

# Nutrition Labeling Toolkit for Mushrooms



Nutrition Facts Panels and Select Nutrition Claims for Fresh White, Brown,  
Portabella, Enoki and Oyster Mushrooms

Compiled, 2002  
Updated, July 2006  
Updated, August 2008

Mushroom Council  
2880 Zanker Road, Suite 203  
San Jose, CA 95134  
408-432-7210  
408-432-7213 (fax)

## Nutrition Labeling Toolkit for Mushrooms

### Contents of this Toolkit

This Nutrition Labeling Toolkit provides models of nutrition labels known as the “**Nutrition Facts**” panel for white, brown, portabella, enoki and oyster mushrooms as well as a selection of nutrition claims that can be made for white, brown and portabella mushrooms. The toolkit also provides the analytical data upon which these labels/claims are based.

### Nutrition labeling for mushrooms is voluntary unless claims are made

FDA regulations for the nutrition labeling of fresh fruit, vegetables and seafood is currently voluntary. (FDA can propose to make such labeling mandatory if less than 60% of grocery stores provide nutrition information voluntarily, but the program has remained voluntary since its inception in 1993.)

An important exception to the voluntary nature of nutrition labeling for fresh fruits, vegetables and fish is that nutrition labeling becomes mandatory if any nutrition claims or other nutrition information are made about the food. Nutrition claims include statements about nutrient content (e.g., “good/excellent source” of vitamins or minerals, “healthy”, “fat-free” etc.) or any other claim that mentions nutrient or health benefits of the food. If such claims are made, nutrition labeling that conforms to the rules that cover mandatory labeling of processed foods must be provided.

## **Nutrition Labeling Toolkit for Mushrooms**

### Nutrient content data for mushrooms

In order to facilitate nutrition labeling on fresh produce and fish, FDA has provided information on the nutrient content of the 20 most common forms of these foods – including mushrooms. This information includes calories and the 13 nutrients that are required to be on their nutrition label of processed foods. However, FDA does not provide information on several important nutrients in mushrooms that are not part of the required elements of nutrition labeling. These nutrients include the B-vitamins riboflavin, niacin and pantothenic acid, vitamin D as well as the essential minerals copper and selenium. Fortunately, information about these nutrients can be provided in nutrition labeling on a voluntary basis.

The Mushroom Council has conducted complete nutritional analysis of white, brown and portabella mushrooms. These data can be used to supplement that furnished by FDA to provide nutrition labeling on the nutrients found in mushrooms that are not part of the typical nutrition label. The benefit of providing this information is that it shows consumers that mushrooms are unique among “vegetables” because they contain a variety of B-vitamins, vitamin D and minerals, and it permits mushroom packages to make a variety of nutritional claims.

The nutrient order on the label is straightforward: Vitamin A, Vitamin C, Calcium, Iron, Vitamin D, Vitamin E, Vitamin K, Thiamin, Riboflavin, Niacin, Vitamin B6, Folic Acid, Vitamin B12, Biotin, Pantothenic Acid, Phosphorus, Magnesium, Zinc, Selenium, Copper, and Manganese. The first four (A, C, Ca, Fe) have to be shown, either as a % Daily Value or covered by the “Not a significant source of...” statement. For the others it is voluntary to show whichever ones are wanted. The two examples in the Toolkit for each type of mushroom are for the minimum nutrients required and for the option to add other nutrients.

Nutrients can be listed in a single column (as on a cereal box). If the label has nutrients listed in two columns then the correct order is: Vitamin A in top left, Vitamin C in top right, Calcium in second row left, and so on. Vitamin D at 4% can be optionally added (listed after iron) for white mushrooms because the USDA National Nutrient Database has a value for white mushrooms. The other types of mushrooms likely have a similar vitamin D content, but no amounts can be shown because no values are listed by the USDA National Nutrient Database.

## Update on *Trans Fat Labeling*

### Trans fat labeling was required for processed foods beginning January 2006

Trans fat labeling was mandatory for virtually all processed foods (including canned mushrooms) on January 1, 2006. However, the nutrition labeling of fresh mushrooms is regulated under the separate, voluntary system discussed previously. This system is currently being updated to reflect newer analytical data for the 20 most popular fruits and vegetables (including mushrooms) and FDA has stated that trans fat labeling will not be required on such foods until this revision is finalized. At that time (possibly several years) the new requirements for trans fat labeling will be extended to fresh produce. Therefore, trans fat labeling is not technically required for fresh mushrooms at this time, but it is inevitable. The Mushroom Council recommends that Nutrition Facts panels that include trans fat information be used at this time in anticipation of the final regulations.

