### Mark Barthel, Special Advisor The Waste & Resources Action Programme (WRAP)



### SUSTAINABILITY IN RETAIL

Retailing in the Green Economy: Getting Serious about Sustainability

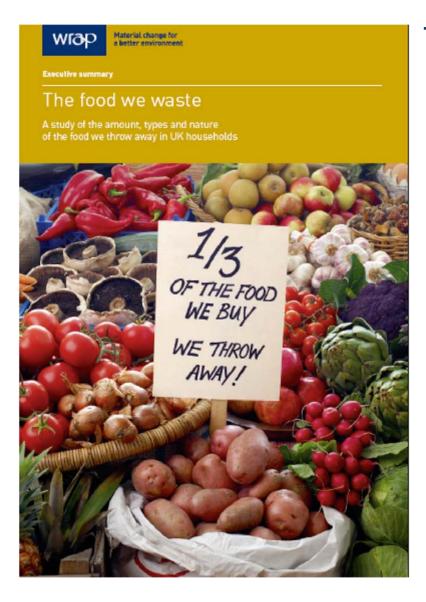






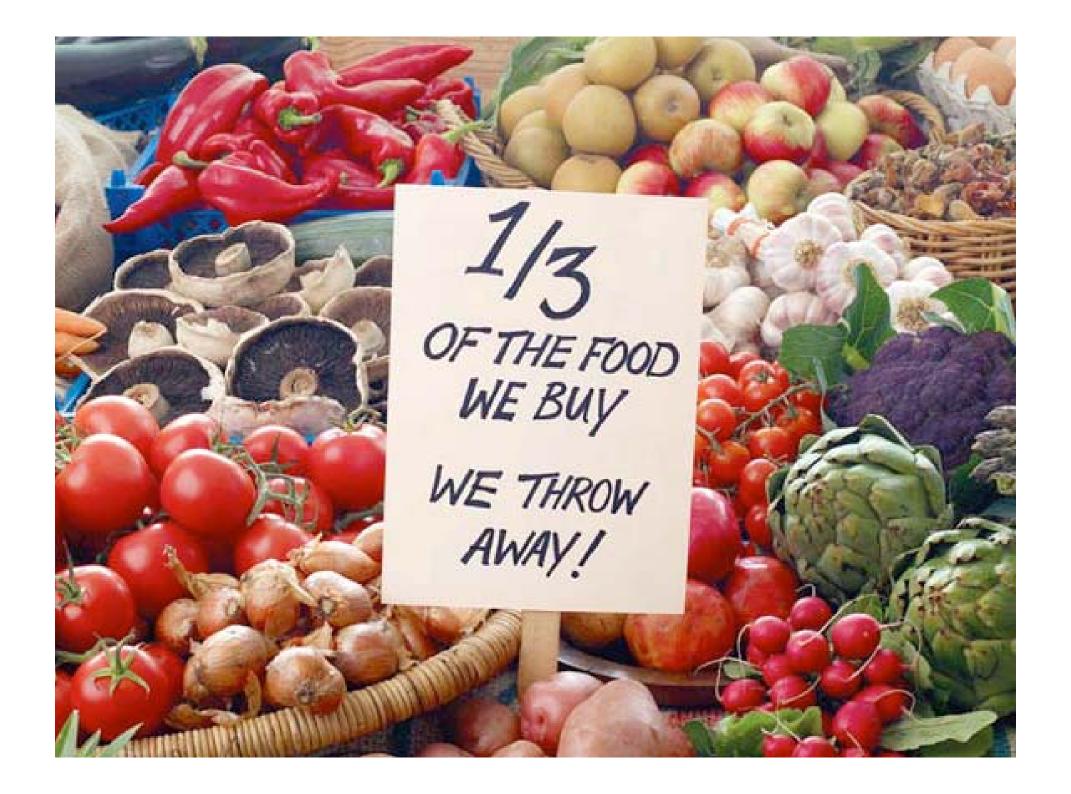
#### Presentation outline

- The Food We Waste
- Consumer insight
- Implications for the food industry
- Developing solutions and driving loyalty
  - Communications to support the customer
  - Changes to product / service offer
  - Changes to the retailer environment
- Top Tips



### The study

- Largest of its kind ever in the UK, and probably the world.
- More than 2,000 consenting households involved.
- Innovative, objective, multi-method approach:
  - Survey;
  - Kitchen diary; and
  - Waste analysis.















