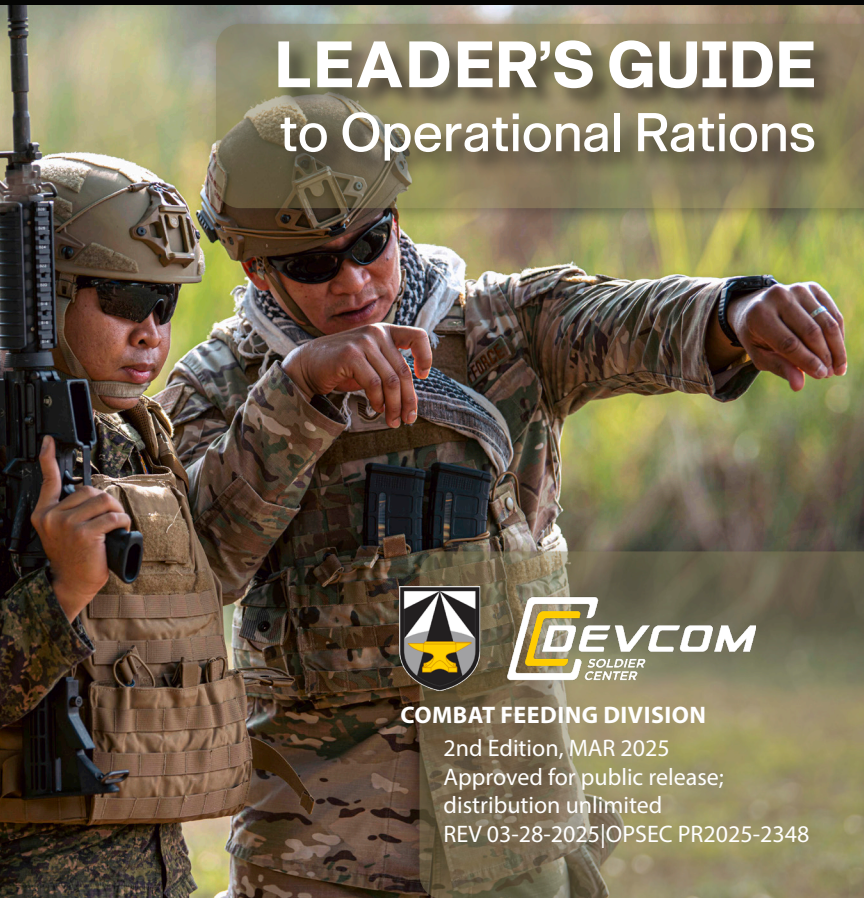




# LEADER'S GUIDE to Operational Rations



## COMBAT FEEDING DIVISION

2nd Edition, MAR 2025

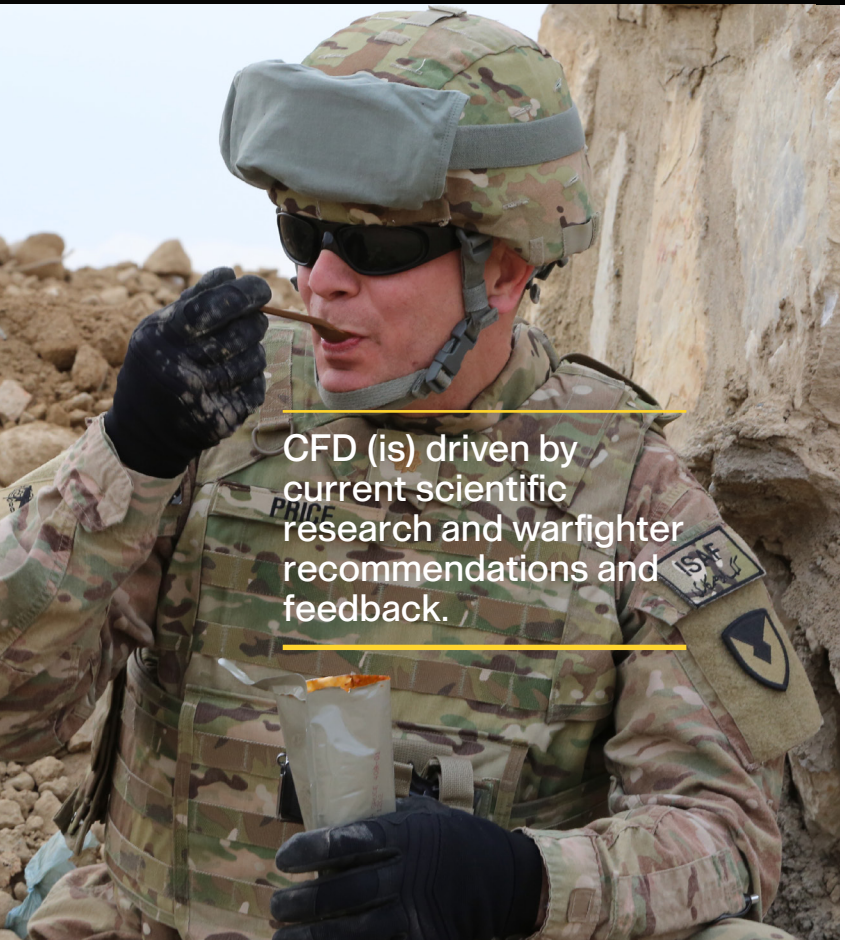
Approved for public release;  
distribution unlimited

