Operational Ration Packs of the British Armed Forces

PROPERTY OF MOD
UNAUTHORISED SALE AND PURCHASE IS PROHIBITED

24 HOUR RATION PACK

This is one of a multiple menu choice and suitable for use on Ops.
Please take time to complete the enclosed questionnaire.
Your feedback, positive and negative, really counts and will be instrumental in developing the ration pack of the future.
Foreword
Current expeditionary military operations,
Document outline

Introduction
UK military rations, Hobby chefs, Main types & other variants

Selecting Components for ORP
Shelf Life, Nutritional Content,
Requirements for Macronutrients, Protein

Security of Supply Chain
Country of origin, EC approved Food Safety Standards,
Rigorous auditing

Food Selection Panel
Blind tasting. Nine point Hedonic Scale

The Current Range of Operational Rations Packs
Retort pouches, Snacks

Pallet Configuration
Outer box dimensions

24 Hour
Designed to meet the religious and cultural requirements
20 menus. A: menus 1-10, B: menus 11-20

10 Man
Feeding 10 men for one day, 5 main menus

24 Hr Jungle Ration
With additional supplements and a Flameless Ration Heater

Cold Climate Ration
Lightweight high calorie 24 Hr ration

12 Hr ORP
Designed for patrolling

Hexamine Cooker and Fuel
Managed supply

Emergency Flying & Survival Rations
Managed supply

Frequently asked Questions
Who establishes the nutritional guidelines for the range of Operational Rations?

Can I buy ORP off the shelf?

What is the shelf life of ORP?

Are the rations gluten and/or nut free?

Why does the ORP have so much packaging?

Why are Vegetarian/Halal/Sikh/Hindu/Kosher rations available?

Why can’t I get a Mars Bar/Snickers/Coke in the ration?

Who decides what to put in the rations?

Where do the components for the rations come from?

Where can I get a list of the menus from?

What if I have an idea for a new product for the rations?
Foreword

Current expeditionary military operations and exercises require a flexible range of rations to meet the cognitive, nutritional and energy needs of the serviceman and woman in the field. Military operations, including planned exercises, routinely take place all over the world, in a variety of climates and theatres. The Defence Food Services (DFS), based in Abbey Wood, Bristol, is responsible for the research and development, Quality Assurance, field-testing, evaluation, and high level management of the current supply chain of UK military rations. These rations not only provide vital sustenance but also they are a key factor in the maintenance of good morale for troops who are working and living in often austere and hazardous conditions.

Military operations can take place anywhere in the world and at any time of the year. DFS must ensure that the military rations, contain components that can be stored at ambient temperature for a specified period of time in a temperate climate. These rations may also be stored for short periods in extremes of temperature and humidity, and the components must be suitable for these varying conditions. Account must be made of this when these components are sourced for the ORP. DFS has a responsibility to react rapidly in support of military operations. It is therefore necessary for DFS to hold reserve stocks of ORP. For this reason, it is vital that the ORP has a shelf life of not less than 24 months. It is also a further requirement that DFS shall alter or change the packaging configuration of individual components or the outer boxes, and trial, design and produce other types of ration configuration at short notice.

This document outlines the full range of operational rations, including the 24 Hour and 10 Man ORP, as well as the more specialist rations including Cold Climate and Jungle rations, emergency and survival rations. Detailed information on the functional characteristics, nutritional content and preparation, including any specialist packaging requirements, are given for each type.
Introduction

Military operations can take place anywhere in the world and at any time of the year. The DFS must ensure that UK military rations, in the form of ORP, contain components that can be stored at ambient temperature in a temperate climate for a specified period of time. A temperate climate is generally considered to range between +3°C and +25°C. When operational temperatures are likely to be below 0°C for long periods then the specialist Cold Climate Ration should be used. For temperatures above +25°C, ORP should be stored in insulated, refrigerated storage conditions. However the ORP are designed to be stored and used in hot conditions without refrigeration for short periods.