## Staggering





### 6.7 million tonnes a year



5.6 million tonnes a year



0.6 million tonnes a year

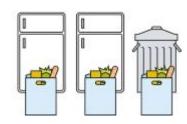


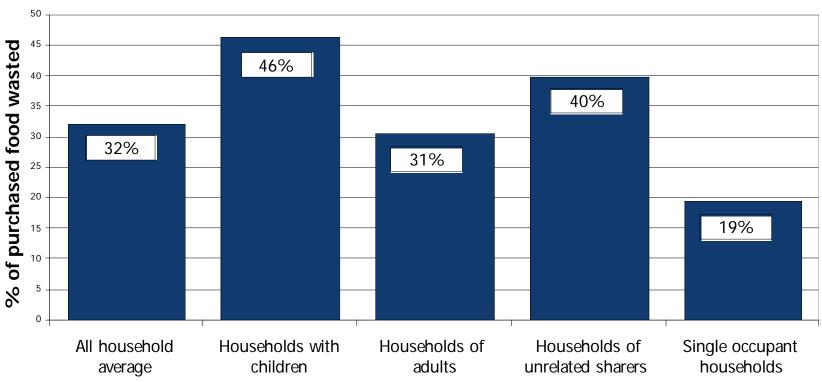
0.3 million tonnes a year



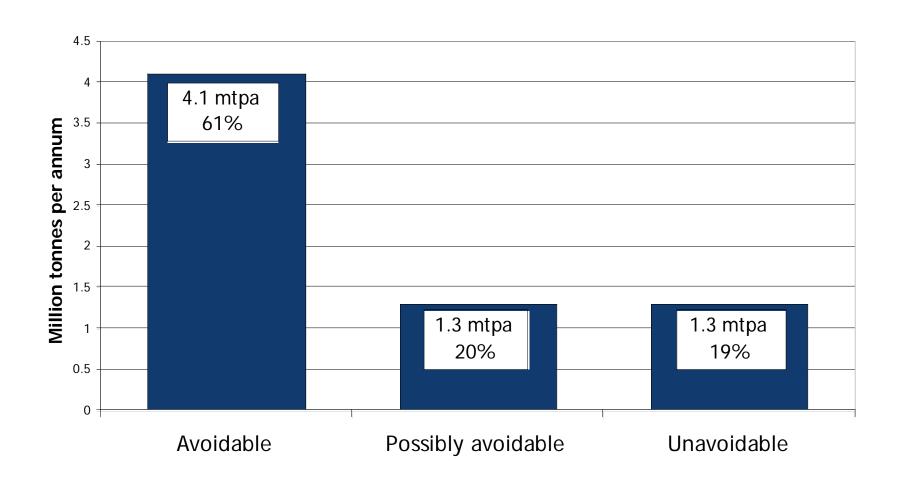
0.2 million tonnes a year

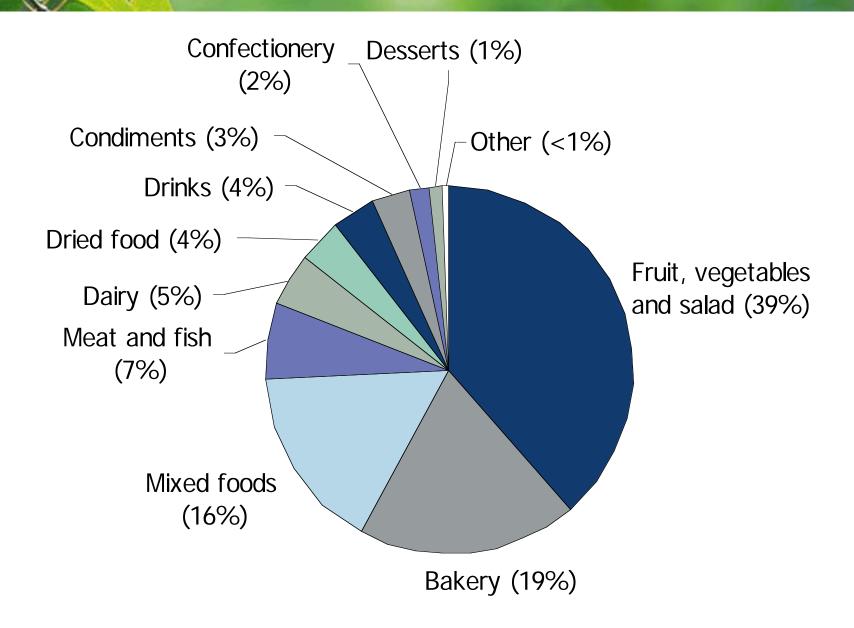
### We throw away a third of the food we buy



