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THE STORY OF FORT NEGEN

THE STORY OF OF THE NEGEN

Family tradition

I was brought up on bread. Both my parents and grandparents made their own bread every week – big wholemeal loaves that were baked in heavy black baking tins and took forever to knead. On Saturday mornings, after a trip to the mill to get some flour, the mixer was put to work kneading the dense wholemeal dough. After being left to rise for a few hours, the dough was shaped by hand and transferred to baking tins, which were then left on the windowsill above the radiator to rise some more before being baked. At the end of the day, the bread was cut into slices that were stored in the freezer so that we always had fresh bread for breakfast and lunch. The thick slices that were handed to me in the morning were a meal in themselves and they fuelled my schooldays. But I didn't always appreciate them. At school, I often swapped my bread for the limp little sandwiches my friends got from the supermarket. The grass is always greener...

So, not surprisingly, baking is in my blood and when I moved out to live on my own, I set about continuing the family tradition. I didn't want to buy bread. I could eat half a loaf and still not feel full because I was used to eating homemade bread. Whenever I went to visit my parents (with my washing in tow) they always gave me a loaf or two to take with me. But I baked my own bread too, just like my parents and grandparents had always done. I kneaded the dough by hand because I didn't have the money to buy a mixer. Baking bread was just something I did without ever really wondering why.

Creative urge

After studying Communication Science, the logical next step was to find myself an office job. I did my final project on employee engagement while working at the communications department of a large Dutch firm, but I had no intention of staying there. The huge office space, the fluorescent lights, the lack of spark — and even the work itself — thesewere not what I was looking for. I wanted to do something creative.

Jobs were scarce back in those days and I spent a long time looking for something new. During this search, my girlfriend at the time and I decided to spend a winter in the French Alps, where we ran a ski chalet. Each week, we welcomed twenty new guests, whom we would serve breakfast and a three-course dinner six days a week. The chalet didn't have a professional kitchen and it was more like taking care of a big family, one consisting of twenty ski-loving, beer-swilling adults. Nevertheless, we were able to cook, bake and ski to our hearts' content. When we returned to Amsterdam, we wanted to continue cooking, so we opened a restaurant in our own living room. We served a homemade three-course dinner once a week using products from the local market and always with freshly-baked bread on the side.

In the meantime, my search for a new job went on. After countless interviews at different companies, I finally found a position at an international advertising agency, something creative and within my field of expertise. It was more like an upgraded internship than an actual job, but I figured I could work my way up the ladder. I began to picture myself travelling the world in a suit and tie (or a shirt at least) and looking very important. I worked in the strategy

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department and made ends meet by renting out my apartment to tourists and staying at my friend's or brother's place instead. Not living in my own home was actually more lucrative than going into work every day, but that would surely change as soon as I became an important, slick advertising dude.

However, I soon found out that office life really didn't suit me, even in a creative position. It wasn't because of the clients; they were all great and the campaigns we worked on were very interesting. But I just found it all so boring. I simply wasn't able to sit around all day staring at a computer screen. At the end of the day, most of my colleagues stayed on working, apparently happy to continue looking at their computers, and so I stayed on too, even when I hadn't the faintest idea what I should be doing. Another reason why I didn't enjoy it was because I couldn't see the value of the work I was being asked to do. And it wasn't the kind of working environment where you were encouraged to question the value of your work, either. But it probably had a lot to do with my own attitude as well. Something I've always wrestled with was an inability to hide my own feelings. It's it was one of the reasons why I was often booted out of the classroom at school. It was the very same at university, where I had a tendency to skip lectures. All the time I spent being bored at work meant I had no energy left over for the things I really wanted to do, like cooking and baking. I was caught in a downward spiral.

Time to travel

While I was struggling at work, my girlfriend at the time was off exploring the world. She spent some time working as a volunteer on farms in California and shared her experiences enthusiastically with me. I had started my career in the advertising world with a similar enthusiasm and had devoured books written by advertising gurus, but my love for the profession had since dwindled and I started to spend my evenings listening to lectures and reading literature about regenerative agriculture and permaculture, which was recommended by my girlfriend, who was deep into this. I love learning new things; it inspires me. I need to be stimulated. It gives me a buzz, one that I need to be able to feel at least once a week.

