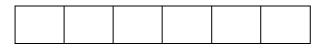


Pre-sessional English Language Course

Listening & Note-taking Examination

Mock Exam August 2011 (Sept 2010 Final Exam) 9.30 - 11.30

Candidate Number:





Instructions:

After the introduction, you will have <u>10 minutes</u> to read through this document. During the lecture, you should complete the questions according to the instructions given. After the lecture you will have <u>30 minutes</u> to complete and check your answers.

The examination is divided into three sections:

Introduction:	(no task)		
Section 1:	answer questions in this booklet as you listen		
Section 2:	take notes in this booklet and then answer the questions		
	in Booklet 2 using your notes. Booklet 2 will be handed		
	out after the lecture		

	Booklet 1	Booklet 2	Agreed Total	Legible Initials
1 st Marker	/30	/30		1 st marker:
2 nd Marker	/30	/30	/60	2 nd marker:

In this section of the exam you may ne	eed to write	more than	one word f	or some
of the answers.				

Answer all the questions

You do <u>not</u> need to write the exact words from the lecture, but the meaning of your answer <u>must be the same as the meaning of the words in the lecture</u>.

Waste: the great food scandal

Waste and the global food industry

1. According to the lecturer, over the last 10,000 years the greatest change in the landscape has been an increase in:

Circle the correct answer

a. fields

- b. urban areas
- c. transport systems

(1)

- 2. What kind of land is being lost?
- 3. Which <u>2</u> of the following are mentioned as environmental implications of a globalised food industry?

Circle two correct answers

- a. extinction of some species of plants
- b. traffic pollution
- c. climate instability
- d. a decline in the amount of agricultural land

(2)

4. What proportion of all food is wasted in the United States?

(1)

5. The speaker suggests that people in the developed world waste a lot of food because it is treated as:

(1)

6. Circle the correct answer

- a. All of
- b. A small amount of
- c. A large amount of

______ the food wasted by rich countries would be needed to feed the world's undernourished people.

(1)

7. One implied solution to the problem of food poverty in poor countries is that:

Circle the correct answer

- a. rich nations should send surplus food to poor countries
- b. rich nations should pay a higher price for food than poor countries
- c. rich nations should stop buying more food than they need

(1)

8. Complete the notes about landfill sites Use <u>one</u> word in each gap

Common in most <u>e.g.</u> developed countries

Waste decomposes into (i)______effluent & methane

Problems with this method:

- i. Some countries are running out of space
- ii. The practice is (ii)______in some countries

Overall this method is <u>not</u> (iii)_____

(3)

9. The main aim of a *freegan is to:*

Circle the correct answer

- a. save money
- b. eat healthily
- c. reduce waste

Supermarkets

10. We do not know exactly how much food is wasted by supermarkets because:

Circle the correct answer

- a. supermarkets refuse to provide this information
- b. supermarkets can give misleading information
- c. supermarkets cannot measure waste accurately

(1)

11. **Complete the table** (one word per gap)

Country	<u>Source</u>	Amount of Waste (tonnes p.a.)
USA	Article: 'Estimating and addressing	2.5 million
	<i>America's</i> (i)' (ii)'	
	WRAP: 'Waste and Resources	
UK	(iii)'	(v)

(5)

12. In the table above, a more accurate figure for the UK could be:

Circle the correct answer

- a. higher
- b. lower
- c. either higher or lower

(1)

13. Supermarket managers consider waste to be:

Circle the correct answer

- a. avoidable
- b. a significant problem
- c. part of their business plan

(1)

14. One reason supermarkets overstock sandwiches is that:

Circle the correct answer

- a. the profit margin is high
- b. sandwiches stay fresh for several days
- c. they are cheap to produce

(1)

15. Choose the best summary of the speaker's conclusion for this section on 'Supermarkets'

Disposal of food in stores is ______ of total supermarket waste.

