



PLASTIC—NOT A TRIFLING MATTER"- Catering Team, 2019

TEAM MEMBERS: Natalie Turney (Administration Team Leader), Shirley Jones (Catering Manager), Angela Jones (Patient Meals Service Team Leader).



The catering team carried out 4 projects;

- 3 projects focussed on preventing plastic waste in catering after the housekeeping team, who were winners of last year's competition, challenged the catering team on their widespread use of plastic. Staff and patients had also expressed concerns about certain patient groups (primarily older people and those with less dexterity) who were struggling with eating their desserts out of the small plastic pots and opening small milk containers. This led to many patients having 'hospital acquired disability', needing help with eating, which they could do independently at home.
- The 4th project was related to decreasing the carbon footprint of meals by introducing more plantbased meals.

Project 1: Plastic – not a trifling matter

Background:

Desserts: 200 dessert portions are served to patients each day. Prior to the competition desserts were made in plastic pots with a lid and then distributed to patients. Afterwards the pots and lid would be disposed of in the domestic waste stream.

Cups: plastic cups were available beside the water cooler in the canteen.

Milk: individual milk servings, contained in plastic cups were provided in the hospital canteen for staff, patients and visitors to add to hot drinks. Prior to the project 200,000 individual milk portions were annual at the Wonford site.

Approach:

Desserts: The team carried out an initial consultation phase. Gastronorms (large metal trays) were then ordered and the chefs made desserts in gastronorms rather than individual pots. The



Royal Devon and Exeter

gastronorms were taken to wards and the desserts are served to patients in china bowls. At all points in the project the team communicated the changes to:

- Catering Staff: this was done via Comm Cells (a notice board in each department where information on quality improvement initiatives is posted and where the team meets regularly) to advise and ask for input.
- Ward Staff: The Patient Meals Service Team Leader, informed the ward staff of the changes and the reasons behind the changes. This allowed an opportunity for staff to express any concerns; for example, some staff were concerned about the potential of increased wastage. Updates were posted on the Trust intranet site, 'The Hub'

The team then undertook several improvement Plan, Do, Study, Act (PDSA) cycles. Key issues that needed resolving were:

- Refining recipes many of the recipes were perfect for individual pots, but on a larger scale were not the correct consistency, resulting in 'sloppy jelly'. However, working with the chefs, different recipes were tested until the perfect recipe for large scale dishes were found.
- Piping nozzles were purchased to allow the desserts to be 'dressed' to look more appealing now made on a larger scale

Cups: Plastic cups provided next to the main restaurant's water dispenser were replaced with paper cones. The team received feedback that the cones were suitable for a quick drink on the way past the canteen, but alternatives were needed for people wanting a drink with their meal. Paper cups are now available at the tills. The team have put up posters to advertise this change; this was a good project to demonstrate the commitment of the Trust to sustainability.

Aspirations:

- spread the substitution of paper for plastic cups across all catering areas within the Wonford and Heavitree sites.
- stocking and selling reusable, sustainable travel mugs and water bottles in near future.

Milk portions:

The team stopped ordering individual milk portions and starting ordering 4 plastic bottles of milk that they served in reusable milk jugs.

Project 2: Veggie Monday

Background: vegetarian options often have lower carbon footprints

Approach: introducing a 'Meat free Monday' at the canteen was discussed but the team felt that this would be poorly received by staff and patients. Instead the team have trialled introducing a second vegetarian hot food choice on the menu on Mondays. Examples of new recipes introduced included:

| GREEN WA COMPETITIE CENTRE FOR SUSTAINABLE HEAD | ON Royal | Devon and Exeter |
|---|--|------------------|
| | Aubergine tagine with lemon, apricots and rice Vegetable & Q uorn stir fr y Vegetable Korma with rice | |
| e | Quorn & Vegetable cottage pie Vegetable lasagne Quorn pasta bolognaise Coconut Dhansak Vegetable Chilli Mush room Risotto Spinach, Butternut Squash Lasagne | |

Results:

Meals: Due to warmer weather, the team feels there has been less demand in general for hot food and are confident that there is potential for these figures to grow even further.

Desserts: The kitchen were using 200 dessert pots per day, so 73,000 annually. Transport was included as the number of deliveries from 3 to 2 were reduced due to stopping using the pots; 1, 206 kgCO2e of the total saving.

Waste has not been an issue as any remaining dessert when portioned has been offered to patients who may like a larger portion.

A summary of the results is displayed on the following page.

What steps have been taken to ensure lasting change?

The changes have been embedded through establishing different ways of working and of ordering. Moreover, the feedback gathered from staff and patients persuaded the members of staff in the catering department who were not involved in the project, that these are changes worth making and the team as a whole is keen for these changes to continue.

Key Elements of Project:

- For reusable items there needs to be adequate storage space and adequate staffing and dishwashing equipment would be required to clean the equipment.



Royal Devon and Exeter NHS Foundation Trust

| Environmental benefit | Dessert pot and lid: 1,964 kgCO2e in first year, after that save 2,250kgCO2e in following years. Carbon (and costs) calculations include the impact of using a dishwasher to clean the china bowls used to serve desserts. |
|---|--|
| | Plastic to paper cups: forecast increase in 152 kgCO2e annually due to weight of paper. The carbon cost of waste disposal will go down, but the carbon cost of manufacturing paper cup is higher as paper cups are heavier than plastic cups. Unfortunately, the cups were lined with plastic so they could not be recycled in the general recycling and there is still reliance on fossil fuels due to the use of plastic. |
| | Milk containers: 12ml being replaced by 4pt plastic bottles. 1,240kgCo2e |
| | Vegetarian: 3,109 kgCO2e over one year. |
| Social sustainability; benefit to patients, staff and community | Dessert pots: Patients have found that the weight of the bowl makes it easier for them to eat their dessert and the quantity can be tailored to their appetite. Catering staff have found that it is easier for them to make up the desserts in the gastronorms rather than in 200 individual pots. There is a reduced workload for the admin team/storeman as they no longer have to order and store plastic pots weekly. |
| | Staff pleased to see a decrease in single use plastic. Many people are concerned about the waste of resources in single use plastics and plastics pollution so projects like these that reduce plastics use and waste allow staff to live out their values at work; evidence shows that working in line with values increases staff resilience and satisfaction. |
| Financial benefit | Dessert pots: will save £1,830 annually for first year, but second year savings should be £2,701, taking the capital investment of gastronomes into account. Based on cost of pots and cost of disposal. |
| | Plastic to paper cups: decrease annually as the paper cups were cheaper than plastic cups, £68 annually. |
| | Milk containers: annual saving of £4,537. Use 586 per day, now use 2L plastic bottles. |
| | Vegetarian meal: over 7 weeks, Mondays of last year compared to 2019, increase in number of vegetarian meals was 146 over 7 weeks, approximately 40/Monday. Normal meal costs £5.85, vegetarian £5.50, equated to a cost saving of £380 . Cost savings could be increased by incentivising people to eat more vegetarian meals and offering vegetarian options on more days. |
| Clinical outcomes | Dessert pots: may contribute to improved nutrition if patients find it easier to eat their meal. |
| | |