

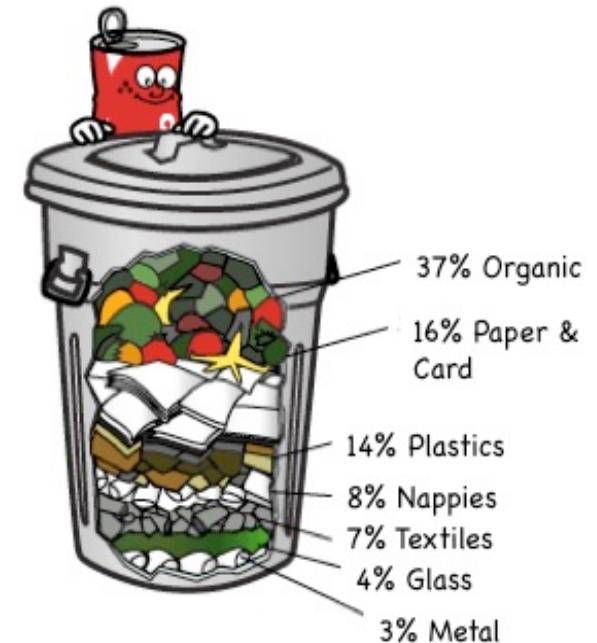


# Food Waste- What's the Story?



# What do we know about organic waste in Ireland?

- The average person throws out almost 300kgs of black bin rubbish each year (the same as three grown men)
- Of this, one grown man's worth, is organics (about 37%).
- This is made up of ~30% food, with the other 7% is garden & landscape materials
- Of the rest of the rubbish, 35% is potentially recyclable.
- So theoretically the rubbish load could be cut by ~70%.
- The average Irish household throws out about 1.2 tonnes of rubbish each year - this is the weight of a small car!
- Message: Savings - both financial and environmental



# Wexford - Enniscorthy

- Pilot Brown Bin scheme
- Looked at bin size
- 60 LITRE BIN IS SMALLEST WHEELIE BIN AVAILABLE
- Survey in MARCH 08
- 119 REPLIES (OUT OF 330)
  - 82% OF THOSE WITH 60 LITRE BIN SAY ITS THE RIGHT SIZE
  - 10% OF THOSE WITH 60 LITRE BIN SAY ITS TOO SMALL
  - 53% OF THOSE WITH 140 BIN SAY ITS RIGHT SIZE
  - 47% OF THOSE WITH 140 BIN SAY ITS TOO BIG
- Bin Survey:
  - 60 LITRE - MOST WERE 75% FULL
    - 16% WERE FULL
  - 140 LITRE- NONE FULL
    - 7% WERE 75% FULL
    - 50% WERE LESS THAN HALF FULL

# Is Ireland the only country wasting a lot of food?

- Amount of organics generated per person annually in different countries

Country	Quantity of Organics Generated annually / kgs
Ireland	103
UK	110
USA	215
Norway	99
Australia	136

- However many other countries (e.g. Sweden, Austria, Germany) have managed to curb the amount of organic waste going to landfill whereas in Ireland it has actually been going up!

# So what food are we throwing out?



There are 3 types of food waste thrown out:

1. 60% is ***Avoidable*** food waste. Plate scrapings, leftovers, gone off fruit and veg, passed its date perishables, etc.
2. 20% is ***Potentially Avoidable*** food waste - this are things like bread crusts, potato skins, etc.
3. 20% is ***Unavoidable*** food waste - like general rubbish, some food waste is unavoidable. Examples are banana skins, chicken bones, etc.

