

WRIISC *Advantage*

SUMMER 2018

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In this edition of **WRIISC Advantage**, we cover topics important to improving Veteran's health including the effects of body movement and physical activity on health and what is referred to as the "gut and brain health connection". Read on and find out about these topics and much more!

DIRECTORS' CORNER

Many of you may have been hearing about Veterans Health Administration's (VHA's) recent focus on whole health. We are happy to report that our WRIISC model of care falls in line perfectly with this focus. Every WRIISC patient interaction supports Veterans in achieving their greatest overall well-being. Working with our team, Veterans identify what matters most in their lives and learn new approaches to live optimally, working to resolve any obstacles standing in the way. Central to the idea of whole health is what an individual Veteran can do on their own to manage their symptoms and thus live a better life. At the WRIISC we introduce and reinforce these concepts, creating a more confident Veteran leaving our Center ready to take next steps on the path to wellness. **Keeping a focus on whole health remains our trademark!**



Wes Ashford, MD, PhD
Director, CA WRIISC

Drew Helmer, MD, MS
Director, NJ WRIISC

Matt Reinhard, PsyD
Director, DC WRIISC

BODY MOVEMENT and PHYSICAL ACTIVITY MATTER!

OFTEN VETERANS hear about the importance of exercise and the associated health and wellness benefits whether it be from a doctor, the news, or another source. Physical activity and movement can positively impact physical and internal movements important to body function and can also improve sleep, energy levels, strength, body weight, and even mood. Physical activity and body movement also play a crucial role in preventative health for diseases related to the heart, bones, digestive system, and immune system. There are many different types of body movements and each one is important to practice on a daily basis to keep a person healthy. These movement types include:

- Lateral or bending and moving side-to-side.
- Forward-backward bouncing, rebounding, and jumping.
- Increasing or decreasing the angle of a joint (flexion/extension).
- Moving a body part towards or away from the center of the body (abduction).
- Shaking of the entire body or a specific part of the body.
- Vibrational or left to right movement within the body.
- Resistance or using external force to increase muscular strength/bone density.
- Aerobic or increasing heart rate/oxygen intake and nurturing the cardiovascular system.



Most of these movements happen while doing daily chores like house and yard work and leisurely activities including gardening, golfing, and playing with children or grandchildren. The negative health effects for inactivity can include a number of unpleasant symptoms- further discomforts in body movement, weight gain, musculoskeletal injuries, cardiovascular disease, psychological disorders such as depression and anxiety among other conditions. All of this makes it so important for a person to keep moving! It's generally recommended an adult participate in one to two hours of continuous physical activity throughout the day. Participating in aerobic exercise, strength training, and stretching are all good ways to make sure that your body movements are reaching all the parts of your body. Age and other health factors will be important when choosing physical activities, body movements, or exercise programs that are suitable for you.

Mindfulness movement is an excellent way you can practice full body movement and also reduce the physical and emotional effects of stress. Research has also shown health benefits including increased strength and flexibility, better balance and coordination, improved reaction times, better lung function, heightened cardiovascular conditioning, and weight loss. Types of mindfulness movement include:

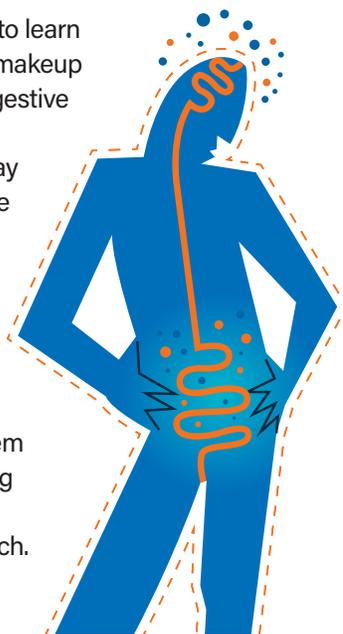
1. **QIGONG** is a Chinese practice using movement, affirmations, breath work, visualizations, and meditation to improve the flow of "qi" or life force.

2. **YOGA** includes stretching and strengthening poses, breathing exercises, focused attention, and meditation practices which also improve the flow of "prana," the yogic term for life force. Yoga practice operates on the "nadis" similar to the way acupuncture works on the "meridian" system. View our WRIISC Star-Well Kit for more information on Qigong or Yoga and getting started: <https://www.WarRelatedIllness.va.gov/education/STAR/index.asp>.

