

# Introduction

*The cow is the foster Mother of the human race. From the day of the ancient Hindoo to this time have the thoughts of men turned to this kindly and beneficent creature as one of the chief forces of human life.*

*William Dempster Hoard, 1885*

Over thirty years ago, I moved to Martha's Vineyard, ill but with a stubborn belief that I could find my own solution to my severe intestinal problems. I started buying raw milk at Fred Fisher's dairy farm in West Tisbury, drinking some fresh and using the rest to make yogurt or "clabbered milk." My intestinal problems mysteriously cleared up. Several years later I went on to medical school and became a naturopathic physician.

In the years since, I've recommended raw milk and the foods you can make from it to most of my patients. I send them to Debra Tyler's Local Farm in rural Connecticut because she feeds her Jerseys only grass and hay, and I've found that makes for the best milk. I've never known one of my patients to have a problem with raw milk, though I've read accounts of many people who have.

Over 95 percent of America's dairy farmers drink their milk raw. I've asked a number of them why, and the answers range from, "Tastes better" to "Makes me feel good" to "Don't like store-bought food." Maybe they're on to something.

Did you know that raw milk and its products shaped the cultures that founded western civilization? The earliest human artifacts include vessels containing residues of milk. Where people have gone, the ox and his kind have followed. Rome was built on ground blessed by libations of milk. In

## 2 The Untold Story of Milk

America, the arrival of a shipload of cows saved the Jamestown colony from starvation. Cows went west with the settlers, hitched behind wagons pulled by their brothers the oxen, feeding families and calves alike. The bovine tribes have been our best animal friends for a long, long time.

Those contented cows fed on green pastures, and when that began to change in the 1800s our relationship with bovines began to deteriorate. The decline began with distillery dairies and continued as cities grew. In those dairies, confined, diseased and abused cows were fed the acid waste products of whiskey making. The milk they produced often led to disease; the solution proposed was pasteurization.

In recent years, we've seen the growth of modern confinement dairies where cows never leave their stalls. Though conditions generally are not as bad as those of the distillery dairies, many of these cows are sick with mastitis and other chronic conditions. These facilities now produce something like 70 percent of our milk in the United States.

Many people want an alternative to modern commercial milk, and hundreds of thousands of Americans —perhaps millions—are drinking organic milk today. A growing number are going to great lengths to obtain raw milk from healthy cows, and many more have grown curious about raw milk and want more information. Accurate information about raw milk can be hard to come by; advocates and detractors often appear at loggerheads and both sides are prone to erroneous and unsubstantiated claims.

The primary factor polarizing the climate, however, is the fact that many of the medical and public health officials who denigrate raw milk are tied to a system that demands compulsory pasteurization of all milk. As a result, with the exception of a few states, raw milk is available for purchase only at relatively few farms, if at all. In 15 states all sales are outlawed; in Canada, it is against the law for a farmer to even give raw milk away (the penalty for breaking that law can be a \$250,000 fine and three years in jail). In our final chapter, we'll examine the availability of raw milk and the legal situation in the various American states, Canada, and Europe.

The very best milk comes from healthy animals that spend most of their time outdoors on fresh pasture eating lots of grass, supplemented seasonally by high quality hay, green chop, root vegetables and perhaps a little grain. Compared to milk from confinement cows fed mostly grains as well

as various types of waste products like leftover bakery goods and citrus peel, such milk is rich in a wide variety of nutrients. In fact, “summer milk,” as it used to be called, is a completely different food from the milk generally available today. The differences will come into clear focus as we present our story.

The Eskimo languages are said to have over 100 different terms to describe the many kinds of snow experienced in the Arctic environment. In similar fashion, we need more words for milk, for even if we consider only cow’s milk, there are many, many kinds of milk besides the bland homogenized pasteurized product available at the corner store or the supermarket. In fact, the milk from every cow is different, reflecting the genetics, feeding, environment and a host of other factors that affect the health and thus the milk of each cow. Raw milk aficionados appreciate these nuances, and taste the difference between summer milk from cows feeding on lush green pastures and inferior milk from animals fed mostly dry feed.

The word milk itself has historically meant much more than the fluid milk we drink today, whether pasteurized or raw. Until around the middle of the 1800s, when the consumption of fresh, sweet, unfermented milk began to rise, most Americans, like Europeans, drank most of their milk fermented, soured into the yogurt-like food known as clabbered milk. But clabbered milk and similar drinks all were referred to as simply “milk,” or sometimes “bonnie-clabber” milk. Even the “milk and honey” mentioned in the Bible is thought to be a reference to a form of fermented yogurt beverage. When we examine the importance of milk in earlier civilizations, including colonial America, it’s important to realize that most of their milk was made into fermented drinks and concentrated products like cheese and butter; the drinking of fresh sweet milk was minimal. According to many historical accounts of dairy food habits throughout Europe, “fresh milk was considered a luxury food. In fact, it seems that the drinking of fresh milk was the least important aspect of milk utilization overall.” This was true also of traditional dairy-based cultures throughout the world that survived into the twentieth century.

Fermented milk products, fresh cheese and butter were at the center of the traditional American diet as well. Fermented buttermilk (equivalent to clabbered milk with or without the milk fat) was drunk, used in cooking or

## 4 The Untold Story of Milk

fed to hogs (four cows generally supported the feeding of one hog). In the South, “buttermilk” is soured whole milk. Although studies of milk’s history often imply otherwise, drinking fresh milk did not begin to become popular in America until around 1850, when the need arose for a breast milk substitute and a food for weaned infants. Many of those demanding fresh milk were immigrants from Europe, where a similar story had unfolded.

There were many reasons why consumption of fresh milk became widespread. Many people had left farms and settled in cities, where poverty, poor sanitation and inadequate nutrition rendered more women unable to breast-feed successfully; others could not because they worked long hours in factories. Poorly nourished toddlers who had been weaned also had a need for nutritious food. The problem was that the distillery dairies grew proportionally with the growth of the cities, and they supplied up to three-quarters of city milk. This meant that America’s developing milk-drinking habit was beset with problems from the very start.

The rise in milk consumption was thus not inevitable, but rather the reflection of a complex set of social factors at play in nineteenth century America. By the 1880s, not just children in the cities but the population as a whole had begun to adapt milk drinking, and by the 1940s fresh milk was a staple in the American diet. At about the midpoint of that period, around 1910, many American cities had imposed a pasteurization requirement and by 1950, most milk was pasteurized.

Pasteurization had a great deal to do with why the milk-drinking habit developed, and pasteurization is the very foundation of the modern dairy industry. The making and distribution of cheese and butter, accomplished by tens of thousands of farms and small factories in every state in 1900, became, during the next 50 years, an industrialized process controlled by huge multinational corporations. Pasteurization made this possible and perhaps inevitable. We’ll explore the history and implications of pasteurization in some detail; for now, suffice it to say that the reasons behind pasteurization were as much political and economic as they were scientific.

So the story of milk has many diverse elements, and like any story, this one reflects the particular viewpoint of the storyteller. My viewpoint is unabashedly in favor of free choice; I believe those who want to produce, sell and consume raw milk and raw milk products have a constitutional right

to do so, and that the denial of that right by the government is a violation of our most basic freedoms. That viewpoint is shaped by elements of the history presented in these pages.

Ancient civilizations and the distillery dairies are part of that history, as are the stories of traditional dairy-based cultures that survived into the 20th century. The health enjoyed by the people of those cultures, the absence of chronic diseases, and the role milk played in their lives are subjects that are not widely understood. Yet they are highly relevant to a full understanding of the essential need for raw milk products in the diet today.

Also forgotten is “the milk cure,” a highly successful method for treating chronic disease detailed in a 1929 article by one of the founders of the Mayo Clinic, John E. Crewe, MD. The article, entitled “Raw Milk Cures Many Diseases,” is a fascinating account of how many physicians used natural foods, including raw milk, to tackle the problem of chronic illness in the years before the pharmaceutical industry persuaded doctors to use drug therapy instead.