- a. the largest part
- b. only a small part
- c. about half

(1)

Manufacturers

16. The *over-production waste* referred to in this lecture happens:



- a. on farms
- b. in food processing plants
- c. in supermarkets

(1)

17. Over-production waste in the convenience food sector can be as much as:



- a. 5% or 6% of output
- b. 56% of output
- c. 5.6% of output

(1)

18. Supermarkets tend to:

Circle the correct answer

- a. have many food suppliers
- b. have only a few food suppliers
- c. own their food suppliers

19. Why are forecast orders problematic for manufacturers?

Circle the correct answer

- a. Manufacturers often cannot meet the full orders on time
- b. Manufacturers have to make food supermarkets might not buy
- c. Manufacturers cannot always get the necessary ingredients

(1)

20. What usually happens to surplus sandwiches produced by manufacturers?

Circle the correct answer

- a. They are re-packaged and sold to another retailer
- b. They are given to charities
- c. They are thrown away

(1)

21. What is the typical <u>minimum</u> shelf-life of a product demanded by retailers?

(1)

22. The speaker believes that waste occurs mainly because:

Circle the correct answer

- a. contracts between manufacturers and supermarkets are unclear
- b. supermarkets force manufacturers to overproduce
- c. manufacturers' production costs are low

(1)

Total marks for Section 1 = 30

This is the end of the first part of the exam. During the next part of the exam you must make your own notes. You will need these notes to answer a series of questions that will be given to you <u>after</u> the lecture has finished.

<u>Notes</u>

LONDON'S GLOBAL UNIVERSITY



Pre-sessional English Language Course

Listening & Note-taking Examination

Mock Exam August 2011 (Sept 2010 Final Exam) 9.30 – 11.30

Write your Candidate Number again here:



Instructions for questions on note-taking section:

Refer back to the notes that you made during the second part of the lecture in order to answer these questions.

Answer <u>ALL</u> the questions by writing your answers on <u>this</u> paper.

You have <u>30 minutes</u> to complete this final section of the listening and notetaking examination and to check answers in Booklet 1

	Booklet 2
1 st Marker	/30
2 nd Marker	/30

Legible Initials	
1 st marker:	
2 nd marker:	

Food labelling

- 1. What did the speaker identify as a major cause of concern for supermarkets and the reason they are so cautious with food labelling?
- 2. Complete the information about food labels

Food Labels	Useful for
Best before	Customers and retailers
Use by	
Sell by	
i until	ii only

(2)

(1)

3. Which of the following does <u>not</u> require a *best before* or *use by* label by law?

Circle the correct answer

- a. Yoghurt
- b. Butter
- c. Fruit
- d. None of the above

(1)

4. Who or what do the British public tend to trust most regarding food safety?

Circle the correct answer

- a. Shop labels
- b. Their own judgement
- c. Government advisors

(1)

5. Lord Haskins argues that the <u>principle</u> purpose of *best before* dates is to:

Circle the correct answer

- a. safeguard public health
- b. increase the profits of supermarkets
- c. give the public confidence in supermarkets

(1)

6. Who decides how long the shelf-life of a product should be?

Circle the correct answer

- a. Retailers
- b. Government
- c. Manufacturers

(1)

7. Which of the following is usually given a *use by* date <u>unnecessarily</u>?

Circle the correct answer

- a. Ham
- b. Dairy products
- c. Fish
- d. Sandwiches

8. Fill the 2 gaps

A best before date is a guarantee of (i) _____, while a use

by date is guarantee of (ii)_____.

(2)

(1)

9. According to surveys, what percentage of the British public completely understands the labelling system?

Circle the correct answer

- a. 20%
- b. 40%
- c. 60%
- d. 80%

10. According to Lord Haskins, how should we decide if food is good to eat?

i. _____ it

ii._____it

(2)

Consumers

11. According to WRAP, the average person throws away:

Circle the correct answer

- a. slightly more than they think
- b. slightly less than they think
- c. a lot more than they think
- d. a lot less than they think

(1)

12. Which of the following best summarises the speaker's opinion of *Buy One Get* One Free deals?

Circle the correct answer

- a. They mainly benefit the consumer
- b. They mainly benefit the supermarket
- c. They benefit both the supermarket and the consumer
- d. They benefit neither the supermarket nor the consumer

(1)

- 13. Tim Lang of City University claims "the tail is wagging the dog". Who is he referring to?
 - i. the tail refers to _____
 - ii. the dog refers to _____

(2)

14. In terms of proportion of household food, the British public wastes:

	Ci	rcle the correct answer	
	a.	more than other European countries	
	b.	less than other European countries	
	C.	the same as other European countries	
			(1)
15.	Ac	cording to WRAP, 'good mother syndrome' applies to:	
	a.	consumers	
	b.	supermarkets	
	C.	both consumers and supermarkets	
	d.	neither consumers nor supermarkets	
			(1)
16.	WI	nich 2 advantages of hand-feeding children did the speaker mention?	
	i.		
	ii.		
			(2)

So what can be done?

