**Cheese Grommet?**

The following notes are based on the discussions and practical experiences during the Historic Cheese-making course at Weald and Downland Museum. The course was run by Ruth Goodman and focused on cheese-making during 3 time periods:

1. The early 17th Century (based on Gervase Markham’s book of 1615 ‘The English Housewife’). Although there are brief mentions in earlier texts Markhams is the earliest full written account of dairying.

2. The mid 18th century (based on William Ellis’s book of 1750 ‘A Country Housewifes Family Companion’)

3. The early 20th century (based on Ministry of Agriculture Leaflets)

My notes are focused on the earliest period which is still considerably later than Saxon, please bear this in mind while reading. However Ruth Goodman considers the main factor influencing cheese production to have not significantly changed between the 10th and 17th century.

This factor is milk yield.

Gervase Markham notes that 2 gallons is ‘rare and extraordinary’, 1½ gallons ‘much and convenient’ but ‘a gallon is not to be found fault with’. A Saxon cow would have likely been fed on common land, sharing available ‘pasture’ with the cows of other smallholders. Pickings would be thin at some times of the year and milk production correspondingly low.

The average smallholder is likely to have had only one or two milk producing cows, so it is likely that only 1-2 gallons of milk per day would be available for all dairy uses: as milk, cream or butter. Compare this with a modern cow which can produce up to 8 gallons a day, with herd numbers in the tens or hundreds and the differences in the scale of the yield are immediately apparent.

By the time of Markham there were different ‘breeds’ of cow known but these seem to be based on regional differences rather than being purposely bred. For example: black cows from Cheshire, Lancashire, Yorkshire and Derbyshire, red cows from Gloucestershire, Somerset and Wiltshire, pied from Lincolnshire.

The dairy year: Something which often surprises modern man is that milk was not available all year. To produce milk, a cow must first produce a calf. These are born in early Spring and start the dairy year. When grass is at it greenest and most lush in early Spring the milk produced is high in fat. Ideal for the young growing calf, and for butter production. Later in the year, as the grass becomes thin, brown and scarce, the milk becomes richer in casein – ideal for cheese production. Calves may be sold off for veal or beef production, slaughtered for rennet and veal production or kept. It was not economically viable to keep all the female calves for milk production, due to the difficulties in feeding the animals over winter.

Rennet: Rennet is a key ingredient in milk production. Produced by all unweaned mammals to digest their mothers’ milk, it was often more cost effective to sacrifice a piglet to produce the rennet necessary for cheese-making rather than a calf (although the cheese produced may be inferior to that made with calf rennet). Rennet is an enzyme and continues to be produced by the stomach after death if stored correctly. The stomach was cleaned and stored in a brine solution or stuffed with herbs and dried. Brine stored stomachs continue to produce enzyme, and the brine gradually becomes more enzyme rich. A small cupful of brine/rennet solution is taken to start cheese production (Markham recommends storage for a year before use – the smell is apparently eye-watering!). If dried, a small piece of stomach may be cut off, soaked in brine to soften and initiate enzyme production and the brine then used for cheese.

Some plants can also be used (eg nettles, thistles and cleavers can be pounded and squeezed to release their juices, this juice used in place of rennet) They are much less efficient and produce an inferior cheese. Acids such as vinegar can also be used to ‘split’ the cheese into curds and whey, again the resultant cheese is thought inferior.

Milk: The milk was of course ‘raw’ and thus full of the natural bacterial cultures necessary for good cheese-making. Every ‘dairy’ would have its own particular blend of cultures giving its cheese a characteristic taste. These cultures would be impregnated in the utensils and other equipment being used and once present are impossible to eliminate. Even in todays’ modern stainless steel dairies there will be differences in the natural cultures between different factories producing the same cheese. It is difficult to buy raw milk, thus cheese made from pasteurized milk needs to have the cultures re-introduced. These tend to be a single ‘type’ and generally result in a bland cheese

Cheese production: As stated above a yield of 1-2 gallons of milk per day would be available to the smallholder. Without refrigeration the milk was best used the same day or the evenings milking would be used next day. A gallon of milk will only produce between ½lb and 1lb of soft cheese. The style of cheese is influenced by the degree to which the curds and whey are broken up and thus how much whey is freed and can be drained off. The curd may undergo no pressing at all, losing whey by drainage alone, leaving an extremely soft ‘cake’, more like a firm junket. Or it may be broken up to allow more whey to drain leaving the curd to be lightly pressed under its own weight to remove excess whey (e.g. hung in a cloth). There is no evidence for cheese presses (to force excess whey from the cheese) in the Saxon period. Under gravity alone, insufficient whey can be removed to form a ‘hard’ cheese. Even if it could, at such a small scale (1-2 gallons of milk) the cheese produced would be very small (less than ½lb) and therefore would not keep well, thus defeating the object of producing a harder cheese.

When hung under its own weight a cheese similar in texture to feta or paneer can be produced. With salting, this can be kept for several months. Since cheese-making was a late Summer/early Autumn activity, this would provide some protein into the winter months.

The ‘Cheddar’ described as being ordered by King John in 1170 (“Great Roll of the Pipe”) is unlikely to be the same hard Cheddar cheese we know today. That said he did purchase 10,240 lbs (4.6 tonnes) of the stuff! This seems a lot if it was all a soft cheese with a short shelf-life. It certainly bears further investigation.

Cows vs Sheep vs Goats: The main alternative to cows’ milk in Saxon England was sheeps milk. According to Ruth Goodman there is little history in rearing goats for milk in England before the early 20th century, when the government tried to encourage it among smallholders who were struggling to complete against the large dairy farmer. It wasn’t very successful, but a second attempt in the 1970’s (the ‘Good Life’ era) was more successful. There was a much stronger tradition for goats milk and cheese in France.

Hygiene: By 1615 it is well known that cleanliness is important for dairy products to remain’ sweet’. The recommended cleaning for dairy utensils is: scalding with hot water, scrubbing with salt, then another scalding before being left in the sun. It seems likely that this type of cleaning would have been done for centuries. The combination of hot water, salt and UV light combine to form an excellent anti-bacterial treatment.