

THE HOUSEHOLD WASTE

In the food supply chain household waste is by far the most problematic, because of the estimated quantities as well as for the actions to reduce it. While for food farming, food transformation and distribution there are some reliable statistics as well as proven ways to prevent waste or to reuse food in a socially minded way, at a household level most edible food goes straight into the bin. Moreover, most studies on household food waste focus on specific ranges (waste at home, in schools' canteens), on specific population segments, or specific geographical areas.

According to the SINU (Italian Society for Human Nutrition), the daily calories intake for every Italian is about 3700 kcal, equal to one and an half the daily calories need, and so there is a surplus of 1700 kcal that tends to generate overnutrition or that gets wasted (it is 3900 Kcal for the US, between 3700-3800 Kcal for Great Britain, Ireland, Belgium, France and Canada and between 3500-3600 Kcal for New Zealand, Finland, The Netherlands and Iceland).

With household waste the food tossed away is food cooked or not, that has gone off or not consumed.

In the calculation of the household waste we include also food and drinks that have been prepared at home but consumed outside and disposed in bins and dumpsters.

With regard to quantifying waste, Bloom (2010) pinpoints how American families throw away about 25% of food and drinks they buy. In terms of value, the estimate for an average family of four, is between 1,365 and 2,275 dollars per year. Dobbs (2011) also pinpoints that these waste have serious implications with regard to energy waste. According to the study by McKinsey, household waste is responsible on average, for eight times the energy waste for post-harvest losses.

In the United Kingdom about two third of household waste is linked to food decay caused by a non prompt consumption of the food, whereas the other third is linked to the way is cooked or because too much of it has been prepared. (WRAP 2011). In this phase of the food supply chain perishability constitutes the main cause for food losses. In terms of total volume, fresh fruit and vegetables constitute the greater quota of waste, followed by milk and fish and meat.

It is important to underline how household waste are not inevitable and that do not represent an ever present occurrence. A 1987 study has observed that people over 65, many of whom experienced the Great Depression and Second World War, waste half of the food wasted by younger generations. In the same way, developing countries, waste "only" 6-11 kg pro-capita of food products per year whereas developed countries waste 95-115 kg of food pro-capita per year. (FAO 2012).

So, for example, the average household waste in the USA is ten times more than the average waste in South East Asia. At national level (in Italy) instead it emerges that every year we waste food for about 8 millions of euro (in terms of monetary level). The research by the University of Bologna, underlines how more than 30% of interviewees declare to waste food in big quantities; 32% declare to throw away between 250 g and 2 kg of still

edible food every week. In Italy as well, fruit and vegetables get thrown away more (between 60% and 70% of interviewees), followed by milk, cheese, yogurt, eggs and bread (between 25 and 30% of the interviewees).

Finally, the factors that determine the quantity of waste at household level are:

- number and composition of family members (in absolute terms adults waste more than children, bigger families waste less than smaller families);
- family income (low income families waste less);
- culture (for example, in the USA Hispanic families waste 25% less than non-Hispanic ones);
- the season of the products (in summer there are more waste).

BIBLIOGRAFIA

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