



Operational Rations of the Department of Defense



**NATICK PAM 30-25,
4th Edition**



**Approved for public release;
distribution unlimited**

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4th Edition

The proponents of this Pamphlet are the DoD Combat Feeding Program (AMSSB-RCF(N)) and the Defense Supply Center Philadelphia Directorate of Subsistence (DSCP-HR).

Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications) directly to AMSSB-RCF(N).

Customers who are interested in ordering any of the products described in this publication should contact DSCP-HR directly. Please refer to the back cover of this publication for contact information.

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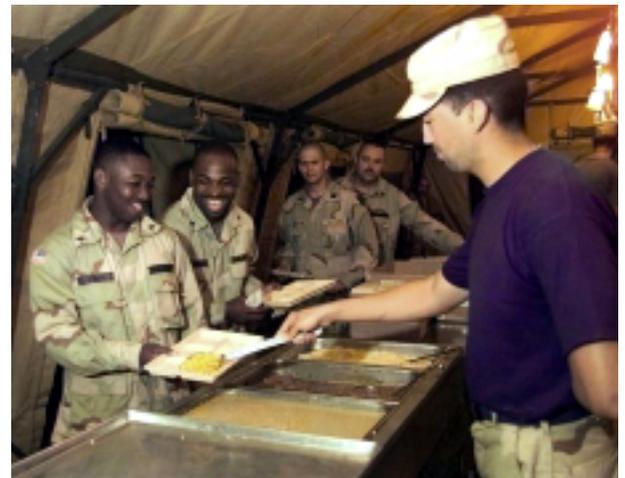
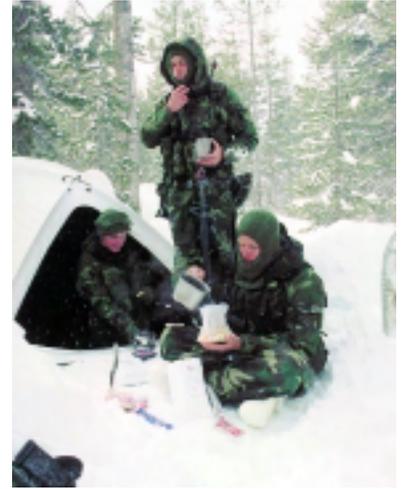


DEFENSE SUPPLY CENTER PHILADELPHIA

Modern operational requirements demand state-of-the-art combat rations that provide for the nutritional needs of the warfighter in extremely intense and highly mobile combat situations as well as in other contingency operations. Under the auspices of the Department of Defense, the U.S. Army Soldier and Biological Chemical Command's DoD Combat Feeding Program and the Defense Supply Center Philadelphia's Directorate of Subsistence Operational Ration Business Unit are working together to employ a total life cycle approach in developing, testing, evaluating, procuring, fielding and supporting the full spectrum of military rations. These rations ultimately contribute to the overall quality of life of the individual combatant.

The DoD Combat Feeding Program serves as the commodity laboratory responsible for research, development, engineering, integration and technical support for the full range of combat rations. The Operational Rations Business Unit is responsible for developing and implementing a master strategy for the integration of the Nation's industrial base for combat rations. The Directorate of Subsistence is also responsible for ensuring the logistical infrastructure is in place in order to supply present and future customers the highest quality combat rations in a timely manner at an affordable price.

This pamphlet highlights the full range of fielded combat rations (general purpose rations, special purpose subsistence, survival rations). Specific information provided for each ration includes: purpose, characteristics, nutritional data and preparation requirements.



Purpose:

The Unitized B Ration is used by the Armed Forces to sustain groups during operations that allow organized food service facilities with the exception of refrigeration. It is also used in situations that do not permit resupply of perishable foods.

Characteristics:

There are approximately 100 semiperishable foods used in the 10-day menu. The ration provides breakfast, lunch and dinner menus. The components are mostly canned and dehydrated foods, packaged in bulk containers of various sizes and types. Canned alternatives for dehydrated foods and alternate package sizes are specified in this ration. The shelf life varies depending on the item. The food is susceptible to damage by various conditions, such as freezing, heating, insects/rodents, humidity, puncture, breakage, etc.

- **Weight/Module*:**
467 pounds
- **Cube/Module*:**
12 cubic feet



*Six containers in a module: includes all regular menu components, bread ingredients, condiments, and seasonings.

Nutritional Data:

The ration provides approximately 4300 kilocalories per day (13% protein, 33% fat, and 54% carbohydrate).

Preparation Requirements:

The food is prepared by trained food service personnel. It takes 2 to 3 hours for two cooks to prepare a meal for 100 persons; additional personnel are needed for serving and sanitation. An average of 75 gallons of water per day is required to prepare food (excluding bread) and beverages for 100 persons.

Comments:

Menus, recipes and supply data are published in the supply bulletin: SB 10-495 NAVSUP INST 10110.6A MCO P10110.25C for the Army, Navy and Marine Corps. The Air Force provides the information through its automated worldwide menu program. Alternate menu items are listed to meet specific Service needs. Whenever possible, perishable foods, e.g., fresh fruits and salads, should be included with Unitized B Rations. Since the fielding of the Unitized Group Ration (UGR) (see page 8), the Army has chosen to use the Heat and Serve UGR in lieu of the Unitized B Ration. The Marine Corps continues to use the Unitized B Ration.

BREAKFAST

MENU 1	MENU 2	MENU 3	MENU 4	MENU 5	MENU 6	MENU 7	MENU 8	MENU 9	MENU 10
Apple Juice	Orange Juice	Orange Juice	Orange Juice	Apple Juice	Orange Juice	Orange Juice	Apple Juice	Orange Juice	Orange Juice
Scrambled Eggs	Scrambled Eggs	Scrambled Eggs	Scrambled Eggs	Scrambled Eggs Western Style	Scrambled Eggs	Scrambled Eggs	Scrambled Eggs	Scrambled Eggs	Scrambled Eggs
Hominy Grits		Hominy Grits	Hominy Grits	Hominy Grits		Oatmeal	Hominy Grits	Oatmeal	Hominy Grits
Creamed Ground Beef	Bacon	Bacon	Creamed Ground Beef		Roast Beef Hash	Grilled Luncheon Meat	Bacon	Bacon	Roast Beef Hash
Hash Brown Potatoes	Hash Brown Potatoes	Hash Brown Potatoes	Hash Brown Potatoes	Hash Brown Potatoes	Hash Brown Potatoes	Hash Brown Potatoes	Hash Brown Potatoes	Hash Brown Potatoes	Hash Brown Potatoes
Grapefruit Sections	Peaches	Pears		Fruit Cocktail		Pineapples	Grapefruit Sections	Fruit Cocktail	Pears
Biscuits/Margarine	Biscuits	Biscuits	Biscuits	Biscuits/Margarine	Biscuits	Biscuits/Margarine	Biscuits	Biscuits/Margarine	Biscuits
Peanut Butter/ Grape Jelly		Peanut Butter/ Blackberry Jelly		Peanut Butter/ Grape Jelly		Peanut Butter/ Grape Jelly		Peanut Butter/ Grape Jelly	
		Griddle Cakes				Quick Coffee Cake			
		Maple Syrup							

LUNCH/ DINNER

MENU 1	MENU 2	MENU 3	MENU 4	MENU 5	MENU 6	MENU 7	MENU 8	MENU 9	MENU 10
Beef and Gravy	Creole Chicken	Chili Macaroni	Beef and Gravy w/ Vegetables	Shrimp Creole	Baked Ham w/ Macaroni and Tomatoes	Breaded Pork Chops and Creamed Gravy	Chili Con Carne	Beef Patties Jardiniere	Baked Chicken
Mashed Potatoes	Steamed Rice		Mashed Potatoes	Steamed Rice		Mashed Potatoes	Steamed Rice	Mashed Potatoes	Steamed Rice
Peas	Corn	Peas	Corn Relish	Buttered Carrots and Peas	Green Beans	Carrots and Peas	Green Beans	Corn	Green Beans
Biscuits	Biscuits	Cornbread	Biscuits	Biscuits/Margarine	Cornbread/Margarine	Biscuits	Cornbread	Biscuits	Biscuits
Pears	Fruit Cocktail	Fruit Cocktail and Pudding	Peach Crunch	Apple Crisp	Cherry Cobbler	Applesauce	Pears	Applesauce	Peaches
Sugar Cookies	Oatmeal Cookies	Sugar Cookies				Oatmeal Cookies	Chocolate Cookies	Yellow Cake w/ Chocolate Icing	Chocolate Brownies w/ Chocolate Icing
		Vanilla Pudding							
		Peaches and Cottage Cheese Salad					Chicken Noodle Soup w/ Crackers	Pineapple and Cottage Cheese Salad	

Breakfast Menus include Coffee, Cocoa and Beverage Base.
Lunch/Dinner Menus include Coffee, Tea and Beverage Base.

Unitized Tray Pack (T-Ration)

Purpose:

The T Ration is designed to sustain groups of military personnel in highly mobile field situations with high quality, nutritionally adequate, heat and serve meals. This ration is used by the U.S. Marine Corps.

Characteristics:

The components in the 10-day menu are thermally processed, pre-prepared, shelf-stable foods, packaged in hermetically sealed, half-size steam table metal containers. The ration provides breakfast and lunch/dinner menus. The container serves as the package, heating pan, and serving tray. Each menu has been unitized in 18-man modules. Instant beverages, nondairy creamers, hot sauce, and disposables (cups, five-compartment trays, utensils) are included in each module. A pallet load consists of 24 identical meal modules. The shelf life is a minimum of three years at 80° F (27° C). A unitized Cold Weather T-Ration Supplemental Module is available. This supplemental module contains styrofoam clamshell trays and hot cups with lids, MRE pouch bread, candy, oatmeal cookie bars, soup, extra hot beverages and nondairy creamers.



Shipping Container and Components, Tray Pack-18 Person

- **Average Net Weight/Module:** 36 pounds (breakfast), 46 pounds (dinner)
- **Cube/Module:** 1.66 cubic feet

Nutritional Data:

The breakfast menus, including milk and bread supplements, provide an average of 1420 kilocalories (15% protein, 29% fat, and 56% carbohydrate) and the lunch/dinner menus, including milk and bread supplements, provide an average of 1420 kilocalories (17% protein, 30% fat, and 53% carbohydrate). The Cold Weather Supplement contains an additional 1020 kilocalories.

