What’s so good about raw milk?

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Farm families drink a lot of raw milk. Many say they don’t like drinking milk from retail stores, and I remember I enjoyed it when I milked cows some years ago. But today there is a lot of hype about the “right” consumers have to raw milk because of its supposed health benefits and the damage that is allegedly caused by pasteurization.

Generally, the milk industry and food safety professionals try to minimize risk to markets and consumers from the occasional disease outbreak caused by bacteria in raw milk. They tout the elimination of disease-causing bacteria through pasteurization and having the “safest milk supply in the world.”

On the other side, groups and individuals supporting small farms, healthful eating, and rights of consumers advocate the benefits of “real” milk. They claim unprocessed milk is healthier because pasteurization destroys nutrients and the enzymes necessary to absorb calcium, it kills beneficial bacteria, and it is associated with allergies, arthritis, and other diseases.

To a degree, both sides stretch facts . . .

So who’s right? To a degree, both sides stretch the facts to make their point.

I recently had a discussion with a friend who lives in the Northeast. She and her husband have a small farm and sell raw milk to neighbors thanks to a new state law that allows sales of raw milk in small quantities. I made the comment that I have had no problems drinking raw milk, but it is likely because I have spent most of my life around cows and manure. I went on to say that I support pasteurization of milk for most consumer sales because of the damage caused to the Oregon industry by several milk illness outbreaks in the 1980s, the liability to vendors, and the trauma to families suffering through food-borne illnesses.

She challenged me quickly by explaining what she knew about pasteurization. She believes there is a lot that changes when milk is pasteurized. According to her sources:

- Less than 10 percent of the enzymes present in raw milk survive the pasteurization process.
- 22 amino acids are available in raw milk (8 of which are essential), and lysine and tyrosine are altered by heat.
- Fatty acids are not altered by pasteurization, but lipase (an enzyme vital for fat digestion) is destroyed.
- All fat and water soluble vitamins are 100 percent available in raw milk, while pasteurization (heat) can cause losses in vitamin availability by 30 to 60 percent.
- Calcium availability can be decreased by up to 50 percent when pasteurized. Other minerals are also less available because they work synergistically, and if one is deficient it affects the others. Also, enzymes serve as a catalyst for the assimilation of minerals.
- While pasteurization kills bad bacteria, it also kills good bacteria.

She granted that she would not buy raw milk from just any farm. She said milk must be high quality and cleanly produced from cows reared in a comfortable, grass-based environment – or a high forage diet when on stored feeds.

This sort of set me back, so I decided to look into what authorities might say about the effects of pasteurization on milk.

First, I found a little history of Louis Pasteur and pasteurizing America’s milk that I thought was interesting:

1856 – As a young professor Pasteur sought to prove a theory he had that spoilage in French wines was due to bacteria from the environment and not from the bugs appearing magically through “spontaneous generation.” He eventually proved his theory by controlling the bacteria using heating and cooling.

1890 – Tuberculosis testing of cows began in the U.S. to control the food-borne spread of that
Raw milk . . .
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disease.
1895 – The first commercial pasteurization ma-
chines were sold; the same year Louis Pasteur
died.
1908 – Pasteurization became compulsory in
the Chicago market.
1924 – The Food and Drug Administration, then
a new agency, formed a group to help advise
states on regulations and to promote milk pas-
teurization. That group later became the basis
for the Pasteurized Milk Ordinance (PMO),
which governs interstate milk production and
processing today.
1938 – The equivalent of the Centers for Dis-
ease Control estimated 25 percent of food-
borne illness was caused by milk and dairy prod-
ucts. Today, about one percent of reported cases
are traced to dairy.
1948 – Michigan became the first state to re-
quire pasteurization of all milk – over 50 years
after pasteurizers became available.

The Food and Drug Administration has
some strong words about the new health
food drive for drinking raw milk. According
to John Sheehan, director of the Division of
Dairy and Egg Safety, drinking raw milk or
eating raw milk products is “like playing
Russian roulette with your health. We see
a number of cases of food-borne illness
every year related to the consumption of
raw milk.”

No significant nutritional difference . . .

