

# THE MERCHANDISER

PRODUCE MERCHANDISING TIPS & TRICKS FROM FOUR SEASONS PRODUCE

## SEPTEMBER IS NATIONAL MUSHROOM MONTH!

Mushrooms: some people love them, some people don't. Some relish the earthy flavors these delicate little fungi boast, while others just can't seem to get past the texture. Whichever side of the fence you are on, the fact remains that mushrooms continue to grow in popularity!

According to a recent article in The Packer, mushroom sales in 2017 set an all-time record with 1.23 BILLION dollars in sales. And that, everyone, is A LOT of fungus!

I personally happen to LOVE mushrooms—immensely. In fact, it is in the top 5 of the commodities that I enjoy discussing with my customers, and in turn, their customers. It's so cool to offer insight, recipe ideas and tips to consumers.

But what makes mushrooms so special, and why are they an increasingly larger part of meals on dinner menus everywhere? For starters, they are extremely versatile. From sautéing criminis to add to pasta, to grilling portabellas as the meat substitute for burgers, or even using the newer "blend method" of adding mushrooms to ground beef to cut down on red meat intake, mushrooms are absolute culinary dynamos!

Some consumers (myself included) build entire meals around the mushroom. They are also a key piece to many vegetarian meals as meat substitutes, and are quite simply delicious!

## NOW IS THE TIME TO PROMOTE FRESH MUSHROOMS!





# HOW CAN I MAXIMIZE MY SALES IN THE MUSHROOM CATEGORY?

Follow this simple five-step process, and watch your mushroom sales grow!

**Receiving and storage** – Much like berries, fresh mushrooms are very sensitive to temperature variations and need cold chain consistency. Mushrooms should be placed into coolers directly upon delivery.

**Carry a great variety** – White mushrooms, Crimini, and Portabella mushrooms are staples and a must-have in any mushrooms section. But with recent added exposure mushrooms have gotten over the years, adding varieties like Shiitake, Maitake (hen of the woods), Beech, and Trumpet Mushrooms will build sales in the category. Don't forget to offer dried mushrooms in your sets as well. Certain mushrooms not often offered commercially, such as Porcini, Wood Ear, and Morrels, are often sold in dry form and can be reconstituted to add to your favorite meal!

**Merchandising** – A nice and tight mushroom set is visually super appealing. Having a great variety on the shelves can be, even for a packaged product, a really cool looking section! Also, loose mushrooms are great to have in your sets but can quickly dry out, so be sure to cull often to ensure freshness. Larger displays of Portobella Mushrooms, especially at summer holidays for grilling, makes for an impressive looking presentation. Also, placing caps up ("Capping") adds a nice and clean look to the section.

**Care and handling** – Mushrooms bruise easily, so be sure to handle with as much care as possible.

**Education, education, education** – While cooking shows have really brought mushrooms into the spotlight a bit more, it is still important for your employees to know the difference between the mushrooms and what dishes they pair well with. "Talk mushrooms" with your staff to offer your knowledge and insight on the perfect mushroom meal and share ideas. It is also important to make sure the front end cashiers know the difference between varieties, especially on the loose to ensure the correct ring through the registers.



## HERE ARE SOME COOL MUSHROOM FACTS

- Mushrooms are up to 90% water
- Mushrooms are often called toadstools
- Kennett Square, PA is also known as the "Mushroom Capital of the World"
- Early Romans referred to mushrooms as "food of the gods"
- Mushrooms grow from spores, and a single mature mushroom will drop as many as 16 billion spores
- There are approximately 10,000 varieties of mushrooms in the United States alone.
- A single portabella mushroom can contain more potassium than a banana
- The world's largest producer of edible mushrooms is China
- Mushrooms are an excellent source of fiber, potassium, and Vitamin B and D. They are also low in calories, fat, and sodium
- Mushrooms are great for your immune system and can help lower cholesterol
- Organic mushroom sales continue to climb and now represent 10% of the mushroom category
- 91% of fresh mushrooms went to fresh markets, the highest total reported by the USDA since 1966
- There are roughly 300 growers of mushrooms in the United States, 26% of them are organic.
- In the Blue Mountains of Oregon is a colony of *Armillaria solidipes* that is believed to be the world's largest known organism. The fungus is over 2,400 years old and covers an estimated 2,200 acres (8.9 km<sup>2</sup>)



