

Annex H – Type and Description of Combat Rations

1. Three types of Canadian combat rations are used to meet the needs of military personnel on training or on deployed operations. They include

- Individual Meal Pack;
- Survival ration;
- Emergency ration; and
- Special ration.

2. The macro nutrient content is summarised as follows:

Type	Energy (KCalories - Cal)	Proteins	Fat	Carbohydrates
Individual Meal Pack	1200 Cal per meal (3200-3600 daily)	15%	35%	50%
Survival Ration	Approx 500 Cal			100%
Emergency Ration	Approx 1000 Cal	10-20%	20-40%	40-70%
Special Ration (vegetarian, Kosher and Halal from US source)	1200 cal per meal	11%	30%	59%

3. The detailed description of each type of operational ration is provided below.

Individual Meal Pack (IMP) – Combat Ration	
Purpose - to sustain the nourishing needs of military personnel for one meal-day. Easy to heat, consumable without heating, resistant to damage during transportation, not expected to be used for more than 30 consecutive days.	
NATO requirement	Canadian ration
<ul style="list-style-type: none"> - provide minimum 3200 kcalories and maximum appropriate to energy expenditure of personnel undergoing continuous and strenuous physical activity - at least 10% of kcalories from protein, 35 - 40% from fat - vitamin and mineral content to satisfy U.S. Food and Nutrition Board - contain some ready-to-eat items that can be eaten without addition of water, heating, or mixing - should include a bread equivalent, spread for bread (cheese, jam, etc), instant beverage powder - shelf life 2 years 	<p>Individual Meal Pack (IMP)</p> <ul style="list-style-type: none"> - 3 meals in one day provide approximately 3600 kcalories, which is adequate for most operational activities. May be supplemented with LMC as required - meets Nutrition Recommendations for Canadians except Calcium and folic acid (not significant if consumption period is less than 30 consecutive days) - meets all other requirements - NSN 8970-21-887-9548 (breakfast/lunch) - NSN 8970-21-887-9549 (lunch) - NSN 8970-21-887-9550 (supper) - shelf life 3 years from date of assembly

Survival Ration	
<p>Purpose - to sustain life in situations where there is a minimal expenditure of energy and limited drinking water. Drinking water must be at least 1000 ml per man per day in cool environments and at least 3000 ml in hot environments.</p>	
NATO requirement	Canadian ration
<ul style="list-style-type: none"> - 150 g carbohydrate per day for up to 6 days - no additional fat or protein - shelf life 4 years or more 	<p>Basic Survival Ration</p> <ul style="list-style-type: none"> - consists of starched jelly candies - meets all requirements - NSN 8970-21-852-7278 <p>Supplementary Beverage</p> <ul style="list-style-type: none"> - consists of beverage powder and chewing gum - NSN 8970-21-905-6757

Emergency Ration	
<p>Purpose - to sustain operational capability of military personnel for 24 hours when regular food supply is disrupted and drinking water freely available.</p>	
NATO requirement	Canadian ration
<ul style="list-style-type: none"> - provide 1000 kcalories per meal - 40 - 70% of kcalories from carbohydrate, 20 - 40% from fat, 10 - 20% from protein - suitable for consumption with cooking, heating, or addition of water. Inclusion of instant beverage powders is desirable - shelf life 2 years or more 	<p>Light Meal Combat (LMC)</p> <ul style="list-style-type: none"> - approximately 1000 kcalories per meal - meets all requirements - does not need cooking or heating except for hot beverage - may be used as a meal replacement or as a supplement to Individual Meal Pack (IMP) - shelf life 3 years from date of assembly - NSN 8970-21-904-3538 (menu 1 - Beef jerky) - NSN 8970-21-904-3539 (menu 2 - Pepperoni) - NSN 8970-21-904-3540 (menu 3 - Freeze dried cheese)

Descriptions of Special Rations

General

4. Each complete military ration has 1200 calories and meets nutritional requirements of US Surgeon General for soldier field use.
5. Shelf Life of accessory pack items is 12 months from production date. An average remaining life of 6 to 10 months from delivery date should be expected.
6. Shelf Life of main course meals is 5 years from production date.

Vegetarian Type (N8970-01-424-2085)

7. Main Course Meals: varieties include: 3 Florentine Lasagna, 3 Vegetarian Stew, 3 Cheese Tortellini, 3 Pasta & Garden Vegetables. Kosher and Halal Certified.

8. Accessory Packs may include: bagel chips/snacks, granola bars, honey peanuts, barbecued sunflower seeds, cereal, raisins, cocoa, salt, pepper, toilet paper, wet wipes, spoon, chemical meal heater, coffee, creamer, and sugar. They may also contain almonds, candy or other substitute items from time to time.

Note: Vegetarian rations are Halal and Kosher certified.

Halal Type (N8970-01-424-1998)

9. Main Course Meals: varieties include: 2 or 3 beef, 3 or 4 chicken, Cheese Tortellini, Florentine Lasagna, Vegetarian Stew, Pasta & Vegetables.

10. Accessory Packs may include: bagel chips/snacks, granola bars, honey peanuts, barbecued sunflower seeds, cereal, raisins, cocoa, salt, pepper, toilet paper, wet wipes, spoon, chemical meal heater, coffee, creamer, and sugar. They may also contain almonds, candy or other substitute items from time to time.

Kosher Type (N8970-01-424-1996)

11. Main Course Meals: varieties include: 2 or 3 beef, 3 or 4 chicken, and 6 vegetarian including 2 dairy and 4 pareve (no dairy or meat in meal)

12. Accessory Packs may include: bagel chips/snacks, granola bars, honey peanuts, barbecued sunflower seeds, cereal, raisins, cocoa, salt, pepper, toilet paper, wet wipes, spoon, chemical meal heater, coffee, creamer, and sugar. They may also contain almonds, candy or other substitute items from time to time.