Introduction

Dear reader, we are the Erasmus+ food group and we would like to welcome you all to our book on a concerning topic in todays' society, food waste and non-sustainable food.

In this book we have written some easy sustainable recipes, common dishes from each country, Germany, Ireland, Czech Republic and England. We are trying to help people make a difference from own kitchen. We are trying to connect with countries around the world so that we can raise awareness of the problems with food waste.

Table of contents

•	Common dish (Germany)	p.4
•	Climate friendly dish (Germany)	p.5
•	Food Project (Germany)	p.6
•	School canteen (Germany)	p.7
•	Common dish (Ireland)	p.9
•	Climate friendly dish (Ireland)	p.10
•	Food Project (Ireland)	p.11
•	School canteen (Ireland)	p.12
•	Common dish (CZ)	p.14
•	Climate friendly dish (CZ)	p.15
•	Food Project (CZ)	p.16
•	School canteen (CZ)	p.17
•	Common dish (England)	p.19
•	Climate friendly dish (England)	p.20
•	Food Project (England)	p.21
•	School canteen (England)	p.22
•	Conclusion	p.23

GERMANY

Common dish: Thüringer Bratwürste mit Kartoffelbrei und

Sauerkraut

(Thuringian sausages with smashed potatoes sauerkraut)

Ingredients (for 4 people):

- 500g potatoes
- 500g sauerkraut
- 5 Thuringian sausages
- 200g cream
- 1 small onion
- ½ apple
- 1 tsp salt
- a little spice

Preparation:

Peel the potatoes and cut them into small pieces. Boil in salted water for about 20 minutes for until soft.

Heat the sausages slowly in span on medium heat with a little oil, otherwise they may burst.

In the meantime, slowly heat the sauerkraut in a pan. Cut the onion, half an apple and two pineapple slices into small cubes and season with sugar.

When the potato pieces are nice and soft, drain off the water, add the cream and mash the potatoes by hand. Season to taste with salt, pepper and nutmeg.

Serve the sausages with mustard, sauerkraut mix and mash.

2.1 kg CO2 per serving

<u>Climate friendly dish: Spinatknödel</u> (Spinach dumplings)

Ingredients (for 4 people):

- 670g white bread from the previous day
- 600g spinach, fresh
- 2 small onions
- 4 eggs
- 4 tablespoons flour
- Salt and pepper
- Nutmeg

Preparation:

At the beginning, cut off the crust from the white bread all around and soak half of the crust in water. The other half is not needed for this dish. Now dice the white bread or coarsely crush it.

The spinach must now be washed, placed in a cullender and squeezed, which makes the spinach clean and dry.

Next, dice the onions and steam them in a little butter until glassy. Now mix the steamed spinach, flour and squeezed bark well in a saucepan with the eggs and spices and puree and add some breadcrumbs if necessary.

Then form the mass into dumplings and simmer gently in boiling water for ten to fifteen minutes.

Tip: The other half of the white bread crust is ideal for making salad croutons. Simply fry in the pan with a little oil.

0.26 kg CO2 per serving

Food Project: Community kitchen

Community kitchen is a project in Munich, Germany which is focused on the reuse of food to help the climate and reduce food waste.

They are in cooperation with supermarkets that give them their food which would have been thrown away, because it wasn`t good enough to sell.

In the restaurant, which is owned by community kitchen, they offer only dishes that are made out of recycled and reused food and as a bonus you pay between $2.50 \in$ and $5.50 \in$.

40 tons of food are collected and saved every week and per year community kitchen is able to reduce carbon emissions by 720 tons CO2.

The restaurant is not the only thing where they reuse the food, but they also use the food to make lunchboxes for students.

They also have a website where you can find more information: https://community-kitchen.com/



<u>School canteen</u>

In our canteen which is connected with the monastery, the food is not just thrown away. The monks eat the leftover meals, so the dishes are not wasted. The food waste from the plates is processed into food for the pigs to eat.

So no food is wasted or thrown away.

But in our school, we also try to cook with seasonal products.

Because our monastery has an own vegetable garden. We can use those vegetables for our meals and salads too.