My 9-to-5 career didn't last long. Within six months, I handed in my notice. In the meantime, my girlfriend was back and we were were living in an anti-squat home. It allowed us to live cheaply but we also knew the housing corporation could kick us out on a month's notice whenever they decided to renovate the building. It was a fair deal and one that lasted a few years. The day they decided to kick us out happened to coincide with me deciding to quit my job. We were in a bit of a pickle. There were almost no other anti-squat homes available anywhere, so I had to try my luck on the private rental market and find a job that would pay the rent. I had already been looking for a new job for two years, so finding one quickly, as well as a place to live, was a serious challenge. Regenerative agriculture and permaculture still fascinated me. In the end, we made the decision to sell most of our stuff and go travelling instead. We decided to go WWOOFing – working on farms for bed and board. It's a relatively cheap way of travelling and a fabulous learning experience. A bit like doing a series of internships at places where you can learn more about the things you actually want to learn



TASTING AND FLAVOUR COMBINATIONS

We have been making different pastries, croissants and other weekly specials at Fort Negen ever since we opened. It was one of the reasons why we wanted to open a shop besides baking for restaurants. We love experimenting and tasting new stuff. Many of the people on our team came from professional kitchens and all our colleagues love cooking and eating. They are curious about flavour, texture, how something feels in your mouth or gets stored as a memory. One of our first ideas was a cruffin: a croissant dough baked in the shape of a muffin and with a range of fillings. We make at least two different kinds each week and the fillings are inspired by desserts that we like, whatever fruits are in season and the flavours that surface during a brainstorm. We also make savoury specials using cheese croissants left over from the previous day as the basis. We use a dish we love as inspiration, or we fill them with something we'd like to eat during a hangover.

Next to cruffins and savoury specials, we also make puff pastries, buns, doughnuts, ice cream, layered cakes, sandwiches and everything in between. We don't follow any particular plan or strategy but just make whatever we feel like making, inspired by what's in season.

Working with new products all the time means you have to learn a lot about flavour. It starts by knowing what things are in season at any given moment. Every few weeks, the team sits down to brainstorm. We discuss methods for preparing, cooking, roasting, fermenting, infusing and macerating and then come up with combinations that will enhance the flavour or add balance. Nuts, seeds, herbs, spices, sours and bitters. Sometimes we start by looking at what we have left over. Bread from our Sandwichbar, crumbs from the bread slicer and cream or compote from another project. We try to give everything a second life. It's not waste, just something to get creative with. Instead of limiting our choices, it actually makes the process more interesting. Drawing on a blank page is more difficult than adding to what's already there.

There's also lots of room for spontaneity and team members can make suggestions at any time. We always listen to each other and take every idea seriously and they often end up appearing in the shop as a special. Sometimes we use an idea immediately, sometimes we test it first. Many of us have worked in restaurants where flavour is king. This allows us to draw from a deep pool of flavour combinations, techniques and know-how. We also consult cookbooks and technical reference books. If you don't possess this kind of experience, you can also get a long way. There are lots of great books about combining flavours that you can consult. A brainstorm is never a linear process. When we have identified certain flavour combinations, we then look at the basic techniques we can use to let the flavours shine using our in-house expertise. Pastry cream, ganache, praline and panna cotta are all made using fixed proportions. The flavour comes from the infusing and mixing. The recipe may be the same; the taste is always different. Don't reinvent the wheel, just use your tastebuds.

Another starting point is looking at how certain ingredients are used in a recipe and learning how to maximise flavour or adding other flavours. Think about every ingredient in a recipe: is this the best way to use it? Take almond flour, for example. Why not use whole roasted almonds instead and grind them yourself? That gives a deeper, more intense flavour. Or perhaps a different nut would work better. Maybe you could combine it with roasted seeds, such as pumpkin or sunflower seeds.

We rarely use vanilla ourselves. It's a flavour that is very widely used and a lot of the vanilla products out there have been made without real vanilla. We prefer to use other spices: cardamom, bay leaf, lemon zest, star anise, rosemary or basil. Infuse your milk or cream with them to give a new twist to a classic recipe.

