

VICTORY H2F

Cadre In-Cycle Fueling Guide



Hello Fort Jackson Drill Sergeants!

Welcome to your comprehensive tactical-fueling guide! This guide was developed by your Victory H2F nutrition teams to help you optimize your nutritional readiness throughout your 10-week cycles. We hope you find this guide useful as you navigate the typical nutritional challenges that come with being a DS. As always, we at H2F look forward to assisting and working with you toward your health and performance goals.

- Victory H2F teams

Table of Contents

In-Cycle Road Map	.....	Pg 3 - 4
Week 0	.....	Pg 5 - 6
Week 1	.....	Pg 7 - 8
Week 2	.....	Pg 9 - 10
Week 3	.....	Pg 11 - 12
Weeks 4 – 6	.....	Pg 13 - 15
Week 7	.....	Pg 16 - 17
Week 8	.....	Pg 18 - 19
Weeks 9 – 10	.....	Pg 20 - 21

In-Cycle Nutrition Road Map

Week 0: This is the optimal time to focus on YOU. Set yourself up for success during the cycle. Develop individual and/or family nutrition goals that you can use to guide you throughout the cycle. For example...

- Individual: I will meal prep breakfasts and lunches worth 5 days on Sundays for 45 minutes using recipes from the Tactical Fueling Guide.
- Family: We will pick 2 veggies to roast/air-fry for dinners for the week

Write out a meal plan calendar.

- Staple meals to rotate
- How to incorporate leftovers
- Batch prep foods that can be easily incorporated into simple & quick recipes
- Freezer meals

Plan for and have meal plan back-ups.

- Commissary options – sushi, sandwiches, frozen meals, rotisserie chicken
- Shoppette – sandwiches, wraps, salads, tuna & crackers

Week 1: Things will be fast paced and hectic during week 1 so it is important to be as prepared as possible. Utilize Sunday to meal prep and organize your fridge and pantry. Try to familiarize yourself with the battle rhythm for the week ahead as best as possible to plan for mealtimes and snacks. This is also the time to do daily energy assessments with yourself. Do you notice that you are relying too heavily on coffee or energy drinks in the morning or throughout the day? Our bodies' preferred source of energy is calories, from food. Not caffeinated beverages. It is okay to do 2-3 caffeine beverages a day, but make sure they are spread out and consumed with food for optimal energy.

Weeks 2 & 3: By now you have settled into a pace with the trainees. Things will still be chaotic and fast, so it's important for you to utilize the resources at your disposal that will help you get in nutritious and quick foods that help you meet your body composition and performance goals. The DFAC will be a main option. Your Bayonet performance dietitian strongly recommends that you eat there anytime that your trainees do. More nutritious and quick options for eating around post are listed in the guide below.

Weeks 4-7: In the heat of the cycle, sleep deprivation and stress will become a big concern. It is especially important for you to hone in on good nutrition practices to help you function and succeed through these weeks. Skipping meals is NOT an option. Skipping meals leads to higher reliance on energy drinks, causes imbalanced blood sugar levels, energy dips and crashes, as



well as negatively impacts your mood and tolerance for trainees. Although you will be at the ranges for most of these weeks, packing/prepping and accessing food should be priority. If you forget your food at home, make sure you utilize more nutritious cadre chow options or the shoppette for fast fuel.

Week 8: Living off of hot A's and MRE's with the trainees during the forge is not ideal. Some options that may help you with fresher food access would be to bring out coolers and ice to stock stuff for sandwiches/wraps, have fresh fruit and/or veggies, as well as other refrigerated snacks such as yogurt, milk, cheese and deli meat. This doesn't have to be an individual endeavor either. If you recruit the other Drill Sergeants in your platoon and split the tasks for food/meal prep, ice runs, etc... it will become much quicker and simpler.

Weeks 9 & 10: Nearing the end of the cycle things will be slowing down significantly. You will probably be feeling exhausted and burnt out. It is still important to rely on meal preps, quick and nutritious post options (Px, shoppette, commissary) and the DFAC to get you through to the end. Now would also be the ideal time to go and schedule an appointment with your H2F performance dietitian to hop on the In Body machine, discuss nutrition goals and write out a meal plan for cycle break and the next cycle.

Week 0

Goals & objectives: *Prioritize sleep, recovery, time with family and friends while preparing for the next cycle to begin.*

Preparation is Key

Thinking ahead: Take this time to develop a list of foods you like and how they work within your budget. When developing this list, prioritize meals that offer leftovers, quick options, & big batch meals like chili, stews, BBQ, etc. These are both budget-friendly and timesaving!

Big Batch Meal ideas:

InstaPot Chicken, Rice, and Broccoli (*approximate 5–10-minute prep time*), 8 servings



Ingredients: 3 pounds boneless, skinless chicken breast, 1 tsp onion powder, 1.5 cups uncooked rice, 2 cans Chicken Broth or water, 2 cans Condensed Cream of Chicken, Broccoli, or another flavor of choice, 6 cups Broccoli florets, 1 cup Shredded Cheese, flavor of choice.

