



ADDITIONAL RESOURCE PACK

Classroom
VIDEO
Education with Vision

Sustainable Food Product Design

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For Teachers

Brief Summary of Programme

Sustainable product design is about providing the best for people and the environment both now and in the indefinite future. It will encourage thriving local communities and protect natural resources, avoiding contribution to climate change. This should result in good quality, safe and healthy food products.

This film will show students how to work through the design process to develop new food products which are sustainable. The ability to apply this knowledge and understanding to their own food product designs is an essential part of the KS4 design tasks students undertake as part of their GCSE examination.

DVD Timeline

00:01	Introduction
01.18	Balanced and Nutritious Meals
02.24	Sustainable Ingredients
04.30	Product Design
07.20	Animal Farming and Sustainability
08.40	Fairtrade
10.35	Summary of Sustainability Issues in Food Product Design
11.17	Yeo Valley – Organic Products
11.47	Product Testing
12.35	Cost
14.01	Final Design
15.21	Credits

Other Background Information for Teachers

There is an expectation that the current generation of young people should be able to choose, buy and use sustainable products in order to protect the environment for the next generations. The choice of food products for use by consumers can impact greatly on future resources and understanding what types of products are sustainable and why will allow the correct choices to be made. Pupils studying Technology at GCSE and A level are expected to be able to design and make sustainable products evaluating their success throughout the process.

Curriculum Links

We can make sustainable choices and decisions in many aspects of our lives. These curriculum areas also cover aspects of sustainability.

KS 3/4 - Citizenship

KS 3/4 - Science

KS 3/4 - Geography

Related DVDs available from Classroom Video Ltd.

Does It Matter How Our Food is Produced?

Fairtrade – Who Benefits?

Local or Imported Food – How to Decide

Sustainable Packaging

Please contact customer services on 0117 929 1924

Or visit www.ClassroomVideo.co.uk to see our full range of Food Technology titles.

Other Useful Links

<http://www.sustainweb.org>

<http://www.eatwell.gov.uk/healthydiet/eatwellplate/>

<http://www.eattheseasons.co.uk/>

<http://www.kentproduce.co.uk/>

Initiate Prior Learning

1. Visit a farmers market. What foods are sold there and how far have those foods travelled? How would you describe the quality and variety of products?
2. What is organic farming? What ingredients are farmed organically in your country? How is organic farming sustainable?
3. Look at the food products in your cupboards at home. Do any of them have a red tractor or Fairtrade symbol? Compare with the other students in your class. How many Fairtrade and red tractor products do you have in total?

Student Worksheet

Active Viewing Questions

1. What food groups should a balance meal contain?

2. Which food products do most people enjoy but they are not essential?

3. What healthy eating guide should you follow in your country?

4. Give some examples of seasonal foods across the world.

5. What does the red tractor symbol mean?

6. What sustainability issues should you consider when deciding what ingredients to use for your own food designs?

7. How much damage does meat and dairy production cause to the planet?

Sustainable Food Product Design

8. How can we design meat based products which are more sustainable?

9. How does a using Fairtrade ingredient help the farmers in poor countries?

10. What is a vegetable box scheme?

11. What is sustainable food product design about?

Suggested Student Responses

1. What food groups should a balance meal contain?
Starchy carbohydrates, protein, fruit and vegetables, milk and dairy
2. Which food products do most people enjoy but they are not essential?
Alcohol and sugary foods like chocolate and sweets
3. What healthy eating guide should you follow in your country?
UK – Eatwell Plate
USA – Food Pyramid
AUS – Healthy Eating Chart
4. Give some examples of seasonal foods across the world.
UK – Strawberries in summer, apples in autumn and Brussel sprouts at Christmas
USA – Pumpkins at Halloween
AUS – Macadamia nuts in autumn
Spain and Portugal – oranges from winter to spring
5. What does the red tractor symbol mean?
Red Tractor is a voluntary group in the UK that ensures your product has come from a UK farm
6. What sustainability issues should you consider when deciding what ingredients to use for your own food designs?
Seasonal, locally sourced, organic, assured food standards such as the Red Tractor, tracking genetically modified organisms
7. How much damage does meat and dairy production cause to the planet?
Global animal farming causes huge greenhouse gas emissions. Milk and other dairy produce combined with worldwide meat production causes more damage to the planet than all of the cars and planes combined
8. How can we design meat based products which are more sustainable?
Source local produce, reduce the amount of meat you use by changing the ratios in the recipe, using more vegetables and less meat or adding pulses and beans to cut down on the meat used.
9. How does a using Fair Trade ingredient help the farmers in poor countries?
Destiny of the farmers is in their own hands. They have responsibility for the future of their farming. They are able to help themselves out of poverty and it will allow them to avoid exploitation.
10. What is a vegetable box scheme?
Members of the community farm can buy a box of seasonal goods at a reduced cost.

Sustainable Food Product Design

11. What is sustainable food product design about?

Sustainable food product design is about providing the best products to consumers while leaving the least impact on the environment, protecting natural resources, encouraging local communities and lowering the cause of climate change leading to good quality food that is safe, healthy, tasty and sustainable both now and in the future

Extension Activities

1. In groups research the foods available during the different seasons in your country.
2. Work in pairs to find suitable recipes which will make use of your favourite seasonal foods. Make some of the recipes which are suitable for the current season.
3. Research into the cost of some seasonal foods. Look at the cost during the peak of their season in your country and when the product is not available locally sourced and has to be transported to your country from abroad. What is the difference in cost? Do you think there will be a difference in quality or taste? If so why?
4. Make 3 bolognaise sauces:
 - 100% beef mince meat.
 - 50% beef mince and 50% vegetarian protein e.g. peas, beans, lentils, Quorn
 - 100% vegetarian protein

Test and evaluate the sauces – which one tastes the best, looks the best, has the best texture and which is the cheapest? Can you make a sustainable bolognaise sauce which has good sensory characteristics?

5. Choose a controlled assessment task which you could complete for your coursework. Research into suitable design ideas for the task – present them as sketches or downloaded images. Identify how you could use sustainable ingredients in each design idea using detailed annotation.