# FOUR SEASONS PRODUCE

offers an extensive line of loose  
and packaged mushrooms

## CONVENTIONAL MUSHROOMS

CODE	DESCRIPTION	SIZE	1507	CV Mushroom Porcini Dried	6/1 oz	1545	CV Mushroom White Button	10 lb
1521	CV Mushroom Baby Bella Sliced	12/8 oz	1515	CV Mushroom Port Caps	6/8 oz	1573	CV Mushroom White Button	6/6 oz
1635	CV Mushroom Baby Bella/Crimini	5 lb	1558	CV Mushroom Port Caps Baby	6/6 oz	1561	CV Mushroom White JBO	10 lb
1653	CV Mushroom Baby Bella/Crimini	6/8 oz	1517	CV Mushroom Portabella Sliced	6/8 oz	1597	CV Mushroom White LG	3 lb
1629	CV Mushroom Baby Bella/Crimini	12/8 oz	1645	CV Mushroom Portabella MD	5 lb	1550	CV Mushroom White MD	10 lb
1628	CV Mushroom Baby Bella/Crimini	10/10 oz	1727	CV Mushroom Portabella	4/16 oz	1535	CV Mushroom WhiteSilver Dollar	10 lb
1650	CV Mushroom Blend Dried	6/1 oz	1512	CV Mushroom Port Caps 3-1/2"	5 lb	1598	CV Mushroom White Sliced	6/4 oz
1605	CV Mushroom Enoki	12/3.2 oz	1655	CV Mushroom Shiitake	3 lb	1592	CV Mushroom White Sliced	12/8 oz
208200	CV Mushroom Lets Blend Mexican	8/8 oz	1509	CV Mushroom Shiitake	6/3.2 oz	20550	CV Mushroom White Sliced	8/16 oz
208201	CV Mushroom Lets Blend Classic	8/8 oz	1511	CV Mushroom Shiitake Sliced	6/5 oz	1594	CV Mushroom White Steak Cut	6/8 oz
208202	CV Mushroom Lets Blend Italian	8/8 oz	1641	CV Mushroom Shiitake Dried	6/1 oz	1569	CV Mushroom White Stuffing	10/10 oz
1546	CV Mushroom Maitake	6/3.5 oz	1544	CV Mushroom Variety Dried	6/1 oz	1570	CV Mushroom White Stuffing	8/14 oz
19745	CV Mushroom Marinated	12/7.5 oz	1570	CV Mushroom White	12/8 oz	35329	CV Mushroom Wild Blend	5 lb
1625	CV Mushroom Oyster	3 lb	1572	CV Mushroom White	10/10 oz	1560	CV Mushroom WhiteSilver Dollar	10 lb
1508	CV Mushroom Oyster	6/3.2 oz	1575	CV Mushroom White	10/12 oz			



