

Fighting food waste, one step at a time

For our 2016 research we decided to concentrate on one of the biggest issues within the Catering Industry – waste. Where does it come from, what do we do with it and crucially, how do we reduce the amount produced to a sustainable level? This is not only from a budget perspective, but importantly an environmental one. With populations rising, the amount of food waste we produce as a whole simply can't continue.



It's not rocket science that this is one of the biggest issues that we face as an Industry. We've known this for a long time, yet it's a topic that is seen as almost too big to tackle as a whole. The Food Industry throws away almost 920,000 tonnes of food every year, 75 per cent of which is avoidable, but what to do about it? Reasons for not tackling the problem effectively range from 'it's too hard' to 'every solution costs yet more money'.

However, we don't believe that this is a problem without a solution and when broken down into more manageable sectors, we can all work together to make food waste a thing of the past.

When carrying out this research we questioned those working directly in university catering teams, as well as experts in the field of food waste. We also spoke to university graduates and you, our members, to see what is already being done to address the issue and what should be done in the future.

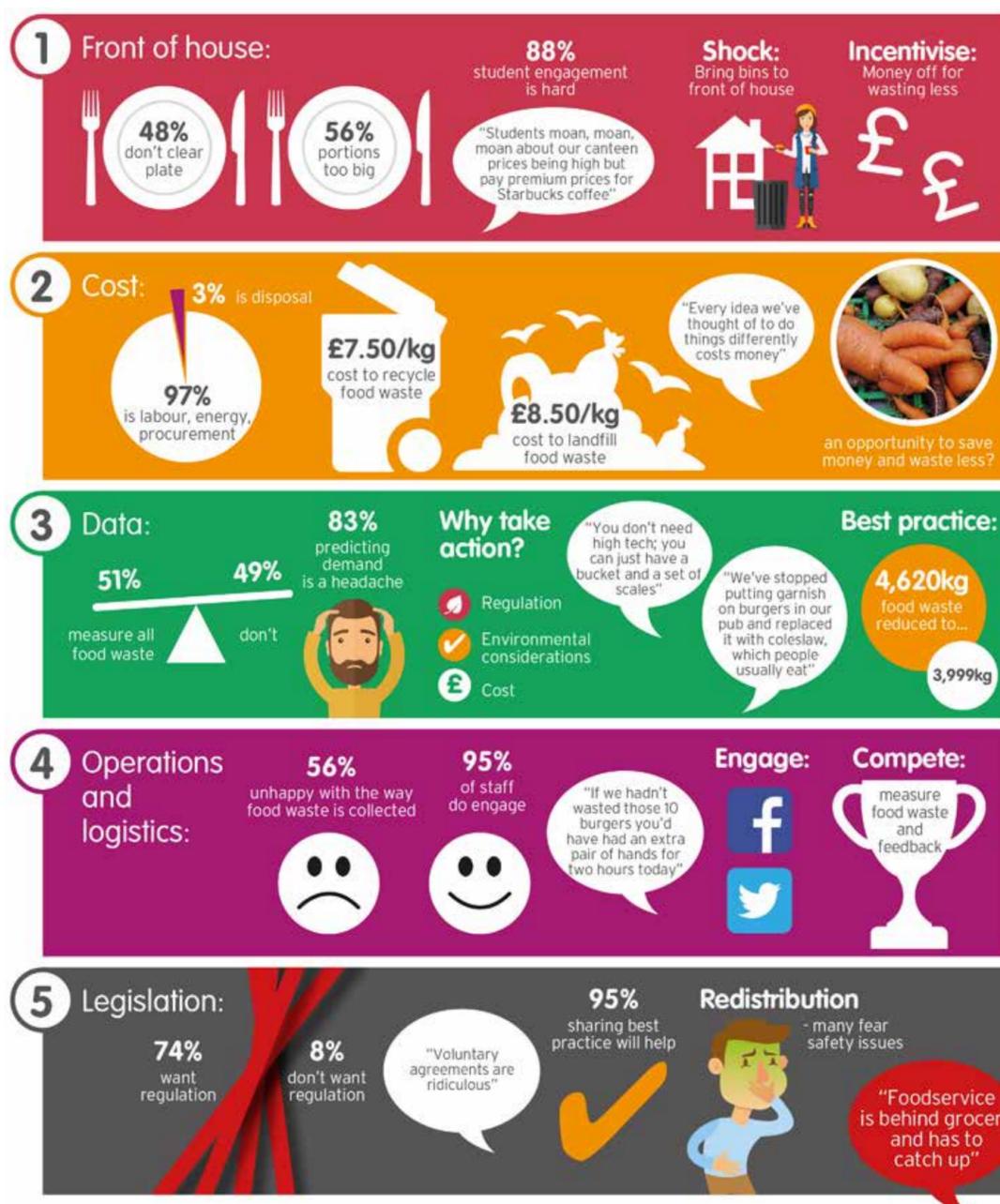
The findings were very interesting. Food waste costs £250m a year in the Education Sector, an area in which operators already have unbelievable tight margins. Students are a tough consumer sector to please and, although university caterers are working hard to reduce waste, it's often difficult in an area where people complain about prices, yet are willing to go to high-price branded competitors if they don't like what is on offer.