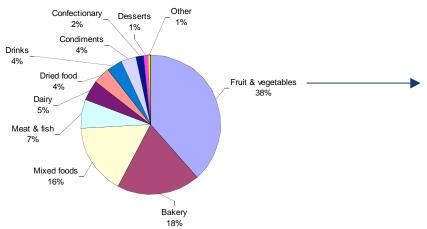


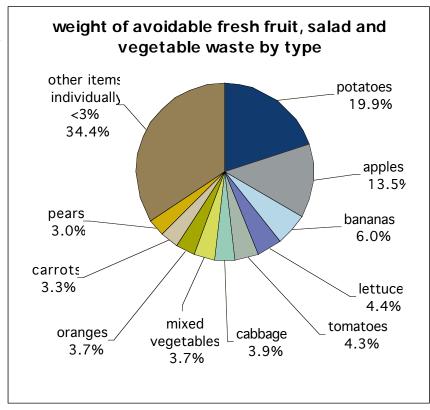
# Mostly avoidable



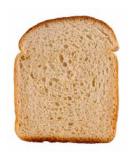


### Avoidable food waste (by weight)





### Some key foods wasted needlessly



Slices of bread 328,000 tonnes a year



Meat or fish meals 162,000 tonnes a year



Yoghurt & yoghurt drinks 67,000 tonnes a year



Bottled water 27,000 tonnes a year



Chocolate and sweets 31,000 tonnes a year



Eggs 19,000 tonnes a year



## Avoidable meat thrown away each year - equivalent whole animals



33 million chickens



3 million pigs



350,000 sheep



100,000 cows

## Costly





### £10.2 billion a year



£8.5 billion a year



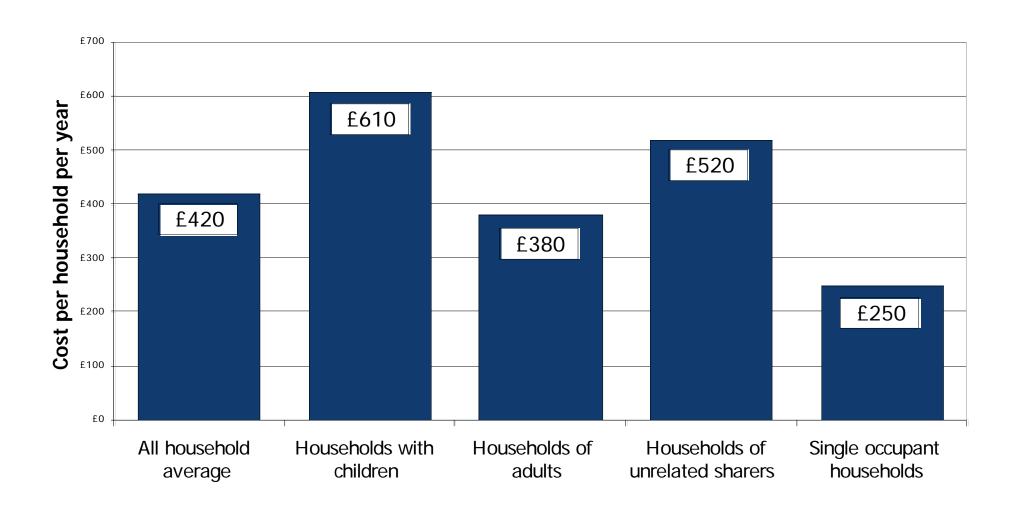
£0.9 billion a year



£0.5 billion a year



£0.3 billion a year



### Some key foods wasted needlessly



Meat or fish meals £602 million a year



World breads £389 million a year



Apples £300 million a year



Pizza £170 million a year



Crisps £82 million a year



Cakes and gateaux £36 million a year

## Harmful

to the environment



## Food waste is responsible for the equivalent of **18 million tonnes** of carbon dioxide











# Each **tonne** of avoidable food waste is responsible for the equivalent of **4.5 tonnes** of carbon dioxide equivalent

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O \\
CO_2
\end{bmatrix} \begin{bmatrix}
O \\
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\end{bmatrix}$$

# Often untouched

Nearly a **quarter** of avoidable food waste is thrown away **whole**, **unopened** or **untouched** – nearly **1 million tonnes** and **£2.3 billion** a year