**BABY BELLA**



**SHIITAKE**



**OYSTER**



**PORTABELLA CAPS**

## ORGANIC MUSHROOMS

CODE	DESCRIPTION	SIZE	41847	OG Mushroom Maitake	3 lb	40305	OG Mushroom Shiitake Heirloom	3 lb
40718	OG Mushroom Baby Bella/Crimini	5 lb	40581	OG Mushroom Maitake	6/3.5 oz	40300	OG Mushroom Shiitake Heirloom	12/3.5 oz
40714	OG Mushroom Baby Bella/Crimini	6/8 oz	40306	OG Mushroom Oyster Grey	5 lb	40304	OG Mushroom Shiitake Sliced	6/4 oz
40302	OG Mushroom Baby Shiitake	12/4 oz	40301	OG Mushroom Oyster Grey	12/3.5 oz	207533	OG Mushroom Shiitake Sliced	10/5 oz
41848	OG Mushroom Beech	3 lb	41850	OG Mushroom Pom Pom	3 lb	43377	OG Mushroom Specialty Mix	8 ct
43374	OG Mushroom Beech Brown	6/3.5 oz	40719	OG Mushroom Port Caps	6/6 oz	40717	OG Mushroom White	6/8 oz
43375	OG Mushroom Beech White	6/3.5 oz	40720	OG Mushroom Port Sliced	6/6 oz	40715	OG Mushroom White	12/8 oz
40303	OG Mushroom Chef Mix	12/4 oz	40716	OG Mushroom Portabella	5 lb	40979	OG Mushroom White	10/12 oz
40989	OG Mushroom Crimini Sliced	5 lb	41849	OG Mushroom Royal Trumpet	3 lb	40990	OG Mushroom White LG	10 lb
40580	OG Mushroom Crimini Sliced	6/8 oz	40997	OG Mushroom Shiitake	5 lb	40713	OG Mushroom White LG	5 lb
40460	OG Mushroom Dried Portabella	8/1 oz	40722	OG Mushroom Shiitake	3 lb	40710	OG Mushroom White MD	10 lb
43376	OG Mushroom King Oyster	5/9.5 oz	40721	OG Mushroom Shiitake	6/3.5 oz	40996	OG Mushroom White Sliced	6/8 oz



**SHIITAKE**



**BABY BELLA**



**SLICED SHIITAKE**



**WHOLE WHITE**



BLEND WITH  
GROUND MEAT



The **FIRST** line  
of ready-to-use finely  
diced mushrooms



# INTRODUCING LET'S BLEND

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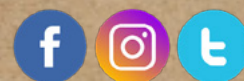
CODE	DESCRIPTION	PK	UPC
208200	Let's Blend Mexican	8 oz	0 37102 81020 6
208201	Let's Blend Classic	8 oz	0 37102 81010 7
208204	Let's Blend Italian	8 oz	0 37102 81030 5



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# VERSATILITY IN VARIETIES



White button mushrooms are by far the most popular mushroom variety, representing 90 percent of mushrooms consumed in the United States. Have you ever run into a shopper that claims to dislike white button mushrooms? Well, what if you had another whole arsenal of mushrooms you could recommend, all with unique taste profiles and culinary applications?

## Get To Know Your 'Shrooms

TYPE	APPEARANCE	TASTE	CULINARY USE	RECIPE	NUTRITION
<b>White Button</b> 	Classic appearance with a short, thick stalk and a white cap.	Fairly mild; blends well with most flavors. Flavor intensifies when cooked.	Try them raw on salads, or sautéed or roasted for pasta, pizza, and mains. Blend well with chicken, turkey or pork.	<a href="#">Mushroom Meatloaf with Mushroom Gravy</a>	Good source of the antioxidant selenium, the B vitamins riboflavin, niacin and pantothenic acid and copper. <sup>1</sup> Contains 2.8 mg of the antioxidant ergothioneine and 15 IU of vitamin D. <sup>2</sup>
<b>Crimini</b> (also known as baby 'bellas or browns) 	Similar in appearance to whites but have a light-tan to rich-brown cap and a firmer texture.	Deeper, earthier, heartier flavor than whites	Full-bodied taste makes them the perfect addition to beef, wild game and vegetable dishes. Blends well with ground beef.	<a href="#">Muffin Tin Meatloaves</a>	Excellent source of the antioxidant selenium, B vitamin riboflavin, and copper. A good source of phosphorus and B vitamins niacin and pantothenic acid. <sup>1</sup> Contains 4.9 mg of the antioxidant ergothioneine. <sup>2</sup>
<b>Portabella</b> 	A larger relative of Criminis, portabellas have tan or brown caps and measure up to six inches in diameter.	Deep, meat-like flavor and texture	Can be grilled, broiled or roasted and served as an appetizer, entrée or side dish. A flavorful vegetarian alternative, can grill and serve as "burgers". Blends well with ground beef.	<a href="#">Pesto Portobello Pizzas</a>	Excellent source of the antioxidant selenium. Good source of phosphorus, copper and B vitamin niacin. <sup>1</sup> Contains 4.3 mg of the antioxidant ergothioneine. <sup>2</sup>

With more varieties in your toolbox, you can recommend mushrooms to shoppers for every taste preference and occasion. Your customers will be excited to open up their taste buds to a new umami experience.

