

DID YOU KNOW...

- The strawberry is not classified by botanists as a true berry. True berries, such as blueberries and cranberries have seeds inside. The strawberry, however has its dry, yellow "seeds" on the outside (each of which is actually considered a separate fruit)

Source: *Wikipedia*

NUTRITIONAL INFORMATION

(value per 144g/1 cup of whole strawberries):

Energy: 43 cal / Carbs: 10.1 g / Dietary Fiber: 3.3g / Fat: 0.53 g / Protein: 0.88g / Water: 132g / Thiamin 0.03 mg / Riboflavin 0.1 mg / Niacin 0.33 mg / B-6 0.09 mg / Pantothenic acid 0.49 mg / Folate (Vit B9): 25 µg / Vit A 39 IU / Vit C: 82 mg / Vit E: 0.20 mg / Calcium: 20 mg / Iron: 0.55 mg / Potassium: 240 mg / Sodium: 1.44 mg / Zinc: 0.19 mg / Copper 0.07 mg / Manganese 0.42 mg / Selenium 1.01 µg.

Source: *USDA Nutrient database*

RECIPES FOR SUCCESS

Local Food Case Study:

STRAWBERRIES

PRODUCT SOURCING/DISTANCE TRAVELED/GROWER BENEFITS

Due to rainy weather, there were plenty of berries at a local U-pick farm but a lack of customers.

Fairwinds Farm in Bowdoinham supplied the berries. We picked up one shipment of 30 flats at their farmer market stand in Brunswick, and the other was delivered for a flat charge of \$ 20 by the farmer.

Another supply was available from farther inland, but due to wet conditions at the farm, they did not have an adequate supply at a comparable price. The longer distance to ship also added to cost.

COST ANALYSIS/COST RECOVERY/SALES

- What is the price schools would pay for the product?
- USDA strawberries frozen are \$ 4.50 + \$ 24 for 4/1 in juice
- Strawberry cups are \$ 0.55 each for 5.5 oz

Strawberries:	\$ 1,340/60 flats
Labor:	\$ 1,788
Total:	\$ 3,128
Servings:	7,200
Cost/serving:	\$ 0.434

USDA FOOD BUYING GUIDE

Frozen strawberries, 14 pounds = 100 ¼ cup servings fruit and juice

Prime Vendor sells Frozen, sliced 4:1 strawberries, 6x6.5 pounds

6x6.5 pounds / 14 = 278 servings

Current price is \$ 58.81/278 = \$ 0.21 per serving commercial product

PROCESSING/LABOR/EXTENDED EMPLOYMENT OPTIONS

- Process clean, slice, freeze – 37.5 and 44 hrs to process 30 flats each
- Clean, freeze- definitely faster, can they be cut before use if needed instead?

Our processing inquiry with Extension processing was answered by Al Bushway:

Q: Can you provide processing instructions for Strawberries – sliced for breads and shortcakes or whole?

A: “For strawberries, there are a couple of approaches you could take depending on the end use for the berries when they are thawed. They can be frozen whole or sliced and frozen, but will lose liquid when being thawed. If they are being used in a cooked product the lose of moisture will not be a major factor. They can also be sliced and sugar added prior to freezing. This will lead to a sweetened strawberry for later use.”

* The fruit and vegetable washes will remove and/or kill some of the microorganisms on the surface of the fruits or vegetables. Usually only a one to two log reduction although Tsunami is reported to be better (than Victory). For frozen products, I don't see that they would increase the shelf-life. For cut fruits (apples) which undergo enzymatic browning, the commercial dips will reduce the rate of browning.

RECIPES/PREPARING/SERVING

- MHL Shortcake & breakfast breads
- Smaller batches for breakfast bread – all in 10# bags and frozen

Used in Breakfast Breads but were a little wetter than expected so care has to be taken to adjust recipe
Breakfast bread used at all school staff breakfast with favorable comments by all.

Much appreciation for use of local products however small a percentage.

Menued for October and November with shortcake square

STUDENT/PARENT FEEDBACK

Frozen sliced strawberries have incredible color and taste compared to USDA buckets or commercial product.

FMI

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