### Key foods thrown away whole and untouched



Potatoes 5.1 million a day



Slices of bread 7 million a day



Unused teabags 520,000 a day



Sausages 1.2 million a day



Yoghurt & yoghurt drinks 1.3 million a day



Packets of crisps 300,000 a day

# Left on our plates

## We leave 1.2 million tonnes a year on our plates



Meal leftovers 582,900 tonnes worth £1.7 billion



Potato 150,000 tonnes worth £150 million



Bread 93,900 tonnes worth £230 million

# Sometimes in date

## At least 340,000 tonnes a year is thrown away still in date

Worth nearly £1 billion



Nearly 20% of that hasn't even been **opened** 

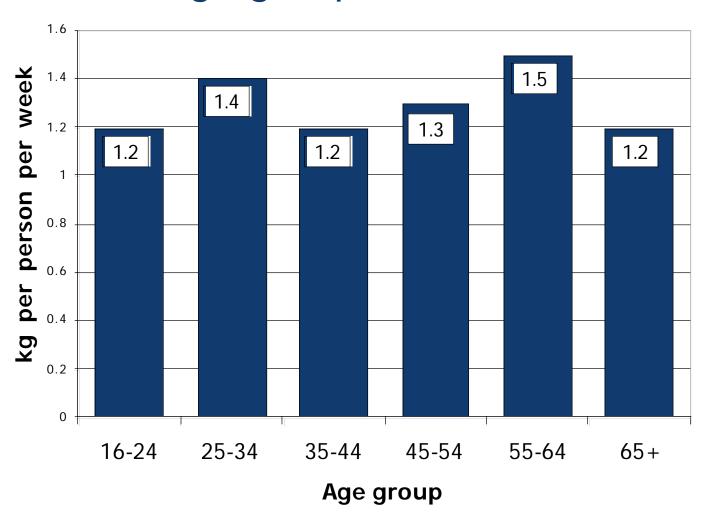




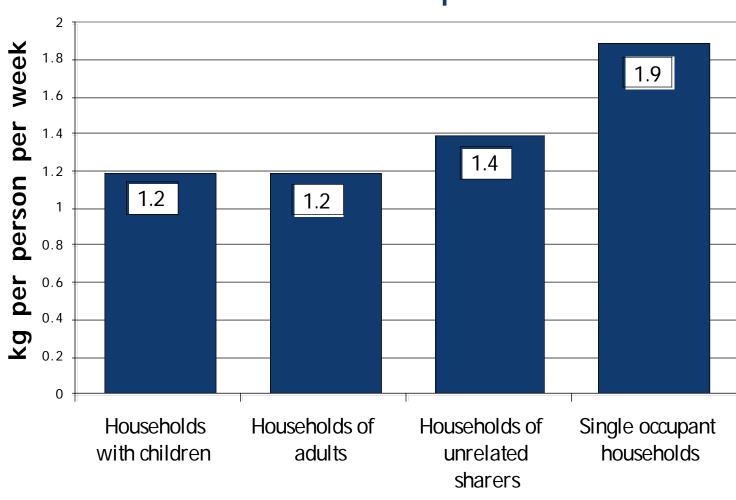


# Produced by all of us

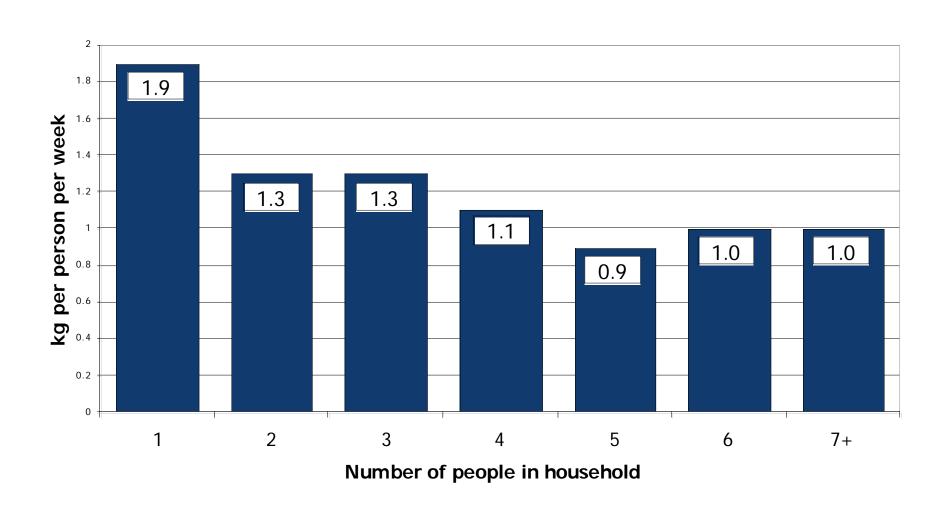
### Different age groups



### Different household composition



### Different household sizes



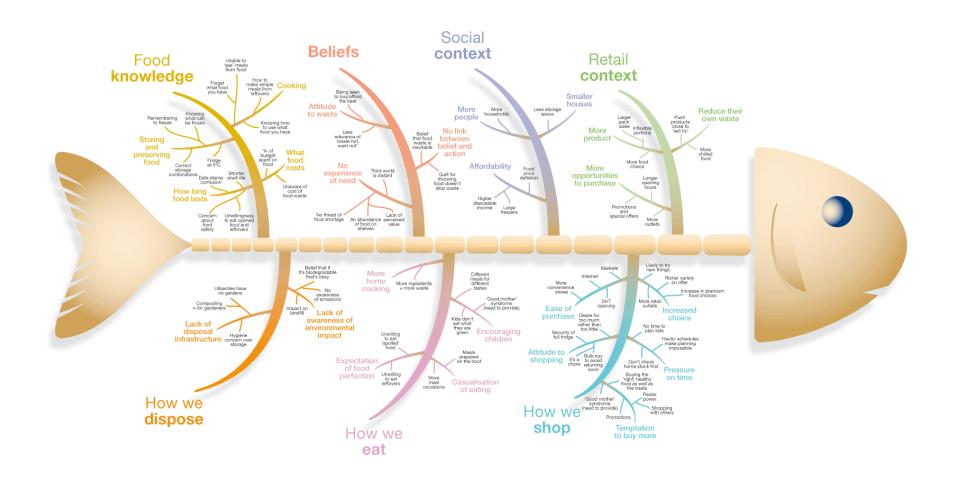
# Invisible to most of us



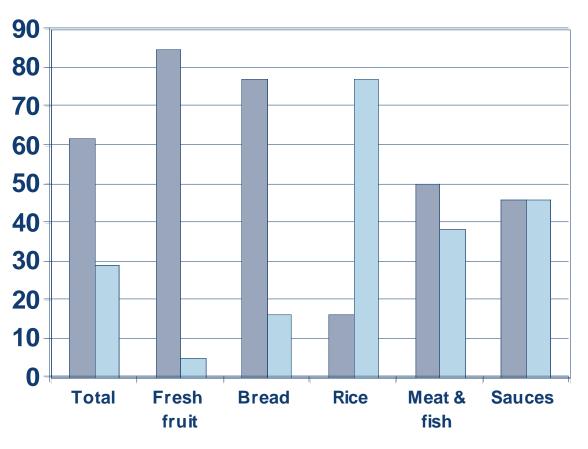
Even households that are adamant they waste no food at all throw away nearly 90kg a year of avoidable food waste

The food we waste is ...

# ... a result of habits and behaviours



### Why is Food That Could Have Been Eaten Thrown Away?

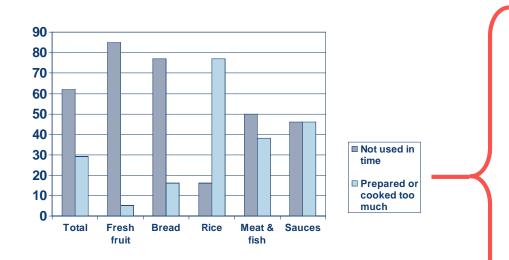




(WasteWorks 2006)

- Not used in time
- Prepared or cooked too much

## Why is Food That Could Have Been Eaten Thrown Away?



- Not planning meals
- Not checking stocks
- Not taking a list
- Tempted in store
- Unclear about dates
- Unsure about storage
- Poor portion control
- Lack of confidence wrt "leftovers"
- Changing plans
- Food rejection
- etc

## Why is food that could have been eaten thrown away - examples



- Only 58% use a list, and half don't stick to it
- 61% tempted by special offers (BOGOF, etc.)



- Almost half don't understand food dates
- 36% treat "best before" as "use-by"
- 53% would never eat fruit & veg past the BB date



- Many don't store food as recommended
  - 11% keep bread / 6% bananas in the fridge
  - 13% store sliced meats "naked" in the fridge
  - Average fridge temperature 6.6°C v's 1-5°C
    - 50% shelf-life for deli meats / 25% for milk

The food we waste is ...

## A massive opportunity



## The fight for the world's food

Population is growing. Supply is falling. Prices are rising. What will be the cost to the planet's poorest?



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### How Tesco is addressing the issue of food waste

Supermarkets came under fee this week for not doing enough to out down on waste. Nothing rould be further from the truth

act Wooday the Cabinet Office. published its Food Strategy Report, which highlighted the opet of food waste to finish consum ers: every year we throw many 4.3 million tennes of food that could have been esters, costing each household an average of £420

Evidently this is not modoews fire our wallets. Moreover, decomposing foodin landfill siteshasserious conse quenos de global varraing. At Tesco echara been working basel to belp our customers to cut slower on what they theoremay, exitis frustrating to hear critics suggest this weak that retailers are to blame for the problem and that government ought to be tougher with us. It is hard to see how government intervention nighthelp. This is not a etrationthatoalistoregulation - it is "Good packaging is the one that demands innovation.