Directions: Spray the inside of an InstaPot with non-stick spray. Season the chicken with the onion powder, then place in the pot. Add the rice, broth, and the condensed soup. Lock the lid and close the pressure release valve. Cook on High pressure, setting timer to 6 minutes. Once cycle is complete, quick release the pressure then add the broccoli and stir well. Return lid to cooker, seal it, and let it sit for about 15 minutes or until rice and broccoli are tender. Remove from the pot, serve immediately and or divide into 8 servings and top each with ¼ cup shredded cheese. *This big batch meal is a great way to use leftovers + it freezes well too! Feel free to substitute items as desired. Additionally, this can be made in a slow cooker.

Slow Cooker BBQ Beef (*approximate 5–10-minute prep time*), 8 servings



Ingredients: 2 pounds boneless, beef chuck roast, 1 can tomato sauce, ¼ cup each: Apple Cider vinegar, ketchup, packed brown sugar, 2 tbsp Worcestershire sauce, 1 cup each of onion and bell pepper, 1 tsp garlic powder, ¼ tsp cayenne ground pepper, and 1 jar, small, sugar-free Peach Preservatives or Orange Marmalade.

Directions: Spray pot with non-stick spray. Place beef in the pot and top with rest of the ingredients. Cover and cook on High setting for 4 hours or on Low setting for 8 hours. Remove lid and shred up the beef with a fork. Serve immediately and or divide into 8 servings for later (delicious on a bun, over rice or even mashed potatoes). *This big batch meal is a great way to use leftovers + it freezes well too! Substitute items as desired for preferences, allergies, etc. Works well with pork shoulder/picnic, and boneless, skinless chicken breasts too.

Buffalo Chicken Sandwiches (< 5-minute preparation), 4 servings



Ingredients: 1 pound boneless, skinless, chicken breasts, 1 cup cayenne pepper sauce, 1 head Iceberg or lettuce of choice, and 4 Kaiser rolls.

Directions: Place chicken breasts in an InstaPot. Add ½ the cayenne pepper sauce. Close and seal lid, close the pressure release valve. Use the Poultry and High-pressure settings and set timer to 15 minutes. Once

cooking cycle is complete, allow the pressure to naturally release. Remove lid, using fork shred the chicken and add the remaining ½ cup cayenne pepper sauce. Place lettuce and chicken mixture on Kaiser rolls and top with Ranch or Blue Cheese dressing if desired.

Tools for Success

While you don't need to plan every meal every day of your life to achieve mission success, it can help make life easier if you think ahead. This allows you to see what "fits" into both your life and your budget. Plus, making big batch meals offer you both a meal now and leftovers. This helps make things more time and budget manageable especially as your cycle goes on, as being prepared is essential for mission success. Breaking down big batch meals is a quick, easy, and cost-effective way to meal prep. If you find you are burnt out or don't eat your meal prep after 3 to 4 days, then just place them in the freezer to grab and go later!

So, get creative, think of your favorite meals and how you can make them a big batch meal. This way you have a healthy meal now + leftovers offering you easy meal prep options. Let these become your staple meals (your go-to when life gets busy) to rotate through, while offering you macro and micronutrient diversity needed for nutrition readiness and mission success.

Week 1

***Goals & objectives:** Fast, slow, on-the-go meals. Light meal prep to stock up fridge for first 72 hours. Proper use and intake of caffeine. Supplement safety, utilizing OPSS resource.*

Breakfast meal prep:

Fast: Protein oats

Ingredients: Instant oatmeal packet, 1 scoop protein powder, 1 cup milk, 1 spoonful peanut butter, 1 sliced banana

Directions: In a microwave safe bowl or mason jar, combine all ingredients except for banana and mix well. Microwave for 2 minutes. Add sliced banana or frozen berries on top.



Slow: Garden Egg bites

Ingredients: 1 dozen eggs, 1 bell pepper (chopped), 2 cups spinach, ½ cup shredded cheese, ¼ cup bacon bits

Directions: Crack eggs in a large mixing bowl. Add in chopped bell pepper, spinach, cheese and bacon bits. Whisk together. Pour into a greased muffin tin (holds 12-16 muffins). Bake at 400F for 15-18 minutes.

On-the-go: Greek yogurt parfait

Ingredients: 1 cup Greek yogurt (individual cup or 1 cup from large container), ¼ cup granola, 1 sliced banana (or ½ cup berries)

Directions: You may assemble the parfait in a jar, bowl or just eat components as they are.



Lunch meal prep:

Fast: Buffalo Chicken & Ranch wrap

Ingredients: 1 spinach wrap, ¾ cup rotisserie chicken, ¼ sliced avocado, 1 Tbsp spicy ranch dressing, shredded lettuce, sliced tomato, 2 slices cheddar cheese

Directions: Place all ingredients in the spinach wrap. Fold in sides first and then tuck into a tight burrito.

Slow: Fiesta bowls

Ingredients: 3 packages precooked Spanish rice, 1 Rotisserie chicken, 1 can corn, 1 can black beans, 1 avocado, sour cream

Directions: Heat packages of Spanish rice. Place ½ cup in each meal prep container. Add ¾ cup Rotisserie chicken to each container. Place ¼ cup of corn and black beans to each container. Top with sliced avocado, salsa, and sour cream.



On-the-go: Turkey & Swiss sandwich

Directions: Pick up a pre-made sandwich from the Shoppette or commissary. Another option is to bring in the sandwich ingredients to your breakroom fridge to be able to assemble on the fly throughout the workday.

