ACR-F-002D
29 May 2025
SUPERSEDING
ACR-F-002C
20 November 2019

SECTION C

The Food Packet, Modular Operational Ration Enhancement (MORE) provides a special purpose enhancement packet for the Warfighter and complements both individual and group rations. This packet of performance enhancing and high carbohydrate foods will help the Warfighter maintain optimal performance levels in extreme operational environments and during high intensity missions.

C-1 ITEM DESCRIPTION

ACR-F-002D, FOOD PACKET, MODULAR OPERATIONAL RATION ENHANCEMENT (MORE), ASSEMBLY REQUIREMENTS

Types.

Type I - High Altitude/Cold Weather
Type II - Hot Weather

C-2 ASSEMBLY REQUIREMENTS

A. Components. The components are specified in table I.

TABLE I. Components

Component	Reference
Beverage Powder, Carbohydrate	PCR-B-055A
Fortified Ascorbic Acid and Enhanced Maltodextrin	Formulation a
Lemon-Lime	Flavor 3
Orange	Flavor 4
Tropical Punch	Flavor 5
Beverage Powder, Carbohydrate Electrolyte	PCR-B-013B
Flat Interlocking Closure Pouch	Design B
Fruit Punch	Flavor I
Grape	Flavor II
Lemon-Lime	Flavor III
Orange	Flavor IV

TABLE I. Components - Continued

Component	Reference
Candy and Chocolate Confections	A-A-20177G
Caffeinated Jelly Beans, Bean-Shaped	Type VIII, Style A
Pomegranate, Cherry, and Watermelon	Flavor 8
Caffeinated Chewables/Gels, Dome-Shaped	Type IX, Style A
Lime	Flavor 2
Chewing Gum	A-A-20175E/PKG&QAP
Tablet, Large, With Caffeine, Regular	Type I, Size C, Style (2), Class 1
Peppermint	Flavor a
Cinnamon	Flavor c
Disk, Regular, With Caffeine, Regular	Type VII, Size B, Style (2), Class 1
Peppermint	Flavor a
Cinnamon	Flavor c
Crackers, Fortified	PCR-C-037B
Plain	Flavor 1
Dessert Bar	PCR-D-004A
Chocolate Banana Nut	Flavor 3
Energy Gel	PCR-E-018A
Raspberry	Flavor 1
Chocolate	Flavor 2
Fruits, Infused, Dried	A-A-20299C
No Sulfiting Agents	Class (1)
Sweetened with Nutritive Sweeteners	Sweetening option a
Cranberries, Sliced, Unflavored	Type VII, Style B, Flavor 1
Fruits, Wet Pack	PCR-F-002D
Applesauce, with Raspberry Puree, Sweetened, Reg.	Type VI
Applesauce, Carbohydrate Enhanced, Sweetened, Reg.	Type VII
Granola	PCR-G-003B
With Milk and Blueberries	Type I
Granola Bars (With or Without Nuts) and Nut Bars	A-A-20245B/PKG&QAP
Nuts (Peanuts and/or Tree Nuts), Uncoated	Base Type II, Coating A
Conventional	Agricultural Practice a
Almond and Coconut	Flavor 1
Meat and Poultry Snacks, Cured	A-A-20298C
Beef, Fermented, Chopped and Formed,	Variety A, Type IV, Style a
Sticks, Teriyaki	Class 2, Flavor (b)

TABLE I. Components - Continued

Component	Reference
Nut and Fruit Mix	PCR-N-003B
Nuts and Raisins with Pan Coated Chocolate Disks	Type II
Nut Butters and Nut Spreads	A-A-20328C
Manufactured from Dry Roasted Nuts, Regular, Stabilized, Fortified, Salted, Conventional	Form (a), Class A, Type a, Fortification ii, Seasoning (a), Agricultural Practice (1)
Peanut Spread, Smooth, Chocolate	Style II, Texture 1, Flavor (2)
Nuts, Shelled, Roasted	A-A-20164E
Conventional, Package Type 1	Agricultural Practice (1), Individual Serving Pouch
Almonds (Unblanched), Flavored (Smoke), 38 g	Type VI, Style c, Package size c
Trail Mix, Recovery	PCR-T-014A
Trail Mix, Recovery with Pretzels	Type I
Snack Foods	A-A-20195E
Pretzels, Filled Pretzels, Cheddar Cheese	Type II, Style F, Flavor 1
Baked Snack Crackers, Cheddar Cheese	Type V, Flavor 1
Toasted Corn Kernels, Barbecue	Type VI, Flavor 2
Toaster Pastries, Regular, Not Fortified	A-A-20211C, Type I, Fortification b
Enriched Wheat Flour, Conventional	Grain Comp. (1), Agricultural Practice i
Single Serving Packet, Frosted (Icing)	Servings (a), Style B
Chocolate Chip, Swirled and/or Drizzled Icing	Flavor 12, Icing Option (c)

B. Contents. The contents of each food packet type are specified in table II. Refer to table I for full citation and document number of components.

