## Nutrition and Advice

UK Department of Health Estimated Average Requirements (EAR) are a daily calorie intake of 1940 calories per day for women and 2550 for men. How many calories are needed each day can vary greatly depending on the activity you are taking part in, and other factors.

Factors that affect your personal daily calorie needs include your age, height and weight, the intensity of daily activity, and your body composition.

Food satisfies both a physiological and a psychological requirement. These both become more significant when hill walking.

Our bodies take energy from food when we exercise and the more strenuous the exercise, the greater are the demands. The actual amount of energy needed depends on a number of factors:- your body weight, age, gender plus the distance and total height gain of the walk.

In hill walking, your muscles need both carbohydrate and fatty acids. If the available carbohydrate is reduced too much, then you will have to slow down. Good food also provides the motivation to complete - and enjoy - your expedition.

The most important requirement is water. When we exercise, our body temperature is controlled by the evaporation of sweat from the body surface. If your body is dehydrated, then heat can't be dissipated in this way. This can result in the rapid onset of heat exhaustion.

Interestingly, thirst is a poor indicator of dehydration. It's estimated that by the time you feel thirsty, you've probably already lost a significant amount of body fluid. So you should not wait until you're thirsty before having a drink. Water is probably the best option - and is readily available from high mountain streams in the UK.

There are also a variety of isotonic drinks now available which aid the rate at which water is absorbed by body tissues. However, whatever your choice, drink often. You need to take on a minimum of 2 litres a day.

You need to have enough food with you so that you can avoid exhaustion due to lack of energy. Exactly how much will depend on the factors outlined above (i.e. age, weight, gender, distance, height climbed).

You'll want to have food which is light to carry but which is 'energy dense'. Foods which are high in carbohydrate are a good idea.

A lunch box for a day trip might include:

- 2 sandwiches (e.g. cheese or peanut butter)
- Bar of chocolate
- Peanuts
- Some dried fruit/cereal bar
- 2 litres of water

Probably the most effective way to consume food when walking is to eat 'little but often' throughout the day.

It's also very important that your day begins with a good breakfast eaten ideally about an hour before the walk start.

At the end of the day, your body will need to refuel. It does this most effectively within 2 hours of the end of your walk. Again, it is foods which are high in carbohydrate (e.g. banana, chocolate, cereal bar) which are most effective.

TIPS!
For guidance only we have detailed the average calorie loss during walking and LOW intensity hill walking. This does not take into consideration loads being carried or addition stress being put on the body.

To give you an insight of how many calories you could be burning by walking BGMA have worked out a couple of examples of what is achievable.

Female, aged 40, 5 ft 5 " tall, weight 12 st 7 lbs and has a moderately sedentary lifestyle.

| Walking Speed | Calories Burned In |  |  |
| :---: | :---: | :---: | :---: |
|  | 10 mins | 20 mins | 30 mins |
| 2 kph | 26.4 kcal | 52.7 kcal | 79.1 kcal |
| 3 kph | 42.7 kcal | 85.4 kcal | 128.1 kcal |
| 4 kph | 61.4 kcal | 122.7 kcal | 184.1 kcal |

Male, aged 40, 6 ft tall, weight 14 st 7 lbs and has a moderately active lifestyle.

| Walking Speed | Calories Burned In |  |  |
| :---: | :---: | :---: | :---: |
|  | 10 mins | 20 mins | 30 mins |
| 2 kph | 21.6 kcal | 43.3 kcal | 64.9 kcal |
| 3 kph | 40.6 kcal | 81.8 kcal | 121.7 kcal |
| 4 kph | 62.2 kcal | 124.5 kcal | 186.7 kcal |