Stock the breakroom fridge LIST

Carbohydrates	Proteins	Fruits/veggies	Heart-healthy fats
<u>Snacks</u> Granola bars Granola Mini bagels Pretzels Pretzel crisps Wheat crackers Pita chips	<u>Snacks</u> Beef jerky Beef/turkey stick String cheese Greek yogurt cups Cottage cheese High-protein milk Protein bar Whey protein shake Hummus	<u>Snacks</u> Fresh fruit – apples, bananas, mandarin oranges, grapes Fresh veggies – baby carrots, celery sticks, sliced cucumber, snap peas, baby tomatoes Fruit sauce packs Applesauce cups	<u>Snacks</u> Mixed nuts Roasted nuts Trail mix Peanut butter Nut butter Sunflower seeds
<u>For meals</u> Sandwich bread Tortillas Pita bread Bagels Instant rice packages/cups	<u>For meals</u> Deli meat Rotisserie chicken Chicken/turkey sausage patties Canned beans Hardboiled eggs Canned tuna/packs Frozen, shelled edamame	<u>For meals</u> Frozen, steamable veggies Canned veggies Salad kits/pre-made bowls	<u>For meals</u> Salad dressing Dips – buffalo chicken, etc. Spreads – cream cheese, etc. Salad toppers Bacon bits

Caffeine

How much?

- Everyone's tolerance is different. Be smart about how much you consume. If you are sensitive to the effects of caffeine, consume the lower recommended end.
- 3-6 mg per kg of body weight
- Ex: $160 \text{ lbs} / 2.2 = \sim 73 \text{ kg} \times 3 \text{ to } 6 = 220 - 440 \text{ mg}$

When should I consume caffeine?

- *Caffeine is an ergogenic aid.* This means that it's intended use is to enhance cognitive and physical performance. However, if you abuse caffeine, it no longer functions to serve this purpose, and you can develop a dependency on it (caffeine abuse).
- The half-life of caffeine is about 5 hours. This means that if you drink a 300mg energy drink at 1400, you will still have 150mg in your system by 1900, and it will take until midnight to completely wear off. Although you may still be able to fall asleep prior to midnight, the lingering caffeine will still affect your REM sleep.
- Sports dietitian tips on **WHEN** to drink caffeine:
 - 100-160 mg within 30-60 min of training/exercise
 - 80-120 mg about 1 hour after waking up
 - 80-120 mg mid-day with lunch to perk you up
 - **STOP** consuming caffeine 6-8 prior to initiating your bedtime routine

Read the labels!

Better alternatives



3D 200mg CAFFEINE 15 CALORIES 7g CARBS 0g SUGAR	5 HOUR ENERGY SHOT 200mg CAFFEINE 4 CALORIES 1g CARBS 0g SUGAR	ALANI NU 200mg CAFFEINE 10 CALORIES 6g CARBS 0g SUGAR	BANG 300mg CAFFEINE 0 CALORIES 0g CARBS 0g SUGAR
BEYOND RAW LIT 250mg CAFFEINE 20 CALORIES 4g CARBS 0g SUGAR	C4 ENERGY 200mg CAFFEINE 0 CALORIES 0g CARBS 0g SUGAR	CELSIUS 200mg CAFFEINE 10 CALORIES 2g CARBS 0g SUGAR	GHOST 200mg CAFFEINE 5 CALORIES 1g CARBS 0g SUGAR
MTN DEW RISE 180mg CAFFEINE 25 CALORIES 5g CARBS 3g SUGAR	MONSTER 160mg CAFFEINE 230 CALORIES 58g CARBS 54g SUGAR	MONSTER ZERO SUGAR 140mg CAFFEINE 10 CALORIES 3g CARBS 0g SUGAR	NOCCO 180mg CAFFEINE 12 CALORIES 0g CARBS 0g SUGAR
NOS 160mg CAFFEINE 200 CALORIES 54g CARBS 54g SUGAR	REIGN 300mg CAFFEINE 10 CALORIES 3g CARBS 0g SUGAR	RED BULL 80mg CAFFEINE 110 CALORIES 29g CARBS 27g SUGAR	RED BULL SUGARFREE 80mg CAFFEINE 0 CALORIES 2g CARBS 0g SUGAR
ROCKSTAR 160mg CAFFEINE 250 CALORIES 63g CARBS 63g SUGAR	ROCKSTAR SUGAR-FREE 160mg CAFFEINE 25 CALORIES 1g CARBS 0g SUGAR	ZEVEA 120mg CAFFEINE 0 CALORIES 0g CARBS 0g SUGAR	ZOA 160mg CAFFEINE 15 CALORIES 3g CARBS 0g SUGAR

Supplements

YES (DoD and Dietitian approved)	NO (DoD banned)	Maybe SO (Not banned, but not enough research to support usefulness)
<p>Beta-alanine (buffers muscle acid and improves muscular endurance)</p> <p>Creatine monohydrate (may increase lean mass, strength, sprint performance and anaerobic power)</p> <p>Omega 3 fatty acids (reduce inflammation, muscle soreness, enhances brain health)</p> <p>Probiotics (promotes gut health, improves immunity)</p> <p>Sodium bicarbonate (delay muscular fatigue, improve anaerobic and peak power)</p> <p>Caffeine (improves cognitive performance)</p> <p>Vitamin D (supports immune health, bone health)</p> <p>Beet root (increases nitrates and may improve aerobic endurance performance)</p>	<p>Guarana</p> <p>Yohimbine</p> <p>Synephrine</p> <p>DMAA</p> <p>Dendrobium</p> <p>SARMs</p> <p>Steroids</p> <p>Pre-workout</p> <p>Deer antler velvet</p>	<p>Arginine</p> <p>BCAAs</p> <p>Citrulline</p> <p>L-carnitine</p> <p>Glutamine</p> <p>Creatine hydrochloride</p> <p>Multivitamin</p>