REV 03-28-2025|OPSEC PR2025-2348

## Leader's Guide to Operational Rations



<b>Introduction</b> .....	<b>1</b>
<b>Individual Rations</b> .....	<b>3</b>
Meal, Ready-to-Eat (MRE) .....	3
First Strike Ration (FSR) .....	5
Close Combat Assault Ration (CCAR) .....	7
Meal, Cold Weather (MCW) .....	9
<b>Enhancements</b> .....	<b>11</b>
Modular Operational Ration Enhancement (MORE) ..	11
MORE – Performance Pack .....	13
<b>Group Rations</b> .....	<b>15</b>
Unitized Group Ration – Heat & Serve (UGR-H&S) .....	15
Unitized Group Ration – A (UGR-A) .....	17
Unitized Group Ration – Express (UGR-E) .....	19
Unitized Group Ration – M (UGR-M) .....	21
<b>Appendices</b> .....	<b>23</b>
Appendix A: Individual Rations .....	23
Appendix B: Group Rations .....	25
<b>Leader’s Role</b> .....	<b>27</b>
<b>Links</b> .....	<b>29</b>



---

CFD (is) driven by current scientific research and warfighter recommendations and feedback.

---

## COMBAT FEEDING DIVISION (CFD)

### The Global Leader and Technology Provider for Military Field Feeding

#### MISSION

The mission of the Department of Defense (DoD) Combat Feeding Research and Engineering Program is to provide an operationally relevant research and development base to deliver solutions for evolving field feeding challenges.

#### DUTIES

CFD is responsible for the research, development, engineering, integration and technical support for the entire family of operational rations. The program is driven by current scientific research and warfighter recommendations and feedback.

#### PURPOSE

This book highlights the various operational rations, which are categorized into several platforms. For each ration, a description of the purpose, major characteristics, nutritional data and preparation requirements is provided.





# INDIVIDUAL RATIONS

## MEAL, READY-TO-EAT (MRE)

### Description:

The MRE is the primary general-purpose individual ration used by the U.S. Armed Forces.

### Use:

Missions that allow time to eat. MRE rations can be main source of meals for up to 21 consecutive days.

- 3 MREs equal a day's worth of nutrition
- Menu variety:  
24 menus (4 vegetarian), entrée, crackers/bread, spread, dessert/snack, powdered beverage, accessory packet, plastic spoon
- Flameless Ration Heater provides heating option
- Shelf stable:  
3 years at 80°F (27°C) and 6 months at 100°F (38°C)
- Nutritional data:  
average 1,250 calories/meal
- Weight:  
average 1.4 lbs (0.63 kg)/meal
- Potable water requirements:  
approximately 18 oz/meal
- 12 menus per case

### Average Macronutrient Breakdown Per Meal:

- Carbs ..... 169g
- FAT.....47g
- PRO .....43g

## Leader's Guide to Operational Rations



# INDIVIDUAL RATIONS

## FIRST STRIKE RATION® (FSR)

### Description:

A compact, eat-on-the-move, restricted individual ration for initial stages of intense conflict.

### Use:

Short duration (ex. 1-3 days), highly mobile dismantled missions.

- 1 FSR equals a day's worth of nutrition
- Menu variety:  
9 menus, pocket sandwiches, ready-to-eat tuna and chicken, energy bars, powdered beverages, caffeinated gum, beef jerky, dessert bars, and Zapplesauce®
- Shelf stable:  
3 years at 80°F (27°C) and 6 months at 100°F (38°C)
- Nutritional data:  
average 2,800 calories/ration
- Weight:  
average 2.5 lbs (1.13 kgs)/ration
- Potable water requirements:  
approximately 30 oz/ration
- 9 rations per case

### Average Macronutrient Breakdown Per Meal:

- Carbs ..... 419g
- FAT.....96g
- PRO .....87g

## Leader's Guide to Operational Rations



# INDIVIDUAL RATIONS

## CLOSE COMBAT ASSAULT RATION® (CCAR)

### Description:

A compact, eat-on-the-move, restricted ration to support Warfighters during semi-independent and dispersed operations up to 5 days without resupply. Intended to replace the FSR.