ACTUALLY, ANY TYPE OF REGULAR EXERCISE IS IMPORTANT. If you have numerous aches and pains, particularly in large joints, non-impact exercise is important. Another type of excellent exercise is swimming. The VA develops programs with the YMCA and the US Master Swimming Association to encourage Veterans to take up swimming as a regular form of exercise: <http://www.usms.org>. *You should consult with your doctor before beginning any exercise/body movement program.* 🌿

Gut and Brain Health Connection

Veterans might be surprised to learn that the type, amount, and makeup of bacteria in the human digestive system or gut (referred to as gut microbiome) hugely affect the way that the human brain works. Have you ever "gone with your gut" when making a choice or had "butterflies in your stomach" when anxious or excited? This is a result of what scientists are now calling a second brain or the enteric (gut) nervous system (ENS). The ENS is not like the "big brain" we know of, but instead located in the lining of the stomach. It significantly impacts digestion, mood, health, and even the way one thinks! The Gut-Brain Axis or GBA is the term that describes the relationship between gut microbiome/ENS/brain.



connection and how to successfully reduce or even eliminate symptoms. Keeping a healthy gut microbiome is a key to how a Veteran with IBS functions and feels on a day to day basis. The latest tips for increasing good gut bacteria and improving the symptoms of IBS include:

- Reducing stress: relaxing breath, biofeedback, yoga, meditation.
- Hypnosis.
- Cognitive Behavioral Therapy (CBT).
- Acupuncture which relieves bloating.
- Exercise which helps bowel regularity and reduces stress.
- Increase fiber intake.
- Increase of foods that contain friendly bacteria such as yogurt.
- Small, frequent meals.
- Anti-inflammatory diet (include lots of fruits/vegetables/whole grains/plant-based proteins (like beans and nuts), fatty fish, fresh herbs, and spices).
- Avoid trigger foods.
- Keep a food diary if symptoms still persist.
- Hydration (drinking water).
- Peppermint oil.
- Turmeric.
- Carob powder for diarrhea.

The gut/brain connection is especially important when a Veteran experiences unpleasant gastrointestinal symptoms with no obvious physical cause- commonly referred to as Irritable Bowel Syndrome or IBS. Recent research supports that psychological or emotional stress can trigger unhealthy bacteria in the gut of IBS patients to "act up" causing unpleasant symptoms. IBS symptoms can be different based on the individual and change over time, and can include abdominal pain, constipation, diarrhea, indigestion, gas, bloating, fatigue, and headaches. Treatments for IBS have evolved in recent years, focusing more on the gut/brain

For more information about IBS or the related treatments visit:

- **VA Center for Integrated Health**
https://www.mirecc.va.gov/cih-visn2/Documents/Patient_Education_Handouts/Irritable_Bowel_Syndrome_Information_for_Patients_Version_3.pdf
- **National Institute of Health**
https://nccih.nih.gov/sites/nccam.nih.gov/files/IBS_11-18-2015.pdf 🌿

Gulf War Illness

Since the Gulf War in 1990-1991, there has been much discussion in the Veteran community and in the media about Gulf War Illness (GWI). GWI refers to a group of unexplained or ill-defined chronic symptoms found in Veterans deployed to the Persian Gulf during Operation Desert Storm/ Operation Desert Shield. GWI falls under the umbrella of what is referred to as Chronic Multisymptom Illness (CMI). Symptoms of GWI vary by individual which make it challenging for healthcare providers to recognize and treat it. Here are the most common symptoms of GWI:

- Fatigue
- Muscle and joint pain
- Cognitive difficulty
- Skin rashes
- Headaches
- Shortness of breath
- Sleep disturbances
- Abdominal (belly) discomfort/ bowel changes

Despite much research, the cause of GWI is unclear. A number of possible causes include:

- Immune dysfunction
- Nerve dysfunction
- Mitochondrial (the part of your cells involved in energy) dysfunction
- A genetic and environmental exposure interaction
- Deployment related exposures
- A combination of these factors

Many Gulf War Veterans have concerns that exposure to chemicals such as low dose nerve agents, pyridostigmine bromide (taken in pill form to prevent effects from exposure to nerve agents) and smoke from oil well fires caused GWI. There have been no clear or consistent links found. Veterans can work with a healthcare provider or see an environmental health clinician or expert in occupational and environmental exposures if they have specific exposure concerns.

