

# **Strawberry Life Cycle 101, How to Grow Fruit What Make Health Food Nutrition**

The life cycle of strawberries can be divided into planting, germination and Sprout, vegetative growth, flowering and pollination, fruit development, maturity and harvesting, reproduction, and senescence. About 10 million tons of strawberry is produced worldwide annually with the United States being the largest strawberry producer in the world, followed by Spain, Turkey, Mexico, and Egypt being major producers. Raw strawberry contains about 90 water and is a good source of dietary fiber, vitamin C, folate, potassium, and manganese. Strawberry is also rich in antioxidants and low in calories and fat making it a nutrient-dense fruit that can provide a range of health benefits as part of a balanced diet.

## **Strawberry life cycle stages**

Strawberries are typically planted in the spring or fall when the weather is cool after which the seeds absorb water and nutrients from the soil and the embryo inside the seed and begin to germinate. As the seed grows the small and oval-shaped cotyledons emerge from the soil which are the embryonic leaves that provide the initial source of energy for the growing plant. In the vegetative growth stage, the strawberry plant grows larger and develops more leaves and stems that provide the plant with a greater capacity to photosynthesize. The flowering stage determines the potential for fruit production. In the fruit development stage, the fertilized ovules in the flower start to swell and grow forming a small green fruit. During the maturity stage, the fruit reaches its maximum size sweetness, and flavor, and the color of the fruit is bright red indicating that it is ripe and ready for harvest. The last growth stage of the strawberry life cycle is senescence where the plant's growth and development slow down and the plant focuses on conserving energy.

## **Benchtop and hydroponic**

Except for traditional matted row systems and a Hill system in the open field for growing strawberries, benchtop and hydroponic systems in greenhouses can also be used as good options and Innovative Technologies for year-round production. They can also be used where traditional planting methods are not feasible. The benefits of benchtop and hydroponic systems for growing strawberries include faster growth higher yields, reduced water and nutrient use, and improved disease Control. Hydroponic systems however require a higher initial investment, regular maintenance, and monitoring to ensure optimal performance.

## **Strawberry runners**

Strawberry runners(stolons) are a natural way for the reproduction of the plant. The runners are horizontal stems that grow out from the base of the parent plant and produce new plants. Strawberry runners typically grow after the strawberry plant has produced its first fruit. The runners may lead to overcrowding and reduced fruit production thus removing or transplanting strawberry runners can be beneficial for the plant's health and productivity. It is worth noting that not all varieties of strawberries produce runners.