

# Vegetable Facts: Tops

## Vegetable

## Growth (Where)

## Growth (How)

## Harvest

### Asparagus



Asparagus is grown in temperate regions with cool winters and warm springs. They require well-drained sandy or loamy soil and full sun exposure.

Asparagus plants are typically grown from crowns, which are root systems of one-year-old plants. It can take 2-3 years to establish a productive bed, after which the bed can be productive for 15-20 years.

Asparagus is typically harvested in the spring when the edible shoots are tender. The delicate spears are cut or snapped by hand just below the surface of the soil when they are 6-10 inches tall and the thickness of a pencil.

### Broccoli



Broccoli is grown in regions with cool climates and grows best when temperatures are between 60-70°F. It requires well-drained, nutrient-rich soil, consistent moisture, and full sunlight to grow well.

Broccoli plants are grown from seeds or transplanted seedlings. The plant develops a thick stem and large, broad leaves. At the top of the stalk, a flower develops, known as the head. The head should be harvested before the tiny buds open into yellow flowers.

Broccoli heads are ready to harvest before the flowers open when they are firm, compact, and dark green. Broccoli can be harvested using mechanical harvesters that cut multiple heads at once or manually by workers who cut the main stalk just below the head.

### Cabbage



Cabbage grows best in temperate climates and requires well-drained, nutrient-rich soil, regular watering, and full sun.

Cabbage is typically started from seeds. The plant develops a rosette of large, broad leaves. As it matures, the central growing point tightens to form a firm, dense head.

Cabbage heads are ready to harvest when they are firm and reach 4-8 inches in diameter. The head is cut from the stem. The cabbage heads are often trimmed in the field to remove excess leaves, sorted, and placed in cartons or crates.

### Celery



Celery grows best in temperate climates where the weather is cool and consistent moisture is available. It requires deep, well-drained soil.

Because celery seeds are small and slow to germinate, they are usually started in nurseries or greenhouses. After 8-12 weeks, the seedlings are transplanted into the field.

Celery is typically ready for harvest 85-120 days after transplanting. Workers cut the entire plant at the base, removing the outer leaves and trimming the roots. In large-scale operations, mechanical harvesters are used to cut the plants.

### Lettuce



Lettuce is grown in temperate regions and prefers well-drained, loamy soil, regular watering, and full sunlight.

Lettuce can be grown from seeds or transplanted as seedlings. In addition to traditional growing methods, lettuce is also grown hydroponically and in controlled environments such as vertical gardens and greenhouses.

Head lettuce is ready to harvest 60-80 days after planting. Workers use knives to cut lettuce heads at the base or mechanical harvesters equipped with rotating blades or bandsaws are used to cut the lettuce. The lettuce is inspected, trimmed, and packed in the field.

# From Farm to You

## Geography

## Transport & Processing

## Distributor

## Store

China is the world's largest producer of asparagus, followed by Peru, Mexico, and Germany. California, Michigan, and Washington are the top asparagus-producing states.

After harvesting, asparagus spears are quickly transported to a packing facility where they are sorted and graded by size, color, and quality. The spears are washed and rapidly cooled to preserve freshness and prevent spoilage. They are then bunched, secured with bands, and boxed for shipping.

China is the world's largest producer of broccoli, with over half of the world's total production. California and Arizona are the top broccoli-producing states.

After harvesting, the broccoli heads are trimmed of any excess leaves, placed in cartons or crates, and transported to a packing house. The broccoli is cooled as quickly as possible to maintain freshness and extend its shelf life. After being packed for shipment, the broccoli is placed in refrigerated trucks to be distributed to grocery stores or processing facilities.

China is the world's largest producer of cabbage, producing nearly half of the world's supply. California, New York, Florida, Wisconsin, and Texas are the top cabbage-producing states.

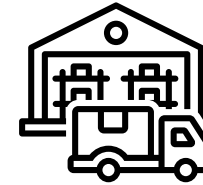
Once harvested, cabbage needs to be cooled quickly to preserve freshness and extend its shelf life. The cabbage is then packaged for transport to distribution centers, grocery stores, or processing facilities in refrigerated trucks.

China is the world's top producer of celery, followed by the United States, Spain, and India. California, Michigan, and Florida are the top celery-producing states.

After harvest, the celery is cleaned, trimmed, and sorted. The stalks are packed into boxes or crates and immediately placed in refrigerated storage. They are then distributed to grocery stores and wholesalers or processing facilities where they are made into celery sticks, juice, soups, or seasonings.

China is the world's largest producer of lettuce, producing over half of the global production. California and Arizona are the top lettuce-producing states.

After harvesting, the lettuce is quickly cooled before being packaged for transport to grocery stores, restaurants, or processing facilities in refrigerated trucks.



