## Vegetable of the Month Mushrooms



| Nutrition Facts |  |  |  |
| :---: | :---: | :---: | :---: |
| Serving Size ( 84 g ) Servings Per Container |  |  |  |
|  |  |  |  |
| Amount Per Serving |  |  |  |
| Calories 20 | Calories from Fat 0 |  |  |
| \% Daily Value* |  |  |  |
| Total Fat 0g |  |  | 0\% |
| Saturated Fat 0g |  |  | 0\% |
| Cholesterol Omg |  |  | 0\% |
| Sodium 5mg |  |  | 0\% |
| Total Carbohydrate 3g |  |  | 1\% |
| Dietary Fiber 19 |  |  | 4\% |
| Sugars 1g |  |  |  |
| Protein 2g |  |  |  |
| Vitamin A 0\% - V |  | itamin C | 0\% |
|  |  | Calcium 2\% - Iron 2\% |  |
| *Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs: |  |  |  |
| depending on you | Calories: | 2,000 | 2.500 |
|  | Less than | ${ }^{65 g}$ | 80 g |
|  | Less than |  |  |
| Saturated Fat Cholesterol | Less than | 300 mg | 3000mg |
| Sodium Less thanTotal Carbohydrate |  | 2,400mg | $2,400 \mathrm{mg}$ |
|  |  | 300 g | ${ }_{30 \mathrm{~g}}$ |
| Calories per gram: |  |  |  |

Mushrooms are not a true vegetable in the sense that it does not have any leaves, roots, or seeds, and really does not need any light to grow. So what exactly is a mushroom? It is a fungus, which grows in the dark and creates more mushrooms by releasing spores. Mushrooms are found all over the world and have been a very honored food in many cultures. Ancient Egyptians considered mushrooms to be food for the royals. The French adored the fungus and began harvesting them in caves during the seventeenth century. These famous fungi didn't reach popularity in the United States until the late 1800s.

## Mushroom Benefits

Mushrooms are brimming with protein, B vitamins (riboflavin, niacin and pantothenic), and minerals (selenium, potassium, and copper). They're low in calories and may have antibacterial substances to help the body. Cooked fresh mushrooms offer the most nutritional benefit versus the canned version that may have more sodium.

## How do mushrooms grow?

Since mushrooms are grown from microscopic spores, Mushroom farming is a step-by-step process that involves:

- two phases of composting
- spawning (mushroom farmer's collecting the spores)
- casing (a soil mixture that acts as a water reservoir that is placed on top of the mushroom spores)
- pinning (the growth stage where the shape of the mushroom forms)
- harvesting

It's best to buy your mushrooms from a reputable grower or grocer instead of hunting them yourself, as there are many poisonous mushrooms. Incorrectly identifying them can lead to symptoms of sweating, cramps, diarrhea, confusion, convulsions, and potentially result in liver damage, or even death.

## Varieties

There are over 38,000 mushroom varieties today. Some are edible and some are highly toxic. Here's a small sample of the most popular edible mushrooms you'll see in the market:


## Agaricus (White or Button)

These mushrooms are the most common variety prepackaged in supermarkets; available fresh, canned, or frozen.

White mushrooms are mildly flavored, are tasty when eaten raw but even more flavorful when cooked.

Chanterelles, or girolle
These trumpet shaped fungi are highly regarded mushrooms favored for their gold to yellow color, and rich flavor, ranging from apricot to earthier tasting. Chanterelles are best eaten fresh, although they are also available dried or canned.



## Crimini, or Italian Brown

These mushrooms are similar to the button variety, yet they are darker in color, have a richer flavor, and have a more dense texture. Criminis were once an imported mushroom but are now grown domestically.

## Enoki, or enokitake

This fungi takes on a sproutlike appearance with small caps and thin, long, stems. Native to Japan, white in color, with a light fruity taste, these mushrooms are excellent when served raw in soups and salads.


Morel
These mushrooms are highly priced and highly prized for their intense earthly flavor. They are usually found in the wild, although can now be grown commercially. This conical shaped, honey combed surface fungi is small, with dark brown hues, is suitable for stuffing and is ideal for sauces and stews.

Oyster, or pleurotus
These mushrooms grow in clusters, and range in color from off-white to shades of brown. Subtly tasting like an oyster, its chewy texture is more
 suited to cooked dishes.

## Porcino

Porcini mushrooms are well valued for their meaty texture, interesting flavor, and distinguishing shape. These mushrooms vary in size and is domestically grown or imported from Europe depending on the season. This variety is usually expensive, but is considered one of the finest-tasting mushrooms.

## Portobello

These are large cremini-like mushrooms that are sometimes the size of a regular hamburger! These fungi are circular, flat, and long, with a dense, chewy texture. Portobellos are excellent for grilling or roasting.


