

APPENDIX F
GUAM FIRE DEPARTMENT

FIREGROUND WORK PERFORMANCE EVALUATION (10-47 TEST)



**GUAM FIRE DEPARTMENT
P.O. BOX 2950
HAGATÑA, GUAM 96932**

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GENERAL ORDER	Effective: June 01, 2018	No: 2018-01
Reference: P.L. 34-49	Rescinds: G.O. 2017-01	
Index As: Guam Fire Department Fire Ground Work Performance Evaluation Policy 10-47 Physical Agility Test and Questionnaire 10-47 Performance Evaluation Instructions Physical Fitness Program Health and Nutrition Program		

SUBJECT: Fire Ground Work Performance Evaluation (FGPE)
AKA: GFD 10-47 Performance Test

PURPOSE: **A. To provide guidelines and procedures that ensure the Guam Fire Department's personnel meet the physical standards for the Fire Ground Work Performance Evaluation (FGPE).**
B. To provide evaluation procedures and guidelines for proper administration.
C. To be in compliance with _____

This order consists of the following numbered section:

I. POLICY

II. RESPONSIBILITY

III. PROCEDURES

I. POLICY:

All personnel are required to successfully complete an annual Fire Ground Work Performance Evaluation (FGPE) aka 10-47 Performance Test before December 31 of each year.

II. RESPONSIBILITY:

- A. It is the responsibility of the Fire Chief to report and recommend to the POST Commission revocation of FGPE certificate of any personnel failing the 10-47 Performance Test four (4) times within a twelve (12) month period.
- B. It shall be the responsibility of the Training Bureau to:
 - 1. Maintain and store all necessary equipment to administer the 10-47 Performance Test.
 - 2. Administer and coordinate scheduling of the 10-47 Performance Test.
 - 3. Maintain records of personnel relative to 10-47 Performance Test.
 - 4. Provide 10-47 Performance Test reports within fifteen (15) days of testing personnel to the Fire Chief and the Training Bureau.
- C. All Bureau Chiefs shall be responsible to:
 - 1. Ensure that all personnel in their respective units/sections are present and prepared to participate in the scheduled 10-47 Performance Test.
 - 2. Implement, inspect, and monitor programs within their respective Commands to maintain 10-47 Performance Test readiness.
- D. Company Commanders and section leaders shall be responsible to:
 - 1. Ensure that all personnel in their respective companies/sections are present and prepared to participate in the scheduled training and drills to maintain 10-47 Performance Test readiness
 - 2. Conduct training and drills to maintain 10-47 Performance Test readiness.
 - 3. Maintain 10-47 Performance Test results of personnel assigned.
 - 4. Conduct progressive counseling/discipline and maintain records of personnel assigned that fail to participate in training and drills to maintain 10-47 Performance Test readiness and/or fail the 10-47 Performance Test.
- E. All personnel shall be responsible to:
 - 1. Be familiar with this General Order and all of its appendices.
 - 2. Schedule 10-47 Performance Test with the Training Bureau.
 - 3. Be present and prepared with proper gear to participate in their scheduled 10-47 Performance Test.
 - 4. Participate in drills and training that will enhance 10-47 Performance Test readiness.

III. PROCEDURES:

- A. General reasons a 10-47 Performance Test would need to be performed:
 - 1. Certification/ Recertification
 - 2. Reinstatement
 - 3. Lift of long term light duty status.
 - 4. As ordered by the Fire Chief

- B. 10-47 Performance Test recertification period:
 - 1. All Guam Fire Department Uniformed personnel shall be required to be tested during the annual designated period.
 - 2. The annual designated period shall be January 1-January 31 of every year.
 - 3. The 10-47 Performance Test certifications shall be valid only between the date of the 10-47 Performance Test was passed (satisfactory) and December 31 of that test year. During the next designated recertification period, any previous satisfactory 10-47 Performance Test will no longer be valid regardless of date.

- C. All personnel shall be in Full Turnout Gear / Fire Ground PPE to include SCBA pack and Mask (On-Air) while participating in the 10-47 Performance Test.

- D. All personnel shall fill out the 10-47 Physical Agility Questionnaire prior to engaging in fitness test. (refer to appendix A).

- E. Personnel will be given ample time, no more than 20 twenty minutes, to warm up prior to beginning 10-47 Performance Test.

- F. The sequence of events for the 10-47 Performance Test shall be in order as listed below.
 - 1. Protective Gear Event
 - 2. Ladder Carry, Raise, Extension Even
 - 3. Forcible Entry Event
 - 4. High Rise Pack Event
 - 5. Hand Line Advancement Event
 - 6. Hand Line Pull Event
 - 7. Pike Pole Event
 - 8. Equipment Carry Event
 - 9. Ventilation Event
 - 10. Victim Rescue Event

- G. Test Administrators shall:
 - 1. Be trained in administering and recording results of the 10-47 Performance Test.

2. Give every participant detailed, clear, and concise instructions. (refer to Appendix B)
3. Escort participants through each event during the 10-47 Performance Test.

H. Injury/illness during participation of the 10-47 Performance Test

1. Personnel injured or ill prior to participating in the 10-47 Performance Test shall provide a medical note.
2. Personnel who become injured/ill during the 10-47 Performance Test shall report injury or illness to test proctor and follow Worker's Compensation procedures.

I. Temporary Medical Profile

1. Personnel with a temporary profile must take the 10-47 Performance Test after the profile has expired. Once the profile is lifted, personnel must be given twice the time of the profile (but not more than 42 days) to train for the 10-47 Performance Test. For example, if the profile period was 7 days, the personnel has 14 days to train for the performance test after the profile period ends. If a normally scheduled 10-47 Performance Test occurs during the profile period, personnel should be given a mandatory make-up date. If personnel exceed 42 days, on the 43rd day they shall receive an unsatisfactory completion for the scheduled 10-47 Performance Test and discipline shall be in accordance with **Unsatisfactory Completion** of this policy.

J. Unsatisfactory Completion

1. Personnel who do not pass the 10-47 Performance Test must retest within forty-three (43) to ninety (90) days. Personnel may volunteer to retake the 10-47 Performance Test earlier than forty-three (43) days with the approval of the Fire Chief.
 - a. First Unsatisfactory - A written warning shall be issued to personnel by their immediate supervisor. Immediate supervisor shall discuss and implement a nutrition plan and workout regimen with the individual (refer to Appendices C & D).
 - b. Second Unsatisfactory - A second written warning shall be issued to personnel by their immediate supervisor. Immediate supervisor shall discuss and implement a nutrition plan and workout regimen with the individual (refer to Appendices C & D). Personnel

will also be ineligible from any favorable employee action, e.g., promotions and individual or unit performance awards.

- c. Third Unsatisfactory - A third written warning shall be issued to personnel by their immediate supervisor. Immediate supervisor shall discuss and implement a nutrition plan and workout regimen with the individual (refer to Appendices C & D). Personnel will also be ineligible from any favorable employee action, e.g., promotions and individual or unit performance awards. A Letter of Reprimand shall be issued.
 - d. Fourth Unsatisfactory - The immediate supervisor of the personnel shall report to the Fire Chief the fourth unsatisfactory results and all previous disciplinary actions taken. The Fire Chief shall temporarily suspend personnel's 10-47 Performance Certification, and recommend to the POST Commission to revoke certification. Personnel will also be ineligible from any favorable employee action, e.g., promotions and individual or unit performance awards. A Notice of Proposed Adverse Action shall be issued in accordance with Department of Administration Personnel Rules and Regulations, Chapter 11.
- 2. Personnel receiving four (4) unsatisfactory 10-47 Performance Test results within a twelve (12) month period shall not receive hazardous and increment pay. Personnel shall be removed from Operations.
 - 3. The Fire Chief shall also take administrative action in accordance with Department of Administration's rule and regulation and the Fair Labor Standards Act.

Fire Chief

Appendix A: 10-47 Physical Agility Test and Questionnaire
Appendix B: 10-47 Performance Evaluation Instructions
Appendix C: Nutrition Plan
Appendix D: Workout Plan



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10-47 Physical Agility Test

Date: _____

Rank/Name: _____ Station: _____ Platoon: _____

Age: _____ Gender: M / F Location of Test Site: _____

The Fire Ground Work Performance Evaluation (FGPE) is a test of an individual's ability to perform essential functions required in the occupation of firefighting. The Guam Fire Department has established a minimum level of acceptable performance which protects the safety of the firefighter and provides for the appropriate delivery of fire suppression and rescue services.