17. Give 2 examples of how food could be recycled according to Tristram Stewart.



18. **Complete the table**

Website		What it did
(i) <u>www</u> .	.co.uk	Reported a 500% increase in sales
(ii) <u>www</u> .	.co.uk	Apologised for late orders due to high demand

- 19. What recommendation did the speaker make regarding visiting supermarkets?
- 20. What do you have to do if you do not finish your dinner in the *Suya Express*?

(2)

(2)

Conclusion

21. In the conclusion, the speaker mentions 2 further causes of waste.Name one of them.

(1)

Total marks for Section 2 = 30

Waste: the great food scandal

ANSWER KEY

Booklet 1

- 1. a
- 2. forest(s)
- 3. a and c
- 4. 50% or fifty per cent
- 5. (a) disposable (1) commodity (1)
- 6. b
- 7. c
- 8. i. toxic or poisonous or dangerous
 - ii. banned or forbidden
 - iii. sustainable
- 9. c
- 10.b
- 11.i. Food
 - ii. Loss *or* Losses
 - iii. Action
 - iv. Programme
 - v. 1.6 million
- 12.a
- 13.c
- 14.a
- 15.b
- 16.b
- 17.b
- 18.a
- 19.b
- 20.c
- 21.70%
- 22.b

Booklet 2

- 1. (food) poisoning
- 2. i. display
 - ii. retailers
- 3. c
- 4. a
- 5. b
- 6. c
- 7. c
- 8. i. quality
 - ii. safety
- 9. a
- 10.i. look (at it)
 - ii. smell (it)
- 11.c
- 12.b
- 13. i. supermarkets or retailers or food industry or food supply not food
 - ii. customers or consumers
- 14.a
- 15.c
- 16.i. less waste
 - ii. less mess (these tow answers can be in either order)
- 17. *any* 2 of the following in any order feed it to livestock /animals or make heat or make power or make compost (by burning in industrial digesters)
- 18.i. www.approvedfood.co.uk

ii.www.foodbargains.co.uk

19. Go/visit frequently (or similar) to buy a little (or similar) (rather than infrequently for a lot)

Waste: the great food scandal

Instructions

While I read these instructions you must not, I repeat not, open the booklet in front of you.

This paper is divided into three parts: the introduction, section 1 and section 2.

During the introduction you are not required to take any notes or complete any tasks.

After the introduction, you'll have 10 minutes to read the questions in Booklet 1 in front of you.

In Section 1 of the lecture, you'll answer the questions in Booklet 1 as I speak.

In Section 2 you'll take notes using the extra pages provided at the end of Booklet 1.

After the lecture, you will be given a second question booklet, Booklet 2, and you'll have 30 minutes in which to answer the questions according to your notes and to check your answers in Booklet 1.

OK, now I'll begin the lecture with the introduction, during which you don't have to take any notes.

Today's lecture's about something we all love – food. But whilst we all love food because we all enjoy *eating* it, this lecture focuses on the food which unfortunately never gets eaten because it simply gets wasted, or thrown away. And as the lecture will show, there's an awful lot of this in the developed world.

Did you know that in North America and Europe, we throw away nearly *half* of all our food? When I say 'we', I'm referring to everyone involved in the production and consumption of food, from farmers and manufacturers through to supermarkets and then, of course, us the consumers. In the west, we throw away enough food to feed all the world's hungry at least three times over, which seems like madness, especially when so much of this waste is completely unnecessary and avoidable.

The title of today's lecture is, *Waste: the great food scandal.* First, I'll outline the extent of the problem of waste and explain how it impacts on society and the environment. Then I'll move on to look at who's responsible and what can be done to improve the situation. I'll be focussing on 4 main areas: supermarkets, manufacturers, food labelling, and finally consumers. Then I'll very briefly look at what can be done to address the situation before concluding.

