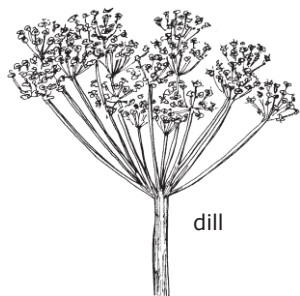


THE CARROT FAMILY Science Page

APIACEAE (OR UMBELLIFERAE)

The name Umbellifereae comes from the Latin word meaning "umbrellas." Plants in the carrot family have flowers that look like little umbrellas.

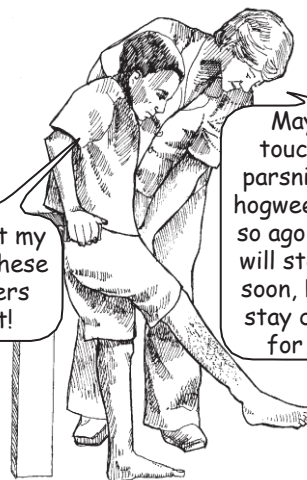


dill

DID YOU KNOW?

Some members of the carrot family, such as wild parsnip and giant hogweed, can burn your skin. With the help of ultraviolet light from the sun, chemicals found in the green leaves, stems, and fruits of these plants can break down skin tissue, make the skin red, and cause blisters.

Look at my skin! These blisters hurt!



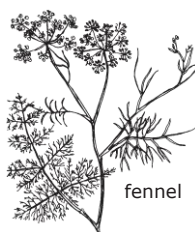
Maybe you touched wild parsnip or giant hogweed a day or so ago. Your skin will stop hurting soon, but it may stay discolored for a while.

MEMBERS OF THE CARROT FAMILY

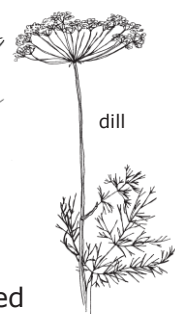
There are more than 3,000 species in the carrot family.



caraway

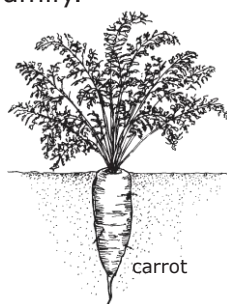


fennel



dill

Some have strong unique flavors and smells, and are used as herbs and spices.



carrot



arracacha



earth chestnut

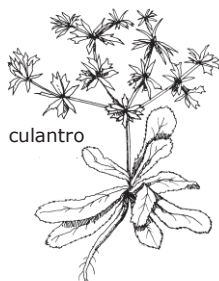
Many have roots, stems, or leaves that are used as vegetables. Some contain nutrients, such as beta carotene, that are important in the human diet.



coriander/
cilantro



anise



culantro



parsley



devil's dung



lovage



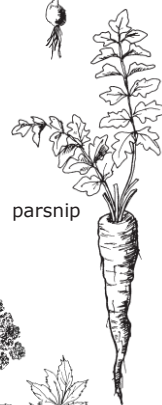
celery



celeriac



angelica



parsnip

Others are poisonous.



poison
hemlock



giant
hogweed

Carrot Family Card Game

DIRECTIONS

Print each clue and its answer onto a separate card. Print the carrot family cards back-to-back so each plant picture is on one side and its description is on the other. Cut out the clue cards and the carrot family cards. To make the cards last longer, they may be laminated.

Spread out all the carrot family cards with the plant pictures facing up. Shuffle the clue cards and put them face down in a pile.

The object of the game is to collect as many carrot family cards as you can. The player with the most cards at the end of the game is the winner.

The first player picks a clue card and reads the clue on the card. The player to the right has a chance to pick the correct plant card to answer the question on the clue card. He or she picks up the plant card and reads the back to see if it is the correct card. If it is the correct card, the player keeps it. If not, the plant card is replaced, and the clue card goes to the bottom of the clue card pile. Then the player who got a chance to choose a plant card picks the next clue card. Play the game until all the plant cards are gone. Then each player counts his or her plant cards to see who is the winner.

Variation: Each player uses the information on the plant cards to make up questions to try to stump other players.

CLUE CARDS

Worldwide, the most popular member of the carrot family.

Answer: carrot

Grew around the ancient town of Marathon in Greece.

Answer: fennel

Dried gum from the root is used as a seasoning.

Answer: devil's dung

Ancient Greeks made a poison drink out of this plant to execute prisoners.

Answer: poison hemlock

Once thought to have angelic healing powers.