The backbone of UK operational feeding is the 24 Hr ORP, in the immediate war fighting phase and early stages of a deployment and whenever the operational tempo precludes group feeding. The 24 Hr ORP is also used extensively during training and on exercise both in the UK and world wide.

The 24 Hr ORP is a self contained ration consumed on the basis of one 24 Hr ORP box per man per day. 24 Hr rations are required not only to provide energy but also macro and micro nutrients, in order to maintain physical and cognitive performance. Troops may have to remain on 24 Hr ORP as their main (if not sole) source of food for a period of many days until other sources of food are available for this reason the composition of the ration is important both in terms of the amount of energy that is provided and the nutrients they contain. Therefore it is important that there is variety in the ration packs so as to reduce the risk of menu fatigue. When used in an operational setting, troops may be issued with several 24 Hr ration packs at any one time. For this reason the “hot” breakfast choices, as well as the main meals and some of the pudding types, are packed in retort pouches to ensure that they have, are flexible and robust. They are designed to be submerged unopened in boiling water, allowing the food contained within to be heated to the desired temperature. The pouched components may also have to be consumed when cold, depending on the operational environment. All 24 Hr ORP should contain core components including a breakfast (hot or cold), lunch element, main meal and dessert, snacks, beverage powders, and sundries including waterproof matches, water purification tablets (used where no potable water is available), dental chewing gum, wet wipes, tissues and a disposable spoon for consuming the products in the ration.

Current 24 Hour ORP comprises of 20 menus, with 10 Halal, 10 Sikh/Hindu, 10 Kosher and 10 Vegetarian variants also available. The culturally sensitive menus are also suitable for those that have no specific cultural or dietary needs and are based on the standard ORP, with many of the core items being sourced from the same supplier.

When the operational tempo allows, 10 Man ORP is utilised for group feeding, usually by military chefs in field kitchens. However they are also suitable for use by “hobby chefs” who have received some basic training in their use and come complete with a simple recipe guide to ensure users can make the most of the contents. Canned items and retort pouches provide the core components which are supplemented by a wide variety of dehydrated products. Each box of 10 Man ORP is self contained, and the components should be such that they are capable of being utilised by Service Personnel with no formal catering training. When the situation allows, 10 Man ORP is supplemented by a range of other basic provisions, such as fresh fruit and vegetables. However, it may be necessary for troops to live on 10 Man ORP for extended periods and account is made of this when selecting components for the rations. There is sufficient variety within each menu to ensure that there will be a range of components to produce a breakfast, lunch and evening meal with associated drinks, hot beverages and snacks.

Current 10 Man ORP comprises 5 main menus. There are no culturally sensitive variants. However each box contains a number of ingredients sufficient to produce a Vegetarian option, where required.

As well as these two main types of ORP, DFS manages the procurement and supply of a number of other variants. These include the lightweight 12 Hr ration for use where a patrol ration is required, the Cold Climate Ration (designed for use either above the snow line or where a high calorie, lightweight ration is required), Jungle Ration (issued to SF or Units undergoing extremely arduous training), Submarine Survival Ration, Ships Emergency Ration, and Emergency Flying Rations. DFS also manage the supply and delivery of the individual cooker and it’s associated fuel.
Selecting Components for ORP

When selecting ration components for inclusion in any of the various ration types, several important requirements have to be met. These are as follows.

**Shelf Life of Operational Rations**
Most of the types of ORP have a 2 year shelf life though some of the more specialised rations have a shelf life of up to 5 years. The shelf life is linked to the best before dates of the products contained within the ration and are occasionally extended, taking into account the ambient temperatures and conditions prevalent during storage.

The main components of the rations are the retort pouches. These pouches are formed from a 4 ply bonded material and are thermally processed at high temperatures to ensure a long shelf life at ambient, shelf stable temperatures, in much the same way as canned goods are processed. The 4 ply construction also ensures they are robust enough to survive multiple handling and storage and finally delivery worldwide, and for short periods of time in field conditions and individuals bergen.