To perfect any dish, you need to be able to analyse everything you taste. I use two methods: tasting for flavour and tasting for ingredients. Tasting for flavour means you try to identify the five basic tastes: sweet, sour, salty, bitter and umami. Is everything in balance? Is anything too dominant? Too much sweetness, for example, can smother everything else. Salt and sour are powerful tools. They enhance flavour and break open a dish. Salt reinforces, sour clarifies. Think of how you sometimes add a dash of vinegar to a dish when you're cooking or lemon zest to a batter. The same logic applies to bread as well. Many bakers try to achieve a sourdough culture that produces only lactic acid and no acetic acid. But a hint of acetic acid can actually give the kind of 'zing' that makes bread more exciting, just like a drop of lemon juice does when you're cooking. I wouldn't fancy drinking litres of the stuff but one drop can elevate a dish to a new level.

I often think of the different tastes in terms of music. This might sound very philosophical but it really works. Five blocks that together form a whole, like how an equaliser works. Umami is the bass, the depth. Sweet and bitter are the mid ranges, the warmth, the melody. Salt and sour are the high frequencies, the hi-hats, and without them there would be no contrast. Make sure all of these tones are present in your dish. Let's be honest, if your dish is an orchestra and the salt is the trumpet player but you can't hear it, why did you include it in the first place?

The second method is tasting for ingredients. Ask yourself: do I taste what I expected this ingredient to do? If not, what do I need to adjust? Take beetroot as a filling, for example. Are both the fullness and the sweetness of the beetroot present or do you first need to roast it to remove some of the water and concentrate the flavour? If you give the name 'strawberry cake' to what you've made but can't taste the strawberry, you need to change the technique. Macerate it with a little sugar and salt, for instance, to make the flavour more intense. Use fruit that is ripe or grill, poach or dry it first. It took a long time for every ingredient you use to grow and it is up to us to allow it to release its full potential.

TASTING AND FLAVOUR COMBINATIONS

TASTING AND FLAVOUR COMBINATIONS

UPCYCLING

Food waste is still a persistent problem in many bakeries and professional kitchens. Right from the start, at Fort Negen we have always tried to minimise wastage. Each time we develop a new product, we don't just think about flavour and technique but also about what we can do with the waste. What can we do with it if it's left over at the end of the day? What will we do with the crumbs in the slicer, with the bread that stayed just a bit too long in the oven or with that final tray of croissants that didn't sell?

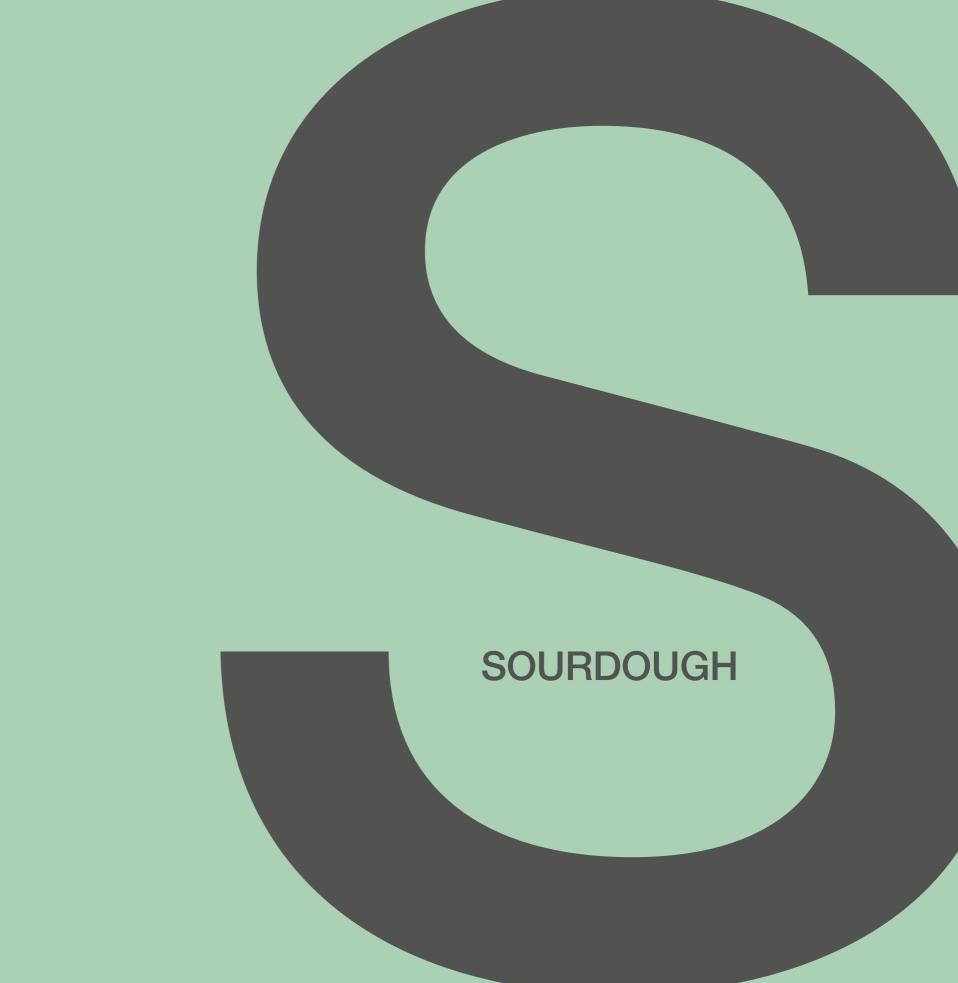
Where possible, everything gets a second chance. Sometimes we know immediately what we want to do with a waste product and sometimes it just piles up gradually until it starts to get in the way, which adds urgency to the situation. When that point is reached, everything moves very quickly. We can no longer ignore the problem and this challenges us to think differently, to try out new techniques and adapt tried and trusted recipes.