Raw and processed products are sold in bulk quantities to a buyer who will distribute it to a retail store.



Retail product is sold to consumers.

# Products Made from Vegetables

## Products

## Nutrition

Asparagus can be grilled, steamed, boiled, sautéed, roasted, pickled, and added to soups, stews, stir fry, quiche, or pasta.



Asparagus is low in calories and high in vitamins and minerals, including vitamin K, vitamin C, folate, fiber, and antioxidants. The high potassium content supports heart health, promotes kidney function, and reduces bloating. The fiber aids in cholesterol management and digestive health.

Broccoli can be eaten raw or cooked. It is commonly steamed, boiled, roasted, grilled, or added to soups, salads, and stir-fries.



Broccoli is low in calories and rich in vitamins, including vitamin C and vitamin K. It contains fiber and essential nutrients like folate and potassium. Broccoli is known for its numerous health benefits including heart, bone, eye, and digestive health, immune support, and cancer prevention.

Cabbage can be eaten raw or cooked. They are commonly boiled, steamed, sautéed, roasted, or used in soups, stews, and casseroles. Cabbage can be fermented to make products like sauerkraut and kimchi. Stuffed cabbage is also a popular dish.



Cabbage is a low-calorie and nutrient-rich vegetable. It contains vitamin C, vitamin A, vitamin K, potassium, calcium, manganese, and magnesium. Cabbage is an excellent source of dietary fiber and is rich in antioxidants. Cabbage health benefits include heart, bone, and digestive health, anti-inflammatory benefits, and cancer prevention.

Celery is often eaten raw as a snack or added to salads, sandwiches, and veggie trays. It can also be added to soups, stews, and stocks, or juiced.








Celery is a low-calorie and nutrient-dense food. It is rich in vitamins and minerals, including vitamin K, vitamin C, vitamin A, folate, potassium, and fiber. Celery benefits digestive and heart health, assists with hydration, and helps reduce inflammation in the body.

Lettuce is a primary ingredient in salads, can be used as a low-carb alternative to tortillas and wraps, and can be added to sandwiches and burgers.



Lettuce is low in calories and high in vitamins and minerals, including vitamin K, vitamin A, folate, and potassium. Lettuce benefits hydration due to its high percentage of water. About 95% of lettuce is water.

# Vegetable Facts: Bottoms

Vegetable	Growth (Where)	Growth (How)	Harvest
<b>Beets</b> 	Beets grow in temperate climates and require well-drained, loamy soil and full sunlight.	Beets can be planted from early spring to late summer. Because beet seeds are seed clusters, thinning is necessary after germination to give the roots space to grow. The plant requires consistent moisture to grow well.	Beets are ready to harvest 50-70 days after planting when they're still tender. They can be harvested in the spring and fall. The beets are harvested with specialized harvesters that lift the roots out of the ground and cut off the greens.
<b>Carrots</b> 	Carrots are a cool-season crop grown in temperate climates. They grow best in loose, well-drained loamy soils and require full to partial sunlight and regular watering.	Carrots are typically started from seeds and grow in the cooler seasons of fall or spring. Once the seeds germinate, the carrot begins to develop its taproot, which is the edible part of the plant.	Carrots are ready to harvest 60-80 days after planting when the tops of the roots are about 1/2-1 inch in diameter. Farmers usually harvest carrots mechanically. Harvesters loosen the soil, pull the carrots from the ground, and remove the tops.
<b>Onions</b> 	Onions are highly adaptable and can be grown in a variety of climates from temperate to tropical. Onions grow best in well-drained, loamy soils with plenty of sunlight and regular watering.	Onions can be grown from seeds, transplanted as seedlings, or grown from onion sets, which are small, immature onion bulbs.	Onions are harvested when the leaves start to yellow. Mechanical harvesters are used to pull the onions from the ground and lay them on the soil surface to dry, also known as curing. In smaller operations or for specialty varieties, onions may be hand-harvested.
<b>Potatoes</b> 	Potatoes are grown in a wide range of climates, but they thrive in cool, temperate regions. Potatoes grow best in well-drained, loose soil and require full sun and regular watering.	Potatoes are planted using seed potatoes which are small tubers or pieces of tubers with "eyes." After planting, the eyes sprout and tubers begin to form at the ends of specialized underground stems and eventually become edible potatoes.	Potatoes are harvested about 90-120 days after planting when the foliage begins to die back. Mechanical harvesters use lifting blades to lift the potatoes from the soil.
<b>Radishes</b> 	Radishes are a cool-season crop planted in early spring and fall in temperate climates. They prefer loose, well-drained soil and require full sun and consistent moisture.	Radishes are grown from seeds because seedlings do not transplant well. As the plant grows, the radish root forms a bulb shape which becomes the edible radish. Radishes grow quickly after planting.	Radishes are harvested about 3-4 weeks after planting when their tops show signs of wilting and turning yellow. Specialized machines called radish harvesters use blades or tines to lift the radishes from the soil. Workers on small farms manually pull the radishes from the ground.

