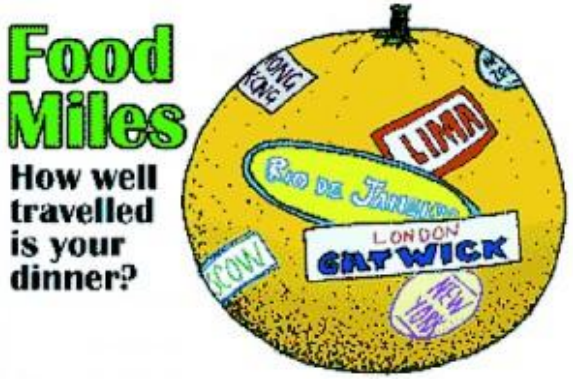
Different aspects of food quality (Fair trade, Food miles)

FAIRTRADE INTERNATIONAL



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What is the food quality?

- the quality characteristics of food that is acceptable to consumers

- external factors - size, shape, colour, gloss and consistency, texture and flavour

Quality characteristics

- Quality characteristics include:
  - sensory properties
  - chemical composition
  - microbiological examination and evaluation

Organic / conventional food quality

- Conventional
  - higher nitrate
  - lower vitamin C
  - more residues of pesticides, heavy metals

- Organic
  - non-toxicity of food
  - more vitamins
  - more biocompounds
  - more protein
  - better taste?

Type of food quality

Product quality is defined as the sum of a product:

Specifies the following information:

- nutrients

  (proteins, fats, carbohydrates, minerals, vitamins and water)

- appearance and sensory factors

  (shape, color, smell, taste)

Type of food quality

- technological factors

  (texture, structure, etc.)

- hygiene factors

  (substances that reduce the quality of the content, the number of microorganisms)

  - For example: 2006 North American E. coli

Supervisory authorities in ČR

- Czech Agriculture and Food Inspection Authority
  - state supervision in food production and placing on the market
  - the entry and imports of food and raw materials from third countries

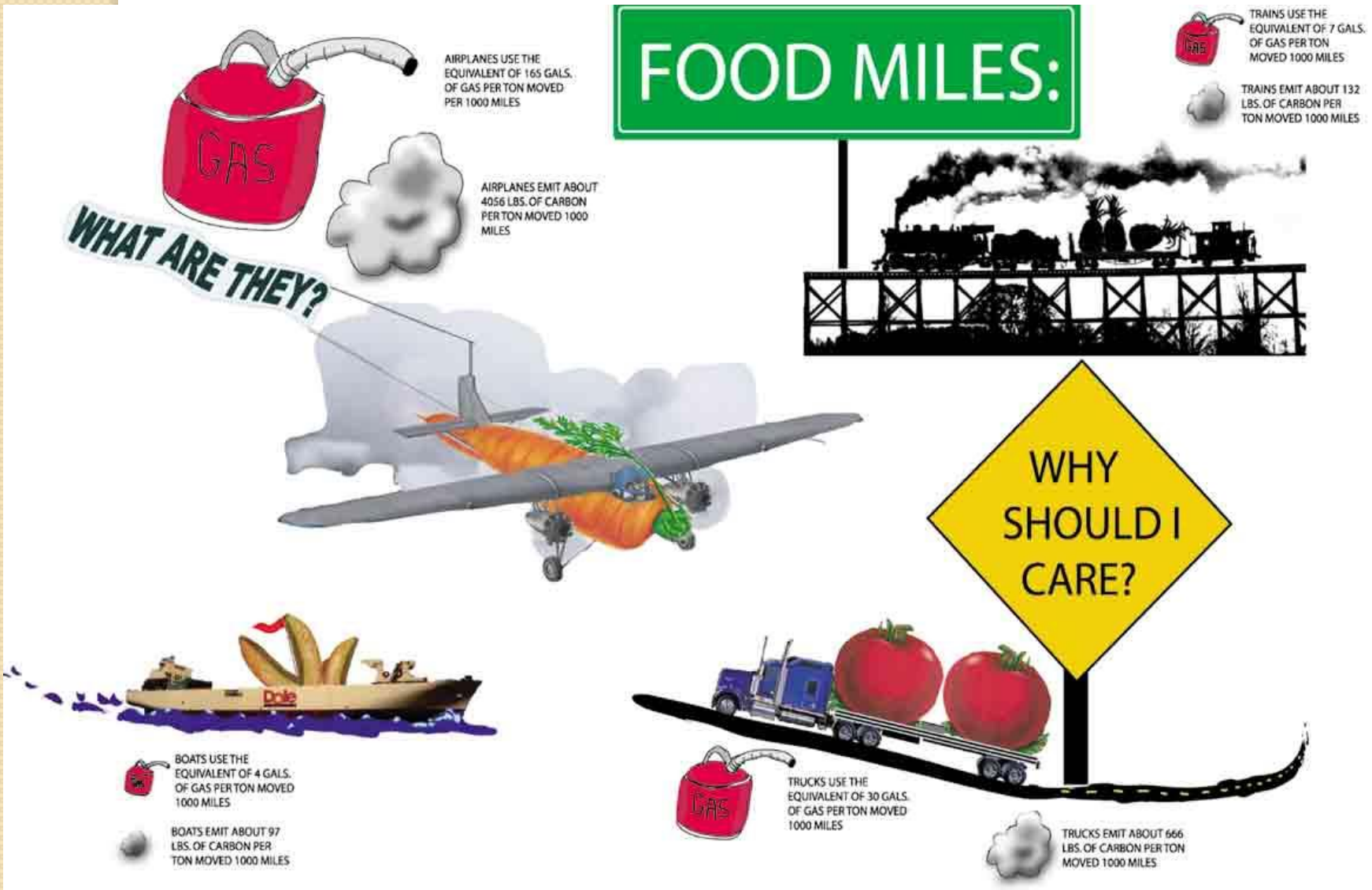
Project of regional food (ČR)

