

A 150-Year Shift In Cheese Tastes:

Social, Economic And Cultural Dimensions Of Danish Cheeses

Jørgen Burchardt

National Museum of Science and Technology, Denmark

jorgen.burchardt@mail.dk



Vesterhavsbutikken, Fjaltring.

Intro

Today, the cheese department in a supermarket or specialty store is filled with a large variety of cheeses. The exporter can provide tasting samples of cheeses, and consumers can choose textures and tastes ranging from firm, soft, strong, mild,

fatty, lean, sour, sweet and many other flavor combinations.

Cheese has become an integral part of the Danish meal. Each Dane eats an average of around 15 kg of cheese a year. Parents give their children cheese to ensure that they in-

gest important vitamins and minerals. Some choose cheeses to become a meal with a culinary quality similar to that of red wine; others buy cheese to blend on pizza for flavors and different textures, while others buy chunks of cheese for a quick addition to the traditional lunch box or snack.

It has taken many years to achieve this level of consumption, although at our latitudes we have had cheese for thousands of years. Danes' opportunities for eating cheese have changed according to technological developments in agriculture, trade patterns, economic cycles, and competition from other foods.

The article highlights some of the most important elements of cheese's cultural and historical journey.

A meeting with a dairy

It's difficult to describe taste. I discovered this a few years ago, when one of Denmark's most important cheese dairies, Brørup Mejeri, had to be closed down. I was contacted to save the dairy's history, and as a trained ethnologist, I started with fieldwork. I knew nothing about dairies, so I said, spontaneously, that I wanted to start my work at the dairy.

It turned out that the first dairy-

men arrived at midnight, and my introduction to the dairy remains clear in my mind. When I got there at midnight, light flowed from the dairy building's windows. It was winter, and from the parked cars, two sets of footprints went up to the entrance door. I followed the tracks, and when I opened the door, I was surprised by a strong smell. My first thought was "baby puke", but the smell of sour milk wasn't quite as unpleasant as if a baby had slipped off one's shoulder.

The dairymen had arrived to prepare the milk for cheese making. First, they would add lactic acid culture to the milk so that it was ready to have rennet added around 4 a.m., when a few more dairymen would arrive. When the curd had solidified, it would be cut into pieces and the whey pumped off. Then, the next team of dairymen would come to pour the cheeses into moulds. When the cheese container was empty, the next of the dairy's six daily productions could begin. This is how the working day went at this dairy and, with some variations, it was similar to those at other dairies all over the world.

In advance, I was going to save the dairy's last cheese at the local museum, but a conservator said that it was impossible to preserve a cheese. The dairy made a copy of a Spanish Manchego cheese, and in

Archaeologists often encounter simple earthenware with holes in the bottom, like this one dated to the Roman Iron Age. More than a thousand sieves are registered in the museums' collections. We know from historical time that the curd is kept in place by a cloth in the bottom, while the whey left. Photo Skiive Museum.



the following months, I got to know the cheese well. It tasted good, better than its Spanish counterpart. How could knowledge about the taste of this cheese be ensured for the future?

An expert in taste is able to identify many hundreds of flavors. Arla, the large Scandinavian dairy, has an expert who judges some of its newly developed cheeses, and the expert had 600 tastes to use in her description.

However, the daily assessment of cheeses in the dairy industry has been reduced to only 20 different main categories. In a judge's guide for cheeses at cheese exhibitions, the visual character must be judged by the cheese's exterior, color, structure, texture, aroma, and taste, as well as its packaging in some cases. Aroma and taste are the most sub-

jective attributes. For taste, a judge checks whether the product's taste aligns with the standard taste for the type of cheese, or whether there is a taste of feed or yeast or if the fat is rancid. In addition, whether a cheese is aromatic and has the right acidity and a taste of salt are other attributes that are judged.

The long way of the cheese

Archaeologists often encounter excavations of sieves, which are simple clay pits with holes in the bottom, such as the one dated to the Roman Iron Age. More than a thousand are registered in the collections of cultural history museums all over the country. We know from written sources how sieves were used for making cheese; the solid cheese must be held firmly by a cloth in the bottom of the vat while the whey

<i>Gorgonzola</i>	879	<i>Year for first known mention of cheese types. Throughout experiments, cheeses have been developed with characteristic flavors. They are often developed within a geographical area, so the name has become a kind of brand for the cheeses. This list shows some of the best known ones. Scott, Robinson and Wilbey 1986, 7.</i>
<i>Schabziger</i>	1000	
<i>Roquefort</i>	1070	
<i>Marolles</i>	1174	
<i>Schwangenkäse</i>	1178	
<i>Grana</i>	1200	
<i>Taleggio</i>	1282	
<i>Cheddar</i>	1500	
<i>Parmesan</i>	1579	
<i>Gouda</i>	1697	
<i>Gloucester</i>	1783	
<i>Stilton</i>	1785	
<i>Camembert</i>	1791	
<i>St. Paulin</i>	1816	

runs from the coagulated milk mass. Likewise, sieves have similarly been used for cheese making since the end of the third millennium, 3,000 years before Christ.

Danes are born to eat dairy products; it is literally stamped in our DNA. For 7,000–10,000 years, our culture has been based on the milking of livestock, and this has meant that we have been able to survive better than peoples who relied on a purely vegan diet or by hunting alone. Since the middle of the fourth millennium, milk products have improved the economic base for residents in Denmark, and 96–97% of Danes do not develop lactose intolerance, which would have prevented us from consum-

ing milk products as adults. In fact, many people with lactose intolerance can eat cheeses as they usually contain very little lactose.

Around the year 100 AD, the Roman historian Tacitus wrote that the Germans used curds as a food-stuff. It is certain that knowledge of cheese making arrived with the Vikings when Iceland was colonized. We know from the Icelandic sagas that cheese was produced from sheep's milk. In addition, a petri-fied cheese was found in a building which, according to the *Njál Saga*, burned down around the year 1000 AD after a manmade fire, even though one person tried to extinguish the fire by whipping whey at it. Laboratory studies were found

to show traces of curd. Thus, from historical records, we know about the production of fresh cheese. It was made from milk or buttermilk, where acidification created the cheese. Like butter, it could be stored longer than milk. Quark and cottage cheese are examples of contemporary fresh cheeses.

However, another technique was needed to produce long-lasting cheeses. Stored cheeses were based on rennet, where the active element was enzymes from calves. After the rennet was added to the milk, the cheese material (casein) was deposited, and it could be stored for a long time after draining and drying. During storage, a further conversion of the cheese occurred, producing tasty flavors. It is probably an old tradition, which is described in a cookbook published in 1868. The farmer's wife made her own rennet from dried calf's stomach, where a teaspoonful was added to six buckets of milk, with cumin or nutmeg to taste. The milk was stirred when it congealed, and the whey could be removed. The curd was put into a mould with a cloth to drip from, and after a few days of regular turning, it would become dry enough to lay on a shelf for further ripening. In the first days, it had to be turned frequently, washed in lukewarm water, and wiped.

The cheeses from the Danish region of Thy were sought, in particular, and they were even awarded a silver medal in 1791 by the Royal Danish Agricultural Society for a thesis on how priests spouses produced their cheeses for the benefit of imitation elsewhere in the country. The historian Troels Troels-Lund stated in his work on daily life in the Nordic countries in the 16th century that, across Scandinavia, there was a geographic area from Thy over to Halland in Sweden where giant cheeses were produced. It is said that they were honored to make them so large because connoisseurs knew that the milk had to be supplied on one and the same day, could finish from the size of the cheese to the wealth of the owner.

