

# GUIDE TO A CLIMATE-FRIENDLY DIET

Did you know you can help reduce climate change simply by changing some of your eating habits? The American food system is responsible for a lot of the carbon dioxide and other greenhouse gases we produce overall. This means that the meals we eat have a big impact on our climate. Since we all eat, this provides a great opportunity to make a big difference through small changes.

Some people try to choose food lower in “food miles”—the distance food travels to get to us—to reduce the carbon emitted by the vehicles that transport our food. But carbon emissions differ greatly by mode of transportation: food transported by boat, for example, is much more climate-friendly than food trucked or flown in. Also, transportation makes up only 11% of food-related greenhouse gas emissions in the U.S. — meaning food miles don’t tell the whole story.

**So how can you eat in a climate-friendly way? Consider a food’s entire life cycle, from seed to plate to garbage bin.**

## HERE ARE A FEW STEPS YOU CAN TAKE:

### EAT LOCAL & SUSTAINABLE

In addition to considering where your food was made, consider *how* it was made. Sometimes, producing food locally emits more carbon than shipping food in from far away. For example, “conventional” agriculture makes use of chemical fertilizers that deplete soil and require large amounts of resources and energy to produce. Other staples of conventional agriculture include chemical pesticides, which disrupt plant and animal life, and intensive tilling (turning over the soil), which uses a lot of fuel. More natural ways of growing food, including organic agriculture, make use of water, sunshine, and farming methods passed down over many centuries (see box below).

**LOCAL RESOURCE:** For more information on local, sustainable food in the Chicago region, see the GOTO2040 regional plan: [cmap.illinois.gov/2040/local-food-systems](http://cmap.illinois.gov/2040/local-food-systems)



**CHICAGO**  
**PEMBROKE**

**African-American farmers in Kankakee County’s Pembroke Township**, just 60 miles south of Chicago, have been growing produce sustainably and naturally since the 1860s. Many of the agricultural practices they employ, such as crop rotation and natural pesticide use, have been passed down through generations of farmers in the region. Pembroke farmers are now beginning to sell their produce at farmers’ markets across the state, including in Chicago.

### WHAT IS CLIMATE CHANGE?

**Climate change** refers to shifts in weather patterns over long periods of time. Today it is caused largely by human activities, like burning fossil fuels, that produce greenhouse gases. Greenhouse gases are trapping heat in our atmosphere faster than ever, causing the climate to change in a variety of ways that disrupt our daily lives. Climate change is already affecting the Chicago region in the form of floods, heavy snowfall, and heat waves. To learn more, see *Climate Change in the Windy City and the World*, a tool for understanding climate science in the Chicago region: [climatechicago.fieldmuseum.org/windycity](http://climatechicago.fieldmuseum.org/windycity).

### EAT IN SEASON

Growing food out-of-season demands excess water and energy, so try to buy in-season foods that are well-suited to your region and grown naturally. Your local farmers’ market is a great place to find seasonal produce. Don’t be shy! Ask your local farmers how they grow their food.

Given our winters, eating in-season foods year-round in Illinois may seem like a challenge. But there are climate-friendly ways to enjoy foods out of season. If you grow or buy fresh herbs in the summer, you can dry or freeze them for use all winter. And fruits and vegetables can be canned, pickled, or frozen to eat later.

### LOCAL RESOURCES

- To find a farmers’ market in Illinois, visit [illinoisfarmdirect.org/market\\_search.html](http://illinoisfarmdirect.org/market_search.html).
- For a list of farmers’ markets that accept the Illinois Link Card, visit [dhs.state.il.us/page.aspx?item=44172](http://dhs.state.il.us/page.aspx?item=44172)
- To find out what foods are in season, download the Illinois Department of Agriculture’s handy chart: [agr.state.il.us/markets/WhatsInSeason.pdf](http://agr.state.il.us/markets/WhatsInSeason.pdf).
- The National Center for Home Food Preservation offers how-to’s on canning, drying, and other food preservation methods: [nchfp.uga.edu](http://nchfp.uga.edu).

### With friends like these...

Who needs fertilizer? Native Americans have been planting the “Three Sisters”—corn, beans, and squash—together for many years. The crops help each other grow naturally, without weed killers or fertilizers. How does *your* heritage affect what you grow and eat?