OK, that's the end of the introduction. You now have ten minutes to read through the questions in Booklet 1 in front of you. Please open your booklets.

10 minutes

That's the end of your 10 minutes. We'll now begin the lecture, during which you should answer the questions as I speak.

As I've said, we'll begin by looking at the problem of waste and some of its effects. I'd like you to picture an aerial view of the earth. Over the last 10,000 years, this picture has changed beyond recognition. In what ways do you think it's changed? You might think it's become a lot greyer, with sprawling cities and roads stretching out covering previously green land. But, in fact, the biggest invader of the natural landscape is none of these, but fields, which now stretch across the planet making it one giant food factory. Fields aren't natural – they've been created by humans in order to cultivate land, and the demands of the global food industry dictate that more and more forests are cut down to make space for them.

Almost everything we eat – from bananas to locally grown beef – is connected to the system of world agriculture and is therefore part of a globalised food industry. Demand for food in one part of the world indirectly stimulates the creation of fields thousands of miles away. This has some very obvious environmental implications: many species of plant and animal are lost and billions of trees are burnt creating tonnes of greenhouse gases. However, other effects are less obvious: the process is upsetting the climate, hydrological cycle and soil to such an extent that the United Nations now estimates that the world's agricultural land may decline in productivity by up to 25% this century, and this could undermine humanity's future ability to grow enough food at all.

And yet this relentless growth of agriculture is not actually necessary to meet our current eating needs. In the United States, around 50% of all food is wasted, and in Britain, up to 2 million tonnes of food waste is created each year. Throughout the developed world, food's treated as a disposable commodity, disconnected from the social and environmental impact of its production. Most of us wouldn't wish for the destruction of Amazon rainforests, yet that's exactly what's happening every day as a result of unwanted, uneaten food. If affluent nations stopped throwing away as much as they do, pressure on the world's ecosystems and climate would be greatly alleviated.

So the environmental motive for tackling food waste is fairly clear. However, there's also a social imperative for finding a solution. By buying more food than we're going to eat, the industrialised world uses land and resources that could otherwise be used to feed the world's poor. There are nearly a billion undernourished people in the world – but all of them could be fed with just a fraction of the food that rich countries currently throw away.

The connection between an abundance of food in rich countries and food poverty elsewhere in the world is a complicated one, and the solution is obviously not for us to be sending our old tomatoes or stale bread over to poor countries. In a global food market, rich and poor countries buy food from a pool of internationally traded commodities and we're essentially all buying from the same common source. If rich countries buy hundreds of millions of tonnes of food and end up throwing them in the bin, they're removing food from the market which could have remained there for other people to buy.

Then there's the problem of where all this wasted food goes when it's thrown away, and this is another environmental problem all of its own. In most countries throughout the developed world, organic waste is buried in landfill sites where it decomposes into toxic effluent and methane. This is a greenhouse gas 21 times more potent than carbon dioxide. Some developed nations are running out of space to bury their rubbish and it's already been banned in certain countries. The situation clearly isn't sustainable.

Many of the statistics I've just given you came from a book published last year from which this lecture takes its name. The author, Tristram Stewart, is what's known as a *freegan*. If you've never heard that word before, a freegan is someone who only eats food that they can get for free and that would otherwise be thrown out or wasted. As you can imagine, he's keen to see waste reduced, and I'll be referring back to his book throughout this lecture.

Let's move on now to look more closely at who's creating this waste and how and why they're doing it.

First, supermakets. Supermarkets waste an awful lot of food, but it's very difficult to know exactly how much because there's no official requirement for them to measure it. Not only that, but all statistics available are based on data which was presented voluntarily by retailers, who were able to select the information they shared and also withhold the information they didn't want to pass on.

In 1997 an article was published entitled *Estimating and addressing America's food losses.* The article reported that retailers in the United States waste around 2.5 million tonnes of food each year – that's just under 2% of the country's total food supply. However, the situation in the UK is much worse.