The research report identifies five key challenges facing catering professionals when it comes to managing – and critically, reducing – food waste. This supplement goes into these in detail and looks at how, through being part of the solution, we can help to address the issue of waste and make sure we reduce its impact on future generations.

Matthew White, Chair, TUCO

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Key challenges facing caterers – what did our research discover?



Waste has emerged as one of the defining sustainability issues of our modern food system. Up to half the food produced globally is never consumed. In the UK, 12 million tonnes of food is thrown away annually – yet most of this is avoidable. Over 10 per cent of food waste produced comes from the Education Sector, this is despite the fact that food waste ranks as a sustainability issue of high importance among universities.

The fact that we have a problem is not up for debate. However, what to do about it is far less clear cut, not least in England where there is a lack of legislation, leaving it lagging behind Scotland and Wales. In fact, Scotland has announced a food waste reduction target of 33 per cent by 2025, making it the first country in Europe to do so.

In England, there are proposals for a new food waste bill with plans to force supermarkets, manufacturers and distributors to cut food waste by 30 per cent by 2025. It isn't yet clear whether caterers would be included in this, but our research suggests that voluntary agreements are not working.

So what are the challenges that we face when attempting to cut food waste?

- Front of house and student engagement** – overwhelmingly the greatest challenge is encouraging students to change their behaviour.
- Cost** – financing infrastructure or student engagement campaigns can be prohibitively expensive for universities on tight budgets.
- Data collection and analysis** – capturing data on waste can be complex and is often dismissed as being too time-consuming.
- Operations and logistics** – the diversity of operations can create logistical barriers to initiatives.
- The legislative landscape** – there is currently no one model, with some countries favouring regulations and other voluntary agreements to reduce waste. There isn't a decision on which is best.

These are not easy challenges to overcome, however, some universities are deploying innovative solutions and taking steps in the right direction. From getting students to realise how much food they are throwing away to running campaigns that encourage staff to talk to consumers about what they really want to see on their plate, it all helps to cut down what goes in the bin.

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The devil's in the detail



Front of house: the biggest obstacle

The top thing we uncovered is the urgent necessity to challenge and change the attitudes of both staff and students in the 'throw away' culture of waste.

There will be some environmentally-conscious students who actively think about the food they waste, but 88 per cent of universities said that student engagement remains a major challenge. This is particularly acute when meals are pre-paid, with the attitude that more food equals better value. Compounding the issue are situations where caterers are required to provide several options, resulting in more waste if one or more isn't popular.

So what approaches can we use to reduce the food waste from students' plates?

- Talk more and waste less

Ask customers if they want more rather than presuming that they do, but it's not about telling them to eat less, more asking them not to waste food.
- Shock tactics

Students, like most people, want to do the right thing. Bad habits are often the result of a lack of awareness rather than lack of responsibility – ask them to scrape their own plates, they'll soon realise how much goes in the bin.
- Translate less waste into better deals

Setting waste reduction targets will save money, some of which could be translated into discounts for students.

Cost: investing in change

Next on the list is cost, ranking highly as a prohibitive factor to cutting waste. Whether it be employing more staff, developing campaign materials or investing in new machinery, it is often putting management off making changes.