Preparation Requirements:

The Tray Packs are prepared for serving by food service personnel. They can be heated, unopened, in boiling water for 15-50 minutes, depending on the product, or opened and heated in an oven to an internal temperature of 165° F (74° C). A special hand-held or table-mounted can opener is required. A replacement polymeric tray is being phased in strating in 2000; this will eliminate the requirement for a can opener.

Comments:

Since the T-Ration is pre-prepared, its use allows reduction in food preparation time by 50-80%, water usage by 40%, and fuel by 20% when compared to A or B rations. Revisions are continuous under the Fielded Group Ration Improvement Program. The Subsistence Review Committee (SRC) and the Joint Service Operational Ration Forum (JSORF) meet annually to approve changes. The Unitized Group Ration (UGR) on page 8, incorporates selected highly acceptable tray pack items from the T-Ration. The Army has phased out use of the Unitized T-Ration; however, the Marine Corps continues its use.



U.S. Marines using T-Rations

BREAKFAST

MENU 1	MENU 2	MENU 3	MENU 4	MENU 5	MENU 6	MENU 7	MENU 8	MENU 9	MENU 10
Orange Juice (Instant)	Grape Juice (Instant)	Orange Juice (Instant)	Grape Juice (Instant)	Orange Juice (Instant)	Grape Juice (Instant)	Orange Juice (Instant)	Grape Juice (Instant)	Orange Juice (Instant)	Grape Juice (Instant)
Scrambled Eggs Western Style	Creamed Ground Beef	Omelet w/ Bacon	Scrambled Eggs	Corned Beef Hash	Omelet w/ Bacon	Scrambled Eggs Western Style	Creamed Ground Beef	Scrambled Eggs	Corned Beef Hash
Potatoes w/ Bacon Pieces	Potatoes w/ Bacon Pieces	Ham Slices	Pork Sausage Links		Pork Sausage Links	Ham Slices	Potatoes w/ Bacon Pieces	Ham Slices	Pork Sausage Links
Oatmeal	Oatmeal			Oatmeal	Salsa	Oatmeal	Oatmeal		Oatmeal
Peaches		Apple Dessert	Pears	Apple Dessert	Peaches	Fruit Cocktail		Apple Dessert	
	Coffee Cake w/ Cinnamon Crumb Topping	Coffee Cake w/ Cinnamon Crumb Topping	Spice Cake w/ Vanilla Crumb Topping	Coffee Cake w/ Cinnamon Crumb Topping	Spice Cake w/ Vanilla Crumb Topping	Coffee Cake w/ Cinnamon Crumb Topping	Spice Cake w/ Vanilla Crumb Topping	Coffee Cake w/ Cinnamon Crumb Topping	Coffee Cake w/ Cinnamon Crumb Topping

LUNCH/ DINNER

MENU 1	MENU 2	MENU 3	MENU 4	MENU 5	MENU 6	MENU 7	MENU 8	MENU 9	MENU 10
Chicken Breast/Gravy	Lasagna	Meatballs in Brown Gravy	Boneless BBQ Pork Ribs	Beef Strips w/ Peppers	Chicken Chow Mein	Hamburger	Spaghetti w/ Meatballs	Turkey Slices w/ Gravy	Beef Stew
Glazed Sweet Potatoes		White Rice	Red Beans and Rice	Oriental Style Rice	Oriental Style Rice	Pork and Beans		Potatoes in Butter Sauce	White Rice
Corn	Green Beans	Mixed Vegetables	Corn	Sliced Carrots	Corn	Cheese Spread	Green Beans	Peas	Peas
Yellow Cake w/ Chocolate Crumb Topping	Chocolate Pudding	Chocolate Cake w/ Vanilla Crumb Topping	Yellow Cake w/ Chocolate Crumb Topping	Marble Cake w/ Toffee Crumb Topping	Chocolate Cake w/ Vanilla Crumb Topping	Yellow Cake w/ Chocolate Crumb Topping			
Lemon Beverage Powder	Grape Beverage Powder	Grape Beverage Powder	Cherry Beverage Powder	Lemon-Lime Beverage Powder	Lemon-Lime Beverage Powder	Orange Beverage Powder	Cherry Beverage Powder	Lemon-Lime Beverage Powder	Grape Beverage Powder

Breakfast Menus include Bread, Milk, Coffee, Cocoa, Non-Dairy Creamer, Hot Sauce, Peanut Butter, Jelly, Dining Packets, Compartment Plates, 8 oz Cups and Trash Bags.

Lunch/Dinner Menus include Bread, Milk, Coffee, Peanut Butter and Jelly.

Unitized Group Ration (UGR)

Purpose:

The Unitized Group Ration (UGR) is designed to simplify and streamline the process of providing the highest quality meals in the field by integrating components Heat & Serve (H&S) and A-Rations with quick-prepared, user friendly, brand name commercial products. The UGR is used to sustain groups of military personnel during worldwide operations that allow organized food service facilities. It is an integral part of the Army Field Feeding System (AFFS).

Characteristics:

The UGR has five breakfast and ten lunch/dinner menus. There are two options available (see comments), an H&S version and an A-version. Each module provides 50 complete meals. The H&S version is unitized into three boxes, including disposables. Each pallet contains 8 modules or 400 meals. The UGR-H&S is

assembled at Government depots and has a shelf life of 18 months at 80° F. The UGR-A is a “build to order” with assembly and direct delivery by the vendor with a 15-day order ship time within CONUS and a 45-day order ship time for OCONUS. The UGR-A has a shelf life of at least 3 months (80° F semi-perishable, 0° F perishable) CONUS, and at least 5 months (80° F semi-perishable, 0° F perishable) for OCONUS.

- **Average Weight/Module*:** 113 pounds
- **Cube/Module*:** 5 cubic feet

*Three containers in a module.

Nutritional Data:

Each meal, including mandatory enhancements, provides an average of 1450 kilocalories (14% protein, 32% fat, and 54% carbohydrate). Breakfast enhancements include bread, milk and cold cereal and the lunch/dinner enhancements include bread, milk, peanut butter and jelly.

Preparation Requirements:

The food is prepared by trained food service personnel using organized food service facilities.



Unitized Group Ration (UGR)
Heat and Serve - 50 Soldier Unit

Comments:

Currently the UGR-H&S and UGR-A are available for procurement. The new polymeric tray replacing the metal tray has been approved and will be introduced. The UGR-A was successfully tested in two sites in FY98 - Ft. Hood, TX and Ft. Stewart, GA. The first rollout of this A version became available to 22 installations on July 22, 1999. Revisions are customer-driven and continuous under the Fielding Group Ration Improvement Program.

UGR-H&S and UGR-A efforts include increasing the number of breakfast menus from five to seven, and lunch/dinner menus from 10 to 14. The number of UGR-H&S menus will increase first.

UGR-A efforts also include standardizing the box configuration and size. A 30-day Spice Pack and a pamphlet entitled “Guide to Group Feeding” are currently being developed for use with the UGR.

Unitized Group Ration (UGR) Menus (Heat and Serve)

BREAKFAST

MENU 1	MENU 2	MENU 3	MENU 4	MENU 5
Grape Juice	Orange Juice	Orange Juice	Grape Juice	Orange Juice
Creamed Ground Beef	Ham Slices in Brine	Sausage Links in Brine	Creamed Ground Beef	Sausage Links in Brine
Scrambled Eggs	Scrambled Eggs w/ Bacon and Cheese	Scrambled Eggs	Western Omelet	Scrambled Eggs
Peaches		Blueberry Desert		Fruit Cocktail
Hominy Grits	Potatoes in Sauce	Hominy Grits	Potatoes w/ Bacon	
	Coffee Cake w/ Cinnamon Crumb Topping	Blueberry Waffles	Spice Cake w/ Topping	Waffles
Catsup	Catsup	Maple Syrup	Catsup	Maple Syrup / Catsup
Salsa	Hot Sauce	Salsa	Hot Sauce	Hot Sauce
Strawberry Jam	Grape Jelly	Strawberry Jam	Grape Jelly	Grape Jelly

LUNCH/ DINNER

MENU 1	MENU 2	MENU 3	MENU 4	MENU 5	MENU 6	MENU 7	MENU 8	MENU 9	MENU 10
Lasagna	Chicken Breast in Gravy, Stuffing	BBQ Pork Ribs	Hamburger Patties	Chicken Chow Mein	Spaghetti w/ Meatballs	Beef and Green Peppers	Ham Slices in Spice Sauce	Chili Con Carne	Turkey Slices in Gravy
	Mashed Potatoes		Hamburger Buns						Stuffing
Green Beans	Mixed Vegetables	Corn	Catsup/ Mustard/ Relish	Peas	Green Beans	Corn	Mixed Vegetables	Corn	Peas
	Cranberry Sauce	Beans w/ Rice and Bacon	Baked Beans	Oriental Style Rice, Soy Sauce		White Rice, Soy Sauce	Baked Beans	White Rice, Instant	Sweet Potatoes
									Cranberry Sauce
Spice Cake w/ Topping	Yellow Cake w/ Topping	Devil's Fudge Cake w/ Topping	Vanilla Pudding	Marble Cake w/ Topping	Spice Cake w/ Topping	Chocolate Pudding	Yellow Cake w/ Topping	Chocolate Cake w/ Topping	Marble Cake w/ Topping
Apple Sauce	Fruit Cocktail	Apple Dessert	Peaches	Pears	Apple Sauce	Peaches	Blueberry Dessert	Cherry Dessert	Pears
Lemonade	Iced Tea	Orange Drink	Lemonade	Grape Drink	Pink Lemonade	Iced Tea	Lemonade	Orange Drink	Cherry Drink

Breakfast Menus include 2 Bread Slices, 8 oz. 2% Milk, and one box Cold Cereal per individual, Catsup, Margarine, Hot Sauce, Coffee, Cocoa, Creamers, Sugar, Salt & Pepper (individual) and Oil (vegetable).

Lunch/Dinner Menus include 2 Bread Slices and 8 oz. 2% Milk per individual, Margarine, Coffee, Fresh Fruit, Salad, Hot Sauce, Peanut Butter and Non-Dairy Creamer.