But we also thought that there are other ways or maybe even better ways to reuse the food. So we asked a nearby supermarket to cooperate with us and give the kitchen the food that can't be sold anymore. Unfortunately, our school declined to cooperate, but we will keep trying.

IRELAND

Common dish: Beef casserole

Ingredients

- 1 kg chuck or boneless shin/gravy beef, cut into 3cm pieces
- 2 tsp olive oil
- 1 large brown onion, thinly sliced
- 2 medium carrots, peeled, thickly sliced
- 2 celery stalks, sliced
- 2 tsp plain flour
- 2 cups (500ml) beef stock
- 400g can diced tomatoes
- 1 tbsp Worcestershire sauce
- 1 tbsp soy sauce
- 5 sprigs fresh thyme
- 1 small bunch silverbeet, stems trimmed, leaves shredded
- 1/3 cup parsley leaves, roughly chopped
- Mashed potato
- -runner beans

Preparation:

Preheat the oven to 180°C (160° fan-forced). Place beef in a large snap lock bag or dish, add half the oil, season and mix well. Heat a large ovenproof casserole dish over medium-high heat. Brown the beef in 2 or 3 batches, setting beef aside on a plate.

Reduce heat to medium and add remaining oil. Add onion, carrot, celery and cook, stirring, for 4 to 5 minutes.

Sprinkle in flour and stir until vegetables are coated. Gradually pour in stock stirring well. Return beef to the pan with any juices and add tomatoes, sauces and thyme, stirring until the mixture boils.

Cover casserole dish, place in oven and cook until beef is very tender (2 to 2 ½ hours), stirring occasionally, adding extra stock or water if necessary. Remove from oven, stir in silverbeet and set aside, covered, for 10 minutes.

2.805kg CO2 per serving

Climate friendly dish: Bread and butter pudding

Ingredients (for 4 people):

- 250g butter
- 8 thick slices white bread
- 50g sultanas
- 2 tsp cinnamon powder
- 350ml full-fat milk
- 50ml double cream
- 2 free-range eggs
- 25g granulated sugar

Preparation:

Graese an overproof dish with butter. Spread each slice with on side with butter, then cut into triangles.

Arrange a layer of bread, buttered-side up, in the bottom of the dish, then add a layer of sultanas. Sprinkle with a little cinnamon, then repeat the layers of bread and sultanas, sprinkling with cinnamon, until you have used up all of the bread Finish with a layer of bread, then set aside.

Gently warm the milk and cream in a saucepan over a low heat scalding point. Crack the eggs into a bowl, add three-quarters of the sugar and lightly whisk until pale. Ad the warm milk and cream mixture and stir well, then strain the custard into a bowl. Pour the custard over the prepared bread layers, sprinkle with nutmeg and the remaining sugar and leave to stand for 30 minutes.

Preheat the oven to 180C/160C Fan/Gas 4. Place the dish into the oven and bake for 30-40 minutes, or until the custard has set and the top is golden brown.

0.4 kg CO2 per serving

Food Project: Thorntons food recycling

Thorntons are a Meath based recycling company. Kilmainham wood Compost is the largest fully enclosed composting facility in Ireland situated on a 33-acre site in Ballynalurgan, Kilmainhamwood, Co Meath. During 2013 a further investment in the facility was made and additional capacity added to treat Ireland's organic waste. Since the end of 2013 they have been capable of processing over 40,000 tonnes annually of food/organic waste there, material that in the past would have been landfilled. They take leftover food and add them to fertiliser to make it healthier and more beneficial. They send them to labs to make sure they're healthy before sending the fertiliser to be used. https://thorntons-recycling.ie/commercial/compost

<u>School canteen</u>

In our school canteen, when there is excess food that is not eaten or even served to the students and staff, it can cold blasted which is necessarily frozen until it is finally to be eated. It can also be sent to the monastery where the monks will eat there meals.

Even though there are not many leftovers some food will have to be discarded off the plates as it will be contaminated.

Sometimes, food that is leftover such as potatoes, pasta, fruit and vegetables will be used in cold salads which helps broaden the variety of meals in school.

Even on this trip, in our hostel we used leftover sandwiches from packed lunches and toasted them which was very popular amongst the students one morning.