*** Participants are required to provide complete NFPA approved personal protective clothing ensemble to participate in the FGPE. This ensemble includes helmet, ear flaps, nomex hood, coat, bunker pants, boots, and gloves.**

Event	Pass	Fail	Reason (Fail)
Protective Gear Event			
Ladder Carry, Raise, Extension Event			
Forcible Entry Event			
High Rise Pack Event			
Hand Line Advancement Event			
Hand Line Pull Event			
Pike Pole Event			
Equipment Carry Event			
Ventilation Event			
Victim Rescue Event			

NOTE: Only four scenarios exist for the Fire Ground Performance Evaluation.:

1. Applicant successfully completes all required events within the allotted time as per the participant's age group (Reference Table 1-1). (Pass)
2. Applicant requests to be removed from the process. (Fail)
3. Applicant runs out of breathable air before successfully completing all events. (Fail)
4. Applicant exceeds the allotted time. (Fail).

Time	Pass	Fail	Evaluator Signature



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10-47 Physical Agility Test

Print Name: _____ Rank: _____ Age: _____

Signature: _____ Date: _____

Contact #: _____ Section: _____

You are being asked these questions for your safety and health. The Fire Fighter 10-47 Physical Agility Test is a maximum-effort test. Fire Fighters who have not been exercising regularly and/or have other risk factors for a heart attack (increasing age, smoking, high blood pressure, etc.) are at increased risk of injury or death during the test. Answering these questions honestly is in your best interest.

1. Have you experienced any of the symptoms/problems listed below and not been medically evaluated and cleared for unrestricted participation in a physical training program?

- Unexplained chest discomfort with or without exertion
 - Unusual or unexplained shortness of breath
 - Dizziness, fainting, or blackouts associated with exertion
 - Other medical problems that have not been evaluated, optimally treated, or not already addressed that may prevent you from safely participating in the test (e.g. heart disease, sickle cell trait, asthma, etc.).
 - Family history of sudden death before the age of 50 years
- ☐ YES: Stop. Notify your Fitness Program Manager and contact your Personal Care Provider for evaluation/recommendations. Hand carry this form to medical evaluation.
- ☐ NO: Stop. Proceed to next question.

2. Are you 35 years of age or older?

- ☐ YES: Proceed to next question.
- ☐ NO: Stop. Sign form and return to your Fitness Program Manager. Member may take the Fitness Assessment.



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3. Have you engaged in vigorous physical activity (i.e., activity causing sweating and moderate to marked increases in breathing and heart rate) averaging at least 30 minutes per session, 3 days per week, over the last 2 months?
- ☐ YES: Stop. Sign form and return to your Fitness Program Manager. Member may take the Fitness Assessment.
 - ☐ NO: Proceed to the next question.
4. Does one (1) or more of the following risk factors apply to you?
- Smoked tobacco products in the last 30 days
 - Diabetes
 - High blood pressure that is not controlled
 - High cholesterol that is not controlled
 - Family history of heart disease (developed in father/brother before age 55 or mother/sister before age 65)
 - Age >45 years for males; >55 years for females
- ☐ Yes: Stop and notify the Fitness Program Manager.
- ☐ NO: Stop. Sign Form and return to your Fitness Program Manager. Member will take the Fitness Assessment



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10-47 Physical Agility Screening Questionnaire

Signature: _____ **Date:** _____

Print Name: _____ **Rank:** _____

Duty Phone: _____

Medical Evaluation (Only applicable if member marked YES on Question #1; provider answers all 4 statements). If medical evaluation is required in accordance with Fitness Screening Questionnaire will complete the following.

I medically evaluated _____ on _____.
(NAME) (DATE)

Medical recommendations are:

Member (is/is not) medically cleared for the maximal effort for the 10-47 Physical Agility Test at this time and will be reevaluated on _____.
(DATE)

(Signature / Date / Stamp of Provider)

Guam Fire Department

Fire Ground Work Performance Evaluation (FGPE)

AKA: GFD 10-47 Performance Evaluation

The Fire Ground Work Performance Evaluation (FGPE) is a test of an individual's ability to perform essential functions required in the occupation of firefighting. The Guam Fire Department has established a minimum level of acceptable performance which protects the safety of the firefighter and provides for the appropriate delivery of fire suppression and rescue services.

The Guam Fire Department requires a FGPE be administered to ALL uniformed personnel.

The FGPE consists of 10 events designed to measure the performance demands of a firefighter to operate effectively at a scene. (<https://youtu.be/B5sWZLPZBPo>)

1. Protective Gear Event
2. Ladder Carry, Raise, Extension Event
3. Forcible Entry Event
4. High Rise Pack Event
5. Hand Line Advancement Event
6. Hand Line Pull Event
7. Pike Pole Event
8. Equipment Carry Event
9. Ventilation Event
10. Victim Rescue Event

Event 1 - The first event is designed to ensure that there is ample time for the firefighter to secure all pieces of their Personal Protective Equipment (PPE), including Self Contained Breathing Apparatus (SCBA) in a safe manner, thus enabling the participant to safely accomplish the remaining portion of the FGPE.

Participants are required to provide complete NFPA approved personal protective clothing ensemble to participate in the FGPE. This ensemble includes helmet, ear flaps, nomex hood, coat, bunker pants, boots, and gloves.

Events 2 – 10 are adjoining events of the FGPE. They are continuous and individuals are encouraged to transition through each event as efficiently and safely as possible.

NO RUNNING IS ALLOWED ON THE COURSE AT ANY TIME.

The participant must complete Events 2 through 10 of the course in the allotted time and **must have breathable air left in the SCBA tank.**

Meeting or exceeding the minimum level of performance will demonstrate that the firefighter is prepared to perform the essential functions of firefighting.

Safety Precautions: Safety of the firefighter is top priority during the administration of the FGPE. The strenuous nature of the assessment requires that participants be monitored closely throughout the evaluation process. The assessment will not be administered when extreme environmental conditions exist that will compromise the safety of the participant. If safety is compromised by improper technique the person performing the test shall be stopped and corrected. The timer and SCBA tank time however, will not be stopped to correct improper technique.

Throughout the evaluation process, the FGPE monitor will keep watch on the participant. The participant will be monitored for improper lifting techniques which may lead to back injuries; improper striking techniques that may cause hand/arm injuries; and exhaustion that may lead to other serious injuries.

The test monitor shall apprise the participant of all aspects of the assessment process prior to the evaluation. This includes a description of each of the tasks to be performed, and the parameters for successful completion. Any performance techniques that are unacceptable will be emphasized. Individuals to be tested will be afforded an opportunity to practice the entire FGPE prior to the actual testing.

Successful

The firefighter will be considered successful at passing the FGPE if he/she completes the course within the allotted time and still breathable air in their SCBA tank.

Unsuccessful

The firefighter will be considered unsuccessful at passing the FGPE for any of the following reasons:

1. Firefighter requests to be removed from the process
2. Firefighter does not complete the course within the allotted time.
3. Firefighter runs out of breathable air prior to completing the course.

Description of Events:

Event 1: Personal Protective Equipment (PPE)

This event allows the firefighter to safely don his/her complete set of PPE

Firefighter will properly don complete issue of PPE (pants, coat, hood, helmet, and gloves). Firefighter will move to SCBA and properly don SCBA. Once air is activated and face piece is secured, the participant will signal ready by raising either arm.

Event 2: Ladder Lift, Carry, Raise and Extension

This event simulates the firefighter's ability to place a ladder in service.

Firefighter will position himself/herself to properly perform a one-firefighter low shoulder carry on a 24 foot extension ladder; carry the ladder 75 feet to a "marked" area; raise the ladder; extend the ladder three rungs; position the ladder to the proper climbing angle and set ladder. **MOVE TO NEXT EVENT.**

EVENT 3: Forcible Entry

This event simulates the firefighter's ability to gain entry into a locked structure.

Firefighter will walk 75 feet to the forcible entry table and pick up sledge hammer provided; position to either side of the tire; strike tire repeatedly until tire moves to other end of table; walk 75 feet back to start point. **MOVE TO NEXT EVENT.**

Event 4: High Rise Pack

This event simulates the firefighter's ability to carry a high rise pack to an upper story location.