Unitized Group Ration (UGR) Menus (A-Rations)

BREAKFAST

MENU 1	MENU 2	MENU 3	MENU 4	MENU 5
Grape Juice	Orange Juice	Orange Juice	Grape Juice	Orange Juice
Hominy Grits	Oatmeal	Hominy Grits	Hominy Grits	Oatmeal
Eggs*	Eggs*	Eggs*	Eggs*	Eggs*
Hash Browns	Hash Browns	Blueberry Waffles	Hash Browns	Waffles
Bacon	Brown and Serve Sausage	Bacon	Creamed Ground Beef	Sausage Patties
Cinnamon Rolls**	Breakfast Pastry**	Maple Syrup	Biscuits	Maple Syrup
Strawberry Jelly	Grape Jelly	Strawberry Jelly	Grape Jelly	Grape Jelly

LUNCH/ DINNER

MENU 1	MENU 2	MENU 3	MENU 4	MENU 5	MENU 6	MENU 7	MENU 8	MENU 9	MENU 10
Creole Macaroni	Sliced Turkey	BBQ Beef	Grilled Hamburgers	Pork Chops	Spaghetti w/ Meat Sauce	Grilled Steak	Baked Ham	Chili Con Carne	Chicken Breast
	Stuffing								
	Mashed Potatoes	Scalloped Potatoes	Scalloped Potatoes	Au Gratin Potatoes	Scalloped Potatoes	Mashed Potatoes	Macaroni & Cheese	White Rice	Rice Pilaf
	Turkey Gravy		Baked Beans	Pork Gravy	Parmesan Cheese	Brown Gravy			Chicken Gravy
Green Beans	Mixed Vegetables	Peas	Corn	Peas & Carrots	Green Beans	Corn	Green Beans	Corn	Fruit Cocktail
Apple Sauce	Cranberry Sauce		Relish/Salad Dressing					Apple Sauce	
	Fruit Cocktail	Pears	Peaches	Apple Dessert	Pears	Peaches	Pineapple		Fruit Cocktail
Vanilla Pudding	Cake Item**	Cookie Item**	Cake**	Cookie Item**	Chocolate Pudding	Cake Item**	Cookies**	Cake Item**	Cookie Item**
Peanut Butter and Grape Jelly	Peanut Butter and Strawberry Jelly	Peanut Butter and Grape Jelly	Catsup/Mustard	Peanut Butter and Grape Jelly	Peanut Butter and Strawberry Jelly	Peanut Butter and Grape Jelly	Peanut Butter and Strawberry Jelly	Peanut Butter and Strawberry Jelly	Peanut Butter and Grape Jelly
Lemonade	Grape Drink	Cherry Drink	Lemonade	Orange Drink	Pink Lemonade	Orange Drink	Lemonade	Orange Drink	Orange Drink
Hot Sauce	Hot Sauce	Hot Sauce	Hot Sauce	Hot Sauce	Hot Sauce	Steak Sauce	Hot Sauce	Hot Sauce	Hot Sauce
Oil, Vegetable		Oil, Vegetable	Oil, Vegetable	Oil, Vegetable	Oil, Vegetable	Oil, Vegetable		Oil, Vegetable	Oil, Vegetable
Salt, Seasoned	Salt and Pepper, Individual	Salt and Pepper, Individual	Salt, Seasoned	Salt, Seasoned	Salt, Seasoned	Salt, Seasoned	Salt and Pepper, Individual	Salt, Seasoned	Salt, Seasoned

Breakfast Menus include 2 Bread Slices, 8 oz. 2% Milk, and one box Cold Cereal per individual, Catsup, Margarine, Hot Sauce, Coffee, Cocoa, Creamers, Sugar, Salt & Pepper (individual) and Oil (vegetable).

Lunch/Dinner Menus include 2 Bread Slices (except Menu 9) and 8 oz. 2% Milk per individual, Margarine, Coffee, Creamers and Sugar.

* Frozen or pasteurized egg product. May be packaged in cartons or boil in bags.

**UGR-A has the option of using commercial "bakery type" items, e.g. Cookies, Snack Cakes, Toaster Pastries, etc.

Medical Diet Supplement (MED Supplement) to the UGR

Purpose:

The Medical Diet Supplement (MED Supplement), used in combination with the Unitized Group Rations (UGR), provides medically unique food components required to prepare modified diets for consumption by patients in Armed Forces medical treatment facilities. The MED Supplement was designed to simplify and streamline the ordering process of medically unique food items, and is based on Armed Forces hospital modified diet order patterns observed during Operation Desert Storm/Desert Shield.

Characteristics:

The MED Supplement consists of quick prepared, off-the-shelf (OTS) commercial components. Each module, when combined with the UGR, includes the following diet orders: 30 Clear Liquid Diets, 10 Full Liquid Diets, 10-20 Dental Liquid Diets, 25 High-Calorie/High-Protein Diets, and 15 Enteral Feedings. Each module is unitized into three boxes, two modules per tier on a pallet, eight modules (four tiers) per pallet. The shelf life is 18 months at 80° F (27° C).

- **Average Weight/Module***: 75 pounds
- **Cube/Module***: 5 cubic feet

*Three containers in a module.

Comments:

The MED Supplement will replace the Standard Medical B Ration in FY01.



Arctic Supplement to the UGR

Purpose:

The Arctic Supplement, when used in combination with the Unitized Group Ration (UGR) provides additional beverages and snacks kilocalories for the warfighter in a cold environment. The Arctic Supplement is designed to simplify and streamline the ordering process of these items.

Characteristics:

The Arctic Supplement assembly consists soups, warming beverages, snacks, hinged foam three-compartment trays, hot cups and covers. Each module promotes the consumption of increased fluids and kilocalories required in cold environments. Each module is unitized into three shipping containers; six shipping containers fit on one tier of a standard pallet. There are four tiers per pallet (eight Arctic Supplements per pallet). The shelf life is 18 months at 80° F (27° C).

- **Average Weight/Module***: 60 pounds
- **Cube/Module***: 5 cubic feet

*Three containers in a module.



Nutritional Data:

The Arctic Supplement provides 1024 Kilocalories (7% Protein, 63% Carbohydrates and 30% Fat).

Preparation Requirements:

The Arctic Supplement is prepared for serving by food service personnel.

Comments:

The Defense Supply Center Philadelphia (DSCP) is currently in the process of procuring this supplement. Once the supplement becomes available, it will replace the Unitized Tray Pack Arctic Supplement.

Meal, Ready-to-Eat, Individual (MRE)

Purpose:

The Meal, Ready-to-Eat is used by the Services to sustain individuals during operations that preclude organized food service facilities, but where resupply is established or planned.

Characteristics:

Each meal contains an entree/starch, crackers, a spread (cheese, peanut butter, jam or jelly), a dessert/snack, beverages, an accessory packet, a plastic spoon and a flameless ration heater (FRH). The flexibly packaged foods are heat processed in retortable pouches. The components are lightweight, compact, and easily opened. The shelf life is a minimum of three years at 80° F (27° C), six months at 100° F (38° C). Through 1995, MRE XV had 12 meals per shipping container, one of each menu. The number of menus were expanded to 16 for MRE XVI (1996), 20 for MRE XVII (1997), and 24 each for MRE XVIII (1998), MRE XIX (1999), and MRE XX (2000).

- **Weight:** 20.6 pounds/case (gross), 1.5 pounds/meal
- **Cube:** 0.880 cubic feet/case, 0.052 cubic feet/meal



Nutritional Data:

Each meal provides an average of 1250 kilocalories (13% protein, 36% fat, and 51% carbohydrate). When supplemented with pouch bread, an additional 200 kilocalories are provided (12% protein, 33% fat, and 55% carbohydrate). The Office of the Surgeon General (OTSG) approves all Menus.

Preparation Requirements:

The food is prepared by the individual consumer. The water requirement is approximately 23 ounces to rehydrate all beverages. Beginning with the 1993 procurement, Flameless Ration Heaters (FRH) are included in each menu bag.

Comments:

As part of DoD's focus on Quality and Customer Satisfaction, the MRE (components and packaging/packing) goes through continuous product improvement under the Fielded Individual Ration Improvement Program. The Joint Services Operational Rations Forum (JSORF) Integrated Product Team meets annually to approve all changes.

- Over 80 new items approved since 1993
- Over 70% non developmental items (NDI)
- Replaced 14 least-acceptable items
- Number of menus increased from 12 to 24
- Flameless Ration Heater in every menu
- Four vegetarian meals
- New easy-open meal bag with commercial-like color and graphics
- Implemented nutritional labeling

Meal, Ready-to-Eat Improvements

ITEMS IN:		ITEMS OUT:	
R&D Items:		NDI* Items:	
MRE XIII/XIV 1993 & 1994 Production	Smoky franks Pork chow mein Pound cake (five types) Fruit-wet pack (peaches, pears) FRH** in each menu bag	Chow mein noodles Potato sticks Sugar-free beverage - in six menus Heat stable chocolate bar	Meatballs w/ tomato sauce Chicken ala King Nut cakes Beverage base/sugar (6 menus)
MRE XV 1995 Production	Chili macaroni Fruit-wet pack (pineapple, mixed) Chewy fudge brownie	Grilled chicken Lemon tea-in 6 menus Tavern nuts	Corned Beef Hash Omelet w/ ham Fruit-freeze dried Chocolate covered brownie Coffee (6 menus)
MRE XVI (16 Menus) 1996 Production	Grilled beef steak Mexican rice White rice, butter flavored New easy-open meal bag w/ graphics Two-sided nutritional insert	Chicken parmesan Pasta primavera (vegetarian) Cheese tortellini (vegetarian) Jalapeno cheese spread	Potatoes au Gratin
MRE XVII (20 Menus) 1997 Production	Beef w/ mushroom gravy	Jamaican pork chop/noodles Beef ravioli Turkey breast w/ potatoes Chicken w/ noodles Fig bars Snacks: corn chips, cheese curls, pretzels Fruit flavored hard candy (individually wrapped) Fruit flavored disc candy Peanut bar Apple cider beverage Beef jerky Strawberry jam	Escalloped potatoes w/ ham
MRE XVIII (24 Menus) 1998 Production	Beef teriyaki Chicken strips in salsa Buttered noodles	Spicy oriental chicken Meat loaf w/ brown gravy Pasta w/ vegetables in Alfredo sauce (vegetarian) Granola bars: chocolate chip, honey nut Fruit filled bars Cinnamon apples Apple cinnamon toaster pastry Snack mix Shortbread cookies Chewy chocolate bar Tea bag Vegetable cracker	Pork w/ rice in BBQ sauce Tuna w/ noodles
MRE XIX (24 Menus) 1999 Production	Raisin nut mix	Lemon poppyseed pound cake Black bean & rice burrito (vegetarian) Toasted peanut butter & crackers Cheese peanut butter & crackers	Oatmeal cookie bar (compressed)
MRE XX (24 Menus) 2000 Production	Country Captain chicken Turkey tetrazzini Raspberry applesauce	Minestrone Western style beans Yellow & wild rice pilaf Marshmallow treats Graham treats Oatmeal cookie Wheat snack bread	Chicken stew Ham slice
MRE XXI (24 Menus) 2001 Production	Seafood jambalaya Beef enchilada Mashed potatoes	Plain snack bread Nutter butter cookies Peanut butter & cheddar Combos Chocolate chip cookies Honey nut mini wheat snack cereal Cinnamon snack cereal Spice pound cake M&M cookies	Pork chow mein Smoky franks

