X118/13/01

NATIONAL 2012

THURSDAY, 3 MAY QUALIFICATIONS 1.00 PM - 3.20 PM

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 impact of Fairtrade products on food choice.	10
(c)	Critically discuss the issues surrounding consumer choice of organic foods.	10
		(25)

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SECTION B Marks

15

(25)

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

You should spend approximately 40 minutes on each question.

- (a) Discuss the ways in which the Scottish dietary targets could contribute to a reduction in coronary heart disease (CHD).
 - (b) Critically discuss factors other than diet which may contribute to coronary heart disease (CHD).
- 2. Discuss the health implications of a vegetarian diet. (25)
- 3. Discuss the properties of protein and their use in food manufacture. (25)
- 4. Discuss the main issues relating to the use of additives in food products. (25)
- 5. Discuss the factors which may influence the food choices of primary school children. (25)

[END OF QUESTION PAPER]

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HOME ECONOMICS HEALTH AND FOOD **TECHNOLOGY** ADVANCED HIGHER 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.





The true cost of putting food on your plate

Nowadays more and more people approach their shopping with ethical concerns in mind which is why the organic food industry saw huge increases in sales in the first part of this century. One factor which has contributed to this increase is growing concern about the environmental impact of artificial fertilisers and pesticides. The supermarkets have tapped into mainstream concern about harming the environment and worries about consuming possibly dangerous chemicals and have extended their organic range.

Another major ethical concern has been the Fair Trade movement. In response to consumer demand, increasing numbers of supermarkets have begun to stock Fairtrade products. Consumers buy Fairtrade products and organic produce hoping to help both the environment and economically struggling communities.

However, the issue is not as straightforward as it seems. Consumers may not be buying a clear conscience along with expensive Fairtrade or organic green beans. Most Fairtrade goods, and some organic produce, originate abroad and much comes from poor or struggling communities. These communities depend on the fastest possible transport method to get their goods to our supermarkets—and that means air freight. Without this a large portion of their income would be lost.

The term "food miles" was coined by Professor Tim Lang, an expert in Food Policy. It refers to the number of miles food has travelled to get to the table. That includes, in simple terms, the miles from the farm to the processor, from the processor to the retailer and from the retailer to the consumer. Transportation by air freight is the fastest growing method used to transport food but it creates the highest carbon dioxide (CO₂) emissions per tonne of all the methods of food transportation. Sending food by air is 100 times more polluting than sending it by train and 200 times more than by boat. This is causing concern for environmentalists.

Many supermarkets promote their organic products as being ethically virtuous. Despite the fact that legally supermarkets have to state on the label where fruit and vegetables have come from, many consumers are often not aware of the food miles involved. Often so called "local produce" in supermarkets may be sent hundreds of miles away to be packaged before distribution.

The positive environmental impact of organic farming can actually be offset by lengthy transportation to bring the goods to our supermarkets. Many campaigners want air freight of food products banned but the problem is complicated. If it were stopped it would reduce CO_2 emissions but it would also cause a problem for the Fair Trade movement. It would be difficult for poor communities to sustain themselves without being able to export their goods to countries like the UK.

The Soil Association said that in the future, food air freighted to Britain from developing countries would only bear an organic label if it can prove it was produced to both Fairtrade and environmental standards. Perhaps this may help the issue of food miles, however, do we really need to be able to buy strawberries 365 days a year?

Supermarket chains have encouraged the idea that it is entirely reasonable for us to expect to be able to buy every fruit and vegetable produced worldwide all year round. There is absolutely no necessity for British consumers to eat fruits and vegetables that have been transported at great environmental cost to the planet, from thousands of miles away. We live in a country which, despite its weather, can produce a varied range of produce all year round. We can have locally produced broccoli and rhubarb in the spring, strawberries and tomatoes in the summer, potatoes and peas in the autumn and pumpkin and parsnips in the winter. TV chef, Hugh Fearnley-Whittingstall explains on his website, "Seasonal produce, locally grown, can be harvested and eaten at its best." Fresh food does not travel well and the processes that give it a longer shelf life often make it less tasty and less nutritionally valuable. Disappointingly the majority of consumers are unaware of when foods are in season. In a recent survey 63% of adults did not know which British fruits and vegetables came in to season at which time of year. As a result it may be very difficult for consumers to choose local produce when it is at its best and cheapest.

With global warming on the increase and more research revealing the negative effects of additives and preservatives in our foods, eating seasonal, home grown organically produced fruit and vegetables may seem appealing, but is it a simple choice? We have been persuaded by the Fair Trade movement that we can make a difference to the lives of people in the developing world. We are also used to getting what we want when we want in terms of fruit and vegetables. Can we change? Can we forget our Fair Trade friends who rely on our trade to ensure fair prices for their goods, fair pay for their workers and development opportunities for producers? What price are you prepared to pay for the food on your plate?

Adapted from Fairtrade versus Food Miles and Seasonal Insanity, Food File @ Carel Press

 $[END\ OF\ REPORT]$

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