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The Implications of Food Miles

For most of human history, people's shelves have been stocked with foods that were seasonally grown within their home gardens or purchased from the local food market. This close connection people once had with their food source, however, is no longer a reality for the majority of today's consumers. Unlike in the past when food was grown and supplied within communities, food today is often mass produced within designated regions and transported throughout the nation. While this industrialized system of food production certainly has its advantages, such as providing people the luxury of eating the foods they want any time of the year, it has not been implemented without consequences. People commonly buying foods that are grown and harvested long distances from their homes has served to harm our environment, as well as the health and quality of the foods we consume.

This transition towards an industrialized agricultural system in which foods are mass-produced and transported throughout the nation has resulted in researchers developing the concept of "food miles" to compare local and conventional foods. This comparison is made as "food miles" measure how far a single piece of produce travels from where it is grown to where it is finally purchased by the consumer. According to a 1996 report cited in the article "Explore with a Localvore," the average piece of produce travels 1,500 miles from where it is produced to store shelves. A large portion of this mileage is the result of the estimated 20 percent of fruits and vegetables found in supermarkets that are imported from international markets. The average American meal includes at least five of these fruits and vegetables, or other such imported products. This is a substantial amount, considering that the majority of the products we consume

consist of multiple ingredients. Analyzing this statistical information on the origin of our food within the concept of “food miles,” researchers at the Leopold Center for Sustainable Agricultural at Iowa State University were able to determine that on average, “conventional produce traveled 27 times further than the same locally-sourced fruits and vegetables.”

The considerable distances conventional foods travel has resulted in detrimental consequences for our environment. Food transportation requires a substantial amount of fossil fuels. In fact, in the article “Explore with a Localvore” Shea states that transportation is responsible for 11 percent of the energy consumed by the food system in its entirety. While the majority of food transportation requires an energy source, conventional foods are responsible for consuming the vast majority of these fossil fuels. In her article, Shea reveals that produce being trucked across the country results in more than five times the carbon emissions produced by the transportation of local crops. As an example provided by Rauber in the article “Miles to Go Before You Eat,” an apple grown in Iowa travels 60 miles in a small truck to Des Moines and requires 1.7 teaspoons of gasoline. Alternatively, an apple grown in Washington is shipped 1,722 miles to Des Moines in a semi trailer and requires 1 cup of gasoline. Produce flown to the United States from other countries is even more harmful to the environment, as air travel consumes the most fossil fuels and produces the most substantial amount of carbon emissions. Unfortunately, according to Hemmelgarn in the article “To Everything There Is a Season,” food transportation is one of the largest and fastest growing sources of the carbon emissions responsible for current environmental concerns, such as global warming.

The health and quality of the foods we consume are also often compromised by the long distances our foods commonly travel. In order to withstand the measures of time and transport, foods are often subjected to methods of harvesting that serve to compromise their taste and

quality. For example, fruits and vegetables are picked before they are ripe to ensure their survival during the rough handling often associated with food transportation. Not only do the transportation methods of conventional fruits and vegetables not offer the consumer the quality and taste of properly harvested local produce, but they also serve to reduce the health benefits these fruits and vegetables are capable of providing. When fruits and vegetables are harvested before they are ripe, they are incapable of fully developing naturally and their nutrient value is compromised. The extra time needed for conventional fruits and vegetables to travel from where they are produced to where they are sold also compromises the health benefits of produce as heat, light, and oxygen exposure act as nutrient destroyers. In the article “To Everything There Is a Season”, Hemmelgarn emphasizes that “a five- to 10-day road trip might result in a 30 to 50 percent loss of some vitamins”.

The health of the foods we consume is further jeopardized as they are polluted with additives, preservatives, pesticides, and the germs of those who handle them throughout their journey. Fruits and vegetables are commonly exposed to chemicals in order to ensure that their appearance resembles what they would look like had they been harvested and sold when ripe. For example, in the article “Explore with a Localvore” Shea reveals that ethylene gas is used to give tomatoes that have been picked before they are ripe their red coloring. Apparently, the lack of knowledge about one’s food source is equivalent to not knowing what chemicals, pesticides, or other such toxins are being consumed and added to the body.

While the close connection people once had with their food source is uncommon in today’s society, the valiant efforts of many people and organizations have served to reconnect us with the source of what we eat. As emphasized by Shea, farmers’ markets, of which there are currently 4,000 of in the United States, and Community Supported Agriculture (CSA) Programs,

in which you buy a share of a farm and receive a portion of that farm's produce throughout the season, are great resources for eating locally and are becoming more and more prevalent throughout the country. For example, the Madison Area Community Supported Agriculture Coalition (MACSAC) works to create a sustainable and locally based food system by coordinating community and farmer education programs about the benefits of locally grown foods. The farms endorsed by this coalition are dedicated to producing sustainable, locally grown produce and in turn allow their members the opportunity to consume healthy and quality fruits and vegetables while simultaneously doing their part to protect our environment.

Sources:

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