

Hill Nutrition and Advice

The following information has been researched and compiled by the author and owner of BGMA. The author has studied this area of mountain walking and hiking for well over 10 years and is keen to pass on his knowledge and understanding of different nutritional requirements ideas.

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.

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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.

BGMA 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.

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

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

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

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