July 2022

VAARNG H2F

Total Health & Performance Newsletter

In this issue:

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

"The Best Investment You can ever make is in your own health"

Monthly Announcement

MFT-MRT Workshop

The VAARNG invites all the MFT's and MRT's to participate in this annual MFT/MRT Workshop to provide training aimed to conduct collective networking and education opportunity to re-fresh on training, discuss industry's education and development updates as well as develop an improved network, organizational structure and **Esprit de Corps amongst all of the VAARNG MFT/MRT community.**

September 24&25, 2022

FPVA—183rd RTI Bldg. 2101, E. Parade St.
Blackstone, VA 23824

POC: CPT Brian R Harder/MSG Ramon F Abreu-Perez

Physical Readiness: Energy Systems and Work Rest Ratios

Just like a car requires gas to operate, we require fuel as well for our body to perform. As we are more complicated than an automobile engine, our bodies operate on different energy systems in order to appropriately provide fuel at the right time and in the right burst. The three systems have different intensities and lengths of time that they last. From short intensity to long they are: ATP-PC (Phosphagen Creatine) (0-10 seconds), Glycolytic (10 seconds- 3 minutes), and Oxidative (3 minutes plus). Not to get too technical but they each get stronger energy storage the more you train in that zone. As this newsletter is all about the ACFT, we need to train in each of these energy systems in order to prepare the body appropriately for this performance test. ATP-PC is used for 3RM deadlift and Standing Power Throw. Glycolytic is used primarily for Hand Release Push-Up, Sprint-Drag-Carry and Plank. And Oxidative is used for the 2 mile run. If we only run all the time or do short quick lift sets for our workout, we are missing out on a primary energy system and improving that area. Some easy ways to adjust a workout is to do shorter sprints (30-60s, hill/stair repeats) on one of your run workouts during the week or turn one of your lift days (or part of it) into compound sets or a circuit lift to increase the amount of time that your body is under load to get to that middle 60-90 second range. And finally, work to rest ratios are important to allow the body to replenish those systems. If you keep going and going without rest, your body will move steadily towards using oxidative even if it is a bunch of 60 second bursts in a row. Typical work to rest ratios are 1:12 to 1:20 for ATP-PC, 1:2-1:5 for Glycolytic, and 1:1 to 1:3 for Oxidative. For a lifting exercise in ATP-PC zone, you should be resting 2 to 3ish minutes between sets to allow for system recovery. Work hard in all the energy systems, rest well and perform optimally on the ACFT!

CPT Brian Harder DPT, CSCS

ABCP Tape Certification Course

Why: AR 600-9 mandates training for designated NCO's that conduct HT/WT Tape.

How: Units utilize their MFT's, trained Medical Personnel or AWC to provide the training. Units can also reach out to the State MFT Coordinator for support.

POC: MSG Ramon F Abreu-Perez, MFT, MRT, CPT

WOD:

Dynamic Warm-up

1. **100m slow jog**
2. **Band or PVC Good Morning**
3. **Lunges with a twist**
4. **PVC/ Band passthroughs**
5. **5 x Inch Worms**

The Workout AMRAP 28mins

200m sprint

(40lbs/60lbs)

10 DB Squat and Press : (scale by using light resistance band or light object i.e. food cans)

10 Hand Release PU

10 Hang Knee Raises (scale to Reverse Crunches or suspension Knee Tuck)

(Rest 3 mins) and Repeat

Cashout by running 1 mile at the end of the AMRAP :)

Cooldown

100m walk

Foam Roll

MSG R.F. Abreu-Perez— MFT, MRT, CPT

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ACFT and Nutrient Timing by Performance Triad P3—April 29, 2021

Plan nutrient timing for peak results

Nutrient timing involves proper fueling strategies before, during and after physical training sessions and other strenuous activity. Solid strategies for eating and hydrating before, during and after exercise are essential. Follow these tips and recommendations.

BEFORE your workout or strenuous activity

1 hour or less before exercise – choice of: fresh fruit such as apples, watermelon, peaches, grapes, oranges, or a sports energy bar and/or ½ - 1 ½ cups (4-12 ounces) of carbohydrate electrolyte beverage

2-3 hours before exercise – choice of: fresh fruit, 100-percent fruit or vegetables juices and/or breads, bagels, Englis muffins with limited amounts of butter or margarine or cream cheese, yogurt, oatmeal, pancakes with limited amount of butter and syrup, or a sports energy bar and/or 2-4 cups (16-32 ounces of carbohydrate electrolyte beverage.

