



Strawberries

Interesting Facts

Strawberries are a member of the rose family. Cultivation began in 13th century France. Today, strawberries are one of the most popular fruits in the world, and per capita consumption is increasing annually. “Strawberry” is the most popular yogurt flavour in North America.

What are strawberries?

Strawberries are red cone-shaped fruits with a seed-studded surface. Each berry is an aggregate fruit comprised of approximately 100 single seeded fruits. Each seed on the outside of a strawberry is technically a fruit and must be pollinated separately. The red fleshy part we eat is the swollen central part of the flower, or the peduncle, to which the seeds are attached.

Where are strawberries produced in BC?

Strawberries can be grown from the Peace River North East area to southern BC. Most commercial growers are in the Fraser Valley, where the weather is moderated by the Pacific Ocean. There are also centres of commercial production in Salmon Arm/ North Okanagan and on Vancouver Island.

How many strawberries do we produce?

BC contributes one-twelfth of the Canadian production of strawberries. This is 1.5 million kg of strawberries, worth \$5.2 million. However, Canada consumes far more strawberries than it produces. The bulk of fresh imports come from California and Mexico, with processed imports originating from California, Poland, Mexico and China.

How are strawberries produced?

There are two main types of strawberries grown in BC—June bearing or short-day, and everbearing or day-neutral varieties.

The June bearing varieties initiate their flower buds in autumn, when days become shorter. These buds remain dormant until the following spring when they produce flowers in May and June. The fruit ripen 4 to 6 weeks after flowering and the harvest season lasts, for most varieties, about 3 to 4 weeks.

Day-neutral varieties will initiate flower buds at any time during the growing season, regardless of the day length.

Thus, they will produce flowers and fruit throughout the growing season.

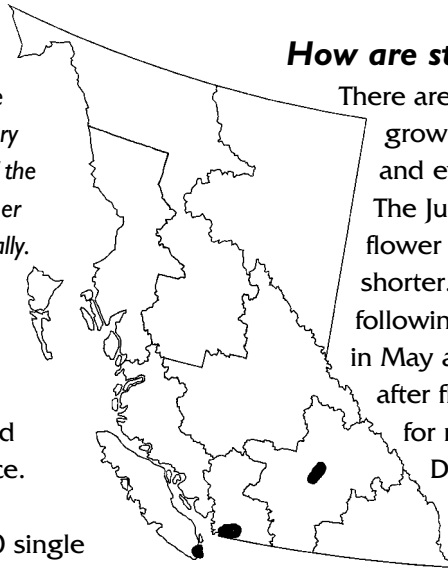
The most common growing method is the matted row. The plants are transplanted into a field where they produce runners, thereby increasing the plant density and yield. Matted row plantings are generally planted one year and harvested for the following 2 or 3 years.

The use of the hill row system is increasing for growing day-neutral strawberries for the fresh market. In this system the transplants are set out at much higher densities and the runners are removed. Generally, black plastic mulch is used to control weeds. The fruit is kept clean by keeping the plant from contacting the soil.

How are strawberries used?

Fresh frozen strawberries are popular for short cake and other desserts. Jam and yogurt are also very popular uses, with additional uses being sauces, toppings and ice cream flavouring. About 75% of the crop is processed—the rest is sold fresh.

Traditionally, strawberries were mainly eaten



fresh during a relatively short growing season or preserved by freezing or jamming. More recently, fresh strawberries have been available in BC any month of the year due to new varieties and advances made in the growing and shipping of berries both locally and from other areas.

What happens after the strawberry leaves the farm?

Strawberries are harvested (picked) by hand. Strawberries destined for the fresh market are picked with the cap (the small green leaves and stem) attached. On the larger farms, the fruit is rushed to on-farm coolers to remove the field heat. Every hour delay in removing the field heat results in about a one-day loss of shelf life. The fruit is kept cool until it is delivered to customers. On smaller farms the fruit is usually not cooled, and is sold directly to the consumer for immediate use.

Strawberries destined for processing are picked with the caps removed and put in re-usable plastic picking trays or flats. Truckload lots are delivered to processors for grading, washing, inspection and freezing. Strawberries are usually frozen whole, sliced or as puree. Some berries are packed whole and individually quick-frozen for retail use.

Some fruit is packaged in retail-sized containers of up to one kilogram. Berries for the food service industry (bakers, restaurants, caterers, etc.) are packed in up to 13kg containers. Most berries slated for jam, yogurt flavourings and other products are

generally preserved in larger containers (up to 180kg) for manufacturing at a later date.

What challenges do strawberry producers face?

BC growers face stiff competition from imported berries. In order for BC growers to retain their existing markets and/or expand their markets, new higher-yielding, hardier varieties for the fresh and processing markets are being developed. New production techniques that will extend the fresh market season and reduce the per unit cost of production are also in the development stage. In order to lead the way in the reduction of the use of pesticides, considerable research and development work has gone into an Integrated Pest Management (IPM) program, which maximizes the use of naturally occurring biological control agents.

Who's involved in producing strawberries?

- Strawberry growers
- Field workers and pickers
- Processing plant workers
- Carton manufacturers
- Sugar producers
- Researchers

Contacts and other resources:

BC Ministry of Agriculture and Lands
Fraser Valley Strawberry Growers' Association

Nutritional Facts

Serving Size: 8 medium strawberries (147g)

Calories	45
Total Fat	0g
Saturated Fat	0g
Cholesterol	0mg
Sodium	0mg
Total Carbohydrate	12g
Dietary Fibre	4g



Sugars	8g
Protein	1g
Vitamin A	0%
Vitamin C	160%
Iron	4%
Calcium	2%
Calories from Fat	0
Daily Value*	
Total Fat	0%
Saturated Fat	0%
Cholesterol	0%
Sodium	0%
Total Carbohydrate	4%
Dietary Fibre	16%

*Per cent Daily Values are based on a 2,000-calorie diet.