

## Nutrition and Hydration Recommendations

(For individual recommendations and meal plans, you should meet with a Registered Dietitian)

## Macronutrients.

Carbohydrates - proved 4 calories per gram.
Simple Carbs - fast acting carbs, are also quickly digested and used for energy. Include both added and natural sugar.
-Sources of added sugar: energy drinks, sports drinks, soda, juice, and table sugar.
-Sources of natural sugar: milk, fruit, honey, and $100 \%$ juice.
Complex Carbs - slow acting carbs that digest slowly.
-Sources: whole grains, pasta, cereal, bread, rice's, and vegetables.
Carbs check list - choose whole grains often, limit added sugar, and eat a variety of carbs.
Protein - Include both plant and animal products.
-Plant Proteins: beans, peas, nuts, seeds, tofu, and small amounts in grains and vegetables.
-Animal Protein: meat, fish, seafood, poultry, pork, beef, dairy, milk, cheese, and yogurt.
Protein check list - choose grilled, baked, roasted options often, limit the number of legs (less legs the better) eat a variety of plant and animal proteins.

Fat - 1 gram of fat supplies 9 calories of energy. Include saturated, unsaturated, and essential fats.
-Unsaturated Fats (typically liquid at room temperature, are healthier options: olives, avocados, nuts, seeds, and their oils.
-Saturated Fats (typically solid at room temperature, are less healthy if consumed in excess): meat, dairy products (butter, cheese, milk, yogurt, and ice cream), coconut oil, red palm oil, and baked goods.
-Essential Fats (Omega -3 \& 6): salmon, walnuts, flax seeds and chia seeds.
Fat check list - Choose fat wisely, limit saturated fat, and eat plant and seafood sources of fat often.
Macronutrient Requirements - Military Dietary Reference Intakes (MDRI) recommendation for men is 3000 calories per day with recommendations up to 4700 calories depending on activity and workload. For women it is 2100 calories per day with recommendations up to 3000 calories depending on activity and workload.
-Aim to fill about $1 / 2$ of your plate with carbohydrate-rich foods, $1 / 4$ with protein-rich foods, and $1 / 4$ with fats or fat-containing foods. Keep in mind, these recommendations are general and can be dependent upon body weight, body composition, fitness goals, medical condition, injury, and or illness.

## Serving Sizes.

- Fruit: 1 small piece of fruit (apple), 1 cup fresh/frozen fruit, $100 \%$ fruit juice, $1 / 2$ cup of dried fruit. Comparable object: closed fist or baseball.
- Vegetables: 1 cup of raw or cooked vegetables, 2 cups of leafy greens.

Comparable object: closed fist or baseball.

- Grains/Starchy Vegetables: 1 slice of bread, 1 cup of cereal, $1 / 2$ cup of cooked rice/pasta/cereal. Comparable object: $1 ⁄ 2$ cup = cupped palm.
- Protein: 3oz cooked meat/fish, $1 / 4$ cup of cooked beans, 1 egg, 2 tablespoons of peanut butter, $10 z$ nuts/seeds, 1 can of tuna.
Comparable object: $30 z=$ deck of cards or open palm of hand; 2 tablespoons = golf ball.
- Dairy: 1 cup of milk, yogurt, soymilk, 1.5 oz of cheese. Comparable object: 1 cup = closed fist.
- Oils: 1 tablespoon of oil, 2 tablespoons of salad dressing, $1 / 2$ medium avocado, 2 large olives. Comparable object: 2 tablespoons = thumb.

How many servings do I need - The number of serving you need is based on many factors including body size, body composition, fitness and health goals, and activity level. If you are highly active one day, you may need more servings than days when you are less active. You may need to adjust your servings of the different food group to find your optimal fueling pattern. Refer to a Registered Dietitian for assistance.