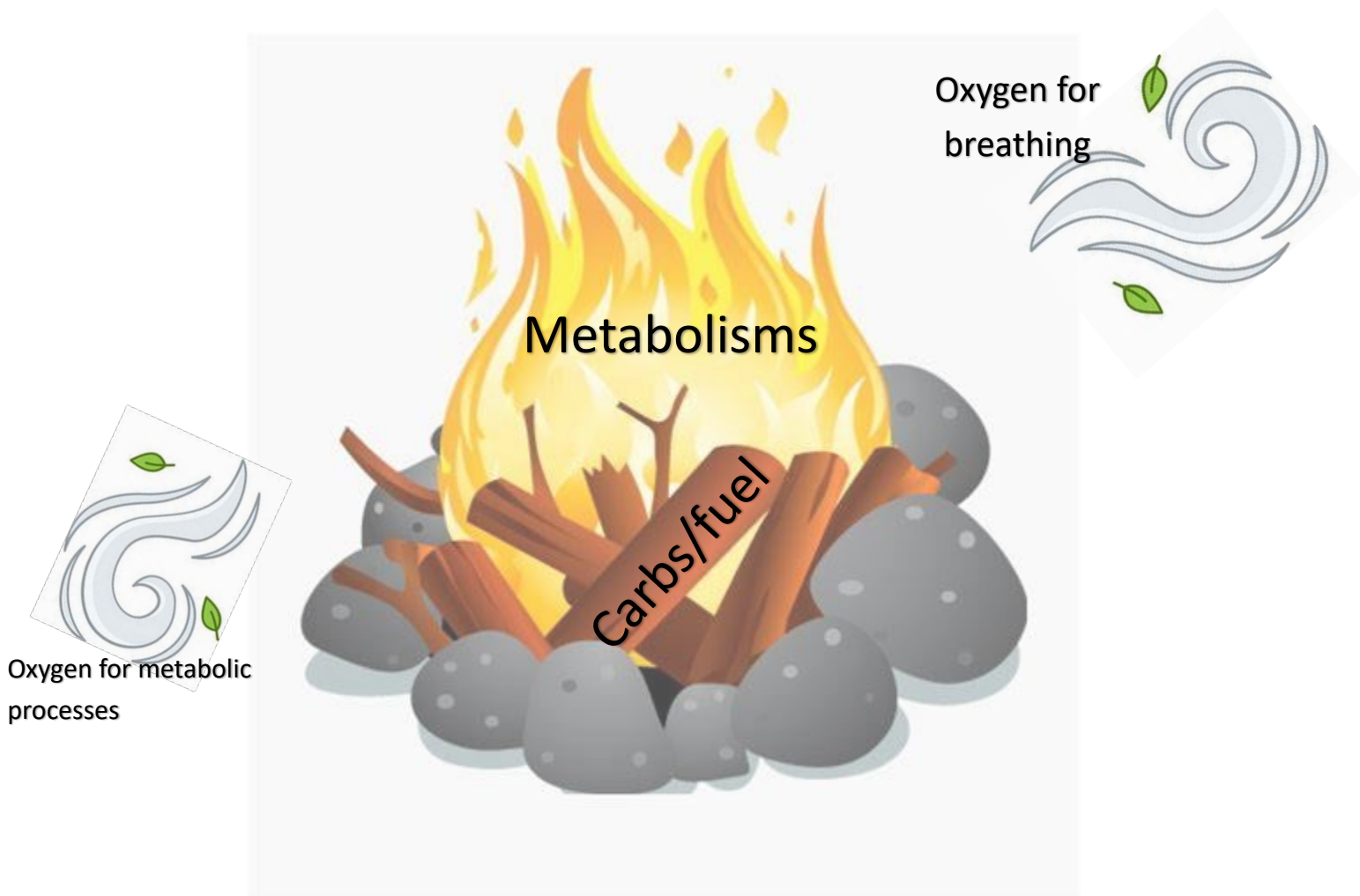
The Food First Solution

- Eat a meal or snack every 3-4 hours to stay well-fueled and to stay well-fueled and to keep blood sugar stable for optimal energy (i.e. PB & honey sandwich, fruit and nuts, string cheese w/ fruit & veggies)
- Pre-workout snack or breakfast every morning to minimize utilization of muscle tissue for energy, especially if the athlete has an early lifting or practice session
- Implement your plan: make a bunch of sandwiches on an off-day, portion out your snacks ahead of schedule (i.e. trail mix, fruit and nuts, nutrition bars, PB & J sandwiches, and meal prep for the week to avoid skipping meals)

Week 2

Goals & objectives: Understand the importance of consistent fueling to sustain work and energy levels. Have a list of on-the-goal fueling options to select from during the workday.

Importance of Fueling Consistently



Our metabolisms are like a fire. When you stoke a fire with wood (aka carbs/fuel) and allow for plenty of oxygen, it burns big and bright. When you consume adequate fuel throughout the day, it helps your metabolisms to burn food efficiently and produce energy from it. Keep your metabolic fires burning big and bright by choosing to consume nutrient dense foods throughout the day!

