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Food and energy security: GM food, biofuel and the media



Box 17.1 Activity: Role play

Participants should be divided into groups of four. Each person should then take one of the following roles:

- parent of hungry children;
- one of her children;
- official responsible for food distribution;
- police official charged with guarding food.

Each group should write and perform a 5-minute play for the rest of the group.



Box 17.4 Activity: Conducting an opinion poll

Participants should work together to produce a questionnaire to gather information from friends, family and fellow students about attitudes to eating in vitro meat. This questionnaire might be accompanied by an information sheet about in vitro meat.

Participants should then discuss the contribution in vitro meat might make to averting the global food crisis.



Box 17.5 Activity: Research and presentation

Participants might like to conduct further research into organic farming methods, then prepare a presentation comparing them to conventional agriculture and the use of genetic modification as a way of alleviating future food shortages.



Box 17.6 Activity: Research and essay writing

Conduct some research into the 'green revolution' and its impact on the environment. Write a short (1,500 word) essay in response to the following statement:

'The green revolution has been an environmental disaster. Discuss.'



Box 17.10 Activity: Paired reflection

In pairs discuss to what extent you believe fears about health might put people off using GM food. Do they put *you* off?



Box 17.11 Activity: Group discussion

Participants should discuss how concerns about the environmental impact of GM technology should be taken into account in the government's thinking about the use of GM technology.

In particular should governments:

- (i) ban the use of GM technology because of such worries?
- (ii) ignore such worries?
- (iii) regulate the use of GM technology to alleviate such worries?

Participants choosing (iii) should be invited to outline the sort of regulation they envisage.



Box 17.12 Activity: Research and presentation

Participants should be divided into two groups. One group should be asked to construct and present a case *against* giant agro-chemical companies like Monsanto, the other should construct and present the case *for* such companies.

Once each side has presented their case, the issue should be opened for group discussion.



Box 17.13 Activity: Media analysis

Print out and photocopy this article from the UK's *Daily Mail*:

<http://www.dailymail.co.uk/sciencetech/article-505561/Alert-march-grey-goo-nanotechnology-Frankenfoods.html>.

Give participants a copy then, dividing them into small groups, ask them (in the case of questions marked '*' after they have had time to conduct some research) to answer the following questions:

1. What role is played by the word 'Frankenfood' in this article?
2. Make explicit the analogy between nanotechnology and GM food and why it is drawn by the author (for an explanation of 'analogy' see Chapter 11, Box 11.5)?
3. Do you think the analogy is a good one?
4. What about the analogy between thalidomide and nanotechnology?
5. The views of various 'experts' are quoted. Do they support the writer's case? Say why (not)?
6. *What is the mention of 'grey goo' about? (search for it online if necessary)
7. *Check out the *Which?* report mentioned. Has the article added its own 'spin' or is it an accurate report?
8. *Check out the Defra report and see if it has been 'spun'.
9. What is the view of nanotechnology that *Daily Mail* readers are likely to form as the result of this article?

This activity might be followed by a whole group discussion on the article.



Box 17.14 Activity: Creative writing

In small groups participants should choose one of the following uses of biotechnology and write an article about it for a popular newspaper:

- (i) the use of artificial sperm or the use of eggs from aborted fetuses (Chapter 10, page 159);
- (ii) the development of an artificial womb (Chapter 10, page 159);
- (iii) the possibility of genetic enhancement creating a new species (Chapter 14, page 256);
- (iv) the use of synthetic biology to create an organism unknown in nature (Chapter 16);
- (v) the use of synthetic biology by a 'garage biologist' (Chapter 16);
- (vi) in vitro meat;
- (vii) the seeding of clouds to avert global warming (Chapter 21).

Participants might also be asked to read the section 'It's disgusting' in Chapter 6, pages 76, 79.



Box 17.15 Activity: Debate

Participants should be asked to debate the following motion:

This house believes that GM technology is the best solution to the global food crisis.