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Raw Milk Sales and Consumption

VVMA Policy Statement

The VVMA recognizes that the U.S. Food and Drug Administration (FDA), the Centers for Disease Control and Prevention (CDC), the American Medical Association, the American Academy of Pediatrics, and the Vermont Department of Health warn that drinking milk which has not been pasteurized (raw milk) may be harmful to human health.

Raw (unpasteurized) milk and fresh products made from raw milk such as cream, soft cheeses, yogurt, or ice cream can be a source of exposure to organisms which are pathogenic to humans including, but not limited to *Brucella* spp., *Campylobacter jejuni*, *Coxiella burnetii*, *Escherichia coli*, *Listeria monocytogenes*, *Mycobacterium bovis*, *Salmonella* spp., *Staphylococcus* spp., and *Streptococcus* spp. Only pasteurized milk and pasteurized fresh milk products should be sold for human consumption. Putative benefits of raw milk consumption on human health are either unsupported by scientific evidence, or cannot be separated from the potential hazards associated with raw milk consumption. Therefore, consumption of raw milk cannot be recommended as a preventive or protective human health measure.

Adopted by the VVMA Executive Committee 3/1/09

Fact Sheet on Raw Milk Consumption and Human Health Risks

Where the term "raw milk" is used it indicates milk (whole or skim) which has not been pasteurized or fresh milk products such as cream, soft cheeses, yogurt, or ice cream that are made from unpasteurized milk.

- The prevalence and incidence of disease in populations is a function of exposure risk.
- Increasing consumption of raw milk in human populations will increase risk of exposure and disease in these populations.
- Subsets of human populations differ in their likelihood of contracting an infectious disease upon exposure, with immune-compromised individuals being at increased risk of disease. Young children under the age of 5 years, the elderly, and pregnant woman or woman considering pregnancy have an increased risk of disease associated with raw milk consumption.

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- Raw milk from lactating dairy animals can become contaminated with pathogenic organisms either by shedding of the pathogen directly into milk from the udder or by manure contamination of the milk during harvest. Pasteurization destroys pathogenic organisms that contaminate milk by either route.
- Lactating dairy animals (cattle, sheep, and goats) may show no health problems (i.e. commonly appear normal) when shedding pathogens that may cause human disease in their milk.
- Epidemiologic studies suggest consumption of raw milk during childhood is associated with reduced rate of allergies supporting the "hygiene hypothesis" of immune system development and modulation through routine exposure to low levels of some pathogens or antigenic stimuli. However, few of these studies are able to separate the effect of raw milk consumption from other exposures such as contact with farm environments or farm animals. Additional research is required to support the association with raw milk consumption and allergy prevention. No authors conducting this research have recommended raw milk consumption as a way to prevent development of allergies due to the superseding potential hazard from foodborne pathogen exposure in raw milk.
- Raw milk does not meet the definition of a "probiotic." Probiotics are intended to assist the body's naturally occurring microbial populations to re-colonize the digestive tract following an insult to the normal gut flora. Raw milk does contain bacteria (the lactic acid bacteria such as *Lactobacillus* spp. and *Bifidobacterium* spp.) that are commonly used as probiotic bacteria. However it is not clear that raw milk contains adequate amounts of these bacteria to either act as a probiotic, or to reduce the potential growth of pathogenic organisms.
- The so called "healthy" or "beneficial" bacteria found in milk and their potential metabolites or products may limit growth of potential pathogenic organisms, although the presence of these compounds remains undefined and is likely variable in raw milk so they can not be relied upon to eliminate potential human pathogens from raw milk.

Organisms that have been isolated from raw milk and associated human disease linked to raw milk consumption include:

<i>Brucella</i> spp	Brucellosis
<i>Campylobacter jejuni</i> *	Gastrointestinal disease, diarrhea to bloody diarrhea
<i>Coxiella burnetii</i> *	Q-fever
<i>Escherichia coli</i> (EHEC)*	Gastrointestinal disease, diarrhea to bloody diarrhea,
<i>E. coli</i> 0157:H7	Hemolytic Uremic Syndrome
<i>Listeria monocytogenes</i> *	Listeriosis
<i>Mycobacterium bovis</i>	Tuberculosis
<i>Salmonella</i> spp. *	Gastrointestinal disease, diarrhea to bloody diarrhea
<i>Staphylococcus</i> spp.*	Gastrointestinal disease, "food poisoning"
<i>Streptococcus</i> spp.*	Sore throat, sepsis, scarlet fever

* indicates pathogens presently known to be isolated from animals or milk from dairy farms in Vermont

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