

PENNY SAVER NEWS

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Your Milk - With or Without Bacteria

Most foods that are good for us are also great places for bacteria to grow. Milk is one of the best examples. It has great protein, a little sugar, some minerals, plenty of water. That makes a great combination for growing people, and for growing bacteria. If we want to drink it without getting a ton of bacteria we need to take care of it.

People have drunk milk and used milk for millions of years. Some people use cow's milk, others use goat's, camel's, buffalo's or donkey's milk. Each has different amounts and kinds of fat, which gives each a slightly different flavor. Milk spoils so quickly and easily that people learned, millions of years ago, to sour the milk with safe bacteria. They made cheese or drank fermented milk products like yogurt, lassi or kefir.

As long as we use the right bacteria, soured milk is safer than fresh milk. When we use safe bacteria to sour or ferment it, the acid they make is enough to keep the others from growing. And thank goodness! The list of dangerous bacteria that have been found growing in milk is positively scary! Besides the common bad guys of *E. coli* and *Salmonella*, there are *Staphylococcus* and *Campylobacter*. *Listeria*, that can cause miscarriages, and *Mycobacterium* that causes tuberculosis are on the list. So are *Brucella*, *Coxiella* and *Yersinia*, a whole lot of really creepy critters. But none of them like acid, so soured milk products like cheese and yogurt are a lot safer to carry around than fresh milk is.

We've all heard of *E. coli* bacteria. Besides a bad case of upset stomach, these

guys can ruin our intestines and kidneys or even kill us. There is one current lawsuit in another state of a person who needs a kidney transplant as a result of drinking raw milk contaminated with *E. coli*. A recent outbreak in Michigan had 12 people sick with campylobacteriosis from raw milk. There have been dozens of outbreaks and hundreds of people sickened by bacteria in raw milk.

When we decide to drink fresh milk instead of cheese or sour milk we need to do something to keep all the dangerous bacteria from growing. The best way to do it is to heat the milk just enough to kill any bacteria, then keep it sealed up and cold so that no new ones get in or grow. The process was developed by Dr. Louis Pasteur and is called pasteurization.

Pasteurization is enough to kill living bacteria but not enough to cook the milk. It is not enough to destroy any nutritional value. Since dangerous bacteria can and do grow in raw milk it's obvious that there's nothing in raw milk to protect us from them!

Small children, the elderly, pregnant women and people who are more sensitive to infection because of other medications or medical conditions are at more risk of getting sick than healthy adults are. Of course these are the people we least want to get sick. Who wants to see their child in the hospital? No one! No one wants an elderly parent sickened.

By always drinking pasteurized milk and by keeping milk cold we can avoid the bacteria. Even after milk has been pasteurized bacteria could still get in. Keeping it cold will prevent them from growing. Milk should never be allowed to sit out on the counter. After just 2 hours at room temperature it should be thrown away. Bacteria can grow so fast in that good food that it will be dangerous by then.

Here's a recipe that is definitely not dangerous. It's a rice pudding made on top of the stove, no hot ovens to heat up the house. The bit of lemon zest helps to balance the sweetness of the pudding. And it's wonderful topped with chopped fresh strawberries. Enjoy!

Stove-Top Rice Pudding

3 cups skim milk

1 cup water

½ cup uncooked rice

½ cup sugar

zest of one lemon

pinch of cinnamon to taste

chopped strawberries or other seasonal fruit, optional

Combine milk, water, sugar, rice and lemon zest in heavy saucepan. Bring to boil.

Reduce heat to low and simmer uncovered until liquid is almost absorbed and rice is tender. Stir frequently. Pudding will thicken when cool so don't overcook. Spoon into individual serving bowls and sprinkle with cinnamon. Refrigerate. Before serving top with sliced strawberries or other seasonal fruit if desired. Serves 6.