



# torq<sup>®</sup> NUTRITIONAL GUIDANCE FOR OUTDOOR ACTIVITIES

## ENERGY BALANCE

The amount of calories required for your outdoor activities depends entirely on the amount and type of activity you do. The more activity you perform and the higher the intensity, the more calories you will burn.

To achieve energy balance you will need to consume as many calories as you're burning. If you have a positive energy balance (eat more than you burn) you will put weight on and if you have a negative energy balance (eat less than you burn) you will lose weight.

What is often misunderstood is that it is possible to lose weight in the short to medium term through focussing on the consumption of 'Functional Calories' whilst still maintaining high levels of energy to perform all of your physical activities. For many, the weight loss is a desirable outcome!

## FUNCTIONAL CALORIES

When considering the role of dietary fat in Performance Nutrition, a functional calorie should be derived from protein and carbohydrates.

Although fats serve as an excellent energy source, even the leanest individuals have ample reserves stored beneath their skin and around vital organs to sustain energy levels for extended periods. The body can efficiently metabolise these stored reserves just as easily as it processes dietary lipids from food.

Therefore, in the short term, dietary fat has minimal metabolic impact. Over the long run however, healthy fats are crucial for a well-balanced diet, as they provide essential fat-soluble vitamins and beneficial omega acids. That said, for most short-term adventures lasting up to a couple of weeks, actively seeking out additional sources is unnecessary.

## PROTEIN

Protein is used to build and repair your muscle tissue as well as looking after a number of important metabolic structures within the body. Research has proven that the body can only process and make use of 20-25g of protein at a time and in an ideal world, this 20-25g dose should be consumed every 4-5 hours throughout the day, including first thing in the morning and last thing at night.

Any additional protein consumed will be stored as fat or in the absence of sufficient carbohydrate, will be converted to carbohydrate for energy. Therefore, from a sporting performance perspective, the optimal dose of protein is 25g.

## CARBOHYDRATE

Along with fat, carbohydrate will provide the energy for exercise. We have already discussed the plentiful supply of fat in the body, but we can only store 500g (2,000 calories) of carbohydrate.

Carbohydrate is needed to fuel the brain, muscles and organs of the body and when you run out of this fuel, everything stops. As we store such a limited amount of carbohydrate in our bodies, it's vital that we consume these carbohydrate calories regularly and in large amounts if we're being active.

## CALORIES PER GRAM

Both protein and carbohydrate contain 4 calories per gram, with fat containing 9 calories per gram. For this reason you can understand why some companies will increase the fat content of their products so that they can boast a higher calorie count.

As we have explained, fat has no functional benefit to you when it's in your food, in fact it will have a negative effect by slowing down the absorption of protein and carbohydrate.

## LONGER EXPEDITIONS

For long expeditions, for instance to the North Pole, where you might be away for many weeks and have to carry all of your food, of course fat is an essential fuel to take with you. As fat contains a huge 9 calories per gram, it's lighter than protein and carbohydrate, so less to carry.

Also, during these longer expeditions, it will be important that you maintain your energy balance, so that you don't waste away. Longer expeditions tend to be lower in exercise intensity too, further making the case for fat (carbohydrate is much more important for higher intensity exercise). TORQ Explore products can be taken on these longer expeditions, but they should not be your sole source of calories.

## HYDRATION

Water is a really important part of our diet and in cooler weather water is probably all you need to drink to maintain hydration. In warmer weather, when perspiration rates are high however, you will also need electrolytes.

Electrolytes are salts that will help to maintain your body's homeostatic balance and they are lost from your body through sweat. If you don't consume enough fluid with electrolytes, your physical performance will drop, you may get muscle cramps and in extreme cases you could become very ill.

Similarly, if you only use water as a hydrator in high-perspiration situations, this could lead to a condition called hyponatraemia - where there is insufficient salt in your body to function properly. Hyponatraemia can be life-threatening.

# torq NUTRITIONAL PRODUCTS FOR OUTDOOR ACTIVITIES



## TORQ EXPLORE FOODS

TORQ have created a range of instant Breakfasts, Pasta Meals and Desserts, all of which contain exactly the same nutritional profile. It doesn't matter which product you consume, each will provide you with 25g of high quality protein and a whopping 100g of carbohydrate. Fat content in these products is minimal, between only 1-3g. All of these Explore Food options contain around 500 functional calories. Other brands boast of higher total calories but do they measure up? Do they contain more or less than the optimal 20-25g of protein? Do they contain anywhere near 100g of carbohydrate? How much irrelevant fat do they contain to boost the calorie count?

There are 9 diverse flavour options to enjoy across the range, so mealtimes will never get boring.



## TORQ EXPLORE FLAPJACKS

TORQ's Explore Flapjacks are a delicious organic high-carbohydrate snack that can be consumed at any time to stave off hunger and provide functional carbohydrate calories between meals.

Available in 6 fantastic organic flavours.

## TORQ ENERGY GELS

Like our flapjacks, TORQ Gels will provide carbohydrate fuel to help you to perform your outdoor activities. Unlike the flapjacks, they require no chewing, so do a fantastic job of delivering the carbohydrate you need quickly and easily.

There are 13 flavours to choose from and they're all utterly delicious.



## TORQ HYDRATION DRINK

This is a powder that you mix with water. Once mixed, this drink will hydrate you faster than water, because it benefits from a process called Facilitated Transport. This is where a small amount of glucose combines with sodium (an electrolyte) in the intestinal wall and actively pumps more water into your blood. Plain water is absorbed through the passive process of osmosis. TORQ Hydration also contains all 5 electrolytes, sodium, potassium, magnesium, chloride and calcium.

Available in 4 light, refreshing flavours.