This form of production has been widespread. It is known that taxes have often had to be paid in kind, and cheeses have been mentioned specifically as a form of payment. For example, in 1249 the bishop in Ribe asked that each household deliver a cheese. In 1690, a farmer owed a priest a goose, four loaves of bread, and a cheese for midsummer. The custom of remuneration in kind lasted a long time. From the mid-1800s comes an anecdote that when a cleric's wife was to make cheese, she sent a message with the



The Swedish writer Olaus Magnus wrote in 1555 in his description of Scandinavia that was a stroke across Scandinavia from Thy of Halland, where you produced such great giant cheese that two men with difficulty could wear them for a short distance. They were made so large because connoisseurs knew that the milk had to be obtained on one and the same day, so that the size of the cheese showed the amount of the owner's submissive. Magnus 1555, 466.

schoolchildren that on a specific day she wanted to make cheese. On the appointed day, the farmers' wives came with milk for the cheese. From 1843, there is a story that the parish clerks and priests were thus made the best sweet milk cheese, which they subsequently sold at good prices. According to the old statutes, every man in the parish was required to give the priest, the clerk, the district bailiff, and in some places the school teacher, the midwife, and perhaps the blacksmith a portion of milk. This was usually expected around midsummer when milk was abundant. Suppliers often ordered at noon as milk from the morning milking was fatty.

For the wealthy, cheese has been

a natural food. When Bishop William joined Eskilsø Kloster in 1161 as manager, he had to complain to the Pope about the bad economy on the spot. For example, he found only a store of half a ham and seven cheeses. As a king in the early 1200s, Valdemar Sejr got 6½ kg of butter and cheese daily, and two night coats for the king and his men was 360 cheeses and some butter. Dairy products were covered by the Catholic Church's rules on fasting. However, the church created a good business shortly before the Reformation by selling "relief letters", also known as "butter letters", whereby the buyer of such a letter was allowed to eat butter and cheese during a period of fasting. The

Swedish author Olaus Magnus in his description of Scandinavia included a chapter on cheese, in which mention was made of such large cheeses that two men with partners could carry them only a short distance.

Not only did the most prosperous citizens get the best cheeses. It is said that, on the island of Læsø, the young girls made “girl cheese”. After they had helped on different farms in the winter, they went to those farms during the summer and were given abundant milk as a kind of consideration for the work they had done. They used the milk to make a cheese with a diameter of 30–40 cm, significantly larger than the normal daily cheese of only 20 cm, which out-of-town buyers preferred. In about 1800, workers on Læsø usually did not get cheese, but when they were hired for a job such as plowing, haying, or shoveling, they were served meat, pork, butter and cheese .

Sheep’s milk cheese was made in the earlier time. In the late 1700s, the cheese in Jutland, on Funen and Falster, weighed about 6 kg, while the Zealanders rarely weighed over 1 kg, probably due to smaller herds. Most cheeses were made from cow’s milk in the 1800s. It is said that when some beggars walked around on farms and picked food, they got a skimmed-milk cheese,

but instead they stole a whole-milk cheese, which the farmer’s wife had made for the priest. It was probably skimmed-milk cheese that sailors were given. It was said that a larger sailing ship for long-distance travel was bought in the 17th century for the crew, but the approximately 10 cheeses allotted per man fermented quickly down in the ship’s hold and caused a terrible stench.

There was a certain market for cheese. Already by the 11th century, there was a lively export of dairy products from Schleswig-Holstein. In 1583 alone, more than 1,000 tons of cheese were sent by ship from the port city of Tönning in Holsten; in the record-setting year 1610, it was more than 1,500 tons. The marsh was favored by cattle for grazing. The geography in Denmark was different, and agriculture was arranged at that time for more versatile use. It is estimated that a typical farm was largely self-sufficient in terms of grains and dairy products.

Phase two: From self-sufficiency to craft

In Denmark, cheese production was considered a by-product that the farmer’s wife made. Certain places abroad dominated the market for milk production in agriculture, and here cheeses were developed that were sought after in Denmark,



When Ms Karen Nielsen from a large farm was photographed in 1881, she was dressed in her work clothes. She made cheese, because in her hand she has a cheese grip used to cut the curd into small pieces, so that the whey could run from the cheese grains. Photo H. Tønnies, Aalborg City Archives 851-01B34352.

especially cheeses from Switzerland, Holland, and Germany that were occasionally introduced. In the best mercantilist spirit, farmers in Denmark tried to produce the same cheeses. However, doing so required both knowledge of technology and, at the same time, extensive experience adapting to the changing conditions with variations in weather temperatures, fat percentages in milk, quantities, and much more. High-quality cheese production had become a specialized craft.

When King Christian IV employed a bailiff, he or she was

nicknamed “Dutch” as a sign that the person had an understanding of dairy farming. Later, the name Dutch came to be used for dairy experts. When the king set up a barn at Copenhagen in 1623, equipment was ordered for a dairy with cheese moulds, sieves and two large cheese vats of stone. “Dutch” also became an institutional synonym with the leasing of a farm’s cattle. It has been estimated that 25% of the country’s dairy cows were controlled by such a “Dutch” in 1782.

The purpose of the Royal Danish Agricultural Society was to im-

prove the dominant agricultural industry, and the production of cheese belonged to one of the side activities. The society encouraged enterprising people. For example, they supported the gathering of knowledge with a prize for the author of a paper with the English title “Notification of Preparation of the Cheese from Thy”, which was subsequently printed in 1800. The cheese from Thy was also the in centrum for a prize for a paper on introduction of the cheeses for negotiation in Copenhagen. Production of cheeses also gave awards in the period 1790–1799, while cheeses of the types from Switzerland and from Gloucester were awarded the following decades. Among other honors, a gold medal was given to a priest cheese for the wife of the poet and priest Steen Steensen Blicher in 1829 for the production of an imitation of an English Gloucester cheese.

Another publication in English, “Cattle breeding and dairy on the Dutchman farms in the Holstein and Schleswig”, was published in Danish in 1854. Herein, the dominant method of cattle farming was described including the production of cheeses. It was so extensive that when cheeses were sold for skippers for sale to Norway, Sweden and Copenhagen.

The publication of these stories continued throughout the 1800s. Many of the first publications did not contribute actual new knowledge except for the two methods: prepressed cheese, where the curd is lifted from the whey without air getting into the curd, whereby only a few large holes occur, and the second method with dipped cheese, where the cheese gets air between the cheese grains, so there are many small holes.

Exhibitions gradually became an important method of disseminating knowledge. Through awards, the best producers could be encouraged to continue to improve their products. The Agricultural Society held a number of exhibitions, and among the exhibits of tools and animals, cheeses were occasionally given space as well. Exhibitions gradually developed to be the industry’s showcase, even though it took many years. Starting in 1845, large farmers’ assemblies led the German model farmers to gather together, allowing them to exchange experiences on operating modes. At the exhibitions, there was also room for the cheeses. For the assembly in 1869, cheeses were called for. The wish-list was divided into five groups, the first being sweet-milk cheese with a dense mass prepared according to a Danish, English,

Dutch or a “related method”. The second type was whole-milk cheese with a piped mass prepared in the “Swiss mode” method. The third and fourth types were skimmed-milk cheeses prepared in a Danish or Holstein method or by other methods. Finally, other cheeses were found in the fifth group. The cheeses were rated and their characters assigned by a committee.

