FOOD BOOSTING NUTRIENTS

- **DHA in fish oil**: studies show that high levels of DHA decrease the risk of dementia, Alzheimer's and other degenerative brain diseases.
- **Resveratrol**: slows the aging process, promotes heart health, stimulates brain function, and supports the body's immune system.
- **Turmeric**: anti-inflammatory antioxidant that supports mitochondrial function, glucose metabolism, and targets inflammation.
- **Probiotics**: modulate the gut-brain axis which impacts the brain and behavior, and may modulate the effects of stress, anxiety, and depression.
- **Alpha-lipoic acid**: a powerful antioxidant with anti-inflammatory properties that works to protect brain and nerve tissue.
- **N-acetylcysteine (NAC)**: emerging as a beneficial antioxidant adjunct for treatment of neurological and mood conditions.
- **Vitamin D**: supports optimal brain health including mental & psychological health.

MIND Diet Improves Brain and Heart Health

The MIND Diet combines two food plans: the Mediterranean diet, which many people are familiar with, and the DASH (Dietary Approaches to Stop Hypertension) diet that has been shown to lower the risk of heart disease and stroke. Although the MIND diet may be challenging to follow on a daily basis, research demonstrates that it improves cognitive thinking and reduces the risk of dementia. It also slows the progression of dementia in those who already have Alzheimer's disease.

**Brain and Heart Healthy Nutrition: MIND Diet; Mediterranean-DASH Diet Intervention for Neurodegenerative Delay**

- **The MIND Diet**: Green leafy vegetables, other vegetables, nuts, berries, beans, whole grains, fish, poultry, olive oil and wine.
  - Be careful with Wine/Alcohol.
  - Check Food Labels: Avoid gluten and cane sugar where possible. Skip sugar and shovel fructose.
  - Eat organic when you can.
  - MIND Diet prevents or slows brain decline. Lowered risk of Alzheimer's by 53% in those who follow it closely and 35% in those who followed it more loosely.

In a study of older adults, those who were implementing the MIND diet had a cognitive brain health score that was 7.5 years younger in age versus those who were in the lowest score range of implementing the MIND diet. Following the MEDITERRANEAN-DASH Intervention for Neurodegenerative Delay (referred to as the MIND diet) and/or taking nutritional supplements are two things that might positively impact your nutrition and brain health relationship.

Fruits and Vegetables Grown Decades Ago Were Richer in Vitamins and Minerals than what we are Getting in our Modern-Day Food Sources

Modern day agricultural practices have substantially decreased the nutrient content of healthy foods such as fruits and vegetables. For example, researchers from the University of Texas compared nutritional data from 1950 to 1999 for 43 different vegetables and fruits. They found “reliable declines” in the amount of protein, calcium, phosphorus, iron, riboflavin (vitamin B2) and vitamin C over the 50-year period.

Another study concluded that an individual would have to eat eight oranges to get the same amount of vitamin(s) in one modern orange that their grandparents ate. Since our food sources may be depleted in the levels of phytonutrients needed for optimal brain health, a person may consider adding high quality, nutritional supplements to their diet to support brain health. Protect brain health by optimizing nutrition.
Vitamin D: All the Facts

You have likely heard more talk lately of vitamin D and its importance in overall health. Truth is, vitamin D has always had many important roles in the body.

What is vitamin D? Vitamin D is a fat-soluble vitamin, meaning it can only be absorbed in the body with dietary fat, unlike water-soluble vitamins that are absorbed on their own, as needed. The good news is that only a small amount of dietary fat (i.e. healthy fats such as olive oil, avocado, or nuts) is required to absorb vitamin D.

Where can we get vitamin D? It occurs naturally in a variety of foods, including fatty fish and sardines, fish liver oils, cheese, egg yolks, and mushrooms, among a few others. Additionally, many foods and beverages are fortified, or have vitamin D added, and these include milk, some juices, some cereals, and a variety of other products now in stores. Interestingly, almost all dairy milk in the US is fortified with 3 micrograms (120 international units) per 8 ounces/1 cup. However, foods made from milk (such as ice cream or cheese) are usually supplements that come in a range of doses depending on if you need a small or large amount. Sunlight provides another form of vitamin D that the body can convert into a usable form. While Vitamin D from sunlight is a wonderful source, it is important to be mindful of your sun exposure in terms of how strong the sun is and the time spent as it can increase the risk of skin cancer.

