YOGURT: ITS LIFE AND CULTURE

Frances James

One of the great puzzles of cultural diffusion is why yogurt, that greatest of all the patrimonial gifts of Allah, should have reached the English-speaking world under its Turkish name. It is true that the Turks spread themselves and their absolutely splendid cuisine across the Balkans even unto the gates of Vienna in the 16th and 17th centuries, but since the Jews went from Europe their personal presence in this area has been very limited. Neither the Armenians and the Lebanese who have founded colonies in virtually every city of the western world. Thus we should know yogurt as mostrous, its Armenian name, or loban, its Arabic. In fact, the name Lebanon comes from this Arabic word meaning milk, as applied to the milk-white peaks of the perennially snow-clad Lebanon and anti-Lebanon.

According to San Francisco's Armenian-American chef, Omar Khyam, emigres from these countries, no matter where they go, do not want to do without their mostrous or loban and a last rite in their old homes is to dip a handkerchief into a bowl of it, let the handkerchief dry, and then pack it along with other household goods and chattels: the culture can be reactivated when they reach their new environment! Prayer to God?

One wonders just how this works, inasmuch as many, if not most, of the Old World cultures are formed in goats' or sheep's milk, but will be reactivated in that of cows. One of these days I really must see what I can do with the ball of kishk (hard, dry yogurt cheese) given me by a basket boy on a dig in southeastern Jordan.

The ritual with the handkerchief (or some moulded container) is necessitated by the fact that, in contrast to ordinary sour milk, which occurs spontaneously when milk has been left after being left for a time at modestly high temperatures, the bacteria causing loban must be artificially introduced into milk. So it is always necessary to keep a starter, sometimes called the rowbeer, from one batch to the next.

Yob is the fermented, thick-curred milk of camels, cattle, buffaloes, sheep or goats. It results when something like 80 percent of the milk sugar, or lactose, is turned into lactic acid by Lactobacillus curvatus and Streptococcus thermophilus. These are minute rod-like organisms, two to nine microns in length and one in width which multiply by breaking into halves, each of which then grows to the size of the parent in some 30 minutes; when the process is repeated. In this the Middle East will hold literally millions of these organisms in a very short time.

These bacteria grow well at temperatures between 77° and 113°F and die at a temperature over 140°. Other bacteria are usually present in loban and they, alone, or in combination, account for the distinctive flavors of the various yogurt cultures, whether representing broad national or geographical areas.

Loban finds its home in hot, dry countries, many of which adhere to, or have adhered to, Islam. From the Levant, the yogurt (loban) complex runs up into the Balkans stopping dead at the Austro-Hungarian frontier, a fact which suggests that adverse historical factors barred its entry into parts of northern Europe. In fact, Austrian and northern Italy cookery seem so naturally, to have censored almost everything which might have come from the Turks, with the only use of coffee and the idea of strudel (not a Turkish idea) rubbing off. Sicily, Sardinia and Corsica know loban, but Spain seems firmly set against it, possibly in reaction to long occupation by the Saracens.

The same sort of health food fad for yogurt may exist in these European countries today as occurs in the U.S. today, where this is happening in northern France. But this does not count in the distribution I am making here, which is to show the presence of loban in the timeless, traditional cuisines of these nations.

Loban is found all along the south coast of the Mediterranean. Then it runs southeast and through India. It is known as kiss in Persia and dahi in India and, in the latter country, seems to be used in practically everything. The fermented milk complex then continues into Mongolia and Tibet. In Mongolia, a related fermented milk appears as kefir, fermented mares' milk. In Tibet, yogurt is made—in little pottery cups—from the milk of yaks by upland nomads whose main source of subsistence is the herd of these shaggy cattle. The use not only of yogurt but of any milk at all must stop somewhere hereabouts, as many of the Far Eastern cultures, the old Chinese, for example, have a strong cultural aversion to the idea of the use of milk for human consumption, though cattle are kept for prestige and beef. As we shall see, there is probably also a physiological basis for this attitude.

The Russians seem to be caught in a colossal pincher movement between loban and must approaching from the Islamic south and the Mongol's koumiss. With its great pastures, the Ukraine shows considerable emphasis on all forms of milk: sweet, sour, yogurt, koumiss. Yet another fermented milk to be found in this general area is kefir, a home in the Caucasus.