### Use:

Short duration (ex. 1-7 days), highly mobile dismounted missions.

- 1 CCAR equals a day's worth of nutrition

- Menu variety:

3 menus, entrée, ready-to-eat tuna, energy bars, powdered electrolyte beverages, beef jerky, calorically dense low weight/volume components

- Shelf stable:

3 years at 80°F (27°C) and 6 months at 100°F (38°C)

- Nutritional data:

average 2,800 calories/ration

- Weight:

average 2.1 lbs (0.95 kgs)/ration

- 17 % weight and 39% volume reduction compared to the FSR

- Decreases individual Warfighter combat load transport

- 10 rations per case

### Average Macronutrient Breakdown Per Meal:

- Carbs ..... 333g
- FAT..... 128g
- PRO .....84g

## Leader's Guide to Operational Rations



# INDIVIDUAL RATIONS

## MEAL, COLD WEATHER (MCW)

### Description:

Specially designed to meet nutritional requirements for missions in extreme cold weather.

### Use:

Temperatures below 32°F (0°C) for extended periods, and water/snow is able to be heated (heat source is required)

- 3 MCWs equal a day's worth of nutrition
- Menu variety:  
12 menus, precooked, freeze dried entrée, crackers, spreads, cookies, sports bars, nuts, candy, powdered beverages and accessory pack
- Shelf stable:  
3+ years at 80°F (27°C) and 6 months at 100°F (38°C)
- Nutritional data:  
average 1,570 calories/meal
- Weight:  
average 1 lb (0.45 kg)/meal
- Potable water requirements:  
approximately 38 oz/meal
- 12 menus per case

### Average Macronutrient Breakdown Per Meal:

- Carbs ..... 206g
- FAT.....55g
- PRO .....50g



## MODULAR OPERATIONAL RATION ENHANCEMENT (MORE)

### Description:

- Energy-dense, mission tailored to augment (not replace) operational rations in extreme environments.
- Use: Missions that require extra calories due to heavy activity in high altitude/cold weather or hot weather environments.

Type I: High altitude/cold weather	<40°F (4°C)
Type II: Hot weather	>70°F (21°C)
Type I or Type II	40°-70°F (4-21°C)

- Menu Variety:  
3 pack varieties for each Type (24 per case), calorically dense, eat-on-the-move items, caffeinated gum, dried fruit, powdered carbohydrate beverages, energy bars.
- Shelf stable:  
3 years at 80°F (27°C) and 6 months at 100°F (38°C)
- Nutritional data:  
approximately 1,000 calories/pack
- Weight:  
average 0.7 lb. (0.32 kg)/pack
- Potable water requirements:  
Type I, 12 oz/pack, Type II, 24 oz/pack

### MORE Components:

The MORE is an energy dense ration enhancement that contains:

- Carbs
- Fat
- Protein
- Caffeine
- Vitamins & Minerals
- Electrolytes
- Antioxidants
- Amino acids

---

...designed to meet the  
unique nutritional needs  
and food preferences of  
the Special Operations  
Forces community...

---



## MODULAR OPERATIONAL RATION ENHANCEMENT (MORE) – PERFORMANCE PACK

### Description:

Newly designed to meet the unique nutritional needs and food preferences of the Special Operations Forces community and other Service Members conducting highly strenuous missions to enhance individual rations.

### Use:


During or after (recovery) highly strenuous missions. Missions that require extra calories due to heavy activity in high altitude/cold weather or hot weather environments.

- Menu Variety:  
3 pack varieties (24 packs/case), energy chews, energy gel, snack/bars, powdered/Ready-to-drink beverages
- Shelf stable:  
18 months at 80°F (27°C)
- Nutritional data:  
Approximately 1340 calories/pack
- Weight:  
Average 1.0 lb. (0.45 kg)/meal

### Optimal Nutrition for Recovery

- Carbs ...80-120g
- PRO.....approx. 25g

**Consume within  
30-60 minutes of  
completing activity**

A woman in military camouflage is working on a vehicle engine. She is looking down at the engine with a focused expression. The name "BARNES" is visible on her uniform. The background shows various mechanical parts and hoses of the engine.

Choose foods to meet  
your performance  
nutrition needs.

## UNITIZED GROUP RATION – HEAT AND SERVE (UGR-H&S)

### **Description:**

First group ration available in the field once field feeding kitchens are available; and contains shelf stable components.