# What are we actually throwing out?

The main food items thrown out are:

- Potatoes
- Apples
- Bread
- Salads
- Meat and fish
- Fruit
- Vegetables

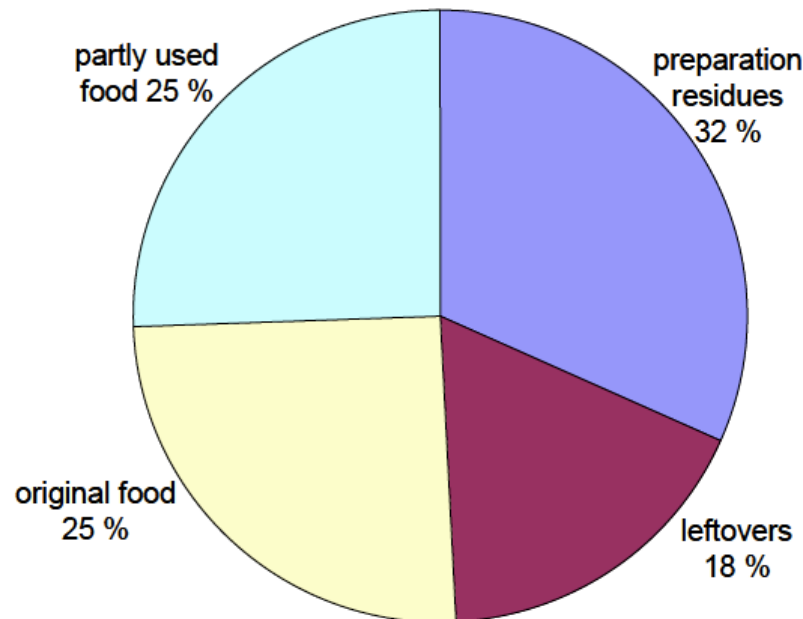
The types of food that we throw out and the greatest proportion of those unused are:

- Salads (almost half of salads bought are binned!)
- Bakery items (just over 30% is thrown out – mainly bread)
- Fruit (1/4 of fruit bought is thrown in the bin)

# Where does this waste food come from in our homes?

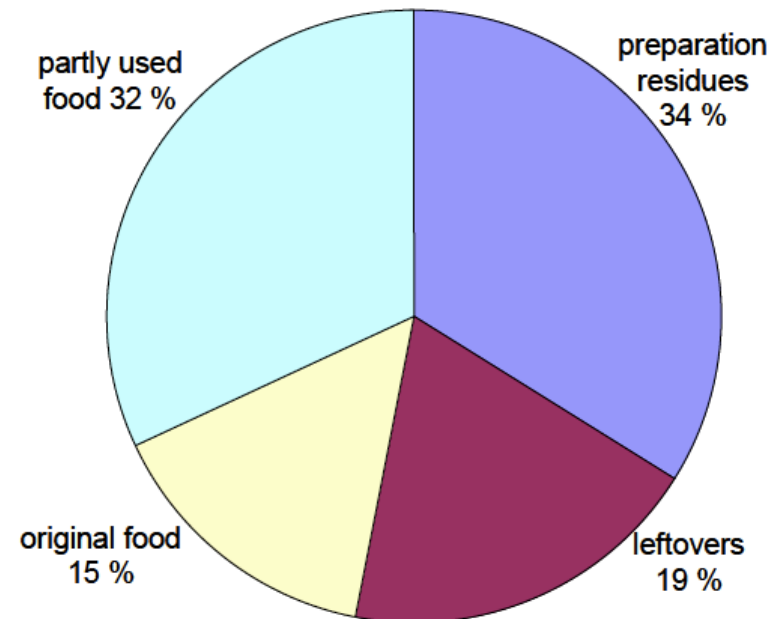
A study looked at the food wastes coming from different sized houses - the results were very similar