Why is vitamin D important? As mentioned above, vitamin D supports health in many ways. The most commonly known benefit of Vitamin D is that it helps with calcium absorption, which is important for improving bone health and strength and helps to prevent osteoporosis and osteopenia (two conditions that lead to low bone mass/density and brittle bones). Vitamin D also assists muscles and nerve functions, as well as supports the immune system. Now more than ever, strong immune health is important to fend off viruses and bacteria with which we may come in contact. Finally, vitamin D can help reduce inflammation in the body, which can help reduce the risk of many chronic diseases that are worsened with chronic inflammation.

Incorporating vitamin D into your life can make a difference in your health.

How much vitamin D do you need? The answer to this depends on your current blood levels. It is important to start by asking your doctor to check your vitamin D level to avoid adding a high dose supplement if your levels are already in normal range. The recommended amount you will need depends on both your current levels as well as your age as our need for vitamin D increases over age 70.

LESS SCREEN TIME, MORE GREEN TIME!

When was the last time you unplugged and connected with the great outdoors? I mean really unplugged – turned off your devices and tuned in to the sensory experiences of being in nature? Being fully present, and savouring the sounds, smells, sights; touch of air on your skin, the sun on your face. Maybe the taste of a vegetable from a garden or your favorite cup of tea or piece of fresh fruit? While not all of us live in rural areas or have ready access to so-called green spaces, studies show that spending time in green spaces such as your backyard, a nearby park, nature preserve, etc. is a restorative practice. The practice has positive physical, mental, and emotional health benefits. Some of these benefits include improved mental health, immune function, pain control, sleep, happiness, and well-being. Being in green spaces and nature can help reduce stress, anxiety, depression, obesity, diabetes, and blood pressure. If you live in an urban setting, apartment complex or have limited access to parks, incorporating more outside time can be beneficial to you even if it is in a small way. Try to find a time and a way to step away from the screen, and into the green. Take a few deep cleansing breaths, be in nature, and notice your experience. What did you see, hear, feel, taste, and smell? How did you feel during and after your time in nature? What did you learn?

Research Matters

WRIISC research related to Veterans’ health concerns.

Publication Title: “Because the country, it seems though, has turned their back on me.” Experiences of institutional betrayal among Veterans living with Gulf War Illness

Question: How is the medical care offered for Veterans living with Gulf War Illness (GWI) influenced by experiences of institutional betrayal (situation in which the institutions people depend upon for safety and well-being cause them harm)?

Findings: Experiences of institutional betrayal both during active military service and when first seeking treatment appeared to shape perceptions of healthcare. Veterans expressed the belief that the military failed to protect them from environmental exposures. Veterans’ concerns regarding subsequent quality of healthcare were intrinsically linked to a belief that, despite official documentation to the contrary, the predominant paradigm of health benefits. Some of these benefits include improved mental health, immune function, pain control, sleep, happiness, and well-being. Being in green spaces and nature can help reduce stress, anxiety, depression, obesity, diabetes, and blood pressure. If you live in an urban setting, apartment complex or have limited access to parks, incorporating more outside time can be beneficial to you even if it is in a small way. Try to find a time and a way to step away from the screen, and into the green. Take a few deep cleansing breaths, be in nature, and notice your experience. What did you see, hear, feel, taste, and smell? How did you feel during and after your time in nature? What did you learn?

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Thank you Dr. Sajja for this partnership and for your valuable work in the Veteran community.
**DC WRIISC**

**Exercise and Chronic Multi-Symptom Illness**

**EXERCISE HAS LONG BEEN recognized as a non-pharmacologic therapy for a wide range of diseases and conditions including chronic multi-symptom illness (CMI). The benefits of graded aerobic exercise (started slowly and increased gradually) are extensive, including but not limited to improvements in brain function, sleep, chronic pain, depression, and anxiety. Individuals with CMI could experience an increase in symptoms during the early stages of physical activity. For these individuals it may result in stopping exercise early over time. The VA does not provide disability benefits for personality disorders because the VA does not consider them to be caused or aggravated by military service. In addition, personality disorder diagnoses can negatively impact medical care due to providers discounting the Veteran’s description of their symptoms.

