

SECTION C

The Medical Nutrition Supplement (MNS), 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 in a field environment. The MNS contains unique food components used in modified diets.

Assembly of this ration consists of three shipping containers (half tier per module); six shipping containers fit on one tier of a standard 40 by 48-inch pallet. There are four tiers per pallet. The MNS contains components to prepare and serve liquid, clear liquid, thickened and high protein diets.

C-1 ITEM DESCRIPTION

ACR-M-003, MEDICAL NUTRITION SUPPLEMENT (MNS), ASSEMBLY REQUIREMENTS

C-2 ASSEMBLY REQUIREMENTS

A. Components. The components shall be as specified in table I.

TABLE I. Components

<u>Component</u>	<u>Reference 1/</u>
<u>Beverages</u>	
Beverage, Protein, Instant, Fruit Flavored, Translucent, 100% Whey Protein, (20 g. Protein/Serving), 14.1 oz. Container Citrus Lemonade	ADCoP
Electrolyte Sports Drink, Powder, 18.3 oz. Container Lemon Lime Orange	ADCoP
Instant Breakfast, High Protein, (18 g. Protein/36 g. Single-Serve Packet), 8 Packets/Box Chocolate Vanilla	ADCoP
<u>Soups</u>	
Broth, Dehydrated, Individual Servings Beef – (50) 4 g. Packets/Box Chicken – (50) 4 g. Packets/Box Chicken, No Sodium – (50) 4 g. Packets/Box	ADCoP

TABLE I. Components - Continued

Component	Reference <u>1/</u>
<u>Other Food Items</u>	
Gelatin, Dessert, Instant, 4 Servings/Box Lemon	A-A-20170
Orange	
Gelatin, Ready To Eat, 3.25 oz. Cups, 4 Cups/Pack Grape	ADCoP
Orange	
Nutritional Drink, Powdered–14 oz., Can, Tube Feeding Vanilla Flavor, Reconstitutes with Water	ADCoP
Protein Powder, Instant, (6 g. Protein/7 g. Serving), 8 oz. Container	ADCoP
Pudding, Dessert, Instant, Vanilla, 4.2 oz	ADCoP
Pudding, Dessert Cups, Ready To Eat, 3.25 oz. Cups, Variety Pack, 6 Chocolate/6 Vanilla	ADCoP
Protein Powder, Instant, (6 g. Protein /7 g. Serving), 8 oz. Container	ADCoP
Thickener, Instant Food and Beverage Thickener – 8 oz. Container	ADCoP
<u>Disposables</u>	
Bag, Plastic, Trash (4 bags per package)	8105-01-521- 6616
Bag, Plastic, Sandwich, Zipper Bags, 100 Pack	ADCoP
Bag, Plastic, Storage, Quart, Zipper Bags, 24 Pack	ADCoP
Cups, Disposable, Paper, Hot and Cold, with Lids, 8 oz. Capacity	ADCoP
Shaker Bottle, 24 oz.	ADCoP
Spoons, Teaspoon, Plastic, Heavyweight, 200 Ct.	ADCoP
Straws, Flexible, Individually Wrapped – 500/Box	A-A-1052

1/ Acquisition and Distribution of Commercial Products (ADCoP)

B. Module Contents. The module contents shall be as specified in table II.

TABLE II. Medical Nutrition Supplement Contents

<u>Component</u>	<u>Issue per Module</u>
<u>Beverages</u>	
Beverage, Protein, Instant, Fruit Flavored, Translucent, 100% Whey Protein, (20 g. Protein/Serving), 14.1 oz. Container, Citrus Lemonade	2 CO
Electrolyte Sports Drink, Powder, 18.3 oz. Container Lemon Lime	2 CO
Orange	2 CO
Instant Breakfast, High Protein, (18 g. Protein /36 g. Packet), 8 Packets/Box Chocolate	5 BX
Vanilla	4 BX
<u>Soups</u>	
Broth, Dehydrated, Individual Servings Beef – (50) 4g. Packets/Box	1 BX
Chicken – (50) 4g. Packets/Box	1 BX
Chicken, No Sodium – (50) 4g. Packets/Box	1 BX
<u>Other Food Items</u>	
Gelatin, Dessert, Instant, 4 Servings/Box Lemon	4 BX
Orange	4 BX
Gelatin, Ready To Eat, 3.25 oz. Cups, 4 Cups/Pack Grape	6 PG
Orange	6 PG
Nutritional Drink, Powdered–14 oz., Can, Tube Feeding Vanilla Flavor, Reconstitutes With Water	2 CO
Pudding, Dessert, Instant, Vanilla, 4.2 oz.	8 BX
Pudding, Dessert Cups, Ready-To-Eat, 3.25 oz. Cups, Variety Pack, 6 Chocolate/6 Vanilla	4 BX
Protein Powder, Instant, (6 g. Protein /7 g. Serving), 8 oz. Container	1 CO
Thickener, Instant Food and Beverage Thickener – 8 oz. Container	1 CO