Some people have quoted whether promotions such as buy-one-get-onefree empranage people to buy more than they need. Our contomers, indisking students and the elderly, tell us that they use these offers to save money and often share any perishable | the extinat way for as long as possible. surplus with friends and family.

It is important to remember how such as confinitional legified gratury been operated. time you will find five different fluid: Offering the right portion size run carting down on food wasts will be being offered at half price.

down on food waste by getting prod- households who carnot use a whole exts into customers' homes in mint. Roughoufuntine. condition and then helping to keep Semilarly, education can play an



### key to cutting down on food waste by getting products into homes in mint condition"

We should not underestimate how stuck poor packaging leads to food faint haviness could not like that much our customers appreciate being full impericular being enabed and Wernesson and maniferant performance of feed among of province there you have even by a revening with our more daily to fine tune the balance ticularly law-income householde and suppliers to increase the use of techthe chiefty. At Toron, we take a com-monsorme approach to choosing the life, such as modified atmosphere the good work being on the very of the good work being deep by relation. right promotional tool. On products — packaging or hopitastic film. Some — government senergies are best sport others food waste can be a particular — inhan are simple, such as as-wealthle — informing people, as they have done problem such as produce - we have puckaging on choose or salads to help httliantly through WRAP's Love Food introduced more long term price cuts, imministration becomes onco a product has a Waste campaign.

and sugetable products in our stores. Have a big impact too. A popular enample is our asogloaf of bread which many of our contorners. And, as our, engethree a nat proc.

Conducting in the key treating is perfect for small or single person we will be there to help.

important role, whether that means improving labelling so that customers. Webstradoma bruteshmuntedne life, aroffering tips online. For example, we recently launched a comparign. in Tescourses to show people which products to keep in the fridge.

Office are quite wrong when they access repermanders of throwing wear large quantities of edible food because between availability and waste.

Sather than setting in the way of

However the economy develops,

legal affairs director at Tesco

### Ocado sets up unique waste reduction drive

### Chloe Smith

Ocado has launched a groundbreaking new initiative it claims will help consumers dramatically reduce their fried waste.

From September, the unline retailer will display product use-by dates online and on receipts, "It means the food we sell will be fresher on average than any supermarket," said CFO lason Gissing, unveiling the initiative the same week PM Gordon Brown called on consumers to make reducing food waste as important as saving energy.

"It will make a huge difference to the business because we won't be wrongly accused of sending out products close to the end of their shelf life."

ucts," he said.

It would also help fami-



people will stick the receipt up on the fridge," said "When you're shopping on the site you will always be Gissing. "I know this from able to see the life of the my own family. If you have product, and when you go children, if you are able to through the checkout it will stick it up on the fridge, cusshow the life of all the prodtomors and their families can plan their consumption

The new receipts will also and minimise food waste. list the food under days of "Customers will trust us the week to show when and buy more from us. shelf life ends. "We think because there is no more

guesswork: Will that steak be oliay at the weekend? Not sore so better not buy it "

The new feature had been under development for six months, he said, "This is a huge project and we are running trials at the moment. It impacts every part of our business from suppliers to warehouse processes to the website design, to the amount of stock we hold as a business, to the receipts and customer proposition.

"No-one has ever done this before in food retail around the world and the reason for that is complexity. We have had to change and upgrade every process over six months.

"We have got about 14,000 different types of product, so we have to be meticulous about the dates and watertight on processes."

### Public warms to frozen food

The frazen food sector has come in from the cold as consumers have recognised its intrinsic health - and waste reduction - benefits, writes Jeff Clark-Meads

As year of little or ingreen.

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This upturn is not just because of manufacturers on the property of the proper

frozen food





### Waste not, want not



iron Action Prognersme W/5 for its recently wursthed er Food Visp sterde circonig ed that in the UKwe three. you a steadering over third of the food we buy TV phat Already

Hernot Gatranti, is supporting the companys along with Support to the purified to know how in

aut down on flood worde, you and round its core along transic the rest will below." up in landfill where it potent greenhouse gal. This sed that so much food is being

ested needlessly, says Or Lie Goodwin, WIFAP Charl Everyative. Persy cost of 28bir ayear, it's a serious issue that not only impacts the environment but our pockets, too." Add in the arrangy-received to purkage, transport and deliver feed to our homes and it all produces the equivalent of of load 15 willers torress of particle dipode every you. Prevening the would be the same as taking strein feet use of UK tooks," explains List Goodwin.