* NDI = Non-Developmental Item

** FRH = Flameless Ration Heater

Meal, Ready-to-Eat, Individual Menus (MRE, XVI)

MENU 1	MENU 2	MENU 3	MENU 4	MENU 5	MENU 6	MENU 7	MENU 8
Beef Steak	Tuna w/Noodles	Chicken Stew	Ham Slice	Spaghetti w/ Meat Sauce	Smoky Franks	Beef Stew	Chicken w/Rice
Mexican Rice	Fruit ¹	Fruit ²	White Rice		Fruit ²		
Tavern Nuts	Pound Cake	Pound Cake	Pound Cake	Oatmeal Cookie Bar	Potato Sticks	Cookie, Chocolate Covered	Fudge Brownie
Peanut Butter	Cheese Spread	Jelly	Cheese Spread	Peanut Butter	Peanut Butter	Peanut Butter	Jalapeno Cheese Spread
		Cocoa	Cocoa	Candy ³ Cocoa	Candy ³	Candy ³ Cocoa	Candy ³
Beverage Base	Beverage Base	Sugar Free Beverage Base	Sugar Free Beverage Base		Beverage Base	Beverage Base	Sugar Free Beverage Base
Packet B	Packet A	Packet C	Packet C	Packet C	Packet C	Packet C	Packet A
MENU 9	MENU 10	MENU 11	MENU 12	MENU 13	MENU 14	MENU 15	MENU 16
Pork Chow Mein	Chili Mac	Pasta w/ Vegetables (Vegetarian)	Cheese Tortellini (Vegetarian)	Pork w/ Rice	Chicken Parmesan	Grilled Chicken	Escalloped Potato w/Ham
Chow Mein Noodles	Fruit ¹	Fruit ²	Applesauce	Applesauce	White Rice	Mexican Rice	Applesauce
Chocolate Covered Cookie	Oatmeal Cookie Bar	Granola Bar	Granola Bar	Tavern Nuts	Pound Cake	Pound Cake	Fudge Brownie
Peanut Butter	Jelly	Peanut Butter	Peanut Butter	Peanut Butter	Cheese Spread	Jelly	Cheese Spread
Candy ³	Cocoa	Candy ³	Granola Bar	Candy ³			Candy ³
Beverage Base	Beverage Base		Beverage Base	Beverage Base	Beverage Base	Sugar Free Beverage Base	Sugar Free Beverage Base
Packet A	Packet B	Packet C	Packet C	Packet C	Packet A	Packet A	Packet A

Case A = Menus 1-12, Case B = Menus 5-16.

Each menu contains Crackers, Hot Sauce, Flameless Ration Heater and Spoon.

Accessory Packet A:

Coffee, Cream Substitute, Sugar, Salt, Chewing Gum, Matches, Toilet Tissue, Towelette

Accessory Packet B:

Coffee, Cream Substitute, Sugar, Salt, Chewing Gum, Matches, Toilet Tissue, Towelette, Candy (Vanilla Caramels, or Tootsie Rolls)

Accessory Packet C:

Lemon Tea w/Sugar, Salt, Chewing Gum, Matches, Toilet Tissue, Towelette

¹ Freeze Dried Fruit: Peaches, Pears, Fruit Mix or Strawberries

² Thermostabilized Peaches, Pears, Pineapple or Mixed Fruit

³ Charms or Heat Stable M&Ms



MRE XVI Components

Meal, Ready-to-Eat, Individual Menus (MRE, XVII)

MENU 1	MENU 2	MENU 3	MENU 4	MENU 5	MENU 6	MENU 7	MENU 8	MENU 9	MENU 10
Beef Steak	Boneless Pork Chop w/ Noodles	Chicken Stew	Ham Slice	Chicken w/ Noodles	Smoky Franks	Pork Chow Mein	Chicken w/ Rice	Beef Stew	Chili w/Mac
Mexican Rice	Applesauce	Fruit ²	White Rice	Fruit ²	Fruit ²	Chow Mein Noodles	Fudge Brownie	Cookie, Chocolate Covered	Oatmeal Cookie Bar
Tavern Nuts	Pound Cake	Pound Cake	Pound Cake	Fig Bar	Potato Sticks	Cookie, Chocolate Covered	Jalapeno Cheese Spread	Jalapeno Cheese Spread	Jam
Peanut Butter	Cheese Spread	Jelly	Cheese Spread	Peanut Butter	Peanut Butter	Peanut Butter	Jalapeno Cheese Spread	Jalapeno Cheese Spread	Jam
		Cocoa	Cocoa	Cocoa	Candy ¹	Candy ¹	Candy ¹	Candy ¹ Cocoa	Cocoa
Beverage Base	Beverage Base	Beverage Base			Beverage Base	Beverage Base	Beverage Base		
Packet B	Packet A	Packet C	Packet C	Packet C	Packet A	Packet A	Packet A	Packet C	Packet D
MENU 11	MENU 12	MENU 13	MENU 14	MENU 15	MENU 16	MENU 17	MENU 18	MENU 19	MENU 20
Pasta w/ Vegetables (Vegetarian)	Cheese Tortellini (Vegetarian)	Pork w/Rice	Chicken Parmesan	Grilled Chicken	Tuna w/ Noodles	Beef Ravioli	Turkey Breast w/Gravy & Potatoes	Beef w/ Mushrooms	Spaghetti w/ Meat Sauce
Fruit ²	Applesauce	Applesauce	White Rice	Mexican Rice	Fruit ²	Fruit ²		White Rice	
Granola Bar	Granola Bar	Tavern Nuts	Pound Cake	Pound Cake	Pound Cake	Fudge Brownie	Pound Cake	Corn Chips	Cheese Curls
Peanut Butter	Peanut Butter	Jalapeno Cheese Spread	Cheese Spread	Jelly	Peanut Butter	Cheese Spread	Peanut Butter	Peanut Butter	Peanut Butter
Peanut Brittle Bar				Cocoa		Beef Jerky	Candy ¹		Candy ¹ Cocoa
		Beverage Base	Beverage Base	Beverage Base	Beverage Base		Beverage Base	Beverage Base	
Packet D	Packet D	Packet A	Packet A	Packet A	Packet A	Packet C	Packet C	Packet B	Packet C

Each menu contains Crackers, Hot Sauce, Flameless Ration Heater and Spoon.

Accessory Packet A:

Coffee, Cream Substitute, Sugar, Salt, Chewing Gum, Matches, Toilet Tissue, Towelette

Accessory Packet B:

Coffee, Cream Substitute, Sugar, Salt, Chewing Gum, Matches, Toilet Tissue, Towelette, Candy (Vanilla Caramels or Tootsie Rolls)

Accessory Packet C:

Lemon Tea w/Sugar, Salt, Chewing Gum, Matches, Toilet Tissue, Towelette

Accessory Packet D:

Lemon Tea w/Sugar, Apple Cider, Salt, Chewing Gum, Matches, Toilet Tissue, Towelette

¹ Jolly Rancher Candy, Heat Stable M&Ms, Peanut Munch Bar or Skittles

² Thermostabilized Peaches, Pears, Pineapple or Mixed Fruit



MRE XVII Components

Meal, Ready-to-Eat, Individual Menus (MRE, XVIII)

MENU 1	MENU 2	MENU 3	MENU 4	MENU 5	MENU 6	MENU 7	MENU 8	MENU 9	MENU 10	MENU 11	MENU 12
Beef Steak	Boneless Pork Chop w/Noodles	Chicken Stew	Ham Slice	Chicken w/ Noodles	Grilled Chicken	Pork Chow Mein	Chicken w/Rice	Beef Stew	Chili w/ Macaroni	Pasta w/ Vegetables (Vegetarian)	Cheese Tortellini (Vegetarian)
Mexican Rice	Spiced Apples	Pretzels	Buttered Noodles	Fruit ²	Mexican Rice	Chow Mein Noodles			Fruit ²	Applesauce	
	Pound Cake	Pound Cake	Pound Cake	Fig Bar	Pound Cake	Cookie, Chocolate Covered	Fudge Brownie	Tavern Nuts	Fig Bar	Granola Bar	Granola Bar
Peanut Butter	Cheese Spread	Jelly	Cheese Spread	Peanut Butter	Jelly	Peanut Butter	Jalapeno Cheese Spread	Jalapeno Cheese Spread	Peanut Butter	Peanut Butter	Peanut Butter
		Cocoa	Cocoa	Cocoa	Cocoa			Cocoa	Cocoa	Peanut Brittle Bar	Candy ¹
Beverage Base	Beverage Base					Beverage Base	Beverage Base				
Packet B	Packet A	Packet C	Packet C	Packet E	Packet D	Packet A	Packet A	Packet B	Packet D	Packet D	Packet D
MENU 13	MENU 14	MENU 15	MENU 16	MENU 17	MENU 18	MENU 19	MENU 20	MENU 21	MENU 22	MENU 23	MENU 24
Thai Chicken	Chicken w/ Cavetelli	Beef Franks	Bean & Rice Burrito (Vegetarian)	Beef Ravioli	Turkey Breast w/ Potatoes	Beef w/ Mushrooms	Spaghetti w/ Meat Sauce	Beef Teriyaki White Rice	Chicken w/ Salsa	Meatloaf w/ Gravy	Pasta w/ Alfredo Sauce
White Rice	White Rice		Fruit ²	Cinnamon Apples		White Rice		Fruit Filled Bar	Short-bread Cookie	Buttered Noodles	Fruit ²
Snack Mix	Pound Cake	Potato Sticks	Fruit Filled Bar	Fudge Brownie	Pound Cake	Corn Chips	Cheese Curds		Peanut Butter	Toaster Pastry	Granola
Jalapeno Cheese Spread	Jelly	Peanut Butter	Peanut Butter	Cheese Spread	Cheese Spread	Peanut Butter	Peanut Butter	Jam		Cheese Spread	Peanut Butter
		Candy ¹	Peanut Brittle	Beef Jerky	Chewy Choc Bar		Candy ¹				Fruit Filled Bar
Cocoa	Beverage Base	Beverage Base			Beverage Base	Beverage Base	Cocoa	Beverage Base	Cocoa	Beverage Base	
Packet C	Packet A	Packet A	Packet D	Packet E	Packet D	Packet A	Packet C	Packet B	Packet B	Packet C	Packet C

Case A = Menus 1-12, Case B = Menus 13-24.

