



# Mushrooms

## **Interesting Facts**

*British Columbians are the champion mushroom eaters of Canada. They eat about 3kg per year, while the average Canadian eats only 2kg per year.*

## **What are mushrooms?**

Mushrooms are a fungus. Some of the more exotic mushrooms grown in BC include shitake, oyster and wild pine mushrooms. The most common mushroom grown in BC is the “Agaricus” mushroom, which comes in 2 colours; white (button) and brown (crimini and portabella).

## **Where are mushrooms produced in BC?**

The majority of mushrooms are grown in the Lower Mainland, with some production on Vancouver Island and in the Interior.

## **How many mushrooms do we produce?**

Mushrooms are one of BC’s most valuable edible horticultural crops, with total sales estimated at \$101 million (2013). BC supplies the majority of mushrooms consumed in the province. There are approximately 60 producers who grow a total of 28 million kg annually. About 90% of this production is for the fresh market with the remainder going for processing. BC supplies about 30% of the total Canadian mushroom production. Markets include Canada, the United States and Japan.

## **How are mushrooms produced?**

Mushrooms are grown in special insulated barns. These barns consist of a number of growing rooms (mushroom growing rooms often consist of 5 to 7 tiers of wooden frame beds on either side of a central aisle) in which growing conditions are closely controlled, often by a computer. At each stage of the mushroom cycle, the grower must carefully control the temperature, moisture, humidity, light levels and air movement. Mushrooms can be affected with a variety of diseases and insect pests which growers must control.

Mushrooms are grown in compost. Mushroom compost is a mixture of hay, straw, horse manure, gypsum and any one of several nitrogen containing

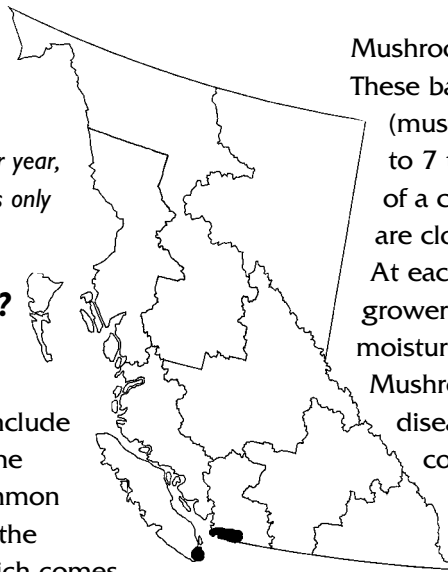
compounds. Top quality compost at a reasonable price is one of the key factors in the economic production of mushrooms.

Compost needs to be sterilized to destroy any pests and disease-producing organisms. The compost is put into the wooden frame beds. It heats naturally, but steam is generally used to raise the air temperature to 60°C.

Mushrooms reproduce by means of spores mixed into the compost. This is called spawning. Ten to 14 days after spawning, a greyish-white growth called mycelium will appear on the surface. A casing soil, mainly peat and ground limestone, is put on the white growth. This soil is kept damp. Mushrooms first appear as “pins” and then grow larger.

Mushrooms are ready for harvest approximately 3 to 4 weeks after casing. Subsequent “flushes” of mushrooms appear every 6 to 8 days. Growers will typically harvest only the first 3 flushes. The whole cycle takes 9 to 10 weeks.

At the time of picking, mushrooms are graded



and then put in cold storage with a constant level of humidity.

The weed free spent mushroom compost is often sold to nurseries or garden suppliers for soil enrichment.

### **How are mushrooms used?**

Mushrooms can be in a natural or processed form. Processed specialty and value-added forms of mushrooms include canned, in sauces or marinated. Mushrooms are a popular topping on pizza, in salads, in hamburgers, as a side dish with steaks, in soups or in stews. They are a good source of iron, potassium and the B vitamins.

### **What happens after mushrooms leave the farm?**

In BC, most mushrooms are picked by hand, packed into boxes, cooled, and shipped to market within 24 hours. Mushrooms are sold through marketing agencies to wholesale and retail buyers. Mushrooms should be refrigerated in paper bags. They will keep for about 5 days after being harvested.

### **What challenges do mushroom producers face?**

Mushroom producers are challenged with maintaining economic viability in the face of the high cost of producing compost in an environmentally responsible manner; increasing food safety and quality assurance standards; and increasing energy costs.

### **Who's involved in producing mushrooms?**

- Composters
- Mushroom producers
- Truckers
- Marketing agencies
- Financial institutions
- Importers/exporters

### **Contacts and other resources:**

BC Ministry of Agriculture and Lands  
BC Mushroom Industry Development Council



### **Nutritional Facts**

Serving Size: 5 medium mushrooms (84g)

Calories	20
Total Fat	0g
Saturated Fat	0g
Cholesterol	0mg
Sodium	0mg
Total Carbohydrate	3g
Dietary Fibre	1g
Sugars	0g
Protein	3g
Vitamin A	0%
Vitamin C	2%
Iron	2%
Calcium	0%
Calories from Fat	0
Daily Value*	
Total Fat	0%
Saturated Fat	0%
Cholesterol	0%
Sodium	0%
Total Carbohydrate	1%
Dietary Fibre	4%

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