### **Use:**

If a field kitchen is available (Kitchen, Company Level, Field Feeding; Assault Kitchen; Mobile Kitchen Trailer; Containerized Kitchen; Expeditionary Field Kitchen; Enhanced Tray Ration Heater System).

### **Components:**

Each module feeds 50 Warfighters and consists of 3 fiberboard cartons

### **Menu Variety:**

5 breakfast and 10 lunch/dinner menus, polymeric trays which contain entrée /starches, vegetables, desserts

### **Shelf Life:**

Shelf stable for 18 months at 80°F (27°C). These rations do not require refrigeration.

### **Nutritional Data:**

Approximately 1,350 calories/meal

## Leader's Guide to Operational Rations



## UNITIZED GROUP RATION – A (UGR-A)

### **Description:**

Provides high quality, fresh-like group meals in the field and contains frozen food components.

### **Use:**

If a field kitchen (Mobile Kitchen Trailer, Containerized Kitchen, Expeditionary Field Kitchen) and refrigeration capabilities (such as Multi-Temperature Refrigeration Container System) are both available.

### **Components:**

Each module feeds 50 Warfighters, consists of 3 fiberboard cartons, 1 w/frozen food and 2 w/semi-perishable foods.

### **Menu Variety:**

7 breakfast and 14 lunch/dinner menus, frozen and semi-perishable pre-cooked entrées/starches, vegetables, and desserts.

### **Shelf Life:**

Can be stored for up to 9 months in temperature-controlled storage (at 80°F for semi-perishable modules; and at 0°F for perishable modules).

### **Nutritional Data:**

Approximately 1,500 calories/meal

---

(UGR-E) provides a hot, group meal in remote locations without the need for cooks, field kitchens, or fuel.

---



## UNITIZED GROUP RATION – EXPRESS (UGR-E)

### **Description:**

Provides a hot, group meal in remote locations without the need for cooks, field kitchens, or fuel.

### **Use:**

When field kitchens are not available.

### **Components:**

Self-contained, self-heating group meal which is pull tab activated. Each module feeds 18 Warfighters, consists of 1 fiberboard carton.

### **Menu Variety:**

4 breakfast, 8 lunch/dinner menus, and a unique holiday meal, polymeric tray entrée/ starch, boil-in-bag eggs, vegetable, dessert, drink mixes, seasonings, dining trays/packets, serving utensils and trash bag.

### **Shelf Life:**

Shelf stable for 18 months at 80°F (27°C). These rations do not require refrigeration.

### **Nutritional Data:**

Approximately 1,300 calories/meal



Choose foods to meet  
your performance  
nutrition needs.

## UNITIZED GROUP RATION – M (UGR-M)

### **Description:**

Used by the Marine Corps to allow trained culinary specialists to provide a high-quality group meal.

### **Use:**

If a field kitchen is available (such as the Expeditionary Field Kitchen, Enhanced Tray Ration Heater System).

### **Components:**

Each module feeds 50 Warfighters, consists of 3 fiberboard cartons

### **Menu Variety:**

7 breakfast and 14 lunch/dinner menus, balance of dehydrated and commercial canned items, entrée, sides, desserts, drink mixes.




### **Shelf Life:**

Shelf stable for 18 months at 80°F (27°C). These rations do not require refrigeration.

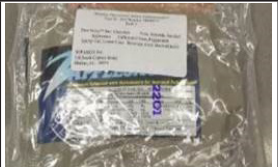


### **Nutritional Data:**

Approximately 1,350 calories/meal



## Leader's Guide to Operational Rations

	<b>Meal, Ready-to-Eat</b>	<b>First Strike Ration®</b>	<b>Meal, Cold Weather</b>
<b>USE</b>	General Purpose	Assault	Cold Weather
<b>DESCRIPTION</b>	General purpose ration; offers balanced nutrition & low logistics burden; can be airdropped; NATO compliant	Dismounted patrol; initial periods of intense/ highly mobile conflict; 50% lower weight & cube vs 3 MREs	Special purpose ration for extreme cold weather; long shelf life; 4500+ calories support heavy exertion, reduce risk of dehydration
<b>RATIONS/DAY</b>	3	1	3
<b>NUTRITION FACTS (avg/meal)</b>	1250 calories	2800 calories	1570 calories
<b>MENU VARIETY</b>	24 (4 vegetarian)	9	12
<b>NSN</b>	8970-00-149-1094 (Pork free, Case A: 8970-01-623-9560)	8970-01-543-3458	8970-01-467-1753
<b>PACKAGE IMAGE</b>			



