

# Ask Dr. Tastebud



Volume 2, issue 9

**Dear Dr. Tastebud,**

*I do not like the taste of milk, can I substitute calcium fortified orange juice instead? I know the importance of calcium in the diet and I want to ensure I am obtaining enough to maintain strong and healthy bones.*

*Boney Bill*

**Dear Boney Bill,**

While drinking calcium fortified orange juice may provide sufficient amounts of calcium in the diet, there are other nutrients in milk that will be left out when consuming solely orange juice. Milk is a high quality source of protein, which is integral in maintaining body tissues. Milk is also fortified with vitamin D and contains vitamin B12, since it is an animal derived product. Milk is extremely an inexpensive, high quality source of vitamins and minerals and it is recommended that 3 cups are consumed daily.

## **Benefits to a diet high in Calcium**

Adult bone mass peaks between the ages of 30 and 35 and it is imperative that calcium levels are maintained throughout one's life up until these ages. If levels are not sufficient the risk of fracture later in life is increased and depending on where the fracture occurs could cause a loss in mobility. Because of this it becomes all the more important to ensure school aged children are drinking milk instead of pop or high sugar juice drinks to maintain adequate calcium levels.

Calcium is also responsible for maintaining proper heart rhythms and muscle contractions. If blood calcium levels fluctuate too much, serious injury may result. When dietary levels

are not high enough hormones will be released, which will cause the breakdown of bone calcium to maintain proper blood levels and sustain life. If bone calcium breakdown occurs over time, bone density can be compromised and the risk for fracture can also increase.

Studies have also shown that individuals that consume the recommended amounts of calcium and dairy products live an overall healthy lifestyle when compared to those who do not. Milk contains approximately 10% of the daily recommended value of Potassium, which can help with muscle cramping after strenuous exercise. By consuming a glass of milk prior to exercise, muscle proteins can be replenished along with blood mineral levels to make the post exercise recovery process happen more rapidly.

## **Lactose Intolerance and Dairy Consumption**

Calcium fortified orange juice can act as a good substitute when the individual has insufficient lactase production, keeping them from properly digesting the milk sugar lactose. It may also be possible to consume other milk products such as goat milk, which has been shown to be more easily digested in lactose intolerant individuals. Protein and nutrient contents are similar, which makes this an excellent choice for lactose intolerant individuals who still want to reap the benefits of milk consumption.

## Other drinks and foods that contain calcium:

1. Sardines
2. Broccoli
3. Dried beans
4. Yogurt
5. Cottage cheese
6. Bok choy
7. Figs
8. Mustard greens
9. Almonds



## How to improve the taste of cow's milk:

- For someone who does not like the taste of normal cows milk it is recommended to add 5 drops of pure vanilla to one gallon of milk to improve the overall taste of the product, without adding calories. Once the individual gets used to the taste of the milk with 5 drops, he or she can slowly decrease the number of drops until vanilla no longer needs to be used.
- Many also prefer the taste of high fat content milks, therefore start with 2% and once acclimated, move to 1% and .5% until the taste of skim milk is tolerable.

## Figure Friendly Dairy Recipes

### 1. Apple Pie al a Mode Smoothie

- 1 large granny smith apple
- 1 cup low fat vanilla frozen yogurt
- ½ cup fat free milk
- ¼ teaspoon cinnamon
- 2 tablespoon graham cracker crumbs

Warm apple in microwave to slightly soften, about 1 minute. Chill in the fridge for approximately 10 minutes. Add all ingredients except graham crackers to blender and mix until smooth. Pour into glass and sprinkle with graham cracker crumbs.

### 2. Berry Blast Smoothie

- 1 cup frozen raspberries
- 2- 6 ounce containers of blueberry yogurt
- ½ cup skim milk
- 1 tablespoon almond butter
- 1 tablespoon honey

Blend all ingredients in blender until smooth. Pour into glasses and serve chilled!

**For more information, check out these sites:**

<http://www.osteoporosis-info.com/calcium>

<http://www.schools.utah.gov/cte/documents/facs>

[www.mypyramid.gov/guidelines/index.html](http://www.mypyramid.gov/guidelines/index.html)

### **Nutrition:**

### **What's in it for me?**

*Brown Bag Lunch Series*

November, 9<sup>th</sup> 2009 at 12:00 PM

Family Consume Science Building  
Halsted Conference Room

Employee Wellness Program: Please go to  
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Questions? [carrich@bgsu.edu](mailto:carrich@bgsu.edu)