One of the prime aims of the packaging on the components is to ensure that the rations are maintained in a first class condition no matter what the environment and that they are safe to eat when they are consumed. Due to the varied storage conditions during exercise or on Ops that the rations face, the rations are packed in very robust outer material to ensure that the shelf life requirements of the rations are met. This can seem like un-necessary waste however without this packaging the food safety aspects, robustness, durability and long shelf life of the ration will not be met. This is why some food items do not appear in the ration packs. They simply do not have the shelf life or robustness required.

Often popular branded items that are commercially available have a relatively short shelf life in a UK temperate climate. For these items to be packed into the ORP, the packaging would have to be changed considerably and made more robust, to meet the often high operational temperatures the ORP is used in. Due to economies of scale and modern production processes, this would be prohibitively costly per component for the small numbers of items the MOD requires. For this reason some branded items are unsuitable for inclusion in the ORP range.

**Nutritional Content of ORP**
The nutritional guidelines for ORP are based on the advice given by the Institute of Naval Medicine (INM) and the Surgeon Generals Office (SG).

Before an item is selected for inclusion in any of the ORP’s the nutritional balance of the item is carefully analysed. If the item meets the profile for macronutrients (these are those compounds in foods that provide energy – protein, fat and carbohydrates) then it can be considered for inclusion in the ORP.

**Requirements for Macronutrients on Ops and Exercises**
Evidence from recent operations and from military training shows adequate energy intake reduces risk of illness and injury (Brookes et al. 2011, Davey et al. 2011). ORP are designed to provide this energy in the optimal mix of carbohydrate, fat and with adequate protein for the body’s needs.

Chronic fatigue occurs after successive days of hard exercise and inadequate nutrition. This is caused by a shortage of muscle glycogen due to inadequate carbohydrate intake. Carbohydrate (e.g. from starchy foods) is stored in muscles and liver as glycogen. These stores are used to maintain blood glucose and are essential for energy metabolism and to fuel the brain. They become a more important fuel as exercise intensity increases. When an individual runs out of muscle glycogen you will fatigue and performance will decrease or stop. To counter this an individual needs to eat enough carbohydrate to sustain performance.

What happens when the body runs out of glycogen? During exercise and on Ops, the amount of glycogen drops as energy is expended. The snack items in ORP are ideal for consuming out on patrol to sustain energy levels. Eating a main meal as soon as possible after exercise will effectively replenish glycogen stores and promote recovery. If however sufficient carbohydrate rich foods are not consumed, glycogen stores will remain depleted. The ability to undertake rigorous activity and mental tasks will be impaired.
Eating more protein than you need will not increase muscle mass, or improve physical performance. Protein supplements are not necessary if you consume enough protein in your diet.

You need no more than 1.5 g per kg body weight of protein per day (this equates to around 10 - 15% of your total energy intake). Consuming some protein (e.g. as part of a main meal) after exercise or patrol will help stimulate recovery.

Fat stores are abundant in the body. Fat is energy dense, it provides 9 kcal of energy per gram. The recommended intake of fat is no more than 35% of energy. However, when energy needs are high and/or food must be carried by personnel, a higher fat diet is an easy way to consume more energy while minimising the weight of food that must be carried. Some ORP components are relatively high in fat for this reason.
Security of Supply Chain

The country of origin of the components for the ORP are a factor to be considered before inclusion in the ORP range. Although DFS has no constraints on the sourcing of products, certain food safety and legislative requirements have to be met, and the security and responsiveness of the supply chain has to be considered. All ORP components, wherever they are produced, must come from production facilities that meet EC approved Food Safety Standards, and must meet the MOD’s own Food Quality Standards, through Cardinal Point and Armed Services Food Specifications. Rigorous auditing and testing ensure these criteria are met. When considering security of the supply chain, the country of origin and time taken from the supplier to the ORP assembly facility is also an important factor. At times the ORP is required to be packed at short notice. For this reason the bulk of the ORP components are sourced from UK companies, though components are also supplied from within the EU and also from further afield such as Brazil, the US, the Far East and Australasia. This acts not only to increase competition but also allows access to authentic origin meals. For instance the Thai based main meals found in the current ORP range taste authentic as they are indeed produced from a Thai manufacturer. Likewise old favourites such as the breakfast range, including the All Day Breakfast and Steak and Vegetables, are produced in Yorkshire.
Food Selection Panel