We now have no structural wastage of end products because we are very conscious of how we treat waste. And that's something we're proud of. In many bakeries, the level of waste is often as high as ten per cent of the total production. We don't regard that as inevitable but as an invitation to work in smarter ways.

Sometimes an upcycling product becomes so popular that we have to make a conscious decision to bake more of it to meet the demand. The almond croissant is a good example. Originally thought up as a way of giving day-old croissants a second life, it has since become one of our most popular products. We now bake extra croissants every day just to be able to make enough almond croissants.

You will find some of our solutions in this book. For example, our recipes for bread syrup, bread koji, bread miso, French toast and bread pudding, as well as cream or ice cream infused with toasted breadcrumbs. These recipes are not just stopgap solutions but fully fledged products that say something about the place they come from. They are the result of a different way of looking at things, one in which every ingredient, everything that is left over, can start again.





GRAINS

During the process of learning how to bake sourdough bread, one thing that has helped me enormously is gaining an understanding of the ingredients at the chemical and microbiological level. Basically, baking sourdough bread requires three ingredients: flour, water and salt. These ingredients all have an effect on the fermentation and structure of the dough. In this chapter, we are going to dive a bit deeper.

Let's start with the grains. Grains belong to the grass family (Poaceae) and have evolved through cross-pollination and selection into the grains we know today. The first domesticated grains were probably einkorn and emmer, followed by wheat. Grains belong to separate genera within the grass family. Wheat, durum, emmer, einkorn and spelt belong to the genus *Triticum*, while barley belongs to the genus *Hordeum* and rye to the genus *Secale*. In biological classifications, a genus is a taxonomic rank that contains a group of closely related varieties.

The genus *Triticum* is characterised by seeds (grain kernels) with a high starch content and variable gluten quality, depending on the variety. This genus played an important role in the history of agriculture and is still one of the most important sources of nutrition all around the world.

The type of grain cultivated at any given location depends heavily on the soil and the climate where it grows. Southern Europe, where it is hot and dry, has traditionally been a place where a lot of durum wheat is grown. In Central Europe, where the climate is mild, you will find common wheat and in Northern Europe, where it is colder and wetter, more rye.

There is plenty of overlap, of course, and grains and recipes have become widely dispersed as a result of increased travel. But if you take a trip from the south of Europe to the north, you will still see a marked difference in the kinds of bread people traditionally make.

Wheat

The most widely used grain in bread and patisserie is wheat and there are may different varieties. These varieties differ in their percentages of proteins and bran, as well as in the amounts of different types of proteins. Even if you cultivate the same kind of wheat two years in a row on the same piece of land, these percentages will vary depending on the quantity of minerals in the soil and the amount of rainfall and sunshine at certain moments in the grain's growth cycle. You may even see differences within the same harvest, particularly when the wheat is stored for longer periods and depending on the part of the field in which it stood. So, it is not difficult to imagine just how much variation you will see when making dough using wheat from different regions, countries or continents. We always like to experiment with different types of bread when on holidays but it takes some getting used to. Similarly, you can almost never use a recipe twice and expect the same result each time. We use recipes in the bakery, too, but we always finish our mix on feel. You can only develop a feel for dough by making lots of it again and again and reflecting on the resulting bread. It is

during the mixing that you decide how much water you want to add to the dough (a process known as 'bassinage' and how long you will mix the dough at a low speed and knead it at a higher speed.

