

Raw Milk: Helpful or Hazardous?

What is raw milk?

Raw milk is milk that has not been pasteurized. During pasteurization, milk is heated to a specific temperature for a minimum period of time, then quickly cooled.

What is the purpose of pasteurization?

Pasteurization dramatically increases food safety and shelf life. Pasteurizing milk or other products such as fruit juices kills potentially harmful bacteria.

In 1864, French scientist Louis Pasteur discovered that heating beer and wine killed most of the bacteria that caused the beverages to spoil or sour. By 1950, pasteurization of milk was a prevalent practice in the U.S., leading to a dramatic reduction in illnesses and fatalities from diseases like tuberculosis, diphtheria, typhoid fever, and brucellosis (undulant fever). While these ailments have since been largely eradicated in our country, pasteurization remains as important as ever in preventing sickness and death from bacteria such as *Listeria*, *Salmonella*, *Campylobacter* and pathogenic *E. coli* O157:H7.

In the U.S., FDA regulations require that pasteurized milk be heated to at least 145°F for 30 minutes or 160°F for at least 15 seconds. Some dairy products are pasteurized with a method known as “ultra-high temperature” or UHT, which heats milk to 280°F for at least 2 seconds. This process results in “shelf-stable” milk which—when stored unopened in specially-designed packaging—has a six-month shelf life without refrigeration.

Why is there an interest in raw milk?

Despite safety risks, raw milk has been growing in popularity. This popularity centers largely on a number of inaccurate ideas easily found on seemingly reputable websites. However, based on substantial scientific evidence, the Food and Drug Administration (FDA), and the Centers for Disease Control (CDC) state the following:

- Pasteurizing milk DOES NOT cause lactose intolerance and allergic reactions. Both raw milk and pasteurized milk can cause allergic reactions in people sensitive to milk proteins.
- Raw milk DOES NOT kill dangerous pathogens by itself.
- Pasteurization DOES NOT reduce milk’s nutritional value.
- Pasteurization DOES NOT mean that it is safe to leave milk out of the refrigerator for extended time, particularly after it has been opened.
- Pasteurization DOES kill harmful bacteria.
- Pasteurization DOES save lives.

What are the dangers?

Milk is an ideal medium for bacterial growth. This characteristic is advantageous when it comes to using beneficial bacteria in the making of cultured milks like buttermilk or kefir, or dairy products like yogurt or cheese. It becomes problematic if the milk is contaminated with dangerous bacteria. Even clean, healthy cows can harbor bacteria that can cause human illness.

Symptoms from an illness caused by contaminated raw milk include vomiting, diarrhea, and abdominal pain as well as flulike symptoms like fever, headache, and body aches. Most healthy people will recover from such illness in a short period of time. Some, however, will develop severe, chronic, or even fatal illness.

Shouldn't there be a law?

Federal law dictates that raw milk cannot be sold for consumer use across state lines. Other laws regulating sales of raw milk vary by state. In Illinois, there are currently no regulations regarding raw milk sales. Illinois Farm Bureau® has been working with raw milk producers and the dairy industry on proposed regulations that would provide oversight into raw milk production and sales.

These are the currently recommended guidelines for raw milk sales in Illinois:

- Raw milk may not be sold at retail outlets.
- Sales of raw milk must occur on the farm.
- Consumers must provide their own containers.
- Farmers cannot advertise sales of raw milk.

In short, most of the claimed benefits of consuming raw milk are misleading and not backed by credible science. Commercially available pasteurized milk, stored properly, is healthy and packed with nutrients. Drink up! ■

Sources/for more information: Fitness Reloaded, *Raw Milk: Yay or Nay?* (*nay, nay, nay.*), <http://bit.ly/1H5PgT9>; Food Safety News, *Raw Milk Myths – Busted*, <http://bit.ly/1EIm57Y>; Illinois Register – Department of Public Health, *Notice of Proposed Amendments: Grade A Pasteurized Milk and Milk Products*, <http://bit.ly/1op432s>; Midwest Dairy Association, *Raw Milk Fact Sheet*, <http://bit.ly/1AZWsxX>; U.S. Food and Drug Administration, *The Dangers of Raw Milk: Unpasteurized Milk Can Pose a Health Risk*, <http://1.usa.gov/1H5P5Y6>

