

Foodmile Calculations

What are the ecological costs of the food you consume?

When we calculate the cost of a meal, we often do not take into consideration the ecological costs associated with the production of a particular commodity. One such measure we should explore when assessing the ecological costs of our consumptive behavior is the distance a product must travel in order to reach a group of consumers. When food is consumed close to its point of production, the ecological costs associated with the consumption of that product will be minimal, e.g., an apple picked in a suburban garden and eaten immediately. However, when food is brought from a distant part of the world, the amount of energy used may be very large, possibly greater than that needed to produce it.

It would be virtually impossible to exactly calculate the amount of energy used to transport a given item of food from the farm, fishery, or factory where it was produced to its point of consumption. The concept of foodmiles, however, may be used as an alternative unit of measurement to provide an illustration, but without extreme claims to accuracy (the term foodkilometre is strictly more appropriate, but is rather clumsy).

For example, an orange with a mass of 150g from Spain, consumed in London could be worth $150 \times 1,2000$ or 180,000 units.



Foodmile value

The mass of a food item (g) x distance transported (km)

Foodmiles calculation for a light breakfast consumed in Perth, Australia

Food item	Mass (g)	Source	Distance (km)	Foodmile Units
Pineapple juice	200	Queensland	4,000	800,000
Cereal	200	New South Wales	3,000	180,000
Kiwi fruit (portion)	50	New Zealand	5,000	250,000
Slice of toast	50	Western Australia	150	7,500
Marmalade	5	Home-made	0	Negligible
Coffee	10	Papa New Guinea	4,000	40,000
TOTAL				1,277,500

Ok, now let's take a look at your breakfast. Execute the calculations necessary to determine how many foodmiles are expended to make your breakfast.

Food item	Mass (g)	Source	Distance (km)	Foodmile Units
TOTAL				



What can you determine from your findings?

Go Further: What is the carbon footprint of the food we eat? Follow the path of a BLT from field to plate in this short video. Consider ways to reduce your carbon footprint with the food choices you make.



Watch this video:
bit.ly/WS-Food-CF



SCAN ME



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