# APPENDIX A — INDIVIDUAL RATIONS

	Modular Operational Ration Enhancement	Close Combat Assault Ration	MORE – Performance Pack
er	Nutritional Enhancement	Assault	Nutritional Enhancement
se me ong 0+ ort n, f	Enhancement pack to augment rations with extra calories; mission tailored: Type I - high altitude/cold weather, Type II - hot weather	Restricted ration to support semi-independent & dispersed operations up to 5 days w/out resupply; 17% weight & 39% volume reduction versus FSR	Enhancement pack for highly strenuous missions; contains components for during event and post-event
	1	1	1
s	1130 calories High Alt/ Cold Weather; 1030 calories Hot Weather	2800 calories	1340 calories
	3 each of Type I - High Altitude/ Cold Weather & Type II - Hot Weather	3	3
753	Type I: High Alt/Cold 8970-01-581-2505 Type II: Hot Weather 8970-01-599-4327	8970-01-717-1022	Not yet assigned
			

## Leader's Guide to Operational Rations

	<b>Unitized Group Ration – Heat and Serve</b>	<b>Unitized Group Ration – A</b>
<b>USE</b>	Large Group Feeding	Large Group Feeding
<b>DESCRIPTION</b>	First group meal available in deployment; food service available, but no refrigeration	High quality, fresh-like meals for use in a stable environment
<b>NUMBER FED perMODULE</b>	50	50
<b>EQUIPMENT REQUIRED</b>	Tray Ration Heater; Kitchen, Company Level, Field Feeding; or other hot water source	Complete field kitchen including refrigeration/ freezer
<b>NUTRITION FACTS (avg/meal)</b>	1350 calories	1500 calories
<b>MENU VARIETY</b>	15 (5 Breakfast, 10 Lunch/Dinner)	21 (7 Breakfast, 14 Lunch/Dinner)
<b>NSN</b>	Multiple	Multiple
<b>PACKAGE IMAGE</b>		

## APPENDIX B — GROUP RATIONS

<b>Unitized Group Ration – Express</b>	<b>Unitized Group Ration – M</b>
Small Group Feeding	Large Group Feeding
Group meal for austere locations; no equipment, fuel, power or cooks	High quality, group meal for use by Marines
18	50
None	Kitchen, Company Level, Field Feeding Expeditionary Field Kitchen
1300 calories	1350 calories
12 (4 Breakfast, 8 Lunch/Dinner)	21 (7 Breakfast, 14 Lunch/Dinner)
Multiple	Multiple
	

---

Proper fueling before, during, and after intense training sessions is critical to mission success.

---



## LEADER'S ROLE IN OPTIMIZING NUTRITIONAL FITNESS:

- Proper fueling before, during, and after intense training sessions is critical to mission success.
- Encourage snacking on carbohydrates and calorie-rich choices when possible, especially when break time is limited.
- Encourage Service Members to choose main entrées to maximize nutrient intake, including vitamins and minerals.
- Use the First Strike Ration® or the Close Combat Assault Ration when operations require eating-on-the-move.
- Educate Service Members to maintain glycogen stores and electrolytes during long periods ( $\geq 90$  minutes) of intense activity by drinking carbohydrate-electrolyte beverages.
- Remind Service Members that eating calorie-dense and nutrient-rich foods is even more critical with cold and high altitudes due to higher energy needs and a decreased appetite.
- Enforce hydration discipline especially in extreme environments such as hot/humidity, cold, and high altitudes.

**YOU** set the standard by modeling and promoting healthy behaviors.

Optimize nutrition  
**BEFORE, DURING, AND  
AFTER** deployment/field operations.

---

Understand your nutritional needs, and plan ahead to optimize performance.

---



## **Defense Logistics Agency-Troop Support**

Ration pricing and availability information

<https://www.dla.mil/Troop-Support/Subsistence/Operational-rations/>

## **Joint Culinary Center of Excellence**

Ration ordering and policy guidance

[quartermaster.army.mil/jccoe/jccoe\\_main.html](http://quartermaster.army.mil/jccoe/jccoe_main.html)

## **COMRAD Database**

Ration nutritional information

[hprc-online.org/comrad](http://hprc-online.org/comrad)

## **Warfighter Nutrition Guide**

[hprc-online.org/nutrition](http://hprc-online.org/nutrition)

## Leader's Guide to Operational Rations







**U.S. ARMY**  
**COMBAT CAPABILITIES DEVELOPMENT**  
**COMMAND — SOLDIER CENTER**  
**COMBAT FEEDING DIVISION**

**LEADER'S GUIDE**  
**TO OPERATIONAL RATIONS**  
2nd Edition, MAR 2025