

Fossil Fuels and Food

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Petrochemicals are key components to much more than just the gas in your car. As geologist Dale Allen Pfeiffer points out in his article entitled, "Eating Fossil Fuels," approximately 10 calories of fossil fuels are required to produce every 1 calorie of food eaten in the US.

The size of this ratio stems from the fact that every step of modern food production is fossil fuel and petrochemical powered:

1. Pesticides are made from oil;
2. Commercial fertilizers are made from ammonia, which is made from natural gas, a fossil fuel.
3. Farming implements such as tractors and trailers are constructed and powered using oil;
4. Food storage systems such as refrigerators are manufactured in oil-powered plants, distributed across oil-powered transportation networks and usually run on electricity, which most often comes from natural gas or coal;
5. In the US, the average piece of food is transported almost 1,500 miles before it gets to your plate. In Canada, the average piece of food is transported 5,000 miles from where it is produced to where it is consumed.

It's not just transportation and agriculture that are entirely dependent on abundant, cheap oil. Modern medicine, water distribution, and national defense are each entirely powered by oil and petroleum derived chemicals.

Reducing fuel consumption

Direct farmer-to-consumer marketing, such as farmers' markets, bypasses centralized distribution systems, cutting out unnecessary food travel and reducing packaging needs while improving local food security.

Farmers' markets are expanding across the United States, growing from 1,755 markets in 1993 to 3,100 in 2002, but still represent only 0.3 percent of food sales.

Eating energy-smart

The biggest political action individuals take each day is deciding what to buy and eat.

Rather than propping up fossil fuel-intensive food systems, governments could promote sustainable agriculture, locally grown foods, and energy-efficient transportation.

Preferentially buying local foods that are in season can cut transport and farm energy use and can improve food safety and security.

Buying fewer processed, heavily packaged, and frozen foods can cut energy use and marketing costs, and using smaller refrigerators can slash household electricity bills.

Eating lower on the food chain can reduce pressure on land, water and energy supplies.

Dangers of fossil fuels

Fossil fuel reliance may prove to be the Achilles' heel of the modern food system. Oil supply fluctuations and disruptions could send food prices soaring overnight. Competition and conflict could quickly escalate.

Decoupling the food system from the oil industry is key to improving food security.