On-the-Go Fueling Options



Meal Combos



Week 3

Goals & objectives: Recognize that there are more nutritious and performance-oriented fueling options at eateries or grocery stores. Present a list of options available on post or close by.

On-the-Go Breakfast Combos!



Greek yogurt

+



Granola

+



Berries



Egg Bites

+



English Muffin

+



Mandarin oranges



Kodiak Waffles

+



Peanut butter

+



Banana



Instant Oatmeal

+



Fairlife Milk

+



Frozen fruit

Restaurant Comparison						
	Calories	Carbs, g	Fat, g	Protein,g	Price (1 order, w/ tax)	Price (12 orders, w/ tax)
Chipotle*						
<i>Burrito</i>	1170	131	45	54	\$9.74	\$116.88
<i>Burrito bowl</i>	700	72	27	42	\$9.57	\$114.84
Subway						
<i>The Philly</i>	960	74	50	62	\$12.64	\$151.68
<i>Rotisserie-Style Chicken on Plain Wrap</i>	500	54	15	38	\$11.54	\$138.48
Clean Eatz**						
<i>BBQ Cheeseburger Bowl</i>	430	43	18	24	\$9.02	\$96.36
<i>Fiesta Street Corn Bowl</i>	313	36	5	31	\$9.02	\$96.36

*Chipotle meal ingredients:

- Burrito: carnitas (pork), white rice, black beans, roasted chili-corn salsa, cheese, sour cream
- Burrito bowl: chicken al pastor, brown rice, pinto beans, fresh tomato salsa, cheese, fajita veggies, romaine lettuce

**Chipotle meal offerings change on a weekly basis. Above meals are given as examples. Price is \$8.20 for up to 9 meals and decreases incrementally as more meals are purchased at a time.

Sam's Club



Sun-dried Tomato Chicken Wrap Party Tray (~\$43.04)



Fruit and Cheese Party Tray with Apples (~\$29.12)

Commissary

Sub sandwiches: ~\$6 for a 6-inch sub

Sushi: typically ~\$7 to \$14 per roll

Panera soup: ~\$4-5



NCO Club

Chicken wrap (\$9.50), taco wrap (\$9), quesadilla (\$6-\$8), salads (\$6-\$15)



Weeks 4 – 6

Goals & objectives: *Understand the importance of proper hydration and how to calculate your needs. Be able to identify and choose appropriate snacks for the range.*

Benefits of Hydration

- Moistens tissues in eyes, nose, mouth
- Assists the body in thermoregulation via sweat
- Provides lubrication to the joints
- Medium to transport nutrients, oxygen, and waste products of the blood and across cells
- Muscles are 75% water

Self-assessment Methods of Dehydration & Hydration

Dehydrated:

- Dizziness/light-headedness, fatigue, moodiness/irritability, thirsty, poor appetite, nausea, cramps, heat intolerance, and decreased endurance performance



Hydrated:

- Skin elasticity, frequent urination (every ~2 hours), bright-yellow and clear urine, and normal sweating

How to Calculate Your Hydration Needs

1. Get baseline fluid needs: Take your body weight and divide by 2
 - a. Ex: $160 \text{ lbs} / 2 = 80 \text{ oz}$
2. Increase by activity needs: Add an extra 16-32 oz for each hour of physical training or outdoor activity that you perform
 - a. 2 hours of moderate intensity PT indoors for a male = ~48 oz lost
 - b. $80 + 48 = 128 \text{ oz}$ (or 1 gallon)
3. Set a hydration SMART goal for yourself
 - a. I will reach 128 oz per day by drinking 16 oz every 2 hours from the time I wake up. I will also carry around a 1-gallon water jug with me.

Range-Appropriate Snacks & Foods

Non-perishable (*indicates high-electrolyte content)

- Snacks: fruit cups, *fruit-sauce pouches, fruit snacks, *pretzels, *peanut butter pretzels, *crackers, *corn nuts, *trail mix, *dried fruit, granola, granola bars, *protein bars, fig newtons, *nuts, *pita chips, *corn chips, cereal cups, *pumpkin seeds, *beef jerky/sticks, *peanut butter crackers, P3 protein packs
- Meals: sandwich fixings – (bread, *peanut butter, honey, jelly), Uncrustables, *tuna packs, pita bread, tortillas

Microwave/fridge/cooler required

- Snacks: *Greek yogurt, *bananas, *oranges, apples, *string cheese,
- Meals: sandwich fixings – (deli meat, sliced cheese, mayo), oatmeal cups/packets, *microwave meals, *CleanEatz, *pre-made sandwiches (commissary, Subway, Publix), instant rice packages, baby carrots w/ *hummus, frozen burrito or breakfast sandwich, Lunchables



Cadre Chow - Athlete's Plate Style

Cadre chow option #1: Jimmy John's

Small catering bundle, \$82.09: 18-piece party box (6 sandwiches cut into thirds, 80-400 kcal per 1/3rd of a sandwich) with 6 bags of Jimmy Chips® (260-300 kcal/bag), side of pesto bowtie pasta salad or homestyle potato salad, and 6 desserts (cookie or brownie, 350-410 kcal)

30-piece party box, starting at \$70 (some sandwiches cost more than others): 10 sandwiches cut into thirds (80-400 kcal per 1/3rd of a sandwich)