### New information to be required

All fresh mushrooms are free of trans fat. FDA will not require such products to provide trans fat information as a separate line in the Nutrition Facts panel, but a footnote that states “not a significant source of trans fat” must be included. This footnote has been incorporated into the Nutrition Facts panels provided in this toolkit.

## Regulatory Compliance

### Individual producers are accountable for nutrition labeling compliance

FDA is responsible for monitoring the accuracy of nutrition labeling and any claims that accompany it. The Mushroom Council believes that the Nutrition Facts panels and claims in this toolkit are in compliance with all labeling regulations. Nevertheless, it is important for producers to understand that FDA will hold individual producers responsible for the accuracy of their labels – not the Mushroom Council. Therefore, it is very important that growers who elect to use this toolkit as a guide understand issues related to enforcement of nutrition labeling.

### Nutrition label declarations

If FDA decides to verify the accuracy of the nutrition labeling of a product, they conduct nutrition analysis on a composite sample of 12 packages (consumer units) collected from 12 separate shipping cases of a single production lot. The results of this analysis are compared with the nutrition label on the product. The label declaration (% Daily Value) for “good nutrients” (e.g. vitamins and minerals) must be at least 80% of the results of FDA’s analysis while “bad” nutrients (e.g. fat, cholesterol etc.) must not be declared at more than 120% of these results.

### Consequences of non-compliance

If FDA concludes that one or more nutrition label declarations are inaccurate, they will inform the product manufacturer. This notification may be made informally (e.g. a telephone call), but is more likely to be in the form of a warning letter or other formal notification of non-compliance. Such issues are a matter of public record, and there is a possibility of negative publicity (especially in the trade press). The manufacturer then has an opportunity to present substantiation for the label declaration to FDA and work to resolve the discrepancy. If FDA still believes the label declaration is inaccurate after this discussion, the most likely resolution is that the manufacturer would agree to change the label. In such instances FDA and the manufacturer would negotiate the timing of such a change. FDA would permit a certain amount of time for new labels to be printed, and may agree to allow the manufacturer to use up remaining labels, but is not obligated to do so. Although more severe sanctions are very rarely used for nutrition labeling violations, FDA does have the authority to seize product and/or impose a recall.

### Risk of non-compliance

As noted above, the Mushroom Council believes the Nutrition Facts panels and associated claims in this toolkit are in compliance with all nutrition labeling regulations. However, there are many factors which can lead to a non-compliant situation: inherent variability in nutrient content of mushrooms based on growing conditions, maturity, cultivar, storage conditions; analytical error; analytical method used; sampling error and others. In addition, the recommended nutrition label declarations in this toolkit for the optional vitamins and minerals have not been adjusted by a large safety factor because the resulting values would not truly reflect the nutrients consumers are receiving. Therefore, it is not possible to guarantee that a non-compliant situation will not occur in the unlikely event of a nutrition labeling compliance audit.

If Choosing to Label:  
Minimum Label Required for White Mushrooms

<b>Nutrition Facts</b>	
Serving Size 5 medium mushrooms (84g)	
<b>Amount Per Serving</b>	
<b>Calories</b> 20	Calories from Fat 0
<b>% Daily Value*</b>	
<b>Total Fat</b> 0 g	<b>0%</b>
<b>Sodium</b> 15 mg	<b>0%</b>
<b>Potassium</b> 300 mg	<b>9%</b>
<b>Total Carbohydrate</b> 3 g	<b>1%</b>
Dietary Fiber 1 g	4%
<b>Protein</b> 3 g	
Vitamin C 2% ●	Iron 2%
Not a significant source of saturated fat, <i>trans</i> fat, cholesterol, sugars, vitamin A, and calcium.	
*Percent Daily Values are based on a 2,000 calorie diet.	

# Optional Additional Nutrients for White Mushrooms

<b>Nutrition Facts</b>	
Serving Size 5 medium mushrooms (84g)	
<b>Amount Per Serving</b>	
<b>Calories</b> 20	Calories from Fat 0
<b>% Daily Value</b> *	
<b>Total Fat</b> 0 g	<b>0%</b>
<b>Sodium</b> 15 mg	<b>0%</b>
<b>Potassium</b> 300 mg	<b>9%</b>
<b>Total Carbohydrate</b> 3 g	<b>1%</b>
Dietary Fiber 1 g	4%
<b>Protein</b> 3 g	
Vitamin C 2% ●	Iron 2%
Vitamin D 4% ●	Riboflavin 10%
Pant. acid 10% ●	Selenium 10%
Copper 10% ●	
Not a significant source of saturated fat, <i>trans</i> fat, cholesterol, sugars, vitamin A, and calcium.	
*Percent Daily Values are based on a 2,000 calorie diet.	