At the Farmers’ Assembly in 1861, 16 cheeses were exhibited; in 1863 and 1866, there were 35 cheeses; and in 1869, the number had risen to 53. There were 13 whole-milk cheeses, and five were whole-milk cheese with whipped cream. More than half of the cheese was skimmed-milk cheese, where 28 of the 31 were made according to the Danish or Holstein method. To these were added four other cheeses.

The exhibition of cheeses was then divided into two classes: one for farms with more than 24 cows, and one for smaller farms. It was realized that small farms would find it difficult to cope with the great use of larger quantities of milk to make cheese. The milk could not be saved, so cheeses could not exceed what a day’s milking could provide. Making cheese was also a great job for a small farm. In 1864, a farmer noted that his maid started making

cheeses during the three hot summer months when the milk was most abundant. She worked from 10 a.m. to 1 p.m. to produce cheddar cheese. Such a long time could not be used for the evening milk, which instead became an ordinary sweet-milk cheese, which the maid could handle in the time from 7 p.m. to 10 p.m.

There was a dairy superstar who repeatedly won prizes at exhibitions, although her farm had milk from only 14 cows. Her name was Hanne Nielsen and she was from the Havartigården in North Zealand. The Danish cheese *Havarti* is named for her efforts. She was an accomplished dairywoman, and at the same time, she received help from the country’s first dairy consultant, T.R. Segelcke, who had been hired by the Agriculture Association to advise farmers based on his agricultural science background. Hanne Nielsen learned about the production of foreign cheeses through study trips to Barsebäck, Sweden, where an Englishman successfully produced cheddar cheese. In 1867, she travelled to Norway to learn about whey cheese, to England in 1869 to learn about cheeses from Somersetshire and Cheshire, and to Holland to learn about cheeses from Edam and Gouda. Then in 1872, she went to Switzerland for cheese from Em-



The milk dishes stood neatly in rows on a Jutland farm in 1860, so after a period the cream could collect on the surface and skimmed off with a spoon before further processing in the butter core in the background. Hand foaming gave the skimmed milk a certain amount of fat. Appeal 1918, 256.

mental and, finally, to France for cheese from Roquefort and Camembert. She also developed a Tilsiter cheese, which was delivered to King Christian IX. Based on the king's desire, it was made with cumin. Her success was due not only to her skill but also because she was the first and, thus, the leader in the field. She had a number of trainees on the relatively small farm who worked diligently on cheese production, but at the same time, Hanne Nielsen was paid a relatively high amount, more than most farm workers earned.

Danish farms were generally small, and since the milk could be

stored for only a short time, only small quantities of milk from each single farm could be used to produce cheese. However, cheeses should be available in large amounts in order to develop the products as a sought-after commodity. Only large estates had enough cows that their dairies could produce large volumes of cheeses. One owner of a large estate was the important merchant, Constantin Brun, who had made a lot of money on grain trading, so he could expand his business to farming by buying the Antvorskov Manor. In 1801, he convened three Swiss families to produce Swiss



The ideal for a modern dairy in 1888 with machine-driven centrifuges and beginning piping of milk was set up at the Nordic Agricultural and Art Exhibition in Copenhagen. To the right is a cheese vessel and in the foreground filled cheese molds. Photo Juncker-Jensen, Royal Library DT023141.

cheese. The large cheeses had to be stored 2–3 years before they were ready to sell, but after those years, the trade went well, with exports even to Russia and the Caribbean. He stated that producing cheese provided a better profit than making butter, and other manors mimicked his production but failed to have the same luck. Their storage time for cheeses was cut, which “increased the amount of the product at the expense of goodness” as stated in 1810. At the Bekkeskov Man-

or, Baron Selbye attempted to make cheeses “in the English manner”, which were probably, copies of the English cheddar cheese. The economy in the production of cheese was generally never good, although export duties on dairy products were abolished in 1819–1820, while import duties increased in 1821 by almost 50%.

The technology of the dairies was improved by the use of new techniques. Since the mid-1870s, it was known that cooling milk using

running water or with stored ice from the winter improved the milk and reduced the risk of the cheeses developing unfavorably. Before the centrifuge, the whole milk had to be left standing still in order for the cream to collect on the surface. This could take 36 hours, and especially in the summer with a lot of milk, much could go wrong. The cooling reduced the risk so that one could wait to foam the cream after 48 hours, which resulted in a larger amount of cream.

Several contractors tried cheese making. In 1836, the Royal Danish Agriculture Society wanted to use science to develop dairy products, and in 1836, experiments with cheese production began in cooperation with the Society for Natural Learning. This was done in cooperation with the landlord Hofman (Bang) at the Hofmansgave Manor. Production went better for P. Trock, who, beginning in 1881, produced cheese on various leased farms. He made “Danish Swiss Cheese”, Dutch cheese varieties, Emmentaler cheese and whey cheese. In 1907, he established a factory for producing Emmentaler cheese.

Experiments with new methods were conducted, and beginning in 1896, systems were developed with an associated publication of a detailed description of manufac-

ture and storage. The participating dairies had a lead mark for a few days to stamp on the cheese at the time of manufacturing to ensure that all cheeses were just as old at the assessment approximately three months later.

Any attempt to produce high-quality cheese that could be exported with good yields became a mistake. The son of the landlord Hofman said about his father's experiment with cheese: “My father has since continued the trials but has not yet come to the result he desires and regrets that no one {in Denmark} has yet gained the experience the British have acquired through centuries of observations”.

Seventy-five years later, after more than 100 years of efforts to improve Danish cheese making, the verdict was the same in 1918. Only Trock's Danish Swiss Cheese was rated a success. It was judged in 1895 that “His cheese is hardly distinguishable from the best Dutch product”.

The most common cheese was a skimmed-milk cheese which could be sold to Norway and Sweden. It was also called Dutch cheese, and as it forms a hard rind shortly after pressing, it was also called by the German name *lederkäse* (leather cheese), which is what a commentator called it in 1843.

Except for the aforementioned parish clerk and priest cheeses, sweet-milk cheese was rarely sold. Many different cheeses were made – fresh cheese, aged cheese, green Swiss cheese, buttermilk cheese – but these were most often for personal consumption. In the summer, one of the peasants' favorite foods was a smoked fresh cheese.

The big mechanized dairies

In many ways, dairy history in the second half of the 1800s was an exciting time when much changed. There were four important changes for dairy operations. First, the process was mechanized as the steam engine could operate many new tools. The second change was the use of scientific methods involving the use of thermometers and systematic record-keeping of events. That meant, thirdly, that the craft moved from being handled by women to a new group, dairies operated by men. Fourth, at the same time, the units became larger, and now milk was pooled from many smaller farms. In 1875, the wholesaler Gunni Busck established the country's first shared dairy, Slagelse Dairy, which was quickly followed by several on a private basis and as cooperatives. Shared dairies could now compete with the large manor dairies to make cheese when large amounts

of milk were available. In particular, the centrifuge became a central tool with two major advantages in dairy farming. First, it worked quickly; in a matter of hours, it could complete a process that, otherwise, took more than one day. Second, the centrifuge recovered a larger proportion of the milk's cream.

The traditional method of producing skimmed-milk cheese was introduced from Holsten, where the milk was used for butter and skim milk was used in the household, for calves, and for cheese as a by-product. Traditionally, the milk was foamed before it became sour, often within 24 hours, so there was still a significant amount of fat in the skimmed milk.

