



EXERCISE NUTRITION MADE EASY

By For Goodness Shakes!

There are three areas that make a great sportsman.

- Physiology & Talent
 - Training,
 - Nutrition.

We'd all love to be have the ultimate physiology and blessed with supreme talent, but unfortunately this can be a little out of our control.

What we do have control over: training and nutrition. Training is important, but takes a lot of effort. Getting your nutrition right can make the difference between reaching your goals, and in some people's cases, the difference between winning and losing.

EXERCISE NUTRITION

Your body needs 5 types of nutrient for exercise:

Carbohydrate:	This is the primary fuel of muscles and is burnt in the form of glucose. It is stored in the body as glycogen in muscles and the liver.
Protein:	The building blocks of the body for muscles, hormones, enzymes and the immune system. Proteins are made up of 20 amino acids, 8 of which are called essential amino acids. These have to come from the diet as they cannot be produced by the body.
Fat:	This is also a fuel, it is a more dense form of energy, it is utilised by the body as a secondary fuel especially at low intensity and in endurance races.
Water:	The body needs water to stay hydrated and control body functions like temperature regulation.
Electrolytes:	Aid hydration of the body and replace the nutrients (sodium & potassium) lost as sweat during training.



THE IMPORTANCE OF TIMING

It's not just what you eat and drink but when you do it. Within these, timing is important. Eating too close or too long before your training session can affect your performance and not refuelling after a session can result in slower recovery and affect future training.

These five different nutrient types are needed in varying levels at different times as you train, below we break down exercise nutrition into three areas: before, during and after exercise.

BEFORE

Preparation is important. Just as you warm up to avoid injury you need to have the right nutrition to ensure you give your best performance. A car won't run on empty and nor will you for long!

3-4 hours before exercise:

Aim to eat a meal or snack **high in carbohydrate with some protein**, it should be low in fat so that the body can absorb and use the energy more quickly.

e.g. porridge with honey or banana, low-fat fruit flapjack, or cereal with fruit .

Eating 3-4 hours before exercise means that food will have left your stomach, and dispersed into your system to give you the energy (the little bit of protein will help start the recovery process and may also give you some extra energy).

The last 2 hours before exercise:

You should make sure you are hydrated so drink a little, regularly. Also it is worth having some carbohydrate too, to keep your energy levels topped up.

e.g. carbohydrate sports drink or banana

Make sure you don't take in lots of carbohydrate in a short space of time as this may cause a sugar rush into your bloodstream, often followed by a sugar low which could impair your performance.

DURING

For training that lasts less than an hour the most important area to focus on is hydration.

FACT - A 5% drop in bodyweight during exercise due to dehydration can lead to a 30% drop in performance

Aim to drink a little regularly, about **125-150ml every 20 minutes**. If this is an isotonic or hypotonic sports drink it will be absorbed more quickly into the bloodstream maintaining hydration.



The body is only able to store a finite amount of glucose, so if you are training for over an hour you'll need to add fuel during exercise. Drinking an isotonic sports drink is an effective solution. You need to try to **consume 30 to 60g of carbohydrate each hour** as this is the maximum your body can take up. Also don't wait until an hour and start fuelling, start early in your session as the fuel will take a while to get to where it is needed most – the muscles.

AFTER

"Recovery is without doubt the most important aspect of training"

Dr Samantha Stear, British Olympic Association

You actually don't get stronger or fitter during training. Training breaks your body down, stressing and wearing out your muscles, starting the adaptive changes. But it is after training when you recover that you get fitter and stronger so it is crucial to feed after exercise so that you have the nutrients to grow back stronger.

After training, timing is crucial to get the nutrients to where they are needed most. It's all about speed. There is a **20 minute "Recovery Window"**, and getting the right nutrition inside your body ensures that it gets to the muscles quickly and at a time that they are primed to absorb it. Fast.

Recovery is in fact preparation. Preparation for your next training session or race. Doing it right should enable you to continue to perform at full power again and again and therefore reach your goals quicker.

In order to recover properly your body needs:

Carbohydrate: The amount you need is determined by the length of exercise and your weight. For an hour of exercise you need around **1g carbohydrate per kg body weight**. This is scalable depending on how long you train for. e.g. 70kg man needs 70g carbohydrate.

Protein: To rebuild repair and strengthen muscles you need to protein. You need to consume **protein at a ratio of 1 part to 3 parts carbohydrate**. Any more protein and it will slow the absorption of fluid and nutrients. To be more scientific aim for 6g of this to be essential amino acids.

Electrolyte: For fast rehydration you need electrolytes. Restoring electrolytes are important as they play a vital role in the majority of bodily functions; specifically calcium, sodium and potassium are used.



For Goodness Shakes!

Britain's No.1 ready-to-drink sports recovery drink.

Created by athletes for athletes, it provides the **right 3:1 ratio of carbohydrate to protein** - including **all 9 essential amino acids** - for fast recovery after sport. It re-energises, hydrates, feeds and rebuilds fast - helping muscles to repair and grow stronger. Fast recovery helps to reduce post-exercise soreness.

Research has shown that it can help athletes rehydrate faster after training and do more at their next session than water and isotonic sports drinks.

Product highlights:

Unlike powdered, recovery protein drinks, For Goodness Shakes! is made from real food ingredients like milk and fruit. It's easy and mild on the stomach, even after strenuous training.

It comes in 4 great tasting flavours, this is a recovery products that you enjoy like a milkshake.

It's **ready-to-drink** whenever, wherever you need it. **No mixing, no mess, no fuss.**

It's kit-bag friendly and **doesn't require refrigeration.**

Drink a bottle for every hour's worth of training within 20 minutes of finishing sport.

Do 40% More

A recent clinical trial has proven that athletes who used For Goodness Shakes! after training recovered more power and were able to do 40% more at their next session than those athletes who used water or isotonic sports drinks.

Find out more at ForGoodnessShakes.com

