



Week 1: waste avoidance

Informational material on challenge A and B: waste

What is this all about?

Germans produce 37.5 million tons of household waste per year. That makes about 8.7 kilos of garbage per person per week. By comparison, Germany generates 20% more packaging waste than the average country in Europe. If this waste were avoided, especially plastic and other durable materials, resources could be conserved, energy saved and greenhouse gases reduced.

The term “plastic” is used across the board for various synthetically produced plastics based on crude oil, coal or natural gas. Advantages of this material include durability, formability, its water-repellent properties and high resistance to decomposition.

The throw-away culture has gained much more awareness in recent years. This has resulted, for example, in lifestyles that avoid waste completely. The zero-waste principle, for example, is quite sophisticated and not feasible for everyone. Nevertheless, there are numerous other methods to avoid garbage in everyday life, at school or in the office.

Returnable or disposable?

The basic principle is that reusable items are more sustainable and that utensils such as dishcloths, toothbrushes or shopping bags can be replaced by wood or cotton products. This way you can reduce plastic and multiple use is guaranteed due to the usually better quality.

But if you take a look at the PET-bottle, you will understand the complexity of the problem. Not always is plastic the first material to avoid. Studies show that a disposable PET bottle takes about 450 years to decompose into microplastic particles and that only a fraction of the melted PET bottles is used to produce new bottles. In addition, microplastic parts get from the bottle into the water and thus into our body. The returnable glass bottle, on the other hand, has no such problems. The



biggest problem with the glass bottle is actually the weight and the resulting higher transport emissions. According to a study by the Federal Environment Agency, the Eco balance of a disposable PET bottle can be partly comparable to that of a returnable glass bottle. Ultimately, the material of the bottle, transport routes and bottle volume have to be weighed up, which means that a 1.5 l PET non-reusable bottle is ecologically more justifiable than a 0.7 l glass bottle. In the same way, for example, olives packed in plastic from Italy are generally more sustainable than a glass of imported olives from Corfu. After all, your own containers or drinking bottles, which you can fill again and again, are best. (If you don't want to do without mineral water here, you can use a water bubbler).

What is the main problem with too much waste?

Most of the world's garbage comes from industrial nations and collects in waters as well as in plastic vortexes in the ocean or on plastic beaches. Rivers in Africa and Asia in particular have a high density of plastic waste. Scientists assume that there are now five large plastic vortexes, some of which are one and a half times the size of whole Europe! In the North Pacific the vortex reaches a density of about 1 million plastic particles per km². Animals get entangled and eat the harmful particles. Plastic gets into the food and pollutes the nature. So, it is time to reduce consumption and make a conscious decision against this garbage!

The waste separation system in Germany is quite well developed, but waste avoidance is always ahead of waste recycling. One should therefore always first try not to produce the garbage at all. For the unavoidable garbage, garbage separation is very important, because only if the garbage is correctly separated, recycling can function. The Nature and Biodiversity Conservation Association sums up the system: "Ecologically, it makes sense if unavoidable (!) kitchen waste ends up in the biogas plant instead of in the waste incineration plant: a banana peel provides an estimated 34 minutes of light in an 11 watt lamp. Other foods, because of the high nutrient content, even more". The institution has also published lists in which it can be read how to deal with which type of waste and which special cases there are (NABU, see reference).





Tips and tricks:

- Coffee beans or powder instead of capsules
- fruit loose instead of in packaging (here you can also determine the quantity yourself)
- solid soap/solid shampoo instead of plastic bottles
- reusable cans instead of aluminium foil/ Togo containers
- shopping in the shop instead of ordering online
- cloth/ newspaper instead of gift paper
- loose tea instead of tea bags
- glass/metal straw instead of disposable straw
- no superfluous receipts...





References:

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