As noted above, GWI falls under a broad term for a group of chronic, unexplained symptoms called Chronic Multisymptom Illness (CMI). In 2014, the VA and Department of Defense (DoD) released guidelines for healthcare



SEVERAL STUDIES SHOW THAT ABOUT **ONE-THIRD** OF **GULF WAR VETERANS** HAVE **GWI**.

IT'S IMPORTANT TO NOTE THAT DEPLOYED GULF WAR ERA VETERANS **DO NOT** HAVE HIGHER RATES OF DEATH COMPARED TO GULF WAR ERA VETERANS WHO DID NOT DEPLOY.

providers caring for Veterans with CMI. These guidelines can also help healthcare providers identify, manage, and treat GWI. Veterans with concerns about GWI can learn more about the guidelines for treatment of CMI by visiting:

▶ **PATIENT SUMMARY**

<https://www.healthquality.va.gov/guidelines/MR/cmi/VADoDCMICPGPatientSummary2014.pdf>

▶ **FAQ**

<https://www.healthquality.va.gov/guidelines/MR/cmi/CMIFAQSheetFinal.pdf>

While there are no specific treatments for GWI, there are many things that can help a Veteran manage their symptoms. The focus of treatment is improving quality of life and functioning. Treatment without medicine, or non-pharmacological treatment, is usually tried first. It can include:

- Graded exercise programs
- Yoga
- Acupuncture
- Cognitive-behavioral therapy

There are some medications which may help reduce symptoms. Care for symptoms should be tailored to the individual. What works well for one person may not work well for someone else. Care coordination is a central part of managing chronic conditions such as GWI. It is important for Veterans to work with their healthcare team to check their response to any treatment.

VA continues to look for the best approaches to Veteran care. They also will continue to do more research about GWI and CMI. ↪

FOR GULF WAR VETERANS: Participation in the VA's **Gulf War Registry Health Exam** helps identify health issues related to GWI and can assist in getting an appropriate specialty evaluation. It also assists the VA in understanding and responding to these health problems more effectively. For more information, go to <https://www.publichealth.va.gov/exposures/gulfwar/benefits/registry-exam.asp>.

Phone-Based Meditation Classes for Veterans

WRIISC CONTINUES TO LOOK FOR WAYS to support Veterans and provide easy access to our education for all Veterans registered in the VA Nationwide.

NJ WRIISC's MINDFULNESS MEDITATION CLASSES (twice a month)

SCHEDULE:

August - October 2018 dates:

- August 3rd and 10th **Mindful Breathing**
- September 7th and 14th **Mindful Body Scan**
- October 5th and 12th **Mindful Movement**

TIME:

- 11am – 12pm, Eastern Standard Time (EST)
- 10am – 11am, Central Standard Time (CST)
- 9am – 10am, Mountain Standard Time (MST)
- 8am – 9am, Pacific Standard Time (PST)

HOW TO PARTICIPATE: Call 1-800-767-1750, then enter Access Code 54220#.

For more information about this class, please visit: <https://www.WarRelatedIllness.va.gov/education/local-offerings/support/Mindfulness-Meditation-Class-flyer.pdf>.



A Veteran can take any or all of the classes listed by calling a toll-free number from the comfort of their home!

CA WRIISC's YOGA SLEEP (iRest®) MEDITATION CLASSES (weekly)

SCHEDULE: Weekly, each Thursday

TIME:

- 2pm – 3pm, Eastern Standard Time (EST)
- 3pm – 4pm, Central Standard Time (CST)
- 4pm – 5pm, Mountain Standard Time (MST)
- 5pm – 6pm, Pacific Standard Time (PST)

HOW TO PARTICIPATE: Call 1-800-767-1750, then enter Access Code 24953#.

