



REAL RAW MILK FACTS

AN INNOVATIVE EVIDENCE-BASED FOOD SAFETY WEBSITE

Michele T. Jay-Russell^{1*}, William D. Marler², Katherine Feldman³, Michael Payne¹, Patti Waller², Ronald H. Schmidt⁴

¹Western Institute for Food Safety and Security, University of California, Davis, CA; ²Marler Clark, Seattle, WA

³Maryland Department of Health and Mental Hygiene, Baltimore, MD; ⁴University of Florida, Gainesville, FL

Introduction

In 2009, the International Association for Food Protection (IAFP) and the American Veterinary Medical Association (AVMA) each sponsored groundbreaking symposia addressing science, policy, and legal issues related to raw milk. It was noted that consumers increasingly use the Internet to research health-related topics, and a Google search on key word “raw milk” produced conflicting and confusing information weighted heavily toward raw milk advocacy groups. To address this imbalance, we created a website, www.realrawmilkfacts.com, that serves as a clearing-house for evidence-based scientific studies, presentations, commentaries, regulations, and position statements on raw milk.

Methods

The website was built using the WordPress publishing platform; the Google Analytics tool was used to track statistics on daily number of visitors to the site. The content was developed through input from diverse professionals including food safety scientists, public health officials, legal experts, and social scientists. A set of frequently asked questions (Q&A) was developed by reviewing the literature, visiting raw milk advocacy group websites and blogs, and conducting informal interviews with raw milk consumers to understand their interest in raw milk. An interactive map was created by querying state agriculture and public health agencies and organizations to identify current and pending regulations (Figure).



Figure. State-by-state interactive map of current and pending raw milk-related laws and regulations in the United States.

Results

The website was launched on April 15, 2010, simultaneous with a major raw milk article in a national newspaper, USA Today. The number of visits peaked at 1,811 on the launch date. A total of 65,800 visits have been logged through July 12, 2011, with ~4,100 per month and ~135 per day. Real Raw Milk Facts is consistently on the first page when key word “raw milk” is entered into a Google search. A number of government and university food safety websites link to the website.

Table. Analysis of evidence-based scientific studies on the benefits and risks from raw milk consumption.

	Condition	Studies	Comment
Benefits	Allergy/asthma/ Eczema	Yes	Several European epidemiological studies published (none found in the U.S.)
	Autism	No	Testimonies/anecdotal stories
	Cancer	No	Testimonies/anecdotal stories
	Crohn's Disease/IDB	No	Testimonies/anecdotal stories
	Earaches, colds and flu	No	Testimonies/anecdotal stories
	Lactose Intolerance	Yes	Stanford study found no difference between pasteurized and raw milk
	Nutrition	Yes	Chemical analysis – raw and pasteurized milk are both excellent sources of proteins, carbohydrates, calcium, and other vitamins (dairy is not a good source of vitamin C)
Risks	Tooth Decay	No	Testimonies/anecdotal stories
	Bacteria, parasites and viruses	Yes	Numerous confirmed outbreaks from raw dairy: <i>Campylobacter</i> , <i>E. coli</i> O157:H7, <i>Listeria</i> and <i>Salmonella</i> most common in the U.S.
	Antibiotic resistant bacteria	Yes	Several outbreaks in different parts of the world involving antibiotic resistant <i>Salmonella</i>

Research conducted during development of the Q&A revealed limited evidence supporting the most common health benefit claims by raw milk advocates (Table). In contrast, food safety risks from pathogens were well-documented in the scientific literature. The Q&A was designed based on major values and interests we identified among raw milk consumers including their desire for raw, unprocessed foods, “grassfed” animals, and small local farms.

Real Life Dangers

Video testimonials of families severely affected by raw milk-related illness are posted on the website to “put a face” on the risks of raw milk consumption. Family members describe why raw milk was appealing as a health food, and the unexpected consequences. In all cases, the raw milk came from pasture-based animals, and was sold legally or bought through a local “herdshare” program.



Conclusions

Outbreaks and illnesses linked to consumption of contaminated raw dairy products are an ongoing public health problem. Our website presents important factual information on raw milk risks and benefits in an easily accessible format designed to inform consumers most likely to seek out raw dairy products. The website may serve as a model in using the Internet for other food safety education efforts.

Acknowledgments

Our deepest gratitude is extended to the families who shared their stories and provided feedback on the website. We are also grateful to Jason Lewis and Suzanne Schreck for technical support. Lastly, special thanks to the many people who shared and reviewed content for the site. Real Raw Milk Facts is supported in part by Marler Clark, a law practice dedicated to food poisoning victims.