TABLE II. Contents

Type I - High Altitude/Cold Weather MORE

Pack 1	Pack 2	Pack 3
Granola with Milk and Blueberries	Dessert Bar, Chocolate Banana Nut	Crackers, Fortified, Plain
Nut and Fruit Mix with Pan Coated Chocolate Disks	Recovery Trail Mix, Pretzels	Peanut Spread, Smooth, Chocolate
Toaster Pastry, Chocolate Chip	Toasted Corn Kernels, BBQ	Applesauce, Carb, Sweetened
Filled Pretzels, Cheddar	Beef Stick, Teriyaki	Baked Snack Crackers, Cheddar
Jelly Beans, Caffeinated	Caffeinated Gum, Cinnamon	Energy Chews, Lime
	Beverage, Carb Fortified 1/	Beverage, Carb Fortified 1/

Type II - Hot Weather MORE

Pack 1	Pack 2	Pack 3
Energy Chews, Lime	Nut Bar, Almond and Coconut	Energy Gel, Chocolate
Dried Cranberries	Nut and Fruit Mix with Pan Coated Chocolate Disks	Toasted Corn Kernels, BBQ
Energy Gel, Chocolate	Energy Gel, Raspberry	Nuts, Almonds, Smoke Flavored
Filled Pretzels, Cheddar	Applesauce, Carb, Sweetened	Applesauce, Raspberry
Applesauce, Carb, Sweetened	Caffeinated Gum, Peppermint	Jelly Beans, Caffeinated
Beverage, Carbo Electro (2) 1/	Beverage, Carbo Electro (2) 1/	Beverage, Carbo Electro (2) 1/

1/ Flavors shall be procured in equal quantities and assembled in a distribution which provides the greatest variation. When pack contains two beverages, they shall be different flavors.

SECTION D

D-1 PACKAGING

A. Components.

(1) Time-temperature indicator (TTI) label. The TTI label shall be a 3/4 inch square, bull's-eye type, pressure sensitive adhesive label. The TTI label shall have an activation energy (E_a) of 24–30 kcal/mole, be protected from ultraviolet radiation, and have a shelf life of 1100 days at 80°F as pivot point.

(2) Assembly package. The assembly package shall be of sufficient thickness and strength to contain the pack components without tearing or spillage of meal contents throughout assembly, packing and distribution. Material will be suitably formulated for use with food packages.

B. Assembly.

(1) Food packet, MORE assembly. Each applicable component for each MORE food packet as described in table II shall be inserted into the assembly package. The assembly package shall be shrink wrapped or heat-sealed (as applicable) with material suitably formulated for use with food. If closed by heat seal, the seal shall be not less than 1/8 inch wide, and vacuum sealing is permitted. The sealed assembly package shall not show any evidence of foreign odor. The size of the finished assembly packet shall allow for the packing of 24 food packets into the box.

D-2 LABELING

A. Food packet, MORE. Each MORE food packet shall be correctly and legibly labeled on at least one face with permanent ink or other dark contrasting color. The label shall cite (as applicable):

Modular Operational Ration Enhancement (MORE)

(Note: shall be printed in BOLD font)

Type I: High Altitude/Cold Weather (Note: shall be printed in BOLD font)

Pack number (Note: shall be printed in BOLD font)

Specially designed for added nutrition during high altitude operations or at temperatures below 40°F

(May also be consumed at temperatures between 40-70°F) (Note: shall be printed in italicized font)

Contents list

Name and address of assembler

OR

Modular Operational Ration Enhancement (MORE)

(Note: shall be printed in BOLD font)

Type II: Hot Weather (Note: shall be printed in BOLD font)

Pack number (Note: shall be printed in BOLD font)

Specially designed for added nutrition during operations at temperatures above 70°F

(May also be consumed at temperatures between 40-70°F) (Note: shall be printed in italicized font)