The figures which demonstrate this come from a government-funded not-forprofit organisation known as WRAP. WRAP stands for Waste & Resources Action Programme, and its findings suggest that British retailers are proportionally more than *three* times more wasteful than their American counterparts. They say that retailers in the UK produce 1.6 million tonnes of food waste each year. However, they also say that this figure could be an underestimate because it's been calculated by extrapolating from the statistics provided by the most efficient businesses in the industry and thus ignores the more wasteful ones. This might not sound significant, but in fact the worst category of retailer can throw away proportionally 35 times more food than the more efficient companies. This statistic from an article by Jones in 2004 shows quite how unreliable WRAP's figures might be.

So why do supermarkets generate so much waste? Surely, it's in their interests to reduce it as much possible and thus increase profitability. Well, in fact, it would appear that much of this waste is deliberate, and that the supermarkets have got an economic logic which explains why they overstock. Firstly, they feel they have to ensure that their customers' favourite products are always available for fear of losing dissatisfied clientele. As one supermarket manager from Asda explained, this generally means that supermarkets will put more stock on the shelves than less, even if it means ending up with wasted food. Not only that, but they believe that shoppers like to see full shelves, which give the impression of infinite abundance - an illusion which remains central to expectations of choice in today's consumer culture. Even if supermarkets know they're overstocking certain products, they believe that the losses will be recouped by attracting customers to their store. If shelves are empty, managers believe that customers might turn around shop elsewhere.

A second reason supermarkets overstock is that profit margins mean that overstocking can - believe it or not - be profitable. Think of a sandwich in a shop. If the retailer can buy the sandwich for one pound fifty but sell it for two ninety nine, it'll be more profitable to overstock than miss out on a couple sales. The only other factor retailers have to consider is the cost of the disposal of surplus stock. This obviously has to be subtracted from the potential profits of sales. But since binning a sandwich weighing 200 grams costs less than one pence whereas the profit of a sale can be up to a hundred times that, this doesn't really have any impact on the profitability of overstocking.

In addition to this surplus stock, a great deal of food gets thrown away simply because its packaging gets damaged – even if the food inside is perfectly edible. This usually consists of a minor tear or mark on the outer packaging, which doesn't affect the food inside, but the supermarkets still choose to throw it away anyway. Also, with larger packs of food, even if one item is slightly blemished, the whole pack will generally be thrown out.

So supermarkets throw a lot of the food in their stores away. However, this waste is just a fragment of the rubbish they create in other parts of the food chain. Let's turn our attention now to the first of these - the manufacturers.

Everyday, food which is fresh, packaged, labelled, and ready to be delivered to supermarkets gets thrown away before it even leaves the warehouse. It's what's known as *over-production waste* – a result of the manufacturer making more food than the supermarket can sell. In the convenience food sector, which involves the supplying of sandwiches or ready meals, research has revealed that up to 56% of a company's total output can be over-production waste – that's more food wasted than sold!

So why does this happen? Well, the principle reason is down to the policies of their customers, the supermarkets, who are now so powerful that they're able to bargain themselves into extremely advantageous business deals. This is because a manufacturer's food factory is typically designed to make a range of products, which it supplies to directly to individual supermarket chains. This means that the manufacturer often has only 2 or 3 customers, sometimes only 1, and any failure to satisfy them could result in bankruptcy. By contrast, the supermarkets have innumerable suppliers who they can switch between quite easily. The supermarkets' disproportionate power allows them to

manage contracts and sales in such a way that the losses incurred by their own failure to predict demand has to be met by the manufacturers.

What do I mean by 'their own failure to predict demand'? Well, a classic example of this is what's known as a forecast order. This is when a supermarket places an order with a manufacturer a week in advance, stating that on a certain day the following week, it will *probably* want, for example, 10,000 sandwiches. However, the supermarket won't confirm that order until the morning the sandwiches are to be delivered or - if the supplier's lucky - 24 hours in advance. Now, one day isn't enough for the supplier to make all those sandwiches: it takes maybe 2 or 3 days to order all the ingredients and get them together, set up the assembly line, and then make all the sandwiches, so what manufacturers do is put together all 10,000 sandwiches on the strength of the forecast order before the supermarket has confirmed it. Very often, when the supermarket finally does confirm, it's for much less than it originally forecast – they always tend to overestimate rather than leave themselves short, for reasons I mentioned before.