Each menu contains Crackers, Hot Sauce, Flameless Ration Heater and Spoon.

Accessory Packet A:

Coffee, Cream Substitute, Sugar, Salt, Chewing Gum, Matches, Toilet Tissue, Towelette

Accessory Packet B:

Coffee, Cream Substitute, Sugar, Salt, Chewing Gum, Matches, Toilet Tissue, Towelette, Candy (Vanilla Caramels or Tootsie Rolls)

Accessory Packet C:

Lemon Tea w/Sugar, Salt, Chewing Gum, Matches, Toilet Tissue, Towelette

Accessory Packet D:

Lemon Tea w/Sugar, Apple Cider, Salt, Chewing Gum, Matches, Toilet Tissue, Towelette

Accessory Packet E:

Tea Bag, Sugar, Creamer, Salt, Gum, Matches, Toilet Tissue, Towelette

¹ Jolly Rancher Candy, Heat Stable M&Ms, Peanut Munch Bar or Skittles

² Thermostabilized Peaches, Pears, Pineapple or Mixed Fruit



MRE XVIII Components

Meal, Ready-to-Eat, Individual Menus (MRE, XIX)

MENU 1	MENU 2	MENU 3	MENU 4	MENU 5	MENU 6	MENU 7	MENU 8	MENU 9	MENU 10	MENU 11	MENU 12
Beef Steak	Boneless Pork Jamaican	Beef Teriyaki	Ham Slice	Grilled Chicken Breast	Chicken w/Noodles	Chicken w/Salsa	Chicken w/Rice	Beef Stew	Chili w/ Macaroni	Pasta w/ Veg - Tom (Vegetarian)	Bean & Rice Burrito (Vegetarian)
Mexican Rice	Spiced Apples	White Rice	Buttered Noodles	Mexican Rice		Mexican Rice				Fruit	Fruit
	Pound Cake	Cheese & Peanut Butter Crackers	Pound Cake	Pound Cake	Fig Bar	Shortbread Cookie	Fudge Brownie	Dry Roasted Nuts	Pound Cake	Granola Bar	Fruit Filled Bar
Peanut Butter	Cheese Spread	Jam	Jalapeno Cheese Spread	Jelly	Peanut Butter	Peanut Butter	Peanut Butter	Jalapeno Cheese Spread	Peanut Butter	Peanut Butter	Peanut Butter
Cracker	Cracker	Cracker	Cracker	Cracker	Wheat Snack Bread	Cracker	Cracker	Cracker	Cracker	Cracker	Cracker
Beef Jerky			Cocoa	Cocoa	Cocoa	Cocoa		Candy ¹		Peanut Brittle Bar	Peanut Brittle Bar
Beverage Base w/ Sugar	Beverage Base w/ Sugar	Beverage Base w/ Sugar					Beverage Base w/ Sugar	Cocoa	Cocoa		
Packet B	Packet A	Packet B	Packet C	Packet D	Packet D	Packet A	Packet A	Packet C	Packet E	Packet C	Packet D
MENU 13	MENU 14	MENU 15	MENU 16	MENU 17	MENU 18	MENU 19	MENU 20	MENU 21	MENU 22	MENU 23	MENU 24
Cheese Tortellini (Vegetarian)	Pasta w/ Veg Alfredo Sauce (Vegetarian)	Beef Franks	Chicken w/ Thai Sauce	Beef Ravioli	Turkey Breast Pot/ Gravy	Beef w/ Mushrooms	Spaghetti w/ Meat Sauce	Chicken Stew	Pork Chow Mein	Chicken w/ Cavetelli	Meatloaf w/ Gravy
Applesauce	TS Fruit		White Rice	Spiced Apples	TS Fruit	White Rice		Pretzels	Chow Mein Noodles		Buttered Noodles
Granola Bar	Granola Bar	Potato Sticks	Raisin Nut Mix	Fudge Brownie	Choc Cvd Cookie		Toasted P'nut Butter Cracker	Pound Cake	Pound Cake	Pound Cake	Toaster Pastry
Peanut Butter	Peanut Butter	Peanut Butter	Jalapeno Cheese Spread	Cheese Spread	Peanut Butter	Jelly	Cheese Spread	Cheese Spread	Peanut Butter	Jam	Jalapeno Cheese Spread
Cracker	Cracker	Wheat Snack Bread	Cracker	Cracker	Cracker	Cracker	Cracker	Cracker	Cracker	Cracker	Cracker
Hard Candy	Fruit Filled Bar		Cocoa	Cocoa	Chocolate Sports Bar		Cocoa	Cocoa			
		Beverage Base w/ Sugar			Beverage Base w/ Sugar	Beverage Base w/ Sugar			Beverage Base w/ Sugar	Beverage Base w/ Sugar	Beverage Base w/ Sugar
Packet C	Packet D	Packet B	Packet E	Packet A	Packet A	Packet B	Packet B	Packet C	Packet C	Packet B	Packet D



MRE XIX Components

Case A = Menus 1-12, Case B = Menus 13-24.

Each menu contains Crackers, Hot Sauce, Flameless Ration Heater and Spoon.

Accessory Packet A:

Coffee, Cream Substitute, Sugar, Salt, Chewing Gum, Matches, Toilet Tissue, Towelette

Accessory Packet B:

Coffee, Cream Substitute, Sugar, Salt, Chewing Gum, Matches, Toilet Tissue, Towelette, Candy (Vanilla Caramels or Tootsie Rolls)

Accessory Packet C:

Lemon Tea w/Sugar, Salt, Chewing Gum, Matches, Toilet Tissue, Towelette

Accessory Packet D:

Lemon Tea w/Sugar, Apple Cider, Salt, Chewing Gum, Matches, Toilet Tissue, Towelette

Accessory Packet E:

Tea Bag, Sugar, Creamer, Salt, Gum, Matches, Toilet Tissue, Towelette

¹ Jolly Rancher Candy or Charms, Heat Stable M&Ms, Peanut Brittle Bar, Fruit Flavored Discs

Meal, Ready-to-Eat, Individual Menus (MRE, XX)

MENU 1	MENU 2	MENU 3	MENU 4	MENU 5	MENU 6	MENU 7	MENU 8	MENU 9	MENU 10	MENU 11	MENU 12
Beef Steak	Boneless Pork Jamaican	Beef Teriyaki	Country Captain Chicken	Grilled Chicken Breast	Chicken w/ Noodles	Chicken w/ Salsa	Chicken w/ Rice	Beef Stew	Chili w/Mac	Pasta w/ Veg - Tom (Vegetarian)	Bean & Rice Burrito (Vegetarian)
Mexican Rice	Spiced Apples	White Rice	Buttered Noodles	Minestrone soup	Raspberry Applesauce	Potato Sticks				Fruit	Fruit
	Pound Cake	Cheese & P'nut Butter Crackers	Marshmallow Treats	Pound Cake	Fig Bar	Shortbread Cookie	Fudge Brownie	Dry Roasted Nuts	Pound Cake	Granola Bar	Fruit Filled Bar
Peanut Butter	Jalapeno Cheese Spread	Jam	Peanut Butter	Jelly	Jalapeno Cheese Spread	Peanut Butter	Peanut Butter	Jalapeno Cheese Spread	Peanut Butter	Peanut Butter	Peanut Butter
Cracker	Cracker	Wheat Snack Bread	Cracker	Cracker	Cracker	Cracker	Cracker	Cracker	Wheat Snack Bread	Cracker	Cracker
Beef Jerky		Candy ¹		Candy ¹	Candy ¹	Candy ¹		Hard Candy		Peanut Brittle Bar	Peanut Brittle Bar
Beverage Base w/ Sugar	Beverage Base w/ Sugar	Beverage Base w/ Sugar	Cocoa	Cocoa	Cocoa		Beverage Base w/Sugar	Cocoa	Cocoa		
Packet B	Packet A	Packet B	Packet C	Packet D	Packet D	Packet A	Packet A	Packet C	Packet E	Packet C	Packet D
MENU 13	MENU 14	MENU 15	MENU 16	MENU 17	MENU 18	MENU 19	MENU 20	MENU 21	MENU 22	MENU 23	MENU 24
Cheese Tortellini (Vegetarian)	Pasta w/ Veg Alfredo Sauce (Vegetarian)	Beef Franks	Chicken w/ Thai Sauce	Beef Ravioli	Turkey Breast Pot/ Gravy	Beef w/ Mushrooms	Spaghetti w/ Meat Sauce	Chicken Tetrazini	Pork Chow Mein	Chicken w/ Cavetelli	Meatloaf w/ Gravy
Applesauce	TS Fruit	Western Beans	White Rice	Dry Roasted Nuts	Pound Cake	Yellow & Wild Rice Pilaf		Pretzels	Chow Mein Noodles		Mexican Rice
Granola Bar	Granola Bar		Raisin Nut Mix	Fudge Brownie		Oatmeal Cookie	Toasted P'nut Butter Cracker	Graham Treat	Chocolate Covered Cookie	Pound Cake	Toaster Pastry
Peanut Butter	Peanut Butter	Peanut Butter	Jalapeno Cheese Spread	Cheese Spread	Cheese Spread	Jalapeno Cheese Spread	Cheese Spread	Peanut Butter	Peanut Butter	Jam	Jelly
Cracker	Cracker	Wheat Snack Bread	Cracker	Cracker	Cracker	Cracker	Wheat Snack Bread	Cracker	Cracker	Cracker	Cracker
Hard Candy	Fruit Filled Bar	Candy			Chocolate Sports Bar		Hard Candy			Candy	
		Beverage Base w/ Sugar	Beverage Base w/ Sugar		Beverage Base w/ Sugar	Cocoa	Cocoa	Cocoa	Beverage Base w/ Sugar		Cocoa
Packet C	Packet D	Packet B	Packet E	Packet A	Packet A	Packet B	Packet B	Packet C	Packet C	Packet B	Packet D

Case A = Menus 1-12, Case B = Menus 13-24.

