

## **CATERING FOR EXPEDITIONS**

Expedition catering must not be confused with camp catering. Camp catering, especially where a motor vehicle is used, can include fresh vegetables, meat, dairy produce and the local delicacies or regional specialities which all add to the enjoyment of camping. Expedition catering for an unaccompanied, self-reliant venture which is dependent entirely on the participants' own physical effort and where all the provisions have to be carried, presents an entirely different form of challenge. Here the task is to cram the greatest amount of energy into the lowest weight and bulk.

The need for a balanced diet becomes increasingly important as the length of an Expedition increases. For journeys lasting up to three or four days, normal eating habits will ensure that the diet is adequately balanced. Usually too much thought is given to achieving variety in the menu instead of paying attention to the need for an adequate intake of food and liquids.

No tables of carbohydrates, proteins or fats are included as campers ignore them, but excellent books and tables do exist, and the labelling of foods has improved greatly in recent years.

For three or four day Expeditions, the prime need is to pack as much energy or calories into the least weight and volume. Calories, or to be more precise, kilocalories - kcal: 1 kcal = 4.18 kilo joules - kj. The unit used in food labelling is the larger kilocalorie). This is usually achieved by increasing the amount of carbohydrates (sugars and starches) and fats, and by using dehydrated food. Such advice may appear contrary to modern dietary advice, but no harm will result over the duration of a venture as all the energy will be burnt up and participants should be fitter and healthier at the end of the journey than at the beginning. It is not so much a case of seeking additional fats but more of not avoiding them, by eating fish in oil, luncheon meats, preserved continental sausages such as salami, and butter or butter substitutes, on bread or biscuits. If too much food is carried, weight will be a handicap; too little food will result in hunger and physical efficiency may be impaired. Three, four, or five thousand calories or more may be needed each day on an Award Expedition.

### **As a rough guide:**

- Simple carbohydrates - the sugars - provide energy very quickly.
- Complex carbohydrates in the form of rice, pasta, bread etc. supply energy over the medium term.
- Fats provide energy over a longer period of time.

Cakes, pastries and biscuits are a mixture of simple and complex carbohydrates and provide energy in both the short and medium term.

Proteins do not play an important part in three or four day ventures as there is an ample supply in a normal expedition diet and the body prefers to derive its energy from carbohydrates and, to a lesser extent, from fats.

Expedition catering is usually carried out in tent units, which usually means in pairs, though it may mean three or occasionally four. The menu, the food and the planning should be based on the tent unit.

**Only take foods which:**

- Contain the greatest amount of energy (kcal/kj) in the smallest weight and volume.
- You and all your cooking partners like and enjoy.
- Are simple to prepare 'one-pot meals', such as stews, curries and pastas.
- Cook quickly to save fuel.
- Will keep, especially in hot weather.

Supermarkets carry an endless variety of dehydrated foods and meals so there is no need to carry water around masquerading as food. The packaging of these products in foil or plastic is airtight and durable, usually waterproof, and stands up very well to buffeting of Expeditions. The outer wrappings or cartons should be removed to reduce bulk, rubbish and weight but make sure that the cooking instructions are retained.

The preparation of food is simplified and fuel can be saved if foods are carried which are liked by everybody in the tent group, and the menu prepared in advance with all participating in the process. Cooking time is reduced; there is no need to duplicate the cooking or to carry around a great assortment of food bags and packages.

The vast majority of dehydrated foods also have the advantage of being quick and easy to prepare, needing only the addition of water, and cook very quickly. The quantities will need to be increased; if the packet indicates that it will feed two, assume that it may feed one on an Expedition. Take foods that are simple to prepare, 'one-pot' meals such as stews, curries and pastas are ideal. You will not have the problem of trying to keep food warm if the menu is uncomplicated: cook it - eat it! Variety is of no great importance in a journey lasting three or four days. As Cervantes states in 'Don Quixote': *"Hunger is the best sauce."*

Check how long the food takes to cook. The total weight of the catering element in one's pack is **the weight of the food plus the weight of the fuel required to cook it**. Choose dehydrated foods, which cook quickly. Some soups are 'instant', while other packet soups may require 5-15 minutes' boiling before they can be consumed.

There is a whole range of pre-cooked noodles, potatoes, peas, rice and pastas that only take five minutes to prepare against the 15-20 minutes of the traditional product. Careful selection of dehydrated foods can greatly reduce the amount of fuel used on a venture.

