FOOD DISTRIBUTION

Ugly vegetables wasted*J. Cleaner Prod.* **201**, 869–878 (2018)

Credit: Mar Photographics/Alamy Stock Photo

Most research into food sustainability looks at productivity during growth. However, distribution and consumption of food is equally important. Occasional news about the steps in supply chains where food is wasted reveal unexpected areas of concern. Still, the full scope of food wasted

is largely unknown. One reason for leakage is aesthetics: vegetables that are larger, smaller, or misshapen relative to standard expectations often do not reach the shops. The nutritional value of these foodstuffs is intact. Food loss due to cosmetic criteria is particularly hard to quantify, because some of these vegetables never leave the field.

Stephen Porter and colleagues, from the University of Edinburgh, UK, estimate the quantity of fresh fruit and vegetables lost from supply chains due to cosmetic criteria in the European Economic Area and the United Kingdom. Their estimate is based on published data about on-farm cosmetic grade-out loss and cradle-to-farm-gate emission factors for 10 common crops. Despite large uncertainties in the quantification, they estimate that between a fifth and a fourth of food is wasted due to aesthetic reasons only. The production of these wasted products contributes around 5% of the greenhouse gas emissions from agriculture. The authors discuss how this phenomenon is driven by retailers, consumers and government standards, and they also outline alternative business models that can help overcome this issue.

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