Through talking to you, we know that intentions are good but this often clashes with budget realities. What needs to be clearer are the cost implications that are attached to waste in the first place, both the cost of surplus ingredients and the high cost of disposal. The price of food waste per tonne in the Education Sector is £2,100. This is less than hotels and restaurants, but still a huge amount considering the wafer-thin margins involved.

There will always be reasons to resist change, but we know from talking to caterers that there is a desire to change, it's about working out what the first steps should be and taking the plunge.

So how can we start to make changes in a way that won't cost the earth? The easiest thing to do is look for the low-hanging fruit. This includes portion control and running staff training in best practice when it comes to waste management. It's also important not to be blinkered to long-term savings by up-front costs, perhaps now is the time to invest in that composter!

Data collection and management

No matter how good your intentions are, it's almost impossible to make any real difference unless you know exactly how much waste is being produced. This can, however, at times be a complicated task.

Over half of those we spoke to said that they measure all waste, however, many are unable to tell exactly where it originates from, given there are often 20 or more food outlets to consider. In fact, 83 per cent said that predicting demand is the single biggest front of house waste challenge.

Predicting demand hotspots requires an investment of time and resource to carry out the analysis, but there are initial steps which caterers can do to get things started. Communication and collaboration between sites is key, with buy-in essential from everyone, from management to front of house staff. Simply talking to customers and encouraging people to take notice of the food they are throwing away can work wonders.

The thing with data analysis is that it will take time, but the advice from WRAP is to keep it simple, all you need to start is a bucket and some scales. As a next step, engage your waste contractor to see what they can offer in terms of analysis. One university is even getting students involved, with undergraduates from the Business School undertaking a project to look at where waste is produced and how this can be reduced.

Operations and Logistics

The diversity of the food choices offered is great for students, but often a huge obstacle in terms of waste management.

What are the main challenges?

- Multiple outlets - often there is no one central policy across sites.
- The distance between sites often makes it hard for central waste facilities to be effective.
- Contamination of bins due to lack of staff awareness, or as one university reported, night staff transferring waste between bins without consideration of contents in order to stay under the waste weight limit.

Environmental initiatives can be a hard sell to time-pressed staff in our sector. However, 79 per cent of respondents said they thought it would be relatively easy to get most employees on board.

The key is to keep reminding, retraining and re-inspiring teams on the importance of reducing food waste, otherwise early improvements can soon tail off.

Legislation: bring it on

Legislation is the latest tool that some countries are using to force a reduction in the amount of food that is wasted. Scotland has recently declared that businesses producing more than 5kg of food waste per week need to separate it for collection. In France, supermarkets have to repurpose unsold food by giving it to charities or other groups. England on the other hand, has traditionally favoured voluntary agreements. This has been met with a mixed response, but our survey respondents overwhelmingly believe that legislation is the only way to force people out of their inertia when it comes to food waste.

We all need to press for legislation, such as the pending food waste bill which will help create a level playing field in terms of food waste. In the meantime there are voluntary agreements such as WRAP's Courtauld 2025 and there is very little to stop institutions collaborating with local partners to redistribute surplus food.

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This is how they did it...



This study shows, for the first time, the true picture of the challenges faced in our sector when it comes to tackling food waste. Members are already making practical changes to the way they approach food waste and are achieving some brilliant results. Below are two examples of where catering outlets are helping to drive sustainability and change attitudes in universities.

Swansea University

Home to 16,000 students and 2,500 staff, Swansea University's campus catering operates a variety of restaurants, coffee shops and hospitality outlets. It implemented its first sustainable food policy in 2010 and has since won a number of awards. As part of its commitment to continuous improvement, the University undertook a review of its catering operations, combined with waste monitoring procedures. This showed up key areas of food and packaging waste.

One of the major sources of waste was identified as the over-filling of plates. This is combined with the over-production of food - a common problem that many catering outlets have. The University also has a commitment to making the most of existing ingredients to contribute to its sustainability ethos.

So what measures did campus catering take to solve the issues identified by its review? The first thing was to reduce the size of the serving plates to 10 inches, which in turn had a positive impact on serving size. Alongside this it also trained staff in portion control and made sure they undertook periodic refreshers. Secondly, it introduced a food waste audit procedure which monitors operations and identifies major waste issues. Both these tactics led to the food offering becoming more sustainable, increased savings and consequently, the ability to maintain prices when raw material costs are on the rise.