TYPE	APPEARANCE	TASTE	CULINARY USE	RECIPE	NUTRITION
<b>Maitake</b> (also known as Hen of the Woods) 	A wild, rippling, feathery look with fan-like caps.	Rich, woodsy taste	Grill or broil maitake mushrooms as high heat develops their characteristic flavor.	<a href="#">Maitake and Porcini Mushroom Burger</a>	Good source of copper, B vitamins riboflavin and niacin; more than 2 grams of fiber, nearly 10 percent of the Daily Value. <sup>1</sup>
<b>Shiitake</b> 	Tan to dark brown in color, have broad, umbrella-shaped caps, wide open veils, tan gills, and curved stems that should be removed.	Meaty texture and are rich in umami and woodsy flavors when cooked	Add a meaty flavor and texture to soups, sides, stir-fries, and entrees. Use shiitakes in any recipes calling for mushrooms, but they especially work well when paired with Asian-inspired flavors.	<a href="#">Shiitake and Chicken Lettuce Wraps</a>	Excellent source of copper (40%), the antioxidant selenium, and pantothenic acid, <sup>1</sup> providing 30 percent of the Daily Value. Good source of B vitamin niacin.
<b>Enoki</b> 	Tiny, button-shaped caps and long, spindly stems.	Mild tasting and crunchy	Try them raw in salads and sandwiches. Or, use them as an ingredient in soups, such as a stock made with soy sauce and tofu.	<a href="#">Mushroom Orzo with Parsley, Lemon Zest and Olive Oil</a>	Good source of B vitamins riboflavin and pantothenic acid. Excellent source of niacin. Contains more than 300 mg of potassium per serving and more than 2 grams of fiber, 9% percent of the Daily Value. <sup>1</sup>
<b>Oyster</b> 	Can be gray, pale yellow, or even blue, with a soft, velvety texture.	Very delicate flavor	Delicate and tender, oyster mushrooms cook very quickly, making them a great option for quick meals like stir-frys, and simple soups.	<a href="#">Oyster Mushroom and Lentil Soup</a>	Excellent source of niacin. Good source of copper and B vitamins riboflavin, and pantothenic acid. Contains 1.9 grams of fiber, 8% percent of the Daily Value and nearly 3 grams of protein, 6 percent of the Daily Value. <sup>1</sup>

<sup>1</sup> U.S. Department of Agriculture, Agricultural Research Service, USDA Nutrient Data Laboratory. 2009. USDA National Nutrient Database for Standard Reference [www.ars.usda.gov/nutrientdata](http://www.ars.usda.gov/nutrientdata).

<sup>2</sup> Dubost, N.J., et al. (2006). Identification and quantification of ergothioneine in cultivated mushrooms by liquid chromatography-mass spectroscopy. International Journal of Medicinal Mushrooms, 2006, 8:3, pg 221. Table 3. (attached)



# HOW MUSHROOMS ARE GROWN

Grown indoors on a year round cycle, mushrooms always pack a nutritious punch into your favorite meals. Before making their way to your plate, mushrooms go through a growing process in a highly controlled environment unlike that of any other produce. Get a behind-the-scenes look into the journey of the incredible fungi.



## RAW MATERIALS

The substrate provides a nutritional balance of organic material to serve as a growth medium for mushrooms.



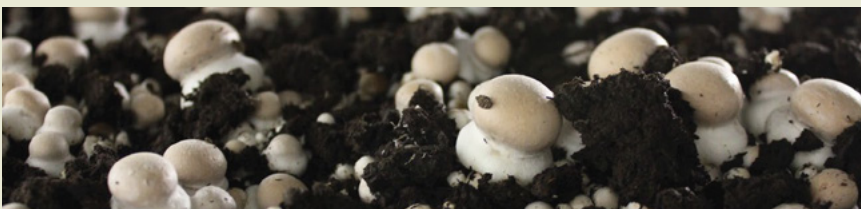
## SPAWNING

Mushroom spawn, purchased from commercial labs, is mixed with the substrate.



