

Romanesco Cauliflower in the Classroom

Math Magic: Fractals and Fibonacci Spiral

What's a Fractal?

Romanesco is a cross between cauliflower and broccoli that features lime green spirals throughout its surface. The whole Romanesco is called a head. Each head has pointy knobs on it called florets (small flowers). Each floret is made up of smaller florets, in the same shape and pattern, but a smaller size. When the same shape is repeated over and over again as you look closer and zoom in, that's a fractal!



Fibonacci Sequence

The Fibonacci Sequence can be found in many other places in nature, such as sunflowers and pine cones! There are spirals you can see on a head of cauliflower, and the number of spirals is always a number in this pattern. The Fibonacci Sequence is a mathematical pattern you might learn in class. The pattern goes like this: Start with 0 and 1. Add them together. $0+1 = 1$. Take those last two numbers you see and add them together. $1+1 = 2$. Take those last two numbers and add them together. $1+2 = 3$. Keep going, and you get these numbers: 0, 1, 1, 2, 3, 5, 8, 13, etc.

Did you Know? The scientific name for cauliflower is *Brassica oleracea*.

Color: Lime green

Flavor: Sweet and a little nutty

Ready to eat: September through December

Flavor Friends: Lemon, olive oil, pasta, parmesan cheese

September Harvest of the Month

Cauliflower



Cauliflower recipes and fun facts inside!



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Easy Roasted Cauliflower Recipe

Prep time: 5 min
Cook time: 20-25 minutes
Estimated Cost: \$3
Serves six as a side dish.

Ingredients:

1 medium head cauliflower (about 2 pounds)
1/4 cup extra virgin olive oil
1 1/2 tsp garlic powder
1/4 tsp crushed red pepper
2 tsp kosher salt
1/4 tsp pepper

Directions:

Preheat oven to 450°F.

Remove any green leaves attached to the cauliflower head. Cut the cauliflower into bite sized florets by first cutting the cauliflower in half, removing the core and then separating florets with your hands or a small knife.

In a large bowl, toss the florets with the olive oil, garlic powder, red pepper flakes, salt and pepper until all of the florets are coated in a small amount of oil.

Place oiled cauliflower florets in a single layer on a baking sheet and roast until golden and tender, about 20 minutes.



Cauliflower Buyer's Tip

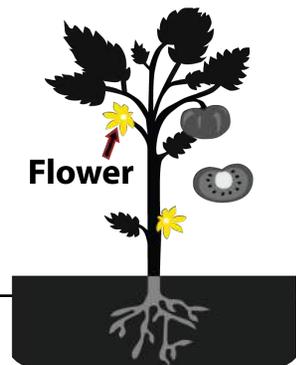
Choose cauliflower that is free of blemishes (such as browning or wet spots) with densely packed florets, and even color. The cauliflower head should feel heavy in your hand for its size.



Fun Facts About Cauliflower

Plant Parts

- Cauliflower and broccoli are technically flowers! We typically eat the underdeveloped flower buds and part of the stalk, or stem.
- The small, tender leaves closest to the flower buds are also edible!



Origins

- Cauliflower is a member of the cabbage family, which also contains plants such as kale, collards and of course, cabbage!
- Cauliflower is thought to have originated in Asia Minor, and has been an important vegetable in Italy and Turkey since at least 600 BC.



Shapes, Sizes and Colors

- Cauliflower comes in many vibrant colors: look for purple, orange and lime green varieties (in addition to traditional white) at the farmer's market!
- Orange cauliflower is typically referred to as 'cheddar'. While it doesn't really taste like cheese, it does contain 25% more Vitamin A than the common white variety!



Looking for local cauliflower?

Visit localdifference.org to search for local food, farms, and retailers.