Paradoxically, the centrifuge was a backdrop to the manufacture of cheese. The skimmed milk was given a lesser fat content so the cheeses deteriorated sharply. Instead of using it for cheese, it was found to be economical for feeding pigs. Some dairies even considered establishing pig farms, but for the most part, it was best to return the skimmed milk to the suppliers' farms. In the 1880s, after research on the newly formed Royal Veterinary and Agriculture High School, it became clear that the leaner the cheeses were, the more water they should contain. During storage, the shrinkage could

The Copenhagen bourgeoisie had a large selection of cheeses, as can be seen from the advertisement from 1890. The most expensive was the genuine Roquefort for DKK 1.45 for a pound, while the Danish “fat, sharp dairy cheese” could be obtained from DKK 0.18. *Politiken* June 28, 1890, p. 4.

„VJUC“ rigeste Gasforbrug.
 Gl. Kongevej 25. **Ingeniør Thos. R. English**, Kjøbenhavn. V.

Kjøbenhavns største og billigste Ostelager,
 en gros & en detail,
41, Vimmelskaffet 41, over Gaarden,

anbefaler og udsælger i reelle Strimler:
 Ima agte Schweizer-Ost Nr. 1, fed skarp & saftfuld, 85-90.
 Ima agte Hollandsk Ost Nr. 1, fed & pikant, 90.
 Ima agte Eklammer-Ost 78.
 Ima agte Roquefort, Société Sarcboea, 1,45.
 Ima agte Roquefort 1,25.
 Ima Limburger-Ost, uovertræffelig fin Kvalitet, 95.
 Ima dansk Schweizer-Ost 60-70-75.
 Ima agte Derby-Ost 35-40.
 Ima agte Myso-Ost 30-35.
 Ima Sødsmøkk-Ost, fin, skarp og dekket, 50.
 Ima fede, skarpe, blaa Bottemejeri-Ost, 35-40.
 Ima Thy-Ost 35-40.
 Ima svensk Græs-Ost 35-40.
 Ima fede, skarpe Mejeri-Ost 18-20-25-30-35.
 Ima grønne Alpe- & Eryels Kloster-Oste.

Ost
 en gros & en detail.
 I hele Oste og større Partier Rabat.
 Ordre til Provinserne mod Efterkrav.

J. Chr. Andersen.
Ostelageret, Kælderen over Gaarden.
41, Vimmelskaffet 41.

Før Høkere. Ny og brugte Mellem
 Et lille Parti hjemmestavet Svæsellet er
 tilbuds. Næsting. 31 E. Kld. N. Helsingør. 4849
 købes og sælges.
 N. Daaefvingen 5.
 Billige Afbetalingsskemaer.

be curtailed by providing the cheeses with a suitable thickness and by providing sufficient moisture in the storage spaces.

The research began to provide a better scientific basis for the dairy industry's craft. Thus, later, Professor V. S. Storch found it appropriate to use pure cultures for the acidification of cream, whereby the quality was considerably increased. Another of the college's researchers, C.O. Jensen, found it appropriate to pasteurize milk so that certain *E. coli* bacteria were killed by heating it to 65–70°C. Pasteurization could also ensure that tuberculosis in cattle was not spread when otherwise infected skimmed milk would have been returned to all farms behind the shared dairy. In 1898, it was leg-

islated that milk would be pasteurized at 80°C. This effort, however, had some negative consequences for cheese making as the properties of the milk also changed in an unfortunate direction.

In the late 1800s, the dominant Danish cheese was still skimmed-milk cheese. It was not a gastronomic wonder, but it was inexpensive and nutritious. Its characteristic as being boring can still be noted from writers who grew up with these cheeses. Ellen Duurloo, born in 1888, in the 1940 novel *Huset på pynten* made the comment, “Yes, you are probably better accustomed than as to fat clamps and skimmed-milk cheese”. Alexander Svedstrup, born in 1864, in his 1923 novel *Erik Gudmand* was a little kinder

Klasselotterkollektor & Fotograf. Oste-Løbe og flydende Smørfarve fra Chr. Hansens teknisk-kemiske Laboratorium.		Tænt møb Gels Gofel Brint blive har til hven
Oste-Løben er her for første Gang ad kemisk Vej fremstillet til praktisk Brug efter en ny Methode, paa hvilken vi forvente Patent. Den er væskelig, fri for Slim, holdstændig holdbar og altid af samme Styrke, saaledes at Tiden for Udsættelsen af Ostestoffet nejagtig kan beregnes. Den kan benyttes saavel til Sødsmelke- som til Skummetmelke-Ost og foranlediger ikke Ostens Hævning, der i Reglen hidrører fra Brugen af en ølet Løbe. Faas i hele og halve Boutl. a. henholdsvis 72 Sk. og 36 Sk. I Øjeblikket bruges kun $\frac{1}{2}$ Boutl. til 1000 Pd. Ost.		
ligt	Den flydende Smørfarve fra vort Laboratorium farver ikke Kjørmælken, giver Smørret den naturlige straalne Farve, saaledes som d'Hr. Smør-Exportørerne ville have den, og som den ogsaa ønskes her hjemme; den har en meget stor Farvenerne og adskiller ikke Erverstoff ved Opbevaring. Vi kunne henvisse til mange af Landets største og bedste Mejerier, hvor den benyttes, og hvorfra der bødsvilligt er tilbudt os enhver Anbefaling. Faas i Flasker af forskjellig Størrelse til 1 Rd. pr. Pd. Saavel Oste-Løben som Smørfarven faas fra vore Forhandlere i Provindeerne eller fra vort Kontor, Frederiksholms Kanal 4, Kjøbenhavn.	
	Ridehest.	

It became an end to make rennet from calf stomachs around the farms and dairies when Christian Hansen had invented a way to produce an uniform rennet. Jyllandsposten April 12, 1874, 4.

in his remark: “His eyesight shone as adorable as any Western Jutland skimmed-milk cheese of them with the cumin in.”

Other types of cheeses were also made. Swiss types such as Ementhal were made only in some places, but the Danish cheeses, unlike the Norwegian and Finnish copies, were very different from the real cheese, as they were smaller and thinner while the pulp was much softer and the “eyes” smaller. Cheddar cheese was made by several, while some attempted a copy of Roquefort. Green Alpine cheese was produced by acid instead of by rennet, like Norwegian old cheese. A cheese named “Appetite cheese” was made from skimmed milk and a little buttermilk, while fresh cheese

consisted exclusively of buttermilk. Monastery cheese and star cheese were new types made from finished cheeses. The manufacturers bought skimmed-milk cheese from the dairies, which were only one to two days old, and after picking and processing, the cheeses were packed in individual packaging.

Overall, there were major problems in maintaining quality. Even the cheeses that dairies had sent to cheese exhibitions could be described as having “no value as merchandise”, being “black-gray or gray-yellow, smelly centrifuge milk cheese with thick, hole and skid rind”, and “so disgusting and nasty that there is great overcoming to touch thereby than say enjoy it with pleasure.”



Cheese vats in rows in Denmark's largest cooperative dairy Trifolium in 1915. Still, the stirring was carried out in the large vats with a cheese grip. At that time, few dairies produced cheese, and if they did, they rarely had more than one cheese vat. The Labor Movement Library and Archives, picture 33.

The efforts of dairy consultants, cheese wholesalers and good dairies seemed to be fruitless, and the many prize awards and trials had not been useful either, according to the pessimistic assessment of the cheese industry in the 19th century in 1909.

