











THE GULF WAR DISPATCH

THE INIM PRESENTS



EXERCISE THOSE LUNGS!

The INIM's Exercise Physiologist, Jeffry Cournoyer, ATC, discusses two breathing techniques to stretch, protect and potentially improve lung capacity:

- 1. Diaphragmatic Breathing
- 2. Stack Breathing

Check it out on our YouTube channel or click on the image





UPCOMING *VIRTUAL EVENT

Veterans Helping Veteran Mid-Day Talk:

Gulf War Illness Research

Friday, July 10, 2020 | 12:00 p.m. - 1:00 p.m.

Meet the Gulf War Illness Research Team.

- Learn about the ease of participating in research.
- Hear from veterans who have participated in research.
- Learn about different studies currently available.

REGISTER HERE

CURRENT RESEARCH

A Translational Medicine Approach to Gulf War Illness: From Cells to Therapy

This is a systematic assessment and characterization of the therapeutic effects of drugs that impact a specific list of therapeutic targets and are based on prior research.

Location: Miami VA Medical Center

Recruiting: Gulf War-Era Sedentary, Male Veterans

The CMI/GWI Survey Study

In this study, we are working to get a better understanding of veterans' unexplained illnesses around the country, as well as, creating a registry for future contact. The survey asks participants if they would like to be contacted regarding future research opportunities and findings. The institute will reach out ONLY to those who agree to be contacted regarding information about studies that are available to them both locally and nationally and invitations to online seminars and events in the participant's area.

Boston Biorepository, Recruitment and Integrative Network (BBRAIN) for GWI

The purpose of this study is to help us better understand and be able to diagnose Gulf War veterans' symptoms. This study aims to produce data to be stored for doing future research on Gulf War veterans' health outcomes.

Locations: Miami VA Medical Center (VAMC), San Francisco VAMC, Bronx VAMC and Boston University Medical Center. Recruiting: Veterans with Gulf War illness

Ongoing Gulf War Illness Research



A Translational Medicine
Approach to Gulf War
Illness: From Cells to
Therapy



CMI/GWI Survey Study



BBrain for GWI

For more information on these studies, contact us at 305-575-7648 or VHAMIAGWI@va.gov, or visit our website: https://www.nova.edu/nim/research-studies/research-

studies.html

REDUCING INFLAMMATION THROUGH DIET

Elizabeth Balbin, INIM Special Projects

We keep hearing about inflammation and anti-inflammatory diets, but what does that even mean? While there are specific occasions in which inflammation helps the body in order to protect it from harm, there are other times where inflammation can cause worsening of some conditions in which the immune system does not work as it should. In these circumstances, chronic low level inflammation not only exacerbate



illness, but can also lead to slower recovery. An anti-inflammatory diet may serve as a complementary therapy for many conditions that become worse with chronic inflammation. In these instances, learning how to nourish your body with simple anti-inflammatory foods has shown to be effective in many cases to help reduce symptoms, prevent further damage and even reverse some illnesses. But what is an anti-inflammatory diet and how does it actually help? An anti-inflammatory diet usually consists of wholesome and mostly vegetable heavy ingredients. These include foods that have been well studied for years and found to help reduce inflammation in the body while providing other health benefits. With all the stressors of everyday life, including chronic illness, COVID-19 and other external factors, now more than ever eating an anti-inflammatory and antioxidant (help removes free radicals from your body) diet, is one of the best things you can do for your body.

Anti-inflammatory diet should include a variety of foods that are rich in nutrients, provide a range of antioxidants and contain healthful fats. Here are 12 food items you may want to add to your diet:

- 1. Oily fish: includes salmon, tuna, mackerel and sardines. These fish are high in Omega-3 fatty acids and polyunsaturated fatty acids, which have been shown to be helpful in autoimmune illnesses, brain health, heart disease, and cancer. In addition, some studies have shown that eating oily fish may be helpful against depression and anxiety.
- 2. **Leafy greens:** spinach, kale and collard greens not only help alkalinize our body, but also nourish our body on a cellular level. Leafy greens also contain vitamin K, which can protects bones from osteoporosis. Also, they may be one of the best cancer preventing foods, which may protect against cognitive decline and help reduce inflammation.
- 3. **Berries:** blueberries, blackberries and strawberries are loaded with powerful antioxidants called anthocyanin, which has been shown to be helpful with inflammation, cancer and cardiovascular disease.
- 4. **Broccoli/colorful vegetables:** Vegetables such as broccoli contain a component call sulforaphane which also been shown to help detoxify chemicals from our environment. Adding a variety of colorful vegetables to your diet will give you a wide range of nutrients that our bodies need.
- 5. **Healthy fats:** such as avocado and olive oil contain monounsaturated fats that help reduce cholesterol and joint inflammation. Some studies have shown a powerful impact on the reduction and prevention of neurodegenerative disease. Tip: Try using olive oil instead of butter or margarine.