Cadre chow option #: Midwood Smokehouse

Party Packs: 8-10 people (\$70), 2 meats (1.5 lbs. each) and 2 sides (1 qt. each)

14-16 people (\$125), 2 meats (2.5 lbs. each) and 2 sides (2 qts. each)

Meats: beef brisket (extra \$10/lb.), chopped pork, pulled chicken

Sides: collard greens, baked beans, SC hash, coleslaw, broccoli, casserole, mac n cheese

Sliders, \$30: 12 sliders with coleslaw, slider buns and sauces (chopped pork, pulled chicken)



Cadre chow option #3: Chick-Fil-A

Spicy Chilled Grilled Chicken Sub Sandwich, \$67.50: 10 sandwiches (430 kcal per sandwich)

Chick-fil-A® Cool Wrap, \$76.90: 10 wraps (350 kcal per wrap)

Side Salad, \$39.90: 10 salads (160 kcal per serving)



Cadre chow option #4: Popeyes

Family Feast, \$29.99: 6 piece signature chicken (1400 kcal), 2 chicken sandwiches (492 kcal each), 2 large sides (large coleslaw, 420 kcal; large red beans and rice, 620 kcal), 4 biscuits (828 kcal)



Cadre chow option #5: Panda Express

Party size entrée, \$41: Kung Pao Chicken (290 kcal), 12-14 servings per party tray

Party size side, starting at \$16: white steamed rice (380 kcal) and super greens (90 kcal), 10-12 servings per party tray



Cadre chow option #5: Taziki's Mediterranean Café

Family feasts for 4 or 6, \$43.99 - \$78.99: grilled chicken, grilled beef, etc.

(250 kcal – 410 kcal), with salad (250-350 kcal), basmati rice (210 kcal) or

roasted red potatoes (190 kcal), and baked pita (80 kcal) or soft pita (110 kcal)



Week 7

Goals & objectives: Understand how stress affects the body and our nutrition choices. Optimize fueling strategies to help combat and deal with stressful situations.

How Stress Affects Eating Patterns

- It raises the body's metabolic needs and increases the use and excretion of many nutrients. If you do not eat a nutritious diet, a deficiency may occur. Soldiers who experience chronic stress may also crave comforting foods such as highly processed snacks or sweets, which are high in fat and calories but low in nutrients.
- Soldiers feeling stress may lack the time or motivation to prepare nutritious, balanced meals, or may skip or forget to eat meals.
- Stress can disrupt sleep by causing poor quality sleep, which leads to fatigue during the day. To cope with daytime fatigue, many Soldiers use stimulants to increase energy such as with caffeine or high-calorie snack foods.
- During acute stress, the hormone adrenaline **suppresses** the appetite.
- But with chronic stress, **elevated** levels of cortisol may cause cravings, particularly for foods high in sugar, fat, and calories, which may then lead to weight gain, especially in the belly area, as well as increased risk for cancer and diseases such as type 2 diabetes.

How Good Nutrition Can Help with Stress

- **Stick with a routine and consistent meal plan.** Choosing foods and meals that you are familiar with will minimize the amount of stress and/or energy put towards meal planning.
- **Eat balanced meals.** Include all components of the Athlete's Plate – grains, protein, anti-inflammatory fats, fruits, and vegetables. This will ensure you get the adequate calories and nutrients to combat the negative side effects of stress.
- **Aim to get 5 or more servings of high omega-3 foods each week;** Salmon, herring, mackerel, walnuts, chia seeds, ground flax seeds and canned tuna.
- **Prioritize magnesium-rich foods;** dark leafy greens, nuts/seeds, whole grains, beans/legumes, dark chocolate, and brown rice.
- **Practice mindful eating (as much as possible).** Try to minimize distractions while you eat, and focus on the flavor of your food, as well as your satiety levels. Doing so can actually help to optimize digestion and absorption of the nutrients you eat.

No BRAINER Meal Prep Options for Stressful Situations

Pistachio Crusted Salmon

Ingredients:

- 1/3 cup pistachios, finely chopped
- 1/4 cup panko breadcrumbs
- 1/4 cup grated Parmesan cheese
- 1 salmon fillet (1 pound)
- 1/2 teaspoon salt
- 1/4 teaspoon pepper

Directions: Preheat oven to 400°. In a shallow bowl, toss pistachios with breadcrumbs and cheese. Place salmon on a greased foil-lined pan, skin side down; sprinkle with salt and pepper. Top with pistachio mixture, pressing to adhere. Bake, uncovered, until fish just begins to flake easily with a fork, 15-20 minutes. Serve with a side of steamed veggies, such as green beans or broccoli.



Rotisserie Chicken – Two Ways

Black bean quesadillas

Ingredients: 2 whole wheat tortillas, ¼ cup drained black beans, ¼ cup shredded cheese, ¾ cup shredded rotisserie chicken.

Directions: Heat a large skillet pan over medium heat. Once heated, drizzle with olive oil. Place a tortilla in the pan and layer fillings. Place second tortilla on top. Cook over medium heat for 2 minutes each side.

Chickpea Power-bowl

Ingredients: ½ cup drained & rinsed chickpeas, 2 cups spring mix, ¼ cup shredded carrots & cabbage, 5 baby tomatoes, 2 Tbsp pumpkin seeds, ¾ cup shredded rotisserie chicken, ¼ sliced avocado.