Towards good times

After the turn of the century, Denmark had a well-functioning dairy sector. All parts of the country were covered with dairies, and the approximately 1,800 dairies gathered milk from small and large suppliers.

The dairies were run and led by a dairy manager with experience and often even some theoretical education. The technical tools were constantly improving, with some dairies even having their own refrigeration plant and laboratory for the recommended tests.

Most plants were used for large-scale production of cream, whole milk and butter. However, there was also progress in the cheese area with better cheese vats, mechanical stirrers, and the beginning of using paraffin, with the protective layer faci-

Three principles for making cheese

Round-eye types such as *Samsø* and *Emmerthal*. Before the whey is drained, the cheese grains are pressed into a continuous block below the whey. The whey is drained and the cheese is poured into smaller blocks, which are put into moulds. The cheese develops large, regular holes during storage.

Kneaded cheeses include types like *Maribo* and *Gouda*. After the whey is drained, the cheeses are stirred or kneaded vigorously with salt, and the curd is poured into moulds. In this way, air is kneaded into the cheese, which then develops many small irregular holes.

Dipped cheese types such as *Havarti* and *Port de Salut*. The cheese is fished or pumped with whey into moulds and pressed with their own weight. They also develop many small, irregular holes.

tating the work of the large cheeses, reducing shrinkage and improving the appearance of the cheeses by maintaining a smooth, thin and clean rind.

The dairies still produced butter for export and milk for consumption in big cities. Many dairies had a cheese vat, but they were used only to produce cheese for their own consumption. Only a few dairies had a larger-scale production.

Slowly, the conditions for the cheese market changed. Still, the export markets were a distant dream for a dairy industry exclusively with copied and no significant chees-

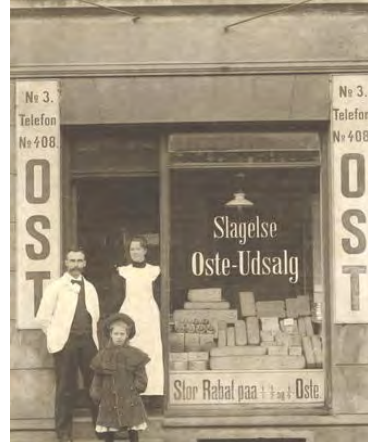
es, but in the domestic market, the Danish cheeses outperformed many of the foreign cheeses.

The progress in cheese production was further strengthened as the Norwegian Ole Wennevold was employed in 1904 by the Danish Dairymen Association as a consultant in cheese making. The former dairy consultants were criticized for having given theoretical guidance only, and this led to the dairy farmers hiring a consultant themselves. As noted by an industry expert in 1931 “with all respect for all the good names that can be mentioned in this connection, how many of them themselves were able to produce a cheese that could serve as an example and be indicative of production?”

Still, Danish cheese was not full fat, and although Wennevold advised making cheese from pasteurized milk, most dairymen preferred to use untreated milk. One followed the principles of a price quote from 1890: “An easily understandable and complete description of how to prepare a good, easy-to-sell household cheese from low-fat, centrifuged milk.” It was based on the technique of the old Holstein dairy system and adapted to large quantities of milk.

The technique consisted of adding skimmed milk to whole milk and 5–10% buttermilk. The chees-

With the increasing consumption of cheese, the number of outlets increased. Here is a cheese sale in the early 1900s. The Labor Movement Library and Archives.



ing and after-heat happened at fairly low temperatures, and the curd was often processed after the whey had run out so that it got quite dry in the large molds. The cheeses weighed 20 kg and were always put in brine. They were later judged as acceptable, but neither did the judges look any further: “It had a powerful, not always pure taste, a firm and fairly bold consistency, and especially as a quarter-fat cheese, it gained much recognition for domestic consumption, while the few attempts which were done to export this cheese did not succeed.”

Next to this cheese was prepared one cheese for which the curd was lifted from the whey into moulds. Large quantities of the traditional Danish kneaded cheese were produced. It was no longer set in large round shapes but in smaller shapes about the size of the Dutch Gouda.

The cheeses were judged to have a tendency to mature too quickly, and when they were 3–5 months old, the cheese was frequently crispy and unpleasant tasting.

Danish Swiss Cheese was made successfully and had progressed. It had succeeded in making it close to the Swedish *Herregårdsost* (manor house cheese). No pure culture was used in addition to the usual acid addition in contrast to any other round-eye cheeses.

Many other types of cheeses had been experimented with — Roquefort, whey cheese, Swiss cheese — and for the Emmenthal cheese and Camembert, the results were so good that the foreign imports almost stopped.

Dedicated cheese exhibitions were resumed in 1890. Now cheeses were exhibited in groups according to their fat content. At the



The curd is raised of the whey by Svendborg Milk Supply in the 1960s. The method was used for emmental cheese and other "chopped" cheeses - the concept of the chunk comes from the subsequent process, in which pieces of the curd are cut out to be put in molds. Odense City Archives B27385.

same time, the state and the Danish Dairymen Association had supported experimental production, where dairies competed to improve the manufacturing processes, so that the associated exhibitions with the 3-month-old cheeses presented a careful documentation of the methods.

At the outbreak of the First World War, market conditions changed, and tight control of the food supply for the population was introduced, including detailed maximum prices for cheese. The import of foreign cheeses decreased and eventually stopped. At the same time, neutral Denmark had good opportunities to trade, which resulted in a sharp increase in the country's cheese production. Demand was high, so the quality saw the dairies less. One of the first initiatives undertaken by the Cheese Handler

Association of Copenhagen after its start in 1916 was to complain to the authorities about too much water in the cheese. The whey dripped down from the cheese shelves in the shops. The authorities were responsive, and a law on cheeses was introduced with rules for the content of water and fat.

The development of larger-scale cheese production was also accelerated by the fact that the rearing of pigs was reduced due to a lack of feed imports, so it would be better to use skimmed milk for cheese production. Out of 1,503 dairies, cheese was produced on 602,- especially in the southeast of Jutland; 241 dairies produced only whole-milk cheese, 161 only skimmed-milk cheese, and 200 produced both types. However, a minimal part of the milk was still used for cheese and often only for the milk suppliers' own consump-



A danablu cheese on Marslev Dairy in the 1950s loosened from its cheese mold after the whey has run out sufficiently for the cheese to become firm. The dairy was the place where the Danish cheese type was developed. At right the cheeses are in brine to be salted. Photo Svend Turck, Royal Library, 61705.

tion; In 1914, to produce more than 15,000 tons of cheese, most dairies used only 1% of the milk for cheese. The production of butter still dominated. The statistics also reported on geographical differences. Most places in Jutland produced skimmed-milk cheese, while four-fifths of the cheese on the islands was whole-milk cheese. There was a tendency towards slightly fattier cheeses. In the whole country, only a quarter of the cheeses in 1914 were skimmed-milk cheese, where the proportion had been 57% in 1905.

Although some of the exported cheeses did not have the best quality, the production of cheese for export continued at a relatively high level after the war. In terms of sales,

however, a problem was caused by the large number of variants; it is stated that there were 21 different mixed cheeses, so buyers found it difficult to find uniform types.

In 1930, the number of cheese dairies with larger-scale production had risen to 588. An inventory showed that 90% of the production was solid cheeses, half of which were the Gouda type, 12% Swiss type, and 12% Tilsit type. However, the majority of the dairies still produced cheese only when there was excess milk.