Table II. Medical Nutrition Supplement Contents – Continued

Component	Issue per Module
<u>Disposables</u>	
Bags, Plastic, Trash (4 bags per package)	1 PG
Bag, Plastic, Sandwich, Zipper Bags, 100 Pack	1 BX
Bag, Plastic, Storage, Quart, Zipper Bags, 24 Pack	1 BX
Cups, Disposable, Paper, Hot and Cold, with Lids, 8 oz. Capacity	150
Shaker Bottle, 24 oz.	3 BT
Spoons, Teaspoon, Plastic, Heavyweight, 200 Ct.	2 BX
Straws, Flexible, Individually Wrapped, 500/Bag	1 BG

SECTION D

D-1 PACKAGING

A. Unit packaging. Components shall be packaged in accordance with documents referenced in table I.

B. Intermediate packaging. Components may be intermediate packaged.

C. Module assembly. The module contents specified in table II shall be packed as specified in table III.

D. Shipping container loading sequence. The components of each menu shall be loaded into a box in the order indicated in table III. The loading sequences are recommended, but variations are allowed. Abbreviations used are:

BG = bag	BT = bottle	BX = box	CO = Container
PG = package	TY = tray	SF = sugar free	

TABLE III. Loading Sequence

MEDICAL NUTRITION SUPPLEMENT		
1a	2a	3a
5 BX Instant Breakfast 4 CO Electrolyte Beverage 1 CO Thickener 1 CO Protein Powder	3 BX Pudding Cups 4 PG Gelatin Cups 8 BX Gelatin	150 Cups 2 CO Nutritional Drink 1 PG Trash Bags
1b	2b	3b
8 BX Vanilla Pudding 8 PG Gelatin Cups 4 BX Instant Breakfast	1 BX Pudding Cups 2 CO Fruit Protein Beverage 3 BX Broth 1 BX Sandwich Bags 1 BX Quart Bags	150 Lids 1 BG Straws 2 BX Spoons 3 Shaker BT

D-2 LABELING

A. Components. Components shall be labeled in accordance with documents referenced in table I.

D-3 PACKING

A. Packing.

(1) MNS Module. Each complete module shall be assembled into three boxes using the suggested loading sequence specified in table III. Because of the number of non-developmental components and the variety of packaging available, it may be necessary to move a product from one compartment to another where space is more available. Each box shall be constructed in accordance with style RSC of ASTM D5118/D5118M, Standard Practice for Fabrication of Fiberboard Shipping Boxes and figures 1, 2, and 3. The fiberboard shall conform to type CF, class D, variety SW, grade V3c of ASTM D4727/D4727M, Standard Specification for Corrugated and Solid Fiberboard Sheet Stock (Container Grade) and Cut Shapes. The inside dimensions of the box shall be 23-3/4 inches in length, 13-3/16 inches in width and 8-3/4 inches in depth. Each box shall be fitted with two V3c partitions in accordance with figures 1, 2 and 3. Kraft paper as specified in A-A-203, Paper, Kraft, Untreated, shall be used to fill voids and immobilize module components. Boxes shall be free

from evidence of rodent or insect infestation. Boxes may be assembled by gluing or taping. Each container shall be closed and then sealed (H-taped) in accordance with methods B or C of ASTM D1974/D1974M, Standard Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Boxes.

(2) Partitions. The center panel of each partition shall meet at the center of the box to divide the box into two equal compartments (cell "A" and "B"). The end panels of the partitions shall butt together at each end of the box (see figure 1). The partitions shall be full depth partitions and fabricated according to figure 3.

