

MIT: Department of Athletics, Physical Education, and Recreation
How to Eat More Sustainably at MIT

What does it mean when food is in season?

- Food is in season when it is at its peak either in terms of harvest or flavor, although the two usually coincide. See A Shoppers Guide to Fruits and Vegetables for a list of what is available by season.

How do I know if a food is in season?

- See A Shoppers Guide to Fruits and Vegetables for a list of fruits and vegetables by season.
 - Do your best to stick to foods that are in season most of the time. When you want something that is out of season, consider buying it frozen, dried, or canned (these fruits and vegetables were harvested in season, and then preserved for you to eat at your convenience).

What does eating locally mean?

- Eating locally means purchasing foods that are grown, raised, processed near you. This might mean 15 miles down the road, within the same state, or in a neighboring state. While living in Massachusetts, products from New England (Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut) are generally considered local.

How do I know if a food is local?

- Grocery stores are beginning to respond to consumers' requests to know where their food comes from, but labeling is still inconsistent. With a close look at the signs next to your produce, you may be able to learn where your food came from. If you know that food is not in season in your area, you can safely assume it is not local.
 - If your local grocery store does not provide you with this information, ask an employee to find out for you. Also, speak with the manager and ask him/her to post foods' origin so consumers can make informed choices!
 - For more specific information about what is in season in Massachusetts, go to <http://www.massfarmersmarkets.org/>, where you will see what farmers are currently producing and where you can find these foods.

What does it mean when food is organic*?

- Organic food is produced by farmers who emphasize the use of renewable resources and are particularly focused on soil and water conservation.
 - To conserve soil, farmers may practice no-till-farming, rotate their crops, plant a wind row, etc.
 - To conserve water, farmers will work to increase the efficiency of their existing irrigation system; this may involve reducing run-off, using soil moisture and rainfall sensors to optimize irrigation schedules, or other similar practices.
- As a general rule, natural substances are allowed in organic farming while synthetic substances are prohibited. There are some exceptions.
- Organic food is produced without:
 - Most conventional pesticides
 - Fertilizers made with synthetic ingredients (e.g. Petroleum) or sewage sludge
 - Genetic engineering
 - Ionizing radiation
- A government-approved certifier must inspect a farm to ensure the farmer is following all the rules necessary to meet USDA standards before its products can be labeled organic.
- Organic meat, poultry, eggs, and dairy products come from animals that were fed all organic feed, given access to the outdoors, NOT given antibiotics, and NOT given growth hormones.
- Companies that handle or process organic food must also be certified.

* As defined by the United States Department of Agriculture

How do I know if a food is organic?

- If a food is labeled organic then by law it must comply with USDA Organic regulations, see the definition of organic above. You will see this symbol on organic foods. →
 - Before making organic purchases, see the dirty dozen and clean fifteen lists which can be found on A Shoppers Guide to Fruits and Vegetables attachment. Organic produce is more expensive so this list will help you make the most of the money you spend on organic foods.



How else can I eat sustainably?

- Eat foods lower on the food chain, in addition to focusing on local, seasonal, and organic foods. Livestock is a significant contributor of greenhouse gases; the United Nations estimates that rearing cattle alone produces more greenhouse gases than general transportation. According to research by the United Nations*:
 - Livestock generates 65% of human-related nitrous oxide, which has 296 times the Global Warming Potential (GWP) of CO₂; most of this comes from their manure.
 - Additionally, these animals are responsible for 37% of all human-induced methane, which has 23 times the GWP as CO₂, and 64% of human-induced ammonia, which contributes significantly to acid rain.
 - Livestock currently uses 30% of the earth's entire land surface. This is mainly permanent pasture, but this figure also reflects 33% of global arable land (land that can be used to grow crops) which is used to produce livestock's feed.
 - Livestock is a major driver of deforestation, especially in Latin America where, roughly 70% of former forests in the Amazon have been turned over for grazing.
- Additionally, it takes 10 times the fossil fuels to produce 1 calorie of animal food as it does to produce 1 calorie of plant food.
- Of all the dietary changes you can make that will positively impact the environment, reducing your intake of meat and dairy products will be the most beneficial! There is also the added benefit that this change will reduce your intake of saturated fat and help you save money.

If I reduce my intake of meat and dairy, where can I get protein?

