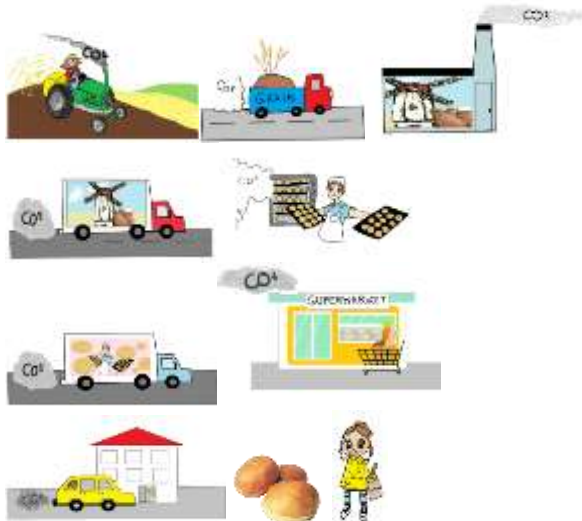


## The Ecological Footprint of Nutrition

Behind every food there is a production chain that begins with a field and ends with the food in your hand. At each transport and processing step area is consumed and CO<sub>2</sub> is produced. For example let's take a bun:



The Ecological Footprint measures all these areas you can see above which are needed for the production of buns. During these production steps a lot of CO<sub>2</sub> is emitted, which has to be fixed again not to cause climate change. The forest area needed to bind this surplus CO<sub>2</sub> is also included in the Ecological Footprint of the buns. The Ecological Footprint of a bun is as big as two sheets of A3 paper (about 0.3 global m<sup>2</sup>) – just for 1 bun!

Farm Animals need a lot of area: from 1 hectare of land you can either feed one cow for one year or produce for example 30 tons of potatoes in one year. Livestock is an inefficient food source: it takes up to 12 kg of soybeans to produce just 1 kg of meat.



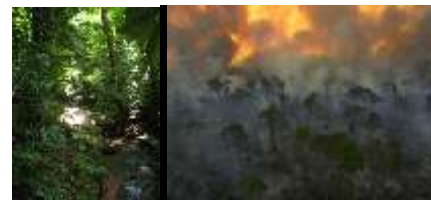
**Meat and animal products have an enormous Ecological Footprint** and huge greenhouse gas emissions - as much as the total global traffic! The biggest Footprint is caused by beef and lamb, as these are ruminants that emit large amounts of methane gas. The manure from farm animals and the nitrogen fertilizers used to grow the fodder also produce a lot of methane and nitrous oxide, which are much "worse" greenhouse gases than CO<sub>2</sub>. An incredible 1.3 billion cattle live worldwide!

### HOW MUCH SOIL DO WE HAVE?



If we scrape together all the soil that exists on Earth then it would make a ball about 50 km in size. Without soil plants cannot grow and without plants we wouldn't have any food. Bio productive areas contain soil and humus and are the basis for nutrition of man. These areas are becoming smaller every day because they have to give way to new roads, parking lots, houses or shopping malls or are degraded by industrial agriculture. In Austria, in average **over 10 football fields of soil areas are taken away every day.**

