



Learning by eating – Natural activity to learn about local, vegetarian and organic food without single use packaging.



Learning experience



Topic

Littering

Food and drinks



30 min



Participants

- Know about (and value) fresh local (and if available organic) food
- Know about the carbon footprint of different nutrition styles (vegan, vegetarian, meat based + conventional, organic)
- Are able to identify some edible plants in nature
- Are able to plan a meal without unsustainable packaging
- Are able to plan a meal without meat



Suitable for  
outdoor sport instructors  
and course participants



Practical sessions



Outdoor F2F  
(Indoor F2F)



Materials needed

- Local food



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## Preparation

Prepare and organize food and drinks for a day out in nature with your group. This may contain:

- Refillable water bottles (every participant organizes this individually. Should be stated in a list of materials for the course)
- Fresh unpacked (and if available organic) fruit and veggies like apples, cucumbers, carrots etc.
- Bread and cheese, spread in glasses or other refillable containers etc.
- Homemade fruit or energy bars (or other sweets from a bakery without plastic wrapping)

## Activity instruction

When you have started your day in nature with your group, you can show your participants some edible plants and give them the task to collect some while hiking etc. For lunchtime, stop in a beautiful place and let the group prepare a buffet in nature together. Only edible things should be included and the edible plants can be added as nice topping. While eating you can tell some stories about the production of the local food or organic farming around.

## Reflection and discussion

Normally it ends up in a natural discussion where every participant adds stories and ideas of local food supply.

Additionally, reflect on the excessive plastic waste that is often associated with packaging – especially of food. By choosing to buy loose fruit and vegetables and wrapping bread, cakes or your own energy bars in bees' wax paper or using durable lunch boxes etc., you were able to have your meal with no packaging left.

Later in the day, you can also reflect with additional games or a short discussion on different nutrition styles and their footprint and the problems of unsustainable packaging. A short quiz is provided in the background knowledge section.



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## Potential variations

- You can bake fruit or energy bars with your group the day before. See recipes provided as additional material.
- Of course, you can also have an indoor buffet with local, seasonal and organic food if this is an indoor course.



## Background knowledge

Sustainable nutrition in a nutshell: Eat local and seasonal, with less meat and avoid unsustainable packaging and food waste.

A simple quiz can be done with different food and the respecting CO<sub>2</sub> equivalent for 1 kilo of its production – write the names of food and the numbers of CO<sub>2</sub> on cards (chosen from the list below) and give participants the task to match the pairs. Can also be played online e.g. using the free to use learning apps platform.

Apples (from New Zealand) 0,8  
Apples (organic, mean) 0,2  
Apples (from regional production sold in Autumn) 0,3  
Apples (from regional production sold in April) 0,4  
Carrots 0,1  
Cucumber 0,4  
  
Apple juice 0,4  
Tap water 0,0  
Bread 0,6  
  
Butter 9  
Cheese (mean) 5,7  
Cheese (organic, mean) 7,2  
Milk (3% fat in composite carton) 1,3  
Almond Milk (in composite carton) 0,3  
  
Chicken (mean) 5,5  
Beef (mean) 13,6  
Beef (organic, mean) 21,7

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The ecological footprints (CO<sub>2</sub> equivalent ) of the different food is related to the production of 1 kilogram of food till "the supermarket checkout" (Reinhardt, Gärtner & Wagner, 2020 for the example of Germany).

Comparison of CO<sub>2</sub>e emissions for different food / nutrition styles (WWF, 2012)

Food type	Emissions per kg Food	Water usage per kg Food
Beef	20,65 kg CO <sub>2</sub> e	Approx. 15,000 Litres
Pork	7,99 kg CO <sub>2</sub> e	Approx. 6,000 Litres
Cheese	7,84 kg CO <sub>2</sub> e	Approx. 3,200 Litres
Vegetables & Fruits	0,94 kg CO <sub>2</sub> e	Approx. 350 Litres

## Literature and further information

Reinhardt, G., Gärtner, S. & Wagner, T. (2020). Ökologische Fußabdrücke von Lebensmitteln und Gerichten in Deutschland. Institut für Energie- und Umweltforschung Heidelberg. Available online:

<https://www.ifeu.de/fileadmin/uploads/Reinhardt-Gaertner-Wagner-2020-Oekologische-Fu%C3%9Fabdruecke-von-Lebensmitteln-und-Gerichten-in-Deutschland-ifeu-2020.pdf>

WWF (2012). Klimawandel auf dem Teller. Available online: <https://www.wwf.de/fileadmin/fm-wwf/Publikationen-PDF/Landwirtschaft/Klimawandel-auf-dem-Teller.pdf>

English summary: [https://www.wwf.de/fileadmin/fm-wwf/Publikationen-PDF/Climate\\_change\\_on\\_your\\_plate\\_WWF\\_2012.pdf](https://www.wwf.de/fileadmin/fm-wwf/Publikationen-PDF/Climate_change_on_your_plate_WWF_2012.pdf)



Key words

#Food and drink  
#Littering



Source

Inspired by Lena Behrendes, educator and sustainability manager at the youth education centre of the German alpine club in Bad Hindelang



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## Materials

Example pictures of an outdoor buffet taken during a course of the Jubi Hindelang (Education centre of the German Alpine Club).



### Recipe for Honey flapjacks energy bars

A great recipe for SEE honey flapjacks energy bars for your activity is:

- 200g local butter
- 100ml local honey
- 200g rolled oats
- 50g desiccated coconut

Nuts, cherries or other fruit to taste

Melt the butter in a small saucepan and stir in the honey. Remove from the heat and set aside.

In a large bowl, mix the oats and coconut then slowly drizzle the butter mixture into the oats while stirring.

Pour the oat mixture in a 20x20cm baking tin and flatten evenly with the back of a wooden spoon.

Bake for 20 minutes at 180°C until golden brown. Mmmmmm..... Enjoy!!!