For more information about this class, please visit: <https://www.WarRelatedIllness.va.gov/clinical/integrative-health/ca/WRIISC-What-is-Yoga-Nidra-Meditation.pdf>. ↗

Research Matters

WRIISC continues to be involved in GW research. Below is a study recently published by the WRIISC research team:

PUBLICATION TITLE: Abnormal rheological properties of red blood cells as a potential marker of "Gulf War Illness: A preliminary study"

Key Points:

QUESTION: Are red blood cell (RBC) properties affected in Veterans with Gulf War Illness?

FINDINGS: In comparison to Veterans without GWI, RBCs of Veterans with GWI are more deformable (able to change shape). In addition, the size and shape of RBCs are more diverse in Veterans with GWI versus those without GWI.

MEANING: In this preliminary study, we observed increased deformability along with increased size and shape of RBCs in Veterans with GWI, which may contribute to the origination of symptoms of GWI or a clue about the underlying cause of GWI. Further research is required to confirm our findings and the role of RBC monitoring in GWI.

ADDITIONAL INFORMATION: This research appears in the journal *Clinical Hemorheology and Microcirculation*, 2018, Volume 68. Authors are from the NJ WRIISC (Michael Falvo, Yang Chen, Jacquelyn Klein-Adams, Duncan Ndirangu) and VA New Jersey (Michael Condon). ↗

Around the WRIISC

DC WRIISC

Whole Health Coaching now available!

WHOLE HEALTH COACHING

is now applied in the care of Veterans who receive a comprehensive clinical evaluation at DC WRIISC. During an evaluation with the DC WRIISC clinical team, several clinicians with different backgrounds and expertise work closely together to support Veterans with deployment-related health concerns on their mission to achieving better health. A majority of Veterans report that after their evaluation they are universally happy with their experience at DC WRIISC and feel that a brighter health status moving forward is not only possible but achievable. The application of whole health coaching to clinical care at the DC WRIISC supports the momentum expressed by these WRIISC Veterans in their journey to improved health. Through this approach to care, the DC WRIISC clinicians assist these Veterans to develop personal goals related to their care plan and identify what matters most to them as individuals. This program also allows DC WRIISC clinicians to provide advanced follow-up support to Veterans after their onsite visit to identify if the Veteran's desired health outcomes are achieved and if adjustments are needed. The whole health coaches at the DC WRIISC provide continued support to Veterans evaluated in the development of their self-management strategies, which are needed to make lifestyle changes or follow-up with WRIISC recommendations thoroughly. Whole health coaching paired with traditional medical care at the DC WRIISC has the potential to transform Veterans' lives by assisting them in making positive and long-term health outcomes a reality!



A VETERAN RECEIVES WHOLE HEALTH COACHING FROM THEIR VA NURSE. DC WRIISC NOW PROVIDES THIS SERVICE.

CA WRIISC

Benefits of Yoga: It only works if you do it.

CA WRIISC HAS PROVIDED

weekly yoga classes for Veterans since 2010 and currently offers daily classes about 50 weeks out of the year. Referrals to the yoga program have continued to grow with nearly 3000 yoga referrals since 2010. In 2017, CA WRIISC

studied these yoga referrals more carefully. Data about symptoms was gathered by phone from newly referred Veterans and looked at to see if there was a relationship between reasons for seeking yoga and whether the Veteran attended class. Findings included:

- ✓ Veterans who are referred to yoga by their providers for mental health reasons attend at higher rates than those who are referred for chronic pain or fatigue.
- ✓ Veterans who report they are coming to yoga for sleep issues and the desire to improve strength and flexibility as well as post-traumatic stress disorder (PTSD) symptoms attend at higher rates than those who have no mental health symptoms.
- ✓ Surprisingly, it appears that the Veterans who might benefit the most from yoga – those with chronic pain and fatigue – are simply not attending.

These important findings will be presented at an upcoming scientific meeting on integrative medicine and health.

Veterans who do participate in yoga classes at CA WRIISC continue to express both patient satisfaction and symptom improvement. For these reasons, looking at barriers that stand in the way of Veteran participation is an important new area of study for CA WRIISC clinical yoga program and research.