CZECH REPUBLIC

Common dish: Vepro Knedlo Zelo (Pork, dumplings and sauerkraut)

Ingredients:

- pork meat 1.5 kg
- salt
- pepper
- 1 onion
- Sauerkraut 500g
- vinegar
- sugar
- garlic
- caraway seeds

Dumplings:

- flour
- yeast
- milk
- eggs

Preparation:

Rub pork with salt and pepper. Place it in a pot and cover with water and the onion.

You have to roast it in the oven for about an hour.

Mix dry dumpling ingredients together. Add milk, eggs and mix it. Let it sit.

In the meantime, we'll cook sauerkraut. Let it simmer for about 20 minutes.

Then add salt, sugar, vinegar and caraway seeds. You can also add flour, which makes it a bit thicker.

After your dough raised create the dumplings and cook them.

4.43kg CO2 per serving

Climate friendly dish: Lentil soup

Ingredients (for 4 people):

- 1 onion, chopped
- 1 carrot
- 1 celery, chopped
- 200 g dry lentils
- cloves garlic
- 1.5 l water
- marjoram
- 3 tablespoons of olive oil
- salt to taste
- black pepper to taste

Preparation:

- 1. Rinse the lens with cold water and cook them in boiling water, until the lentils are soft.
- 2. Warm the olive oil in a large pot over medium heat. Add the chopped onion. After few minutes when the onion turns gold add chopped carrot and celery and simmer for about 5 minutes with a little water.
- 3. Then add salt, pepper, cooked lentils and pour 1.5 l of water. Stir the content of the pot.
- 4. Cook until the lentils are completely soft.
- 5. When the soup is cooked add minced garlic with marjoram and cook for little longer.
- 6. Enjoy your meal! 😊

0.16kg CO2 per serving

Food Project: Zachraň jídlo (Save Food)

It's a Czech organisation, which gives information about wasting food and makes particular tips, that can help with the appropriate way how to treat food. They motivate people to make a change and also find a support for it.

Their vision is that Czech Republic between the years 2020 and 2030 will reduce the waste of food in half.

This organisation was created in 2013. This year they made their first happening, which is a type of events they make to bring closer the theme of this global problem. Since the time they have made projects, lectures, posted recipes with wasted food and other information.

They have their own websites where they post everything about their project. You can find it on:

https://zachranjidlo.cz/

School canteen

How we deal with food leftovers in our school?

In Czechia, in general, almost every school has its own school canteen where students can order a lunch every day. We would like to tell you more about ours and how it deals with leftovers.

In our canteen they cook about 800 lunches every day for students, employees as well as for others. They also prepare breakfasts and dinners for students staying in dormitory. Besides that, there is also a buffet, where you can buy some fresh snacks like sandwiches and other dishes. But what happens with the food nobody eats? That is the question we wanted to answer.

Usually there are not any leftovers as everybody eats their whole dish. We try not to waste anything, because we are aware of the energy put into every part of the meal. In Czech schools, they try to teach students a lot about ecology and the environment which also includes not wasting food. Naturally, there are some leftovers, but it is just negligible amount. For example, when somebody truly hates something like mushrooms or some kind of vegetable, he simply does not eat it. School does not have an option, but to throw it away.

In our opinion, there are still some ways in which we can improve dealing food waste in our school. It would be great if some animals were fed by the leftovers. We are not quite sure if it is hygienically possible, but we think that this is a great way of recycling and reusing the food waste. Another great solution would be vacuum packing the food that nobody has taken. For example, if someone is ill and doesn't cancel his lunch, the food is left there. This leftover food can be vacuum-packed in plastic containers and sold in canteen the next day. In this way the amount of food waste would be reduced even more. And we are also able to recycle the plastic packaging afterwards.

ENGLAND

Common dish: Shepherd's pie

Ingredients (for 4 people):

- 1 tbsp sunflower oil
- 1 large onion, chopped
- 2-3 medium carrots, chopped
- 500g pack lamb mince
- 2 tbsp tomato purée
- large splash Worcestershire sauce
- 500ml beef stock
- 900g potatoes, cut into chunks
- 85g butter
- 3 tbsp milk
- Method

Preparation:

Heat 1 tbsp sunflower oil in a medium saucepan, then soften 1 chopped onion and 2-3 chopped carrots for a few mins.

