

December 1, 2022

VAARNG H2F



Total Health & Performance Newsletter

In this issue:

- Tendon and Ligaments Strengthening
- Slow down your long runs
- Sleeping in a Tactical Environment
- Prompts for self-reflection
- Importance of Protein in Nutrition

Total Health & Performance Newsletter

The purpose of this newsletter is to communicate across the spectrum of the VAARNG and share significant updates, education, training and events related to all the 5 domains of health and fitness.

ACFT Updates:

If you are an OIC/NCOIC for your Unit's next ACFT the following sites will provide the latest and most accurate information about the test.

<https://www.army.mil/acft/>

<https://usacimt.tradoc.army.mil/ACFTGuidance.html>

How to improve your ACFT 2 Mile Run when doing your long runs

Our intuitive thinking tells us that if we want to improve our running we should train by running as fast and as long as we can. However, this could not be more far from the truth.

First, let's make sure that we understand that the 2 mile Run is an event that challenges the Aerobic system and that in order to improve we need to incorporate distances longer than 2 miles in order to improve. Runs between 4-6 miles could be very beneficial.

Understanding Aerobic vs. Anaero-

Physical PMCS

"Tendon and Ligament Strengthening: Is it Important?"

When we look at the word strength, images come to mind of large muscles. But these muscles cannot do anything without being connected appropriately to the rest of the body. Tendons

being connected appropriately to the rest of the body. Tendons connect the muscle to the bone, which allows us to contract the muscle, as well as absorb impact and transfer forces. Ligaments connect bone to bone which helps stabilize joints and keep it in place. These connective tissues have elastic properties which mean they are meant to recoil and move with us as we lift and move. As we age, have jobs that keep us sitting still at a desk or even perform continuous repetitive movements (i.e. running/ endurance activities), this can affect the response and health of these parts. In comparison to muscle fibers, making changes to tendon and ligament health takes much longer to improve- which is why an injury to these takes much longer to heal as well. But improving the tendon and ligament strength, or stiffness, not only protects you in the long term but also can improve your efficiency with specific movements like ground contact time or cadence speed in running.

So how do we do this? 3 ways that are shown specifically in evidence: eccentric training, plyometric training and isometric training. Eccentric training with lightly weighted resistance exercises (NOT bodyweight alone) on a single limb working on controlling in a slow and purposeful pattern into a lengthened position. A few examples of these exercises would be Eccentric Heel Raises, Single Leg Squats and Single Leg Deadlifts. Plyometric training are quick, explosive movements that work on that recoil response between the muscle/tendon as well as stability at the joints with the ligaments as well. A word of caution- gradually introduce plyometric training especially if this is new and/or get guidance from a MFT/strength coach that you know. A few examples of plyometric exercises are Box Jumps, Lateral Hops, Squat Jumps, and Lunge Jumps. And finally, isometric training is when a muscle is held in a still position typically in the middle of the movement. This emphasizes stability and it is recommended to mix these movements in with heavy resistance and eccentric routines. A few examples of isometric exercises are planks, wall sits or calf holds. There are many more in each of these categories that can be expanded upon- if you have questions or would like more information, reach out and we can help guide you in the right direction!

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bic:

Aerobic: When we run slow or keep our effort level "easy", our bodies utilize oxygen to power our muscles to utilize fat and some glycogen as the source of fuel. This is great, because our bodies have lots of fat and by using this type of fuel our bodies have pretty much unlimited resources.

Anaerobic: In the other hand, when we run fast or at a medium/hard intensity (which is what most runners do), we cut short our energy resources because our bodies are not able to utilize fat as the main source of fuel and instead it primarily utilize glycogen.

So, if you want to run longer, allow for better faster recovery, reduce your injury risks and build your aerobic capacity, **slow down**. Make sure that 75%-80% of your runs are done at a very easy, conversational pace. If you finish your run and you feel that you could do it all over again, you have nailed your long run.

