

## Butter.

By Clive Beech.

ALTHOUGH SCIENTISTS tell us that modern margarine, with its added fortifying vitamins, is quite the nutritional equal of dairy butter, most people are still old-fashioned enough to prefer the flavoursome, age-old traditional product. And with the cream from 18 pints of quality milk still needed to make a single pound of butter, it stands pretty high as a natural health-giving food—without the added vitamins of its scientific substitute.

Butter was one of man's earliest foods and it remains one of the most valued. Ever since he ceased to be purely a hunter and became a herdsman, milk, butter and soft curd cheese have been important items in his diet.

In the very earliest times butter was very highly esteemed since only small quantities were made. So highly, in fact, that it was often used as sacrifice to the gods. Such a use is described in the Hindu Vedas written between 1400 and 200 B.C.—over 3,000 years ago.

The first herdsmen were nomads, always on the move, and they carried their liquids in skin bags. Butter-making was probably discovered by accident through the agitation of such a skin bag full of milk carried for a long journey on the back of a horse or camel.

Once the initial discovery had been made that cream or milk agitated like this turns into granulated yellow butter, dairying as we know it today had dawned. The herdsmen set about deliberately making the tasty substance, devising crude churns from hollow logs with sealed ends and suspending them on ropes from trees. When these containers were filled with milk or hand-skimmed cream and swung to and fro by hand, they produced good butter. Other primitive churns included boxes or bags swung or agitated when hung up, and flat earthenware vessels in which the milk was beaten by hand, first with a flat stick, and later by a stick with radial spokes inserted.

In due time, of course, milk itself ceased to be churned. It was set in shallow pans and after 12-24 hours' standing had its cream skimmed off by hand. This greatly reduced the volume of liquid to be rotated in the churn, and so shortened the time needed to produce butter. A parallel development was the traditional barrel churn, still seen to-day on some small farms. These hand-turned churns later gave place to electrically-driven models, but the basic principle of butter-churning has remained unaltered for 3,000 years.

Nowadays, most of the world's butter is factory made, and is churned in gigantic cylinders of teak and steel. These are internal worker churns, fitted with running trollies to remove the finished butter, and glass sight-doors on their fronts through which the process can be watched. Running at top speed for 30-40 minutes, they make an average of 2½ tons or 100 boxes of butter at a single churning.

Until late in the 19th century butter-making was a small-scale farm job, carried out efficiently but laboriously and without much regard for hygiene. The barrel churns used were small, and all cream had to be hand-skimmed anyway, so only a few pounds of butter could be made at a time. Then, within a few years of one another, came the twin discoveries that revolutionised dairying the world over. In 1870 there appeared the centrifugal separator for milk. This abolished the lengthy hand-skimming of milk in shallow pans, and so made possible the handling of large quantities of cream for butter-making at a time. Then, in 1873, the first practical refrigerating machine was invented.

Within a decade butter-making had become a factory process with steam-driven mechanical churns, and the rise of dairying in New Zealand and Australia began, since those countries could now send their butter to Europe and keep it fresh on the way. In 1882 the first co-operative dairy was opened in Denmark, and soon that country became world-famous for its well-flavoured butter.

Nowadays, British and Eire farmers concentrate on liquid milk supplies, producing between them only about 15 per cent. of Britain's butter supplies—in some years less, when small quantities are also imported from Poland, Norway, Sweden and Holland. 43 per cent. of the butter on British bread comes from New Zealand. Denmark sends 33 per cent. and Australia 9 per cent.

These individual butters have their particular qualities and flavours derived from manufacturing processes and the type of milk used. Thus, the Danes have always concentrated on a strong-flavoured, often rather salty butter, known to dairymen as a ripened cream butter. This means that, after pasteurisation (a universal preliminary to modern butter-making), Danish cream has a lactic acid culture added to it which partially sours it and increases the delicate, volatile flavours, ensuring that they are retained in the subsequent butter. Danish butter is therefore always fuller-flavoured than that from Australia or New Zealand, and it is rather softer in texture. In those countries the butter men do not ripen their cream, making instead a sweet cream butter by controlling the lactic acid in the cream directly it reaches the factory.

New Zealand and Australian butters are also firmer in texture and more delicate in flavour than Danish butter. They are also brighter yellow because the Jersey cows used (famous for the high colour of the butterfat in their milk) are able to feed on their pastures all the year round, unlike their European counterparts.

Butter must by law contain at least 80 per cent. fat, and a certain amount of casein. It must also contain not more than 16 per cent. of water, nor more than 2 per cent. of salt. Great care is taken to produce an acceptable colour, body, texture, waxiness and sheen. Indeed, modern butter-making is a specialised art, governed by connoisseurs' rules.

After selection of the finest cream, the control of the water content at the final stages of the churning process, and the addition of high-quality, finely-sifted salt when the butter granules reach the size of peas, are the two key points of the modern butter-maker. All butter requires some added salt—it would be insipid otherwise—and the amount used determines the taste, market value and keeping qualities of the finished product.

With so much care lavished upon its manufacture, butter deserves to be treated properly in the home after purchase. With a really "safe" shelf life of only a fortnight, except in very cold weather, butter is best kept in the refrigerator, wrapped preferably in an opaque covering, and isolated from strong-smelling foodstuffs like cheese or fish. Although they cannot reproduce butter in the laboratory, scientists know that the delicate flavour comes from what they term the "unsaturated fats" in butter. These are slightly volatile, and absorb odours and flavours very easily. Only small quantities of butter, enough for each meal, should be put on the table, and then best in a covered dish—a table fashion that inexplicably almost died out 30 or 40 years ago.

Given the choice between guns or butter, man will always plump finally for butter. For, as Douglas Jerrold said a century ago: "Honest bread is very well—it's the butter that makes the temptation." Only here the temptation is rewarded with delight and unrivalled nourishment.

## Sister Dora's Birthday.

ONCE AGAIN THE citizens of Walsall are observing Sister Dora's birthday on January 16th, when a ceremony will be held at her statue on The Bridge, and a floral tribute will be laid by the Mayor of Walsall.

The noble and self-sacrificing labours of Sister Dora at the Walsall Hospital from 1865 to 1878 in the cause of the sick and suffering endeared her to the hearts of Walsall people, and adorned with signal honour the Nursing profession.

[previous page](#)

[next page](#)