Providing an item being considered for inclusion in the ORP meets the criteria of shelf life, nutrition and food safety and quality, the final stage is the Food Selection Panel (FSP). The FSP is a process where a representative group of end users assess a number of components "blind". The food is tested and rated using a nine point Hedonic Scale against similar types of products without seeing the packaging or branding. It is important that the packaging is removed so that the panel tasters are not unduly influenced. The multinationals spend large amounts on their food budgets on advertising their brands, because it works! For this reason the food is rated purely on its appearance, smell and flavour profile. An example of the Hedonic Scale and format of the scoring sheet is below.

- (9) Immensely Liked
- (8) Very Liked
- (7) Moderately Liked
- (6) Liked
- (5) Neither Liked nor Disliked
- (4) Disliked
- (3) Moderately Disliked
- (2) Very Disliked
- (1) Immensely Disliked

Scores are collected for each of the attributes of smell, taste, mouth-feel and overall acceptance. These are then totalled up for each item, and providing it scores at least an average of 6.5 it is considered for inclusion in the ORP. The highest scoring item from a group of similar components is then selected.

When selecting the group of end user representatives to take part in FSPs, DFS looks at operational experience and role. It is imperative that the group taking part in the FSP and tasting the food have had some recent operational experience so that the components can be tasted and rated in the context of operations and exercises. There are between 4 and 6 FSPs per year, and DFS is always looking for volunteer units to host the FSP. If you would like your Unit to take part in the selection of future ORPs please contact DES LCS-LC-DFFS-Food ORP Plans.
The Current Range of Operational Rations Packs

Individual ORP provide one person with all the food they require for one day. They require minimal preparation and no catering skills are necessary. To heat the retort pouches found in the 24 Hour ORP, place the unopened pouch in gently boiling water for around 4 minutes, remove the pouch carefully and invert, then place in the water again for another 4 minutes. For the pouches found in the 10 Man packs, either heat in the pouch for at least 12 minutes until the contents are piping hot, or open the pack and heat as normal. Open by tearing along the easy open tear notch. Once opened, the contents should be consumed while hot then disposed of. To make up and consume the other components within the ORP, follow the simple instructions on the side/back of each packet/sachet. Many of the snacks, nutty bars, sweets etc require no further preparation.

In the following sections the full range of ORP is given with the current NSN (NATO Stock Number), D of Q and PPQ.
Pallet Configuration

The 24 Hr rations are packed into a cardboard carton, weighing a maximum of 2.3 kg gross, (exact weight varies from menu to menu). Ten cartons are then packed into an outer waterproof carton. The weight of the outer carton will be 25 kg max.
Pallets are a maximum of 2.1M high. This configuration allows stowing and transit in either a 20’ or a 40’ container or Refrigerated Container with maximum utilisation of available space. Each pallet weighs a maximum of 900 Kg inclusive.

Stack to be covered with a Polypropylene Gusset Pallet Cover 1195x2210x1295 mm (150g)
ORP Boxes to be laid Square to the Edges of the Pallet

24 Hr,10Man & CCR
5 Boxes to a Layer
7 Layers to a Pallet
35 Boxes to a Pallet
350 Individual Rations per Pallet

ORP Stack to be stretch wrapped in 19 micron Power Pre-stretched Polypropylene. Wrapping to include side of pallet and top layer of ORP. Wrapping to be applied taunt to provide the stack with the maximum stability.
The dimensions of the ORP outer boxes as follows:

**Outer box internal dimensions**

<table>
<thead>
<tr>
<th></th>
<th>10 Man ORP</th>
<th>24 Hr ORP / 24 Hr Jungle ORP</th>
<th>12 Hr ORP</th>
<th>Cold Climate ORP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal</strong></td>
<td>Measurement (+/-5 mm)</td>
<td>Measurement (+/-5 mm)</td>
<td>Measurement (+/-5 mm)</td>
<td>Measurement (+/-5 mm)</td>
</tr>
<tr>
<td>Length</td>
<td>581 mm</td>
<td>590 mm</td>
<td>590 mm</td>
<td>581 mm</td>
</tr>
<tr>
<td>Width</td>
<td>381 mm</td>
<td>390 mm</td>
<td>390 mm</td>
<td>381 mm</td>
</tr>
<tr>
<td>Height</td>
<td>241 mm</td>
<td>255 mm</td>
<td>156 mm</td>
<td>241 mm</td>
</tr>
</tbody>
</table>

The variants are packed on full pallets on the same configuration as per the 24 Hr GP i.e. 35 outers, 350 rations per pallet.

When ordering the above rations please note that these should be ordered in whole outers only, i.e. in multiples of 10. Therefore if you required say 4 days rations for 26 men, you should order \((26 \times 4 = 104)\) rounded up to nearest 10, therefore order 110 rations.

In every box of rations there is a feedback form. This form is used by DFS to monitor consumption of the ORP and look for trends, good and bad, in component acceptability. It is one of the many ways the ORP team use to continually develop and improve the ORP. At the bottom of the form there is a space where you may add comments and suggestions for new components. These ideas and suggestions are greatly welcomed.

The procedures for the demand, issue and disposal procedures for ORP are contained within JSP 886 Vol. 6 Part 4, and JSP 456.
24 Hour ORP

The 24 Hr GP is currently available in one of 20 menus. These menus are mixed 10 to a box, with box A containing menus 1-10, and box B menus 11-20. These are then mixed on the pallet with an equal number of box A and B. In this way the maximum number of menus is made available to the end user. Menus are changed frequently to ensure maximum choice to the end user and to prevent menu fatigue. The 24 Hr rations have a number of variants that are designed to meet the religious and cultural requirements of the modern, diverse nature of the British Military. All of these variants are based on the standard 24 Hr GP, and are suitable for consumption by everyone. They are designed for the British Serviceman and woman. Seen side by side, the variants would be very difficult to tell apart from the GP. They are based on the same macro and micro nutrient requirements and go through the same FSP process. The variants have 10 menus per outer carton and are comprised of Vegetarian, Halal, Sikh/Hindu and Kosher.

NSNs below:

<table>
<thead>
<tr>
<th>Ration Type</th>
<th>NSN</th>
<th>D of Q</th>
<th>No menus per outer carton (minimum order)</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 Hr GP</td>
<td>8970-99-001-9011</td>
<td>RA</td>
<td>10</td>
</tr>
<tr>
<td>24 Hr Vegetarian</td>
<td>8970-99-190-6881</td>
<td>RA</td>
<td>10</td>
</tr>
<tr>
<td>24 Hr Halal</td>
<td>8970-99-190-6875</td>
<td>RA</td>
<td>10</td>
</tr>
<tr>
<td>24 Hr Sikh/Hindu</td>
<td>8970-99-190-6874</td>
<td>RA</td>
<td>10</td>
</tr>
<tr>
<td>24 Hr Kosher</td>
<td>8970-99-190-6873</td>
<td>RA</td>
<td>10</td>
</tr>
</tbody>
</table>
10 Man ORP

The 10 Man ORP is designed primarily for use by military chefs in a field kitchen, with one box (10 rations) feeding 10 men for one day. This ration is used once any warfighting phase has passed and when the tactical situation allows the deployment of a field kitchen. They are also suitable for use by the novice or “hobby chef”. The components should be used according to the instructions on each packet/sachet/tin. Various guides exist to enable the chef to make the most from the contents of the box, flexibility in use being the key to the production of a variety of tasty meals. Each box of 10 rations is designed to enable a two course breakfast, lunch and three course dinner to be made, as well as various drinks, both hot and cold. In use, the pouches, cans etc should be heated until piping hot, opened, and the contents within 90 minutes and disposed of if not used within this time. In the absence of adequate refrigeration, care should be taken not to store the components in direct sunlight, and especially when opened.