For more information about the CA WRIISC Yoga Program and its upcoming class schedule, visit:
<https://www.WarRelatedIllness.va.gov/clinical/integrative-health/ca/index.asp>



NJ WRIISC

Veteran Feedback Reinforces Successful Work by Clinical Team

THE NJ WRIISC CLINICAL TEAM remains highly committed to improving the life of each Veteran medically evaluated. When a Veteran reports that health is improved through a WRIISC evaluation or by WRIISC recommendations, it means “the world” to the team and illustrates the impact of a job well done.

Recent feedback included comments directly from Veterans such as:

[the clinical evaluation staff] members exceeded anything I was expecting and I felt that my concerns were being acknowledged and addressed comprehensively for the first time.

The level of expertise you all presented and the compassion you showed were amazing!

The nightmare of my illness slowly became a dream of recovery, all thanks to a wonderful team of doctors who changed my destiny.

Your team exceeded my expectations of professionalism, thoroughness, and empathy. I was just an old worn out soldier, but your team took care of me as if I was the most important person on earth...

All WRIISC team members remain focused on making a positive difference in the lives of our Veterans and their health and wellness by providing the care that our Veterans truly deserve. 🐾

ATTENTION READER: Do you prefer to receive the WRIISC Advantage newsletter electronically? Email us at wriisc.nj@va.gov with your full name and preferred email address.

Produced by the
War Related Illness and Injury Study Center

Editor:
Susan L. Santos, PhD, MS

Assistant Editor:
Christina Ramage-Miller, MSPH

WRIISC Directors:
Wes Ashford, MD, PhD, CA WRIISC
Drew Helmer, MD, MS, NJ WRIISC
Matt Reinhard, PsyD, DC WRIISC

Graphic Artist:
Florence B. Chua, MS

Contributors:
Steven Greer, mS-EP-C
Drew A. Helmer, MD, MS
Walt Jachimowicz, MSN, RN, CNL
Louise Mahoney, MS, RYT
Christina Ramage-Miller, MSPH
Susan L. Santos, PhD, MS
Serena M. Satcher, MD, FAAPMR

DC WRIISC: 1-800-722-8340
War Related Illness and Injury Study Center
Department of Veterans Affairs
Washington, DC VA Medical Center
Room 3B 203, Mail Stop 127
50 Irving St., NW
Washington, DC 20422-0002

CA WRIISC: 1-888-482-4376
War Related Illness and Injury Study Center
Department of Veterans Affairs
Palo Alto Health Care System
3801 Miranda Ave.
Mail Code 151Y
Palo Alto, CA 94304-1290

NJ WRIISC: 1-800-248-8005
War Related Illness and Injury Study Center
Department of Veterans Affairs
New Jersey Health Care System
385 Tremont Ave.
Mail Stop 129, 11th floor
East Orange, NJ 07018-1023

For comments or concerns regarding this newsletter, please contact us at:
1-800-248-8005 or wriisc.nj@va.gov.



War Related Illness & Injury Study Center
Department of Veterans Affairs (VA)
New Jersey Health Care System
385 Tremont Ave., Mail Stop 129
East Orange, NJ 07018
1-800-248-8005
www.WarRelatedIllness.va.gov

VA



U.S. Department of Veterans Affairs
Office of Patient Care Services
Post-Deployment Health Services



This newsletter contains a minimum of 30% post-consumer waste.

On-demand post deployment training for providers now available on TRAIN (public) and TMS (VA-internal) with accreditation:

WRIISC
War Related Illness & Injury Study Center
Post-Deployment Health Services

Common Exposures

Solvents
Many Servicemembers use industrial solvents in regular military tasks such as cleaning, degreasing, paint stripping, and thinning oil-based paints. Too much exposure to some industrial solvents can cause short-term and long-term health effects. Solvents may impact your health depending on the specific chemical, level of concentration, length of exposure and how it enters the body. Such health impacts may manifest as:

- Blood disorders,
- Liver injuries or
- Neurological Disease,
- Kidney injuries.

For more information, visit:
<http://www.cdc.gov/niosh/docs/87-104/default.html>
<http://www.publichealth.va.gov/exposures/solvents/>
If the links are not active, simply type the URL into a new browser window.



Metals

You must review all of the hazards before proceeding to the next page.

Access our training by visiting:

- <https://www.TRAIN.org> (public) or
 - <https://www.TMS.va.gov> (VA-internal)
- and search for "WRIISC"