Answer: angelica

Used to flavor a liquor known as akavit in Scandinavia.

Answer: caraway

One of the most popular flavorings in ancient Roman cooking.

Answer: lovage

Leaves used in funeral ceremonies in ancient Greece.

Answer: parsley

Leaves smell like cilantro, only stronger.

Answer: culantro

Children in England used to dig up the roots for a treat on their way to and from school.

Answer: earth chestnut

Important root crop in Central and South America.

Answer: arracacha

The green-stemmed variety of this plant is popular in the United States, while the Europeans prefer the yellow-stemmed variety.

Answer: celery

Root vegetable that has leaves which can cause a skin rash.

Answer: parsnip

In the nineteenth century, candied seeds from this plant were called "sugar plums."

Answer: cilantro/coriander

Invasive weed that causes a skin rash.

Answer: giant hogweed

Name comes from the Old Norse word meaning "calm."

Answer: dill

In ancient Rome, used in cakes that were eaten at the end of a meal to aid digestion.

Answer: anise

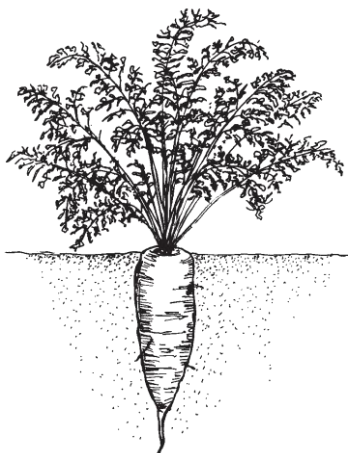
Popular in Europe for its tough, bulb-like roots, which must be peeled before being eaten.

Answer: celeriac

Carrot Family Cards

CARROT FAMILY

CARROT
Daucus carota



CARROT FAMILY

PARSLEY
Petroselinum crispum



CARROT FAMILY

LOVAGE
Levisticum officinale



CARROT FAMILY

ARRACACHA
Arracacia xanthorrhiza



CARROT FAMILY

CARAWAY
Carum carvi



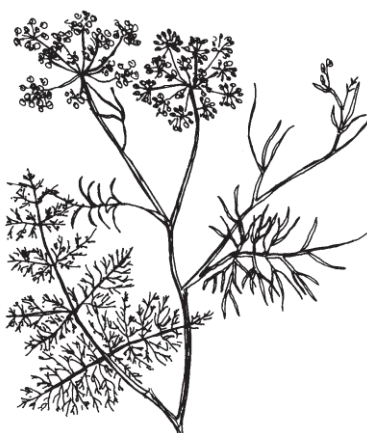
CARROT FAMILY

ANGELICA
Angelica archangelica



CARROT FAMILY

FENNEL
Foeniculum vulgare



CARROT FAMILY

DEVIL'S DUNG OR ASAFETIDA
Ferula asa-foetida



CARROT FAMILY

POISON HEMLOCK
Conium maculatum



LOVAGE *Levisticum officinale*

Lovage was one of the most popular flavorings in ancient Roman cuisine. The roots are used as a vegetable. Powders and oils are extracted from the roots and used for flavoring. The celery-flavored leaves and leaf stalks are used in salads, soups, and stews. Lovage seeds are used to flavor candies, cakes and meat dishes.

CARROT FAMILY

PARSLEY *Petroselinum crispum*

In ancient Greece, parsley was used in funeral ceremonies and in wreaths given to winning athletes. The tangy, sweet-tasting leaves are used dry, raw, or diced to flavor many different dishes. Parsley is an important part of the Middle Eastern tabbouleh salad. The Japanese deep-fry parsley in tempura batter. In Belgium and Switzerland parsley is deep-fried as a side dish for fondue. Mexicans and Spaniards use parsley in salsa verde. The French add parsley to a garlic and butter sauce eaten with escargots (snails). The English make parsley jelly.

CARROT FAMILY

CARROT *Daucus carota*

Worldwide, carrots are the most popular member of the Apiaceae family. White carrots are native to Europe, red carrots are native to Central Asia, and yellow and purple carrots are native to what is now Afghanistan. Carrots have more beta carotene, from which the body makes vitamin A, than any other vegetables.

CARROT FAMILY

ANGELICA *Angelica archangelica*

People once thought that angelica had angelic healing powers. The roots can be boiled and used as a vegetable. The oils, extracted from the roots and seeds, are used to flavor candies and alcoholic drinks like gin and vermouth. The oils are also used in perfumes and soaps.