Firefighter will move to high rise pack location and properly lift high rise pack onto the shoulder; carry high rise pack 30 feet to the simulated stair platform; simulate climbing 3 floors (completely stepping up and down = 1 step) for a total of 30 steps; carry high rise pack 30 feet back to start point and place pack in marked area. **MOVE TO THE NEXT EVENT.**

EVENT 5 and 6: Hand Line Advancement and Pull

This event simulates the firefighter's ability to advance and re-position a charged hand line. Firefighter will walk 75' to charged 1 ¾" hand line; pick up hand line; pull hand line 75'; crawl back 50' on hands and knees keeping one hand in constant contact with the hose line back to coupling. Firefighter will then turn and face nozzle and while in the kneeling or sitting position, pull hose line back until nozzle is reached; lower nozzle to ground. **MOVE TO NEXT EVENT.**

Event 7: Pike Pole

This event simulates the firefighter's ability to pull ceilings and/or remove debris from above the shoulder level.

Firefighter will pick up pike pole; walk 30 feet to marked area and raise the pike pole 30 times. Both hands must be below the mark on the pike pole. Both arms must extend fully for each repetition to count. When completed return to start point and place pike pole back in marked area. **MOVE TO NEXT EVENT.**

Event 8: Equipment Carry

This event simulates the firefighter's ability to carry equipment from point to point.

Firefighter will move to equipment; properly lift equipment; move the item(s) 75 feet to marked area; set equipment down; lift and carry second item(s) 75 feet back to event start point. Note: Firefighter must perform single item carry and dual item carry to be successful at this event. Items to be carried in this event will alternate between 25 pound weight plate (single item carry) and 20 pound dumbbell and 25 pound dumbbell (dual item carry). **MOVE TO NEXT EVENT.**

Event 9: Ventilation

This event simulates the firefighter's ability to create an opening for ventilation.

Firefighter will pick up sledge hammer and position himself/herself on the Keiser sled; Strike I-beam until it moves a distance of 3 feet (repositioning feet as necessary); dismount Keiser sled. **MOVE TO NEXT EVENT.**

Event 10: Victim Rescue

This event simulates the firefighter's ability to perform a victim rescue.

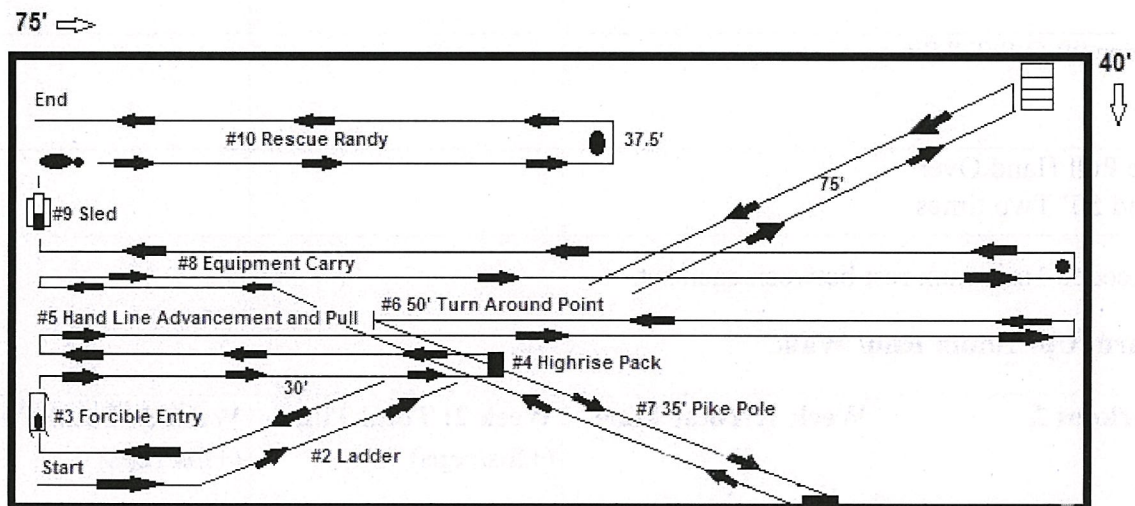
Firefighter will use straps to drag manikin (rescue dummy) a total distance of 75 feet (going around cone); returning to start point; place manikin back in marked area.

THE FIRE GROUND WORK PERFORMANCE EVALUATION IS COMPLETE. MOVE TO REHABILITATION AREA.

NOTE: Only four scenarios exist for the Fire Ground Performance Evaluation.:

1. Applicant successfully completes all required events within the allotted time or less. (Pass)
2. Applicant requests to be removed from the process (Fail)
3. Applicant runs out of breathable air before successfully completing all events (Fail)
4. Applicant exceeds the time allotted time (Fail).

View the following video (<https://youtu.be/B5sWZLPZBPo>) on the Fire Ground Work Performance Evaluation (FGPE) also known as the 10-47 agility test.



Workout Schedule:**Name:****Start Date:****Initial 10-47 Time and Date:*****Warm Up- 10min Run/Walk**

Workout 1	Week 1: Total Time	Week 2: Total Time (+lbs/reps)	Week 3: Total Time (+lbs/reps)
30 air squats			
Two 1 ½" Hose Farmers Carry 100' 30lbs Dumbbell Equivalent			
15reps "P.O.S.T." Sit- ups			
Tire Pull Hand Over Hand 50' Two times			

*If needed 1min max rest between each set.

***Warm Up- 10min Run/ Walk**

Workout 2	Week 1: Total Time	Week 2: Total Time (+lbs/reps)	Week 3: Total Time (+lbs/reps)
Two 1 ½" Single Section Hand Hose Carry Steps-up 20reps			
25lbs Standing Arm Curl Shoulder Press 20reps Total			
30sec Push-up Plank			
Tire Pull 100'			

*If needed 1min max rest between each set.

Warm Up- 10min Run/ Walk

Workout 3	Week 1: Total Time	Week 2: Total Time (+lbs/reps)	Week 3: Total Time (+lbs/reps)
Two 1 ½" Single Sections Hose Farmers Carry 100'			
9.5/10lbs Sledgehammer Right/Left Side 10 reps each side Tire Slams for a total of 20 reps			
Push Up Position Knee To Elbow 20reps			
50' Tire Pull Turn and Hand over Hand Pull			

*If needed 1min max rest between each set

***Warm Up- 10min Run/Walk**

Workout 4	Week 1: Total Time	Week 2: Total time +lbs/reps)	Week 3: Total Time(+lbs/reps)
One 1 ½" Single Section Hose Wide Stance Squat to Shoulder Press 20 reps			
50' Tire Drag to 10 reps Sledgehammer Tire Slams Right/Left Side for a Total of 20			
10 "P.O.S.T." Sit ups to 10 Supine Single Leg Toe Touch Alternating Legs/Arms			
Two 1 ½" Single Section Hose Step Ups 20reps to 100' Farmers Carry			

*If needed 1min max rest between each set

Note: Your goal is to finish all three sets regardless of how fast you go or what time you complete each set. Workout schedule is to be used as only an aid to help you achieve your goal; results will vary depending on the amount of effort put into your workout.

Calculate Maximum Heart Rate: Subtract your age from 220; this method does not take into account your fitness level or health factors, which can make your true maximum heart rate 10 to 20 beats per minute higher or lower than the age-predicted number.

Determine Resting Heart Rate: Take your pulse before you get out of bed in the morning. Do this for several days in a row to get a consistent reading.

Calculate Your Training Heart-Rate Range: Subtract your hearts resting rate from your maximum rate. For example, if you are 40 years old, subtract that number from 220; your maximum rate is 180. Next, subtract your resting rate, 80 in this example. Your target range is 100 beats per minute which is a cushion available for exercising.

Training Exercises for each event:

1) Single arm cleans and carry with 45/75lbs- perform exercise 5/10reps walk 20' turn switch arms and perform 5/10reps then walk back to starting line.

2) Sledgehammer Right and Left Side Slams- With a 9.5/10lbs sledgehammer hit a semi-truck tire 10/15reps standing on one side of the tire and striking the tire in a modified low baseball swing hitting square on the sledgehammer and in the middle of the tire tread.

3) Weighted step-ups- Wearing a SCBA pack with a 60min bottle with a 100' of 1 ½" hotel pack will be draped over the SCBA bottle and conduct step ups 30 reps on a 8" step. Dumbbell step-ups with 45lbs dumbbell in each hand and no SCBA pack worn.

4) Weighted drag – A 15' rope/cut 1 ½" hose attached to a standard car/suv tire and drag 50' and back to starting line. One section of 50' 1 ½" hose capped and water filled dragged 50' then walk back to starting point and pull 50' section back to starting point.

25/35 lbs dumbbell double handed chest to overhead press 15reps, 45 lbs bench press bar hold vertical and perform ceiling breach movement 15 reps then switch hand placement.

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Introduction

We need a new paradigm for the food we eat. We need to view food as nourishment to our body as opposed to solely calorie units. We need to consider what that food represents in terms of energy and nutrients. Just one food or one nutrient is not the answer to more energy, an optimal weight, better health, and improved performance. The key to success lies in the collection of our habits that fuel our bodies, activities, minds, performance, and most importantly our lives.

There are 5 areas of nutrition focus in the Fueling Series. You will find that the handout series and builder systems revolve around these 5 areas.

Eat Clean Eat Often Hydrate Recover Mindset

1. EAT CLEAN

Eating clean means trying to choose the least processed types of foods most of the time. Typically, the closer the food is to its original form (from the earth or the animal), the better it is for you.

Simply put. Try to eat foods in the most natural form possible.

Nutrient density plays a large role in the mentality of eating clean. Nutrient density is the relationship of the amount of nutrients that a food has to amount of calories. It is critical to try to choose nutrient dense foods as often as we can to ensure we get the nutrients we need. Focus on trying to choose the types of foods that have the highest amount of nutrients for the calories within the foods.

The 3 macronutrients:

Carbohydrate = Fuel

Protein = Build

Fat = Energy Density

2. EAT OFTEN

The key to energy and stability (beyond the types of foods you choose) is how often you eat. By eating mini-meals every 2-3 hours, your body is given a steady flow of fuel. The goal here is to maintain blood glucose (fuel) in an optimal range. This will help maintain focus and keep your metabolism roaring all day long. We find that those who eat more frequently have better energy and prevent becoming overly hungry, which can help us make better choices.

3. HYDRATE

It is vital to stay hydrated because the body is 60-65% water which performs numerous vital functions including:

- Providing life and shape to every cell
- Delivery of fuel to muscles
- Lubrication and cushioning of joints
- Aiding in muscle contraction & tone
- Aiding in metabolism and digestion
- Brain function
- Shock absorption for the spine and brain
- Regulating temperature

Consequently, dehydration causes these functions to suffer impairing your health, ability to recover from illness, and athletic performance. As little as a 2% decrease in weight, due to fluid loss, can impair both physical and mental performance.



Master these 5 fundamentals and enjoy new found physical and mental performance through nutrition.

Grains: "Come Back to Earth" • Carbohydrate = FUEL for the brain & muscles

- Main sources are: Breads, cereals, grains, beans, fruits, and vegetables.
- What to look for in a grain: The least processed forms of grain you can find.
- Think brown and found close to the ground!
- The best choices will have more than 3g of FIBER per serving.

The Top 5 Grains



Protein: "The Less Legs the Better" • Protein = Building blocks for our bodies

- Protein builds muscle and maintains the immune system.
- Main sources are: Lean Meats, Low Fat Dairy, Eggs, and Beans/Legumes.
- What to look for: Lean protein sources. Typically the less legs on the animal the protein came from, the better it is for you.
- Try to include a lean protein source with every meal.
- Protein needs increase with activity. Intake ranges from 0.5g (recreational exerciser) to 0.8g (building muscle mass) of protein per pound of body weight. You will never need more than 1g per pound for health or muscle mass gains. The palm of your hand equals about 30-40g of protein.

The Top 5 Proteins



Fats: "Eat Healthy Fat" • Healthy Fats = Energy Density

- Healthy Fats provide energy, help to regulate blood sugar, improve cholesterol, and keep you feeling full.
- Omega-3 fatty acids improve cognition, decrease inflammation, and enhance heart health. They are considered essential because your body cannot make them, you must get them through food. Omega-3's are found in fatty fish like salmon, trout, and tuna, as well as flaxseed, walnuts, and omega-3 fortified foods.
- Try to get one serving of healthy fat per meal (2 total servings of fatty fish per week).

The Top 5 Fats



FUELING SERIES

Nutrition Program

CHOOSE YOUR FUEL

EAT CLEAN

CARBS (GRAINS)

HIGH OCTANE FUEL: 91

Beans (black, kidney, navy)
Chickpeas
Black eyed peas
Brown rice
Corn
Green peas
High fiber crackers
Lentil, black bean and pea soup
Low-fat refried beans
Sweet potato/yam
Whole grain bread
Whole grain bagels
Whole grain cereal
Whole grain tortillas
Whole grain waffles

Baked beans
Baked chips
Boiled new potatoes
Cereal bars
Corn tortillas
Cornmeal/cornbread
Crackers
Cream of wheat
Flour tortillas
French bread
French toast
Hamburger/hot dog buns
Macaroni
Pancakes
Pasta
Pita bread
Pretzels
Ravioli
Rice cakes
Spaghetti
Waffles
White bread
White rice

LOW OCTANE FUEL: 87

Biscuits
Croissants
Doughnuts
Fettuccini alfredo
French fries
Hash browns
Mashed potatoes
Muffins
Pop tarts
Refried beans
Sugary cereals

PROTEIN

95% Ground beef or turkey
Beans & peas
Chicken, white meat/skinless
Deli meat (turkey, ham, beef)
Eggs (especially omega 3 eggs)
Egg whites
Lean beef steak
Lean ham steak
Lean jerky
Low-fat cottage cheese
Yogurt
Milk, Non-fat and 1%
Nut butters, Almond/peanut
Non-fried fish
Tofu
Trimmed pork chops
Tuna (in-water)
Turkey, white meat/skinless

85% Ground beef/turkey
Chicken, dark/skinless
Milk, 2% and low-fat flavored
Turkey, skinless/dark
Turkey bacon
Turkey sausage

75% Ground beef/turkey
Bacon
Beef or pork ribs
Bratwurst
Chicken, with skin
Fried chicken
Fried fish/seafood
Frozen pizza
Ham on bone
Regular cottage cheese, low-fat
Whole milk/chocolate milk

FAT

Avocado
Flax seed and flax oil
Natural almond butter
Natural peanut butter
Olive oil
Canola oil
Peanuts
Pumpkin seeds
Raw almonds
Raw cashews
Raw pecans
Raw pistachios
Raw walnuts
Sunflower seeds

Butter (in small amounts)
Dry roasted nuts/seeds
Reduced fat mayonnaise
Reduced fat salad dressing
Reduced fat sour cream
Reduced fat cheese
Regular peanut butter

Fried foods
Honey roasted nuts/seeds
Margarine
Mayonnaise
Ranch & other salad dressing
Regular cheese
Sour cream
Coconut oil

Fruits and Vegetables

- Fruits and vegetables are a great source of high fiber carbohydrates.
- Fruits and vegetables provide our body with a combination of vitamins that cannot be replicated in a supplement.
- Different colors serve different roles in the body.
- Aim for at least 3 colors at every meal.
- Over the course of the day strive to eat 2 servings of fruit and 3 servings of vegetables.
- Whole fruits and vegetables are best.
- Canned and frozen fruits and vegetables can also offer healthy alternatives at a lower cost. When choosing canned fruits make sure to choose them in their own juice or water.
- Drink fruit juice in moderation and make sure it is 100% juice. One serving of juice is equal to 4-6 oz.

COLOR CODE OF RESTORATIVE NUTRITION

Yellow Foods: Optimizes brain functions

- Star fruit
- Yellow fig
- Golden kiwi
- Yellow pear
- Yellow pepper
- Yellow tomato
- Squash
- Sweet corn

Green Foods: Rejuvenates musculature and bone

- Green leafy veggies
- Avocado
- Broccoli
- Kani
- Green cabbage
- All green veggies

Orange Foods: Supports skin and mucosal tissues

- Apricot
- Cantaloupe
- Nectarine
- Papaya
- Carrots

Red Foods: Supports heart and circulatory

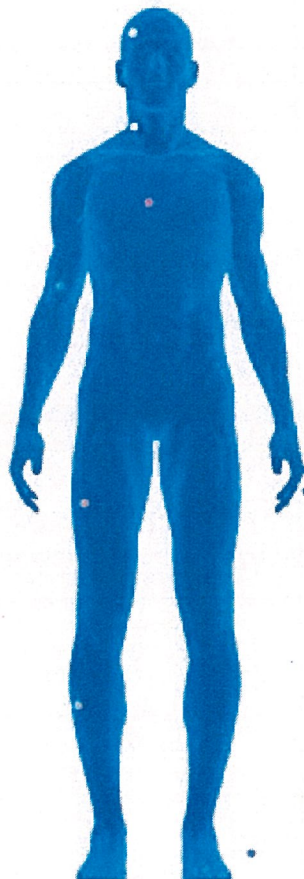
- Cherries
- Cranberries
- Strawberry
- Beets
- Red onion
- Tomato/tomato sauce

White Foods: Enhances immune system, lymph system, and cellular recovery

- Banana
- Garlic
- Ginger
- Gobo root
- Heart of palm
- Horseradish
- Jicama
- Mushrooms
- Onion

Purple Foods: Promotes microcirculation

- Blackberry
- Blueberry
- Plums
- Cabbage
- Eggplant
- Grapes
- Olives



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Portion Control: What is a serving size?