When soft, turn up the heat, crumble in 500g lamb mince and brown, tipping off any excess fat.

Add 2 tbsp tomato purée and a large splash of Worcestershire sauce, then fry for a few mins.

Pour over 500ml beef stock, bring to a simmer, then cover and cook for 40 mins, uncovering halfway.

Meanwhile, heat the oven to 180C/fan 160C/gas 4, then make the mash. Boil the 900g potato, cut into chunks, in salted water for 10-15 mins until tender. Drain, then mash with 85g butter and 3 tbsp milk.

Put the mince into an ovenproof dish, top with the mash and ruffle with a fork. The pie can now be chilled and frozen for up to a month. Bake for 20-25 mins until the top is starting to colour and the mince is bubbling through at the edges. (To bake from frozen, cook at 160C/fan 140C/gas 3 for 1 hr-1 hr 20 mins until piping hot in the centre. Flash under the grill to brown, if you like.)

Leave to stand for 5 mins before serving.

3.4 kg CO2 per serving

Climate friendly dish: Potato peel soup

Ingredients (for 4 people):

- 20g butter, or rapeseed or sunflower oil
- 1 large or 2 medium onions, diced
- 1 bay leaf
- About 200g potato peelings (about as much as you'd get from preparing a decent-sized tray of roast potatoes)
- 500ml whole milk
- 500ml chicken or veg stock
- 2 tablespoons finely chopped parsley leaves (optional) Salt and freshly ground black pepper
- To finish (optional)
- Fried sage leaves Crisp-grilled bacon

Preparation:

Heat the butter or oil in a medium saucepan over a medium-low heat and add the onions, bay leaf and a good pinch of salt. Sauté gently, until the onions are soft but haven't taken on much colour, about 10 minutes.

Add the potato peelings and give everything a very good stir for a minute.

Pour in the milk and stock, season well with salt and pepper and bring to the boil. Reduce the heat and simmer gently until the peels are very tender – another 10 minutes or so.

Remove from the heat and cool slightly, then purée in a food processer, blender or using a stick blender until very smooth. Return the soup to the pan and reheat gently. Season well with salt and pepper and stir in the chopped parsley, if using.

Serve in warmed bowls, topped with fried sage leaves and shards of crisp-grilled bacon, if you like. Finish with a generous grinding of pepper.

0.104 kg CO2 per serving

Food Project: FareShare

FareShare is the UK's national network of charitable food redistributors, made up of 18 independent organisations. Together, they take good quality surplus food from the food industry and give it to nearly 9,500 frontline charities and community groups. The food we redistribute is nutritious and good quality. It reaches charities across the UK, including school breakfast clubs, older people's lunch clubs, homeless shelters, and community cafes. Every week they provide enough food to create almost a million meals for people who need them. 75,371 tonnes of CO2 emissions are prevented by the initiative while also providing 130 million meals worth of food provided to people in need and 53,894 tonnes of food redistributed to charities.

https://fareshare.org.uk/

School canteen

After every meal there are two separate bins, one for the food and another for the general waste which ensures the food waste is able to be composted. Some of the food that is not served at meals is recycled into other dishes or served again at the salad bar. We are unsure whether the food waste is composted on the school site or if it is sent to another site. Unfortunately, the general waste most likely ends up in landfill as there is no way to recycle it in the school. We tried to contact the school refectory team for more information on how the school disposes of waste and waste food wafter meals, however, we received no response.

Conclusion

In our conclusion we believe our time in Erasmus has been extremely enjoyable and educational. The project you have just seen is the fruit of the o this program. Our group looked at each country separately to gain an understanding on how food is reused and what dishes aim to be climate friendly. The climate friendly dishes in our cookbook provide a guilt free meal to any anxious home cook. This project also showed us what our countries are doing at a large scale to change the food waste situation. This addition to the cookbook provides a statistical backing to the rest of the book and project.

This project has been very educational and fun for all involved, and we are proud of what we have done.