on food sources for our intake. Omega-3's are essential to our survival. EPA and DHA have been attributed to having inflammatory effects and protect against neurological and metabolic diseases. DHA has been shown to help with cognitive deficits associated with Alzheimer's Disease and memory function. EPA has shown to be effective in preventing depression. Listed below are some fatty fish sources.

- Salmon
- Mackerel
- Herring
- Tuna
- Trout
- Anchovy
- Halibut
- Sea Bass

ALA has proven helpful for cardiovascular disease and other diseases but has not shown to be effective for mental health. ALA can be converted to EPA and DHA in our bodies in low amounts, but it is highly inefficient. It is still worth listing some foods that contain ALA for other health benefits.

- Kale
- Spinach
- Soybeans
- Walnuts
- Chia Seeds
- Flax Seeds
- Hemp Seeds
- Seed Oils- Flaxseed and Canola

There you have it. Research has shown that our diets play a direct role in our neurological and mental health. Filling our plates full of antioxidants, B vitamins, and Omega-3 fatty acids can help keep our minds healthier!

*health.harvard.edu *phychologytoday.com

*alzheimers.net *overcomebreastcancer.com

*mayoclinic.org *sciencedaily.com