Wheat belongs to the so-called 'naked' grains. Unlike husked grains, such as spelt, emmer and einkorn in which the chaff (the hard outer shell) must first be mechanically removed after harvesting, the chaff in wheat comes loose during the threshing (the process by which the grain kernels are loosened from the rest of the plant). This makes it much easier to mill and was probably an important factor in terms of the dominant position enjoyed by wheat in human nutrition.

The wheat kernel is oval-shaped, beige to golden in colour and has a smooth, hard shell. It originated in the Middle East and is now one of the most widespread plants in the world. The yield per plant is relatively high when compared with other types mentioned in this book. Wheat is the most commonly used grain in bakeries all around the globe, thanks primarily to the balance between the proteins that form the gluten and the bran. This makes it possible to produce an elastic dough that is light and airy in structure, which is essential for bread and patisserie.

There are over one hundred wheat varieties in Europe alone but that number is falling as a result of selection processes and cross-pollination by seed companies. Grains are selected on the basis of yield per hectare and the quality of gluten. However, there is also a growing interest in older varieties (pre-1970) that have escaped modern hybridisation and selection techniques and genetic manipulation. The kernels of these older varieties are often softer and produce a more unique flavour. We think it's a terrific development that more and more farmers are starting to cultivate these older varieties again and retaining their own seed to preserve their diversity.

Wheat varieties are classified on the basis of the season in which they grow (winter wheat or spring wheat), the colour of the kernel (red or white) and the kernel's hardness (hard or soft wheat).

Spring wheat and winter wheat

There are a number of differences between spring wheat and winter wheat, including the composition of proteins and bran. Generally speaking, spring wheat has a higher protein content than winter wheat. This is because spring wheat requires less time to grow and puts more energy into the production of protein. This makes it more suitable for certain uses, such as baking bread, which demands a strong gluten network.

Winter wheat takes longer to grow, with the result that the grain yield is a little higher. It is sown in the autumn and the first shoots begin to appear at the start of winter. The plant barely grows during the winter but the roots do and when spring comes around, winter wheat holds a small lead over spring wheat because it has a more extensive root system when the weather begins to get warm. This allows it to maintain its hold on the soil and absorb nutrients more efficiently, which in turn means that it can be harvested sooner. It is also more resistant to drought because the plant is able to draw water from deep under the ground.

sourdough 43







Seeded bread

makes 2 loaves, each about 1 kg / preparation: 40 minutes / waiting: 6 hours + 1 night / baking: 45 minutes

Ingredients	Baker's percentages	Amount
Wheat flour	100%	1000 g
Water	63%	630 g
Salt	2.5%	25 g
Starter	12.5%	125 g
Bassinage water (optional)	10%	100 g
Seed porridge	15%	150 g
- Oats	-	40 g
- Pumpkin seeds	-	20 g
- Polenta	-	15 g
- Linseeds	-	25 g
- Oatmeal	-	5 g
- Soaking water	-	210 g

Preheat the oven to 200°C. Roast the oats, pumpkin seeds, polenta and linseeds separately on a baking tray lined with baking paper for 5 to 10 minutes, until golden brown.

Mix with the oatmeal and soaking water and leave for 30 minutes.

In the meantime, in a big bowl or the bowl of a stand mixer with dough hook attached, mix the flour and water on low speed for 4 to 6 minutes, until well mixed. Cover the bowl and leave to rest for 30 minutes (autolyse).

Add the salt and starter. Knead for 4 minutes on low speed and then 6 minutes on higher speed, until the dough comes away from the sides of the bowl. While kneading, slowly add the bassinage water, if using, until incorporated and it can handle extra water.

Place the dough in a lightly greased bowl. Spread the seed porridge over it and fold through. Cover with a tea towel. Leave to rise for 3 hours in a warm place (27°C), or set the dough bowl in a bain-marie filled with warm water (30°C). Fold the dough every 45 minutes (see page 112). You fold the dough a total of 3 times during rising, each time replacing the bain-marie water (30°C).