Organization of production and sales

The development, production and sale of cheese took place for many



The cheese grains are dipped in the molds at Brørup Omegns Dairy in the 1960s. The goal was to be able to fill a mold with 100 grams accuracy for a 6 kg cheese. Local history archive for Brørup.

years in a large number of independent companies. The great societal interest due to the close association of the industry with the importance of agriculture provided some political benefits that were unknown in other industries. The state established legislation with a tight framework for cheeses' properties, and sales were heavily managed, for some periods stronger than others. In a way, the industry functioned at times as a cartel supported by the state.

The Dairy Act of 1921 intended to bring order to the existing chaos regarding the types and varieties of Danish cheeses. The main actor in this work had been dairy consultant G. v. Ellbrecht, and the Ministry of Agriculture recognized his efforts by having the cheese law go into effect on the consultant's birthday. This legislation still exists where the

current order still defines cheeses according to their shape and properties, including descriptions of their aromas and tastes.

Cheese is a living product, and as such, it can vary a lot from time to time. Even cheeses from a single dairy can be different from year to year. In fact, in industrialized dairy farms, taste can even vary between the same cheeses from cheese vat to cheese vat made the same day. The first dairy farmers in the morning are often taking a set of cheeses from the ready-to-go cheeses to judge their quality. A cheese must be taken from each vat.

In the inter-war period, a field of cheeses had been separated from the export markets. As has been seen from the foregoing, the shapes and other properties of cheese have changed over time. Below is a picture of the situation in 1938, when cheeses were characterized by a committee with Professor S. Orla-Jensen, assistant H.C. Jørgensen, and cheese consultant N.P. Hansen.

However, this first description of Danish cheeses did not last long. It was discussed, and suggestions for changes came into being as the cheeses produced changed significantly in the dairies. In connection with the naming of the Danish cheeses in 1952, the cheeses were once again to be described,

While cheeses are freshly prepared, they must be turned regularly to keep their shape. It is handwork, as here when turning svendbo cheeses in 1990. The Labor Movement Library and Archives.



and virtually all descriptions were changed; the most important changes are shown below. One difference was that the previously called “hard cheeses” were designated as “semi-solid”. This is probably due to the fact that Denmark has rarely produced the very solid types of cheeses in the style of Parmesan and Grana. At the same time, the hardness of the cheese was determined from measured water content (which is not included in the list). An extra-hard cheese had less than 51% water in the non-fat curd, and for soft cheeses, the proportion was over 67%.

The description below comes from the original outline. The development of cheeses has, of course, continued, and the current position is included through the Ministry of Agriculture's description in the current report on dairy products in 2016. Here, there are 42 named cheeses, which had to be produced in a certain way if the name was to

be used on the packaging. For all cheeses except Danish Feta, only cow's milk could be used.

Solid cheeses

According to the description in 1938, *Emmentaler* cheese was a flat, cylindrical cheese, 15 cm high and 80–90 cm in diameter weighing 90–110 kg. It had to be produced with at least 45% fat in the dry matter and unpasteurized milk. The taste was mild and nutty and the smell sweet. It had holes up to 2½ cm large, and it reached maturity after 6–8 months. In 2016, the holes were up to 3 cm, and the taste description was expanded by the fact that there was a taste from the propionic acid fermentation. The cheese did not get a name in 1952, presumably because the Danish Swiss cheese in a way replaced it.

A Danish cheese was named *Svenbo* in 1974 in addition to the original cheeses. It was close to the Norwegian cheese Jarlsberg.



Danbo



Esrom



Havarti



Danish smoked fresh cheese



Danablu



White Mold Cheese

Gouda has the shape of a flat cylinder with rounded edges and sides; it ranges in size from 1 to 17 kg. It is made from 20–45% fat in dry matter, preferably of pasteurized milk. Few dairies produce the type with regular holes. The maturation is 2–5 months. In 1952, the cheese made

by kneading was named *Maribo*. It is now produced in sizes down to ¼ kg, with the most common, however, weighing 14 kg with a diameter of approximately 43 cm. Its taste was quite strongly sour, and it was the strongest-colored Danish cheese. The maturation was reduced to a

minimum of 1½ months. In 2016, the size increased to a minimum of 2½ kg (except for special baby cheeses), and the fat content was increased to a minimum of 30%. The maturation was further reduced to a minimum of three weeks. In 1952, the round-eyed version of the cheese was named *Fynbo*. It is quite similar to *Maribo* but is typically smaller at 6–7 kg and a diameter of approximately 31 cm. It is made from low-temperature pasteurized milk containing factory-made rennet and ordinary acidification culture, giving it a mild, aromatic flavor and regular round holes of 5–8 mm.

Danish dairy cheese has the shape of Gouda but is taller. It usually has a lower fat content, has irregular holes and is strongly acidified with a sharp taste.

Edamer cheese is a round cheese of 2–3 kg, where the Danish cheese has a slightly different structure than the original Dutch with a slightly stronger souring. It has a mild taste and round, regular holes of ½–1 cm. It is made with 20–45% fat content, mainly of low-temperature pasteurized milk. In 1952, it was given the name *Molbo*, and weight down to 1 kg was allowed. Its taste was characterized as salty, and it had a ripening time of 2–5 months. In 2016, the maturation period was reduced to at least 3 weeks.

Edam cheese was made in two variants. One was a tropical edamer for export, and another was the bread cheese of 5–6 kg. The latter was given the name *Elbo* in 1952, when the maturation time was set to 1½–3 months. In 2016, the size of the smallest holes was reduced to 2 mm.

Danish Swiss cheese is made with 30–45% fat of low-temperature pasteurized milk. It is a slightly sour cheese with a relatively mild taste and regular, rather large holes. The cheese is round with a relatively low height of 10 cm and 42–45 cm in diameter and usually weighs 15–17 kg. The maturation is 4 months. In 1952, it was named *Samsø*. It was allowed to be manufactured down to 13 kg but also in a diameter up to 48 cm. It has been mentioned that it was often stored for 5–6 months. In 2016, square shapes were also allowed and the shelf life was reduced to 3 weeks.

Steppeosten was originally in the same family as Tilsit cheese but was closer to a square Danish Swiss cheese, 7–8 cm high and then 30–35 cm, with a weight of 7–8 kg. In 1952, the name changed to *Danbo*, and it had a slightly smaller size of 25 cm and a weight of approximately 6 kg. It was made from low-temperature pasteurized milk from factory-made rennet and an ordinary

acidification culture. Maturation was 1 to 3 months. In 2016, it was stated to be matured with rind salting, and its shelf life was reduced to three weeks.

Taffelosten (table cheese) was a smaller version of *Steppeosten* in a block of 1–2 kg. These were made with 30–45% fat and stored for 2½–3 months. In 1952 it was renamed *Tybo*. In the description, it was given the term “semi-solid” with a greater weight of 2–3 kg. Then it could also be made in a cheese with 20% fat. It had round holes of 3–7 mm in diameter. Again, the maturation of the cheese was reduced to a minimum of three weeks.

Semi-solid

Tilsit cheese is a low cylindrical dipped cheese of 1–6 kg with 20–45% fat. It is relatively soft with an irregular structure and a pleasant but somewhat sharp taste. In 1952 it was renamed *Havarti*, and weight was set at 4–5 kg. Now the cheese can also be made in a square shape of approximately 30 x 12 x 12 cm. In 2016, the minimum fat content was raised to 30%.

Port de Salut is a soft-pressed cheese of 45% fat in a flat and rectangular shape of ½ and 1 kg. It's a cheese with irregular holes; it is lightly salted and matures through-

out the mass without major smear formation. Two months of storage give it a sharp, spicy taste and smell. In 1952 it was renamed *Esrom* but does not appear in a list from 2016.

