Food waste: Facts and figures

Food waste is a major contributor to climate change and many other environmental impacts. It is also a major ethical problem. And it would be easy to avoid a large proportion of it.

According to estimates by the United Nations Environment Programme (UNEP), around 17 per cent of all ready-to-eat food worldwide is not consumed but thrown away. If food losses on farms and in supply chains are added to this, UNEP estimates that a third of all food produced is never consumed.

This problem is often referred to as food waste, especially when it would have been avoidable to throw the food away.

'Food waste', food waste, food losses - what is it? What is what?

The term food waste is not clearly defined and is used in different ways. Experts usually use other terms.

The Food and Agriculture Organisation (FAO) distinguishes between food losses and food waste. The FAO defines food losses as the proportion that is lost or spoils before the product is ready or on the market. This includes losses that occur during harvesting, storage, packaging or transport. One example is strawberries that are left in the heat for too long, causing them to ferment or go mouldy.

According to the FAO, food waste occurs when food that is suitable for consumption is thrown away or spoils. For example, when bananas are discarded in shops because their skin is brown. However, incorrect storage or incorrect handling of best-before dates are also considered causes. Adverse shopping and cooking habits also contribute to food waste. People often buy too much or cook too much, so that leftovers or food that is no longer edible is thrown away.

Waste is also differentiated according to whether it is avoidable. Waste is considered avoidable if the food was still edible at the time of disposal or would have been edible had it been consumed in time. Unavoidable food waste includes, for example, non-edible food components such as banana peels or bones.

Why is waste a problem?

Energy, water and land are used unnecessarily to produce and transport food that is not consumed, and fertilisers and pesticides are used. It is estimated that eight to ten per cent of global greenhouse gas emissions are associated with food losses and waste.

Even today, global food production has many disadvantages for ecosystems and the climate. Meat consumption is particularly damaging, followed by dairy products.

This is because keeping livestock requires a particularly large amount of natural resources such as land and water and causes greenhouse gas emissions.

In Germany, more than half of the country's territory is used for agriculture. Intensive farming in particular is responsible for the decline and threat to numerous species - among other things through the use of pesticides. In addition, arable farming and animal husbandry, in which pesticides and fertilisers are used, cause problems for soil and water.

Food production therefore affects ecosystems, the climate and our health. For these and other reasons, it is very important to treat food with care and to value it.

What is the extent of the waste?

Different information can be found in the media and in various sources. This is also due to different definitions. The United Nations Environment Program presented methods for measuring this in 2021.

The current data shows: Worldwide, around 17% of all food ends up in the bin due to food waste in households, restaurants and stores.

In Germany, the Federal Cabinet adopted the "National Strategy to Reduce Food Waste" in February 2019. Since then, methods for uniform nationwide recording of food waste have been developed. As a result, around twelve million tons of food waste are generated in Germany every year. More than half of this, around seven million tons, could be avoided.

According to the study, the majority of food waste (52% or 6.1 million tons per year) is generated in private households. According to this calculation, each person throws away around 75 kilograms of food per year. This does not even include drinks and food waste that is disposed of via the sewage system.

Primary production accounts for around twelve percent (1.4 million tons) of food waste, while processing accounts for 18 percent (2.2 million tons). 14 percent (1.7 million tons) of waste is generated in out-of-home catering. And according to this calculation, retail accounts for four percent (0.5 million tons) of food waste.