- 6. **Nuts and seeds:** Almonds, walnuts and other nuts are chock full of nutrients, protein and even fiber. Some benefits of eating nuts include cardiovascular and cognitive benefits. They contain the "good fats" that we need to include in our diet. The American Heart Association recommends & about four servings of nuts per week. Some nuts are better than others, for instance, walnuts are higher in Omega-3 and some research has linked almonds with reduced risks of developing certain forms of cancer. Try adding a handful of unsalted, raw or dry roasted nuts to your diet!
- 7. **Legumes:** An incredibly simple and inexpensive food that is low in fat, high in fiber and has zero cholesterol. This plant-based staple is full of vitamins and protein. While the benefits of legumes in your diet are well known, two things to keep in mind is how you prepare them and how well you tolerate them. Be wary of eating canned beans that are high in salt or cooked with unhealthy items, which may defeat some of the benefits.
- 8. **Garlic:** The benefits of garlic have been studied for centuries. Besides adding great flavor to you dishes, garlic is loaded with good for you vitamins and minerals. Benefits range from lowering cholesterol, reduced risks of heart disease, lowering blood pressure and supporting the immune system. Some evidence suggests it can help reduce bone loss and improve memory.
- 9. **Turmeric:** Turmeric contains bioactive compounds such as curcumin, which has powerful anti-inflammatory properties and the potential to help prevent heart disease, Alzheimer's and cancer.
- 10. **Green tea:** Has been consumed for centuries for many of its health benefits. More recent studies have shown that these include cancer prevention, lowering the risk of heart disease, protection of cognitive functioning and many others.
- 11. **Chia seeds:** These little seeds are full of health benefits that include Omega-3 fatty acids, antioxidants, iron, calcium and even fiber. They can be added to other foods or soaked before eating. Look for recipes that include them such as smoothies and pudding.
- 12: **Ginger:** Another ancient spice that is loaded with nutrients and bioactive compounds and have a powerful benefit to our brain and body. Because of its anti-inflammatory effects, ginger has been shown to be helpful in osteoarthritis and in helping reduce blood sugars and improving heart health. Other benefits include treatment of indigestion, lowering cholesterol, protection against Alzheimer's disease, helping fight infection and may even help prevent cancer.

While no single food can help boost a person's health, it is important to include a variety of healthy vegetables and fruits to your diet while reducing foods that increase inflammation.

Plant-based diets have been associated with reduced risks of illness



and inflammation. Foods that you may want to avoid or reduce include processed foods; refined carbs such as rice, pasta and bread; foods containing additional sugar and salt, preservatives and added dyes; as well as foods that contain unhealthy oils. Remember to talk to your healthcare professional about specific dietary needs, any allergies you may have and as well as supplements you may be taking.

Here's to healthy eating!

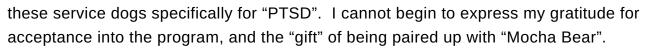
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VETERAN SERVICE DOG

What weighs 60 pounds, has a black sleek coat, walks on four legs, and has beautiful brown eyes? A 4-year-old female Labrador named Mocha!

Mocha is the service dog of Gulf War Veterans, Ronald and Jill Green, who affectionately refer to her as "Mocha Bear." As you read on you will get a quick glimpse of the absolute blessing and marvelous benefit Mocha has made in the overall quality of life for the Green family.

I am Ronald Green and I am a military retiree. A few years ago, I learned about an organization named, America's VetDogs®, who had a training program for



Over the past couple of years, my wife and I have witnessed Mocha's ability to calmly navigate through crowded airports- while accompanying us on several commercial flights. The only challenge we have – and it's not with her – it is with other travelers who almost always insist on petting her; even though they read her vest which clearly states "please don't pet, I'm working". Oh well, it is human nature.

Among the various aspects of her training, we feel the most important is her ability to perform "nightmare interruption". Additionally, she can turn light switches on and off, retrieve items, and assist with my balance on stairs. Best of all, I have experienced the strong bond that she and I have; especially when I'm stressed. She immediately

resorts to her training to "alert", which helps me to refocus and regroup. I know for a fact, there have been a couple of instances where, had Mocha not been present and sensed my mood change, my responses to those outcomes would have been very different!

For anyone reading this, please know that our "Mocha Bear", is a beloved part of our family and we are so very grateful to be able to experience the mental and physical benefit of having a professionally trained service dog. How fitting it is, that after so many years of rendering military service, we now receive service that is uniquely rendered at just the right time and in just the right package. How blessed we are to have her in our lives!

- Ronald, Jill, and Mocha Green

During this time of the COVID-19 pandemic, we have all had to make major adjustments to how we live. For some of our veterans it has been extremely difficult and having a service dog as a companion has helped with this adjustment. For more information about America's VetDogs®, go to www.Vetdogs.org.

VETERAN SPOTLIGHT

Todd Anthony "Tony" Langeland Gulf War Veteran

"Never give up" - a famous motto that Mr. Todd Anthony "Tony" Langeland follows and displays on a small yellow sticky note, as a personal reminder, on his home computer.

Tony Langeland has always been interested in history since he was a young child. He displayed a keen interest in joining the military because his father served in the United

States Marine Corp during World War II.

After high school, Tony joined the United States Marine Corp Reserve and loved everything about it. He always wanted to be a part of something larger than himself and the Marine Corp gave him that. When he completed college, he moved from Nashville to Louisville, Kentucky as a Federal Agent with Immigration. While there, he transferred positions to the Army Reserve.

In the summer of 1990, while he was training for his new MOS in a fuel handling unit, he heard the news that Saddam invaded Kuwait. He was deployed in early 1991 until June 1991. He was a Fuel-Handler providing fuel to the 7th Corps during the war.



After Operation Desert Storm, he stayed in the Army Reserve and decided to retire after a total of 13 years served.

Tony joined the GWICTIC Patient Advocate Advisory Committee, back in late 2019 with the objective of helping other veterans with Gulf War illness. Since then, he has been spreading awareness about Gulf War illness and the research being done at the Institute for Neuro-Immune Medicine at Nova Southeastern University.