Since putting these measures in place along with others, such as a greater use of batch cooking, making fresh gravy and stuffing from existing ingredients and cooking food closer to service times when customer numbers can be more accurately determined, there has been an overall reduction in food waste by 20 per cent. This translates into £9,500 per year saved in food procurement costs alone.

Next steps for the team include the sharing of best practice and looking into the redistribution of surplus food through local charities. The University is also opening a city centre café using surplus food from its outlets and educating the local community on health and nutrition.

The University of Manchester

The University of Manchester, ranked 5th in the UK and 35th in the world¹, has set a number of aspirational and environmental sustainability targets. Social Responsibility is at the heart of these aims and as a result, the University has developed an award-winning food waste reduction scheme, resulting in a dramatic reduction of food waste and associated costs...

In order to increase perceptions of satisfaction and value for money, catered students at the University were previously able to return for second helpings. Unfortunately, this freedom often resulted in excess food left on plates and students appeared to be somewhat disconnected from the issue of waste. Last year, a four week audit quantified the scale of food waste that was being generated from catered halls - and student plate waste totalled a massive 1.3 tonnes per week.

Following the results of the audit, a new strategy was implemented in September 2015 in order to reduce the amount of unnecessary food waste. Using insights from a study which showed that removing food trays from canteens can lead to a 20% reduction in food waste, the university's catering team took the trays away and began to offer a variety of portion sizes, whilst still offering the same amount of choice to students.

To find out the students' position on food waste and to help raise awareness of the issue, a questionnaire to 200 'catered' students was carried out, which found that 88% of respondents would use facilities to recycle food waste if they were available. Responding to this, the University introduced a food waste-only recycling stream, which is then treated and used to produce gas for energy and fertiliser for crops. Students are also required to scrape their own plates into a new bin area, making them feel more accountable for their waste and freeing up members of staff to help the team in other areas.

These new strategies have been a huge success. The average weekly student plate waste has decreased from 723kg in 2015 to 527kg in 2016 - a massive saving of 27% - and the 2015/16 academic year has been predicted to reduce the amount of food waste by 6.7 tonnes. Although students in catered halls are still welcome to return for second helpings, they are taking less, eating their meal, and often finding themselves too full to want more food.

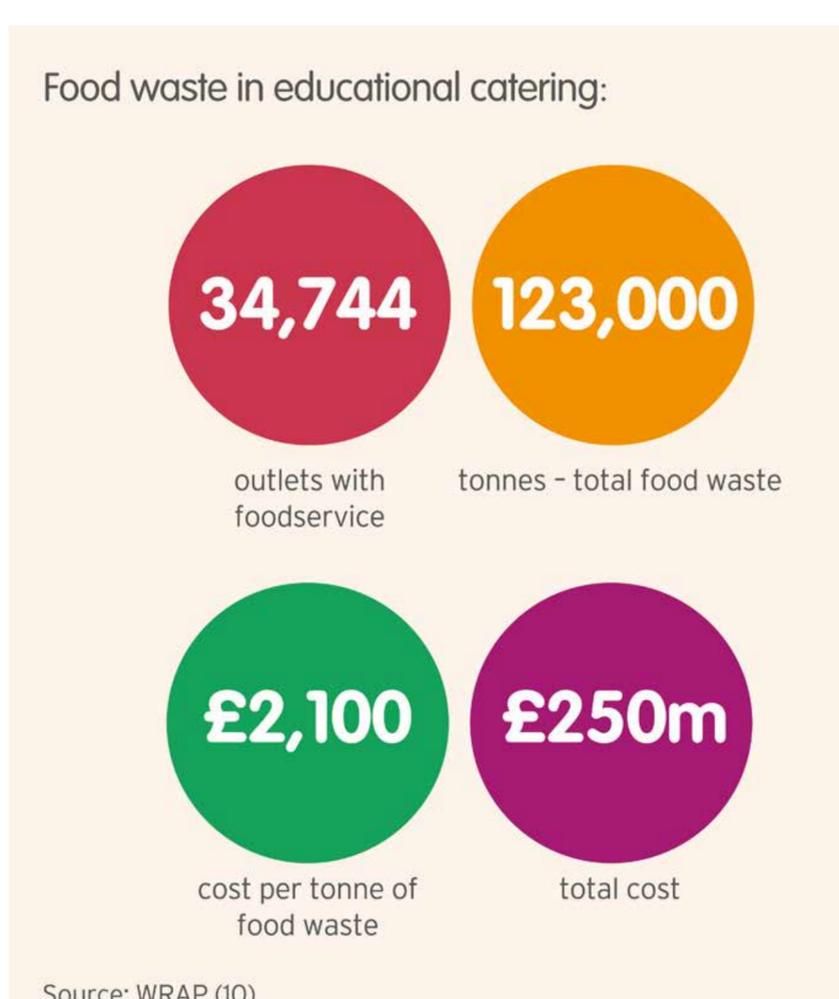
For this reason, the number of 'general waste' bins needed for catered halls has fallen from 30 to 18, and the overall monetary cost associated with the collection of general waste has fallen. The kitchen food waste is also weighed daily, to ensure staff are monitoring and actively seeking to reduce excess wastage. As a result, the average weekly kitchen food waste has also decreased from 532kg to 511kg per week.