If you want to have an idea of what pace you should run, your easy run you can use this link: <https://runnersconnect.net/long-and-easy-run-pace/>

Remember, you cannot you cannot make a mistake by running too slow but you can hurt progress by running too fast. Now, go out there and enjoy your run.

MSG AP—CPT/MFT

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Sleep in a tactical environment

Sleep is critical for sustaining the mental abilities you need for success in training and on the battlefield. Even simple tasks such as communicating, driving, or plotting grid coordinates can be impaired by inadequate sleep (anything less than 7—9 hours every 24 hours). Soldiers can correctly sight a target – but they might select the wrong target.

Planning for sleep in training and tactical environments is a core leader competency. Leaders must know the sleep-work cycles of their Soldiers, particularly when they are working shifts, are in operational environments, or are outside standard duty hours.

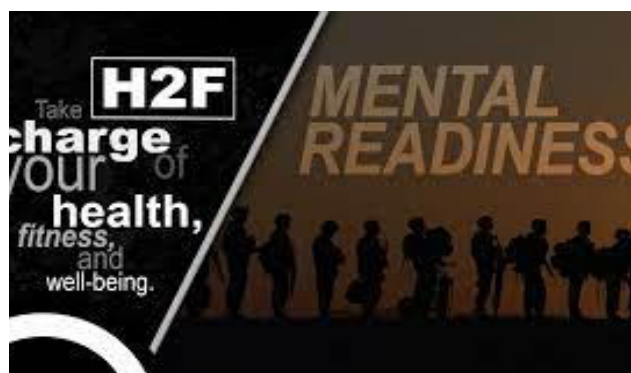
Combat operations can create situations where inadequate sleep becomes the norm. Soldiers who do not get enough sleep accumulate a sleep debt that must be paid off by getting the needed sleep. It's mission-critical to make sleep your top priority.

To learn more, follow the following link or scan the code: <https://p3.amedd.army.mil/performance-learning-center/sleep/sleep-tactics-for-sustained-operations>



Nutrition Readiness— Performance benefits of protein

- Builds and repairs muscles and connective tissue
- Builds red blood cells
- Builds hormones and en-



Autumn is a season many of us look forward to. Cooler weather,

zymes

- Is a back-up source of energy
Protein is essential for performance. When you are physically active, you work your muscles and connective tissues hard. You need protein to build and repair injuries to those tissues. In addition, when you run out of carbohydrate stores, your body burns protein for energy. Those who are physically active need more protein than those who are more sedentary.

As mentioned before, protein is a backup energy source, but do not rely on protein for energy. When you burn protein, it is because you are low on carbohydrates. Too few carbohydrates and calories cause you to burn valuable lean tissue, which weakens your muscles and can decrease overall strength.

How much protein do I need?

The Recommended Dietary Allowance (RDA) for protein is 0.36 grams per pound body weight. Highly active individuals may need 1.5–2 times the RDA to repair tissues and build the muscle strength and size required for top performance. This does not necessarily mean that when you are in training you need to eat twice the amount of protein that you do when you are not in training. Most people eat this amount and more without even trying.

<https://p3.amedd.army.mil/performance-learning-center/nutrition/protein>

beautiful scenery, new hunting and sports seasons, holidays, and many of our Virginia Army National Guard family returning from various tours of duty this year. This season also presents an opportunity to begin to reflect on the year and fine-tune our mental readiness before spring arrives. Options to ensure you are mentally fit may include self-care, use of support systems, or linking up with a professional resource such as a counselor, chaplain, H2F or MRT asset, or other medical providers.

Below are a few prompts for self-reflection from the Holistic Health and Fitness team to improve your mental readiness.

- ⇒ What were the highlights and lowlights over the past year?
- ⇒ How can I get the process of closure and setting new goals started before 2023?
- ⇒ When can I prepare myself and cope ahead for the future?
- ⇒ Who can I reach out to? Who might need me to reach out to them?
- ⇒ Where can I turn to, or direct a fellow soldier to, in times of need for support?

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World Mental Health Day
October 10



DOMESTIC
VIOLENCE
AWARENESS MONTH

