

MEDICAL RESEARCH COUNCIL

SUMMER SLEDGING RATION
MK. IX 1967

For severe Winter Conditions it is advisable to take 3-lb. extra Butter for 20 man-days.



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"SUMMER" SLEDGING RATIONS MK. IX 1967

This new sledging ration is designed for summer Antarctic conditions, providing an individual daily intake of approx. 4,900 Calories for 2 men over a 10 day period.

When sledging in severe winter conditions it is advisable to increase the daily intake to over 5,500 Calories, the extra 600 Calories can be most conveniently supplied by butter.

i.e. for 20 man/days take an extra 3-lb. of butter for severe winter sledging
(1-oz. of butter gives 225 Calories)

These rations have been developed from previous prototypes as a result of reports from the field. The first three marks were composed of small unit packs; the fourth mark was modified to reduce the large number of small packs and was assembled into 2 man/day packs with supplementary packs containing butter, meat bars, condiments and beverages.

The MK. IX ration has been further revised in accordance with the demands of the Belgian-South African Antarctic Expedition 1967-68 and now contains 2 man/day packs containing all basic foodstuffs, together with one random pack containing condiments and one sundries pack which also contains instructions for use of the ration.

Comfort packs containing chocolate and vitamin tablets for midday use are packed in the random and sundries packs.

Outer cases are provided with a detachable lid which can be used as a tray inside the tent.

Details of Rations and Instructions for Use

Each wooden sledging box contains rations for 20 man/days:-

- 1 outer case
- 1 polythene snowproof liner
- 10 x 2 man/day packs
- 1 sundries pack
- 1 random pack
- Paper hand towels

Details of these packs are given below:-

2 man/day pack (Polythene wrapped, waxed card boxes)

- | | |
|-------------------------------------|----------------------------------|
| Dehydrated meat bars | 2 x 5-oz. vacuum packs |
| Precooked Oats | 1 x 3-oz. packet |
| Horlicks Glucose/Lemon Drink Powder | 2 x 2 $\frac{1}{4}$ -oz. packets |
| Knorr-Swiss Soup Powder | 1 x 2-oz. packet |
| Butter | 2 x 2-oz. vacuum packs |
| Mitcham Processed Cheese | 2 x 2-oz. |
| Milk Powder | 2 x 2-oz. packets |

Continued.....

Plain Biscuits	2 x 4 $\frac{1}{2}$ -oz. vacuum packs
Sugar (lump)	2 x 3 $\frac{1}{4}$ -oz. polythene packs
Instant Potato Powder	1 x 1-oz. packet
Sweets	2 x 1 $\frac{1}{2}$ -oz. packets
Drinking Chocolate	1 x 2-oz. packet
Tea Bags	2
Instant Coffee	8 x 1/16-oz. sachets
Dehydrated Apple Flakes	2 x 1-oz. packets

Comfort Packs

Chocolate	2 x 2-oz. bars
Multivitamin Tablet	1 tablet
Vitamin C Tablet	1 tablet

Random Pack

Pumpnickel (2 varieties)	2 x $\frac{1}{2}$ -lb. packets
Onion Flakes	1 x 2-oz. packet
Salt	4 x 1-oz. tubes
Oxo Cubes	2 x 1-oz. packets
Matches	6 boxes
Razor blades	1
Comfort Packs	12

Sundries Pack

Comfort Packs	10
Penguin Book	1
Questionnaire Forms	2
Instruction Sheet	1

Paper hand towels are included in the sledging box and may be used for general cleaning.

NOTES:-

Plastic Bags are difficult to tear open. Best to slit with razor blade provided. The polythene case liner has been designed so that it can be folded over after first opening in order to obtain a snow-proof seal. Polythene bags can be resealed in the flame of a candle.

Preparation of foodstuffs

Dehydrated Meat Bars - (4 varieties)

Beef & Pork	-	Vacuum packed blocks each
Minced Beef	-	containing 5-oz. Daily
Steak & Kidney		requirements for one man.
Mutton		

Directions for use are on the packs.

