



The right formula

Taking driving into the classroom

Fitness and Nutrition – Theme 9: Staying alert

Activity 9b

Know your drinks

Performance in sports is affected – both physically and mentally – by the amount of liquids in our bodies (see **Factsheet 9b: Liquid facts**). Drinking before, during and after exercise needs to provide:

- water and electrolytes to replace loss from the body through sweating
- carbohydrate to supplement/replace energy stores.

There are three types of sports drinks and the choice depends on your particular needs:

Hypotonic drinks

These are absorbed into the body faster than water. They contain low levels of carbohydrate (less than 3g per 100ml) and may have a little salt added. They can quickly quench thirst and provide fluid to the body but they do not provide significant energy.

Isotonic drinks

These are absorbed into the body as fast as water (sometimes faster). They contain some carbohydrate (5-8g per 100ml) to replace lost energy and have a little salt added to enhance the absorption and retention of fluid.

Hypertonic drinks

These are absorbed into the body much slower than water and they usually contain high levels of carbohydrate (more than 10g per 100ml). They are not very effective in quenching thirst and re-hydrating the body, but are good in replacing lost energy.

Class organisation

Individual work

Class discussion

Resources

Template 9b:
Drink Survey Form

Factsheet 9b:
Liquid facts



The right formula

Taking driving into the classroom

Activity 9b

- Carry out a survey of off-the-shelf sports drinks and other soft drinks. Use **Template 9b: Drink Survey Form** or a computer spreadsheet to analyse data from the labels and to group them in categories.
- Discuss in class the variety and extent of 'other' ingredients used (for example, herbs, caffeine, guarana, taurine, ginseng, colourings, etc).
 - Are they necessary?
 - Do they enhance the quality of the drinks?
 - Is there any evidence to support manufacturers' claims?
 - Could they cause harm?
 - Are drinks of this type advertised in a realistic and fair way?
- Create your own 'power' drink using everyday ingredients like water, juices, squash, fresh fruit and vegetables, sugar and salt.
 - Try variations (i.e. different proportions, different fruit, organic produce, etc).
 - Measure the ingredients each time.
 - Keep details of each variation.
 - Carry out sensory testing (try them out with your friends).

Extension

- Name your drink.
- Design packaging for it.
- Devise a marketing strategy to promote it to young adults attending the local gym.