## White Mushroom Claims

Mushrooms are  
**HEALTHY**

Good Source of  
the **ANTIOXIDANT**  
Selenium

### **Good Source of:**

- Riboflavin
- Pantothenic acid
- Selenium
- Copper

## If Choosing to Label:

# Minimum Nutrients Required for Brown Mushrooms

<b>Nutrition Facts</b>	
Serving Size 5 medium mushrooms (84g)	
<b>Amount Per Serving</b>	
<b>Calories</b> 20	Calories from Fat 0
<b>% Daily Value*</b>	
<b>Total Fat</b> 0 g	<b>0%</b>
<b>Sodium</b> 15 mg	<b>0%</b>
<b>Potassium</b> 300 mg	<b>9%</b>
<b>Total Carbohydrate</b> 3 g	<b>1%</b>
Dietary Fiber 1 g	4%
<b>Protein</b> 3 g	
Vitamin C 2% ●	Iron 2%
Not a significant source of saturated fat, <i>trans</i> fat, cholesterol, sugars, vitamin A, and calcium.	
*Percent Daily Values are based on a 2,000 calorie diet.	

# Optional Additional Nutrients for Brown Mushrooms

<b>Nutrition Facts</b>	
Serving Size 5 medium mushrooms (84g)	
<b>Amount Per Serving</b>	
<b>Calories</b> 20	Calories from Fat 0
<b>% Daily Value*</b>	
<b>Total Fat</b> 0 g	<b>0%</b>
<b>Sodium</b> 15 mg	<b>0%</b>
<b>Potassium</b> 300 mg	<b>9%</b>
<b>Total Carbohydrate</b> 3 g	<b>1%</b>
Dietary Fiber 1 g	4%
<b>Protein</b> 3 g	
Vitamin C 2% ●	Iron 2%
Riboflavin 15% ●	Niacin 10%
Pant. Acid 10% ●	Selenium 10%
Copper 15% ●	
<small>Not a significant source of saturated fat, <i>trans</i> fat, cholesterol, sugars, vitamin A, and calcium.</small>	
<small>*Percent Daily Values are based on a 2,000 calorie diet.</small>	

## Brown Mushroom Claims

Mushrooms are  
**HEALTHY**

Good Source of  
the **ANTIOXIDANT**  
Selenium

### **Good Source of:**

- Riboflavin
- Niacin
- Pantothenic acid
- Selenium
- Copper

If Choosing to Label:  
Minimum Nutrients Required for Portabella  
Mushrooms

<b>Nutrition Facts</b>	
Serving Size 1 cap (84g)	
<b>Amount Per Serving</b>	
<b>Calories</b> 20	Calories from Fat 0
<b>% Daily Value*</b>	
<b>Total Fat</b> 0 g	<b>0%</b>
<b>Sodium</b> 15 mg	<b>0%</b>
<b>Potassium</b> 300 mg	<b>9%</b>
<b>Total Carbohydrate</b> 3 g	<b>1%</b>
Dietary Fiber 1 g	4%
<b>Protein</b> 3 g	
Vitamin C 2% ●	Iron 2%
Not a significant source of saturated fat, <i>trans</i> fat, cholesterol, sugars, vitamin A, and calcium.	
*Percent Daily Values are based on a 2,000 calorie diet.	

# Optional Additional Nutrients for Portabella Mushrooms

<b>Nutrition Facts</b>	
Serving Size 1 cap (84g)	
<b>Amount Per Serving</b>	
<b>Calories</b> 20	Calories from Fat 0
<b>% Daily Value*</b>	
<b>Total Fat</b> 0 g	<b>0%</b>
<b>Sodium</b> 15 mg	<b>0%</b>
<b>Potassium</b> 300 mg	<b>9%</b>
<b>Total Carbohydrate</b> 3 g	<b>1%</b>
Dietary Fiber 1 g	4%
<b>Protein</b> 3 g	
Vitamin C 2% ●	Iron 2%
Riboflavin 15% ●	Niacin 15%
Pant. acid 10% ●	Selenium 10%
Copper 15%	
Not a significant source of saturated fat, <i>trans</i> fat, cholesterol, sugars, vitamin A, and calcium.	
*Percent Daily Values are based on a 2,000 calorie diet.	