So what happens then is the manufacturer ends up with hundreds or even thousands of fresh sandwiches but no one to sell them to. You might think that they could look for another customer – another shop with greater demand – but the first problem is that many products nowadays carry the supermarket's own brand name, so the packaging actually says 'Sainsbury's Taste the Difference' or 'Tesco's Finest'. It *is* possible to design packaging which can be removed, or replaced with generic labels, so products can be sold on, but the problem is supermarkets won't allow this. They insist that food produced *for* them must be sold exclusively *to* them. Worse still, they'll often forbid the manufacturer from giving the surplus food to charities because they suspect it might be sold to less reputable retailers, thus causing damage to their brand. Often, the manufacturer has few options other than to throw the food away.

And even if a manufacturer *is* permitted to sell on surplus, it has another logistical problem to deal with. Fresh products like sandwiches and chilled

ready meals have fairly short shelf-lives, and the clock is ticking rapidy from the moment they go into the packet. Most retailers insist on receiving the product with 70-90% of the shelf-life still available: if the shelf life of a ready meal is 12 days, they want 10 of them in which to try and sell it. If the manufacturer has already held the food for 3 or 4 days, many retailers won't touch it – they'd rather get produce from elsewhere with a longer shelf-life.

If manufacturers tried to avoid all this waste by making less than the supermarket's forecast order, they'd risk failing to meet the contract. If they have a written contract, the supermarket may fine them for failing to meet their side of the bargain. Much of the time, however, the supermarkets are careful to avoid making any sort of contract at all, preferring to suspend, reduce or cancel orders at the last minute. If a manufacturer fails to meet orders, the supermarket can simply takes its custom elsewhere. It's for this reason that the manufacturers will routinely over-produce just to avoid upsetting the supermarkets.

That's the end of section 1 of the lecture. From now on you have to take your own notes on the pages provided.

Let's move on now to look at the labelling on food packaging and how this also contributes to the problem of waste. There's one thing which supermarkets live in absolute fear of, and that's food poisoning. Just a single case of this can cause sales to plummet and share prices to dive. In order to ensure this doesn't happen, labels tell us when a product is best eaten before and this date is actually set much earlier than necessary, in order be as sure as possible that the product's absolutely safe to eat.

Yet these labels can also be very confusing for the customers. Think about the last time you checked a label in a supermarket. Did it say 'best before' and then a date, or 'use by' and then a date? It might also have had extra information such as 'sell by' or 'display until' written on it. In fact these last 2 are only there for the benefit of the retailer and are of no use whatsoever to you the consumer. Going back to the first of these labels, the *best before* date is for lower risk foods. This indicates that the food would be at its best before this date but not necessarily that it's unsafe to eat it after it after that date. This includes products that are stable at room temperature such as bread or cakes or chilled foods which don't support the growth of food poisoning organisms if stored properly - such as butter or margarine. In fact, many of the products which carry 'best before' labels don't need to have any label at all. The law explicitly states that fruit, vegetables and any bakery products designed to be eaten within a day don't have to be labelled – and yet supermarkets routinely package them and date them. This leads people to throw them away when the date has passed, even though they are perfectly edible.

It's really not difficult to decide when *fruit* is passed its best – it goes wrinkly – and yet people seem to trust the labels more than their own judgement. Lord Haskins was once one of the chief advisors to the government on food and farming, and he's also ex-chairman of one of Britain's largest food-processing firms, Northern Foods, and he's therefore a very senior member of the food industry. One might expect him to defend the practices of supermarkets. But in fact he argues that the principle function of best before dates may merely be to increase the profits of the supermarkets, primarily by giving consumers the impression of guaranteed freshness, but it may also be that they encourage us to throw away more food so that we have to come back to the shop more often.

