

# A raw deal?

A recent CDC study reveals dangers of raw milk, but enthusiasts say benefits outweigh concerns.

By HELEN SHEN

**S**UJATHA Kattimani, a Redwood City, California, software engineer, drives regularly to the Cupertino Farmers Market to buy raw milk at US\$7.25 (RM21.75) per half-gallon. It's about three times as expensive as regular milk and, according to the Centers for Disease Control and Prevention (CDC), could make her ill.

Kattimani drinks two glasses a day anyway. And she's one of a rapidly growing number of raw milk enthusiasts.

Raw milk has not been pasteurised, or heated to kill bacteria. A recent CDC study says raw milk products accounted for 36% of individuals sickened in milk-related disease outbreaks between 1993 and 2006.

That's a large percentage considering that only an estimated 1% of milk drinkers in the US consume raw milk.

In all, 4,413 people were sickened in dairy-borne outbreaks – although that is just a small fraction of the 48 million people the CDC estimates are sickened by food in the US each year.

"No matter how you line it up, there is more risk with the raw product," said Michele Jay-Russell, a University of California-Davis food safety expert not involved in the study.

CDC epidemiologist Adam Langer, lead author of the study, noted that research does not support any special health benefits of raw milk. "It's just not worth the risk," he said.

But raw milk's popularity persists in California, fueled by permissive laws that allow it to be sold in supermarkets and anecdotal evidence of health benefits that is enough to convince its devotees.

"I think it worked wonders for me," said Kattimani, 43. Raw milk is the only milk she's been able to drink since becoming lactose intolerant to both conventional and organic pasteurised milk. Of the CDC's warnings, she says, "I don't disregard them completely, but more like I always take it with a grain of salt." She's never had a problem with raw milk and said if she ever did, she would probably still drink it.

On its website, the pro-raw-milk Weston A. Price Foundation, a non-profit organisation, criticises the latest CDC study for stopping just before 2007, when tainted pasteurised milk killed three people. Langer says they used the most recent data available. In the same week the study was published, raw milk sickened at least 78 people in a Pennsylvania outbreak.

California is one of 12 states that allow raw milk sales at retail stores, while 20 states prohibit sales outright. Other states permit raw milk with varying restrictions. Federal law prohibits selling raw milk across state lines.

Raw milk is a US\$99mil (RM27mil) business in California, according to Mark McAfee, owner of the Fresno-based Organic Pastures Dairy Company – one of only two state-licensed raw milk suppliers. "It sells like crazy," said McAfee. His US\$8mil (RM24mil) operation, licensed in 2001, has grown roughly US\$1mil (RM3mil) annually in recent years, and now serves about 75,000 consumers weekly, he said.

Raw milk believers swear by the product's purported health benefits, including relief from allergies, eczema, asthma, lactose intolerance, ulcers and inflammatory bowel disease. Most claims rely on anecdotal evidence and informal surveys. Christine Chessen, 45, of San Francisco says raw milk improved her three children's immune systems after they started drinking it in 2007. The family has since weathered every flu season snifle-free. "It's almost like I feel like they're inoculated or something," said Chessen, a certified nutritionist. Some European studies have linked raw milk consumption to fewer childhood allergies. But many of those same studies cite milk-borne pathogens in recommending



A quick on-site test of raw milk components is performed to determine if it is compliant with the standard measure.

against raw milk as preventative treatment.

Federal health agencies say that while the benefits are yet unproven, the risks of raw milk are clear. Improper handling can still taint pasteurised milk, but the CDC and the Food and Drug Administration say high-temperature treatment is an important first line of defence.

"Raw milk does have a checkered history of safety issues," acknowledged McAfee, alluding to the high incidence of milk-borne illnesses before the 1900s. But with modern sanitation, he believes "we know now how to produce very safe, very clean raw milk."

Still, Organic Pastures milk has been recalled for disease outbreaks in 2006 and again in November – both related to the uncommon but highly virulent O157:H7 type of *E. coli*. Most recently, five children younger than six, were sickened across California.