TOPTIPS to preven had write If Make a shooping fist and stick to it. \* Watch your portion control, only costs what you need, so pasts and rice. S live up leftovers in scops and saleds.
For more information on cutting down on Food waste, 'ways with leftsvers' plus ideas on preparation, storage, portioning and recipes, wint were level to other tensure core.

### Food Sainsbury's Only £120 HELLO

### A feast of fruity puds

### New season flavours

- Nigel Slater's jellies Skye Gyngeli's salads
- River Café risotto

### IN THE PINE Easy ideas

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> THE BEST PES FAMILY food DVENTURE

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### Food Waste

A Food A Food source and policies: A Food Waste

### Food for thought

Each year, we throw away 6.7 million tonnes of food in the UK. This costs each British household between £250 and £400 a year". Recent research by the Waste Resources and Action programme (WRAP) has shown that around a half of this food could have been eaten. The main reasons for this wastage appear to be we either cook or prepare too much, or we forget food and let it go off.

The majority of our food waste, like other household waste, ends up in landfill sites, But, with space expected to run out within the next 10 years, something has to be done now to reduce the waste we dispose of in this way. This waste also impacts our dimate - as rubbish decays in landfill sites it produces methane, a greenhouse gas judged to have 20 times more impact on climate change than CO2

As a signalory to the Courtauld Commitment, Waltrose is committed to reducing the amount of packaging and food waste that is thrown away by UK households. As part of this commitment, we are actively supporting WRAP's latest consumer campaign. Love Food, Hate Waste' www.loveloodhatewaste.com @ by helping to raise awareness of the issue of food waste and providing practical information in store and online to help our Partners and customers reduce the amount of food they waste



Save article in sereptions | Pret







Betailers supporting the campaign

Focale across Dritain are adding their values to the Love Food Hate Waste campaign. Add your

EVERYONE RETAILERS LOCAL MITHORIES

RETAILER MESSAGES

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**G**reener*living* 

What we are doing

What you can do: At Work

**Getting Around** 

Welcome to Tesco Gr

Home \* At Home \* Articles \* Cutting back on food waste

Are you wasting more food than you realise?

If you're looking for easy ways to reduce your food waste, a new campaign supported by Tesco can help.



DeLicio.us

C Google

E Eacebook

Yahoo MyWeb

It's rather sobering to think that a third of all the food we buy in the UK is thrown year. That's 6.7 million tonnes, and most of it could've been eaten. This waste for off to landfill sites around the country - and it takes a lot of lorry fuel to transpo

Once in the landfill the food releases methane as it rots, which is a sensus conti

But it's not just that - the energy and resources that go into producing the food i all of which have an impact on the environment, are wasted. So what can we de-

Well as ever, it's about making a joint effort. If everybody changes their behavior adds up to a big difference.

At Tesco, we're looking at ways to minimise food waste from our stores and th reviewing apportunities to divert all of it away from land file.

But the real opportunities are in people's homes up and down the country. Most being a bit more thoughtful about your food waste.

The Love Food, Hate Waste campaign





- Apples, potatoes, bananas, tomatoes and oranges are the top fruits thrown out whole and without even a ribble on them.
- You'll start to find helpful storage tips instore, on all pre-packed fruit 8, veg, as well as on shelf information, and we will be naking our storage advice currently on our packaging. larger and easier to read on a variety of packaging to help you keep your fruit and veg fresher for longer and get best value for money.
- Nearly all fruit and yet (except bananas and pineapples) will keep fresher for longer when refrigerated in a plastic or paper bag, and potatoes keep fresher for longer when stored in a cool dark place. If you've gut loose fruit and veg in one of those little plastic bags available around the fruit and salads area instore, or choose pre-packed products try keeping them in the packaging when you get home and use our quick guide for best storage option.

Quick guide - Keeping it fresher for langer

Here's some storage advice to help you reduce food waste and keep your loose fruit and veg fresher for longer.



Refrigerate in bag



Store in their bags in a cool place (avoid refrigerating)





Refrigerate in bag



Refrigerate in bag



Keep in the original packaging 6 refrigerate



Herbs - fresh cut Basi - store at room b All other herbs - refrig in original packaging.