## Shiitake




#### Abstract

Shiitake mushrooms were originally cultivated on natural oak logs and only grown in Japan, but are now available domestically. These mushrooms are large, black-brown, and have an earthy rich flavor. This fungi is enjoyed in stir-fries, soups, or even a meat substitute. Dried Shiitakes have more intense flavors and are sometimes preferable to fresh.


Photos courtesy of Cook's Thesaurus

## Cleaning

Clean mushrooms only when you are ready to use them. Remove any bits of the debris on the surface, rinse with cold running water or gently wipe the mushrooms with a damp cloth, paper towel, or soft brush.

## Preparation

How do I use dried mushrooms? Dried mushrooms are intensely concentrated in flavor and should be treated more like a seasoning than a vegetable. You'll need to soak the dried mushrooms in hot water for 20-30 minutes, rinse, then chop, and use. Saving the soaking water and adding it to your sauces or soups will intensify the mushroom flavor.

Mushrooms are available all year long and although there are many different varieties, selecting any kind of mushrooms are easy. You should look for firm,
moisture-free (not dry), unblemished caps, and free of mold. Place purchased loose mushrooms in a paper bag in the refrigerator. Airtight plastic bags tend to retain moisture and will accelerate spoilage. Properly stored mushrooms will last for approximate five days.

Mushrooms can be frozen but they must be cleaned, cooked, and placed in a $\frac{1}{2}$ cup or 1 cup container to freeze. Don't forget to mark the date on the container, frozen mushrooms will last several months.

Mushrooms are versatile and may be eaten raw or cooked whole, sliced or chopped. Certain varieties like shiitake and portabella, must have their stems discarded or used as a flavoring agent, as they are often tough.
Preparation Hint: Squeeze a small amount of lemon juice on the mushrooms to retain the color.

## Make Mushrooms Part of Your 5 A Day Plan

- Add sliced mushrooms to your salad, soups, and pasta.
- Mushrooms make an attractive addition to your vegetable platters.
- Have a veggie burger by grilling portabello mushrooms and adding lettuce and tomato to your whole wheat bun.
- Include sliced mushrooms to your stir-frys.
- Making homemade pizza? Why not try a white pizza combo with low fat mozzarella toped with different kinds of mushrooms.
- Like to grill? Include mushrooms onto your skewers in addition to the bell peppers, squash, and pineapple.


## Recipes

## Cold Mushroom Marinade

Makes 16-20 servings
Each serving equals one 5 A Day serving
Source: Produce for Better Health/Monterey Mushrooms, Inc.

1 lb whole washed mushrooms (small to medium size)
1 cup white wine vinegar
1 tsp salt
1 tsp black pepper
2 tsp Dijon mustard
2 tsp fresh garlic, chopped
Add all ingredients and blend well. Place in a shallow dish or pan. Add mushrooms and all to marinade for two-four hours.

Nutritional analysis per serving: calories 21 , protein $0 g$, fat $0 g$, percent calories from fat $6 \%$, cholesterol 0 mg , carbohydrate 2 g , fiber 1 g , sodium 285 mg


## Fresh Mushroom Soup

Makes 4 servings (11/2 cup servings)
Each serving equals one 5 A Day serving
Source: Produce for Better Health
$11 / 2$ lbs fresh mushrooms
8 scallions
1/2 tsp thyme
1/4 tsp black pepper
1 Tbsp Dijon mustard
$1 / 2$ cup red wine
1 quart fat-free no-added-salt chicken broth
1 cup plain nonfat yogurt
Chop mushrooms and scallions into bite-sized pieces. Place in non-stick Dutch oven and cook with red wine until tender. Add thyme, pepper, mustard, and chicken broth. Bring to a boil and simmer for 15 minutes. Add yogurt, stirring to blend, and serve.

Nutritional analysis per serving: calories 135 , protein 15 g , fat 2 g , percent calories from fat $13 \%$, cholesterol 1 mg , carbohydrate 9 g , fiber 3 g , sodium 164 mg

## Mushroom Garden Baked Potatoes

## Makes 2 servings

Each serving equals three 5 A Day servings
Source: Produce for Better Health/Mushroom Council
4 tsp olive oil
8 oz fresh mushrooms, sliced
1 red bell pepper (small), seeded and cut into 1-inch squares
1 large clove garlic, minced
2 Tbsp water
11/2 Tbsp lemon juice
salt and pepper to taste
2 baked potatoes (about 6 oz each)
parsley, chopped
Heat oil in 8-10 inch skillet. Add mushrooms, bell pepper and garlic. Toss over high heat until mushrooms brown lightly. Add water and lemon juice. Reduce heat to low. Cook and stir 3 minutes. Season with salt and pepper. Split and fluff potatoes. Top with hot mushroom mixture. Sprinkle with chopped parsley.