Three children were hospitalised with haemolytic uremic syndrome, which destroys red blood cells and damages the kidneys. It's not the most common milk-borne pathogen, but it's one of the most powerful.

State investigators found that the patients were linked only by recent consumption of Organic Pastures raw milk. All five were infected by a rare strain of *E. coli* O157:H7 that genetically matched soil, water and faecal bacteria samples found in the farm's calving area – physically distant from the milking area and serviced by different staff. "We just don't know how it happened," said McAfee, who has since added new cleaning protocols.

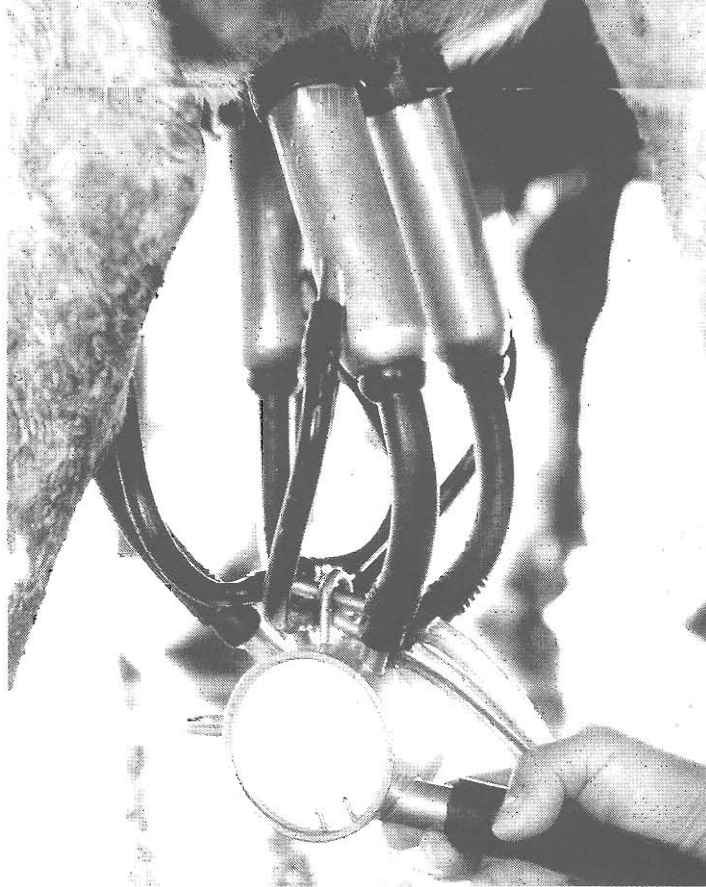
Mary McGonigle-Martin, 52, of Murrieta, California, says she didn't fully grasp the health risks when her seven-year-old son Chris was sickened in the 2006 outbreak. Pro-raw-milk websites and conspicuous advertisements at her local health foods store convinced her that raw milk could be a safe, natural remedy for her son's chronic sinus congestion. She bought Organic Pastures milk after reading about the farm online. "That they tested the milk and they'd never found a pathogen – the testing was what sold me," said McGonigle-Martin, a school counselor.

Even with sophisticated lab tests, *E. coli* can be much harder to detect in milk than in, say, ground beef, said Michael Payne, a University of California-Davis food safety expert. "I have zero faith that there exist technologies that currently allow for the adequate on-farm testing of raw milk for pathogens," he said.

Chris Martin developed HUS, experienced kidney failure, and at one point required a ventilator. "My choice almost killed my child," said McGonigle-Martin.

For other parents, she stresses that drinking and serving raw milk is a personal choice that should be made knowing all the risks.

"You better know what pathogens could be in the milk and what could result," said McGonigle-Martin. "If you can't name those diseases and illnesses, then you shouldn't be making the choice." — The San Jose Mercury News/McClatchy Tribune Information Services



**Udder-ly easy:** An automatic cow-milker is attached to a cow at the Organic Pastures Dairy Company in Fresno, California. The milk can be seen collecting in the round jar at bottom. The dairy milks about 100 cows in an hour with this system.