According to Sheehan, research has
shown there is no significant difference in
the nutritional value of pasteurized and un-
pasteurized milk. Caseins, the major family
of milk proteins, are largely unaffected, and
any modification in whey protein that
might occur is barely perceptible. It oc-
curred to me as odd that raw milk drinkers
largely oppose the use of rBST, a milk pro-
tein hormone, yet claim that pasteurization
results in losses of anywhere
marginal reduction.”

Pasteurization is not the whole
story to milk safety. At least half of
the illnesses attributed to dairy
products come from post-process-
ing contamination where pathogens
get into the milk or dairy product
after the heating and cooling cycle.

those helpful microorganisms. Plus, by
adding the microorganisms that we need
for fermentation, we can assure a consis-
tently high quality product.”

Science has not shown a connection be-
tween drinking raw milk and disease pre-
vention. “The small quantities of antibodies
in milk are not absorbed in the human in-
testinal tract,” says Ingham. “And there is
no scientific evidence that raw milk con-
tains an anti-arthritus factor or that it en-
hances resistance to other diseases.”

Fans of raw milk often cite its creamy
rich taste. In fact it may be creamier be-
cause it is not made according to the stan-
dards for processed milk. If you go to a gro-
cery store and buy fluid milk, it’s been stan-
dardized for a certain percentage of fat,
such as 2 percent. Raw milk is potentially
creamier because it has not been standard-
dized and has a higher fat content.

It is a violation of federal law enforced
by the FDA to sell raw milk packaged for
consumer use across state lines (interstate
commerce). But each state regulates the
sale of raw milk within the state (in-
trastate), and 24 states allow it to be sold.
This means that in some states dairy oper-
ators may sell it to local retail food stores,
to consumers directly from the farm, or at
agricultural fairs or other community
events, depending on the state law.

In states that prohibit intrastate sales of
raw milk, some people have tried to circum-
vent the law by “cow sharing” or “cow leas-
ing.” They pay a fee to a dairy producer to
lease or purchase part of a cow in exchange
for raw milk, claiming that they are not ac-
tually buying the milk since they are part
owners of the cow.

Wisconsin banned cow-leasing programs
after 75 people became infected with
Campylobacter jejuni bacteria in 2001 from
drinking unpasteurized milk obtained
through such a program. Washington had
an outbreak in 2005 from a share dairy.
Some of the “partners” recovered damages
from the farm owner.

But pasteurization is not the whole
story to milk safety. At least half of the illnesses
attributed to dairy products come from
post-processing contamination where
pathogens get into the milk or dairy prod-
uct after the heating and cooling cycle. Pas-
teurized or not, milk must be handled care-
fully to protect it from bacteria still in our
environment. Like my friend in the North-
est said, raw milk should come from
clean, well-managed farms and be handled like
a precious commodity. That’s good advice
for either side of this controversial fence.

Remember the risks . . .

For a producer thinking of selling raw
milk, remember the risks. Food-borne ill-
ness is covered by strict liability laws. This
means if someone gets sick and proves the
illness came from your milk, you will pay.
Warning labels, signed liability waivers,
and selling only to best friends doesn’t mat-
ter to the court.

Human illness reaps big bucks as you
can see from the growing list of new law
firms pursuing and defending large food li-
tigation cases. I spoke to a large farm insur-
ance underwriter and he said their insur-
ance suppliers limit coverage to dairy pro-
ducers or processors who follow state law
and the PMO.

Some farm families have begun pasteur-
izing their drinking milk or started buying
retail milk, but there are many still drink-
ing milk right from the bulk tank. Can one
become resistant to these disease bugs by
being exposed to a few all the time? No one
is advocating that yet, but research contin-
ues on whether we “live too clean a life.”

This is an era of consumer choice. We
have a wide array food and consumer goods
to enjoy. Not many will argue against the
opportunity to choose the goods we like to
consume. Raw milk might be one of those
products.

As a consumer, we also have the respon-
sibility to judge these products as we per-
cieve them and to accept the consequences
personally. Unfortunately, when a family
member becomes ill, few are willing to
blame themselves.

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