Expedition foods must be chosen which will not go bad during the course of the venture, especially in hot weather. This rules out fresh meat. Sealed pre-packed bacon may last until the morning of the second day. Dried, cured or smoked continental meats and sausages make ideal expedition food and they will normally last for the duration of a venture. There is also a wide range of vegetarian foods available, usually based on Soya, which have excellent keeping properties.

Tinned foods do not feature to any great extent in three or four day expeditions, but there are a few which are worthy of very serious consideration. Corned beef, luncheon meat, sardines, pilchards and tuna all contain a great deal of fat or oil which gives them a very high energy content and makes them a valuable addition to any expedition menu. The weight of the tin in relation to the energy supplied is negligible; they are waterproof and the contents will last for years.

### **General Considerations**

Plan meals ahead, experiment with dehydrated food meals at home and on practice ventures. Foods can be weighed and measured out in advance. Experiment with the various powdered milks to see which ones can be boiled. Plastic bags provide suitable storage for most foods, but butter, jams and spreads are messy unless kept in plastic containers or refillable plastic tubes that are now available on the market. Plastic/metal ties frequently puncture plastic bags and rubber bands are a safer way of securing all bags. All food must be packed and waterproofed so that it will stand up to the hammering it will receive in rucksacks or containers which are dropped, sat on and squashed during the course of an expedition. Drinking mugs may be converted into handy measures by scratching a few lines in the right place.

### **Drink**

Many participants place far too much emphasis on planning the menu and on food, and far too little on the fluid intake. It is possible to survive for a considerable number of days without food, but ill effects occur and efficiency is impaired in a comparatively short time if fluid intake is inadequate. A large fluid intake is essential in all ventures where there is a high expenditure of physical energy, particularly when walking, cycling, canoeing or rowing. Much of the fatigue which participants experience towards the end of the day is frequently due to dehydration. When you have a very bad thirst it is probable that your physical efficiency is already impaired. Drinking becomes even more important in hot weather, whether in Great Britain or abroad, when it may help to delay the onset of exercise-induced heat exhaustion.

It is difficult to quantify how much liquid is needed during the travelling part of the day as so much depends on the weather conditions, the individual and the amount energy expended. Several litres may need to be consumed during the journeying and mid-day break. In very hot, dry conditions, people who are not acclimatised to the heat or used to coping with a very high workload may well need a total fluid intake of 7- 8 litres (15-16 pints) every 24 hours.

Much of the body fluid is lost through sweating when performing a physically demanding activity, especially in hot weather. It is necessary to replace not only the fluid loss, but also the salt that is also excreted. There is no need to carry salt tablets in Britain or the rest of Europe, but food should be well salted and plenty of salt should always be carried. Sadly it is all too frequently forgotten when it is most needed, while at home there is frequently an excess of salt in our diet.

There is a tradition amongst many experienced climbers, hill and mountain walkers not to drink on the hill, or they drink from mountain streams. It is a policy, which can no longer be recommended to young people within the Award Scheme. It may be safe to drink from the clear mountain streams of the Scottish Highlands, but over practically all of England, most of Wales and Northern Ireland the situation is very different. Even if a dead sheep is not lying a hundred metres upstream from where you take your water, there is a probability that the water may be contaminated. Expeditioners are advised to go through, rather than over, wild country and there is more chance of the water being contaminated in the lower areas where there is a greater intensity of recreational use and increased agricultural activity. For ventures in normal rural and open country, where the vast majority of ventures take place, the problems are even greater with the contamination by nitrates and slurry from farming, as well as sewage and industrial effluents.

Water intake for ventures on foot may need to be in the order of five, or even eight, litres a day and this intake cannot just take place only in the morning and evening. Ventures in the hot weather of continental Europe may pose even greater problems and the needs of canoeists and sailors on rivers or salt water must not be overlooked.

Participants should 'tank-up' with fluid before departure from the campsite in the morning and **drink as much as possible as soon as possible** on arrival at the campsite in the evening. A suitably sized plastic container with a screw top will serve as a water bottle and help to overcome the problems of dehydration during the day. Water should be sipped in small amounts at regular intervals during the journey to derive the most benefit from a limited supply. No opportunity to slake ones thirst should be missed during the journey by drinking copiously. A lunchtime break provides an ideal opportunity to prepare a 'brew', even in the hottest weather. If the break is taken close to a stream, water can be sterilised by boiling and then drunk as tea or coffee, while extra water can be boiled, allowed to cool and then used to top up the water bottle.

Water sterilisation tablets are available from chemists. The directions accompanying the tablets should be followed and any taste disguised by adding a small amount of lemonade or fruit drink powders. To ensure that there is sufficient to drink, especially in hot weather, always carry more tea, coffee, sugar and milk powder than you think you will need. Fruit flavoured breakfast drinks and lemonade powders are available and a search of the supermarket shelves is worth the effort.

