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The Promise and Risk of Raw Milk in Arkansas – Analyzing Arkansas' New Raw Milk Law

Introduction

Milk and other dairy products are dietary staples in the United States, and the Dietary Guidelines for Americans recommends the inclusion of dairy products in our diets. Many states require dairy products to go through a process called pasteurization, or the heating of a food to kill disease-causing bacteria, prior to being sold to consumers.

The federal government has banned the sale of raw milk across state lines since 1987 because of concerns over consumers becoming ill from bacteria that raw milk can harbor. However, states retain the ability to regulate raw milk sales within their borders. Many states have chosen to allow a certain amount of raw milk sales, while approximately 20 states continue to ban the practice.ⁱ

In 2013, Arkansas legislators passed a law allowing limited on-farm sales of raw cow milk for human consumption. The safety of consuming raw milk is a controversial topic and is an issue that warrants further research by dairy farmers interested in selling raw milk and by people who are considering adding raw milk to their diets.

What Is Raw Milk?

Raw milk is milk that has not been pasteurized nor homogenized (a process of breaking fat into smaller pieces so as not to separate and will

distribute evenly). Raw milk laws typically refer to milk from cows or goats.

Why Do People Choose to Consume Raw Dairy Products?

Proponents of raw milk believe that the processes of pasteurization and homogenization decrease the nutritional value of the product. However, none of the nutrients in milk are harmed by the two processes.

Other reasons include:

- *Taste* – Raw milk may be described as being richer and fuller than pasteurized milk which could be attributed to the higher percentage of milk fat.
- *Production conditions* – Proponents may believe that producers of raw milk manage their dairy cows more naturally than conventional dairy operators.
- *Allergies and asthma* – The farm environment has been repeatedly associated with a reduced prevalence of asthma and allergies during childhood. One study (Perkin and Strachan, 2006) indicated that the consumption of raw milk was the primary reason for lower levels of certain allergies. However, similar studies have not been able to replicate these claims.

As of April 2013, 25 states allow the sale of raw milk either on farm or at the retail level. Several of the states limit sales to raw goat milk.

This publication is intended to provide general information about risk and should not be construed as providing legal or medical advice.

What Are the Health Risks Associated With Drinking Raw Milk?

Infections related to consumption of contaminated milk were relatively common in the late 19th and early 20th centuries, prior to the widespread application of pasteurization of dairy products. Unsanitary conditions present during milking or storage of raw milk often introduced disease-causing bacteria.

The following health risks are associated with the consumption of raw dairy products:

- Diarrhea, stomach cramping and vomiting due to disease-causing germs such as *Campylobacter*, *Salmonella*, *Listeria monocytogenes* and *Escherichia coli* or *E. coli*. Certain strains of *E. coli* can cause hemolytic-uremic syndrome, a disease that destroys red blood cells and can lead to kidney failure.
- Tuberculosis caused by *Mycobacterium bovis* and *Mycobacterium tuberculosis* is also associated with raw milk products, though primarily due to products imported into the United States from other countries.
- Unnecessary exposure to antibiotic residues if raw milk is not tested for residues.
- Exposure to aflatoxins, which is carcinogenic to humans. Aflatoxins can contaminate grains commonly consumed by dairy cows. Milk sold commercially is checked for aflatoxins while raw milk may not be tested.
- Secondary complications include kidney failure, paralysis, chronic disorders and even death as a result of these same germs. Certain germs, such as *Listeria monocytogenes*, can cause pregnant women to miscarry or threaten the health of the fetus if the mother were to develop *Listeriosis*.

Raw milk from a healthy animal does not inherently cause illness, but the milk can harbor harmful bacteria. Sick dairy animals can also pass on harmful pathogens. For example, Brucellosis or undulant fever caused by the bacteria *Brucella abortus* can be passed on to humans through consumption of unpasteurized milk and results in fever, sweating and muscle pains. Failure to diagnose and treat the infection can result in chronic infection.

Pasteurization, or the gentle heating of a food to 161 degrees F for 15 seconds, is enough to kill disease-causing bacteria that can be present in raw

milk products and can extend the shelf-life of milk by killing spoilage bacteria.

Who Is Most at Risk for Becoming Ill From Drinking Raw Milk?

Healthy people of any age can become sick from consuming raw milk, but the most at risk populations include:

- Infants and young children (The American Academy of Pediatrics endorses the use of pasteurized milk.ⁱⁱ)
- Elderly
- Pregnant women
- Immunocompromised people including those with cancer, organ transplants or HIV/AIDS

Foodborne Disease Outbreaks: Raw vs. Pasteurized Dairyⁱⁱⁱ

- From 1993 to 2006, 60 percent, or 73 out of 121 cases of reported dairy-related outbreaks were linked to raw milk products and;
- 75 percent, or 55 of the 73 outbreaks related to raw dairy products, occurred in states where the sale of raw milk was legal.
- Within the 73 outbreaks mentioned above, 1,571 people became ill, 202 were hospitalized and two people died.
- People sickened in raw dairy product outbreaks from 1993 to 2006 were 13 times more likely to be hospitalized than those who became ill from consumption of pasteurized milk.