Raspberries, blueberries, blackberries, blackpurrents 8. gooseberries - keep in the original packaging 8, refrigerate



Cucumbers Keep in the original packaging & refrigerate in the crisper draw



### Sainsbury's scottish carrots loose

At home, refrigerate for freshness 894-1232882-0-00-17





28p per lb

















### Our Products

















### How to Store Bread

### The Golden Rules

To enjoy our bread at its very best, you need to store it in the best possible way. While all our products are carefully baked and packaged, here are a few handy tips to make sure you get the most from your loaf.

🗶 Never keep bread in the fridge It encourages the bread to go stale faster.

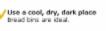


Keep the crust as the top slice This helps to retain softness and maistness in the rest of the loaf



/ Use a cool, dry, dark place

J Keep the wrapper air tight This helps to prevent your bread



### Freeze it

drying out.

For longer storage, bread can be frozen on the day of purchase. Our products can be frozen for up to three months.





Every year in the UK we throw away one third of all



the food we buy - most of which could be eaten. Love Food Hate Waste is a campaign from WRAP (Waste & Resources Action Programme) that provides tasty recipes and top tips that helps us cut back on wasting





### Fresher for longer

Here's a tip...if you store your onions and potatoes in a cool, dark place, (other than the fridge!), they'll stay fresh and delicious for longer.

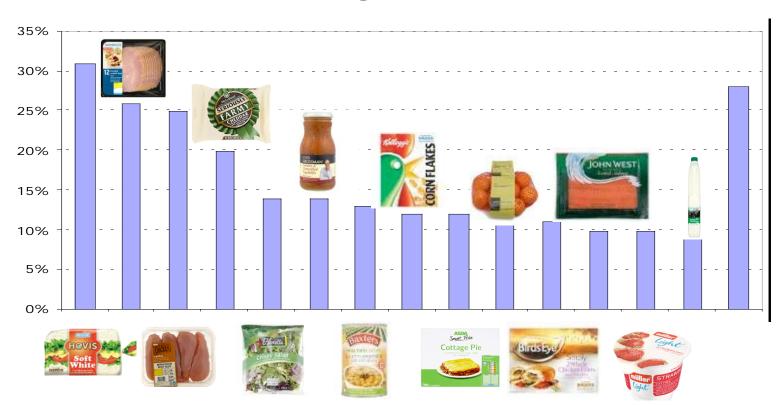
Plan A.







## Which products do consumers struggle to find in the "right" portion size?



### Helping consumers to buy what they need

- Over 30% of households are now single occupancy
- Portioning, formats, etc.



















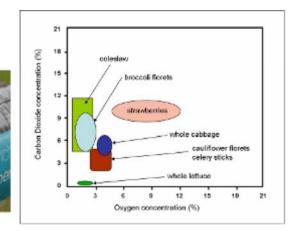
### Give consumers time to use the food they buy

Shelf-life, packaging functionality and technology

OXYGEN ABSCRBER













### Application

Fresh fruit and vegetables (whole, cut/processed).

### Description

Pruits and vegetables continue their natural respiration after they have been harvested, creating multiple challenges in designing their packaging.

With Multivas's FreshSAFE packaging, the product is surrounded by an atmosphere optimized for its individual requirements. The product can continue its natural respiration as a result, so it remains fresh longer without any preservotives.

### Help consumers get the most from their food

- Clear storage instructions
- Date labels and indicators
- Packaging design

















The food we waste ...

## Top Tips!

### Pre-shop:

- Know what you need: a couple of minutes a month saves time and money
- Shop for meals not ingredients

### In-store:

- Stop "sleep shopping": correct your mistakes
- Use promotions to your advantage: don't feel cheated
- Make food dates work for you
- Food storage starts in-store



### At home:

- Buy a fridge thermometer and use it
- Date watchers: manage your food
- The freezer is your friend
- Give yourself a chance: kitchen cupboard staples

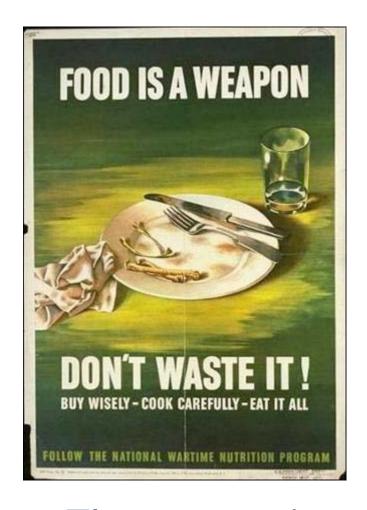
### Food preparation and cooking:

- Count your carb's: how many are coming to dinner?
- Love your leftovers: today's dinner, tomorrow's lunch?











The enemy is now climate change...



