

Want to Save the Environment — Change Your Food Habits

Many people are aware of the carbon footprint and environmental impact of automobiles and industries. But have you ever thought that the carbon footprint of our food is significant as well for environment.

Greenhouse Gases

Every step in getting food from the farm to our plate involves emission of greenhouse gases (GHGs). The carbon footprint of food refers to the amount of GHGs it produces — from production to its consumption. Often, it is expressed in terms of the amount of carbon dioxide or its equivalent of other GHGs emitted.

Carbon footprint of food can be measured through an assessment of its GHG emissions.

Food Miles

Food miles are one of the factors used when assessing the carbon footprint and environmental impact of food. Food mile refers to the distance food is transported from the time of its production until it reaches the consumer. In India, where agricultural farms are close to the population, food miles would be much lower than that in the case of developed country like the USA.

Food miles of a food is the highest if it is transported by road. Road transport produces 60 per cent of the world's food transport carbon emissions.

Other Factors

Many other factors involved in the agricultural processing and food supply chain also contribute to GHG emissions. Instead of measuring a product's carbon footprint through food miles alone, the *Lincoln University* scientists expanded their equations to include other energy-consuming aspects of food production. The important aspects include water use, harvesting techniques, fertiliser used, renewable energy applications, means of transportation and the kind of fuel used, the amount of carbon dioxide absorbed during photosynthesis, disposal of packaging, storage procedures and dozens of other cultivation inputs.

In India, agricultural and dairy production engage huge number of livestock, hence a great volume of cow dung. Cow dung and manure emits 'methane'— a greenhouse gas. This increases the carbon footprint of food in our country. Paddy cultivation in our country is another source of methane emission.

Low-Carbon Diet

A 'low-carbon diet' is the way you can do something meaningful to help save the planet and the environment. In a low-carbon diet, little carbon is produced in getting that food to your table. It is a lifestyle choice that involves eating food that lessens the greenhouse gas emission by the entire food supply chain. It involves food choices that do not expend energy resources or pollute the planet with carbon dioxide. A low carbon diet



minimises the emissions released from the production, processing, packaging, transport, and preparation and wastage of food.

It is dietary choice, not food miles, which most determines a household's food-related climate impacts, says *Carnegie Mellon* researchers. It's increasingly recognised that meat and dairy products are the largest sources of food-related emissions. Adopting a plant-based vegetarian diet, even if the vegetarian food is transported over very long distances, does far more to reduce greenhouse gas emissions, than does eating a locally grown diet of animal-based products. In India consuming less dairy products and rice would contribute to a low-carbon diet.

Organic Food

Contrary to a common belief that organic foods have lesser carbon footprint, a *University of Alberta* study showed that organic fruit and vegetables might be healthier, but not necessarily for the environment. The greenhouse gas emitted when product is transported to great distances mitigates the environmental benefits of growing the food organically. The positive environmental effects of organic farming may be compromised by increased transport, unless it is produced locally.

Reduce Your Food Footprint

- * Consume more local or regionally produced, plant-based, seasonal foods that haven't travelled long distances to reach you.
- * Shop at the market where local farmers bring their products. Choose foods with less packaging to reduce waste.
- * If non-vegetarian, eat less meat; going meatless for just one meal a week can make a difference. Globally, it has been estimated that 18 per cent of all greenhouse gas emissions are associated with meat consumption.
- * Limit the use of dairy products.
- * If you have some space on your premises, develop a kitchen garden. It does not consume energy, except the calories you burn to plant, clean, and harvest it.

Sources: cmu.edu, sciencedaily.com, expressnews.ualberta.ca, myfootprint.org, nytimes.com, guardian.co.uk, en.wikipedia.org

Supermarket giant Tesco has become the first UK retailer to display the full carbon footprint of milk — one of the top-selling products in its stores. According to guardian.co.uk, Tesco said that in the case of milk, it is the agricultural stage that accounts for the biggest portion of the carbon footprint — in this case the most significant factor being methane emission from the cows themselves.