Currently there are 5 main menus and although there are no specific ethnic varieties available, there are sufficient vegetarian components within the menus to produce a vegetarian option if required. Each box comes with a range of basic raw materials, a chef’s pack containing flour, yeast, spices and other condiments etc and a number of hot and cold drink choices.

As the operational situation permits, the 10 Man can be supplemented by the use of fresh fruit and vegetables and will gradually replace the use of the 24 Hr ration as the tactical situation allows.

Like the 24 Hr ration, the contents of the 10 Man box are constantly under review by DFS using feedback from military chefs of all 3 services

The 10 Man ration comes as one complete box of 10 rations. Therefore when ordering, care must be taken to ensure the correct number of rations are ordered.

NSN below:

<table>
<thead>
<tr>
<th>Ration Type</th>
<th>NSN</th>
<th>D of Q</th>
<th>Minimum order</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 Man</td>
<td>8970-99-567-4173</td>
<td>RA</td>
<td>10</td>
</tr>
</tbody>
</table>

Therefore if you are required to feed 150 men for 5 days, you would order (5 x 150) = 750 rations (75 boxes) of 10 Man.
These come as mixed menus on each pallet, so a full pallet of 10 Man has a blended mixture of all 5 menus on the pallet (5 menus per layer x 7 layers = 35 boxes/350 rations of mixed menus per pallet).
24 Hr Jungle Ration

The 24 Hour Jungle ration is based on the standard 24 Hr ration with additional supplements and a Flameless Ration Heater (FRH). The Jungle ration is designed for use by the SF and other specialist units and is not usually available for general consumption. Currently it provides a minimum of 4,500 kcal per day.

The 24 Hr Jungle ration comes as one complete box of 10 rations. Therefore when ordering, care must be taken to ensure the correct number of rations are ordered.

NSN below:

<table>
<thead>
<tr>
<th>Ration Type</th>
<th>NSN</th>
<th>D of Q</th>
<th>Minimum order</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jungle 24 Hr</td>
<td>8970-99-378-9083</td>
<td>RA</td>
<td>10</td>
</tr>
</tbody>
</table>

Pallet configuration is as per the standard 24 Hr and 10 Man ration.

This ration has been developed for high intensity operations in a jungle environment, for jungle operations of a lesser intensity, 24 hour ORP should be used.
Cold Climate Ration

The Cold Climate Ration (CCR) is a specialist and lightweight, high calorie 24 Hr ration designed for use by troops above the snow line or in the high Arctic. It comprises mainly dehydrated main meals with a range of snacks designed to be eaten on the go. The CCR ration provides a minimum of 5,500 Kcals per ration and currently 8 menu choices are available, mixed per outer.

NSN below:

<table>
<thead>
<tr>
<th>Ration Type</th>
<th>NSN</th>
<th>D of Q</th>
<th>Minimum order</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCR</td>
<td>8970-99-302-2654</td>
<td>RA</td>
<td>8</td>
</tr>
</tbody>
</table>
12 Hr ORP

The 12 Hr ORP is a lightweight ration designed for patrolling for durations from 4 – 12 hours. It comes complete with a FRH thus dispensing with the requirement for an additional heating source. In addition to a main meal in a retort pouch, it also contains a number of snack items and drink powders, but NO hot beverage items. Due to its utility in fulfilling a number of requirements, e.g. for drivers, remote guard posts etc, and its ambient shelf stable nature, it is available to any unit worldwide where this type of operational ration is required. It is also useful in meeting a nutrition gap where the daily energy expenditure is expected to be in excess of 6,000 Kcals, e.g. arduous training.