Small household



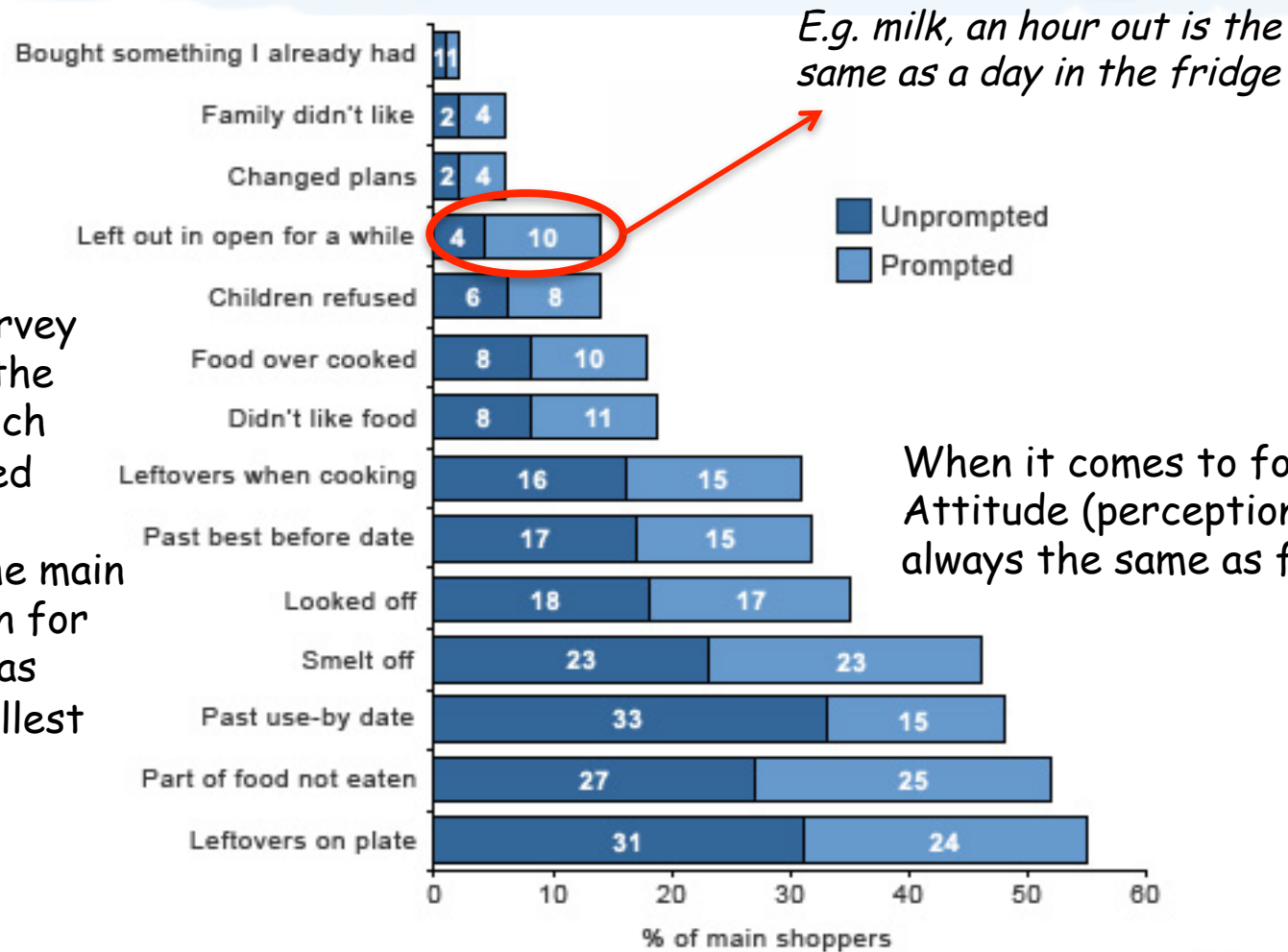
745 samples with 1,700 kg food

Large household



478 samples with 1,700 kg food

# Why do people think food is being thrown out?



Compare this survey of attitudes to the previous one which actually measured wastes. While leftovers was the main perceived reason for waste food, it was actually the smallest when measured.

When it comes to food waste: Attitude (perception) not always the same as fact

# Food Waste - an attitude thing

- During the past 50 years Ireland has evolved from a poor agricultural country to a much more global and urban one.
- Over the past 20 years, with increased GDP and personal wealth, being frugal (i.e. smart!) with goods and food is something that has become less important.
- It is important to remember when it comes to better food efficiency that, in the majority of cases, we are dealing with an attitude shift.
- And this is not easy!