## EAT MORE WHOLE FOODS

83% of the average American's household's food-related carbon emissions come from food production—and a large portion of that is processing and packaging. 🌱 The foods that require the most energy to produce are actually the ones that our doctors tell us to eat the least: highly processed, heavily packaged “junk food.” Cut back as much as possible on these individually packaged snacks—and beverages, too: instead of buying canned soda and bottled water, carry a reusable metal water bottle and refill it.

Try to replace processed foods, like frozen and boxed meals, with fresh produce and whole grains—known as “whole foods.” One affordable way to gain access to these foods is to grow them yourself in your yard or a local community garden. And instead of buying food that was processed in a factory, do the “processing” at home—cook more!



**Community gardens, like this one in Bronzeville** on Chicago's South Side, are a great way to get access to fresh food and spend time with your neighbors. For more information on how to grow a climate-friendly garden, see the Climate Action Plan for Nature: Community Action Strategies at [climatechicago.fieldmuseum.org/capn](http://climatechicago.fieldmuseum.org/capn).

To learn more about climate action in Bronzeville, visit: [climatechicago.fieldmuseum.org/bronzeville](http://climatechicago.fieldmuseum.org/bronzeville).

🌱 “Food-Miles and the Relative Climate Impacts of Food Choices in the United States,” by Christopher L. Weber and H. Scott Matthews. [pubs.acs.org/](http://pubs.acs.org/)  
🇺🇸 U.S. Environmental Protection Agency report: “Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2009.” [epa.gov/climatechange/emissions/usinventoryreport.html](http://epa.gov/climatechange/emissions/usinventoryreport.html). 🐄 Food and Agriculture Organization of the United Nations Report: “Livestock's Long Shadow: Environmental Issues and Options.” [fao.org/docrep/010/a0701e/a0701e00.HTM](http://fao.org/docrep/010/a0701e/a0701e00.HTM). 🍎 Diet for a New America: How Your Food Choices Affect Your Health, Happiness, and the Future of Life on Earth, by John Robbins.

## EAT LESS DAIRY & MEAT

Meat production is a major cause of climate change: the U.N. estimates that it accounts for 14% of all greenhouse gas emissions caused by humans. 🐄 Red meat (beef, pork, and lamb) is especially harmful to the climate, about 150% more so than chicken or fish. 🌱 In fact, one fifth of the greenhouse gas methane produced by the U.S. comes just from the digestive processes of cows (mostly their burps). 🌊 Plus, clearing land to grow feed and raise animals drives much of the destruction of the earth's forests, which in turn speeds up climate change.

Meat's environmental impact has greatly increased in the last 50 years, for two reasons: we eat much more meat than we used to, and we now produce most of it on large factory farms. In factory farming, livestock waste is mismanaged and ends up emitting greenhouse gases and polluting nearby waterways.

Try to eliminate or cut back on meat and dairy. When eating meat and dairy, buy from small- to mid-size family farms, which tend to pollute significantly less than factory farms.

**LOCAL RESOURCE:** Illinois Farm Direct has a directory of smaller local farms that sell meat and dairy: [www.illinoisfarmdirect.org](http://www.illinoisfarmdirect.org).



### There aren't plenty of fish in the sea...

Fish are a great alternative to meat, but some are over-fished or fished in environmentally harmful ways. For easy reference at supermarkets and restaurants, consult the Shedd Aquarium's pocket guide to sustainable seafood: [www.shedd-aquarium.org/pdf/Right\\_Bite\\_Wallet\\_Update.pdf](http://www.shedd-aquarium.org/pdf/Right_Bite_Wallet_Update.pdf).

To learn about local fishing and fish preparation practices that are safe and environmentally friendly, see The Field Museum's comic book *Grab This Fish Tale*: [fieldmuseum.org/sites/default/files/FishTale\\_web.pdf](http://fieldmuseum.org/sites/default/files/FishTale_web.pdf)

## DID YOU KNOW?

On **one acre of land**, you can grow 20,000 pounds of potatoes, or... enough cattlefeed to produce less than 165 pounds of beef. 🍎



**20,000 lbs** of potatoes **VS** **165 lbs** of retail beef cuts

## ADDITIONAL RESOURCES:

Field Museum videos on food, culture, and climate change along with a discussion guide are available at: [climatechicago.fieldmuseum.org/learn](http://climatechicago.fieldmuseum.org/learn)



Find this and other climate action tools at [climatechicago.fieldmuseum.org](http://climatechicago.fieldmuseum.org)

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