Pre-Activity Fuel: No consensus statement for optimal content and timing of a pre-exercise meal/snack has been published. Pre-activity meals provide the nutrition needed to fuel the body during light, moderate, or intense activity. Consuming a meal or snack providing 200 to 300 calories three to four hours before heavy training or mission will allow sufficient time for the food to be digested and leave the stomach. Consuming up to 25 grams of protein before exercise may be important for those primarily engaged in strength/power training with regard to maximizing protein synthesis.

Examples of good pre-workout foods are: Bananas, Oats, Greek Yogurt, Avocado, Almonds, and Walnuts.

During Activity: For exercise less than one hour water is generally sufficient. During exercise lasting longer than one hour, ingesting carbs in a fluid such as a sports drink can also help sustain hydration. Ingesting approximately 30-60 g carb/hour or 7-20 g carb every 15-20 minutes can extend endurance performance. When the exercise duration is greater than three hours, carb intakes of up to 110 g per hour may be needed, depending on the intensity of the exercise. For exercise longer than three hours, individuals typically eat both solid and liquid foods to meet carb needs.

Recovery: The recommended time to begin recovery nutrition is no later than 60 minutes after activity when glycogen stores and muscle protein synthesis are lowest; this provides the body with the necessary nutrients and fuels. To enhance muscle glycogen synthesis following prolonged,
strenuous exercise (over 60 minutes), consuming approximately 50 grams of carb within 60 minutes after the activity is recommended, followed by approximately $100-150 \mathrm{~g}$ carb (as liquid, gel, or solid food) at two hour intervals for up to six hours.

Hydration.
In general, men should consume 4 QTS (125 OZ) and women should consume 2.9 QTS (91 OZ) to maintain adequate hydration. (Physically active people may require even greater amounts of fluids, which is further discussed below). As a general rule of thumb, try to drink half your body weight in fluid ounces per day. Sources of fluids include water, milk, tea, coffee, and juice, foods high in water (e.g. juicy fruits and vegetables), soups, and sports drinks.

Before Exercise: At least four hours before exercise, consume 14-22 fluid ounces of fluid. You can also use your body weight to estimate your fluid needs (0.07-0.14 OZ per pound).

During Exercise: In general, for exercise lasting up to one hour, water is sufficient for maintaining hydration. Drink 3-8 oz every 15-20 minutes (a "gulp" of fluids is about 1-2 oz). When exercising more than 60 minutes, drink 3-8 oz of a sports drink every 15-20 minutes. Look for a sports drink that contains $10-20$ grams of carbohydrates, $50-200 \mathrm{mg}$ of sodium, and $20-100 \mathrm{mg}$ of potassium per 8 oz serving.

After Exercise: After exercise, replace fluid losses by consuming regular foods and beverages. If you know the change in your body weight after exercise, drink 16-24OZ of liquid per 1 pound of weight loss to fully restore fluid balance.

| Upper Body |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Name: |  |  |  |  |  |
| Date: |  |  |  |  |  |
| Tier 1 | Dynamic Warm-up |  |  |  |  |
| Order | Exercise | Reps | Distance | Sets | Notes |
| A | Knee to Elbow Push-p | 10 |  | 1 |  |
| B | Side Straddle Hops | 20 |  | 1 |  |
| C | Bear Crawl |  | 15yds | 1 |  |
| D | Inchworm |  | $15 y d s$ | 1 |  |
| E | Side Slide w/ Arm Swin |  | 25 yds | 2 |  |
| F | Carioca |  | $25 y d s$ | 2 |  |
| G | Mountain Climbers | 20 |  | 1 |  |
| H | Burpees | 10 |  | 1 |  |
| WORKOUT |  |  |  |  |  |
| Clap Push-up (8 reps, transition to push-ups, upon failure regular push-ups only) |  |  |  |  |  |
| Toe Touches |  |  |  |  |  |
| Ammo Can Press (Object that weighs 30-351bs) |  |  |  |  |  |
| Russian Twist |  |  |  |  |  |
| Pull-ups |  |  |  |  |  |
| Side Plank (Left/Right) |  |  |  |  |  |
| 5 rounds, $\mathbf{3 0}$ sec each exercise, $\mathbf{6 0}$ sec rest inbetween rounds |  |  |  |  |  |
| FLEXIBILTY |  |  |  |  |  |
| EXERICSE |  | SETS | time |  |  |
| Chest Roll/Chest Stretch |  | 2 | 45Sec/30SEC |  |  |
| T-Spine Roll/Shoulder Stretch |  | 2 | 45Sec/30SEC |  |  |
| Triceps Roll/Tricep Stretch |  | 2 | 45Sec/30SEC |  |  |
| Trap Roll/Cat/Camel Stretch |  | 2 | 45Sec/30SEC |  |  |