CARROT FAMILY

CARAWAY *Carum carvi*

Caraway is a popular spice in Central Europe. It has antifatulent power (this means it counteracts digestive gas!). The spicy seeds and seed oils are used for flavoring cookies, cakes, cheese, and rye bread. The seeds and oils are also used in candy, meats, pickles, and drinks. Caraway-flavored liquor, known as kummel or akavit, is produced and drunk in Northern Germany and Scandinavia. In Tunisia, caraway is used in harissa, a fiery paste made of dried chiles.

CARROT FAMILY

ARRACACHA *Arracacia xanthorrhiza*

Arracacha is an important root crop in South and Central America. It was first grown in the Andes Mountains. Over time, growers improved the crop, so that today's varieties have large, smooth, fleshy roots. One plant has four to six carrot size roots. Its flavor is similar to that of parsnips and carrots. Roots are boiled, baked, and fried. They can be eaten whole, mashed, or made into fried chips. Arracacha chips have crispness, so many people like them more than potato chips. Arracacha roots also can be dried and powdered, and used in instant foods, such as soups and baby food. Also used to make an alcoholic drink called "chicha."

CARROT FAMILY

POISON HEMLOCK *Conium maculatum*

Over 2,300 years ago, Greeks made a drink out of poison hemlock to execute prisoners. Socrates, a famous Greek philosopher, was judged to be an enemy of the people. He was sentenced to death and drank a potion made of poison hemlock.



CARROT FAMILY

DEVIL'S DUNG OR ASAFETIDA *Ferula asa-foetida*

Devil's dung has a strong bitter, sharp, stinging odor. Its leaves are used as a potherb. Dried gum from the root is a powerful seasoning. It is popular in southern India for flavoring fish and vegetable dishes such as dal (name for beans, peas, lentils, and other legumes). Devil's dung is used for its antifatulent action (this means it counteracts digestive gas!). It is one of the ingredients in Worcestershire sauce.

CARROT FAMILY

FENNEL *Foeniculum vulgare*

Ancient Greeks called fennel "marathon." This plant grew around the village of Marathon, which was the site of a famous battle. During the battle, a Greek soldier ran from Marathon to Athens. This distance became the length of the Olympic marathon race. Fennel seeds, flowers, and leaves have a strong anise flavor. Snipped leaves are used as a garnish or to make tea. The bulb-like stalk can be eaten like celery. The seeds are used to flavor baked goods, cheese, and various meat and vegetable dishes.

CARROT FAMILY

More Carrot Family Cards

CARROT FAMILY

GIANT HOGWEED

Heracleum mantegazzianum



CARROT FAMILY

PARSNIP

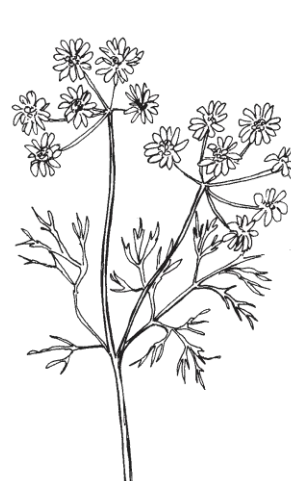
Pastinaca sativa



CARROT FAMILY

CORIANDER/CILANTRO

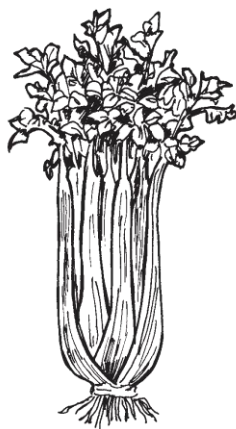
Coriandrum sativum



CARROT FAMILY

CELERY

Apium graveolens var. *dulce*



CARROT FAMILY

ANISE

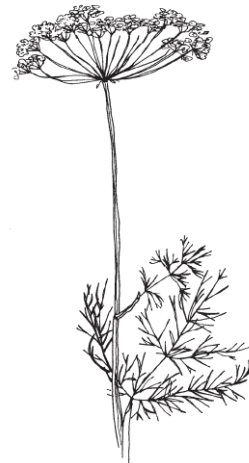
Pimpinella anisum



CARROT FAMILY

DILL

Anethum graveolens



CARROT FAMILY

CELERIAC OR ROOT CELERY

Apium graveolens var. *rapaceum*



CARROT FAMILY

EARTH CHESTNUT

Conopodium majus



CARROT FAMILY

CULANTRO

Eryngium foetidum



CORIANDER/CILANTRO

Coriandrum sativum

The herb cilantro and the seed coriander come from the same plant. It is native to southern Europe and the Mediterranean. It is one of the oldest spices in recorded history, and was used as long as 7,000 years ago. Cilantro is used in Latin America and southeast Asia to flavor salads, soup, and meats. Coriander is used as a spice in European, Indian, and Middle Eastern dishes. Candied coriander seeds, popular in the 19th century, were called "sugar plums."

