

Fact sheet - carbohydrates and exercise

When you start to exercise your body must start producing energy much faster than it does when it is at rest and this energy comes from glycogen stored within the muscles and liver so the need for full energy stores in the body is very important.

What are carbohydrates?

Carbohydrate is stored in the body as glycogen and this is the body's immediate energy store. Carbohydrates can be divided into 2 main groups:

- simple carbs (sugars)
- complex carbs (starches)

Simple carbohydrates include:

- Glucose
- fructose and sucrose

Complex carbohydrates include:

- rice
- pasta
- potatoes
- oatmeal

What are carbohydrates for?

A diet that is rich in complex carbohydrates will ensure high glycogen stores and if you eat a high carbohydrate diet before your training session your muscle and liver glycogen stores are more likely to be full. They will help you to continue exercising for longer and to perform at your best. If a person's diet does not contain enough carbohydrate he or she will start exercising with low muscle and liver glycogen stores and will be more likely to fatigue sooner and perform under par.

Why are carbohydrates so important?

By the end of an exercise session your muscle glycogen store will be lower than when you started. You have to refuel your bodies glycogen store after training in order to replace the energy that you have just used up. Unless you do this you will turn up at your next training session with low glycogen stores (low energy). So, the best time to start refuelling is as soon as possible after exercise. Glycogen is manufactured faster and more efficiently during the first 1-2 hours immediately after exercise so it is a good idea to consume a high carbohydrate meal

directly after your workout. Throughout the day you should try to eat ‘ little and often’. For example, a high carbohydrate snack every 2-3 hours is a more effective way of refuelling than eating a large meal 3 times a day.

Examples of carbohydrate snacks:

- 2 oz (50g) of bread (2 slices) and 1 banana
- 5 rice cakes with banana
- 3 oz (75g) dried fruit
- 8 oz (200g) baked or boiled potatoes
- 2 1/2 oz (65g) cereal
- 6 plain crackers or crispbreads with 1 tbsp (20g) honey/jam
- 3 small bananas
- 8 rice cakes