Knorr-Swiss Soup Powder - Cooking instructions are shown on the packs. Will be a selection of varieties.

Mitcham Processed Cheese - Each 2 man/day packs will contain 2 x 2-oz. (56 g) vacuum packs. Hint - Cut across packet (not right through) and peel cheese away from foil.

Oatmeal - This has been supplied as precooked oats. It requires only the addition of about 1 pint of boiling water or milk. Stir well, salt to taste. After 60 seconds serve with milk and sugar. In order to prevent feeling of hunger two or three hours after breakfast, add some butter to the porridge which will help the stomach to retain it longer.

Tea Bags - These are now supplied instead of the dehydrated tea powder previously supplied.

Glucose/Lemon Drink Powder - Each packet contains sufficient for 1 pint drink, either cold or hot at night.

Instant Coffee - This is packed in foil sachets each containing 1/16-oz. which is sufficient for a small cup only.

Instant Potato Powder - Creamed potato may be made by adding small quantity of boiling water and stirring. May also be used as a thickener for meat bar or soup.

Apple Flakes - These are supplied in vacuum packed foil envelopes in the 2 man/day packs. They can be reconstituted by cutting off the top of the pouch and adding either hot or cold water. The reconstituted apple puree can be eaten after a further period of about 5 minutes.

Vitamin Tablets - Two vitamin tablets are included in each of the Comfort Packs and should be consumed each day, preferably at a fixed time. The first tablet is chocolate coated and contains:-

Vitamin A 2,500 i.u. Vitamin B₁ 1 mg. Vitamin B₂ 0.5 mg.

Vitamin C 15 mg. Vitamin D₂ 300 i.u. Nicotinamide 7.5 mg.

The second uncoated tablet contains 50 mg. Vitamin C.



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No. 12 / 15 / 67

Expedition - Belgian/South African
Antarctic.

Date Despatched - 1/12/67

Horlicks Limited,
SLOUGH, Buckinghamshire,
England.

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QUESTIONNAIRE

The successful development of these prototype rations depends on your reports. We would particularly like to know about the packaging, the food itself, how it compares with the standard sledging rations and how you think the M.R.C. ration could be improved; e.g. what items would you substitute? Criticise as severely as possible.

I. OUTER BOX

- a) General design

- b) Effect of low temperature on box

- c) Temperature range

- d) Has material any effect on foodstuffs?

- e) Details of damage to box and conditions of use, e.g. height dropped on occasions, immersion in water, etc.

- f) Date of journey and length of time in use.

- g) Tested by:

II. a) POLYTHENE LINER BAG - AND OTHER FOIL - POLYTHENE WRAPPINGS & COMFORT PACK

- b) 2 man/day boxes

Continued.....

III. IN THE FOLLOWING, COMMENT ON PACKAGING, QUANTITY AND PALATABILITY OF FOOD AND PREFERRED SUBSTITUTES

1. Milk Powder
2. Sweets
3. Precooked Oats
4. Potato Powder
5. Knorr-Swiss Soup Powder (Indicate order of preference)
6. Biscuits
7. Processed Cheese
8. Instant Coffee
9. Glucose/Lemon Drink
10. Chocolate (Indicate preference) - 4 varieties:-
Milk
Milk Fruit & Nut
Tiffin
Milk ~~Butter~~ Whole Nut
11. Apple Flakes
12. Butter
13. Dehydrated Meat Bar (Indicate order of preference)
Beef & Pork
Beef
Steak & Kidney
Mutton

14. Drinking Chocolate

15. Tea Bags

16. Sugar Cubes

17. Salt

18. Pumpernickel (Indicate preference)
Rye Slices

19. Onion Flakes

20. Vitamin Tablets

21. Oxo Cubes

22. Jam

23. Sundries

Hand Towels

Matches

Books

Razor Blade

Instructions

24. General Comments

PLEASE RETURN TO: Arthur B.E. de Jong,
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England.