The second kind of label I mentioned was *use by* dates. According to the Food Standards Agency, or FSA, these are supposed to be reserved for those pre-packaged foods which are 'highly perishable and likely after a short period to constitute an immediate danger to public health'. Basically that means food which is going to go off and make you ill. The law doesn't stipulate how long the shelf-life of each product should be. That's determined by manufacturers according to their own assessments. Neither does the law give a list of foods that fall into that category, but it's likely to include the following:

dairy products - not including butter

- > cooked or partly cooked products and this includes sandwiches
- cured meat
- ➤ fish
- ≻ ham
- smoked salmon

Although in practice raw meat and fish are almost always given a use-by date, by law they could be covered by best-before dates because the customer would be expected to refrigerate and then cook them, thus preventing exposure to dangerous bacteria.

So we can see that the best-before date and the use-by date have very different purposes under law: the first is merely a guarantee of quality; the second is a guide to food safety.

This system of labelling was introduced in the 1970s and has therefore been with us for over 30 years now. Yet the public is in utter confusion as to what they mean. According to some surveys, up to 80% of the British public misinterpret the function of the various terms. And many people are even more cautious than the labels and don't eat food if it's even *approaching* the date stated. The biggest area of confusion is when customers treat a best-before date as if it were a use-by date and throw it away because they think it's unsafe to eat. According to one survey, more than a third of the population mistakenly believe that any product past its best-before date is liable to poison them and should never be eaten. Inevitably, this leads to a lot of perfectly good food being thrown away.

So how long is food good for? Well this obviously depends and the best way to tell if food is OK is by looking at it and smelling it. Lord Haskins, who I mentioned earlier, claims that if meat is 5 or 6 days out of date, he'd have a look, smell it and probably eat it if it had been stored in the fridge. Dairy products, like yoghurts, even if they were a month out of date, he'd also probably eat as long as they looked and smelled OK. So the lesson is, if it looks OK and smells OK, it probably *is* OK. Don't worry what the date says.

OK, so we've looked at a number of ways the food *industry* contributes to the generation of unnecessary waste. Now I'm going to turn the spotlight on you and me – the consumers.

How much food do you think you waste in an average week? A kilo? More? Less? You might not be surprised to hear that WRAP found that the average person vastly underestimates how much they throw away. In order to look at why this might be, I need to briefly return to supermarkets before looking at what we're doing wrong.

We've already seen how supermarkets manage to push some of their waste back up the food chain onto the manufacturers. Well, they're also very good at pushing waste down the food chain onto us. One of the many ways they do this is through Buy One Get One Free deals. I'm sure you've all seen these in Tesco, Sainsbury's or wherever you do your shopping. These can offer great value for money, but only if you actually need what you're buying. What in fact usually happens is that we take something home which we're not going to eat and the supermarket has succeeded in offloading a surplus product. Tim Lang is the professor of food policy at City University in London, and he sees waste as embedded in the structure of modern food supply. He says: 'Food pours out of the supermarket machine, and it ends up being dumped on consumers. It has to get down people's throats and consumers are colluding with that: the abundance model of food has been built into consumer culture. Supply is dictating demand; the tail is wagging the dog.

But it would be unfair to lay the entire blame with the supermarkets. If we look at what we throw away and how much there is of it, it's clear that there's an awful lot more we could do to improve. Through a protracted examination of the bins of more than 2,000 households, WRAP discovered that the British now throw away 6.7 million tonnes of food every year. That's less than the *combined* wastage in the rest of the food industry but it's still the biggest contributing sector. Comparisons with other European countries suggest that Britain compares very unfavourably in this respect and no better than the Americans. However, I should add here that although the percentage of food wasted in US homes could be lower than in the UK, US homes actually buy more, so the quantity discarded per head is still higher.

WRAP's done a huge amount of research into the reasons why people buy more than they can eat. One phenomenon they identified is what psychologists often describe as 'Good Mother Syndrome' – always wanting to make sure there's enough choice and plenty of food to satisfy the family. In many cultures, a well stocked kitchen has long been a principal signifier of status and affluence. Anybody who's entertaining guests or even just cooking for the family would rather cook too much than run out. In that way, we operate a bit like a supermarket, projecting an image of unlimited abundance.