## Portabella Mushroom Claims

Mushrooms are  
**HEALTHY**

Good Source of  
the **ANTIOXIDANT**  
Selenium

### **Good Source of:**

- Riboflavin
- Niacin
- Pantothenic acid
- Selenium
- Copper

If Choosing to Label:  
Minimum Nutrients Required for Enoki Mushrooms

<b>Nutrition Facts</b>	
Serving Size 3 oz (84g)	
<b>Amount Per Serving</b>	
<b>Calories</b> 30	Calories from Fat 0
<b>% Daily Value*</b>	
<b>Total Fat</b> 0 g	<b>0%</b>
<b>Sodium</b> 0 mg	<b>0%</b>
<b>Potassium</b> 270 mg	<b>8%</b>
<b>Total Carbohydrate</b> 6 g	<b>2%</b>
Dietary Fiber 2 g	8%
<b>Protein</b> 2 g	
Vitamin C 0% ●	Iron 2%
Not a significant source of saturated fat, <i>trans</i> fat, cholesterol, sugars, vitamin A, and calcium.	
*Percent Daily Values are based on a 2,000 calorie diet.	

# Optional Additional Nutrients for Enoki Mushrooms

<b>Nutrition Facts</b>	
Serving Size 3 oz (84g)	
<b>Amount Per Serving</b>	
<b>Calories</b> 30	Calories from Fat 0
<b>% Daily Value*</b>	
<b>Total Fat</b> 0 g	<b>0%</b>
<b>Sodium</b> 0 mg	<b>0%</b>
<b>Potassium</b> 270 mg	<b>8%</b>
<b>Total Carb. hydrate</b> 6 g	<b>2%</b>
Dietary Fiber 2 g	8%
<b>Protein</b> 2 g	
Vitamin C 0% ●	Iron 2%
Riboflavin 10% ●	Niacin 20%
Not a significant source of saturated fat, <i>trans</i> fat, cholesterol, sugars, vitamin A, and calcium.	
*Percent Daily Values are based on a 2,000 calorie diet.	

## Enoki Mushroom Claims

**Mushrooms are  
HEALTHY**

**Good Source of  
Riboflavin**

**Excellent Source of  
Niacin**

## If Choosing to Label:

# Minimum Nutrients Required for Oyster Mushrooms

<b>Nutrition Facts</b>	
Serving Size 3 oz (84g)	
<b>Amount Per Serving</b>	
<b>Calories</b> 30	Calories from Fat 0
<b>% Daily Value*</b>	
<b>Total Fat</b> 0 g	<b>0%</b>
<b>Sodium</b> 15 mg	<b>0%</b>
<b>Potassium</b> 250 mg	<b>7%</b>
<b>Total Carbohydrate</b> 5 g	<b>2%</b>
Dietary Fiber 1 g	4%
<b>Protein</b> 2 g	
Vitamin C 0% ●	Iron 2%
Not a significant source of saturated fat, <i>trans</i> fat, cholesterol, sugars, vitamin A, and calcium.	
*Percent Daily Values are based on a 2,000 calorie diet.	

# Optional Additional Nutrients for Oyster Mushrooms

<b>Nutrition Facts</b>	
Serving Size 3 oz (84g)	
<b>Amount Per Serving</b>	
<b>Calories</b> 30	Calories from Fat 0
<b>% Daily Value*</b>	
<b>Total Fat</b> 0 g	<b>0%</b>
<b>Sodium</b> 15 mg	<b>0%</b>
<b>Potassium</b> 250 mg	<b>7%</b>
<b>Total Carbohydrate</b> 5 g	<b>2%</b>
Dietary Fiber 1 g	4%
<b>Protein</b> 2 g	
Vitamin C 0% ●	Iron 2%
Riboflavin 10% ●	Niacin 20%
<small>Not a significant source of saturated fat, <i>trans</i> fat, cholesterol, sugars, vitamin A, and calcium.</small>	
<small>*Percent Daily Values are based on a 2,000 calorie diet.</small>	

## Oyster Mushroom Claims

**Mushrooms are  
HEALTHY**

**Good Source of  
Riboflavin**

**Excellent Source of  
Niacin**

For additional documentation on the labels and label claims in this toolkit, please contact the Mushroom Council directly at 408-432-7210 or [info@mushroomcouncil.org](mailto:info@mushroomcouncil.org).