**2nd Era+ mobility February 17-21-2020**

**Water Footprint of prepared food in the kitchen of Herderschule**

**Students worked in 4 groups and chose to prepare the following recipes:**

1. Tzatziki water footprint lit/kgr

Ingredients

300 gr greek yogurt……………………………………… 3000

1 cucumber =300 gr…………………………………….. 350

1/3 slice garlic……………………………………………… 250

3 tbsp white wine vinegar……………………………. 10

¼ bunch of fresh dill…………………………………….. 25

2 tbsp olive oil……………………………………………… 288

Pinch of salt, pepper……………………………………. 70

Served with 200 gr of arab bread………………… 1600

Preparation: Clean the cucumber and rub it in the grater.

Put the cucumber in a towel, which we have placed in a bowl.

Add salt and 1 tbsp. from apple cider.

Drain our cucumber very well with the towel. We need to tighten it a lot to get all the moisture out.

Put the yogurt in a bowl and add the cucumber and the other 2 tbsp. apple cider.

Beat the garlic in a mortar with olive oil and add to the yogurt.

Chop the dill, add it to the yogurt, salt and pepper and mix.

Based on the above quantities and ingredients the 650 gr of tzatziki needed aprox. 1525 lit of water.

This means that in order to produce the ingredients that will make **1** **kilo of tzatziki** we will need to **consume 2346 litters of water**.

The 200 gr of bread account for another 320 litters of water. Apart from bread, the 600 gr of tzatziki were served with about 1,5 kg of baked vegetables. In the end, **this group’s food (tzatziki, bread and vegetables) had a water footprint of aprox, 1300 lit/kg**.

1. Potatos a la creme

Ingredients water footprint lt/kg

10 potatos (circa 1 kg)....................................................... 287

250 gr sliced brown mushrooms ..................................... 287

1 tbsp butter...(15 ml)........................................................ 5553

250 ml cream..................................................................... 3500

3 tbsp olive oil................................................................... 14430

Preparation

1. Preheat oven to 200 C
2. Sprinkle coarse salt on the baking tray
3. Use a fork to pick a few holes in each potato, rub olive oil and place on the salted baking tray and sprinkle again with salt. Bake for 1 hour
4. Heat the butter in a medium-size-heavy-weight saucepan, add the sliced mushrooms, garlic and rosemary, and fry until softened and fragrant. Add the cream and simmer for 15 min. until reduced into a creamy sauce
5. Cut across into each baked potato and quash the flesh. Top with the mushrooms
6. Sprinkle with rosemary and serve.

**Water Footprint**: 1790 lt of water for apr. 1,5 kg of this recipe.

circa **1200 lit/kg**

1. Spanish omelette

Ingredients: water footprint lt/kgr

4potatoes................................................................... 287

3 eggs…………………………………………………………………….. 588

1red pepper cut into chips……………………………………… 80

salt

4 spoonfuls of olive oil…………………………………………… 432

1 chopped onion……………………………………………………. 80

3 tb spoonfuls of parsley……………………………………….. 80

Spanish omelette: Instructions

Preparation

1. Heat the oil in a non-stick pan.

Fry the potatoes until they get crispy. Add the onion and the red pepper and fry until it gets transparent.

2. Beat the eggs with the salt and pepper to taste. Pour the mixture into the pan stirring occasionally with a spatula.

3. Place a big, round plate on top of the pan and flip the tortilla onto the plate. Then slide the tortilla back into the pan until it is cooked on the reverse side.

1. Serve with salad.

In the production of the ingredients of the aprox. 1,5 Kg + 500 gr of fresh salad of this recipe were used 1547 lit of water. So **the water footprint of this food withoud the salad is about 1000 lit/kg. If we include the salad (237 lit/kg) and 200 gr of bread (1608 lit/kg) it drops to 903 lit/kg.**

1. Macaroni with vegetable sauce

Ingredients water footprint lit/kg

500 gr of pasta……………………………………………………………. 1849

Vegetables (1 onion, 2 red hot chili peppers, 1 zucchini,

1 eggplant, 2 skinned tomatos)…………………………………… 250

4 tbsp olive oil…………………………………………………………….. 1440

2 tbsp salt…………………………………………………………………… 100

50 gr parmigiano cheese…………………………………………….. 3200

Preparation

1. Put all chopped vegetables in 3 tbsp of hot olive oil in a big skillet. Cook in law temperature covered for about 30 min or until soft and fragrant.
2. Boil the pasta in 2 lit of salted water for 10 min.
3. Mix pasta and sauce in a big salad ball, springle with parmigiana, add olive oil and serve.

To grow the ingredients of aprox. 2,5 kilos of food of this recipe 2261 lit of water were used+2 lit to boil the macaroni. This means that the **water footprint of macaroni with vegetable sauce is**

**906 lit/kg.**

**Conclusion: the pasta recipe and the omelette (when served with salad and bread) have the lowest water footprint. However, all 4 groups prepared food with relatively low water footprint for they avoided meat. Generaly, animal products have a lot higher water footprint than vegetables. Congratulations!**

**For more information:** [**https://waterfootprint.org/en/resources/interactive-tools/product-gallery/**](https://waterfootprint.org/en/resources/interactive-tools/product-gallery/)