



The Liver and Alcohol

Teacher Guide

This activity aims to provide teachers with a resource which will help them to raise science-related health issues with their pupils.

What are the Issues?

The health of young people is of increasing concern to society, as a result of their lifestyle choices. Alcohol consumption in school children has doubled over a decade, and in 2005 a quarter of pupils imbibed 14 or more units a week. Teachers are discovering that younger and younger pupils are consuming alcohol, and the police report a steep rise in alcohol-related crime involving very young children.

Lesson Plan

This activity could be used with pupils from age 10-14 when they are studying diet and digestion, as part of their science course, or when they are learning about the effects of alcohol as part of their PSE programme. The activity aims to develop an understanding of the importance of a healthy liver to the body and to consider some of the health and social issues associated with alcohol consumption. The activities centre on encouraging discussion on the many ways in which alcohol affects the lives of young people and asks them to talk about some of the dangers of drinking too much.

There are 3 parts to the activity:

PART 1

After an introduction to the topic, the teacher divides the class into groups of about 6 pupils. Each group is given a liver help card and a pupil sheet and asked to complete the summary table. Alternatively, the teacher could lead the pupils through this part of the lesson in a whole class discussion or use text books or other resources to learn more about the liver.

These 3 websites give a comprehensive overview:

http://www.britishlivertrust.org.uk/home/looking-after-your-liver/livergoodlife-film.aspx http://www.bbc.co.uk/science/humanbody/body/factfiles/liver/liver.shtml http://mywebpages.comcast.net/wnor/liver.htm

The teacher now gives each group of pupils the other 2 help cards and asks them to read them and complete the task of writing down what worried them about the information.

PART 2

Then each pupil completes the 'Is it ok?' sheet and, as a group, they discuss any differences they found in their answers.

As they are doing the activity, teachers may like to read out or project the definition of binge drinking which is available as a PowerPoint slide.

PART 3

The class now, still in groups, looks at 3 different items to stimulate discussion:

- A set of pictures showing young people at parties.
- A dialogue between 2 boys.
- A set of 4 video clips (the young girl in the second video clip is an actress).

The teacher could use some or all of these activities and each one has suggestions in the pupil sheet about the way in which the discussion could be led.

Curriculum Links

SCOTLAND - Curriculum for Excellence (CfE) -

http://www.educationscotland.gov.uk/learningteachingandassessment/curriculumareas/sciences/index.asp

This resource supports the following CfE outcomes:

- By investigating some body systems and potential problems which they may develop, I can make informed decisions to help me to maintain my health and wellbeing [SCN 2-12a].
- Through research and discussion, I have contributed to evaluations of media items with regard to scientific content and ethical implications [SCN 3-20b].
- I understand the effect that a range of substances including tobacco and alcohol can have on the body [HWB 2-38a].
- I know that popular culture, the media and peer groups as well as my own attitudes and values can influence how I feel about substance use and recognise the impact this may have on my actions [HWB 3-39a].
- I know that the use of alcohol and drugs can affect people's ability to make decisions [HWB 2.40], and the decisions that people make about relationships and sexual health [HWB 3.41b and HWB 4.41b].

ENGLAND AND WALES - National Curriculum - http://www.qca.org.uk/curriculum

This resource supports the following area of the curriculum:

KS3 Science

Programme of study for key stage 3 and attainment targets.

- 3. Range and content.
- 3.3 c. conception, growth, development, behaviour and health can be affected by diet, drugs and disease (this includes the importance of healthy eating complemented by regular exercise).

PSHE

- 3. Range and content
- e. facts and laws about drug, alcohol and tobacco use and misuse, and the personal and social consequences of misuse for themselves and others. This should include medicines, alcohol, tobacco, volatile substances and illegal drugs.
- 4. Curriculum opportunities.
- d. take part in individual and group discussion to consider personal, social and moral dilemmas and the choices and decisions relating to them.

NORTHERN IRELAND - http://www.nicurriculum.org.uk/

This resource supports the following area of the curriculum SCIENCE AND TECHNOLOGY:

- Science KS3 (Objective 1)
 - Developing pupils as Individuals.
 - Explore physical, chemical and biological effects on personal health, for example, inherited characteristics, exercise and nutrition, misuse of chemicals, loud sound etc.
 - Recognise and challenge over-simplistic or distorted generalisations about science with informed and balanced responses and take responsibility for choices and actions.