Choosing great foods is only half the battle to optimizing nutrition. Make sure to choose portion sizes that fit your needs.

BREADS:

- 1 Slice 100% whole wheat, rye, white, pumpernickel bread
- 2 Slices reduced calorie bread
- 1 Hot dog bun
- $\frac{1}{2}$ English muffin
- $\frac{1}{2}$ Bagel (3 inches)
- 1 Roll (small)
- 6" diameter pita bread
- 6" diameter corn or flour tortilla

VEGETABLES:

- 1c Raw vegetables
- 1c Cooked vegetable (e.g. see above for raw)
- 6oz Most vegetable juices

FRUITS:

- 1 Medium whole fruit (apple, orange, banana, etc)
- $\frac{1}{2}$ c Applesauce, unsweetened
- $\frac{1}{2}$ c Blueberries
- 1- $\frac{1}{2}$ c Whole strawberries
- 1c Raspberries or boysenberries
- 1c Cubed cantaloupe or honeydew
- $\frac{1}{2}$ c Cubed watermelon
- $\frac{1}{2}$ c Canned fruit (canned in water or juice)
- 12-15 Grapes
- 12 Cherries
- 2 Small plums
- 3 Dried prunes (also called "dried plums")
- 2Tbsp Raisins or other dried fruit
- 4-6oz 100% fruit juice

CEREALS AND GRAINS:

- 1oz Most cold cereals ($\frac{1}{4}$ - 1c)
- 1- $\frac{1}{2}$ c Puffed cereals (e.g. puffed rice)
- $\frac{1}{2}$ c Cooked cereal (e.g. oatmeal, oat bran, cream of wheat)
- $\frac{1}{2}$ c Cooked brown or white rice
- $\frac{1}{2}$ c Cooked enriched or whole-wheat pasta

MILK AND DAIRY

- 8oz (1c.) Nonfat or 1% milk, low fat or 1% fat chocolate milk
- 8oz (1c.) Calcium-fortified light or reduced fat soy milk
- 8oz (1c.) Nonfat or 1% plain or fruited yogurt
- $\frac{1}{2}$ c Nonfat frozen yogurt

MEAT AND PROTEIN

- 8oz (1c.) Nonfat or 1% milk, low fat or 1% fat 3 - 4oz meat
- $\frac{1}{2}$ c Beans
- 2Tbsp Peanut butter
- 2 Eggs
- $\frac{1}{2}$ c Cottage cheese

1tsp = 1 Teaspoon
1Tbsp = 1 Tablespoon
1c = 1 Cup
1oz = 1 Ounce

QUICK TIPS:

- 3-4oz. of meat is about the size and thickness of a deck of playing cards.
- A medium sized piece of fruit is the size of a tennis ball.
- 1oz of cheese is about the size of four stacked dice.
- $\frac{1}{2}$ c of ice cream is the size of a tennis ball.
- 1c of mashed potatoes is the size of your fist (depending on your size, commonly the size of a female fist).
- 1oz of nuts should fit into the palm of your hand.
- 1tsp of margarine or butter is about the size of the tip of your thumb.



DAILY HYDRATION NEEDS

- Water should be your main source of hydration.
- Avoid drinking soda, energy drinks, and fruit drinks. These beverages provide a lot of calories with very little nutritional value.
- Limit sweetened teas and coffee drinks with added sugar and cream.
- Only choose sports drinks before, during, and after intense exercise.

Are you hydrated?

- If you are thirsty, it is too late.
- Evaluate your urine. It should be light in color and resemble pale lemonade.

To maintain hydration drink water:

- 0.5 - 1oz fluid per pound per day [There are about 33oz in a liter (L)]

BODY WEIGHT	OUNCES OF FLUID PER DAY	LITERS NEEDED PER DAY
120 pounds	60 - 120 oz	2 - 4 liters/day
150 pounds	75 - 150 oz	2.5 - 5 liters/day
175 pounds	90 - 175 oz	3 - 6 liters/day
200 pounds	100 - 200 oz	3.5 - 7 liters/day
225 pounds	115 - 225 oz	4 - 8 liters/day
250 pounds	125 - 200 oz	4.5 - 9 liters/day

HYDRATION CONSIDERATIONS IN EXTREME ENVIRONMENTS

In extreme environments it is even more important to be aware of your fluid intake, fluid loss and electrolyte needs.

Key Nutrition Tips for Extreme Environments:

- Do not skip meals.
- Take time to drink.
- Maximize taste/palatability (temperature, sweetness) of your beverage. If it tastes great, you are more likely to drink it.
- Minimize body water losses.
- Consider engineered food products when cramping risks are high, if you are a salty sweater, or if you are sweating more than usual. Choose sports drinks with at least 110mg sodium and 30mg potassium per 8oz/250ml. These are ideal for replacing electrolytes lost in sweat.
- If you are an excessively salty sweater (salty skin), then 200mg sodium per 8oz or added electrolytes should be considered (Nuun Tablets, Gator-Lytes, etc.).
- Include whole foods in your meals that are higher in sodium. Good options are V8 Juice, pickles, pretzels, adding a little extra salt to your meals.

ENVIRONMENT	CONSIDERATION	HYDRATION RECOMMENDATIONS
Dry Extreme Heat	The extreme dry heat greatly increase the risk for dehydration and heat injury.	Suggested Fluid Intake: 5-12 Liters/day Tips: Sweating rates can be reduced by working at night. During daylight hours, sweating rates can be reduced by covering the skin with light, vapor-permeable clothing. If and when possible, drink COLD water and sports drink.
Hot and Humid	Relative humidity can increase water requirements independent of temperature. The humidity makes the evaporation of sweat off the skin difficult, which decreases the body's ability to cool itself. This increases the risk for dehydration and heat exhaustion. Excessive sweating can also cause a large loss of electrolytes, specifically sodium and potassium.	Suggested Fluid Intake: Up to 2x needs of Extreme Dry Heat Tips: If and when possible drink COLD water and sports drink.
Altitude	Altitude puts us at greater risk of dehydration. More fluid is lost through our urine and breathing. Layers of clothes may cause us to sweat more with little evaporation. The elevation also causes us to not feel as thirsty.	Suggested Fluid Intake: 4-6 Liters/day Tips: Drinking small quantities of fluid frequently results in less urine production than drinking large quantities of fluid less frequently.
Altitude and Cold	The addition of cold to altitude can cause greater risk for dehydration because of the sweat losses that occur in insulated clothing, low rates of fluid ingestion, and concern of having to remove clothing to urinate.	Suggested Fluid Intake: 5-5.5 Liters/day Tips: Make sure to consider the ventilation for your clothing to allow for sweating to dissipate heat. Drinking small quantities of fluid frequently results in less urine production than drinking large quantities of fluid less frequently. If and when possible consume hot fluids: tea, chicken/vegetable broth.

Check the color of your urine
as a good indicator of your
hydration status.

Hydrated

Dehydrated

**Extremely
Dehydrated
(consult a doctor)**

Recovery In 3's: Pre, During, and Post-Workout

Pre Workout

Don't go into your workout on an empty stomach.

Top off your fuel tank with a small balanced snack containing carbohydrate, fluid, and a small amount of protein approximately 1 – 2 hours before your workout.

Going into a workout properly fueled will improve performance and jump start recovery

Great pre-workout snacks include:

- 1 Yogurt with $\frac{1}{2}$ cup berries and $\frac{1}{4}$ cup high fiber cereal
- Small bowl of cereal with a banana
- $\frac{1}{2}$ turkey sandwich and fruit
- $\frac{1}{2}$ peanut butter & jelly sandwich and fruit
- Homemade trail mix. (1c high fiber cereal, 2 Tablespoons dried fruit, 2 Tablespoons nuts)

Make sure to hydrate with 16-20 oz of water too.

During Workout

It is important to stay hydrated during exercise.

How much do you need to drink?

- Losing 2% or more of your body weight due to sweating can decrease your performance and put you at greater risk for heat illness
- A good way to monitor how well you are hydrating is to weigh yourself before and after training

Do you need a sports drink?

NO, if...