Baguette

makes 4, each about 350 g / preparation: 40 minutes / waiting: 3.5 hours + 1 night / baking: 45 minutes

Ingredients	Baker's percentages	Amount
Wheat flour	100%	1000 g
Water	70%	700 g
Starter	9%	90 g
Salt	2.5%	25 g

In a big bowl or the bowl of a standmixer with dough hook attached, mix the flour and water for 4 to 6 minutes, until well mixed and leave to stand for 30 minutes (autolyse). Add the starter and salt and knead for 5 minutes at low speed. Put the speed up a bit and mix for 1 minute, until the dough is pliable and elastic.

Fold the dough directly from the mixer and place it in a lightly greased bowl. Cover with a tea towel and leave to rest for 1 night at 6°C.

Divide the dough in 4 equal parts. Fold them into oval balls (see page 114) and leave to rest for 30 minutes. Roll out each piece to a baguette of 40 to 45 cm long and put them each in a couche that's been dusted with rice flour or rye flour.

Leave to rise at room temperature for 2 hours, until the dough feels airy and bounces back lightly when pressed with a finger. Put the baguettes in the couche in the fridge for 30 minutes to firm up.

Preheat the oven to 260°C. Put the baguettes on a baking tray lined with baking paper, score them and bake for 30 to 35 minutes, until they're golden brown and crusty. Put an empty oven dish on the bottom shelf of the oven during preheating. Create steam by pouring boiling water in the dish when you put the baguettes in the oven and then quickly close the oven door to keep the steam in the oven.

Leave the baguettes to cool on a rack for 20 minutes, before cutting into them.

Shaping and baking



Tip:

After shaping the baguettes you can roll them across a damp tea towel and then through your toppings of choice, like some seeds. You could also add some seeds to the dough when you add the salt and starter.



FILLINGS AND CREAMS

Coconut crémeux

Passion fruit crémeux

makes about 500 g preparation: 30 minutes waiting: 6 hours

Ingredients

2 gelatine leaves325 g coconut milk45 g caster sugar100 g egg white100 g cocoa butter, melted, cooled down

a smooth, buttery crémeux.

These two crémeux recipes are flexible bases that work with any fruit juice or purée, not just passion fruit and coconut. Simply strain the juice, avoid boiling the mixture, and you'll have

Soak the gelatine in the water for 5 to 10 minutes.

In a saucepan, warm up $\frac{1}{3}$ of the coconut milk with the sugar to 45°C. Add the rest of the coconut milk and the egg white and stir well. While stirring, heat to 75°C.

Take the pan off the heat and stir through the gelatine. Leave the mixture to cool to 40°C. Add the butter in 3 parts. Briefly mix with a handheld blender after every addition, until all the cocoa butter has been incorporated.

Pour the crémeux in a bowl, cover the surface with cling film and leave to set in the fridge for at least 6 hours.

makes about 350 g preparation: 40 minutes waiting: 4 hours

Ingredients

1 gelatine leaf
125 g passionfruit juice (fresh or defrosted, sieved)
65 g granulated sugar
65 g egg yolk
125 g cold butter, in cubes

Soak the gelatine in the water for 5 to 10 minutes.

In a saucepan, warm up the passionfruit juice to about 40°C.

In the meantime, whisk the sugar and egg yolks in a bowl.

While whisking, gradually add the warm juice to the egg yolks. Pour this mixture back into the pan and while stirring, heat it to 82°C. Don't let it boil because it could split.