# Different attitudes to food in China

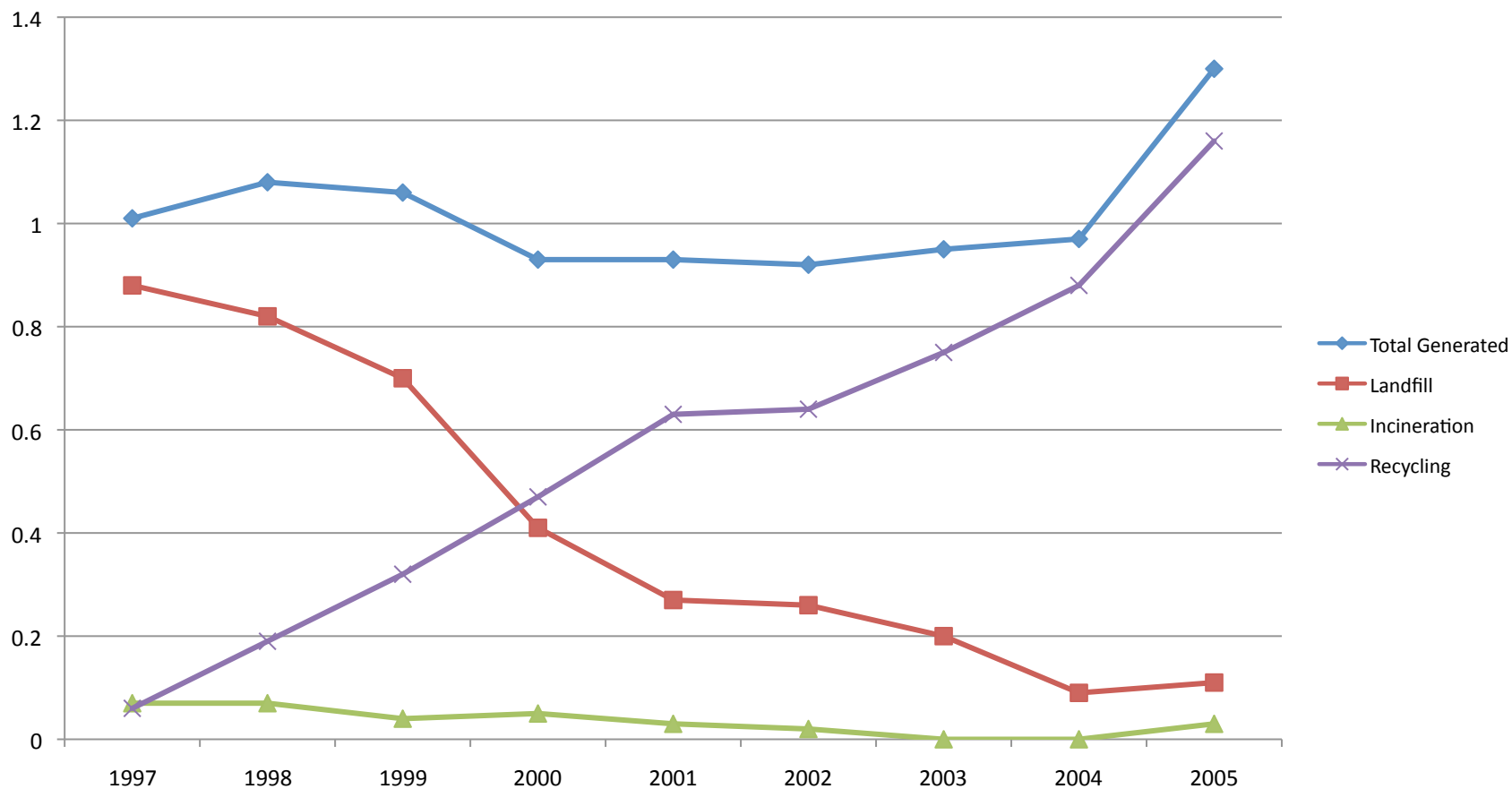
- In the main part of Han China it is viewed as an insult if a person visiting a house isn't stuffed after a meal.
- They think they will be seen as 'stingy' if they do not have an abundance of serving platters with a variety of food.
- This they attribute to the relatively recent famines during the Cultural Revolution in the 60's.
- In the west of China, where famine wasn't as pronounced and a different ethnicity of people live, it is viewed as almost a crime to waste even a grain of rice.
- Therefore, food waste must be seen as an attitudinal or cultural issue.