3-4 hours before exercise – choice of: Fresh fruit, 100-percent fruit or vegetable juices and/or beads, bagels, baked potatoes, cereal with milk, yogurt, sandwiches with a small amount of peanut butter, lean meat, or cheese, spaghetti with tomato sauce and/or 4-7 ½ cups (32-60 ounces) of carbohydrate electrolyte beverages.

DURING strenuous activity

Sessions lasting 45 minutes or less:

Drink ½ to 1 cup of water every 15–20 minutes during your workout. Do not exceed 1.5 liters or 1½ canteens per hour.

Sessions lasting 75 minutes:

- Glycogen levels start to dwindle, especially if you are only drinking water. After exceeding 45 minutes, consume 10–20 grams of carbohydrate (banana, sports drink, commercial sports bar or granola bar, gel shot, etc.) every 20–30 minutes.
- Continue drinking ½ to 1 cup of fluid every 15–20 minutes. Sports drinks can have added performance benefits during activity lasting longer than 60 minutes as they provide carbohydrates that help refuel glycogen stores and maintain blood sugar levels. They also contain electrolytes, like salt, which help you retain body water.

Endurance and intermittent, high intensity exercise lasting 1 to 2.5 hours – recommended carbohydrate is 30-60 grams per hour

- Endurance and ultra-endurance exercise lasting 2.5 to 3 hours or longer – recommended carbohydrate is 80-9 grams per hour

Alternatives to sports drinks:

- Dilute any 100% fruit juice with an equal amount of water. Add 1/8 teaspoon salt per quart (one quart = four 8 oz. cups). This mix closely approximates the carbohydrate, sodium, and potassium content of commercially available sport drinks.

Mix 1/3 cup sugar and 1/8 teaspoon salt per quart (four 8 oz. cups) of water. Flavor with unsweetened beverage base.

AFTER strenuous activity

Refuel to replenish your energy and start preparing your body for the next training session.

Fuel:

- Focus on eating protein and a carbohydrate-rich food within 30–60 minutes after exercise.
- Suggested carbohydrate/protein snacks include low-fat chocolate milk, 100% fruit juice (8 oz.) and a handful of nuts, whole-grain bread with peanut butter and banana, low-fat yogurt plus fruit, or a commercial sports bar.
- Optimize glycogen refueling by consuming 50–100 grams of carbohydrate in your beverage or food within 30–60 minutes of exercise and every 2–4 hours thereafter.

The post-workout fuel choices along with a complete balanced meal within 3–4 hours of activity will replace electrolytes.

Fluids: Continue to drink fluids and rehydrate.Drink 2–3 cups of fluid for every pound lost during activity. As indicated before, drinking small amounts of fluid at a time is more effective than large amounts occasionally.

- Drink until urine is clear or light yellow.

Avoid alcohol as a fluid replacement. If you do drink beer after activity, drink 1–2 cups of water or diluted juice at the same time to counter the dehydrating effects of alcohol.

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Mental Readiness & ACFT

While the Army's ACFT is designed to test the physical capabilities and readiness of each individual soldier, it is also a test of one's mental agility, endurance, and mindset. Just like we train to improve our fitness to reach our highest potential, we can also train ourselves to psychologically perform at our best. Much like elite athletes, soldiers can maximize their performance by using strategies before, during, and after the ACFT. Here are some recommended exercises to follow in preparation for the official ACFT:

Before:

- Physically practice the ACFT to establish your baseline performance. Take note of points or events during which your experience mental fatigue or limited confidence.
- Write down short-term and long-term measurable goals for yourself. Then use backwards planning to create a personalized plan to achieve them. Revisit your goals at least every 2 weeks to keep up your motivation and track progress.
- Use mental rehearsal to visualize events that you have the most room for growth in. This allows your brain to "practice ahead" without needing access to any equipment or placing more strain on your body.
- Plan ahead to ensure enough rest, hydration, caloric needs, and any other factors like environmental temperature and having needed items including full uniform are accounted for at least 24 hours ahead of time.

During:

- Have a mental warm-up routine. This might include music, body scan method, prayer, or something else.
- Use positive and instructional self-talk or key phrases throughout each event and do the same for others while waiting for your turn. Keep your mind focused and centered on target!
- Use breathing techniques to help regulate your stress, heart rate, and blood pressure.
- Be prepared to adapt as you go. Be self-aware of what you have left in the tank so you can strategize how to conserve your strength and speed through to the end.

After:

- Complete a mental cool-down routine. Find a quiet place, replay a positive "clip" from your performance, breathe, stretch, and refuel your body.
- Keep initial self-talk and conversations others focused on the positives. Make a plan to review potential areas for improvement later in the day.
- Continue to use resources include H2F and MRT assets, social supports, or other professional guidance.

Stephanie L. Malozzi

CPT, MS

BHO, Clinical Psychologist

VaARNG Medical Command