- Training for less than 1 hour
- Weight loss is the goal of the training session

YES, if...

- Training for over an hour
- Training in extreme environments
- Lean body mass gain is the goal
- You enter the workout without any fuel
- You have a short but extremely intense workout

GENERAL HYDRATION GUIDELINES DURING WORKOUTS:

Maintain Hydration

- Keep weight loss to less than 2% during the workout.
- Take 4-6 gulps of fluid about every 15 minutes.
- Pay extra attention to your hydration when you are sweating more than usual or in an extreme environment.

Maintain Fuel and Electrolytes

- When you need something more than water, choose a sports drink with at least 110mg of sodium per 8 ounces to help prevent cramping and maintain electrolytes.
- When your exercise level warrants the consumption of a sports drink, 20-32oz an hour is all you will need to keep you fueled. Balance the rest of your hydration needs with water.

Hydration Example: 150 pound Peace Officer

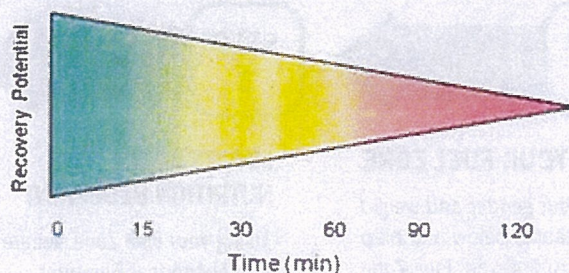
- 2% of their body weight is 3 pounds.
- If this Officer loses more than 3 pounds during their training, they are not hydrating effectively.

Recovery in 3's: Pre, During, and Post-Workout

Post Workout

- The sooner you get your post workout nutrition, the quicker you recover.
- Your recovery snack or meal – such as a granola bar with at least 5g of protein or a fruit smoothie – makes up one of your 5 - 6 meals per day.

THE OPEN WINDOW OF OPPORTUNITY TO GET YOUR BODY THE NUTRIENTS IT NEEDS FOR RECOVERY.



• Re-Fuel

• Re-Build

• Re-Hydrate

Within 10 minutes of training:

1. Refuel with carbohydrate

The more intense the training, the more carbohydrate you need.

2. Rebuild with protein

Protein needs post workout are based on body weight.

3. Rehydrate with fluid

Drink 20-24oz of fluid for each pound lost during training.

What do you need to recover?

BODY WEIGHT (POUNDS)	GRAMS OF PROTEIN	GRAMS OF CARBOHYDRATE
120 - 150	15 - 20	30 - 60
150 - 180	20 - 25	40 - 75
181 - 215	25 - 30	50 - 90
215 - 245	30 - 35	60 - 105

Examples:

- 20oz low-fat chocolate milk + banana
- Turkey and pasta salad
- Tuna sandwich w/baked chips
- Meal replacement bar + 20oz sports drink
- Scrambled eggs or egg whites with whole wheat toast and 6oz juice
- Turkey sandwich + yogurt
- Spaghetti and meatballs
- Fruit smoothie blended with yogurt or whey protein

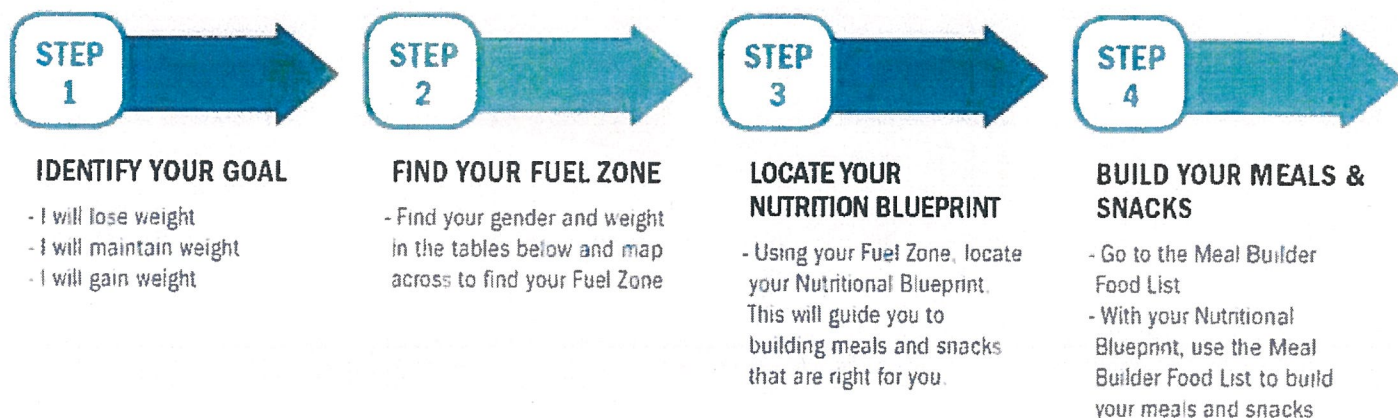
FUELING SERIES

Nutrition Program

STRENGTH SERIES | ENDURANCE SERIES | SANDBAG TRAINING SERIES

The biggest barriers to great nutrition are poor planning and poor implementation. The nutrition blueprint and meal builder make it easy to build meals and snacks that will keep you fueled and help you reach your goals. This tool will help you stay organized and create an environment for success. Always remember the 80/20 rule as you look to sustainably upgrade your nutrition. Choose high octane fuel 80% of the time and lower octane fuel that you really enjoy 20% of the time.

BUILD YOUR MEAL IN 4 SIMPLE STEPS



SET YOUR GOAL, FIND YOUR FUEL ZONE

I WILL FUEL TO...

STEP 1	LOSE WEIGHT		MAINTAIN WEIGHT		GAIN WEIGHT	
	CURRENT WEIGHT	FUEL ZONE	CURRENT WEIGHT	FUEL ZONE	CURRENT WEIGHT	FUEL ZONE
FEMALE	100 - 125	1400 - 1600	Under 105	2000 - 2200	100 - 110	2800 - 3000
	125 - 150	1600 - 1800	105 - 130	2200 - 2400	110 - 140	3000 - 3200
	150 - 180	1800 - 2000	130 - 160	2400 - 2600	140 - 165	3200 - 3400
	180 - 205	2000 - 2200	160 - 185	2600 - 2800	165 - 195	3400 - 3600
	205 - 235	2200 - 2400	185 - 210	2800 - 3000	195 - 220	3600 - 3800
	235 - 260	2400 - 2600				
MALE	Under 140	1800 - 2000	Under 140	2600 - 2800	Under 140	3400 - 3600
	140 - 155	2000 - 2200	140 - 160	2800 - 3000	145 - 165	3600 - 3800
	155 - 175	2200 - 2400	160 - 180	3000 - 3200	165 - 185	3800 - 4000
	175 - 190	2400 - 2600	180 - 195	3200 - 3400	185 - 205	4000 - 4200
	190 - 210	2600 - 2800	195 - 215	3400 - 3600	205 - 220	4200 - 4400
	210 - 230	2800 - 3000	215 - 235	3600 - 3800	220 - 240	4400 - 4600
	230 - 250	3000 - 3200	235 - 255	3800 - 4000		
	250 - 265	3200 - 3400	255 - 275	4000 - 4200		
	265 - 285	3400 - 3600				
	285 - 305	3600 - 3800				

STEP 3

Locate Your Nutrition Blueprint - Strength, Endurance, Sandbag Series

Using the Fuel Zone you identified in Steps 1 & 2, locate your personal Nutritional Blueprint to fit your caloric needs. Your blueprint has six columns across the top that represent meal times, or "fueling times". The food groups are represented along the left hand side, and the numbers located within the zone are the recommended number of servings from each food group at each fueling time.

