Carbohydrate Factsheet

Carbohydrate is the preferred energy source for our body. All the things we think about as sugars are carbohydrates, some examples include:

- Potato is a carbohydrate
- Fruit is a carbohydrate
- Haribo and other sweets (except for sugar free!) are carbohydrates
- Any food with any sort of sugar in will be considered a carbohydrate. Please note that some foods have combinations of macronutrients, so not wholly carbohydrate

Here’s the important part:

- Not all of these sugars will be digested at the same speed into the body
- Some are bigger and more complicated and therefore harder to digest quickly
- However, some are very simple sugars and will enter into your bloodstream more quickly. Also, we eat more of some foods in a portion than others
- Often the sweeter the taste the quicker the speed it can digest

Being mindful about your carbohydrate intake:

- Carbohydrates are an energy source but in terms of nutritional content they don’t contain any nutrients such as vitamins and minerals which are needed by the body. A bit like fuelling up your car for a journey, you should consider how much activity you are going to be doing and trying to match your energy intake to this
- Simply put, don’t fill your fuel tank with sugars if you’re just going to be parked on the drive, however if you’ve got a busy day and lots of training then you’ll need the fuel
- Also to be considered is the effect of what you are eating on your blood sugar level. Spikes in blood sugar can lead to highs and lows of mood, this
would be the effect of eating something very sugary. Ideally a more moderate and on-going release of energy is the aim, for this some of the carbohydrates which are slower to impact blood sugar should be considered.

- This idea around the way in which a sugar can digest depending on the type and portion size is termed glycemic Load, there’s lots of information to be found online.

Some examples of the extremes:

- Higher Load (think high octane fuel) - Sports drinks, sweets, white potatoes, white rice pasta and bread, bananas, dried fruit.

- Lower Load - Whole rolled oats, granary, rye or wholewheat versions of bread and pasta, sweet potatoes, apples and pears, vegetables such as carrots.

How does exercise benefit blood sugar?

Exercise allows the muscles to metabolise (use up) any excess sugar available in the blood and some which has been stored away within the muscles themselves and the liver. Over a number of weeks your body will become more sensitive to insulin* and become better at moderating blood sugar, therefore avoiding consequences such as high blood sugar.

*Insulin is the hormone which the body releases to reduce blood sugar.
Guidelines for Training

- 1-2 hours prior to your session you should be looking to eat a meal containing slower burning carbohydrates such as whole oats, wholemeal bread, pasta or rice
- Ideally, you'll have some protein also within this meal such as tuna, chicken or nuts and seeds
- After a session you ought to have a little snack at the ready
- This should combine a little carbohydrate with a little protein. Examples might include fruit and nut mix, a milkshake or a small sandwich
- You should be aiming to eat a full meal within 2 hours after your session

Guidelines for Racing or Competition

- Have a good meal 2-3 hours ahead of time
- Mainly carbohydrate also low protein, low fat and smaller portions will help avoid stomach ache
- Slower burning carbohydrates are best: Whole oats, wholemeal bread/pasta, sweet potato
- As the race approaches nothing should be eaten less than 30 minutes before
- If in between races focus on faster absorbing carbs such as sipping a sports drink, a small amount of flapjack, half a banana or jam sandwich.

Summary:

- Carbohydrates are sugars and provide energy for the body.
- Balancing intake with activity will allow you to manage your blood sugar and perform to your best.