Contents list

Name and address of assembler

D-3 PACKING

A. Packing. Twenty-four food packets, eight of each pack, shall be packed in a fiberboard box. The fiberboard box shall conform to RSC-L of ASTM D5118/D5118M, Standard Practice for Fabrication of Fiberboard Shipping Boxes and grade V2s of ASTM D4727/D4727M, Standard Specification for Corrugated and Solid Fiberboard Sheet Stock (Container Grade) and Cut Shapes, except the requirements for dry burst strength shall be minimum 425 psi, the requirement for wet burst strength shall be minimum 250 psi and the laminated board thickness shall be 0.069 inches. [DEVCOM Soldier Center found that solid fiberboard shipping container material consisting of two outer facings of 90 pound wet strength linerboard and an inner ply of 69 pound linerboard met the performance criteria of this specification.] The box liner shall be a full inside width box liner fabricated from grade W5c fiberboard in accordance with ASTM D5118/D5118M, except the terminal ends of the liner shall overlap a minimum of 2 inches and no fastening of the overlap is required. The box shall be closed in accordance with closure method 2A1 of ASTM D1974/D1974M, Standard Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Boxes; except the gap between the outer flaps shall be not more the 3/4 inch wide. Each box shall be reinforced with two girthwise nonmetallic straps. The inside dimensions of the box shall be 16-11/16 inches in length, 9-1/8 inches in width and 10-1/4 inches in depth.

D-4 UNITIZATION

A. Unit loads. Forty-eight boxes shall be arranged in unit loads in accordance with type I, class C of DLA Troop Support Form 3507, Loads, Unit: Preparation of Semiperishable Subsistence Items. At least two boxes in each tier shall be oriented to display the TTI label.

D-5 MARKING

A. Shipping containers. Shipping containers shall be marked in accordance with DLA Troop Support Form 3556, Marking Instructions for Boxes, Sacks, and Unit Loads of Perishable and Semiperishable Subsistence and as specified in the contract with the following exceptions:

(1) Identification markings normally placed on an end of the shipping container shall read from top to bottom, left to right, when the shipping container is rotated from its upright position onto its side for palletization. The major flaps of the shipping container closure immediately to the right of the marked end of the shipping container shall bear the following marking:

Contract data and other required markings
Date of pack
Lot number
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(2) The TTI label shall be centrally positioned on the panel. A minimum distance (quiet zone) of 1/4 inch from the nearest identification marking shall be maintained.

(3) One side panel of the shipping container shall be marked "Food Packet, Modular Operational Ration Enhancement (MORE)" in letters not less than 1-1/4 inches high. The marked end panel for Type I shall read "Food Packet, MORE High Altitude/Cold Weather (for temperatures below 40°F)" or for Type II shall read "Food Packet, MORE Hot Weather (for temperatures above 70°F)" in addition to other required markings.

B. Unit loads. Unit loads shall be marked in accordance with DLA Troop Support Form 3556.

SECTION E INSPECTION AND ACCEPTANCE

The following quality assurance criteria, utilizing ANSI/ASQ Z1.4, Sampling Procedures and Tables for Inspection by Attributes, are required. Unless otherwise specified, single sampling plans indicated in ANSI/ASQ Z1.4 will be utilized. When required, the manufacturer shall provide the Certificate(s) of Conformance to the appropriate inspection activity. Certificate(s) of Conformance not provided shall be cause for rejection of the lot.

A. Definitions.

(1) Critical defect. A critical defect is a defect that judgment and experience indicate would result in hazardous or unsafe conditions for individuals using, maintaining, or depending on the item; or a defect that judgment and experience indicate is likely to prevent the performance of the major end item, i.e., the consumption of the ration.

(2) Major defect. A major defect is a defect, other than critical, that is likely to result in failure, or to reduce materially the usability of the unit of product for its intended purpose.

(3) Minor defect. A minor defect is a defect that is not likely to reduce materially the usability of the unit of product for its intended purpose, or is a departure from established standards having little bearing on the effective use or operation of the unit.

B. Conformance inspection. Conformance inspection shall include the examinations/tests and the methods of inspection cited in this section.

C. Packaging examination.

(1) Assembled food packets examination. The filled and sealed food packets shall be examined for the defects listed in table III. The lot size shall be expressed in packets. The sample unit shall be one packet. The inspection level shall be S-4 and the acceptable quality level (AQL), expressed in terms of defects per hundred units, shall be 2.5 for major defects and 4.0 for minor defects. A minimum of 50 samples shall be examined for critical defects. The finding of any critical defect shall be cause for rejection of the lot. The inspection sample shall contain a proportionate amount of packets.