1400 - 1600	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	2	1	1 to 2	1	1 to 2	
Proteins	1		1		1	1
Fruits	0 to 1	1	1	1	1	1
Vegetables	∞	∞	∞	∞	∞	∞
Fats	1	1	1	1	1	0 to 1
Calorie Range	350 - 400	175 - 200	280 - 320	175 - 200	280 - 320	140 - 160
*Meal Replacement Shake or Bar		1		1+ fruit		1

1600 - 1800	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	2	1 to 2	2	1 to 2	2	
Proteins	1		1		1	1
Fruits	1	1	1	1	1	1
Vegetables	∞	∞	∞	∞	∞	∞
Fats	1	1	1	1	1	1
Calorie Range	400 - 450	200 - 225	320 - 360	200 - 225	320 - 360	160 - 180
*Meal Replacement Shake or Bar		1		1+ fruit		1

1800 - 2000	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	2 to 3	1 to 2	2	1 to 2	2	
Proteins	1	0 to 1	1	0 to 1	1	1
Fruits	1 to 2	1	1 to 2	1	1	1
Vegetables	∞	∞	∞	∞	∞	∞
Fats	1	1	1	1	1	1
Calorie Range	450 - 500	225 - 250	360 - 400	225 - 250	360 - 400	180 - 200
*Meal Replacement Shake or Bar		1+ fruit		1+ 2 fruit		1

2000 - 2200	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	3	2	2	2	2	0 to 1
Proteins	1	0 to 1	1	0 to 1	1	1
Fruits	2	1	2	1	2	1
Vegetables	∞	∞	∞	∞	∞	∞
Fats	1	1	1	1	1	1
Calorie Range	500 - 550	250 - 275	400 - 440	250 - 275	400 - 440	200 - 220
*Meal Replacement Shake or Bar		1+ fruit		1+ 2 fruit		1+ fruit

2200 - 2400	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	3	2	2 to 3	2	2 to 3	1
Proteins	1 to 2	1	1	1	1	1
Fruits	2	1	2	1	2	1
Vegetables	∞	∞	∞	∞	∞	∞
Fats	1	1	1	1	1	1
Calorie Range	550 - 600	275 - 300	440 - 480	275 - 300	400 - 440	200 - 220
*Meal Replacement Shake or Bar		1+ fruit		1+ 2 fruit		1+ fruit

2400 - 2600	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	3	2	3	2	3	1
Proteins	2	1	1	1	1	1
Fruits	2	1	2	1	1 to 2	1
Vegetables	∞	∞	∞	∞	∞	∞
Fats	1	1 to 2	1	1 to 2	1	1
Calorie Range	600 - 650	300 - 325	480 - 520	300 - 325	480 - 520	240 - 260
*Meal Replacement Shake or Bar		1+ fruit + 1 fat		1+ 2 fruit + 1 fat		1+ fruit + 1 fat

2600 - 2800	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	3	2	3	2	3	1
Proteins	2	1	1	1	1 to 2	1
Fruits	2	1	2	1	2	1 to 2
Vegetables	∞	∞	∞	∞	∞	∞
Fats	1 to 2	1 to 2	1 to 2	1 to 2	1	1
Calorie Range	650 - 700	325 - 350	520 - 560	325 - 350	520 - 560	260 - 280
*Meal Replacement Shake or Bar		1+ fruit + 1 fat		1+ 2 fruit + 1 fat		1+ fruit + 1 fat

2800 - 3000	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	3	2	3	2	3	1
Proteins	2	1	1	1	2	1
Fruits	2 to 3	1	2	1	1 to 2	2
Vegetables	∞	∞	∞	∞	∞	∞
Fats	2	1 to 2	2	1 to 2	1	1
Calorie Range	700 - 750	350 - 375	560 - 600	350 - 375	560 - 600	280 - 300
*Meal Replacement Shake or Bar		1+ fruit + 1 fat		1+ 2 fruit + 1 fat		1+ fruit + 1 fat

3000 - 3200	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	3	2	3	2	3	1 to 2
Proteins	2	1	1 to 2	1	2	1
Fruits	3	1	2	1	2	2
Vegetables	∞	∞	∞	∞	∞	∞
Fats	2	1 to 2	2	1 to 2	1 to 2	1
Calorie Range	750 - 800	375 - 400	600 - 640	375 - 400	600 - 640	300 - 320
*Meal Replacement Shake or Bar	1+ fruit + 1 fat		1+2 fruit + 1 fat		1+ fruit + 1 fat	

3200 - 3400	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	3 to 4	2	3	2	3	2
Proteins	2	1	2	1	2	1
Fruits	3	1	2	1	2	2
Vegetables	∞	∞	∞	∞	∞	∞
Fats	2	1 to 2	2	1 to 2	2	1
Calorie Range	800 - 850	400 - 425	640 - 680	400 - 425	640 - 680	320 - 340
*Meal Replacement Shake or Bar	1+2 fruit + 1 fat		1+2 fruit + 1 fat		1+2 fruit + 1 fat	

3400 - 3600	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	4	2 to 3	3	2 to 3	3 to 4	2
Proteins	2	1	2	1	2	1
Fruits	3 to 4	1	2	1	2	2
Vegetables	∞	∞	∞	∞	∞	∞
Fats	2	1 to 2	2 to 3	1 to 2	2	1 to 2
Calorie Range	850 - 900	425 - 450	680 - 720	425 - 450	680 - 720	340 - 360
*Meal Replacement Shake or Bar	1+2 fruit + 1 fat		1+2 fruit + 2 fat		1+2 fruit + 1 fat	

3600 - 3800	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	4	2 to 3	3 to 4	2 to 3	4	2
Proteins	2	1	2	1	2	1
Fruits	4	1	2	1	2	2
Vegetables	∞	∞	∞	∞	∞	∞
Fats	2 to 3	1 to 2	3	1 to 2	2	1
Calorie Range	900 - 950	450 - 475	720 - 760	450 - 475	720 - 760	360 - 380
*Meal Replacement Shake or Bar	1+2 fruit + 1 fat		1+2 fruit + 2 fat		1+2 fruit + 1 fat	

COACH TIP:

Remember, the biggest barriers to great nutrition are poor planning and poor implementation. Stay organized and do what you can to create an environment for success. To get you started, make a copy of your Nutrition Blueprint and put it somewhere you'll have easy access to when making fueling decisions, like in your wallet or on your fridge.

3800 - 4000	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	4	3	4	3	4 to 5	2
Proteins	2	1	2	1	2	1
Fruits	4	1	2	1	2	2
Vegetables	∞	∞	∞	∞	∞	∞
Fats	3	1 to 2	3	1 to 2	2	1 to 2
Calorie Range	950 - 1000	475 - 500	760 - 800	475 - 500	760 - 800	380 - 400
*Meal Replacement Shake or Bar	1+2 fruit + 1 fat		1+2 fruit + 2 fat		1+2 fruit + 1 fat	

4000 - 4200	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	4	3	4	3	4 to 5	2
Proteins	2	1	2	1	2	1
Fruits	4	1	2	1	2	2
Vegetables	∞	∞	∞	∞	∞	∞
Fats	3	2	3	2	2	1 to 2
Calorie Range	1000 - 1050	500 - 525	800 - 840	500 - 525	800 - 840	400 - 420
*Meal Replacement Shake or Bar	1+2 fruit + 2 fat		1+2 fruit + 2 fat		1+2 fruit + 2 fat	

4200 - 4400	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	4	3	4	3	5	2
Proteins	2	1	2	1	2	1
Fruits	4	1	2	1	2	2
Vegetables	∞	∞	∞	∞	∞	∞
Fats	3	2 to 3	3	2 to 3	2	1 to 2
Calorie Range	1050 - 1100	525 - 550	840 - 880	525 - 550	840 - 880	420 - 440
*Meal Replacement Shake or Bar	1+2 fruit + 2 fat		1+2 fruit + 2 fat		1+2 fruit + 2 fat	

4400 - 4600	BREAKFAST	SNACK	LUNCH	SNACK	DINNER	SNACK
Grains	4	3	4 to 5	3	5	2
Proteins	2	1	2	1	2	1
Fruits	4	1	2	1	2	2
Vegetables	∞	∞	∞	∞	∞	∞
Fats	3	2 to 3	3	2 to 3	2	1 to 2
Calorie Range	1100 - 1150	550 - 575	880 - 920	550 - 575	880 - 920	440 - 460
*Meal Replacement Shake or Bar	1+2 fruit + 2 fat		1+2 fruit + 2 fat		1+2 fruit + 2 fat	

***When choosing meal replacements:**

1. Make sure it fits within your calorie recommendations
2. Should have at least 3g of fiber
3. Should have 10 - 30g of protein for women
4. Should have 15 - 42g of protein for men

STEP 4

Build Your Meals & Snacks

Using your Nutritional Blueprint, follow the directions below to start filling your day with meals and snacks designed to help you with your goals

Map Your Blueprint

The food list below has foods from each of the categories found in your Nutrition Blueprint

Size Up Your Servings

The number to the left of each food item equals one serving (eg. 1 slice of whole wheat bread = 1 grain serving)

Mix It Up

Each serving may be used interchangeably. For example, if you tire of whole wheat toast at breakfast you can replace it with any of the foods listed in the grain column. If you have more than one serving suggested, you can double up on the same food (eg. 2 slices of whole wheat toast) or mix and match (eg. 1 slice of whole wheat toast and 3/4c Multi grain Cheerios). You are limited only by your creativity!