Looking further ahead, the University is currently developing more strategies, including a catered hall food waste competition where the total amount of food wasted by each catered hall is recorded every week, with a competition leader board at the entrance of each hall. The hall that wastes the least amount of food over a term will win a themed dinner service of their choice! The development of 'Eco Hero', an adult sized cardboard character, holding the leader board is also currently underway to add personality and fun, helping the initiative to stand out to the students.

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¹ https://en.wikipedia.org/wiki/Academic_Ranking_of_World_Universities

It's a start - practical solutions from members



Front of house

From talking to students to moving bins to the front of house and asking them to scrape their own plates, there are many schemes aimed at showing diners just how much food they are wasting.

Some universities are going further and looking at their pricing policies, offering students smaller portions or splitting up meals to encourage them to just take what they want. One member stated “We used to charge £4.50 for a roast dinner, now we charge only £2.50 for a main course then students can add sides on top. They can have all sides for £2”.

One university has also tackled this issue by letting students know that they don't need to overload their plates and can instead return for more, this has reduced food waste on a nightly basis by over half, from 25-30kg to 10-15kg.

Cost savings

One of our group tackled the issue of portion control by convincing a yoghurt supplier to introduce a smaller pot because they found out too much was being wasted with the larger sizes. Lids on containers for pasta and salad have also been implemented by another university to emphasise portion control.

Data analysis

Better menu planning benefits from in-depth data analysis and remains a massive opportunity to cut food waste. In order to tackle this, here are some ideas from our members:

- “We monitor very closely dishes that generate more plate waste and then we will tweak or remove the dish.”
- “We've replaced salad garnish with coleslaw in our pub, which is generally eaten.”
- “Staff ask students at bins or at tables what was wrong with their food if they've left something on their plate.”

Operations and logistics

The pure diversity of food on offer can mean more waste generation than is necessary on a daily basis. Many universities say that the key to tackling this is communication. In those universities where progress has been most impressive, regular communication with stakeholders shines through. Chefs, students and catering staff will all be involved to assess everything from student feedback on Twitter and waste data from contractors, to new menu ideas.

Some managers conduct spot checks on the bins, whilst others quantify waste in terms of labour costs. For example – if those ten burgers hadn't been wasted, we could have had extra help for two hours.

The war on waste – winning one battle at a time

Through conducting this research study, it has become clear that food waste is a huge issue for many universities and one that TUCO members care deeply about. The majority of catering professionals in our sector are extremely environmentally conscious and want to ensure that the lasting impact of their operations on the planet is minimised.

Significantly reducing food wastage will take time, with data analysis and perhaps legislation key factors in achieving truly meaningful results. However, everyone can take steps in the right direction with relatively little investment. These include changes to the way waste is managed both front and back of house, encouraging customers to think about how much they throw away and educating them about waste separation. In addition, asking staff to talk directly to students about the food on offer as well as thinking more about portion size will enable more efficient planning.

Tackling waste is a long-term war; together we will get there – one battle at a time.