D-4 UNITIZATION

A. Unit loads. Boxes shall be arranged in unit loads in accordance with Type I, Class A of DLA Troop Support Form 3507, Loads, Unit: Preparation of Semiperishable Subsistence Items.

D-5 MARKING

A. Module marking. The three boxes comprising one module shall be positioned on the pallet side by side and marked in sequence so that the module can be identified as one unit (two, three box module units to a tier). Using either labels or stencils on the top panel, with characters at least 2 inches high, the boxes shall be identified as "Medical Nutrition Supplement BOX 1", "Medical Nutrition Supplement BOX 2", and "Medical Nutrition Supplement BOX 3". The characters shall be oriented so as to be readable when facing the marked end panel.

B. Shipping boxes and unit loads. Marking of shipping boxes and unit loads shall be as specified in DLA Troop Support Form 3556, Marking Instructions for Boxes, Sacks, and Unit Loads of Perishable and Semiperishable Subsistence.

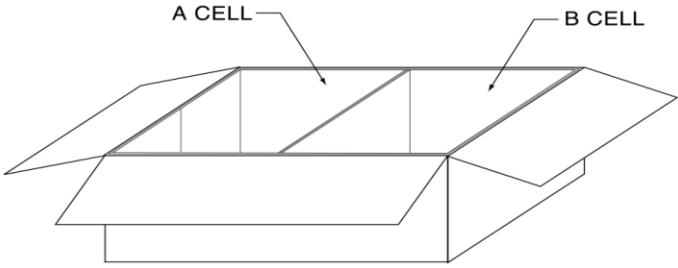


FIGURE 1
 SHIPPING CONTAINER WITH PARTITIONS

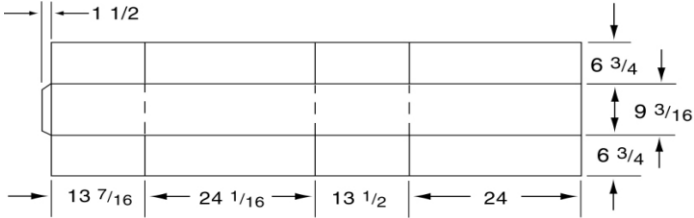


FIGURE 2
 STYLE RSC FIBERBOARD
 (SIZE: 23 3/4 x 13 3/16 x 8 3/4 I.D.)

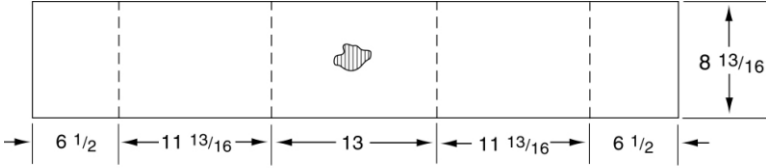


FIGURE 3
 SHIPPING CONTAINER PARTITIONS
 (2 REQUIRED)

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) Medical Nutrition Supplement assembled modules examination. The assembled modules shall be examined for the defects specified in table IV. The lot size shall be expressed in assembled modules (3 boxes per module). The sample unit shall be one fully assembled module. The inspection level shall be S-2 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. Five assembled modules shall be randomly selected from the lot and examined for critical defects. The finding of a critical defect shall be cause for rejection of the lot.

TABLE IV. Medical Nutrition Supplement assembled modules defects 1/

Category		Defect
<u>Critical</u>	<u>Major</u>	<u>Minor</u>
1		Any canned food product leaking or damaged so as to expose contents.
	101	Component leaking or damaged.
	102	Component not clean. 2/
	103	Box not as specified.
	104	Marking missing or incorrect or illegible.
	105	Box not closed as specified.
	106	Item missing.
		201 More than 5 percent of the quantity of any disposable is crushed or damaged so as to be unusable.

202	Intermediate bag has tear or open seam.
203	Dunnage or box partitions not as specified.

1/ Any evidence of rodent or insect infestation shall be cause for rejection of the lot.

2/ 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 for the clean appearance of the components 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. Water spots.

c. Very thin grease, oil, or product residue that is discernible by touch, but is not readily discernible by visual examination.

(2) 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

FEDERAL SPECIFICATION

A-A-203C	Paper, Kraft, Untreated
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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