Researchers at the DC WRIISC are currently working to develop a way to assess exercise readiness that would hopefully minimize any side effects of exercise including burnout and symptom flare-up. To do this, they are conducting a research study that is comparing two different exercise programs in a group of individuals with CMI and are monitoring daily responses to exercise in both groups.

The original study design required participants to come to the DC VA Medical Center (DC VAMC) to exercise. With the global pandemic, the research has now shifted to a home-based exercise intervention in which participants log their exercise sessions using remote technology. The Institutional Review Board Chair of the DC VAMC, whose role is to protect human subjects in research, has approved the study and the study is proceeding. The Office of Research and Development has also reviewed the study protocol and provided feedback to the study team. The Institutional Review Board Chair of the DC VAMC has also approved the study and the study is proceeding.

**NJ WRIISC**

**Addressing Mental Health Misdiagnoses Improves Veterans’ Lives**

**MAKING AN ACCURATE mental health diagnosis has important implications for Veterans’ lives. Personality disorders are defined by the American Psychiatric Association as pervasive, unhealthy patterns of thinking, feeling, and behaving that begin in adolescence or early adulthood and persist over time. The VA does not provide disability benefits for personality disorders because the VA does not consider them to be caused or aggravated by military service. In addition, personality disorder diagnoses can negatively impact medical care due to providers discounting the Veteran’s description of their symptoms.**

Clinical Neuropsychologists at the NJ WRIISC have seen Veterans who endured complex psychological exposures during military service (e.g., combat trauma, military sexual trauma) and then, at the same time, either during military service or within the VA, their deployment-related symptoms were misdiagnosed. Following their WRIISC evaluation and change in diagnosis, Veterans have reported that they were finally able to access their service-connected disability benefits, which in some cases prevented homelessness and allowed for vocational rehabilitation. They received more effective mental health care and experienced decreased stigma in their medical care. NJ WRIISC neuropsychologists work to address personality disorder misdiagnoses, apologize to the Veteran, repair harm by advocating for access to appropriate services, and engage in a continuous improvement process to enhance services for the future. While the harm of years of misdiagnosis cannot be reversed, Veterans described regaining a sense of honor that felt tarnished by their prior misdiagnosis.

**CA WRIISC**

**Preventative Healthcare Spotlight**

**COLON CANCER IS the third most common cancer diagnosed in both men and women in the United States. In 2021, there have been 104,000 new cases—the good news is that the number is declining overall from prior years due to preventative care, screening advancements and people changing their lifestyle-related risk factors. The U.S. Preventive Services Task Force (USPSTF) recommends all adults start screening at age 45. Though, given there was an increase in incidences in people that are younger than 50, with a 2% increase from 2012-2016, the Task Force released new guidelines for screening individuals if they have certain genetic diseases.**

**Overall, your lifetime risk of developing colon cancer is about 4% but your PCP can review your medical history and risk factors and decide if screening should begin.**

There are things you can do that might help lower your risk, such as changing your lifestyle-related factors. These include:

- **Stop using tobacco and tobacco products-** the VA Telequit Program can assist you with this.
- **Watch your consumption of meat products-** a diet high in red meats such as pork, beef, lamb, or liver and processed meats (like hot dogs and some luncheon meats) raises your colorectal cancer risk.
- **Get your daily dose of sunshine-** studies show that vitamin D levels can be linked to cancer. (see article above for more information on vitamin D and health)
- **Limit your alcohol consumption-** alcohol has been linked with a higher risk of cancers of the colon and rectum.
- **Maintain a healthy weight-** obesity, or a body mass index (BMI) greater than 30, has been linked to the development of colon cancer.
- **Increase your physical activity-** ideally 150 minutes of moderate-intensity aerobic physical activity or 75 minutes of vigorous-intensity physical activity, or a combination of both types of exercise. Referrals to the VA MOVE program may be made by your doctor.

**WE HOPE THAT THESE SUGGESTIONS WILL HELP KEEP YOU ON THE PATH TO HEALTHY LIVING.**

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**WRIISC Advantage**

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