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**Raw Milk and Raw Dairy Products:
Risk and Recommendations**

In California, although the sale of raw milk and raw dairy products is legal, all such products are required to include this warning on their labels:

“WARNING: Raw (unpasteurized) milk and raw milk dairy products may contain disease-causing microorganisms. Persons at highest risk of disease from these organisms include newborns and infants; the elderly; pregnant women; those taking corticosteroids, antibiotics or antacids; and those having chronic illnesses or other conditions that weaken their immunity.” It is important to have the correct facts on consuming raw milk products so that you can make the best decision for you and your family.

1. Raw milk and raw dairy products are milk and dairy products (e.g., queso fresco, cheese, cream, etc.) made from milk that have not been pasteurized (heat treated) to kill off bacteria. Raw milk and raw dairy products are not as safe as pasteurized milk and dairy products made from pasteurized milk.
2. Raw milk and raw dairy products are inherently unsafe to consumers because they may contain one or more types of bacteria that can cause mild to severe illnesses. These bacteria include *Brucella*, *Campylobacter*, Shiga toxin-producing *E. coli* such as *E. coli* O157:H7, *Listeria*, *Mycobacterium bovis*, *Salmonella* species, and *Yersinia*.
3. Infection with one of these bacteria may occur from drinking raw milk or eating dairy products made from raw milk. The symptoms of these infections include diarrhea, stomach cramps, or fever. Rare, yet severe illness may also occur, including a neurological disease called Guillain-Barré syndrome with *Campylobacter jejuni* infection, acute renal failure in children or the elderly with *E. coli* O157:H7 infection, and miscarriage or fetal death in pregnant women with *Listeria monocytogenes* infection.

4. The risk of severe disease, hospitalization, or death from consuming raw milk or raw dairy products is greater for children, pregnant women and their unborn babies, the elderly, and persons with weakened immune systems.
5. Outbreaks of infections due to consumption of raw milk or raw dairy products have been documented nationwide. From 1998 to 2008, the U.S. Centers for Disease Control and Prevention (CDC) documented 85 outbreaks of human infections that resulted from consumption of raw milk or cheese made from raw milk. A total of 1,614 reported illnesses, 187 hospitalizations and 2 deaths were reported from these outbreaks. The actual number of illnesses associated with raw milk or raw milk products is likely greater because not all cases of foodborne illness are recognized or reported
6. California outbreaks due to raw milk or raw dairy products included:
 - a. Cases of *Salmonella* Dublin infections in the 1970s into early 1980s that were associated with raw milk consumption. One published investigation in 1979 documented 113 patients with 89 hospitalizations and 22 deaths. Several patients had a serious underlying disease such as leukemia or lymphoma that might have predisposed them to a more severe outcome.
 - b. Two outbreaks of *Campylobacter* infection, one in 1984 where several children and adults were ill after drinking raw milk while on a tour of a dairy, and another in 1985 where several people became infected after drinking raw milk on a tour of a bottling plant.^c An outbreak of *Listeria monocytogenes* infection associated with eating Mexican-style cheese in 1985 that affected 142 persons resulting in 48 deaths. Of the cases, 93 were in pregnant women or their offspring resulting in 30 deaths in fetuses and newborn babies.
 - d. Two outbreaks of multidrug-resistant *Salmonella* infection associated with eating unpasteurized Mexican-style cheese in 1997 resulting in over 100 culture-confirmed cases.
 - e. An outbreak of *E. coli* O157 infection in September 2006 that affected six children, three of whom were hospitalized including two with kidney failure.
 - f. A cluster of diarrheal illness and *Campylobacter* infections in May-June 2008 that affected some members of a cow-share program who consumed raw milk; one of those affected developed a form of Guillain-Barré syndrome that required prolonged hospitalization.

7. The California Department of Public Health recommends that:

- a. persons at higher risk for severe foodborne disease (children, pregnant women, the elderly, and persons with weakened immune systems) and those who wish to reduce their risk of foodborne infections should not drink raw milk nor eat raw dairy products.
- b. persons who experience illness after consuming raw milk or a raw dairy product should see their doctor.

Several federal agencies, including the U.S. Centers for Disease Control and Prevention (CDC) and the U.S. Food and Drug Administration (FDA) have officially recognized the health risks of consuming raw milk and raw dairy products.

For more information about raw milk and raw dairy products:

CDC: http://www.cdc.gov/nczved/divisions/dfbmd/diseases/raw_milk/

FDA: <http://www.fda.gov/Food/ResourcesForYou/Consumers/ucm079516.htm>