



Diet, Diabetes, Obesity

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. In the past 10 years, obesity has doubled in six year olds and trebled amongst 15 year olds and around 30% of children in the UK are overweight or obese. Engaging young people in discussion of the science behind health issues/lifestyle choices, rather than didactic provision of information, may help them to rethink attitudes and build confidence in their ability to take responsibility for their own health. Let's Talk Science and Health aims to provide activities which might help with this process.

Lesson Plan

This activity could be used with pupils from age 10-14 when they are studying diet and digestion as part of a science or a PSE/PSHE (personal/social/health education) programme. The activity aims to develop an understanding of some of the health issues associated with being overweight and to encourage discussion of some of the ways in which individuals and society can intervene in this problem.

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 set of help cards. There are 3 HELP cards (blue, green and red) and each pupil or pair of pupils should pick one of the cards and read it out loud.

Now one pupil who has a blue card should explain it to the group. This is then repeated for the green and red cards. As a group the pupils have to answer the questions:

- Do you think this is a problem for society?
- If so why?

Alternatively the teacher could lead the pupils through this part of the lesson in a whole class discussion. The teacher may find the Background Information and Glossary Leaflets helpful at this point.

The teacher now gives each pupil their own confidential questionnaire and the pupils complete this and keep it without showing it to anyone else.

PART 2

Still in groups the pupils are going to discuss what society might be able to do about these issues. They have to decide what is an acceptable measure and what is an unacceptable one.

Each group is given a set of the acceptable/not acceptable cards and one pupil begins by reading out the first card. As a group, the pupils decide where to place the card on the pupil sheet. The cards are passed to the next pupil and the procedure is repeated. Once all the cards are placed the groups can compare results. Larger groups might find it easier to use an A3 piece of paper labelled acceptable and non acceptable to place the cards on.

PART 3

After summing up the lesson and the groups findings, the teacher then invites the pupils to take a postcard and write a message to themselves. The teacher takes these postcards away and posts them to the pupils a few weeks after the lesson.

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].
- I have explored the role of technology in monitoring health and improving the quality of life [SCN 3-12b].
- I can report and comment on current scientific news items to develop my knowledge and understanding of topical science [SCN 2-20b].
- Through research and discussion, I have contributed to evaluations of media items with regard to scientific content and ethical implications [SCN 3-20b].
- Having explored a range of issues which may affect food choice, I can discuss how this could impact on the individual's health [HWB 3-34a/HWB 4-34a].

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
- f. how a balanced diet and making choices for being healthy contribute to personal wellbeing, and the importance of balance between work, leisure and exercise.
- 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.