Blue mold cheese from low-temperature pasteurized cow's milk is produced in two sizes, with the smallest of 2½–3 kg being the most common. It has a high cylindrical at approximately 9 cm and a diameter of approximately 18 cm, and it's sold after 2–3 months of storage. The largest cheeses, 8–10 kg, look more like *Gorgonzola*. Both cheeses contain at least 50% fat and have a maturation time of 4–5 months. Purified cultures of lactic acid bacteria and of blue-green mold species *Penicillium roqueforti* and *Penicillium gorgonzola* are used. In 1952, the blue mold cheese was divided into two types. *Danablue* became the name for the smallest cheese, where the mold species *Penicillium roqueforti* gave it its slightly sharp but pure taste. The cheese is not mentioned in the 2016 report. However, it is the other cheese, *Mycella*, which is produced by *Penicillium gorgonzola*. Its curd is slightly more yellowish than *Danablue*'s, and the taste is milder and has a slightly more fat-like consistency. It is made from raw or low-temperature pasteurized milk. In 2016, it was allowed to have a fat content down to 30%.



Judges at a cheese exhibition in 2004 in the process of assessing the submitted cheeses. While exhibitions 100-150 years earlier often concerned quality, cheeses today are of a such high quality that the assessment is usually only about taste nuances. Photo Jørgen Burchardt, The Green Museum.

Soft

Camembert, like Brie, is a white mold cheese, which is always produced with at least 45% fat and preferably with low-temperature pasteurized milk. It has a pleasant, mushroom-like flavor and aroma and is packed in 350 g of round and 175 g semicircular chip boxes. The cheese did not get a Danish name in 1952. Since 2016, it has been allowed to be produced from 30% fat content.

Brie is made in round, flat 1 kg cheeses or in the form of sections of 250 g and 165 g packed in chip

boxes. This cheese also does not have a Danish name.

Processed cheese

Processed cheese is pasteurized cheese, where various types of cheese are melted while adding an emulsifier and heated to 70–90°C. A special type is “petit Gruyere”, which is packaged as small triangular cheeses packed six to a round box. The processed cheese also did not get a Danish name. The regulation in 2016 briefly mentions a smooth and glossy surface, and the color should



Every morning at a dairy, one day's production is being rated. Here are cheeses from Grenå Dairy's production of seven cheese vessels a few months earlier. Most batches go to the packing center as prime goods, but some are judged to be second. Some are so poor that they are sold for further processing. Photo Jørgen Burchardt, The Green Museum.

be uniformly whitish to yellowish. The consistency should be cohesive, tough and elastic, not short and crisp. If the processed cheese is to be marketed with a recognized cheese name, it must contain at least 75% of that cheese.

The 2016 report included descriptions of more than 12 cheeses with Danish names. The immature soft cheeses (fresh cheeses) or cottage cheese had larger or smaller cheese grains; cream cheese should have at least 60% fat; quark should have a homogeneous curd, and quark with cumin can also be labelled *Knapost*. It was also stated in the report that Danish Feta and other cheeses should not be sold under these names in Denmark.

Large-scale operations and fewer manufacturers

There was a sharp increase in the

population's consumption of cheese during WW2. Due to the halting of imports, there was a shortage of grain. Therefore, pig production decreased, and quantities of skimmed milk were instead used for cheese production. As there was also a shortage of meat and cold cuts, cheese could serve as a substitute. Where consumption since World War I had risen slowly from around 15,000 tons to 20,000 tons in the late 1930s, it reached 38,000 tons in 1945.

Until the late 1950s, cheese was sold in small dairy shops and specialty cheese shops. Dairy shops disappeared rapidly as their exclusive sale of milk came to an end. At the same time, much of the sales from cheese shops went to other traders. Therefore, their number declined rapidly from 600 stores at the peak in the early 1950s to 200 in 1991.

An inventory in 1980 showed that 33% of all cheese was sold by merchants, 6% by supermarkets, and 3% by butchers; cheese traders had to settle for 14% from shops and 4% from sales from wagons. A total of 87% of all households bought cheese once a week, but sales dropped to 30% of households when there were no offers. Supermarkets also had the best hold on soft cheeses, while the proportion of sales of solid cheeses was higher in the cheese traders. From around 1970 on, sales of cutting cheese went down somewhat presumably because cheese was no longer used so much in packed lunches.

The harsh restrictions of wartime were gradually abolished, but the state's involvement in the cheese industry continued in peacetime. In 1947, the state-controlled cheese labelling scheme for butter was expanded to include cheese for export. To be able to export, a dairy had to deliver cheeses for quality evaluation and achieve a certain result. At the same time, a number of requirements were made for the dairies' equipment and for the layout of cheese and warehouses, as well the wholesale warehouses being included in the provisions. In the first year, 18 dairies were granted the right to export Roquefort cheese and 137 dairies were granted the right to ex-

port other kinds of cheese, while 45 wholesalers were authorized. Exports of cheese during the war had been regulated for supply to the population, but after the war, the state continued its involvement in the area. After 1950, exports were coordinated through cooperatives' export committees, along with private exporters, in a system of minimum prices and a licensing scheme. Several countries tightly controlled their imports of goods at a time of lack of currency. This meant that it was an advantage to enter into agreements with, for example, England, to ensure a price guarantee.

For many years, the dairies had sold their cheeses to private cheese wholesalers, which in fact acted only as a kind of agent for the dairy. The dairy owners were discontent, and in 1946, some Jutland dairies started Danske Ostemejerier's joint sale and cheese export.

From the mid-1960s, the dairy sector underwent a major transition. The introduction of milk tankers meant that small local dairies lost their importance. Large-scale production could now be established at fewer large central dairies. At the same time, organizational centralization took place. When Mejeriselskab Danmark took over cooperatives and bought private dairies in the 1980s, the company was di-

vided into four production areas; two were for cheese, one for white mold cheese, and the other for solid cheese.

Cheeses and their names

Names are appropriate for trading. A name must give customers' expectations of a particular product. As cheese began to become more than a local commodity, the geographical birthplace of the cheese type was used for naming. Above, Swiss cheese, cheddar and many more are mentioned.

When Danish dairies began to export cheeses in the early 1900s, these geographical names were used. You could easily put "Danish" in front of the geographical name.