# Can food waste diversion work?

- Yes - example of South Korea
- Food waste accounts for about 30% of MSW
- Since 1997 this fraction has been directed away from landfill
- A series of measures including food waste reduction, separate collection systems, enlargement of food recycling
- Since 2005, the prohibition of direct disposal to landfill.
- Food waste is collected from householders in bags that are purchased locally - therefore the more you generate, the more you pay.

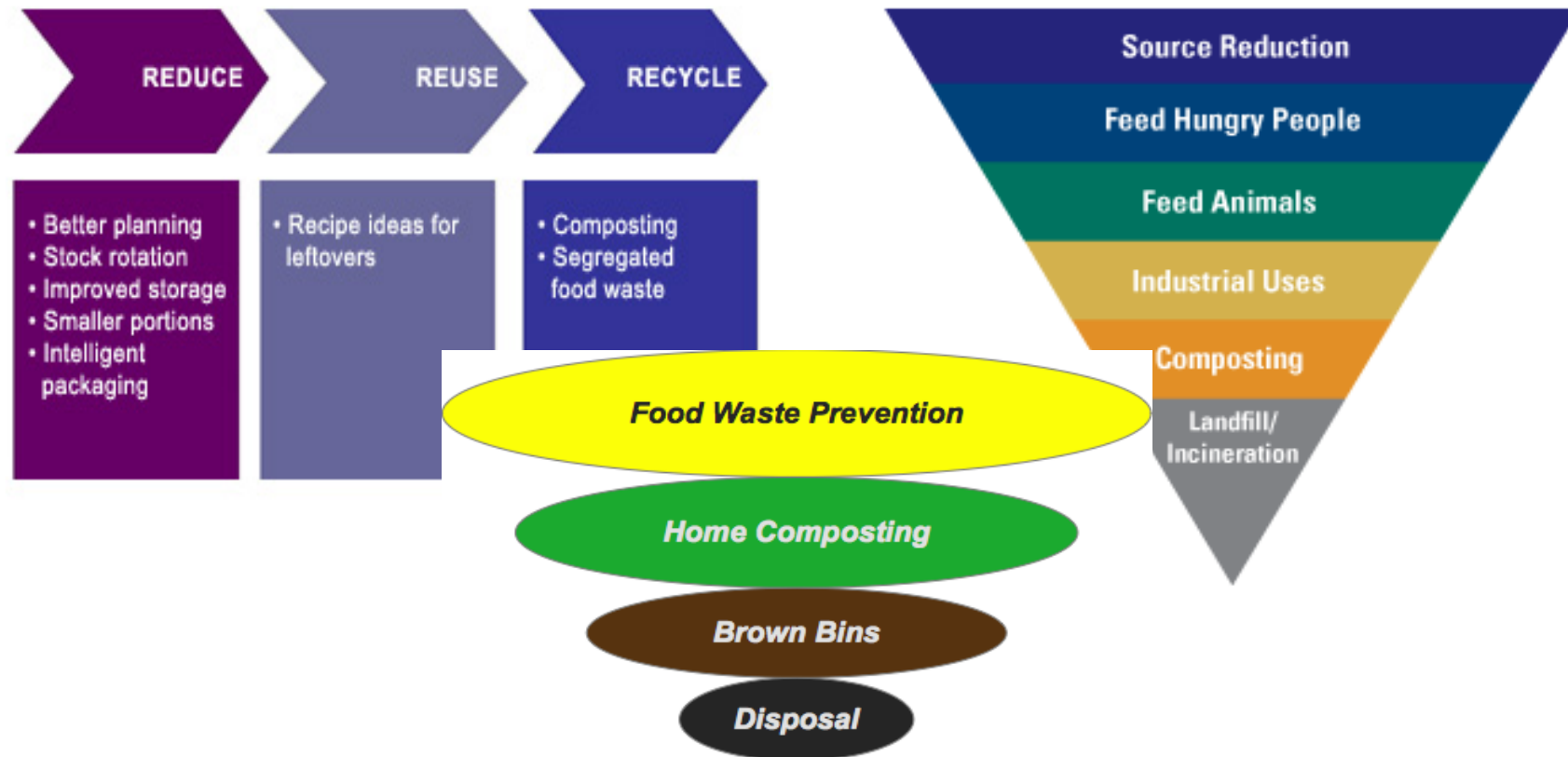
# South Korea Food Waste Profile

Food Waste Generation and Management



# Where do we go?

- Different hierarchies have been proposed



# Food Waste Prevention - message

- Equate food waste to money
- Each household wastes about 1/3 of the food it buys - imagine if someone stole a third of your groceries as you were putting them into your car - you'd be livid!
- Yet this is what we all do.
- If this wasted food was avoided, then each household could save up to €1,000 each year - think of the holidays!
- And the thing is, everyone wastes food - even those who think they are doing well...




# What can be done about this?

There are five general areas where we can improve our 'food efficiency':

1. What kind of food do I waste regularly?
2. When we buy groceries
3. Where and how we store food
4. How we prepare and serve food, and
5. How we manage food that becomes waste

# 1. What kind of food do I waste regularly?

- People are creatures of habit – and this often extends to eating habits and food wastes.
- So, for a week or two, gather all your food waste in a container before transferring it to a bin.
- Then, using the check list on the website  identify the main types of food waste you generate in your home.
- Use this as a signpost to help you identify specific food types where you could improve





## 2. When we buy groceries - Better buying tips:

- Don't go shopping when you are hungry - you'll buy more than you need!
- If you are shopping for the week, try and plan your meals.
- Check your fridge and cupboards before you go shopping, make a shopping list...and then try to stick to it!
- Plan your meals around what you have found in your fridge, freezer or cupboards.
- Beware of special deals - good for toilet rolls but bad for fruit, veg and salads. These are the things we buy because of a good deal but often does not get eaten.