## BEDDING

The mushroom spawn mixture is transferred to several hundred beds or trays.



## CASING AND PINNING

Casing, made of peat moss, is spread over the mushroom bed serving as a reservoir to hold in moisture. During the pinning stage, "pins" of mushrooms push up through the casing.



## HARVESTING

Mushrooms are harvested by hand throughout a 16-35 day cycle.

# SHEDDING LIGHT ON WHAT'S GROWN IN THE DARK



## A Unique Growing Process

Ever wonder how those meaty, umami-packed, nutritious mushrooms make it from the farm to your fork? Mushrooms boast a unique growing process that's unlike any other fruit or vegetable you'll find in the produce aisle. That's because mushrooms are technically considered fungi – unlike plants, mushrooms lack chlorophyll to make their own food through photosynthesis and instead exist on a substrate of organic material. Grown indoors on a year round cycle, mushrooms have one of the most interesting farm-to-fork agricultural stories.



## The Journey of Farm-to-Fork

### 1. Making the Mushroom Bed:

Because mushrooms have no chlorophyll, they must get all their nutrients from the organic matter in their growing medium, the compost. Making mushroom compost involves wetting and mixing organic materials including corncobs, hay, straw, cottonseed and cocoa seed shells, and nitrogen supplements to initiate aerobic fermentation (composting), which lasts about 7-14 days. The compost is then made mushroom-ready by pasteurization and a highly controlled temperature-dependent process to remove any ammonia. The bed is now ready to use to help mushrooms grow!



### 2. Spawning:

Just as a tomato comes from a plant with roots, stems and leaves, mushrooms arise from thin, thread-like cells called mycelium. In order to propagate the compost with “mushrooms' roots”, growers use mushroom spawn (grain or seed that's been inoculated with mushroom spores) to transfer the mycelium to the beds. The time needed for the spawn to colonize the compost varies but usually takes about 14-21 days.





### 3. Casin and Pinning:

Casing, made of peat moss and limestone, is spread over the mushroom bed, acting as a reservoir to hold in moisture. Eventually, tiny white protrusions form on the mycelium and push up through the peat casing - a process which is referred to as pinning. The pins continue to grow into buttons and into larger mushrooms. Mushrooms are typically ready for harvest about 18 to 21 days after casing.

### 4. Harvesting:

Mushrooms are harvested by hand throughout a 16-35 day cycle. It takes about 15 weeks total to complete a growing cycle. After the mushrooms are harvested, the house is emptied and steam-sterilized before the process begins again and the remaining compost is recycled for potting soil. The harvested mushrooms are set in carts, refrigerated and then packaged and shipped quickly to supermarkets, food processors and restaurants. The entire farm-to-fork process from the time the farmer starts preparing the compost until the mushrooms are harvested and shipped to market takes about four months.



## SPECIALTY MUSHROOMS

**White button and brown (crimini) mushrooms follow the same general farm-to-fork journey but specialty mushrooms have some unique differences in their growing processes.**

- **Portabella:** The portabella mushroom is just a mature Crimini mushroom, meaning it's usually three to seven days older than the Crimini when harvested. Those few days make a big difference in size though – this is why Portabellas develop much larger caps, ranging up to six inches in diameter.
- **Oyster:** Oyster mushrooms grow well on a range of agricultural and wood waste products, including hardwood chips, chopped cereal straws or corncobs. The pasteurized and inoculated compost is packed into long, tubular shaped bags. Holes are punched in the bags to allow the mycelium to breathe and after 14 days the mushrooms will pop out through the holes and can be harvested.
- **Shiitake:** Shiitake mushrooms were originally cultivated on natural oak logs, a lengthy process which took two to four years. To speed up the growing process, mushroom farmers pack sterilized, inoculated oak sawdust into bags, which produces shiitakes in seven weeks.