Each menu contains Crackers, Hot Sauce, Flameless Ration Heater and Spoon.

Accessory Packet A:

Coffee, Cream Substitute, Sugar, Salt, Chewing Gum, Matches, Toilet Tissue, Towelette

Accessory Packet B:

Coffee, Cream Substitute, Sugar, Salt, Chewing Gum, Matches, Toilet Tissue, Towelette, Candy (Vanilla Caramels or Tootsie Rolls)

Accessory Packet C:

Lemon Tea w/Sugar, Salt, Chewing Gum, Matches, Toilet Tissue, Towelette

Accessory Packet D:

Lemon Tea w/Sugar, Apple Cider, Salt, Chewing Gum, Matches, Toilet Tissue, Towelette

Accessory Packet E:

Tea Bag, Sugar, Creamer, Salt, Gum, Matches, Toilet Tissue, Towelette

¹ Jolly Rancher Candy or Charms, Heat Stable M&Ms, Peanut Brittle Bar, Fruit Flavored Discs



MRE XX Components

Meal, Ready-to-Eat, Individual Menus (MRE, XXI)

MENU 1	MENU 2	MENU 3	MENU 4	MENU 5	MENU 6	MENU 7	MENU 8	MENU 9	MENU 10	MENU 11	MENU 12
Beef Steak	Jamaican Pork w/ Noodles	Beef Ravioli	Country Captain Chicken	Grilled Chicken Breast	Oriental Chicken/ Thai Sauce	Chicken w/ Salsa	Chicken w/ Rice	Beef Stew	Chili w/ Macaroni	Pasta w/ Veg - Tom (Vegetarian)	Bean & Rice Burrito (Vegetarian)
Western Style Beans	Spiced Apples	Potato Sticks	Buttered Noodles	Minestrone Soup	White Rice	Mexican Rice		M&M Cookie		TS Fruit	TS Fruit
Peanut Butter	Cheese Spread	Fudge Brownie	Marshmallow Treats	P'Nut Butter Sand Cookie	Raisin Nut Mix	Shortbread Cookie	Fudge Brownie	Dry Roasted Nuts	Pound Cake	Granola Bar	Pound Cake
Cracker	Cracker (veg-flavor)	Jelly	Peanut Butter	Jelly	Jalapeno Cheese Spread	Jalapeno Cheese Spread	Peanut Butter	Jalapeno Cheese Spread	Peanut Butter	Peanut Butter	Peanut Butter
Beef Jerky	Honeynut Miniwheat Cereal	Wheat Snack Bread	Cracker	Plain Snack Bread	Cracker (veg-flavor)	Cracker (veg-flavor)	Plain Snack Bread	Cracker (veg-flavor)	Wheat Snack Bread	Cracker	Cracker
Beverage Base w/ Sugar	Beverage Base w/ Sugar	Beverage Base w/ Sugar	Cocoa	Candy ¹		Candy ¹		Cocoa	Cocoa		
Packet B	Packet A	Packet C	Packet A	Packet D	Packet E	Packet C	Packet A	Packet C	Packet E	Packet C	Packet C
MENU 13	MENU 14	MENU 15	MENU 16	MENU 17	MENU 18	MENU 19	MENU 20	MENU 21	MENU 22	MENU 23	MENU 24
Cheese Tortellini (Vegetarian)	Pasta w/ Veg Alfredo Sauce (Vegetarian)	Beef Enchiladas	Chicken w/ Noodles	Beef Teriyaki	Turkey Breast Pot/ Gravy	Beef w/ Mushrooms	Spaghetti w/ Meat Sauce	Chicken Tetrazini	Pork Chow Mein	Jambalaya	Meatloaf w/ Gravy
Applesauce	TS Fruit	Mexican Rice	Raspberry Applesauce	Chow Mein Noodles	Compos-Cheddar	Yellow & Wild Rice Pilaf		Compos-Nacho	Chow Mein Noodles	Cinnamon Life Cereal	Mashed Potatoes
Pound Cake	Granola Bar	Chocolate Chip Cookie	Fig Bar	Cheese & P'nut Butter Cracker		Oatmeal Cookie	Toasted P'nut Butter Cracker	Pound Cake	Chocolate Covered Cookie	Pound Cake	Toaster Pastry
Peanut Butter	Peanut Butter	Jalapeno Cheese Spread	Cheese Spread	Jam	Peanut Butter	Jam	Cheese Spread	Peanut Butter	Peanut Butter	Peanut Butter	Jelly
Cracker	Cracker	Cracker (veg-flavor)	Cracker (veg-flavor)	Wheat Snack Bread	Cracker	Cracker	Plain Snack Bread	Cracker	Cracker	Plain Snack Bread	Cracker (veg-flavor)
Hard Candy	Pound Cake		Candy ¹		Chocolate Sports Bar		Hard Candy	Candy ¹			
			Cocoa			Cocoa	Cocoa	Cocoa			Cocoa
		Beverage Base w/ Sugar	Beverage Base w/ Sugar	Beverage Base w/ Sugar	Beverage Base w/ Sugar	Beverage Base w/ Sugar		Beverage Base w/ Sugar	Beverage Base w/ Sugar	Beverage Base w/ Sugar	Beverage Base w/ Sugar
Packet C	Packet D	Packet A	Packet A	Packet A	Packet A	Packet A	Packet A	Packet D	Packet A	Packet A	Packet B

Case A = Menus 1-12, Case B = Menus 13-24.

Each menu contains Hot Sauce, Flameless Ration Heater and Spoon.

Accessory Packet A:

Coffee, Cream Substitute, Sugar, Salt, Chewing Gum, Matches, Toilet Tissue, Towelette

Accessory Packet B:

Coffee, Cream Substitute, Sugar, Salt, Chewing Gum, Matches, Toilet Tissue, Towelette, Candy (Vanilla Caramels or Tootsie Rolls)

Accessory Packet C:

Lemon Tea w/Sugar, Salt, Chewing Gum, Matches, Toilet Tissue, Towelette

Accessory Packet D:

Lemon Tea w/Sugar, Apple Cider, Salt, Chewing Gum, Matches, Toilet Tissue, Towelette

Accessory Packet E:

Tea Bag, Sugar, Creamer, Salt, Gum, Matches, Toilet Tissue, Towelette

¹ Jolly Rancher Candy or Charms, Heat Stable M&Ms, Peanut Brittle Bar, Fruit Flavored Discs

Purpose:

The Go-To-War (GTW) Ration is designed to sustain an individual during the early stages of mobilization until which time the ration industry ramps up to meet demand. This ration evolved from lessons learned during Operation Desert Shield/Storm (ODS). It does not meet the full spectrum of Military Service Requirements for Operational Rations, therefore, it augments the “family of rations” and does not replace an operational ration.

Characteristics:

Each of the 12 nutritionally complete menus consists of commercially available, individual serving shelf-stable components to include an entree, wet-pack fruit, snack item (cookies, candy or beef jerky), and instant coffee. Other items include military specified MRE pouch bread, beverage base, Dental Liquid (DL) dairy shakes and two flameless ration heaters (RFH). All components are packaged in a clear meal bag. Menu items are available from a variety of commercial sources. Development of the menu is predicated on an individual component’s acceptability, shelf stability, packaging utility, and nutritional adequacy. The shelf life of this ration is 18 months at 80° F (27° C). There are 12 meals per shipping container, one of each menu.

- **Weight:** 25 lbs. per case, 2 lbs. per meal
- **Cube:** 1.440 cubic feet/case, 0.1198 cubic feet/meal

Nutritional Data:

Each meal provides an average of 1300 kilocalories (16% protein, 24% fat, and 60% carbohydrate).

Preparation Requirements:

The food is fully prepared and ready-to-eat. The water requirement is 24 ounces to rehydrate the beverages and to activate the FRHs.

Comments:

A comprehensive computer database of commercially available, shelf-stable foods to support this ration is maintained by Natick. When a requirement for procurement is received by the Defense Supply Center, Philadelphia (DSCP), menus reflecting currently available components will be coordinated with the Office of The Surgeon General for approval and packing/assembly documents will be finalized. The Meal Ordered, Ready-to-Eat, a forerunner of the GTW ration, was used during ODS. However, it was not unitized and this resulted in logistical problems.



Purpose:

The current Ration, Cold Weather is used to sustain an individual during operations occurring under frigid conditions. It was developed to satisfy a Marine Corps requirement, but is also used by the Army units operating in cold climates such as the 6th Infantry Division and 10th Mountain Division.

Characteristics:

The six menus contain dehydrated, cooked entrees and other low moisture foods. The RCW is lightweight, and many of the components can be eaten either dry or rehydrated. Several drink mixes and soup are included in each menu to encourage water consumption. There are two meal bags per ration which provide food for 24 hours. All packaging is flexible; the outside bag is made of white camouflage material. The shelf life is a minimum of three years at 80° F (27° C), six months at 100° F (38° C). There are six rations per shipping container, one of each menu.

- **Weight:** 21.31 pounds/case, 2.75 pounds/ration
- **Cube:** 0.90 cubic feet/case, 0.13 cubic feet/ration

Nutritional Data:

Each menu provides approximately 4500 kilocalories (8% protein, 32% fat, and 60% carbohydrate). It provides sufficient kilocalories to meet energy expenditure during heavy exertion in extreme cold, while limiting sodium and protein content to reduce risk of dehydration in arctic environments. The sodium content is five grams per ration.

Preparation Requirements:

The food is prepared by the individual consumer. If all components are hydrated, the water requirement is 90 ounces. Fuel tablets for heating water in the canteen cup are provided separately.

Comments:

The design criteria was recommended by the Naval Submarine Medical Research Laboratory and U.S. Army Research Institute of Environmental Medicine. Controlled cold chamber studies with the prototype ration have indicated that lower sodium and protein levels will reduce the daily water requirement and lessen the possibility of dehydration in the user. As a result of a military service request, the RCW is in the process of being redesigned into three individual meals per day in lieu of the current one complete daily ration packaged in two meal bags. The RCW will consist of 12 menus, including more commercial entrees, snacks, cereals, and soups. After appropriate field testing and approval by the Joint Services Operational Rations Forum, the procurement documents were transferred to DSCP for FY99 procurement. The RCW will not be procured after the year 2000.