# 3. Where and how we store food - Savvy storage tips:

- Make sure fruit and veg. are stored in the correct place ....we'll look at that next....
- Use your own judgment when it comes to throwing food out. Best before dates are a guide, use by dates should be followed but...food that can be eaten is worth money.
- Keep all dairy products in the fridge and don't leave the milk container out after using as it will spoil faster.
- If you are not going to use meat or fish immediately, freeze it or cook it and eat it in the following days.
- Use your freezer but don't forget what's in there for 3 years!

# Where to store your fruit & veg

Fruit & Vegetables	Best Storage Conditions
<p><i>Refrigerate for freshness</i></p> <ul style="list-style-type: none"> <li>Lemons</li> <li>Apples</li> <li>Strawberries</li> <li>Grapes</li> <li>Kiwi</li> <li>Carrots</li> <li>Peppers</li> <li>Broccoli</li> <li>Mushrooms</li> <li>Salad</li> </ul>	<p><i>The Fridge</i></p> 
<p><i>Keep cool or refrigerate for freshness</i></p> <ul style="list-style-type: none"> <li>Tomatoes</li> <li>Melons</li> <li>Oranges</li> </ul>	
<p><i>Refrigerate for freshness, ripen at room temperature</i></p> <ul style="list-style-type: none"> <li>Pears</li> </ul>	
<p><i>Keep in a cool dark place for freshness</i></p> <ul style="list-style-type: none"> <li>Potatoes</li> <li>Onions</li> </ul>	<p><i>The larder</i></p> 
<p><i>Keep cool but don't refrigerate</i></p> <ul style="list-style-type: none"> <li>Bananas</li> <li>Pineapples</li> </ul>	

# Best-before versus use-by dates

- **'Best-before' date** - the date up until which food can reasonably be expected to retain its optimum conditions. (include frozen, canned and dried foods). This is therefore a general rule of thumb.
- **'Use-by' date** - required for foods which, from a microbiological point of view, are highly perishable and are, therefore, likely after a short period to constitute a danger to human health. Most fresh, ready-to-eat and chilled foods fall into this category.
- When it comes to Use by Dates, remember they are not part of the Cinderella story and change instantly at midnight!
- So when it comes to these dates use common sense, check the dates but also check the food...look at it, smell it.