| Speed \& Agility |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Name: |  |  |  |  |  |
| Date: |  |  |  |  |  |
| Tier 1 | Dynamic Warm-up |  |  |  |  |
| Order <br> A <br> B <br> C <br> D <br> E <br> F <br> G <br> H <br> I | Exercise | Reps | Distance | Sets | Notes |
|  | Side Straddle Hops | 20 |  | 1 |  |
|  | Frontal Leg Swing | 10 |  | 1 | each leg |
|  | Walking Lunge w/Twist |  | 25 yds | 1 |  |
|  | Monster Walk |  | 25 yds | 1 |  |
|  | 50\% Run |  | 25yds | 1 |  |
|  | 75\% Run |  | 25 yds | 1 |  |
|  | 100\% Run |  | $25 y d s$ | 1 |  |
|  | Mountain Climbers | 20 |  | 1 |  |
|  | Burpees | 10 |  | 1 |  |
| WORKOUT |  |  |  |  |  |
| Cone Box Drill $1 \times 2$ ( 2 min of work: 4 min rest) Cone Goalie Drill X2 ( 2 min of work: 4 min rest) 40yd Sprints X6 (Every min on the min) |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  | FLEXIBILITY |  |  |  |  |
|  | EXERICSE | SETS |  |  |  |
|  | Roll Calf/Calf Stretch | 2 | $45 \mathrm{sec} / 30 \mathrm{sec}$ |  |  |
|  | Roll Hamstring/Hamstring Stretch | 2 | $45 \mathrm{sec} / 30 \mathrm{sec}$ |  |  |
|  | Roll Quads/Quad Stretch | 2 | $45 \mathrm{sec} / 30 \mathrm{sec}$ |  |  |
|  | Roll Glute/Glute Stretch | 2 | $45 \mathrm{sec} / 30 \mathrm{sec}$ |  |  |


| CHALLENGE |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Name: |  |  |  |  |  |
| Date: |  |  |  |  |  |
| Tier 1 | Dynamic Warm-up |  |  |  |  |
| OrderABCDEFGH | Exercise | Reps | Distance | Sets | Notes |
|  | Side Straddle Hops | 20 |  | 1 |  |
|  | Split Jack Forward | 20 |  | 1 |  |
|  | Walking Knee Hugs |  | $25 y d s$ | 1 |  |
|  | Walking Lunge |  | $25 y d s$ | 1 |  |
|  | Carioca |  | $25 y d s$ | 2 |  |
|  | Side Slide w/Arm Swing |  | $25 y d s$ | 2 |  |
|  | Mountain Climbers | 20 |  | 1 |  |
|  | Burpees | 10 |  | 1 |  |
| WORKOUT |  |  |  |  |  |
| Push-ups |  |  |  |  |  |
| Flutter Kicks |  |  |  |  |  |
| 20yd Sprints |  |  |  |  |  |
| Ammo Can Press (Object that weighs 30-35lbs) |  |  |  |  |  |
| Plank w/hand raise |  |  |  |  |  |
| Body Weight Squats |  |  |  |  |  |
| Pull-ups |  |  |  |  |  |
| Diagonal Lunge |  |  |  |  |  |
| Hanging Oblique Knee Raises |  |  |  |  |  |
| Prone 5-10-5 Drill |  |  |  |  |  |
| 3 rounds, $\mathbf{3 0} \mathbf{s e c}$ at each station, 60 sec rest inbetween rounds |  |  |  |  |  |
| FLEXIBILITY |  |  |  |  |  |
|  | EXERCISE | SETS | HOLD |  |  |
|  | Chest Roll/Chest Stretch | 2 | 45Sec/30SEC |  |  |
|  | T-Spine Roll/Shoulder Stretch | 2 | 45Sec/30SEC |  |  |
|  | Triceps Roll/Tricep Stretch | 2 | 45Sec/30SEC |  |  |
|  | Trap Roll/Cat/Camel Stretch | 2 | $45 \mathrm{Sec} / 30 \mathrm{SEC}$ |  |  |
|  | Roll Calf/Calf Stretch | 2 | $45 \mathrm{sec} / 30 \mathrm{sec}$ |  |  |
|  | Roll Hamstring/Hamstring Stretch | 2 | 45sec/30sec |  |  |
|  | Roll Quads/Quad Stretch | 2 | $45 \mathrm{sec} / 30 \mathrm{sec}$ |  |  |
|  | Roll Glute/Glute Stretch | 2 | $45 \mathrm{sec} / 30 \mathrm{sec}$ |  |  |