## **COOKING**

There is progression in the catering syllabus of the Award Scheme from being able to prepare a simple meal at Bronze level, to the ability to prepare and use dehydrated foods at Gold level and to make substantial meals under camp conditions.

### ***Breakfast***

Individual preferences are always a most important consideration in camp diet. Many campers begin the day with a substantial breakfast and, for some, no day is complete without bacon and eggs. This has much to commend it as the fat and the protein stay in the stomach and not only provide energy over a long period of time, but stave off the pangs of hunger. Others prefer to avoid washing greasy pans and stick to cereals, muesli or porridge variants followed by biscuits or bread and jam. Whatever the preference, it is good practice to stoke up with plenty of food and drink before setting out in the morning.

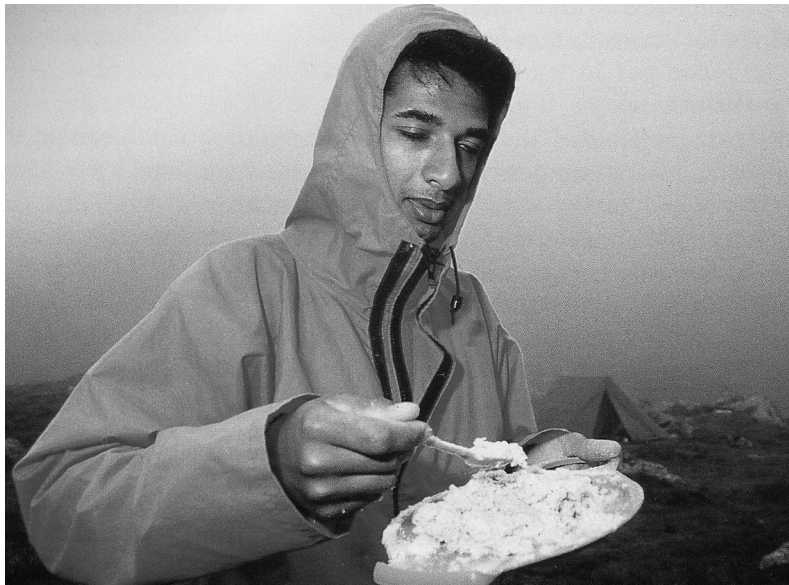
### ***Lunch***

Attitudes to lunch vary. Some groups are content to have pockets full of nuts, dried fruit and biscuits, which they supplement with chocolate bars and boiled sweets. These are concentrated forms of energy and may be consumed while on the move, a form of 'drip feed'! It is possible to meet all the energy requirements by following this practice, which keeps blood sugar levels high over a prolonged period. It is cheaper to buy a variety of dried fruit and nuts by the kilo/pound and mix them yourself. Others prefer their lunch break with sandwiches and a 'brew'. Many like cheese and biscuits or biscuits with some spread such as jam or peanut butter, while others would not be without their loaf of bread. It is necessary to 'stoke-up' with fuel during the journey and, whatever method is adopted, an energy boost is provided which is essential for the body to work efficiently where long-term stamina is important.

### ***Evening Meal***

Award conditions require that one substantial meal be cooked each day and this is nearly always the evening meal. Even when limited by one stove and a couple of pans it is possible, with a little practice, to prepare hot, filling three-course meals in a very short time. Such a meal might consist of soup, a curry, stew or pasta followed by a hot or cold pudding or cheese and biscuits with coffee. In addition to the dehydrated foods mentioned earlier, there are whips and mousses, which only require the addition of water or milk, and ground rice and semolina preparations which need boiling milk to turn them into hot nourishing puddings.

When the tent has been pitched, the water fetched and you are ready to prepare your evening meal, lay out all the ingredients and pans in the order in which they will be needed. Then, and only then, light the stove. Lids on pans help to conserve heat; food will cook more quickly and fuel will be saved. Unless the cooker is a modern spirit stove, which is well shielded, a windshield will improve efficiency and save fuel. The milk for the pudding might be boiled first, the dish prepared and set aside for later; then the soup should be made and drunk from mugs while the main course is cooking. Immediately after the main course is prepared, water can be boiled for the coffee and washing up. If drinking water cannot be obtained from a farm then it may be necessary to boil water, set it aside to cool and then fill the water bottles for the following day. After the meal, the experienced camper will wash up, tidy up and then pack away any equipment not needed. A hot drink and biscuits are usually sufficient before going to bed, but do not forget to eliminate any dehydration that may have occurred during the day!



**Enjoy your food!!**