- While meat and dairy are great sources of protein, you can also find other great sources of protein. This includes, but is not limited to:
 - Seafood
 - Soy: soybeans, soy milk, and tofu
 - Beans and legumes: black beans, kidney beans, pinto beans, lentils, navy beans, and chickpeas
 - Some grains: quinoa, oats, couscous, barley, bulgur, and wheat
- A typical, healthy, young adult needs .4 grams of protein per pound of body weight per day. To determine your recommendation, multiply your weight in pounds by 0.4. This is a general recommendation; your individual needs may vary.
 - Athletes may need closer .6 grams of protein per pound of body weight per day.

Looking for more information?

Find fresh produce on campus: http://ua.mit.edu/produce_market/

(MIT's produce market is open Tuesdays, 12:00 - 6:00pm on the Walker Memorial (Building 50) side of East Campus.

During winter, it can be found on the 1st floor of Stata. They only accept cash.)

Find fresh food near you: <http://www.nrdc.org/health/foodmiles/default.asp>

Learn about sustainable seafood: <http://www.montereybayaquarium.org/cr/seafoodwatch.aspx>

Learn about other sustainable eating practices: <http://www.sustainabletable.org/>

Learn more about the environmental impacts of livestock:

<http://www.un.org/apps/news/story.asp?newsID=20772&CR1=warning>

* United Nations. (2006). Livestock's long shadow: environmental issues and options. Rome: Food and Agriculture Organization of the United Nations.

A Shoppers Guide to Fruits and Vegetables

Produce by Season (Learn how to shop seasonally)

Summer

- Apricots
- Beets
- Bell peppers
- Blackberries
- Blueberries
- Butter lettuce
- Cantaloupe melons
- Cherries
- Corn
- Cucumbers
- Eggplant
- Figs
- Garlic
- Grapefruit
- Grapes
- Green beans
- Honeydew melons
- Lima beans
- Limes
- Nectarines
- Okra
- Passion fruit
- Peaches
- Peas
- Plums
- Radishes
- Raspberries
- Strawberries
- Summer squash
- Tomatoes
- Watermelon
- Zucchini

Fall

- Acorn squash
- Apples
- Belgian endive
- Broccoli
- Butter lettuce
- Butternut squash
- Cauliflower
- Cranberries
- Diakon radish
- Garlic

- Ginger
- Grapes
- Guava
- Huckleberries
- Mushrooms
- Passion fruit
- Pears
- Persimmons
- Pineapples
- Pomegranate
- Pumpkin
- Quince
- Sweet potatoes
- Swiss chard
- Turnips
- Winter squash

Winter

- Apples
- Belgian endive
- Brussel sprouts
- Chestnuts
- Collard greens
- Dates
- Grapefruit
- Kale
- Leeks
- Kiwifruit
- Oranges
- Passion Fruit
- Pear
- Persimmons
- Pummelo
- Radicchio
- Sweet Potatoes
- Tangerine
- Turnips
- Winter squash

Spring

- Apricots
- Artichoke
- Asparagus
- Belgian endive
- Broccoli

- Butter lettuce
- Chives
- Collard greens
- Corn
- Fava beans
- Fennel
- Green beans
- Honeydew
- Limes
- Mango
- Morel mushrooms
- Mustard greens
- Oranges
- Pea pods
- Pineapples
- Rhubarb
- Snow peas
- Spinach
- Baby lettuce
- Strawberries
- Sugar snap peas
- Vidalia onions

Year Round

- Avocados
- Bananas
- Bell peppers
- Bok choy
- Broccoflower
- Broccolini
- Cabbge
- Carrots
- Celery
- Coconut
- Leeks
- Lemons
- Lettuce
- Mushrooms
- Onions
- Papayas
- Parsnips
- Pearl onions
- Potatoes
- Rutabagas

Produce's Pesticide Load* (Learn when to buy organic)

The Dirty Dozen

(These fruits and vegetables have a **HIGH** pesticide load* when they are grown conventionally* – best purchase organically)

- Peaches
- Apples
- Sweet bell peppers
- Celery
- Nectarines
- Strawberries
- Cherries
- Kale
- Lettuce
- Grapes-imported
- Carrots
- Pears

The Clean Fifteen

(These fruits and vegetables have a **LOW** pesticide load* when grown conventionally* – not essential to purchase organically)

- Onion
- Avocado
- Sweet corn (frozen)
- Pineapple
- Mango
- Asparagus
- Sweet peas (frozen)
- Kiwi
- Cabbage
- Eggplant
- Papaya
- Watermelon
- Broccoli
- Tomato
- Sweet potato

* Pesticide load refers to the pesticide residue found on foods.

✧ Most produce is grown conventionally, meaning that it is not organic.