Raw Milk in Arkansas

Before the passage of Act 1209 in the 2013 Legislative Session, Arkansas Code § 20-59-248 allowed limited sales of unpasteurized goat milk.

After August 16, 2013, the law will change to allow incidental sales of raw cow milk for personal use. Farmers are limited to selling 500 gallons of raw milk each month.

The addition of raw cow milk was framed as a matter of freedom of choice by legislators who supported the change. During a hearing on the issue at the state capitol, supportive legislators said the act would give farmers the freedom and the right to sell milk to someone who wants to buy it.^{iv}

Where Can Raw Milk Be Sold in Arkansas?

Raw milk can be advertised anywhere, but sales can only be conducted at the farm where the milk was produced. The resale of raw milk is not permitted. Raw milk purchased under this act may not be used in food products that are going to be sold.

Consumer Information Requirements

Raw milk sellers are required to post a sign of at least 2 feet by 4 feet at the point of sale informing people that the raw milk has not been pasteurized or inspected by the state health department. The sign must also notify purchasers that the consumer “assumes all liability for health issues that may result from the consumption of this product.”

The milk’s packaging must also carry a similar label, along with the name and address of the farm from where the milk came.

State Regulation of Raw Milk

Many states that allow raw milk sales empower state agencies to create rules or regulations for animal or milk testing. Arkansas’ legislation does not.

The Arkansas Department of Health (ADH) was removed from the legislation at the state agency’s request because the law did not allow the agency to charge for its services.^v

As it stands, the law requires that raw milk come from a healthy animal and states that farmers must allow inspection of cows and barns by customers upon request. The animal’s health is not inspected or tested by the Arkansas Livestock and Poultry Commission. In addition, the ADH does not test the milk for certain diseases as is done with milk from Class “A” dairies in Arkansas.

Liability of the Seller

One issue that may arise when Arkansas’ law goes into effect is the potential legal liability of sellers who distribute raw milk if it causes an illness or fatality. The statute requires the following language be posted on a sign at the point of sale as well as on the label of the bottle or package:

This product, sold for personal use and not for resale, is fresh whole milk that has

NOT been pasteurized. Neither this farm nor the milk sold by this farm has been inspected by the State of Arkansas. The consumer assumes all liability for health issues that may result from the consumption of this product.

Courts have often taken an unfavorable position to liability disclaimers. While the Arkansas statute provides language for the sign at the point of sale, it does not expressly create any other form of liability protection in the statute. Other avenues to mitigate this risk, such as liability insurance, may be needed to protect against the threat of a lawsuit.

Best Management Practices

Because the sale of raw cow milk previously was illegal in Arkansas, there are not any Arkansas-based practices developed for the processing of raw milk. Interested dairy farmers can look to other states for suggested best management practices.

For example, while producing raw milk for direct sales, the Vermont Agency of Agriculture^{vi} suggests these practices:

Sanitation

- Wash and rinse milking machines and parts immediately after each milking.
- Store machine parts on suitable racks to drain and dry. Hang vacuum hoses to drain, and store pails and strainers inverted on a rack.

Milking

- Prior to milking, flush milking machine with a dairy sanitizer bearing an EPA registration on its label.
- Collect milk samples for testing.

Bottling

- Wash containers with alkaline dairy detergent.
- Acid rinse.
- Drain and dry.
- Sanitize with EPA registered sanitizer just prior to filling.

Anything and everything that contacts milk should be washed, rinsed, sanitized and drained, according to the Vermont Agency of Agriculture. Milk should be cooled to at least 40 degrees F within two hours of finishing milking and maintained until it is obtained by a consumer.

Raw milk farmers can also take it upon themselves to follow in the footsteps of other producers by establishing food safety management plans.

A food safety management plan puts into writing a producer's on-farm practices to address potential hazards. Plans typically include sanitary, handling and packaging routines. In addition to making a farmer think about his or her practices, a plan establishes records that may come in handy to answer questions from consumers or from the Health Department in case of any illness outbreak.

Footnotes

- ⁱ National Conference of State Legislators, "Summary of Raw Milk Statutes and Administrative Codes," http://milk.procon.org/sourcefiles/NCSL_Raw_Milk_Memo.pdf. (Accessed April 2013)
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- ^{vi} Junkins, L., and D. Scruton. (n.d.). *Best Management Practices While Producing Raw Milk for Direct Sales*. [PowerPoint Slides].

Resources

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