The 12 Hr ration provides a minimum of 2,000 Kcals per ration and currently 10 menu choices are available including one vegetarian.

NSN below:

<table>
<thead>
<tr>
<th>Ration Type</th>
<th>NSN</th>
<th>D of Q</th>
<th>Minimum order</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 Hr</td>
<td>8970-99-575-0992</td>
<td>EA</td>
<td>10</td>
</tr>
</tbody>
</table>
Hexamine Cooker and Fuel

DFS manage the supply of Hexamine Cookers and Fuel.

NSNs below:

<table>
<thead>
<tr>
<th>Description</th>
<th>NSN</th>
<th>D of Q</th>
<th>Minimum Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooker</td>
<td>7310-99-883-3123</td>
<td>EA</td>
<td>1</td>
</tr>
<tr>
<td>Fuel</td>
<td>9110-99-124-2229</td>
<td>EA</td>
<td>1</td>
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Emergency Flying and Survival Rations:

DFS manage the supply of Emergency Flying and Survival Rations.

NSNs below:

<table>
<thead>
<tr>
<th>Ration Type</th>
<th>NSN</th>
<th>D of Q</th>
<th>Minimum Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Flying Ration Mk 4 (Scaled for fixed and rotary winged aircraft)</td>
<td>8970-99-700-2104</td>
<td>RA</td>
<td>1</td>
</tr>
<tr>
<td>Emergency Flying Ration Mk 9 (Scaled for fixed and rotary winged aircraft)</td>
<td>8970-99-748-7760</td>
<td>RA</td>
<td>1</td>
</tr>
<tr>
<td>Submarine Survival Ration</td>
<td>8970-99-441-4359</td>
<td>RA</td>
<td>20 (Multiples of 20)</td>
</tr>
<tr>
<td>Pouched Water (Fast Jet/ Rotary Wing/Survival Packs and Vests)</td>
<td>8960-99-537-4919</td>
<td>RA</td>
<td>30 (Multiples of 30)</td>
</tr>
<tr>
<td>Pouched Water (Hercules A/C)</td>
<td>8960-99-660-9410</td>
<td>EA</td>
<td>30 (Multiples of 30)</td>
</tr>
<tr>
<td>Ships Emergency Rations GP</td>
<td>8970-99-667-9083</td>
<td>RA</td>
<td>10 (Multiples of 10)</td>
</tr>
<tr>
<td>Ships Emergency vRations Veg</td>
<td>8970-99-551-9933</td>
<td>RA</td>
<td>10 (Multiples of 10)</td>
</tr>
</tbody>
</table>
Frequently asked Questions

Who establishes the nutritional guidelines for the range of Operational Rations?
A variety of sources are used to ensure UK ORP meets the requirements of the end user and these are continually challenged to ensure they remain relevant. The current guidelines are based on the advice of the Institute of Naval Medicine (INM), the Surgeon Generals Office (SG), Dstl (defence Science and Technology Ltd), UK Military Dietary Reference Values (MDRV) 2008, the INM (2004) recommendations for Cold Climate ORP and findings taken from other recent research and contained in JSP 456.

Can I buy ORP off the shelf?
No. ORP remains Crown Property and is for issue and use as directed by the appropriate military authority. The selling or obtaining ORP with the intention to sell it is illegal and may result in prosecution of the individual concerned. However the MOD supplier has an agreement that they can sell ORP under a gainshare agreement and thus the ORP, albeit under a commercial wrapper, are available on line.

What is the shelf life of ORP?
Most ORP, including the 24 Hr and 10 Man rations, have a 2 year shelf life. Specialist Emergency rations can have a shelf life of up to 5 years. The condition of the rations is carefully monitored and tested by DFS to ensure they remain in first class condition during storage and at the point of issue before use. A monthly ORP status letter is issued advising shelf life changes and extensions where appropriate.