While the association of yogurt with Islam undoubtedly has something to do with its absence in certain areas of Europe south of the Alps and Pyrenees, it must be to a large extent the climate north of this line which has been the determining factor in eliminating it from the traditional cuisine of northern Europe. As noted, Lactobacillus bulgaricus, the most important of the organisms which produce yogurt, grows best at about 86°F, considerably higher than even the highest summer temperatures in this area, whereas the bacteria which produces normally sour milk flourishes at about 79°F.

Koumiss comes from the great sweep of large flocks of the central European steppes, once inhabited altogether by tribesmen, though those within the U.S.S.R. are rapidly becoming sedentary. Probably on the contiguous plains of the Ukraine, the horses were first domesticated, so the herds of these nomads are essentially of Equus, though including sheep and cattle as well. It is thus the milk of mares which provides the main item of the summer diet of these groups. This milk is never consumed fresh but always fermented into koumiss. Unlike yogurt, koumiss is not started from the last batch, but from decaying animal or vegetable matter which contains the parent microbes. These produce a liquid combination of an acid and an alcoholic ferment.

Kefir provides a large part of the diet of the Caspian Sea people and is used for its longevity, as well as consider able ability to put up a stiff resistance from their mountain refuge to absolutely anything they do not like. The kefir is most often prepared in goatskin bags or bottles; in summer, these are filled with milk and put outside the door of the house so that the heavy mixture of kefir "grains" forming in the skin bag will be broken up by agitation as people enter or leave the house. Fresh milk is added as kefir is consumed and the fermentation continues in the same bag of infinite. Not surprisingly, the mixture sometimes becomes a bit high. In contrast to yogurt, kefir is a liquid, not a custard, and also contrasts with it in having a small percentage of alcohol.

In the valleys between the mountains, the villagers making kefir use open bowls rather than skin bags and so lose many of the gases formed from the lactose. The several organisms working together to produce kefir grow best at about 72°F; they die at about 95°F.

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Like kefir, koumiss is made in skin bags, bottles blowing in the doorway—of a circular felt curt, or tent, this time—and again agitated by all who go in and out. Koumiss contains from 1.097 to 1.96 percent of alcohol when fully fermented. In the early part of the 20th century there was in this country a health food fad for koumiss, though doubtless made from cows'.
milk. The American brand used a formula calling for yeast, flour and honey to establish the ferment. To my surprise, I found a recipe for it in a 1972 Seattle Women's Rights Cook Book, which had belonged to my mother.

Therapeutic claims have been made for most of these fermented milks, which to some extent must account for their appearance among the health foods-reform movements. The Russians at one point considered komniah beneficial in treating tuberculosis and established sanatoriums for the treatment. Great claims for both longevity and benefits to the digestive tract have been made for yogurt, and currently the longevity of the peoples in the kefir area is under investigation, though in relation to correlation rather than digestive or lung troubles.

Yet it is absolute irony, and poor science as well, to claim that cows give long life when it is a basic food all over the Near and Middle East and India where life continues to be shorter than anywhere else in the world. This claim was first made in 1910 by the Russian scientist, Metchenkov, who associated the high consumption of yogurt in Bulgaria with statistics purporting to show that, of a population of about five million, some five thousand Bulgarians were centenarians. These figures can, however, point only to general illiteracy and an absence of birth certificates.

As to benefits to the digestive tract, a modest benefit may indeed occur, but it is on the principle of keeping black snakes in your garden to leave no ecological niche for the mosquitoes. The good bacteria of fermented milk will leave no room for bad ones. Quite recently, there have been claims for and studies made of what is believed to be extreme longevity in the Caucasus. Whether or not kefir is implicated here, it is another case of no birth certificates if we are talking of large numbers of centenarians. A few, I will accept (after all, two pharaohs, Romans II in the 12th century B.C. and Pepi II in the 28th, lived into their 90's), but judging from the age of the general run of the skeletons we dig up, primitive life really is not all that conducive to longevity.

It is much easier to explain the absence of babies in the north of Europe than to be altogether certain as to why it is so popular south of the Mediterranean, especially since the milk must be heated to pasteurize it and start the bacterial action, and fuel is scarce.
that rats fed exclusively on commercially made yogurt develop cataracts after one to six months of this diet. Human beings, who would have to eat about a third of their own weight in yogurt per day to achieve this, would have to eat about a third of their own weight in yogurt per day to achieve this.

