



Nutrition for the active child

Sport and physical activity not only benefit a child's weight by increasing their energy usage, but also because they can also be used to promote good nutrition. Using the direct link between sporting performance and healthy eating is a great, positive way to encourage children to select food wisely. Talk to children about famous, admired athletes eating what you are trying to get children to eat, and it usually works a treat!

Do active children and adolescents need to watch what they eat?

It makes sense that active children require more food than their non-active friends. Whilst continuing to grow and develop, they also need energy to fuel their muscles for running, and refuel them after sport. If children are unable to eat enough, they may become quite tired, get infections and colds more easily, and lose weight or grow more slowly than expected. Nutrient deficiencies may also cause delayed puberty, menstrual irregularities, poor bone health and increased chance of injury. Usually, children's appetites increase as they require more energy, so the increase is often self regulated. As long as they continue to follow the dietary guidelines above, there should not be any weight issues.

What should children eat before sport?

This depends on what time and how long they exercise for, and how sensitive the child is to having food in their stomach before exercise. It is crucial to find tasty, portable foods, which are quick and easy to eat and digest. They should be high in carbohydrate and low in fat. (High fat foods can reduce the amount of carbohydrate the child eats before sport, take longer to be absorbed from the stomach, and may lead to increased levels of body fat over time, as well as the development of poor nutrition habits.)

Drinks are also important before sport, and water is usually the fluid of choice. Sports drinks can be useful in hot weather.

What about fluid and food during exercise?

Like adults, children lose fluid through sweating, urine and respiratory water (ie. water lost as they breathe). However, children do not sweat as much as adults, due to lower sweat production per gland (not less sweat glands). Also, the sweating threshold is higher in kids than adults, implying that children will start sweating at a higher body temperature. This can lead to overheating sooner, and early signs of this are the children who tend to have very hot, red faces after sport and exercise. It is not until mid puberty that adult sweating patterns develop.

If exercising for more than 20 minutes, fluid needs to be provided to ensure dehydration is minimised. Again, water is the first preference, or else a sports drink in warmer weather. The carbohydrate in these drinks tops up the child's energy supply, and can help them to exercise for longer. The small amount of salt (sodium) in sports drink stimulates thirst, which usually encourages children to drink more. And like many adults, children often do not drink enough whilst they exercise, so parents are encouraged to make sure drinks are always accessible and palatable.

Although requirements vary due to the weather, their body size, and the intensity of exercise, guidelines for active children range from 150-400ml of fluid 45 minutes prior to exercise, plus an additional 75-



150ml every 20 minutes during exercise. After exercise, children need to drink until they are no longer thirsty plus another half a glass.

Eating for recovery

After sport, children need to refuel and rehydrate. However, many lack an appetite immediately after exercise, thought perhaps to be due to the increase in body temperature suppressing appetite. If solids cannot be eaten, children need to be offered nutritious liquids. See the list below for solid and liquid recovery foods.

Suitable foods post-sport include:

- cereal bars
- fresh, dried or canned fruit
- bread / toast with honey or jam
- low fat fruit yoghurt with a banana
- liquid meal supplement i.e. Sustagen TM, or a homemade fruit smoothie
- cereal with low fat milk
- crumpets or toasting muffins
- pasta with tomato based sauce
- creamy rice (eg. Le Rice)
- pancakes with maple syrup or fruit spread
- rice cakes / snacks