CARROT FAMILY

PARSNIP

Pastinaca sativa

The parsnip is native to Italy. Stone Age people in central Europe harvested parsnip from the wild. It was common in kitchen gardens in Ancient Rome. By the mid-1800s, it was popular in Europe and the United States. Today, parsnip is not so popular in the U.S., but it is still very popular in England and France, where the roots are used in soups and stews. The plant exudes a juice that causes severe skin rashes on many people. When picking the plant, always wear gloves and wash your hands afterwards.

CARROT FAMILY

GIANT HOGWEED

Heracleum mantegazzianum

This weed grows up to 4.5-6 m (15-20 ft) high, the leaves are up to 1.5 m (5 ft) wide, and the flowers are up to 76 cm (2.5 ft) across. It is native to the Caucasus Mountains and southwestern Asia. It was introduced to Europe and North America as a garden curiosity, but it is a very invasive plant. It quickly out-competes native species by forming a dense cover, which shades out other plants. Because it has a weak root system, it can lead to erosion when it grows beside stream banks. It is becoming a health hazard in cities and towns where it is taking over. Its sap makes skin more sensitive to the sun. You can develop severe sunburn with a rash and blisters after touching this plant.

CARROT FAMILY

DILL

Anethum graveolens

Native to southern Europe and western Asia, dill has been used since 3,000 B.C. Dill seeds and leaves were widely used in ancient Egypt, Greece, and Rome. The name comes from the Old Norse word "dilla" meaning calm. It was used to relieve stomach pain from gas in babies. Today, the sweet taste of dill is popular all over Europe and Asia. In Europe it is mostly used for bread, pickles and fish, and in sauces and dressings. Fresh dill weed is very popular in Scandinavia, where it is used to flavor fish and shellfish. In India dill seeds are used to flavor lentil and bean dishes.

CARROT FAMILY

ANISE

Pimpinella anisum

Anise is native to the Mediterranean. In ancient Rome, a cake called mustaceum was laced with anise. It was served at the end of all major feasts, and may have been the first wedding cakes. It was not only a sweet treat, but also an aid to digestion. Today, people all over the world enjoy the sweet licorice flavor of anise leaves. It is used fresh and dried in salads, soups, and for garnish. In Scandinavia it is used in breads and in India in curries. Hispanic people use it in stews and the French use it to flavor carrots.

CARROT FAMILY

CELERY *Apium graveolens* var. dulce

Celery is popular in North America, where the green-stemmed variety is used, and in Europe, where the yellow-stemmed variety is more popular. The celery capital of the ancient world was a city in Sicily called Selinunt, meaning "celery city." Their coins had pictures of celery on them. Celery leaves were used in ceremonies for the god Linus, the creator of music. Until the Middle Ages, celery leaves were only used as a medicine. It was not until the 17th century that people began using celery as a vegetable.

CARROT FAMILY

CULANTRO

Eryngium foetidum

Native to tropical America and the West Indies, culantro smells like cilantro, only stronger. The leaves are used to flavor food in Latin America, the Caribbean, and the Far East. In Latin America, it is added to salsa and sofrito. In Thailand and Malaysia, chopped culantro is sprinkled on top of soups, noodle dishes, and curries.

CARROT FAMILY

EARTH CHESTNUT

Conopodium majus

This plant has a round, brown root that looks and tastes like a chestnut. It grows wild in woods and fields throughout much of Europe and North Africa. In England, children used to dig them up for a snack on their way to and from school. Pigs love earth chestnuts, which is why they are sometimes called "pig nuts." In Shakespeare's play *The Tempest*, Caliban promises, "I prithee, let me bring thee where crabs grow; and with my long nails I will dig thee pig nuts."

CARROT FAMILY

CELERIAC OR ROOT CELERY

Apium graveolens var. rapaceum

Root celery is grown for its bulb-like, light brown roots instead of for its stems or leaves. The root is about 10-12 cm (3-4 inches) in diameter and has a celery-like flavor. It is also called "turnip rooted celery" or "knob celery." It was first grown in Europe, where it is still very popular. The root must be peeled, because it is very tough. It can be eaten raw, but it is usually cooked in soups or stews, or sliced and served with salt, pepper, and vinegar.

CARROT FAMILY