Homework Lesson 1 – Water footprint calculator

"Everything we use, wear, buy, sell and eat takes water to make. The water footprint measures the amount of water used to produce each of the goods and services we use. It can be measured for a single process, such as growing rice, for a product, such as a pair of jeans, for the fuel we put in our car, or for an entire multi-national company. The water footprint can also tell us how much water is being consumed by a particular country – or globally – in a specific river basin or from an aquifer."

Water Footprint Network

We can also calculate personal, or household water footprint based on things we consume/eat on daily basis and how we use water in our homes and gardens.

We will use following resources:

- **Water Footprint calculator**:
  https://waterfootprint.org/en/resources/interactive-tools/personal-water-footprint-calculator/personal-calculator-extended/
- **Food weight information**:
  https://www.nutritionix.com/uk/database/common-foods

To understand your water footprint, you will have to talk to parents/adults and principal shopper/cook in your home. You will need to estimate how much food you consume as a household on a weekly basis.

- Use the provided table to write down an average weekly meal plan for your household. While we do not eat the same thing every week, there are some things that we eat more often. You can create your favourite meal plan. For example, someone will eat cereals for breakfast or jam on toast more often than beans on toast.
  Put the meal names in the grey rows and try to decompose them to basic ingredients in the white row below. You should think about what you eat every day for breakfast, lunch, dinner and snacks. If you have a day when you eat leftovers for lunch, just log leftovers and skip calculating the ingredients.
  When you populate the table with meals and ingredients go to the **Food weight information** website and find the weight in grams for the items for which you do not have grams (bowl of milk, bowl of cereal, etc.). [See example at the end of the instructions]
  This will help you calculate how much in kg you consume of cereals, meats, eggs, vegetables, fruits and starchy roots (eg: potatoes) and dairy products. 1 kg = 1000g

- Fat content. You will have to discuss this with the principal shopper/cook in your household. Do they usually buy lean meat, low calorie yogurts and comparable products? In this case select low fat content. Whole milk, full fat yogurt, fatty meats, etc would be high in fat content. If some products are low fat and some are full fat, this can be described as an average fat content.
- For the question how many showers you have daily, put in the number of showers for the whole household. For cups of coffee, put in the joint number for all the members of your household.
- Once you obtain the number for the joint household footprint, you can obtain yours by dividing the household water footprint with the number of people in the household.

Below you can find firstly, instructions on how to use the website with the food weight information, secondly an example of how you can fill in the meal plan for the week and thirdly, a table for your meal plan (you can use this one or make your own).

Food weight information link will take you to the Nutritionix website, their dataset for the UK products. This is a website where you can find information on calories in your food but also food weight in grams. In the search bar, you can type: a bowl of milk or potato. The result of the search will be your ingredient with information on the number of calories contained in the ingredient (see image below). If you click on the little expansion arrow to the right of the number of calories (highlighted with the blue circle and arrow), the website will give you more details on the requested item.
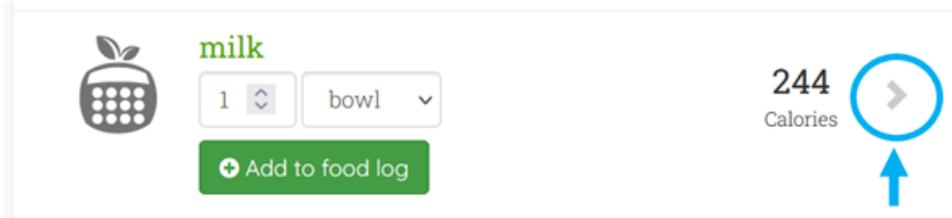
You need to find the weight of the ingredient in grams (highlighted with the blue circle and arrow below).
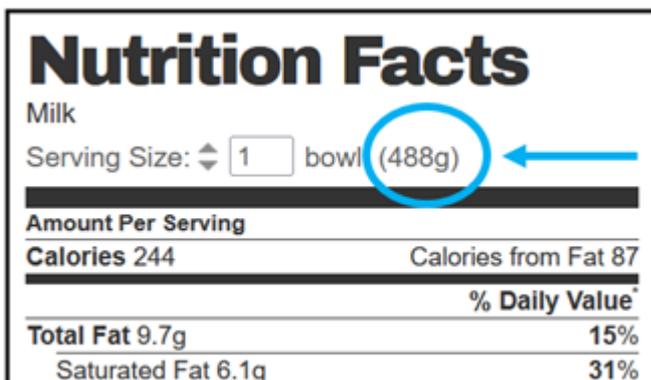
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Cereal with milk	Eggs with bacon					
1 cup cereal = 28g 1 bowl of milk = 488g	- 10 eggs - 6 slices of bacon = 69g					
	Shepard's pie			Leftovers		
	- 500g lamb - 1 carrot = 46g - 1 medium onion = 94g - 1 celery = 40g - 3 medium potatoes = 519g - 5g oil					

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Breakfast							
Lunch							
Dinner							
Snacks							