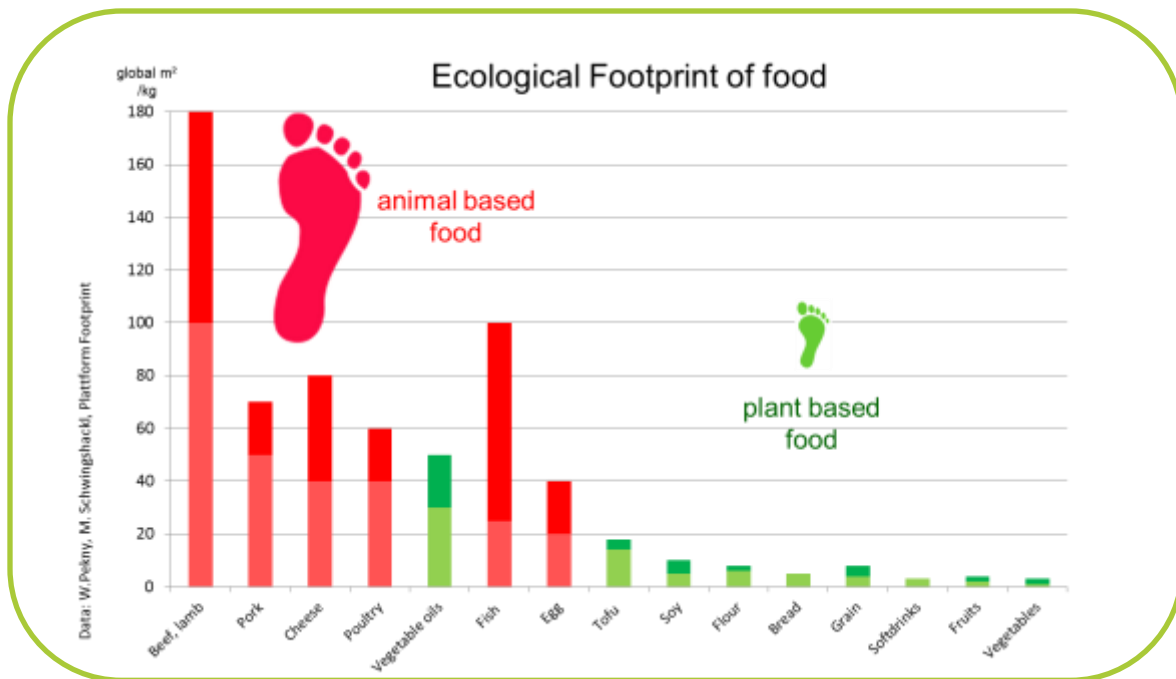
### AREAS FOR LIVESTOCK - WHAT DOES MY HAMBURGER HAVE TO DO WITH THE RAINFOREST?



In Brazil rainforest is being deforested for many decades to create fields, where only one single plant is grown: soy! Where once there was a rich diversity of species with many different animals, plants and indigenous people only soybeans are cultivated which serve as feed for our farm animals: for chickens, pigs and cattle.



In earlier times the farmers got the fodder for their livestock from their own meadows and fields, which belonged to their farm. Today, the farm animals eat the food that is grown far away in Brazil or Argentina and transported across the Atlantic Ocean. The reason for this is that we grow so many farm animals that we cannot feed them from our own fields. There are about 3 mil. pigs and 15 mil. chickens in Austria, because the Austrians (8 mil.) eat so much meat, milk products and eggs. (meat: 65 kg/cap and year)



1. Vegetables, fruits, potatoes, legumes and grain products have a **much smaller** Ecological Footprint than meat, fish, milk products and eggs and are healthier as well. You can also reduce your Ecological Footprint a bit by eating poultry instead of beef.

2. We can also downsize our Ecological Footprint, if we choose season-compliant and local food. Local foods are produced in the region where we shop and have a short transport distance or come from your own garden. Season-compliant means only eating fruits and vegetables that are just ripe: for example strawberries in May-June, or grapes in September, October. We also call them seasonal fruits and vegetables.

Buy organic food or harvest fruits, vegetables, nuts, wild herbs from a garden, park or the country side. Organic food is produced without artificial fertilizers, "weed killers" and insecticides (pesticides) and is good for nature and for the farm animals. It generally has a Footprint that is about 10% smaller.

3. Don't throw food away. In Austria and in the EU almost one third of all food is thrown away. This happens not only at home but also in the supermarket and at the wholesaler. Only buy what you really need. Withhold consciously on special offers such as "Buy 1 get 1 free!" Food beyond the expiration date is not automatically spoiled - trust your senses or ask an adult!

Make valuable compost out of vegetable waste.

#### HOW CAN I REDUCE THE ECOLOGICAL FOOTPRINT OF MY NUTRITION

1. Reduce meat, milk products (especially fat milk products) and eggs



2. Prefer seasonal and local products, as much as possible from organic farming



3. Don't waste food



#### BUILDING MUSCLES WITH SMALL FOOTPRINT

In order to get muscles, you need to exercise and also eat protein. However, these do not have to be of animal origin, they can also come from vegetable food such as legumes. That's why pigs and chickens are fed with soy. The strongest animals in the world are pure herbivores:



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