Nutritional analysis per serving: calories 302 , protein 7 g , fat 10 g , percent calories from fat $29 \%$, cholesterol 0 mg , carbohydrates 41 g , fiber 5 g , sodium 21 mg

## Mushroom Lasagna

Makes 9 servings
Each serving equals one and one half 5 A Day servings
Source: Produce for Better Health/Monterey Mushrooms, Inc.

1 lb low-fat cottage cheese
$1 / 2 \mathrm{lb}$ low-fat or part-skim ricotta cheese
2 egg whites
2 Tbsp Parmesan cheese, grated
1 Tbsp fresh chives, minced
1 Tbsp fresh parsley, minced 1/4 tsp freshly ground black pepper

8 oz whole wheat lasagna noodles, uncooked
1 cup onion (1 large), minced $1 / 4$ cup dry red wine $11 / 2$ lbs mushrooms, sliced
1 cup zucchini, chopped
4 cups low sodium red sauce of your choice

Puree cottage cheese, ricotta, egg whites and Parmesan. Blend in chives, parsley and pepper by hand. In a large pot of lightly salted boiling water, cook lasagna noodles until just tender but not mushy, about 10 minutes.

Remove noodles with a slotted spoon, dip into cold water and lay out flat on clean kitchen towels (not paper towel, or they will stick).
In covered skillet, simmer onions in wine for about 5 minutes until very soft.
Stir frequently, but keep pot covered in between stirrings. Add mushrooms and zucchini and cook until soft and half their original volume, about 5 minutes. Drain the vegetables.

Preheat oven to $375^{\circ}$ F. Combine the cheese mixture and all but $1 / 4$ cup of the mushroom mixture. Spread 2 cups red sauce in the bottom of a 9 -by- 14 inch baking pan. Alternate layers of noodles and cheese mixture ending with a final layer of noodles. Cover with remaining sauce. Distribute reserved mushrooms over top. Bake, covered, for 1 hour. Uncover and bake for 5 minutes longer. Remove from oven and let sit for 10 minutes before cutting.

Nutritional analysis per serving: calories 234, protein 18 g , fat 8 g , percent calories from fat $25 \%$, cholesterol 11 mg , carbohydrate 33 g , fiber 6 g , sodium 300 mg

## Roasted Mushrooms and Mixed

## Vegetables

Makes 4 servings


Each serving equals two and one half 5 A Day servings
Source: Produce for Better Health
1 lb mixed fresh mushrooms (white, portabella, shiitake, crimini, oyster), cut in large pieces
1 sweet red bell pepper cut in 1-inch chunks
1 medium onion, cut in 8 wedges
$1 / 2$ tsp salt
1 large zucchini, cut in 1-inch chunks
1/2 Tbsp olive oil
1 tsp garlic, minced
1 tsp freshly ground black pepper
Preheat oven to $450^{\circ}$. In a $13 \times 9 \times 2$ inch nonstick baking pan (or spray a conventional pan with vegetable cooking spray) place mushrooms, bell pepper, zucchini and onion. Toss with olive oil, garlic, salt and black pepper. Bake uncovered until mushrooms and vegetables are tender, about 20 minutes. Serve as a side dish, or toss with pasta or rice if desired.

Nutritional analysis per serving: calories 342 , protein $3 g$, fat 89 , percent calories from fat $22 \%$, cholesterol 0 mg , carbohydrate 9 g , fiber 5 g , sodium 300 mg

## Squash Stuffed with Mushroom Cheese Filling

Makes 4 servings
Each serving equals two 5 A Day servings
Source: Produce for Better Health
2 acorn or butternut squash
1/2 lbs mushrooms, chopped
1 cup onion, chopped
1 clove garlic, crushed
1 cup low-fat cottage cheese
$1 / 2$ tsp basil
1/4 cup parsley, chopped
salt and pepper to taste
3/4 cup cooked brown rice or bread crumbs
2 Tbsp dry white wine (optional)
Split the squash lengthwise, remove seeds, and bake, face down, on a non-stick tray or on a tray sprayed with non-stick spray for 30 minutes at $350^{\circ} \mathrm{F}$ or until tender. While the squash are baking, sauté mushrooms, onions and garlic with salt and pepper until onions are soft. Drain well (save liquid) and combine with the remaining ingredients. Fill the squash cavities amply and bake, uncovered, 25-30 minutes at $350^{\circ}$ F. Baste with liquid from sauté during baking.

Nutritional analysis per serving: calories 198, protein 13 g , fat 3 g , percent calories from fat $21 \%$, cholesterol 2 mg , carbohydrate 30 g , fiber 8 g , sodium 239 mg