On a more cheerful note is the fact that yogurt has been shown by London University investigators to raise the blood cholesterol levels by 67 percent if ten ounces of yogurt are consumed before breakfast. That is to say, so much yogurt, which also contains milk, is apparently as beneficial as a substantial meal, but leaves considerably more space for the alcohol.

In the case of milk, I would also like to say that we can never say how far back into the practice of milking and the obviously slightly later domestication of the koumiss, kefir, butter and buttermilk go. I would suspect them to be the oldest, as its nuclear area corresponds to that of the earliest Neolithic (or agricultural) stage of culture in the European-Western Asiatic con
denium.

However, it is the antiquity of koumiss which is best documented. This is firmly associated with the nomads of Mongolia and the Pontic steppes. We find Homer referring to "proud mares" that almost certainly mean
ing the Scythians, though it is hard to see how they became the "infants" terribiles of all time. The milk is probably still being rampaging over the entire Near East in the 7th century B.C., let alone bes GISING koumiss for 29 years in the Crimea. Very elegant koumiss dispensers made by Greek craftsmen are found in the Scythian tombs of the 4th century B.C. Elsewhere in the Ukraine, so ornate as to suggest a great importance attached to the breed.

Koumiss was known to Xenophon as well as to Herodotus: Pliny Secundus in the origin of Nero most dodgy, and the really good Grade A koumiss come only from the skin carried by the wildest horses. It reached its ultimate fame with Marco Polo and Genghis Khan in the 13th century A.D. The former compared it to a good white wine. In keeping with the Mongolian tradition that both the horse and the drink were given to man by the gods, the Mongol emperor is said to have retained 18,000 miles, white and black, and the use of himself and progeny. All these references, however, belong to the historic period and to a later date.

We do not know just when and where labon first appeared, but it should have invaded India not long after the thought of taking animal milk for his own use and let pets of milk stand long enough for the bacteria to develop and do them better to interpret such an event as than a gift from the gods? The animals were at hand and it is just a matter of where and who occurred to man. There is some slight evidence to suggest that this might even have

Suggested Reading

Brewbaker, Don and Patricia

Food in Antiquity: Thunes and Hutton, London.

Brown, R.G.


Petersen, G.S.

Microbiology of Food Preservation, Oxford Press, New York.

Kitchener, Norman

1972

Art and Lec

McCracken, Robert D.

1971


Credits

Pp. 169-180, nos. 1, 2, 3, 5,


William Cough, pp. 38.


Early dairying practices are shown on the fresco of the tomb of Neues, 31 miles north of Luxor, in southern Mesopotamia. Dating from the 2,500 B.C. this fresco has been cited as the earliest absolute evidence for the use of milk, and the milk must have been kept from the decay of the milk fat. This is the European-African civilization.

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1-8 Drawings show the steps through which a goatskin about three feet long becomes a skin churn and is then imitated on a small scale in clay vessels about one foot in length. Pottery churns, still rather closely following the asymmetrical lines of the goatskin original, turn up in various cultures at widely spaced intervals with, so far as is now known, no in-between links.

1 Goatskin.
2 Skin churn.
3, 4 Clay vessels.
5, 6 Palestinian Chalcolithic clay vessels.
7 Clay churn from the Roman levels at Meroe in Nubia. It copies the skin prototype very closely but adds a spoutlike air vent (suggesting a foreleg) as an outlet for air compressed during churning.
8 Modern pottery churn from Sinai.

Since the bacteria responsible for various yogurt cultures vary, the yogurts also vary and a yogurt connoisseur will find a trip through the Near East absolutely fascinating. The best laban I have tasted to date came from a hotel at Antalya, ancient Antioch, on the north Syrian coast. Driving out to Jerusalem for an autumn dig, a friend and I stopped for a plate of this at some impossible hour, like 10:30 a.m., because we couldn't bypass it even though it spoiled our timetable and spoiled our lunches, too. This Antiochen laban was so thick as to be almost cheese and had a beautiful sour tang.

Driving on toward the Holy City, with the yogurt tang still alive on our taste buds, we were conscious once again of the "everlasting past." How many generations of bacteria had left their mark on that particular yogurt culture? Man makes food; food makes man. Wars, migrations, cataclysmic ecospasms—all touch a swaying goatskin in the sun. We are the inheritors. "Al hamdu li 'llah rabbi al-'alamin." Praise be to God the Lord of the beings of the whole world."