## 4. How we prepare and serve food - Canny cooking techniques:

- Make stock with leftovers and freeze it as ice cubes - these can be stored and used in the future - easily stored without having to defrost a large container of liquid.
- Use leftovers to make delicious and cheap meals - try this once a week - the last supper!
- Most wastes are related to leftovers - instead of putting too much food on the plate put less out and leave more in serving dishes - these are more likely to be reused.
- It has been found that portion sizes can be reduced by 30% without being noticed - you'll be surprised what you'll have leftover for later if you reduce portion sizes.
- Remember that kids need smaller portions - many portions can be as big as adults resulting in food being wasted.

## 5. How we manage food that becomes waste

- So, if you can, try and reduce the food you waste and the food you buy.
- Food may be cheap to buy, but we tend to forget about the life cycle costs associated with food.
- A life cycle looks at the the impact of food from the plough to the plate.

# The ethics of buying food

- We the consumers do not have a huge impact in the whole lifecycle of food production and distribution (~15%).
- But the process behind our consumption has a very large impact.
- Therefore there is an ethical issue when it comes to food use.
- Food waste may be a small deal for the consumer but consider what has gone into the making and delivery of the food you eat.
- This affects the producers in developing countries just as it affects local Irish producers.

# So remember...

- Try and figure out what you waste on a regular basis - and then plan to stop this food waste.
- Be a better buyer - this will not only save you money but ensure that all the life cycle costs associated with wasted food can be avoided.
- Store your food properly - your food will last longer and you will save money.
- Be a canny cooker - reuse food where you can and try and keep an eye on portion control.
- And if you have food waste, then try and compost it - preferably at home - where you can avail of the benefits and reduce your waste bill.

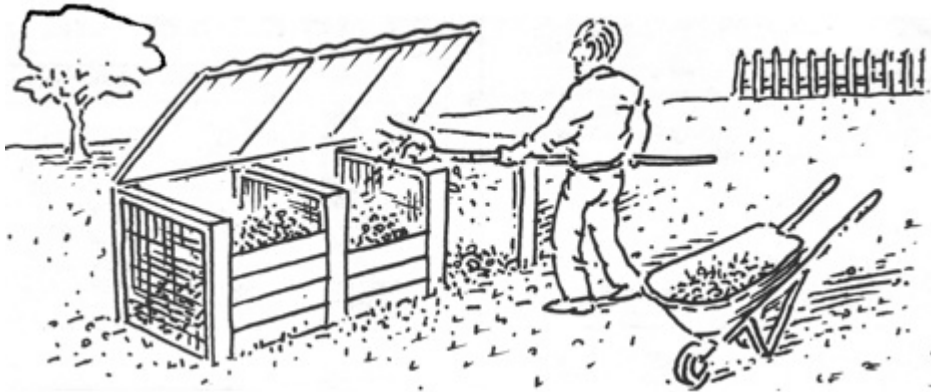
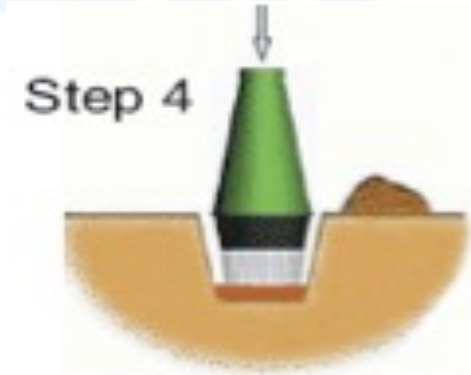
# Prevention is better than cure

However

20% of food waste leaving our homes is unavoidable for example fruit and vegetable skins and cuttings, such as banana, apple cores, onion peelings etc.....

Why not compost this unavoidable food waste rather than paying for it to be sent to landfill?

