

Berries have some of the highest antioxidant levels due to their high concentration of phytonutrients including anthocyanins, ellagitannins, flavonols, terpenoids, and phenolic acids. Strawberries are a great source of vitamin C, providing 70% of adult needs in only ½ cup. Blackberries and blueberries are rich in vitamin K. The seeds in raspberries and blackberries are especially high in both fiber and ellagitannins.

### HOW THEY IMPROVE HEALTH

- Phytonutrients may protect from inflammation and cancers of the mouth, colon, small intestine, and prostate.
- Antioxidants may help to detoxify the small intestine to improve immune health.
- A few studies have correlated blueberry consumption with age-related memory loss and cardiovascular disease, but more research is needed.

*This information is not meant to diagnose, treat, cure, or prevent any disease. This project is made possible by funding through OSU CARES - an initiative of OSU Extension and the OSU to expand faculty, staff and student partnerships with communities throughout Ohio.*

For more information or how to maximize nutrients in other fruits and vegetables, see <http://localfoods.osu.edu/maximizenutrients>.

# Farm to Health Series

## MAXIMIZE YOUR NUTRIENTS FROM: BERRIES



### NUTRIENT AND PHYTOCHEMICAL CHANGES

Berries should be used or consumed soon after picking to prevent spoilage, usually within 2-5 days. Room temperature storage is not recommended for food safety reasons and to minimize nutrient loss. Fresh or frozen berries are best to maximize nutrients.

	Vit C	Vit K	Fiber	Anthocyanins	Ellagitannins
Refrigerated storage	↓	=	=	↓	↑
Cooking methods:					
Cooked but not drained	↓	=	=	↓	=
Boiled & drained	↓↓	=	=	↓↓	↓
Canned:					
During storage	=	=	=	↓	=
Syrup from can drained	↓↓	=	=	↓↓	↓
Syrup from can retained	↓	=	=	↓	=
Frozen	=	=	=	=	=
Dried	↓↓	↓↓	=	↓↓	↓↓

↓: decrease, ↓↓: large decrease, =: no change, ↑: increase, ↑↑: large increase



# Recipe: Very Berry Whole-Wheat Bread Pudding

(Reprinted with permission from the American Institute for Cancer Research, [www.aicr.org](http://www.aicr.org))

To maximize nutritional value, this recipe uses fresh or frozen berries. The berries can be used frozen. For the sauce, the berries are thawed in the refrigerator overnight and the drained liquid incorporated into the sauce, thus retaining the nutrients and phytochemicals.

## Ingredients:

### Pudding:

- 1 cup frozen or fresh cherries (tart or sweet), pitted
- 1 cup fresh or frozen blueberries
- 1/4 cup sugar
- 1 tsp. ground cinnamon
- 5 oz. whole-wheat bread, cubed (about 3 cups)
- 2 eggs
- 3/4 cup low-fat milk
- 1/2 tsp. vanilla extract
- 1/4 tsp. salt
- Cooking spray

### Topping:

- 1 oz. sliced almonds
- 1 tsp. powdered sugar, garnish

### Optional sauce:

- 1 lb. bag frozen unsweetened mixed berries
- 1/2 tsp. cornstarch

## Directions:

- Combine cherries, berries, sugar and cinnamon in mixing bowl. Stir well to coat berries; add bread cubes.
- In another bowl, whisk together eggs, milk, vanilla and salt. Pour egg/milk mixture over berry/bread mixture and stir to coat bread thoroughly. Let mixture stand for 15 to 30 minutes to enable ingredients to combine and the bread to soak up the egg mixture.
- Preheat oven to 325 degrees, spray a 9-inch baking dish.
- Pour pudding mixture into baking dish. Bake 20 minutes. Remove from oven and distribute almonds over pudding. Return to oven and bake about 25 to 30 minutes.
- Remove from oven and let rest for 10 min. Garnish with powdered sugar. Serve warm.
- For sauce: Thaw berries overnight in the refrigerator; save drained juice and mix with cornstarch. Cook berries over medium-low heat for about 3 minutes. Add juice mixture to berries and heat until thickened. Serve over or alongside pudding.



**6 servings. Per serving:** 183 calories, 5g total fat (1g sat. fat), 27g carbohydrate, 8g protein, 3.5g dietary fiber (12% DV), 248mg sodium, 4.4mg vit C (7% DV), 0.025mg folate (6% DV), 7.2mcg vit K (9% DV)

## OTHER FOOD SOURCES OF KEY NUTRIENTS AND PHYTOCHEMICALS:

