

MILK AND NATIONAL IDENTITY IN CHINA

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Introduction

H.G. Creel, in his *Birth of China*,¹ tells the story of a Chinese man who had long lived on the borders of Mongolia. Arriving in Beijing, the Chinese passed himself off as a Mongol prince. Since he could speak Mongolian and knew Mongolian customs very well, he was successful for a while in his deception. After some time, however, some local Chinese became suspicious and decided to test him. They arranged a lavish banquet for him, but rather than the Chinese delicacies he had been given previously, they served Mongol foods, including milk, butter, and cheese, to observe his reaction. Confronted with those foods, the impostor left in disgrace, since he could not bear to eat dairy products.

This anecdote very vividly illustrates the Chinese dislike or hatred for milk and dairy products, as well as the connection between such products and the Mongol identity.

In the West too, the Chinese lack of appreciation for milk has been the object of similar jokes and anecdotes (as much as their appreciation of certain "monstrous" or unusual delicacies: shark fins, bird nests, and dog meat). In addition, at a more educated and "scientific" level, the signs of physical discomfort displayed by many Chinese after consuming milk or dairy products have resulted in the formulation of several theories trying to explain and justify, if not amend, their non-milking attitude.

Similarly, the Chinese have always regarded the nomadic populations living on their northern frontiers, who subsisted basically on a

1. Creel 1937, p. 81. Creel refers to this story as a "recent incident".

diet of meat and dairy products, not only as uncivilized barbarians, but also as exuding a rank smell. The Westerners, too, who later in history came into contact with China, offended Chinese nostrils with an equally foul smell, due to their predilections for milk, butter, cheese etc.

As we can see, milk has from relatively early times become an issue the Chinese had to confront. It couldn't simply be accepted or rejected, just like any other food, on economic, environmental, health or simply culinary grounds; still less ignored, especially after China's meeting with the West, the great milk consumer. Moreover, even from a very early date milk has been the great divide between civilization (that is, Chinese civilization) and the barbarians (nomads first, and then the Westerners): the lactophobes versus the lactophiles.²

The aim of this paper is to show that the commonly perceived Chinese antipathy towards milk and dairy consumption is not as widespread or as consistent throughout history as is generally thought. In addition this paper will show that when it does occur, the Chinese aversion towards milk and milk products is not necessarily the result of a commonly believed physiological deficiency, as commonly believed, but rather the result of complex socio-political factors.

Milking attitude versus non-milking attitude

The failure to accept dairying and the use of animal milk in China has been attributed to a number of factors.

The most credible theories can be summed up as follows:³

Cultural conservatism

Environmental and ecological hindrances

Economic reasons

Self-identification (as non milk-drinkers)

The enzyme theory

The conservatism of the Chinese in matters of diet has been seen by several scholars as a reflection of a more general conservatism of Chinese culture, i.e. the tendency to accept or reject "foreign" things according to whether they fit existing patterns.⁴ Milk consumption

2. The *querelle* of the lactophiles and the lactophobes, as well as other issues concerning the use of milk and dairy products in China, is discussed at length by Marvin Harris. See Harris 1985, pp. 130-153.

3. For a complete discussion of all the factors, see Simoons 1991, pp. 454-463.

4. Chang 1977, p. 7.

and dairying were strange to the Chinese, and this strangeness prevented those practices from spreading throughout China. This very general explanation certainly holds some truth, but leaves out a main point: why did dairying not fit into pre-existing patterns? Other practices (such as sugar-refining)⁵ and crops not indigenous to China were introduced through the centuries, and they all received wide acceptance. What makes milk different?

Environmental and ecological constraints answer the question at least in part. Dairying was unsuitable to the condition of intensive agriculture and dense population in China. There was not enough land both to grow crops for humans and to provide pasture for animals, and the development of a dairy industry would have put an intolerable strain on the Chinese subsistence economy. The moot point in this theory, put forth by the American anthropologist Marvin Harris,⁶ among others, is that on the Indian subcontinent, which includes areas as densely populated as China, dairying is a well-established practice, and milk and dairy products are widely accepted and appreciated. Dairying can, therefore, be integrated into a country's agricultural system, even when feeding dairy animals is a major problem.

Closely related to the environmental and ecological hypotheses is the argument that had the Chinese found a way to integrate dairying into their agricultural system, its product would have been too expensive for the people to buy, especially if compared to traditional products such as soybeans and pork. Simoons⁷ notes that dairy products are expensive in India, but this does not prevent people from buying them, even in small quantities, according to their financial abilities, and the practice of consuming milk has never been discontinued on economic grounds. The Chinese, on the other hand, have always been famous for their *penchant* for expensive, rare and sometimes highly "impractical" food (shark fins, bird nests, bear paws etc.), on which, on special occasions, they were willing to squander their meagre resources. The consumption of such delicacies has never ceased in China.

More convincing is the hypotheses that the Chinese abstinence from dairying and milk consumption was a means of distinguishing

5. India is generally regarded as the first place where manufacture of granular sugar was developed. See Simoons 1991, pp. 376-383. For a comprehensive discussion on sugar in China, see Mazumdar 1998.

6. Harris 1985, pp. 130-153.

7. Simoons 1991, p. 456. On milking and dairying traditions in Asia and elsewhere see also Simoons 1954; Simoons 1970; Simoons 1971.

themselves from the nomadic population of the northern frontiers, upon whom they looked down as culturally inferior, and of avoiding becoming dependent on them for a supply of dairy products, as they already were for horses.⁸ Nonetheless, even if the prejudice against the northern barbarians has always been very strong in mainstream Chinese culture, the Chinese were never chauvinistic to the point of resisting all imports.

The last and the least convincing theory, which we have designated the "enzyme theory", is based on the observation that more than 90 per cent of adult Chinese show a sharp drop in the lactase enzyme in the small intestine. After drinking a glass of milk, lactase-deficient individuals begin to show symptoms of gastrointestinal discomfort. This condition, initially labeled as a genetic aberration, led to explaining Chinese intolerance for milk as a physical handicap, which could, and should, be treated through increasing exposure to dairy products, lest the unfortunate and deficient Chinese bodies be deprived of an essential source of calcium.

We will discuss this point later in this paper.

Dairying and milking in China

In analyzing the Chinese attitude toward dairying and milk consumption, we are dealing with various historical and geographic factors, which should be presented in their broadest perspective.

The milking of domesticated animals and consumption of their milk by humans are cultural traits. These traits were not found among humans in the hunting and gathering stage which characterized almost all of human history, for early hunters and gatherers possessed no domesticated herd animals, and thus lacked that prerequisite of dairying. As a result, early hunters and gatherers drank milk as infants, but after weaning they ceased to produce the lactase enzyme necessary to break the lactose contained in milk into more digestible sugars. Therefore, they would normally refrain from milk or other dairy products for the rest of their lives. Dairying became possible for humans only with the domestication of herd animals suitable for milking.

The ancient Chinese seem not to have been a dairying, milk-using people⁹. On the other hand the practice of dairying and consuming milk wasn't entirely unknown in China since two early outside influences encouraged dairying. The spread of Buddhism from India en-

8. Anderson 1988, pp. 145-146.

9. Creel 1937, pp. 81-83; Ho 1975, pp. 113-114; Chang 1977, p. 29.

couraged the ritual use of dairy products and the belief that dairy products are clean and healthful.¹⁰ Another influence came from neighboring peoples, such as Tibetans and Mongols during two periods of history: between AD 250 and 1000, when alien cattle-breeding societies ruled North China; and during the Mongol period (AD 1271-1368) and immediately afterwards. According to Sabban's landmark study,¹¹ based on culinary texts dating from the sixth to the nineteenth centuries, there were historical periods in which the Chinese displayed high levels of sophistication in the preparation and use of a variety of dairy products. Schafer¹² remarks that the prejudice against dairy products in China broke down after Han times (206 BC-AD 220). By Tang times (AD 618-906) there were significant dairy dietary elements among the upper classes, in part because of the close ties established between North China's aristocracy and noble families of nomads on China's borderlands, and in part because of a slow intermingling of peoples. This is confirmed by fermented milks, including koumiss and fermented mare's milk, being far more in demand in Tang China than fresh milk.¹³

The milk-using period from Han to Tang has always been described as a brief interlude, with Tang being the climax of dairy product consumption in China.¹⁴ Nonetheless, the use of kumis remained common in Sung times (AD 960-1279), and it was not looked upon as an especially alien, barbarian, or nomadic product; there was an imperial office responsible for making kumis, a common banquet food; and there were restaurants that specialized in its sale.

The Mongol conquest in the thirteenth century further stimulated milk use in China, for kumis was important among the Mongols both as the most common everyday beverage and as a ceremonial drink.¹⁵ Marco Polo also mentions a herd of over 10,000 white horses kept by the Khan; the mares provided milk for him, his family, and members of one privileged tribe.¹⁶

10. Eberhard 1952, p. 10; Ho 1975, p. 114n; Schafer 1977, pp. 106, 107, 134; Sabban 1986, pp. 40-42, 44-45.

11. Sabban 1986, pp. 31-55.

12. Schafer 1977, pp. 105-106.

13. Schafer 1963, p. 153; 1977, pp. 105-106; Anderson 1988, p. 55.

14. Anderson 1988, p. 55.

15. Freeman 1977, pp. 156, 160, 167; Anderson 1988, p. 66.

16. Marco Polo 1958, p. 109.

According to E.N. Anderson,¹⁷ the Mongol example served to reaffirm the Chinese perception of dairy products as alien, associated with enemies of the nation. Shortly after Mongol times, Chinese gradually abandoned milk and dairy products in those areas where they had come into use. This happened principally because of a significant increase in population following AD 1500, a growing need to concentrate on food crop production, and consequent shortage of grazing land. Moreover, the upsurge of Chinese nationalistic feeling in Ming times strengthened the resolution not to consume dairy products.¹⁸ However, milk use did not cease completely in this period. In the Ming dynasty (AD 1368-1644), there are references to butter made of cow's milk and to milk sacrifices being offered,¹⁹ as well as to butter used in Taoist sacrifice in the fifteenth century, and to its use by Buddhist monks late in the seventeenth century.

Although the Manchus are believed not to have practiced dairying in their homeland previous to their take-over of China,²⁰ there are references to an office for tea and milk in the Qing imperial household (AD 1644-1911); to a Qing emperor's having milk for breakfast;²¹ to milk tea or milk tea with salt drunk at the Qing court and served at official functions;²² and to a distilled milk liquor that came from the emperor's cellar.²³ During the Qing period, there are also references to the use of dairy products in east Central China: large quantities of butter and milk were consumed in Zhejiang²⁴ and in the city of Suzhou, in present-day Jiangsu. Evidently, even in times when the consumption of dairy products was not widespread, it yet continued in some places and in some restricted circles. That they never became major dietary elements among the general populace is probably because neither the Mongols nor any other nomadic group had been able to exert a profound influence on Chinese culture.

In nineteenth and early twentieth century China, the consumption of milk and dairy products was restricted essentially to China's non-Chinese border populations and, in some cases, to their immediate Chinese neighbors. It is well documented that dairying occurred tradi-

17. Anderson 1988, p. 66.

18. Anderson 1988, p. 66.

19. Hermanns 1949, p. 128.

20. Shirokogoroff 1924, pp. 130-131.

21. Spence 1977, p. 281

22. Nieuhoff 1673, pp. 41, 74, 119; Parker 1897, p. 176; Parker 1903, p. 271, quoted in Simoons 1991, p. 456.

23. Nieuhoff 1673, p. 123, quoted in Simoons 1991, p. 459.

24. Spence 1977, p. 264.

tionally along China's western borders.²⁵ Some Chinese settlers in Inner Mongolia consumed dairy products made by the Mongols, and some along the Tibetan border used milk and milk tea in imitation of the Tibetans.²⁶ The Mongols carried huge amounts of butter to Beijing in the early twentieth century²⁷ though this was probably for sale to Mongol and other residents of dairying background. A larger market for dairy products was to be found in the foreign residents' communities, such as the Indian and the Western residents of Hong Kong area. The former kept, around 1920, herds of water buffalo for dairy purposes,²⁸ and the latter were supplied with tinned products obtained from harbor ships or relied on the output of a herd of American cows kept in stalls in a cool upland area.²⁹

The Western influence was in fact the most important factor in encouraging milk use among the Chinese, especially by infants and children belonging to groups more exposed to Western ideas, such as newly converted Christians, hospital patients, persons educated in Western-oriented schools, and the urban middle and upper classes. According to some sources, dairy products also became an integral part of local diet in some areas of pre-modern China, such as Yunnan.³⁰

On a national scale, however, the consumption of dairy products in traditional China remained negligible, and they were virtually absent in rural diet.

The situation was somewhat different in large cities, where middle-class families, through Western influence, came to consume a certain amount of milk (fresh and tinned) and butter. In Beijing in the 1930's dairy products remained scarce and expensive, and were consumed in very small amounts.³¹ According to Chiao³² in the mid-1940's there

25. Hermanns 1948, pp. 70-71, 127, 128; Simoons 1970, pp. 575-577; E.N. Anderson - Anderson 1977, pp. 340-341.

26. Lattimore 1932, p. 305; Frick - Eichinger 1952, p. 132, quoted in Simoons 1991, p. 460.

27. Headland 1914, pp. 173-174, quoted in Simoons 1991, p. 460.

28. Levine 1922, p. 8. It is said that the first water buffalo dairy had been established in Canton in the first decade of the twentieth century, but that water buffalo had been milked in certain Guangdong villages long before. See Levine 1922, pp. 4-5, 8, 10-11, 26.

29. Thomson 1909, p. 54.

30. Anderson - Anderson 1977, pp. 340-341, 355; Anderson 1988, pp. 74, 169.

31. Lindstedt 1939, p. 378; Lang 1946, pp. 94-95

32. Chiao 1944, p. 22.

was very little, if any, dairying, and in the wartime Sichuan cities of Chongqing and Chengdu, it was "difficult to buy butter or cheese at any price".

Since establishment of the People's Republic, efforts have been made to improve and expand dairying, and in 1972 China had roughly 900,000 milk cows.

Per capita consumption of milk products in China was seven kilograms in 2000, less than 6 per cent of the world average. Statistics from the China Milk Industry Association report indicate that China's milk powder production stood at 526,000 tons in 1995, growing to 829,000 tons in 2000, representing an increase of 57.6 per cent. Production of fresh milk has also seen an increase of 189 per cent from 519,000 tons in 1997 to 1.5 million tons in 2000.³³ There are currently approximately 1,000 dairy enterprises in China, but 90% have a capacity of processing less than only 100 tons of fresh milk daily. Many dairy farms, moreover, have increasingly outdated equipment and technology despite growing levels of investment, and this means that they are losing out to foreign funded joint ventures and imports. Some EU countries started to work on this market in China some ten years ago. More recently the USA, New Zealand and Australia have entered the game. Foreign companies such as Walls and Nestlé have come to dominate the ice cream and popsicle markets due to lack of local competition.

The Chinese government has started to encourage its residents to increase their consumption of dairy products, even through campaigns aimed at improving the national physique.³⁴ Rising average annual incomes, greater ownership of fridges and freezers, increased exposure to western and international cuisines and the arrival of fast-food chains and Western-style supermarkets are all combining to increase sales of dairy products in China.³⁵

Not least is the presence of foreign dairy companies, both as active importers and as manufacturers in China.

Chinese consumption of dairy products at present is largely confined to milk, milk powder, ice cream and yogurt (including plain and flavored yogurt and fruit-based yogurt) due to taste preference. How-

33. See *Dairy Products In China: a Market Analysis* 2001.

34. See "Milk Campaign Extended to All Ages", *China Economic Review* August 2001; "Dairy Industry Milks Potential", *China Business Handbook* 2002, p. 184; *Ministry of Agriculture* 2000.

35. Li 1999; Wei - Viney 1999.

ever, in view of the Japanese and Korean experience,³⁶ with further increased disposable income and with overseas influence, it is expected that changes in taste will develop, and thus, the consumption of butter and cheese will increase, especially among the younger generations.

The “defective” body and the anxiety for identity

The pressure exerted by Westerners in promoting the consumption of milk and dairy products in the urban areas of China showed a strong belief in the popular stereotype of milk as the “perfect food”. Whereas other Western habits, both dietary and otherwise, were passed on to the most receptive nationalities simply by proximity or through imitation, the spread of milk consumption among the non-milk drinkers of China and elsewhere was pursued with determination. When the United States was called upon to help feed certain countries in the aftermath of World War II, U.S. Agency for International Development officials naturally chose milk as a weapon in the war against hunger.³⁷ Between 1955 and 1975 various government agencies shipped massive amounts of powdered milk to needy countries around the world. Farmers, politicians, and those involved in international aid organizations proudly shipped their white panacea to starving nations all over the world, tactfully ignoring the fact that the milk was surplus and that Americans themselves did not like to use it in powdered form. As soon as the first shipments reached their destinations, evidence began to accumulate of people’s getting sick from drinking the wondrous white potion. At the same time as it was trying to feed the poor of the world, the United States government was also distributing surplus whole milk to needy Americans under various antipoverty programs. By the mid-1960s, the American scientific community was well aware that African-Americans and American Indians were getting unpleasant gastrointestinal symptoms after consuming even a small amount of milk. In 1965, a team of research physicians at the Johns Hopkins Medical School discovered the cause: a large percentage of the people who reported milk-related gastrointestinal problems were unable to digest lactose, a polysaccharide found in the milk of almost all mammals.³⁸ In order to be digested, lactose molecules have

36. Song – Sumner 1999.

37. Harris 1985, pp. 131 ff.

38. The only exception is the milk of aquatic mammals, such as seals, sea lions, and walruses, whose consumption is hardly of any relevance to the human diet.

to be broken down into monosaccharides or simple sugars, specifically glucose and galactose. The transformation of lactose into simpler sugars depends on the chemical action of an enzyme known as lactase, which is under genetic control. The Johns Hopkins researchers discovered that about 75 percent of adult African-Americans had a deficiency of this enzyme as compared with about 20 percent of Caucasian Americans. After discovery of the biological basis of milk intolerance, medical researchers eagerly proceeded to map the world populations according to their inability to process lactose.³⁹ Those who were deficient in lactase were initially labeled as "abnormal", but it soon became evident that lactase deficiency in adulthood is the "normal" condition and lactase sufficiency the "abnormal" condition among adult humans. Less than 5 percent of adult Chinese, Japanese, Koreans, and other eastern Asians can absorb lactose; in some Asian and Oceanian groups such as the Thai, New Guineans, and aboriginal Australians, the percentage of adult lactose absorbers is close to zero. Adult lactose absorbers are almost equally hard to find in West and central Africa.

It, therefore, became evident that the Chinese, as well as other Eastern and Southeastern Asians, rejected milk because they were lactase-deficient, and that they were lactase-deficient because their ancestors had rejected, or had not been sufficiently exposed to, milk. Or more precisely, they maintained the gradient of lactose intolerance after weaning that is normal for our species in the absence of any significant advantage to be derived from drinking milk. This means that they were never obliged by their habitat or mode of subsistence to depend on milk for their calcium or for any other nutrient.

So far so simple. But the ethnocentric Western concept, which resulted in the slogan "Milk is good for every body", heralded by the California Milk Producers Advisory Board in the 70's, dies hard.

A lactase-deficient body is a "defective" body, since it does not conform to an ideal physiological model proposed by the dominant, Western, milk-oriented culture. No matter what alternative sources of calcium and other nutritional elements the Chinese might have, their spurning of milk is still regarded as a sign of inferiority and backwardness, by Westerners as well as by the most sophisticated and cosmopolitan Chinese. Thus, the massive advertising campaign for dairy products as a mean to improve the Chinese "body". Moreover, China's huge potential market has lured foreign companies into the

39. See Simoons 1981.

country. China also agreed to a substantial reduction of tariff rates for dairy products after WTO accession.

What was once lactophobia is slowly but steadily turning into lactophilia. This newly acquired lactophilia, though, and the old lactophobia are two sides of the same coin: anxiety for identity. In the past it was the need of distinguishing the civilized from the uncivilized. Nowadays it is the quest for a modern, globalized image.

Says Joe Müller, Managing Director of Nestlé China:

These continuous improvements [cooperation with the provincial and local governments to stimulate efficient and economically viable milk production] not only benefit Nestlé, but also continue to create wealth for the surrounding communities and the country at large.⁴⁰

Says Song Kungang, director of the China Milk Industry Association:

This [recent growth in milk consumption] shows that there is still much growth potential in China in line with the continuous improvement of people's living standards and the gradual building-up of people's awareness about the need for a balanced and healthy diet structure.

Despite fears in a number of other sectors about foreign rivals controlling the market after accession to World Trade Organization, forecasts for the milk industry are optimistic.⁴¹

And so we are back to the Chinese anecdote related by Creel. But now the roles are reversed: the "real" milk-drinking barbarians set up the banquet, and the "real" Chinese courteously sit and oblige.

40. "Nestlé Improves Conditions for Local Farmers in N.E. China", International Chamber of Commerce website, <http://www.iccwbo.org/home/news-archives/2001/nestle.asp>.

41. "China's Milk Market Expected to Bulge", *China Daily* Jul 19, 2001.

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