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Raw Milk May Pose

hat's a building block in the food pyramid that's important for building and maintaining bone mass? It's milk.

Whether it's from cows, goats, sheep, or another mammal, milk and milk products are an important source of calcium throughout a person's life.

Most of the milk sold in the United States is pasteurized, a process during which the milk is heated to 161 degrees and kept there for 15 seconds. Pasteurization kills harmful bacteria—including salmonella, E. coli, and listeria—that can contaminate milk before it gets to your table. The Food and Drug Administration (FDA) and the Centers for Disease Control and Prevention (CDC) recommend pasteurization for all milk consumed by people in the

Pasteurization Reduces Illness

United States.

Pasteurization of milk is an effective means of preventing outbreaks of foodborne illness, including tuberculosis, brucellosis, salmonellosis, scarlet fever,

and listeriosis. It was first used in the United States more than 100 years ago and has been widely used for more than a half-century, says John Sheehan, an FDA expert on the safety of dairy products.

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Pasteurization was first used in the United States more than 100 years ago, and it has been widely used for more than a half-century.

But increasingly, consumers are seeing "raw" milk—and cheeses, yogurts, and other products made from it—in specialty shops, farmers' markets, and stores. That's partly because many Americans have adopted a "back to nature" philosophy about the foods they eat, embracing the idea that locally produced and minimally processed foods are more nutritious.

But in the case of raw milk, FDA says that's not true. Although the heating process slightly affects a few of the vitamins—thiamine, vitamin B6 and folic acid within the B-complex, and vitamin C, the changes are not significant. Meanwhile, there is a risk that milk could be contaminated by environmental factors such as soil or animal feces, animal diseases, or bacteria on an animal's skin.

Consumers are also seeing more raw milk products because of the growth of the artisanal cheese industry, Sheehan says. These cheeses are made by hand using what are considered to be traditional methods—often on the farm where the milk is produced. Some of these cheese makers use pasteurized milk in their products, but others use raw milk that could contain disease-causing bacteria.

Some people believe cheese made from raw milk is better for you, but Sheehan says there is no scientific evidence to support that belief.

In countries where pasteurization of milk is less common, outbreaks of foodborne illness attributed to tainted milk or milk products occur more frequently than they do in the United States. In France, for example, the rate of foodborne illness attributed to milk and milk products was reported to be roughly three times what it is in the U.S., says Sheehan, citing a 2001 study by researcher Marie-Laure De Buyser and other French scientists.

When in Doubt—Ask!

Federal law prohibits dairies from distributing raw milk across state lines if it has been packaged for consumers. This means raw milk can only be distributed between states if it's going to plants to be pasteurized or used to make aged cheese before being sold to consumers. Experts have long believed that aging cheese for 60 days or longer killed disease-causing bacteria. FDA is now reviewing the scientific basis for that belief.

Each state makes its own laws about selling raw milk within the borders of the state. About half of states allow some form of raw milk to be sold to consumers.

Consumers should be alert when they buy milk or milk products. To avoid raw milk, here are a few things you can do:

- Read the label on milk or milk products before you buy them. Many companies put the word "pasteurized" right on the label—but, Sheehan says, it is not required.
- Ask store employees if specific brands are pasteurized.
- At farm stands or farmers' markets, ask if the milk and cream being sold have been pasteurized. If the market sells

yogurt, ice cream, or cheese, ask if they were made with pasteurized milk.

Symptoms of Foodborne Illness

Not all raw milk and products made from it contain harmful bacteria. But if they do, the bacteria could be especially dangerous to pregnant women, children, the elderly, and people with weakened immune systems. While most healthy people recover from a foodborne illness in a short time, some people may develop symptoms that are chronic, severe, or even life-threatening.

Symptoms of foodborne illness may include:

- vomiting
- diarrhea
- abdominal pain
- fever
- headache
- body aches

If you think you might have become ill from drinking raw milk—or eating yogurt, cheese, or a product made from it—see your health care provider immediately.

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