|  | EXERCISE | REPS | DISTANCE | SETS | NOTES |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A | Stationary Forward Lunge | 10 |  | 1 |  |
| B | Trunk Twist | 10 |  | 1 |  |
| C | Heel/Toe Raises | 10 |  | 1 |  |
| D | Walking Knee Hug |  | 10YDS | 1 |  |
| E | Walking Leg Cradle |  | 10YDS | 1 |  |
| $F$ | Walking Lunge-Elbow to Instep |  | 10YDS | 1 |  |
| C | High Knees |  | 20YDS | 1 |  |
| H | Lateral Shuffle |  | 20YDS | 2 | Down \& Back |
| I | Side Slide w/ Arm Swing |  | 20YDS | 2 | Down \& Back |
| J | Squat Drops | 10 |  | 1 |  |
| $\mathbf{K}$ | Speed Skaters | 10 |  | 1 | 5 Each Direction |
| UPPER BODY |  |  |  |  |  |
|  | ROLLING/MOBILITY | SETS | REPS/TIME | HOLD | NOTES |
| A | Peanut Lower Back | 1 | 45SEC |  |  |
| B | Cat/ Camel | 1 |  | 30sec | 15sec Both Positions |
| C | Roll Triceps | 2 | 45SEC |  |  |
| D | Triceps on Wall | 2 |  | 30sec |  |
| E | Lax Ball Pecs | 2 | 45SEC |  |  |
| $F$ | Long Arm Pull and Rotate | 2 |  | 30sec |  |
| C | Roll T-Spine | 2 | 45SEC |  |  |
| H | T-Spine Heel Sit w/ Reach | 2 | 10 |  | 5 Each Direction |
|  |  |  |  |  |  |
| STABITY / AGTVATION |  |  |  |  |  |
|  | EXERCISE | SETS | REPS/TIME | HOLD | NOTES |
| A | Cook Hip Lift | 1 | 10 |  |  |
| B | Push Up Plus | 1 |  | 30sec |  |
| C | 4 Way Bear Crawl | 1 | 30SEC |  |  |
| D | Bent Over IYT | 1 | 10 |  |  |
|  |  |  |  |  |  |
| LOWER BODY |  |  |  |  |  |
|  | ROLLING/MOBILITY | SETS | REPS/TIME | HOLD | NOTES |
| A | Roll Hamstring | 2 | 45SEC |  |  |
| B | 90/ 90 Active Hamstring | 2 | 30SEC |  |  |
| C | Roll Quads | 2 | 45SEC |  |  |
| D | Couch Stretch | 2 | 30SEC |  |  |
| E | Roll Calf | 2 | 45SEC |  |  |
| F | rone Position with Reverse Ankle Hoo | 2 | 30SEC |  |  |
| G | Roll Glute | 2 | 45SEC |  |  |
| H | Figure 4 | 2 | 30SEC |  |  |



Sprint forward to each cone and back peddle to start, repeat for each cone