Directions: Combine/toss all ingredients in a large salad bowl. Serve with a side of whole wheat toast or pita bread for extra fuel.





Week 8


Goals & Objectives: *Know and be able to select appropriate snacks and foods for ruck-march scenarios. Know how to fuel for ruck-marches and the field. Understand the difference between the types of carbs and their benefits for health and performance.*

Ruck march fueling


 **Time:** Night before event


 **Purpose:** Fueling up on a carb-rich meal helps to maximize glycogen stores.


 **Fuel:** Warfighters should choose whole-grain carbs (whole-grain bread, brown rice, quinoa, whole-wheat pasta) for nutrient-rich options. They can balance out the meal by including lean protein (lean beef/pork/chicken/turkey, seafood/fish, tofu) and healthy fats (olive oil, avocado, nuts). Follow HPRC's "**Power Plate – Eat to Fuel Your Performance**" for guidance on building a balanced, nutrient-dense meal.


 **Fluid:** Suggest Service Members drink healthy fluids such as water, milk, or milk alternatives.

 **Time:** 1 hour before boots on the ground


 **Purpose:** "Top off" fuel stores to make them readily available for active brain and muscles. Pre-fueling guidelines include 1–4 grams of carb/kg 1–4 hours prior to activity—adjust to personal preference, experience, and schedule.


 **Fuel:** Suggest Warfighters eat a meal of 1–2 grams of carb/kg approximately 1 hour before the march. Avoiding unfamiliar foods and limiting ones high in fiber, fat, and protein help prevent GI distress.

 **Fluid:** Warfighters should consume 14–22 fl oz water.

 **Caffeine:** If desired, Service Members can include 200 mg caffeine (16-oz coffee, 2 pieces of caffeinated gum or mints)

 **Time:** During the march

 **Purpose:** Provide ongoing fuel, in the form of carbs, to keep feeding the brain and working muscles. Focus on simple carbs because these are the most easily and readily absorbed. Also, regular fluid intake helps with maintaining hydration.

 **Fuel:** For training up to 3 hours, Warfighters should consume 30–60 g carb per hour. For training longer than 3 hours, Warfighters should consume up to 90 g carb per hour. For ease, the following options contain about 25 g carb (specific amounts noted). Educate Service Members to pack snacks in small baggies the night before the event.

- 18 gummy bears (26 g carb)
- 25 jelly beans (26 g carb)
- 1 pouch fruit snack (23 g carb)
- ¼ cup raisins (28 g carb)
- 3 Tbsp dried cranberries (24 g carb)
- 2 squeezable fruit pouches (28 g carb)
- 1 sports gel (24 g carb)
- 3 sports chews (24 g carb)
- Energy bar (23 g carb)
- 16 oz sports drinks (29 g carb)

hprc-online.org/nutrition/performance-nutrition/fueling-road-or-foot-marches-depth

Ruck march in real time

This is what fueling before, during, and after a ruck march might look like in real time for a 185-lb Warfighter on a 16-mile road march.

TIME	FUEL
	Grilled chicken breast (5 oz)
	+ roasted garlic potato wedges (2 cups) (61 g carb / 35 g pro)
	+ roasted broccoli with olive oil (2 cups) (22 g carb / 7 g pro)
1800	+ mixed fruit salad (1 cup) (16 g carb / 1 g pro)
(night before event)	+ chocolate chip cookies (3 small) (22 g carb / 1 g pro)
	+ water with meal
	= 121 g carb / 44 g pro
	Oat ring cereal (1.3 oz container × 2) (52 g carb)
	+ 8 oz low-fat milk (12 g carb)
0500	+ medium apple (25 g carb)
	+ 14–22 fl oz water
	= 89 g carb (1 g/kg)
0600	START RUCK MARCH
0700	18 gummy bears (26 g carb)
	+ 16–32 fl oz water
	2 squeezable fruit pouches (28 g carb)
0800	+ 16 fl oz sports drink (29 g carb)
	+ 16 fl oz water
	¼ cup raisins (28 g carb)
0900	+ 2 squeezable fruit pouches (28 g carb)
	+ 16 fl oz sports drink (29 g carb)
	+ 16 fl oz water
1000	END RUCK MARCH
	Peanut butter (2 Tbsp) (7 g carb / 7 g pro)
	+ jelly (1 Tbsp) (15 g carb / 0 g pro)
	+ whole-wheat bread (2 slices) (46 g carb / 10 g pro)
	+ trail mix (½ cup) (34 g carb / 10 g pro)
1100	= 102 g carb, 27 g protein
	Or MRE
	+ 16 fl oz water or sports drink per pound of weight loss



Note: If you didn't check your weight, drink regularly until urine is pale yellow.

Carbohydrates for Performance

Complex – slow digested, high in fiber and protein, great source of sustained energy

- Examples: whole wheat bread and bagels, brown rice, quinoa, oatmeal, popcorn, Triscuits, whole wheat pasta
- Optimal times to consume: breakfast – sustained energy throughout the day, dinner – stabilize and prevent blood sugar spike before bed, desired weight loss – helps keep you full for longer



Simple – quick digested, low in fiber, great source of immediate energy

- Examples: white rice, pasta, bread, cereal, chips, crackers, bagels, grits
- Optimal times to consume: pre-workout – for an energy boost, post-workout – for glycogen

repletion (recovery), lunchtime – midday energy boost, weight/muscle gain – lower in fiber so you can eat more calories worth



Weeks 9 & 10

***Goals & objectives:** Understand the effects that alcohol has on overall health and performance. How to optimize your nutrition and body composition goals while on cycle break/leave.*

Short Term Effects

Hydration: Alcohol is a diuretic that can lead to dehydration. Rehydration from one alcoholic drink requires consumption of twice as much water.