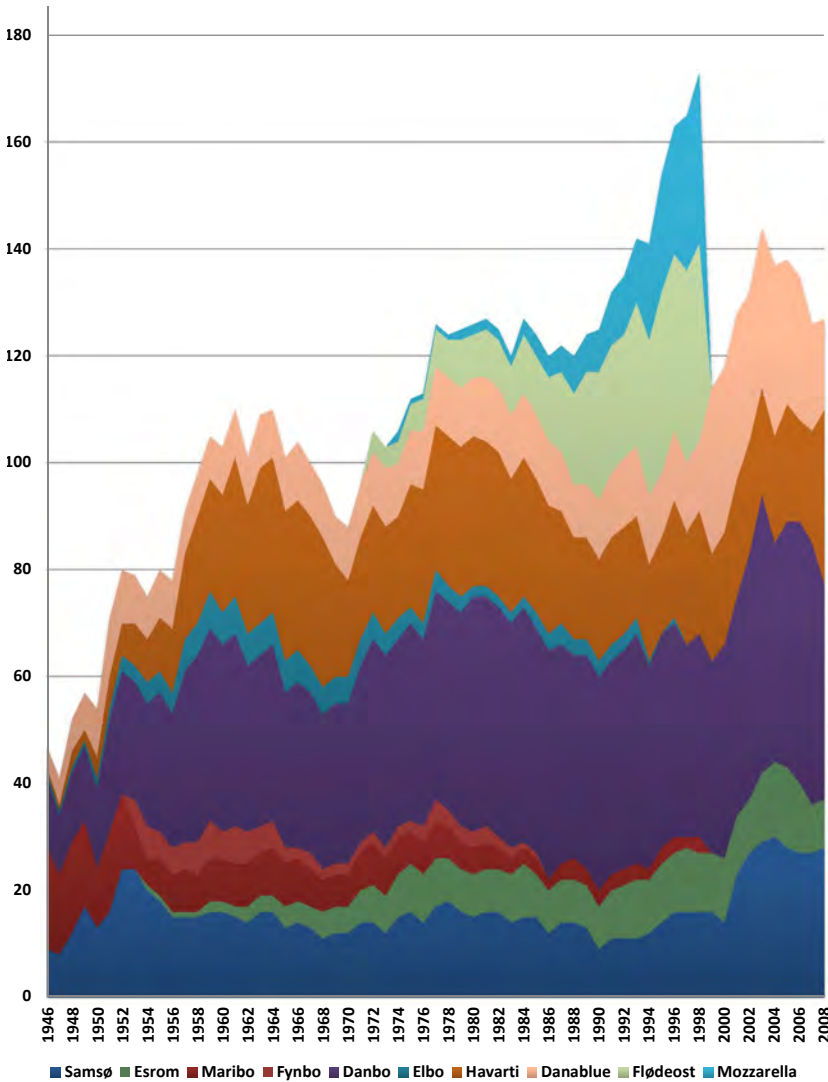
It was not always easy to use the names of foreign sites. For example, France complained through diplomatic channels in 1921, criticizing Danish exporters for selling "Roquefort Danois" on the German market. The Ministry of Agriculture, therefore, called on Danish dairies "to take seriously into consideration whether or not to incorporate the Danish cheese under Danish names".

In 1922, a competition for a Danish name for Roquefort cheese was arranged, and many suggestions were received. A Danish exporter in London suggested "Danish Blue

Cheese", while another thought it should be "Danableu".

Dairy nations found it unfortunate to leave behind the cheese names that had established them, where the names had changed to mean cheese produced in a certain way and not cheese made in a particular place. Again in 1925, the Ministry of Agriculture was called upon to change the names, but again without the support of the dairies. Therefore, the dairy industry called on the Ministry of Agriculture to refrain from attending the international conference at Rome in 1930, although the International Dairy Congress in 1926 had adopted a desire for internationally designated cheese names.

However, as early as 1935, the State Experimental Dairy and the Dairy Office drew up a first draft of system names, and in 1937, a Danish name for "Danish Swiss" became of particular interest. In spite of the WW2, the Ministry of Agriculture was authorized in 1942 to fix cheese denominations after negotiations with the Danish Dairy Association' Joint Organization (hereinafter referred to as the Dairy Association). The motive was that no cheese should be negotiated with names whose contents do not correspond to the terms that were stated in the statutory order. In 1950,



The Danish production of cheese 1946-2008

The figure shows the most important types of cheese, 1.000 tons/year.

The development in taste is shown. Samsø and Danbo have allways been popular. Some of the most important cheeses in 1946, Maribo and Fynbo, dissapeared in the 1990'th. Instead Havarti together with Danablu became important. In the 1970'th came Cream Cheese (Flødeost) and Mozzarella in production.

The figure do not show the production of Feta. The statistics for Cream Cheese and Mozaarella was discontinued from 1999.

Denmark had become the world's third-largest exporter of cheese, so there were major economic interests at stake.

In order to gain the public's interest, in 1948–1949, a proposal competition was organized in connection with a country dairy exhibition in Copenhagen with approximately 1,200 suggestions.

The naming would take place according to a general system, where all cheeses with a Danish distinctive character would have a Danish name. Where it was desired to produce cheese with the greatest possible resemblance to original types, the previous names should be retained but have a “Danish” connotation. At the same time, only a limited number of main groups was wanted, which should be according to uniformity, e.g. whipped, kneaded, firm or soft cheeses. In addition, it was sought, according to international tradition, to use Danish place names for places with a certain relationship to the cheese production. Finally, the names should be short and easily pronounced so that they could be used directly in the main languages.

At a conference in Amsterdam in 1950, a proposal for the international protection of names was adopted. The proposal was accepted by the Danish representatives. The adop-

tion was made concrete in 1951 at a conference in Stresa, Italy, where Denmark, in cooperation with Norway and Sweden, softened it. Designations such as Roquefort, Gorgonzola, Pecorino and Parmesan were reserved for local producers, while foreign-type designations for cheeses made in Denmark should have the addition “Danish” in front.

A working committee was established and in 1951 suggested the Danish names, which were approved by the dairy industry's organizations and by the Ministry of Agriculture a few days later. The proposed names could be included on the provisional lists of the Stresa convention before the expiry of the deadline.

The proposal was for place names but also for the usual term for a locale's residents, for example, *Molbo*, *Tybo*, and *Fynbo*. The most common Danish cheese was a fat or half-fat square cheese, and because of its widespread distribution, it was called Danbo.

Some of the new names were also included in a public naming competition. One winner received DKK 250 for his proposal for the name Havarti in memory of Hanne Nielsen's efforts at Havarthigården. The money would go to his wife, “for a woman's efforts should fall to a woman”.

The marketing of the new names took place with military precision and preparation. The advertising agency Harlang & Toksvig was responsible for the creative work, while the Dairy Association did the organizational work. In the marketing, they made sure to send signage to all hotels and restaurants with pictures and names.

When the authorized list of cheese names was published, the new names should be used everywhere. It was especially difficult for the large restaurants in ferry crossings, where the Great Belt crossing was friendly but certainly encouraged to change its dinner menu from Dutch cheese to Maribo cheese.

The Ministry of Foreign Affairs was involved in several areas. The press attaché in Bonn was approached to make the new names known in the important country of Germany, and the diplomatic channels sent messages to foreign institutions for customs clearance.

Conclusion

Cheese has for millennia been a Danish food. The farmers' self-sufficiency provided fresh cheese and sometimes an older stored skimmed milk cheese.

The main product was butter despite large of farms dairy and mechanized common dairies.

Around 1830 found foreign cheeses way to Denmark - large hard cheese from Switzerland and the Netherlands, supplemented with English, while Italy and France delivered soft cheeses.

Danish dairies mimicked, and around 1915 the quality matched the Danish demand, including more fatty cheeses, and the imports were reduced. The foreign types were adapted, and new developed as Danablu of cow's milk - a copy of sheep's milk cheese. Modern processed cheese came into being.

Government regulation became permanent from 1921, among other things to reduce the number of cheese types; Quality control was extended to all cheeses in 1947. In 1952 Danish names were introduced for only 11 cheeses (in 1974 12).

In 1928, Gouda was dominant along with Steppeost (Danbo) and Danablu. After World War II, Danbo and Tilsit (Havarti) dominated, while Gouda almost disappeared. In the 1970s, several soft cheeses came, including white mold and cream cheese. Feta was a special cheese for foreign markets with a transition half of the production.

Danish cheeses were for many years copies of foreign cheeses., but over the years a specific Danish approach was achieved.

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