In the future this requirement will be met by the Meal, Cold Weather/Long Range Patrol.



Purpose:

The Food Packet, Long Range Patrol (LRP), is designed to be an extended life operational ration that will be used to sustain personnel during initial assault, special operations, and long range reconnaissance missions.

Characteristics:

The eight menus contain dehydrated entrees, cereal bars, cookie and candy components, instant beverages, accessory packets, and plastic spoons. The shelf life is expected to be 10 years at 80° F (27° C). There are 16 rations per shipping container, two of each menu.

- **Weight:** 20 pounds/case, 1 pound/ration
- **Cube:** 1.44 cubic feet/case, 0.04 cubic feet/ration

Nutritional Data:

Each menu provides an average 1560 kilocalories (15% protein, 35% fat, and 50% carbohydrate). The LRP is a restricted calorie ration that is approved for use at an issue of one packet per man per day for up to ten days. It is nutritionally compatible with the MRE to allow menu mixes under scenarios where additional calories are required.

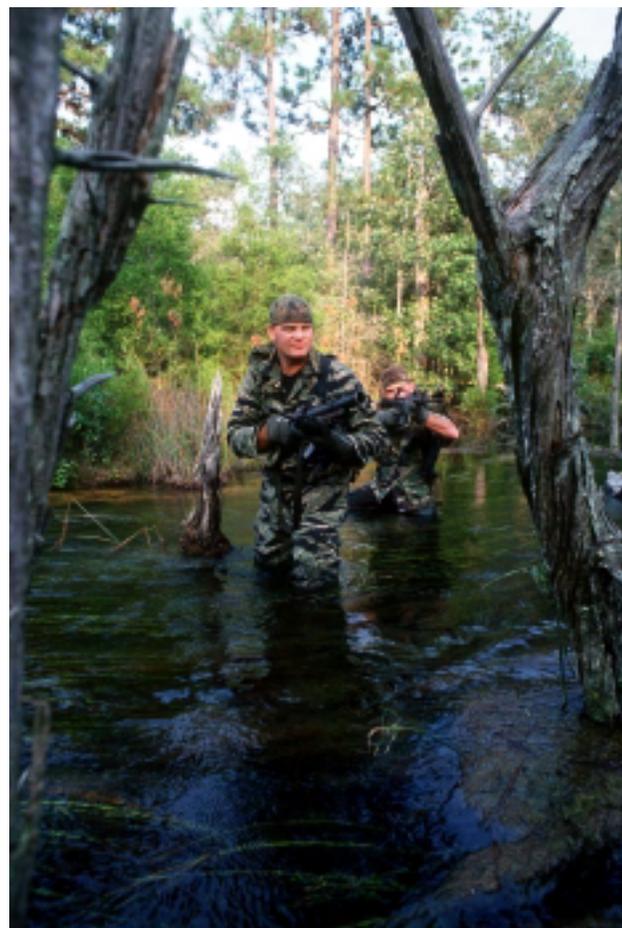
Preparation Requirements:

The food is prepared by the individual consumer. The water requirement is 10 to 12 ounces for the entree and 16 ounces for the beverages.

Comments:

This ration has taken advantage of current production technology by using components from existing military rations (LRP (pre-1983), MRE and RCW). The new LRP provides approximately 400 more calories than the original version. An improvement program was completed in FY96 that resulted in the approval of a redesign of the packaging system and an increase to 12 menus. The new packaging system includes a peelable seal menu bag and will allow the LRP to be assembled on the same lines as the MRE, using the same size case. The new packaging system relies on the use of a brick-shaped package for the entree that has resulted in a 20% increase in LRP packets per pallet (i.e., from 480 packets to 576 packets).

Future requirements for a LRP will be met through the combined Meal, Cold Weather/Long Range Patrol Ration.



Food Packet, Long Range Patrol (LRP) Menus

MENU 1	MENU 2	MENU 3	MENU 4	MENU 5	MENU 6	MENU 7	MENU 8
Chicken Stew	Beef Stew	Sweet & Sour Pork	Chicken A La King	Lasagna	Spaghetti w/Meat Sauce	Chili Con Carne	Beef & Rice
Corn Flake Bar	Granola Bar	Branflake Bar	Branflake Bar	Branflake Bar	Corn Flake Bar	Granola Bar	Corn Flake Bar
Oatmeal Cookie Bar	Chocolate Covered Cookie	Peanut Butter & Crackers	Chocolate Covered Cookie	Peanut Butter & Crackers	Oatmeal Cookie Bar	Fig Bar	Fig Bar
Tootsie Rolls (4)	Caramels		Candy (Variety)		Tootsie Rolls (4)	Charms	M&Ms
Apple Cider Drink	Cocoa Beverage	Apple Cider Drink	Orange Beverage	Lemon Tea (2 Pkts)	Beverage Base (MRE)	Orange Beverage	Lemon Tea (2 Pkts)
Accessory Packet	Accessory Packet	Accessory Packet	Accessory Packet	Accessory Packet	Accessory Packet	Accessory Packet	Accessory Packet
Spoon	Spoon	Spoon	Spoon	Spoon	Spoon	Spoon	Spoon

Accessory Packet: Coffee, Cream, Sugar, Chewing Gum, Toilet Paper (2), Matches, Salt



Menu 6 Meal Bag and Components

Purpose:

The Meal, Cold Weather and the Food Packet, Long Range Patrol is designed to meet the Joint Service requirements of the Marine Corps and the Army Special Operational Forces. The Marine Corps requires appropriate nutritional and operational characteristics for extreme cold environments and the SOF require a long life restricted calorie ration to be used during initial assault, special operations and long range reconnaissance missions.

Characteristics:

The same 12 menus provide dehydrated entrees, cereal bars, cookies, candy, drinks, accessory packets and plastic spoons for each ration product. This lightweight meal/ration packet includes ready to eat items and an instant entrée that can be eaten dry if necessary. Extra drink mixes are included to encourage water consumption. The shelf life is a minimum of 3 years at 80° F (27° C) and 6 months at 100° F (38° C) but extended life for the entrée has been shown in actual storage. The MCW is packed in white camouflage material and the LRP in the same tan color as the MRE.

- **Weight:** 17.5 pounds/case, 1 pound/packet
- **Cube:** 0.88 cubic feet/case, 0.04 cubic feet/packet

Nutritional Data:

Each menu provides an average of 1540 kilocalories (15% protein, 35% fat and 50% carbohydrate). The MCW if used for three meals will provide the 4500 kilocalories required for heavy exertion in extreme cold. Limits on protein and sodium help to reduce risk of dehydration in cold weather environments. The LRP is a restricted calorie ration that is approved for use at an issue of one packet per man per day for up to ten days. The MCW/LRP is compatible with other operational ration feeding systems like the UGR and the MRE and can be used as a separate meal especially in cold weather scenarios.

Preparation Requirements:

The individual consumer prepares the food. The water requirement is 16 ounces for the meat entrées, 16 ounces for the egg/cereal menus and 12-24 ounces for the beverages. Total water required ranges from 28-40 ounces per menu if all the components are hydrated. Menu design is aligned with providing adequate hydration in a cold weather environment. Fuel tablets for heating water in the canteen cup are provided separately.

Comments:

The MCW/LRP documentation was completed in FY99 for FY00 initial procurement of the combined product.



Combined MCW/LRP Menus

MENU 1	MENU 2	MENU 3	MENU 4	MENU 5	MENU 6
Spicy Oriental Chicken	Beef Stroganoff	Sweet & Sour Pork/Rice	Turkey Tetrazzini	Chicken & Rice	Lasagna
Cereal Bar	Raisin Nut Mix Chocolate Sports Bar		Fudge Brownie	Cereal Bar	Raisin Nut Mix Toaster Pastry
MRE Cracker	Peanut Brittle Bar	MRE Cracker	MRE Cracker		Shortbread Cookie
Peanut Butter		Peanut Butter	Cheese Spread		
		Ramen Noodles		Ramen Noodles	
MRE Beverage Base			Orange Beverage	Orange Beverage	
			Lemon Tea		Lemon Tea
	Cocoa	Cocoa		Cocoa	Cocoa
Coffee	Coffee	Coffee	Coffee	Coffee	Coffee
Creamer	Creamer	Creamer	Creamer	Creamer	Creamer
Sugar	Sugar	Sugar	Sugar	Sugar	Sugar
MENU 7	MENU 8	MENU 9	MENU 10	MENU 11	MENU 12
Beef Stew	Spaghetti & Meat Sauce	Beef Teriyaki w/ Rice	Western Omelet	Eggs/Bacon	Western Omelet
Pound Cake	Raisin Nut Mix	Shortbread Cookies	Cream of Wheat Cereal	Oatmeal Flavored	Oatmeal Flavored
Chocolate Covered Cookie	Toaster Pastry	MRE Cracker	Granola Bar	Tavern Nuts	Granola Bar
		Peanut Butter			
Tootsie Roll	M&Ms		Peanut Brittle Bar	Fig Bar	Fudge Brownie
Cider		Cider	Orange Beverage	Orange Beverage	Lemon Tea
	Cocoa		Cocoa	Cocoa	Cocoa
Coffee	Coffee	Coffee	Coffee	Coffee	Coffee
Creamer	Creamer	Creamer	Creamer	Creamer	Creamer
Sugar	Sugar	Sugar	Sugar	Sugar	Sugar



MCW/LRP Combined Meal Bags and Components

Food Packet, Survival, General Purpose, Improved (GP-1)

Purpose:

The Food Packet, Survival, General Purpose is used by the Services to sustain an individual in survival situations, including escape and evasion, under all environmental conditions, and when potable water is limited. Requested by the Air Force, it is used to sustain personnel in any survival situation for periods less than five consecutive days.

Characteristics:

The ration contains six compressed bars consisting of two cereal bars, three cookie bars, and wintergreen tablets which are sealed in trilaminar pouches and packed in a water resistant, paperboard box. Sweetened lemon tea and soup and gravy base are also included. The storage requirement for this ration is five years at 80° F (27° C) and one month at 140° F (60° C). There are 24 packets per shipping container.

- **Weight:** 18.21 pounds/case, 0.71 pounds/packet
- **Cube:** 0.520 cubic feet/case, 0.014 cubic feet/packet

Nutritional Data:

Each packet provides 1447 kilocalories (5% protein, 39% fat, and 56% carbohydrate). It is designed to provide a maximum of 8% of the calories from protein in order to minimize metabolic water requirements.