TABLE III. Assembled food packet defects

Category			Defect
Critical	Major	Minor	
1			Tear or hole or open seal in energy gel or applesauce.
2			Swollen energy gel or applesauce.
	101		Food packet not type or not pack as specified.
	102		Component missing or incorrect pack for packet.
	103		Food packet not clean or outer packaging of contents not clean. 1/
	104		Foreign odor.
	105		Label missing or incorrect or illegible.
	106		Tear or hole or open seal in component packages.
	107		Crushed or broken component. 2/
		201	Tear or hole or open seal in packet. 3/

1/ Outer packaging shall be free from foreign matter, which is unwholesome, has the potential to cause package damage (i.e. glass, metal filings, etc.), or generally detracts from

the clean appearance of the package. The following examples shall not be scored as defects for unclean:

a. Foreign matter which presents no health hazard or potential package damage and which can be readily removed by gently shaking the package or by gently brushing the package with a clean dry cloth.

b. Localized dried product which affects less than 1/8 of the total surface area of one pouch face, or an aggregate of scattered dried product which affects less than 1/4 of the total surface area of one pouch face.

2/ For definition of crushed or broken, refer to applicable ration component document.

3/ The holes provided in shrink wrap to allow venting of air to facilitate effective application of shrink wrap are permitted and shall not be scored as defects.

D. Packing.

(1) Shipping container and marking examination. The filled and sealed shipping containers shall be examined for the defects listed in table IV. The lot size shall be expressed in shipping containers. The sample unit shall be one shipping container fully packed. The inspection level shall be S-3 and the AQL, expressed in terms of defects per hundred units, shall be 4.0 for major defects and 10.0 for total defects.

TABLE IV. Shipping container and marking defects

Category		Defect
Major	Minor	
101		Marking missing or incorrect or illegible.
102		Outer flaps do not completely meet, leaving an opening greater than 3/4 inch between flap ends.
103		Inadequate workmanship. 1/
104		Missing food packet. 2/
105		Not eight of each pack specified.

TABLE IV. Shipping container and marking defects - Continued

Category		Defect
Major	Minor	
106		Not correct type food packet.
	201	Twenty-four food packets do not fit in box.
	202	Time-temperature indicator missing or not centrally located on panel.
	203	Time-temperature indicator 1/4-inch quiet zone not maintained.

1/ Inadequate workmanship is defined as, but not limited to, incomplete closure of container flaps, loose strapping, inadequate stapling, improper taping, or bulged or distorted container.

2/ Each missing food packet is a major defect.

(2) Flap closure testing. The lot size shall be expressed in shipping containers. The sample unit shall be one shipping container. The inspection level shall be S-2 and the AQL, expressed in terms of defects per hundred units, shall be 4.0. The closure of the four outer flaps of the container shall be tested separately. A 90 degree angular bar with each leg approximately 5 inches long by 3 inches wide by 1/8 inch thick shall be used to test the flap closures. Insert one leg of the angular bar full length under the center of one outer flap. Insertion shall be made through the open slot between the outer flaps. Lift the container vertically by the other leg of the bar until the container is suspended. The complete upper surface of the inserted leg shall be in contact with the inner surface of the flap during the lifting and suspension of the container. Complete separation of the adhesive bond of one or more of the outer flaps, showing no evidence of fiber tear, shall be scored a major defect.

F. Unit load examination. The unit load shall be examined in accordance with the requirements of DLA Troop Support Form 3507. Any nonconformance shall be classified as a major defect.

SECTION J REFERENCE DOCUMENTS

Unless otherwise specified, the applicable version of these documents is that which is active on the date of the solicitation or contract.

DLA Troop Support Forms

Form 3507	Loads, Unit: Preparation of Semiperishable Subsistence Items
Form 3556	Marking Instructions for Boxes, Sacks, and Unit Loads of Perishable and Semiperishable Subsistence

NON-GOVERNMENTAL STANDARDS

AMERICAN SOCIETY FOR QUALITY (ASQ) www.asq.org

ANSI/ASQ Z1.4	Sampling Procedures and Tables for Inspection by Attributes

ASTM INTERNATIONAL www.astm.org

D1974/D1974M	Standard Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Boxes
D4727/D4727M	Standard Specification for Corrugated and Solid Fiberboard Sheet Stock (Container Grade) and Cut Shapes
D5118/D5118M	Standard Practice for Fabrication of Fiberboard Shipping Boxes