PRODUCE NOTES

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VERITABLE VEGETABLE

Promoting sustainable agriculture since 1974

HOW ORGANIC AND CONVENTIONAL STRAWBERRIES DIFFER:

Strawberries consistently rank as one of top ten most pesticide intensive crops. Because of this, two consumer groups, the Environmental Working Group and Consumers Union, recommend strawberries as one of the most important items to buy organic.

Why so many chemicals? Methyl bromide and other soil fumigants are commonly used in conventional production to sterilize the soil of any weed seeds, pathogens, insects, or other pests. Pesticides are frequently applied to combat many pests throughout the season. Fungicide use is also common due to the cool, sometimes damp, California coastal conditions that prevail where most (85%) of the US crop is grown.

Strawberry growing is a labor-intensive crop, putting field workers at risk of pesticide exposure via drift and contact with residues.

In contrast, organic growers have few chemicals they can use when growing strawberries, yet face the same challenges as conventional growers. Warning signs of disease or insect problems must be dealt with early, because once a problem builds it can get out of control quickly. Beneficial insects are used to balance pest problems, and sulfur is occasionally used as a fungicide. Plant based insecticides and soaps are used when needed; but none of these materials are common practice.

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POWERFUL ANTIOXIDANTS

Strawberries are rich in antioxidants, substances known for their ability to counter the effects of pollutants and other environmental contaminants. One of those antioxidants, vitamin C, is a well-known antioxidant with anti-microbial and anti-viral properties.

Strawberries are also rich in flavonoids. Flavonoids are phenolic compounds found in plants that protect them from disease and insects. Recent research suggests that flavonoids are higher in organic fruits and vegetables than conventional. Perhaps this is because untreated plants don't have the protection of pest-icides and need to produce their own compounds, i.e. flavonoids, for protection. We, in turn, get the benefits of these flavonoids when we consume organic strawberries. Sweet deal!

Eight medium strawberries have just 45 calories but supply 160% of the recommended daily allowance (RDA) for vitamin C, 4% for iron, 2% for Calcium, and 16% for fiber.

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STRAWBERRY SUMMER FORECAST

Supply should be good through the summer but both fruit quality and price are heavily dependent on the weather, especially sunshine. Most summer strawberries come from the Salinas-Watsonville area where sunshine competes with coastal fog on an almost daily basis. During foggy spells, the berries aren't as sweet and the plants don't produce as fast bringing the price up. Here's a look at our summer suppliers:

ALBA ORGANIC: This grower group made up of Latino immigrants produces large, mouth watering Seascape berries. Based in Salinas, these growers believe in packing only full red, sweet fruit into open pints.

COKE FARM: Dale and Christine Coke grow in Watsonville. We usually start with their crop sometime in June and go through the summer. Their berries tend to be medium sized—just right for clamshells.

GIVENS/SOMETHING GOOD: Givens' strawberry season, which started in February, will probably be done by July.

RYAN O'SHANNON: Mike McDowell grows his strawberries in Petaluma. More likely to be thought of as dairy country than strawberry land, this area has more sun and less fog than the coast. He starts in June.

SANDPIPER: The largest strawberry grower we work with, Dan Schmida farms about 50 acres of berries. While the bulk of his supply is Seascape, he also grows Camerosa, Diamante, and LaDulce as well.

VB: Our newest grower, Vanessa Bogenholm, grows 20 acres of Camerosa, Aromas, and Seascape strawberries in Watsonville. Once a farm-manager for a large conventional strawberry grower, then an organic grower for Driscoll Vanessa is now independent and producing beautiful fruit. Supply through summer into autumn.

STRAWBERRY HISTORY

Strawberries are native to both the Old and New Worlds but these small native berries, sometimes known as fraises des bois, are quite different than the larger ones we make into shortcake, dip in chocolate or slice into fruit salads.

Europeans started cultivating their own native strawberries in the 14th century. Fruit size and yields were low but they had red, white and green varieties. Native Americans also gathered native strawberries and ate them fresh and dried. Two native American species, Fragaria virginiana on the east coast of North America, and Fragaria chileonis on the west coast of both South and North America are the parents of our larger, modern berries.

F. virginiana found its way to France in the 17th century where it was cultivated in gardens with the European cultivars. A century later, F. chileonsis berries were found by a French officer in the Andes Mountains of Chile. They too were brought back to France where they made a natural cross with F. virginiana. The cross produced a new, larger species of strawberry, Fragaria x ananassa, which became the basis for modern strawberry breeding.

Soon after, due to the disruptive effects of the French Revolution strawberry breeding moved to England. The Brits ambitiously expanded strawberry breeding and developed the Keens' Seedling, a Fragaria x ananassa cultivar and the first strawberry to truly resemble our modern varieties.

Today, California produces 85% of the U.S. crop, due in part to its ideal climate and fertile soils, but also to the efforts of the University of California. The UC breeding programs of the 1940's produced high-yielding cultivars that could produce all season long. Overall, there are about 70 varieties grown commercially in the US today.