- quality, local ingredients, traditional recipes and excellent taste
- promotion of small and medium-sized producers from regions

Food miles

Food miles:

- are a way of attempting to measure how far food has travelled before it reaches the consumer



This poster indicates roughly how much energy each form of transportation uses and how much carbon dioxide it produces. As any car driver knows, these figures depend a great deal on how the vehicle is driven, the vehicle's condition and technology, and the weather. These are some of our best guesses of industry-wide averages based upon the existing literature.

Local Food Distribution

- start on smaller, sustainable family farms
- farm products are transported over shorter geographic distances
- generally processed either on the farm itself, or with smaller processors

Local Food Distribution

- Sustainable/local food distribution networks rely on two primary markets:
  - the direct-to-consumer market
  - the direct-to-retail foodservice and institution market

Food miles – primary energy requirement per kg of locally-grown versus apples imported from New Zealand in April

Home-grown, local fruit	Energy per unit [per kg, t, km or day]	Primary energy requirement [MJ/kg apples]
Apple cultivation	2.8 MJ/kg[1]	2.800
20 km transport to Meco	3.47 MJ/t/km[2]	0.069
Initial cooling	86.3 kJ/kg[3]	0.086
150 days CA storage at 1°C in Meckenheim	5.4 kJ/kg/day	0.810
Packaging	650 kJ/kg	0.650
40 km in < 28 t truck to wholesale market Roisdorf	2.32 MJ/t/km[2]	0.093
150 km < 40 t truck to retail	1.38 MJ/t/km[2]	0.207
Cooling on truck 95 km	0.3 MJ/t/km	0.028
Consumer shopping 6 km[4]	3.83 MJ/km[4]	1.150
	Local fruit	5.893

Pimentel (1979);2 Frischknecht et al. (1994);3 Hochhaus et al. (1994);4 Kjer et al. (1994)

Food miles – primary energy requirement per kg of locally-grown versus apples imported from New Zealand in April

Import from New Zealand	Energy per unit [per kg, t, km or day]	Primary energy requirement [MJ/kg apples]
Apple cultivation	2.8 MJ/kg[1]	2.100
40 km transport to Nelson	3.47 MJ/t/km[2]	0.139
Initial cooling	86.3 kJ/kg[3]	0.086
23,000 km reefer Nelson-Antwerp[3]	0.11 kJ/kg/km[3]	2.534
28 days cooling on board[3]	10.8 kJ/kg/day[3]	0.302
Packaging	650 kJ/kg	0.65
200 km in < 40 t truck to regional distribution centre	1,38 MJ/t/km[2]	0.276
150 km < 40 t truck to retail	1.38 MJ/t/km[2]	0.207
Cooling on truck 175 km	0.3 MJ/t/km	0.055
Consumer shopping 6 km[4]	3.83 MJ/km[4]	1.150
	Imported fruit	7.499

Pimentel (1979); 2 Frischknecht et al. (1994); 3 Hochhaus et al. (1994); 4 Kjer et al. (1994)

Fair trade

Fairtrade is:

- an alternative approach to conventional trade
- based on a partnership between producers and consumers

Fairtrade offers:

- producers a better deals
- improved terms of trade
- consumers a powerful way to reduce poverty through their every day shopping

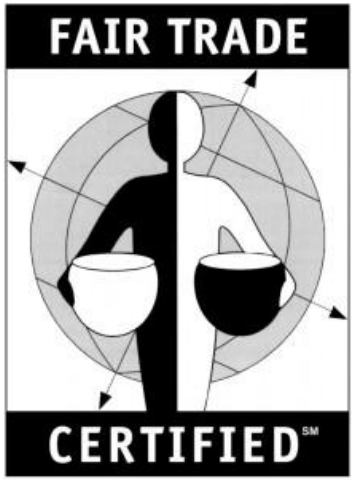
What are the Principles of Fair Trade?

- creating opportunities for economically disadvantaged producers
- payment of a fair price (minimum floor price for their product)
- community Development (the social premium)
- Fair Labor Conditions
- Environmental Sustainability

Fair trade and quality

- are often higher quality than other products because the Fair Trade system provides incentives for farmers to improve the quality of their products
- for example, most Fair Trade coffee is also single origin, which enhances the quality of the coffee

How can I identify Fair Trade products?



Fair trade products

- coffee
- tea
- cocoa
- fruit
- sugar
- honey
- rice
- quinoa
- vanilla
- olive oil
- flowers
- spices
- wine

Thank you for your attention!