Are the rations gluten and/or nut free?
No. The ORP are not gluten free and neither are they produced in a nut free environment. There are several reasons for this. Firstly if individuals who have any specialist food requirements or food intolerance or allergy it would not be possible to ensure that their specific dietary requirements could be met in an operational setting. Rations that are produced to cater for specific food intolerances or allergies are prohibitively expensive due to the very small numbers that would be required and may not meet current dietary or nutritional requirements. The relevant chapters of JSP 456 contains further information and guidance on this topic.

Why does the ORP have so much packaging?
DFS are constantly looking at ways to reduce the amount of packaging that comes with each ORP type, however it fulfils two very specific purposes. Firstly robust packaging is necessary to ensure that the ORP has an adequate shelf life in all climatic conditions that may be encountered on exercises or operations world wide. Secondly the packaging provides protection from the environment and handling during transport to the soldier. The rations must be capable of being delivered anywhere in the world and to being dropped by parachute from aircraft and to survive being carried for a number of days by troops.
Why are Vegetarian/Halal/Sikh/Hindu/Kosher rations available?
DFS produce a number of 24 Hr variants to meet the needs of the modern, British military. There are therefore a number of culturally sensitive variants to meet the requirements of the end user. There may be occasions when none of these menus are available and all troops will be required to subsist on the standard ORP. All of these variants are based on the standard 24 Hr General Purpose ration and are designed to meet the tastes of British troops.

Why can’t I get a Mars Bar/Snickers/Coke in the ration?
DFS team are continually looking at new products to put in the ration, and where possible branded goods are included. However the MOD only make a limited number of rations per year. Due to the very specific and specialised nature of our rations, we are very limited in the number of commercially available products we can add to the ration. Most of the big manufacturers cannot afford to change over production lines just to wrap their product into our specialised packaging. Additionally most commercially available product from a supermarket or corner store is not suitable for use in the harsh environments or elevated temperatures encountered by troops. They tend to melt in the heat!

Who decides what to put in the rations?
All of the components of the rations go through a very careful selection process before appearing in the complete ration. Firstly the shelf life and nutritional values have to be met. When these are considered suitable, the DFS team then visit units and troops with recent operational experience, who then taste and score a number of items using a nine point Hedonic Scale. This scale goes from Liked Immensely [scoring 9 points] to Disliked immensely [scoring 1 point]. Various attributes are tested including the appearance, smell and flavour, then these all added and providing the product scores more than 6.5 points, it will be considered. The products that score highest are automatically selected for inclusion in the next pack. In addition to this process, there are also feedback forms in every ration. When a product is identified that is failing to meet expectations it is removed at the earliest opportunity and replaced with an improved product, providing the overall nutritional balance remains the same. These feedback forms are combined with theatre visits where user groups are questioned in focus panels and instant feedback obtained about the likes and dislikes of the current ration.

Where do the components for the rations come from?
DFS are not limited to any one source of supply for the ration components. We source from a wide number of countries, including the US, Canada, Brazil and the Far East, providing the selected producers meet UK and EC Food Safety and Quality standards. However it is true that the bulk of the components are still procured from UK companies and producers. In this way we have surety of the supply chain while continually seeking value for money and cost effective components.
Where can I get a list of the menus from?
The menus in the rations change on a regular basis, when they are packed by the supplier, usually every three or four months. In order to combat menu fatigue, as part of the continuous improvement and to respond to feedback from the end user, a number of the main meal components will be changed. Because of these frequent changes the menu configuration is an organic process. However each outer box of both the 24 Hr and 1 in 5 of the 10 Man rations have a menu sheet specific to that pack.

What if I have an idea for a new product for the rations?
All of your suggestions are useful. This is one way the DFS team monitor the changing eating trends of the end user, i.e. you.

Please e-mail with your suggestion to:
DESLCS-DFFS-FoodORPPlans@mod.uk

or write to:
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Defence Food Services (DFS)
Defence Equipment and Support
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