Preparation Requirements:

The food is prepared by the individual consumer. Fourteen ounces of water are required to reconstitute the lemon tea, soup and gravy base.

Comments:

This improved version of the Food Packet, Survival, General Purpose successfully survived a storage study of five-years duration. The original Food Packet, Survival, General Purpose was type-classified in 1961, replacing all other survival packets except those designed for space constraints and water limitation (Abandon Ship and Aircraft, Life Raft). Components were two Cornflake Bars, one bar each of Granola and Rice Cornflake, Instant Coffee, Sugar and Soup and Gravy Base packed in a tin-plated can. Limited procurement quantities contributed to the unavailability of the can which led to the packet being improved. The GP-1 provides approximately 42% more calories than the original general purpose survival ration with essentially the same weight and volume.



COMPONENTS	UNITS
Cornflake Bar	2
Shortbread Bar	1
Wintergreen Tablets	1
Granola Bar	1
Chocolate Chip Bar	1
Soup & Gravy Base	1
Sweetened Lemon Tea	1



Food Packet, Survival, Abandon Ship

Purpose:

The Food Packet, Survival, Abandon Ship is used by the Navy to sustain personnel who must abandon ship. It is supplied in lifesaving craft aboard ships.

Characteristics:

The packet contains calorically dense cereal bars. It is designed to fit in the storage areas of lifesaving craft. The components have maximum stability for storage in on-deck craft under all climatic conditions. They meet the five-year shelf life criteria stated in U.S. Coast Guard Regulations Governing Emergency Provisions for Lifeboats and Life Rafts. There are a minimum of six equally shaped, commercially available, individually wrapped bars per intermediate box. The ration will not exceed a volume of 36.6 cubic inches or weight of 16.4 ounces.



Nutritional Data:

Each packet provides approximately 2400 kilocalories (54% carbohydrate). It is strictly short-term survival food. The consumption of this ration will help to minimize the negative metabolic effects of acute starvation. The components are compatible with potable water restriction.

Preparation Requirements:

There is no preparation necessary except opening packages.

Comments:

The ration was designed as a result of experience with ocean disasters which showed that other supplies, such as lifesaving equipment and drinking water, were more critical to survival than food. This new commercial version became available in 1997. The previous version of the ration contained hard candy and chewing gum. Earlier versions contained starch jelly bars, candy-coated chewing gum, mint tablets, matches, and a cigarette packet (40 cigarettes); there were 15 food packets and a cigarette packet per intermediate box.

Purpose:

The Food Packet, Survival, Aircraft, Life Raft is used by the Navy to sustain personnel that survive aircraft disasters. The packet, along with other essential equipment, is supplied in the emergency kits carried aboard naval aircraft.

Characteristics:

The packet contains hard candy, candy-coated chewing gum, and twine. An instruction sheet is included explaining the use of the twine for storing the components after the packet is opened. The components have maximum stability under extreme temperature changes. They must withstand temperatures up to 160° F (70° C).

- **Weight:** 8.0 pounds/case (gross), 0.24 cubic feet/case
- **Cube:** 3.5 ounces/packet, 12.00 cubic inches/packet



Shipping Container, Food Packets and Components



Nutritional Data:

Each packet provides approximately 300 kilocalories (100% carbohydrate). It is strictly short-term survival food. The consumption of this ration will help to minimize the negative metabolic effects of acute starvation. The components are compatible with potable water restriction.

Preparation Requirements:

No preparation is necessary except opening packages.

Comments:

Earlier versions included fruit flavored tablets (fortified with ascorbic acid) and mint tablets, but procurement became impractical due to the small quantities required.

Meal, Religious, Kosher/Halal

Purpose:

The Meal, Religious, Kosher or Halal is utilized to feed those individuals in the Military Service who maintain a strict religious diet.

Characteristics:

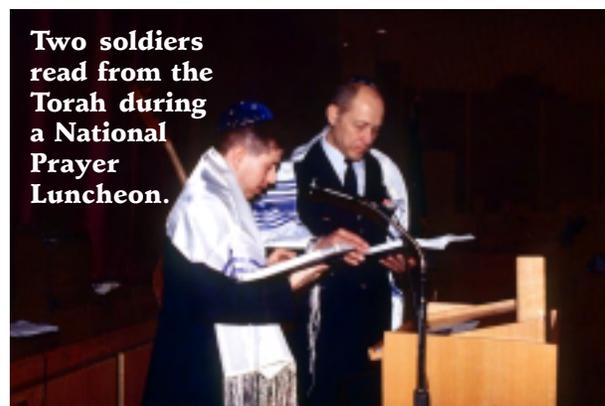
Each meal consists of one Kosher or Halal certified entrée and religiously certified/acceptable complementary items sufficient to provide the recommended daily nutritional requirements. Like the MRE, it is a totally self-contained meal, however, it is not combined in a flexible meal bag. Each case of Religious Rations contains two intermediate boxes, one box with twelve entrees and one box with twelve component/accessory items. Each meal contains an entrée plus a bag containing a variety of components. In addition, an accessory packet with condiments/seasonings, utensils, flameless ration heater and napkin is included in the component bag. The maximum shelf-life at delivery is 10 months, the minimum shelf-life at delivery is 3 months.

Nutritional Data:

Each menu provides approximately 1200 kilocalories (11-13% protein, 37-40% fat, and 48% carbohydrate).

Preparation Requirements:

Except for the beverages, the entire meal is ready to eat. While the entrée may be eaten cold when operationally necessary, it can also be heated in a variety of ways, including immersion in hot water while sealed in its individual package. A flameless ration heater has also been packed into each meal bag to heat the entrée.



Two soldiers read from the Torah during a National Prayer Luncheon.



A group of Kosovar Muslims praying in a refugee village at Fort Dix.

Main Entree Varieties:

KOSHER	HALAL
Beef Stew	Beef Stew
Chicken and Noodles	Chicken and Noodles
Cheese Tortellini	Cheese Tortellini
Florentine Lasagna	Florentine Lasagna
Pasta w/ Garden Vegetables	Pasta w/ Garden Vegetables
"My Kind of Chicken"	"My Kind of Chicken"
Old World Stew	Old World Stew
Chicken & Black Beans	Chicken & Black Beans
Chicken Mediterranean	Chicken Mediterranean
Vegetarian Stew	Vegetarian Stew

Components/Accessory Items are shipped packaged together in the same case with the entrees. Component/Accessory Items contain brand-name items.

Complementary Components include Beverage Base (hot or cold), Cereal, Bakery Items (bagel chips, granola bars, etc.), and Fruit/Nuts (e.g. raisins, peanuts, etc.). Accessory Items are Salt, Pepper, Sugar, Spoon, Toilet Tissue, Flameless Heater and Towelette.

Purpose:

The Health & Comfort Packs (HCP) are designed to provide a means for forward area troops to acquire the everyday necessities that are required for their health and comfort when the exchange system or local stores are not available to them.

Characteristics:

The Type I HCP contains components that are suitable for both males and females. The intent is to supply 10 individuals for 30 days. Each shipping container contains 10 prepackaged polyethylene bags with a drawstring closure containing a designed quantity of 14 items for issue to 10 individuals. Each shipping container also contains other items intended as general supply for replacement or issue as needed.

The Type II HCP is intended for females only. The intent is to supply 10 females for 30 days.

The contents of the Type I and Type II HCPs are as shown. The shelf-life remaining for all components in the both the Type I and Type II HCPs at the time of assembly is two years at 50 to 72 degrees Fahrenheit.

Comments:

The components listed here are the components that were procured on the last contract for this ration. Based on field surveys, changes may be made in future procurements. If changes are made, they are usually in size of component or due to popularity of a new item, but the basic list of items generally remains the same.

Package Contents:

TYPE I	TYPE I Supplemental Items	TYPE II
Toothbrush	Detergent, laundry	Napkins, sanitary, regular (48)
Toothpaste	Towelette, moist	Napkins, sanitary, super (72)
Floss, dental	Lotion, sunscreen	Tampons, regular (60)
Razor, shaving, double blade, 10 pack	Comb, flexible rubber	Tampons, super (84)
Shave foam	Shave gel	Panty shields (250)
Soap, bar	Boot laces	Towelette, moist (20 20-packs)
Foot powder	Sewing kit	Bag, plastic, self seal, 1 gallon (20)
Towelette, moist, 20 pack	Tablet, writing	Disposal bag, 3x7 (150)
Tissues, 40 pack	Envelope, letter size	Bag, plastic, 10-15 gallon (10)
Shampoo	Fingernail clippers	Ponytail holders (10)
Deodorant, stick	Tweezers, flat tip	Brush, hair, grooming (1)
Pen, ball-point	Finger nail file	Comb, plastic (2)
Bag, plastic, self seal	Brush, hair	Bobby pins (50)
Petroleum jelly	Band aids	Personal Hygiene Body Wipes (10)
	Shoe brush	
	Mirror	
	Electric shave lotion	
	Hairdressing	
	Hair moisturizer	
	Hand lotion	
	Petroleum jelly	
	Boot/shoe polish	
	Mink Oil	
	Shave powder	



Ultra High Temperature Milk (UHT)

Purpose:

This item is used by the Armed Forces as a mandatory supplement and/or enhancement for operational ration feeding during operations which do not have refrigeration capability or have very limited capability. It is used in situations that do not permit resupply of perishable foods.

Characteristics:

UHT milk is fresh milk, which has been processed with a technology called Ultra High Temperature. The UHT treatment ensures maximum flavor, taste, and nutritional value. The aseptic packaging system protects the product from air and light and guarantees long shelf-life without the need for refrigeration. The shelf-life of UHT milk is 10 months (unopened) under normal storage condition.



Nutritional Data:

The nutritional values provided are:

- Whole White — 150 calories (30% Fat, 40% Carbohydrate, 30% Protein)
- Whole Chocolate — 230 calories (21% Fat, 58% Carbohydrate, 21% Protein)
- Reduced Fat Chocolate 2% milkfat — 170 calories (14% Fat, 64% Carbohydrate, 22% Protein)
- Reduced Fat Strawberry 2% milkfat — 170 calories (13% Fat, 66% Carbohydrate, 21% Protein)
- Reduced Fat White 2% milkfat — 120 calories (21% Fat, 46% Carbohydrate, 33% Protein).

Serving size is 1 cup (236 ml).



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