

X118/13/01

NATIONAL TUESDAY, 7 MAY
QUALIFICATIONS 1.00 PM – 3.20 PM
2013

HOME ECONOMICS
HEALTH AND FOOD
TECHNOLOGY
ADVANCED HIGHER

75 marks are allocated to this paper.

This paper consists of **two** sections.

Candidates should answer the following:

Section A—All questions

Section B—Question 1 and any **one** other question.



SECTION A

Marks

You should spend approximately 1 hour in total on this section.

Read the report carefully.

Using the information in the report and your own knowledge, answer the questions below.

- | | | |
|-----|---|-------------|
| (a) | Outline the main issues of the report. | 5 |
| (b) | Discuss the role of additives in the prevention of food waste. | 10 |
| (c) | Critically discuss how food labelling influences consumer choice of food. | 10 |
| | | (25) |

SECTION B

Marks

Answer TWO questions from this section: Question 1 and any ONE other question.

You should spend approximately 40 minutes on each question.

1. “It is predicated that obesity rates could reach 40% by 2030.”

The Scottish Health Survey: Topic Report: Obesity, the Scottish Government 2011

- (a) Discuss how the Scottish dietary targets could contribute to a reduction in obesity levels. **10**
- (b) Critically discuss the role of parents in the prevention of childhood obesity. **15**
(25)
2. Discuss the stages involved in the product development process of an organic vegetable soup. **(25)**
3. Discuss the contribution of antioxidants to the health of individuals. **(25)**
4. Discuss the role of the media in influencing teenagers’ food choices. **(25)**
5. Discuss the choice and function of the main ingredients used in the manufacture of baked goods. **(25)**

[END OF QUESTION PAPER]

ACKNOWLEDGEMENTS

Section B Question 1—Quote is taken from “The Scottish Health Survey: Topic Report: Obesity, October 2011,” from www.scotland.gov.uk. © Crown Copyright.

X118/13/11

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HOME ECONOMICS
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Report

REPORT

For use with SECTION A.

Read the following report carefully and then answer the questions in SECTION A of the accompanying question paper.

You should spend approximately 1 hour in total on Section A.



FOOD WASTE: A COSTLY BUSINESS

The disposal of perfectly good food is extremely wasteful, environmentally unfriendly and costly for consumers and food businesses. A study has revealed that British households throw out £5 billion worth of food a year. The average household bin contains approximately 10% of the family's weekly food and drink purchases whilst 1 in 5 families waste more than 25%. It is estimated that, on average, £680 of perfectly good produce, some of it still "in date" and with packaging untouched, is disposed of by families every year.

Wasted food is not only a waste of money, it's also a major contributor to climate change. Producing, transporting and storing food uses a lot of energy, water and packaging, which is all wasted if the food gets thrown away uneaten. If this food had been consumed, it would have prevented the equivalent of 1.7 million tonnes of carbon dioxide entering the atmosphere—which is roughly the same as taking one in every four cars off Scotland's roads.

It is thought that much of the food which is wasted is down to confusion over the dates on labels. Betsy Reed, Head of Campaigns for Zero Waste Scotland, said "Clearer date labelling on food packaging is a simple step which could prevent perfectly good food going to waste and save families money."

In 2011, the Department for Environment, Food and Rural Affairs (DEFRA), after consultation with food manufacturers and supermarkets, issued new guidance on the application of date labels on food and drink products. Suggestions are that food and drink should only be labelled with one date—either indicating "best before" or "use by". This would make it clear when food is good and safe to eat and so save consumers money by them not throwing away perfectly good food.

Some foods, such as tinned and dried goods, will continue to carry a "best before" date. This indicates that the food is still safe to eat but the quality may be slightly diminished. "Use by" labels will still go on high risk foods which are unsafe to eat after a particular date eg soft cheeses, eggs, fresh meat and fish and chilled ready meals.

DEFRA would like the food industry to remove or make less visible to consumers the "sell by" or "display until" dates. These are used for stock control reasons by retailers and have nothing to do with the produce being unsafe to eat. Instead of using these words, the food industry will be encouraged to use other measures such as colour coding—this will tell retailers how long to keep produce on the shelves.

Some retailers have made it clear that they do not support key elements of the new guidelines. A supermarket spokesperson said: "There's no evidence that confusion over "display until" adds to food waste; for stores handling 30,000 different products, and with hundreds of staff, the "display until" label is a vital and simple way to control stock." The general feeling is that if the Government really want to make a difference to reduce food waste it should be educating consumers about the two basic terms—"best before" and "use by".

Reducing food waste, however requires a change in people's attitudes and behaviour. The Love Food Hate Waste campaign, launched by the Waste & Resources Action Programme (WRAP) in 2007, aims to reduce the amount of food waste in the United Kingdom. The aim of the campaign is to inform consumers on how to keep food edible and how to use food in a variety of imaginative ways rather than throwing it away. There are a number of simple steps which can be taken to save food from being wasted. This includes planned purchasing, proper storage, sensible portion sizes, planning meals and using leftovers to make another meal.

Currently, research is on-going into other ways of helping consumers determine the freshness of food. A new generation of smart packaging—which shows when food is going off—is being developed. Researchers from Strathclyde University are working on indicators made from “intelligent plastics” which change colour when food loses its freshness.

A natural preservative, called bisin, has been discovered by scientists and has the potential to extend the shelf life of food significantly. Bisin occurs naturally in some types of harmless bacteria and is said to work by destroying the bacteria that spoils fresh meat and fish, eggs and dairy produce. It also inhibits the growth of food poisoning bacteria such as E.coli, salmonella and listeria. It is thought that this breakthrough could change the way we shop forever as it could reduce 20 million tonnes of food waste in the UK each year.

The need to reduce food waste is clear, as is maintaining high standards of food safety for consumers. The Government, food industry and consumers all have a key role to play.

Adapted from

Guidance on the application of date labels to food,
the Department for Environment, Food and Rural Affairs, 2011

Bye-bye to use-by dates: A magic ingredient that could keep food (and wine)
fresh for years, *Tamara Cohen, Daily Mail, 2011*

Supermarkets drag their heels on food date label reforms,
Sean Poulter, Daily Mail, 2011

New Date Labelling guidance welcomed in Scotland, *Zero Waste Scotland 2011*

[END OF REPORT]

ACKNOWLEDGEMENTS

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