Another reason might be that spontaneity has become an important feature of many people's lives in the Western world. In the past people used to make a shopping list before going to the supermarket, but this seems to have fallen out of fashion, and now people go out shopping and end up buying things they already have. Today's busier lifestyle also means that we tend to go and do a big shop for the week, often at the weekend, without a clear idea of what we'll be doing later in the week. You might, for example, buy some carrots and beans on a Saturday with the intention of making a healthy meal during the week, but they'll end up sitting in the fridge as you decide to microwave a ready-meal instead – at the end of a tiring day, it just seems so much easier than cooking from scratch.

A final factor which determines how much food we waste is the way we feed our children. This is a photo of my son taken about this time last year. Like most children of his age, he's a very talented waster of food. You can see a piece of broccoli in his hand there. There's probably about a 20% chance that that went in his mouth...at best - most of his food goes down his front, down the side of his chair, on the floor and even on the walls. If I showed you a picture of the rest of the kitchen, you'd see carrots he's mistaken for missiles and a bowl of soup he decided to pour on the floor. This is a normal, average meal. The amount of waste he creates is unbelievable. For most of us, this is a normal part of bringing up children. But it needn't be like this. An Indian friend of mine, instead of giving his son a plate, hand-feeds him small pieces of food. Although this might seem time-consuming and indulgent, this really cuts down on food waste and doesn't create nearly as much mess.

So there you have a few examples of how we waste food as consumers. Now that we've looked at the main causes of waste – supermarkets, manufacturers, labels and consumers – the final question to ask is what can be done about the situation, and this brings me to the final part of the lecture. So what can be done?

In a lecture of this length, it's not possible to offer solutions to all the problems I've mentioned. All I'll do is highlight 3 very general areas identified in Stewart's book and then mention a few things I think we might be able do as individuals.

According to Stewart, at the cornerstone of managing food waste is what he terms the 3 R's: reduce, redistribute, and recycle. The first thing has to be to stop creating surplus waste in the first place, thus avoiding the expenditure of resources and strain on the environment. The second priority, when surplus does arise, is to ensure that whatever *can* be eaten by people *is* eaten by people, which means donating and redistributing it for human consumption. Even when all avenues for this primary use have been exhausted, food still has enormous potential, and the question is how best to recover value from it – whether to feed it to livestock, or to break it down in industrial digesters to make heat, power and soil-enriching compost. But those are very general recommendations and ones which need to be addressed by those further up the food chain than ourselves. So I'd just like to finish by considering what we can do as individuals to help improve the situation.

I mentioned earlier that sell-by dates are set far too early, as supermarkets tend to err on the side of caution. This is leading to a thriving trade by websites selling discounted groceries past their official shelf lives. Last year, the site *approvedfood.co.uk* reported a 500% increase in sales on the previous year, while another, *foodbargains.co.uk* recently ran an apology on

its website over backlogged orders due to high demand. Most of the goods sold on these sites are past their best-before dates but not the use-by dates, and have been bought at knocked-down prices from wholesalers, suppliers and supermarkets. Why don't you try one?

If you do go to supermarkets, try to shop frequently for a little, rather than infrequently for a lot. This will reduce the number of fresh items you buy with the best of intentions but don't get round to cooking for whatever reason maybe you've ended up visiting friends, eating out or studying late in the Self-Access Centre.

And if you do go out to eat, there are a number of restaurants which are now trying to address the issue of waste in their own way. A Nigerian restaurant in East London called Suya Express asks customers who don't finish their dinner to donate £2.50 to Oxfam. A similar scheme is running in a restaurant in Chinatown. Another restaurant reduced the size of all portions but offers to 'supersize' for free if people ask them to do so. This way, people with larger appetites are still satisfied but less food is wasted. Again, why don't you try one?!

Finally, instead of throwing away what you don't eat at the end of a meal, try to make the most of your leftovers. Think about how they can contribute to or even become your next meal.

To sum up then, food waste is a huge problem in the developed world, and its effects are felt all across the planet - both at an environmental and societal level. We've briefly looked at some of the main causes of waste but, with more time, could have looked at many more. I haven't had time to even *mention* farming methods and agricultural policies at government level. These too greatly contribute to the problem. But I hope I've said enough to raise your awareness of this issue, which I believe should become one of the highest priorities on the environmental agenda. And I hope that when you eat your lunch after this lecture, you'll only cook or order as much as you need....and make sure you eat all of it!

That's the end of today's lecture – thank you for your attention.