# Examples of Compost Systems



# Composting Bins & Heaps



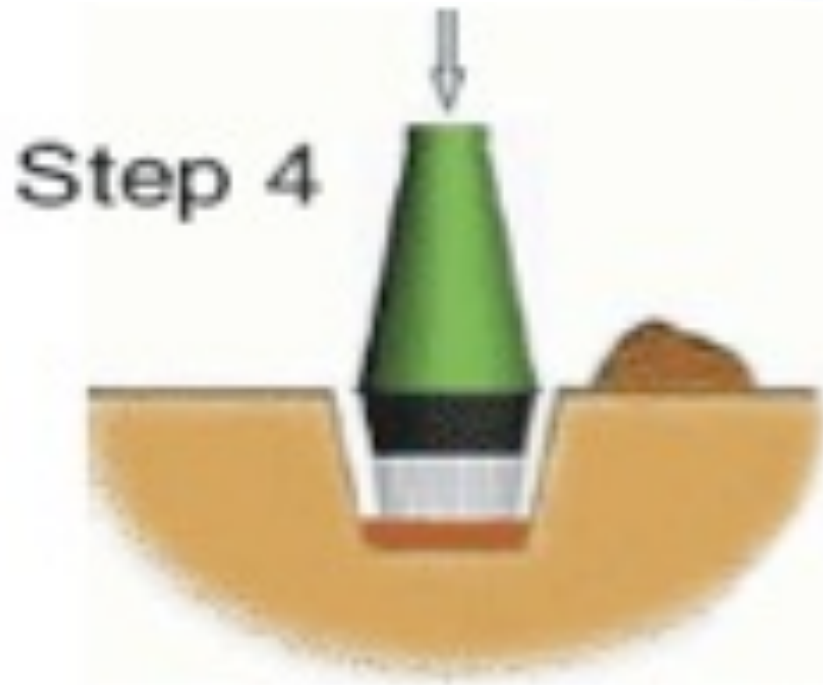
- Ideal for garden waste & vegetative food waste
- Inexpensive and you can build your own
- Capacity can be moderate (4-5 people) to large (6+ people)
- Low maintenance
- Garden space required

# Wormeries



- Use Brandling or Tiger worms.
- Food waste can be added but they will not take citrus fruits
- They can be kept indoors or outdoors
- Low maintenance
- Moderate cost but you can build your own
- Doesn't need a garden

# Green Cones



Ideal for food waste as the waste is buried

You must dig a hole and the ground needs to be free draining

Moderate cost to purchase

Low capacity (3-4 people)

Some time required for turning

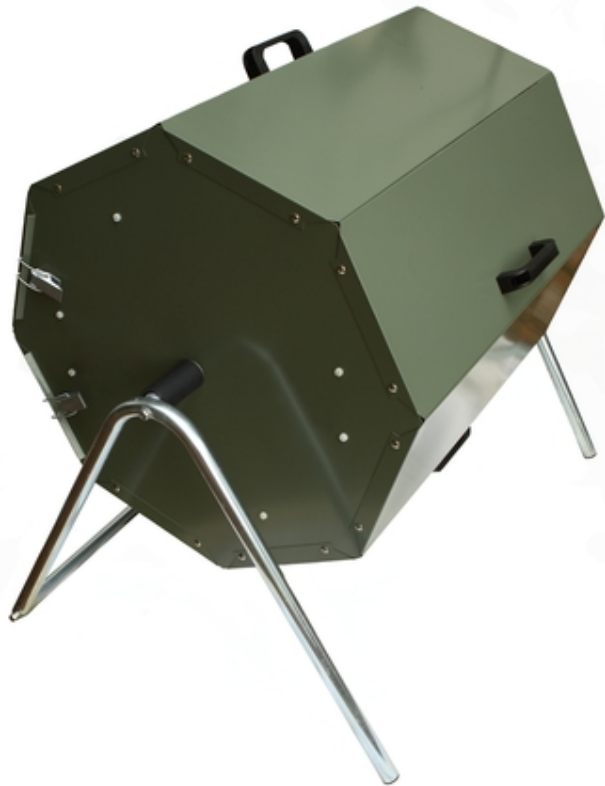
- Garden beneficial

# Bokashi



- Will take food waste and can manage food waste from approx. 4-5 people
- A large garden is required because you will need to bury the waste
- There is a moderate cost associated with this compost system
- There is time required to manage this type of compost system

# Tumblers/Turning Systems



- Doesn't usually need a garden and will take a little food waste
- Can be quite expensive to purchase
- Will cater for 4-5 people
- Some time required for maintenance



For Further Information visit  
[www.stopfoodwaste.ie](http://www.stopfoodwaste.ie)