Motor skills: Alcohol causes slower reaction time, decreased hand-eye coordination, and impaired balance.

Strength: Decreased grip strength, jump height, and speed. Alcohol cancels out muscle gains by decreasing HGH and testosterone.

Aerobic performance: Alcohol will slow you down! It causes faster fatigue, increased ventilatory stress, and decreased lactate threshold.

Sleep: Alcohol disrupts REM sleep, which can result in hormonal suppression, impaired muscle synthesis and performance.

Nutrition: Alcohol depletes energy stores and nutrients that are necessary for muscle contraction, resulting in a loss of energy and poor performance.

Hormones: Increased glucocorticoids (especially cortisol), which are stress hormones that influence metabolism and development.

US Standard Drink Sizes



12 ounces
5% ABV beer



8 ounces
7% ABV malt liquor



5 ounces
12% ABV wine



1.5 ounces
40% (80 proof)
ABV distilled spirits
(gin, rum, vodka,
whiskey, etc.)

ABV = Alcohol by Volume

Long Term Effects

Weight gain: Alcohol has low nutritional value with one drink containing an average of 100-150 empty calories per serving. The body will store alcohol as fat by converting alcohol sugars into fatty acids.

Nutritional deficiencies: Decreases vitamin and mineral absorption, utilization, and excretion (especially B vitamins, zinc and vitamin C).

Disease: Long term, heavy drinking increases the risk of cardiovascular disease, anemia, liver damage, depression, and dementia.

Illness and injury: Alcohol depresses immune function and contributes to delayed healing. The injury rate for drinkers is 54.8%, whereas non-drinkers is 23.5%.

G4G – Dining Out Style

	Most Often	Occasionally	Rarely
McDonald's	Salad w/ chicken tenders ½ packet of dressing Apple slices	Cheeseburger Small fries Side salad	Big Mac Fries Soda McFlurry
Cookout	Chargrilled chicken Slaw Chili	Regular BBQ Onion rings Slaw	Small shake Chicken strips Fries Cheese bites
Chik Fil A	Grilled chicken salad ½ packet dressing Greek yogurt parfait	Grilled chicken sandwich Kale side salad Small fries	Chicken tenders Waffle fries Shake
Panda Express	Black pepper chicken or Sizzling shrimp Brown or steamed rice Sauteed veggies	Teriyaki chicken or Beef n Broccoli Steamed rice Sauteed veggies	Orange chicken or honey walnut shrimp Chow mein Fried rice
PopEye's	Blackened chicken sandwich Green beans Small cajun fries	Chicken strips Small fries or mashed potatoes Green beans	Fried chicken sandwich Small fries or macaroni n cheese Biscuit w/ butter
Burger King	Garden chicken salad ½ packet of dressing	Chicken tenders or Impossible burger Small fries Side salad	Whopper Small fries Icее or lemonade
Starbucks	Egg bites Cheddar protein box Turkey bacon sandwich Spinach, feta & egg white wrap Tomato & mozzarella on focaccia	Crispy grilled cheese Bagel w/ cream cheese	Vanilla biscotti Dark chocolate coffee beans Cake pop

Short-term Goals

Take this break to reflect on how the cycle went and ask yourself questions to dig deeper while also becoming more proactive and forward thinking:

- Did you achieve any personal goals?
- Did you stay on track with prioritizing sleep, nutrition, life, and stress management, etc. for optimal performance throughout the cycle?
- Were you effective in your time and personal management strategies?
- What do you want to achieve or do better on your next cycle?



Take these next 2-3 weeks to spend time with family, get a massage, workout for fun, and think ahead so you can be better prepared for the upcoming cycle. Use this time to develop meal plan ideas you would be able to apply from this guide. Go to the Commissary, Sam's Club, Costco, etc., and buy in bulk so you have the ingredients needed to make some of the recipes, big batch meals, and such from the guide. Plus, don't forget about your favorite recipes too, and how you can cycle them into your staple meal routine – having your favorite go-to dishes can truly take the guesswork out of it!

Long-term Goals

Nutrition is the basis of all health. Everything begins with how fed (not calorie-wise, but micronutrient-wise) you are. We physically perform better, sleep better, think better, and for some, we are even better humans (not a hangry person). Use the remainder of this cycle break to think about long-term goals you have and how you can best pursue them. Maybe you want to go back to school? Maybe you and your spouse want to plan for a family after your drill tour is over? Use this time to really think about where you want to be.

Additionally, be sure to recover. Use all the tips and tricks at your disposal to do so: nutrition, sleep, and mild physical activity (think massage and easy training liking walking, hiking with the family/dog, swimming, etc.). Eat with a purpose, allow your meals to include “the rainbow” as the saying goes and enjoy the moments of life spent with family and friends. Recovery is more than just a good nights' sleep – it is about what you are doing in the moments of no physical, mental, emotional demands as well. The life of a Drill Sgt. is challenging enough without anything extra thrown in, so take this time to develop yourself further – mission success begins and ends with you.