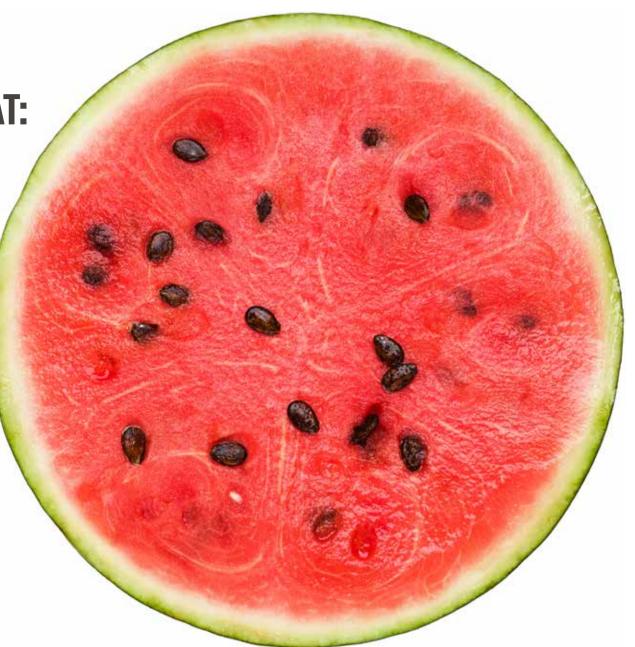
COURSE INTRODUCTION: GETTING GROUNDED

L.2

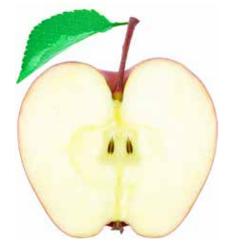
WHAT WE EAT: PLANTS 101

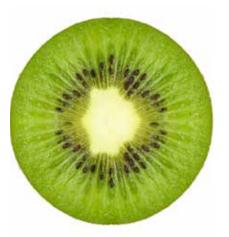




FOOD EDUCATION FOR CHANGE







FRUITS AND VEGETABLES.

The fruits and vegetables we eat are parts of plants. Not all parts of plants are edible, but often we do not eat all that are.

Sometimes the terminology is confusing, because we often identify plant foods using terms that are not botanically accurate. Consider the term "fruit" and "vegetable." Botanically, a fruit is anything that has seeds inside.

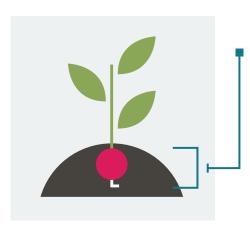
This group includes foods we recognize as fruits (such as an apple or mango). It also includes fruits like the tomato, squash, and string beans that we commonly call vegetables because we eat them most often as savory dishes.

Cabbage

LEAVES

Leaves are the organs of photosynthesis and transpiration. Lettuce, cabbage, and beet greens, are examples of leaves that we eat.





ROOTS

Roots grow underground, and draw moisture and nutrient into plants.



■ Carrots being harvested







RHIZOMES AND TUBERS

Other plant parts grow underground but aren't technically roots – like rhizomes such as ginger or tubers such as potatoes. These foods are still often called root vegetables in the grocery store.

Rhizomes and tubers reproduce underground.

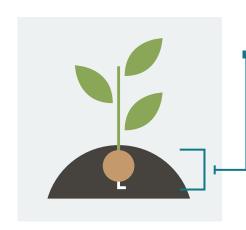


■ Potatoes being harvested



Ginger growing in a field





BULBS

A bulb stores food for a plant when it is dormant.

The part of garlic or onions that we typically eat are bulbs, but we can eat the stems of some bulb plants like green onions. We can also eat the flower shoot and bud of garlic, known as garlic scapes.



■ Garlic in a field



Asparagus



Fennel

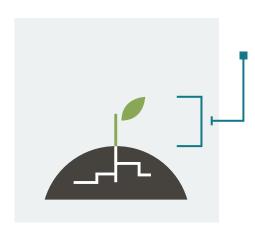
STEMS

We eat the stems of some plants, like asparagus. Typically, edible stems have edible leaves.

Celery is not botanically a stem and is often called a stalk in recipes and in the grocery store. The leaves attached to the stalk are edible.

Sometimes we eat the thickened stem, created by farmers over thousands of years. The fennel "bulb" is a thickened stem, as is a kohlrabi.





SHOOTS

Shoots are the early growth from the seed. If you eat alfalfa sprouts, you are actually eating the shoots from an alfalfa seed.

Pea shoots, on the other hand, are the young leaves of a pea plant.



■ Alfalfa Sprouts

Pea Shoots

FLOWERS

Artichokes are flowers but we also eat the stems. We eat flowers, such as squash blossoms, but we also eat the buds of flowers, like cauliflower and broccoli.



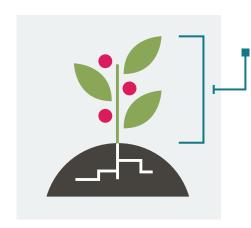
■ Squash Blossoms



Cauliflower







FRUITS AND BERRIES

All fruits have seeds.

Over thousands of years, farmers have altered wild plants to have different characteristics. In some fruits, for example, we barely detect the seeds. In others, the seeds are enormous!

Not all plants create an edible fruit. The maple fruit with seeds on the lower left is an example of a non-edible fruit.

Berries are also fruits.



■ Maple fruit



FRUITS AND SEEDS

Seeds are the means by which many of the plants we eat reproduce themselves. Many plants have evolved delicious fruits to get animals, human and non-human, to disperse their seeds.



Sometimes we eat the fruit that surrounds the seeds (such as an apple), sometimes we eat the seed itself, and sometimes we eat both!

Peas are seeds; the pod is a fruit. Corn kernels are all individual seeds.

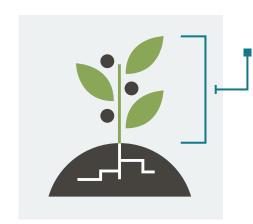
Coconut is the largest seed. The brown part we buy is the seed, the green part that surrounds it when on the tree is the fruit.



Coconuts







SEEDS AND NUTS

Seeds are a key part of our diet, as they store well when dried and contain stores of nutrients.

What we typically call beans are seeds, such as black beans, lentils and peas.

Nuts are also seeds. Peanuts for example are seeds and the shell is the fruit – the fruit isn't edible.



■ Black beans



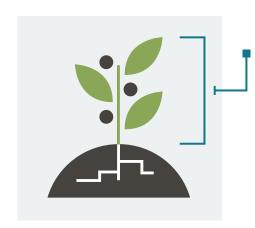
Peanuts



■ Brown and red lentils







SEEDS AND NUTS CONTINUED

Flour is the ground seed of plants, such as wheat.

Seeds can also produce oil, when ground. Sunflower and canola seeds, for example, produce common oils. Olive oil, in contrast, is made from a fruit, from which the seed is discarded.



Olives







SPICES

Spices can come from many different parts of a plant. Cloves are actually dried flower buds. Cinnamon is the bark of a tree.



■ Cloves growing



■ Cinnamon tree bark





■ Various mushrooms



■ Wild Chanterelles

MUSHROOMS

Mushrooms are not animals or plants. They belong to a separate kingdom: fungi.

Mushrooms do not photosynthesize nutrients; rather they decompose organic matter in order to get the nutrients they need.

