



# Cultured butter

If butter tastes better, homemade cultured butter tastes best, says Pierre Issa, maker of *Pepe Saya* artisan butter.

**If you're considering** making cultured butter, it's worth noting that it's a trial-and-error process. Don't expect to master it first go. I continue to learn every day – every time I make butter I learn something new or recognise something different.

In my former life making desserts for a living, I once had hundreds of litres of cream on my hands, right on the verge of a two-week Christmas shut-down. How to preserve the cream? I discovered my best bet was to churn it and make butter.

The first attempt couldn't be called a resounding success – my wife thought it tasted dreadful. From that point, the challenge was on and I was determined to make her something she'd love better than any butter she'd tasted before (and this is a woman who loves her butter). And so my research and experimentation began.

The starting point, and key to success in butter-making, is very good cream. I look for organic, as fresh as possible and with as high a fat content as I can find – the ideal is 40 to 50 per cent. Farmers' markets are your best go-to. You'll buy from a purveyor who knows what they're talking about and deal firsthand with the farmers.

Ageing the cream is the next step. In this process we're trying to grow lactobacillus – essentially lowering the pH from 6.5 to 4.8. I test the pH with a pH reader, but there's an easier way to check: taste. As the pH drops, the cream sours, so taste every couple of days. I age my cream in the refrigerator for a week until it smells like it has turned slightly. You could shorten this process (the butter will have a less pronounced cultured taste) or you could skip it entirely. It's very much a matter of personal taste.

When the cream reaches the desired sourness, it needs to be warmed to 37.5C – the blood temperature of cows and the international culturing temperature – to create the ideal environment for bacteria to grow. When dealing with bacteria and culture, hygiene is very important, so at this stage sterilise your bowls and utensils – it's as easy as pouring boiling water over them. Make sure you wash your hands thoroughly before you continue or wear disposable gloves.

Once this is done, heat the cream gently to prevent scalding, best done in a double-boiler or bowl over a saucepan of simmering water, stirring frequently to distribute the heat. Monitor the temperature with a thermometer, or if you don't have one, I swear by the pinkie test. Dip your little finger in the cream and count to 10. If you can stand the temperature and only need to pull it out at the count of 10, you've hit the sweet spot. If it remains cool, give it a little more time and test again. Too hot and you'll need to let the cream cool a little (there is a little wiggle room here – up to 45C is fine).

At this point, add the lactic culture, either in crystal form (available at [cheeselinks.com](http://cheeselinks.com)) or in the form of active crème fraîche or live buttermilk, which functions a bit like a mother or starter in sourdough-making. The whole point of culturing the cream in this way is to taint the fat with a flavour.

Check the ingredients of whatever crème fraîche or buttermilk you intend to use – it needs to have active lactic culture. Much of the buttermilk available is not live buttermilk; rather, it's a combination of skim milk, skim milk powder and culture, which won't do the job. Farmers' markets are once again a reliable source of the real deal.

As a general equation, I add half a cup of culture for every litre of cream. When the culture is first introduced to the warm cream, it eats the lactose and converts it into lactic



**STEPS** Mixer from KitchenAid. Ceramic spoon and small green bowl from The Bay. Tree. Pale green bowl from Mud Australia. Scissors and twine from Paper 2. Stockists p215.

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Prep time 45 mins (plus ageing, culturing, setting)

Makes about 500gm

- 1 litre pouring cream (40-50% fat content)
- 120 gm (½ cup) crème fraîche



**1** Age the cream in the refrigerator until it starts to smell a little like it's beginning to go off (1-1½ weeks). Transfer to a large bowl placed over a large saucepan

of simmering water and stir occasionally so cream warms evenly to 37.5C on a thermometer or meets the pinkie test (see story).

**2** Combine crème fraîche with 125ml warmed cream in a separate bowl, then add back to the cream and stir thoroughly.

**3** Transfer to a saucepan with a tight-fitting lid, cover and wrap in a heavy blanket. Place in the warmest part of the house to inoculate (at least 20 hours). Unwrap saucepan, place in refrigerator and leave to age for 2 days and up to 3 weeks – at this stage you've made crème fraîche, the base for your cultured butter.

**4** Transfer crème fraîche to an electric mixer and whisk on high speed until the cream splits (4-5 minutes). Reduce speed to low and beat until butter resembles popcorn and buttermilk splits out – this is when you should stop.

**5** Strain through a colander. Reserve buttermilk for baking or marinating meat (it will keep refrigerated for up to 2 weeks).

**6** Place colander in the sink or over a large bowl and rinse butter with well-chilled water, shaking occasionally and ensuring you don't touch the butter with your hands, until water runs clear. You'll have about 500gm butter.

**7** Work the butter in a squeezing motion with your hands to remove excess water until it has the consistency of playdough.

**8** Push it into a ring mould lined with greaseproof paper, fold paper to enclose, remove ring and secure with string if desired. Wrap in foil and plastic wrap and refrigerate for up to 3 months. **61**

acid. This in turn brings down the pH of the cream from a pH6.5-7.0 down to pH4.8-5.2.

Once the cream is inoculated, a stable temperature of between 20C and 37.5C needs to be maintained for at least 20 hours for the lactobacillus to develop and multiply. At home, the best way to do this is to place the cream in a saucepan with a lid and wrap it in a thick woollen blanket. Place the whole bundle in the warmest part of the house where it won't be disturbed (at my place, it's the laundry or in the oven – turned off, of course) and let the culture work its magic.

Next, the mixture needs to set in the fridge for 24 hours (unwrap it first) – the mixture will resemble thick custard. At this point, you can pat yourself on the back – you've just made crème fraîche.

And now for the fun stuff: making the butter. Beat the crème fraîche (the size of this batch is the perfect fit for a standard mixer) on high speed in a heavy-duty electric mixer fitted with a paddle attachment until it thickens and splits; it will develop a slight yellow tinge and spray out buttermilk. Reduce to the lowest possible speed and keep beating until the butter comes out of the cream and starts to resemble popcorn. This is where the fat content of the cream comes into play – if you've used cream with 50 per cent fat, you'll have about half

butterly solids and half buttermilk.

Tip all the mixture into a colander over a large bowl and refrigerate the buttermilk in a sterile container for up to two weeks – you can use it in baking or as a marinade for meat or poultry.

The butter "popcorn" then needs to be rinsed of any remaining buttermilk. Place the colander in the sink and pour chilled water over (it's important the water is well chilled or the butter will melt), shaking the colander until the water runs clear. You'll need about a litre of chilled water – preferably filtered.

Next, knead and squeeze a handful of butter at a time to extract any remaining liquid until the butter feels like playdough. Push it into a ring mould lined with baking paper, fold the paper over to enclose, then wrap in foil and plastic wrap. Refrigerate in an airtight container for up to three months (if the container is ceramic, even better, because it will protect the butter from light).

Note that this is an unsalted butter. If you prefer the flavour of salted butter, I recommend that you scatter salt over the butter after spreading. I find doing it this way enhances the cultured flavour you've taken so long to achieve, rather than obscuring it.

Use this butter however you please – it's as good in baked goods as it is bubbling and sizzling in a pan of sautéed mushrooms, or simply spread it on bread. If butter tastes better, homemade cultured butter tastes best.

RECIPE & WORDS PIERRE ISSA PHOTOGRAPHY JAMES MOFFATT STYLING & PRODUCTION EMMA KNOWLES MERCHANDISING RHIANNE CONTRERAS ILLUSTRATION LAUREN HAIRE



**BUTTER** Twine from Paper 2. Small dish from Bison. Plate from Mud Australia. All other props stylist's own.

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