# From Farm to You

## Geography

## Transport & Processing

## Distributor

## Store

The Netherlands, China, and Italy are the top producers of fresh beetroots in the world. Wisconsin and New York are the top beet-producing states.

After harvesting, the excess soil is brushed off. The beets are then sorted and stored in a cool, dark location or packaged to be transported to markets. Cool temperatures and humidity are important to keep beets fresh during transportation.

China is the world's largest producer of carrots, followed by Uzbekistan, Russia, and the United States. California, Washington, and Wisconsin are the top carrot-producing states.

Once harvested, carrots are cleaned, graded, and sorted. They can be stored for several months at temperatures just above freezing with high humidity. Some carrots are trimmed and packaged or processed into products like baby carrots. After processing and packaging, carrots are transported to distributing centers or grocery stores.

China is the world's largest producer of onions, followed by India and the United States. California, Washington, Oregon, Idaho, and Texas are the top onion-producing states.

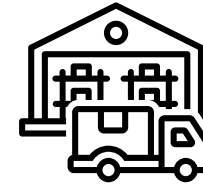
After harvesting, onions are left in the field for several days to cure, which allows the outer layers to form protective skins, preventing rot during storage. In some cases, onions are cured in a facility with controlled temperature and humidity. After curing, onions are graded, sorted, and packaged to be transported to distribution centers, grocery stores, or processing facilities.

China, India, and Russia are the world's largest producers of potatoes. Idaho, Washington, North Dakota, Wisconsin, and Colorado are the top potato-producing states.

After harvesting, the potatoes are graded and sorted before being transported to storage or processing facilities. Potatoes are stored in cool, dark, well-ventilated conditions to prevent sprouting and spoilage. Potatoes are cured for 10-14 days at 50-60°F and high humidity to extend the shelf life.

China, Japan, and South Korea are the world's largest producers of radishes. California and Florida are the top radish-producing states.

After harvesting, radishes are cleaned, sorted, graded, and packaged for transport to markets or storage facilities in refrigerated trucks. Radishes are stored in cool, dark conditions to prolong their shelf life.



Raw and processed products are sold in bulk quantities to a buyer who will distribute it to a retail store.



Retail product is sold to consumers.

# Products Made from Vegetables

## Products

## Nutrition

Beets can be eaten raw, roasted, boiled, or pickled. They are used in salads, soups, and as side dishes.



Beets are low in calories and high in nutrients like manganese, potassium, iron, and vitamin C. They contain antioxidants that help reduce inflammation and oxidative stress in the body. They are also a good source of dietary fiber which promotes digestive health.

Carrots can be consumed raw or cooked. They can be boiled, roasted, sautéed, steamed, pureed, juiced, or used in salads, soups, stews, and baked goods.



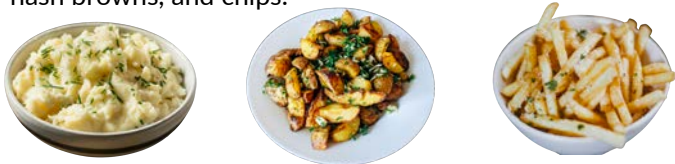
Carrots are rich in vitamins and minerals, including beta-carotene, vitamin K, vitamin C, potassium, calcium, and iron. They are also a good source of antioxidants and dietary fiber. Carrots contribute to eye, heart, and digestive health and reduce the risk of heart disease and cancer.

Onions can be consumed raw, cooked, or pickled. They can be added to salads, sandwiches, and salsas, sautéed, caramelized, and roasted, and used in soups, stews, sauces, and as toppings for tacos and burgers.



Onions are low in calories and rich in antioxidants. They contain vitamin C, vitamin B6, folate, potassium, manganese, calcium, iron, and magnesium. Onions benefit heart and digestive health, boost immune function, and reduce inflammation.

Potatoes can be boiled, baked, fried, roasted, and mashed. They are used in soups and salads and to make French fries, hash browns, and chips.



Potatoes are rich in nutrients, including vitamin C, vitamin B6, potassium, magnesium, folate, and iron. They are high in fiber and antioxidants and benefit heart and digestive health.

Radishes can be added to salads, pickled, roasted, used as a garnish for tacos, sandwiches, and soups, or used in stir-fries, stews, and soups.



Radishes are low in calories, rich in fiber, and high in antioxidants. They support hydration and liver function. Radishes contain vitamin C, potassium, folate, calcium, and magnesium.