History is one thing, and milk today is another. Confinement dairies, pasteurization, homogenization, bovine growth hormone—what do they do to modern milk? What made a renowned pediatrician write a book called *Don't Drink Your Milk*? What do dairy farmers think about dairy farming and milk production today? And what about those germs the public health authorities are worried about—how much of a threat are they? *Isn't* raw milk dangerous? What about pasteurized milk? These are all good questions worthy of considered and thoughtful answers. While I am an advocate for raw milk, I recognize that the public health authorities have valid concerns and a reasonable role to play. I also have some interesting details about how many “authorities” have abrogated their responsibilities to the public and acted dishonorably.

And what about cholesterol and saturated fat in dairy foods? You may quite naturally ask this question, given the generally accepted relationship between animal fats and heart disease. For many years I wondered too, and that kept me from fully appreciating fresh and fermented raw milk, butter, cream, eggs and meat. I finally made a thorough study of the cholesterol issue, aided by Dr. Uffe Ravnskov's wonderful book, *The Cholesterol Myths*, and what I learned was very disconcerting, for the campaign against cho-

## 6 The Untold Story of Milk

lesterol has involved a betrayal of trust on the part of some of our most respected officials and institutions. I've written a chapter about that betrayal, and another to explain the information that convinced me that cholesterol and animal fats do not cause heart disease.

In fact, it's my belief that the best foods in the world are rich in cholesterol and animal fats. I call them vital foods—fresh and fermented unprocessed dairy foods, eggs, meat and poultry from pasture-based farms. Pasture feeding is important because the nutrients just aren't the same when animals are confined and fed a lot of grains. The countryside isn't the same either.

Fresh and unprocessed is important because uncooked food contains enzymes. Enzymes are defined in medical textbooks as being essential to life; they are vital, and are destroyed by heat. While no one would argue those points, food scientists and medical people generally dismiss the importance of food enzymes. They're said to be unimportant because the body contains enzymes to digest food even if the food is cooked and the food enzymes are destroyed. In this book, we'll look at why food enzymes are crucial to good health. We'll review Francis Pottenger's once-famous cat studies from the 1930s and Edward Howell's enzyme research. Their work provided evidence for the vital role food enzymes play in human metabolism, evidence with critical implications in understanding every aspect of health and disease. Dr. Howell recently died at the age of 102. Of course that doesn't prove anything, but it does make you wonder.

A lot of people are fed up with the food situation today. My UPS deliveryman gets eggs from his cousin; he won't buy the ones in the store. Many people I talk to ask about where you can get a good, pasture-raised chicken. The local health-food store can't keep enough raw milk from Local Farm in stock. People everywhere seem to be looking for answers to questions about better and healthier foods.

For the past 20 years, I've tried to answer those questions for my patients. Many of the questions are addressed here, but the untold story of milk involves a lot more than just milk and health. It's also the story of why small farms in America have all but disappeared and why 30 million farmers have left the land since the end of World War II. You may wonder about that, and if you're like most post-Enron Americans, you may somewhat

distrust corporations and perhaps suspect that the demise of small farms and the rise of corporations are somehow related. I'm particularly interested in the corporations involved in the agribusiness, food and pharmaceutical industries here, and you may find your distrust growing as you read my story.

I think we're happiest when our sense of purpose is intact and when we feel that our place in the universe is secure and harmonious. Producing and using foods in traditional, time-honored ways is in tune with something that resides very deep in the souls of many people. I like having top-quality raw milk in the refrigerator, making my own yogurt, cheese, and sometimes butter, and growing vegetables and keeping chickens. Going to farmers' markets and purchasing fresh cheeses, fruits and vegetables is a soul-nourishing activity. Understanding what happened to milk, and how to know and find good milk today, resonates with a surprising number of people. Perhaps as you peruse these pages, you'll find that you are one of them.