You are now prepared to build customized meals and snacks to help you meet your goals. These meals and snacks will provide you with sustainable fuel throughout the day as well as the energy you need for your workouts. Remember, to maximize your energy and reach your body composition goals, think about both quality and quantity of your food choices

GRAINS / STARCHES:

Pasta/Rice

- 1/2c Brown Rice (cooked)
- 1/2c Whole Wheat Cous Cous (cooked)
- 1/2c Whole Wheat Pasta (cooked)
- 1/2c Risotto, Quinoa (cooked)

Breads/Tortillas/Rolls

- 1 slice Bread (100% Whole Wheat)
- 1/2 Pita Bread (6" diameter each)
- 1/2 Whole Wheat Bagel
- 1/2 English Muffin
- 1/2 Whole Wheat Hamburger/Hot dog Bun
- 1/2 Sub Bread (6" each)
- 1 Whole Wheat Tortilla
- 2 Corn Tortillas
- 1 sm Whole Wheat Roll (1oz each)

Cold Cereals

- 1/2c All Bran Cereal
- 1/2c Cheerios Cereal
- 1/2c Cheerios MultiGrain Cereal
- 1/2c Cracklin Oat Bran Cereal
- 1/2c Frosted Mini Wheats Cereal
- 1/2c Grape Nuts Cereal
- 1/2c Kashi Go Lean Cereal
- 1/2c Kashi Go Lean Crunch Cereal
- 1/2c Kashi Go Lean Honey Almond Flax
- 1/2c Muesli Cereal
- 1/2c Raisin Bran Cereal
- 1/2c Smart Start Cereal
- 1/2c Special K Cereal
- 1/2c Whole Wheat Total Cereal

Hot Cereals

- 1/2c Cream of Wheat (cooked)
- 1 Instant Grits
- 1/2 Packet Kashi Instant Oatmeal
- 1/2 Packet Quaker Instant Oatmeal
- 1/2c Slow Cooked Oatmeal

Veggies, Beans, Potatoes

- 1/2c Soy Beans (cooked)
- 1/2c Split Peas (cooked)
- 1c Squash (winter, acorn, butternut)
- 1/2c Peas (cooked)
- 1 sm Baked Potato
- 1/2c Beans: Black, Kidney, Pinto, Lima, Lentils (cooked/canned)
- 1/2c Corn (cooked)
- 1 Ear of corn
- 1/2c Sweet Potato (cooked)
- 1/2c Yam (cooked)
- 1/2c Mashed Potatoes

Snacks/Crackers/Granola Bars

- 1 Kashi Granola Bar
- 2 Graham Crackers
- 5 Whole Wheat Crackers (cooked)
- 4 Whole Wheat Melba Toast
- 1 Nature Valley Granola Bar
- 8 Animal Crackers
- 3c Light Popcorn (popcorn)

1/2c Pretzels

- 2 Rice Cakes (4" diameter each)
- 4 Reduced Fat Triscuits
- 1 Whole Grain Fig Newton

PROTEINS / DAIRY:

Fish/Seafood

- 3oz Fish
- 3oz Cod
- 3oz Flounder
- 3oz Haddock
- 3oz Halibut
- 3oz Salmon
- 3oz Shrimp
- 3oz Trout
- 3oz Tuna

Poultry

- 3oz Chicken (lunch meat)
- 3oz Chicken breast
- 3oz Ground turkey (cooked)
- 3oz Turkey (lunch meat)
- 3oz Turkey breast

Beef/Pork

- 3oz Beef (96% lean ground chuck)
- 1.5oz Beef jerky
- 3oz Beef tenderloin
- 3oz London broil
- 3oz Pork (roasted)
- 3oz Roast beef (lunch meat)

Dairy

- 8oz 1% or non-fat regular milk or chocolate milk
- 1/2c Non-fat or low fat cottage cheese
- 1/2c Non-fat frozen yogurt
- 1c Non-fat or low fat greek yogurt
- 8oz Reduced-fat soy milk
- 1 2% String cheese

Eggs

- 1/2c Egg Substitute
- 4 Egg Whites
- 2 Eggs
- 2 Omega-3 Eggs

Legumes

- 1/2c Beans: Black, Kidney, Pinto, Lima, Lentils (cooked/canned)
- 8oz Calcium-fortified light soy milk
- 2t Hummus
- 1/2c Soy beans (cooked)
- 1/2c Split peas
- 1t Almond butter
- 1t Peanut butter (natural)
- 10-15 Raw nuts

MEAL REPLACEMENTS, PROTEIN POWDERS:

- 1-2 scoop Whey Protein*
- 1 Bar
- 1 Shake

*Make sure to choose protein powders that are certified safe and reliable. Check out www.navyfitness.org for a complete list.

Meal replacement considerations:

- Make sure it fits within your calorie recommendations
- Should have at least 3g of fiber
- Double check the protein level
- Women need **10-30g**
- Men need **15-42g**

VEGETABLES:

Green

- 1c Arugula
- 1/2c Asparagus (cooked)
- 1c Asparagus (raw)
- 1/2c Broccoli (cooked)
- 1c Broccoli (raw)
- 1c Brussel sprouts
- 1/2c Celery (cooked)
- 1c Celery (raw)
- 1c Collards (cooked)
- 1c Cucumber (raw)
- 1/2c Green beans (cooked)
- 1c Green beans (raw)
- 1c Green veggie salad
- 1c Kale (raw)
- 1c Lettuce (all)
- 1c Spinach (raw)

White

- 1/2c Cabbage (cooked)
- 1c Cabbage (raw)
- 1/2c Cauliflower (cooked)
- 1c Cauliflower (raw)
- 1/2c Onions (cooked)
- 1c Onions (raw)
- 1/2c Water chestnuts (cooked)
- 1c Water chestnuts (raw)

Red

- 1/2c Tomato, beets
- 1/2c Salsa, tomato sauce

Orange

- 1/2c Carrots (cooked)
- 1c Carrots (raw)

Mixed Colors

- 1/2c Peppers (cooked)
- 1c Peppers (raw)
- 1/2c Stir fry vegetables (cooked)
- 1c Stir fry vegetables (raw/frozen)
- 6oz Vegetable juice
- 1/2c Zucchini (cooked)
- 1c Zucchini (raw)

FRUITS

Red

- 1 sm Apple
- 1/2c Applesauce (unsweetened)
- 12 Cherries
- 1c Raspberries
- 1/2c Strawberries (whole)
- 1/2c Watermelon (cubed)
- 1 sm Grapefruit

Orange

- 1c Cantaloupe (cubed)
- 1 sm Orange, nectarine or peach
- 1g Tangerine

Yellow

- 1/2g Banana(s)
- 1/2c Pineapple chunks (in own juice)

Blue/Purple

- 1c Blackberries or boysenberries
- 1/2c Blueberries
- 14 Grapes
- 2 sm Plums
- 3 Prunes (dried plums)
- 2t Raisins

Green

- 1c Honeydew melon (cubed)
- 1 sm Kiwi fruit
- 1 sm Pear

Mixed Colors

- 2t Dried fruit
- 1/2c Fresh fruit salad
- 1/2c Fruit cocktail (own juice)
- 6oz Fruit juice (100% juice)
- 1c Mixed berries (fresh/frozen)

FATS (CHOOSE OFTEN):

- 1t Nut butters: Almond, peanut, etc.
- 10-15 Nuts: Almonds, walnuts, pecans
- 1/2 Avocado
- 12g Black or green olives
- 1.5t Plant oils: olive, canola, flax
- 2t Flax seeds
- 2t Hummus
- 2t Seeds: Pumpkin, sesame, sunflower
- 3t Guacamole
- 2t Smart Balance, Benecol

FATS (CHOOSE LESS OFTEN):

- 2t Butter (stick)
- 1oz Cheese
- 1 sm Cheese
- 2t Cream cheese
- 4t Half & Half
- 2t Mayonnaise
- 3t Reduced fat cream cheese
- 4t Reduced-fat sour cream
- 2t Sour cream
- 1 2% String cheese
- 2 Turkey bacon slice
- 1 Turkey sausage link
- 1 Commercial salad dressings

- 1t = 1 Teaspoon
- 1T = 1 Tablespoon
- 1c = 1 Cup
- 1oz = 1 ounce

- sm. = Small
- med. = Medium
- lg. = Large

SOURCE: WWW.NAVYFITNESS.ORG