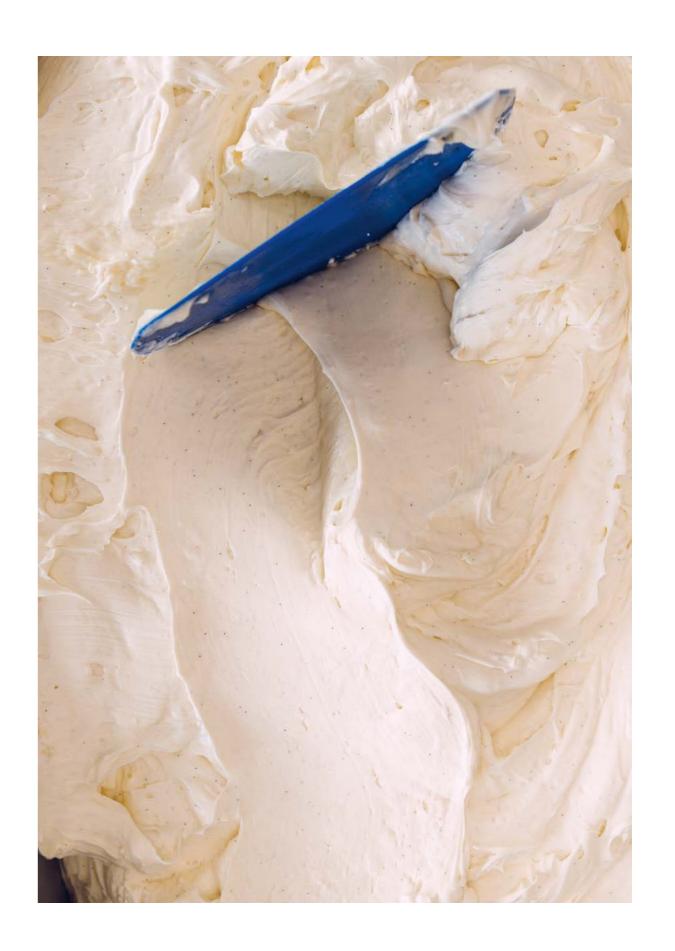
Take the pan off the heat. Squeeze out the gelatine and stir it into the mixture Leave the mixture to cool to about 40°C.

Add the butter in 3 parts. Briefly mix with a handheld blender after every addition, until all the butter has been incorporated.

Pour the crémeux into a bowl, cover the surface with cling film and leave to set in the fridge for at least 4 hours.

Tip:

This is good with some lime zest and/or brown rum.





SUGAR, FAT AND EGGS

Sugar

Sugar is a generic name for sweet-tasting carbohydrates. In our bakery, we usually take it to mean granulated sugar or sucrose, a disaccharide composed of glucose and fructose. This sugar is extracted from sugar beet or sugar cane. At Fort Negen, we mostly use sugar beet because it is locally grown. The extracted substance, sucrose, is chemically identical, regardless of the source.

Processing sugar beet and sugar cane is done via extraction and refining. With sugar beet, the beets are washed, chopped and soaked in warm water. The sugars released form a crude sugar juice that is purified with calcium and carbonic acid. After condensing, crystals are formed that are then centrifuged and dried. The residual materials, such as beet molasses, contain little sugar and are used as animal feed. Sugar cane is pressed and the resulting juices are purified, condensed and reduced until crystals begin to form. Sugar cane molasses is more aromatic and is often added to the end product, such as raw cane sugar.

In addition to sucrose, other sugars are used in bakeries as well. They include simple sugars (glucose and fructose), double sugars (maltose and lactose) and liquid sugars (honey, agave syrup and invert sugar). Unrefined variants, such as muscovado, panela and coconut sugar, contain molasses and plant-based components, which given them a different flavour and absorption properties.

Sugar is more than just a sweetener. In bread and pastry, it influences fermentation, structure, moisture content, bonding, colour, stability and shelf life. It feeds yeasts, shortens the rising time and contributes to crust colour via caramelisation and the Maillard reaction. Sugar slows down the protein coagulation in custards and foams, which gives a smoother and more stable result. It also bonds with water in jam and syrup, which stops it from going off.

The role of sugar depends on the context and application. Sugar plays a different role in cake than it does in whipped cream. The quantity, structure (crystals or liquid), the moment it is added and how it interacts with other ingredients determine its effect.

Sugar in dough

Sugar affects the consistency of dough because of its ability to bond with water. It competes with gluten for the available water. Proteins such as glutenin and gliadin need water to be able to form compounds. Adding sugar reduces the amount of available water, which slows down gluten development and makes the dough feel a bit tougher at first. That toughness doesn't come from the strength of the gluten network but from insufficient hydration. The structure will be able to develop but it may require more time or a different mixing sequence.

For sugar percentages above 10% (based on the flour content) it is best not to add the sugar until the gluten has formed. For a 20 to 30% sugar content, it is often added only after

the dough has fully developed, as is also the case with fatty substances.

Due to the reduced availability of water, the dough becomes more compact and the crumb finer. However, sugar also helps to retain moisture, including after baking. It reduces water activity, delays microbial growth and slows down dehydration. Enriched doughs like brioche and panettone can for these reasons stay fresh longer.

Yeasts feed on simple sugars, such as glucose, fructose and sucrose. In standard bread doughs, this stimulates the fermentation. However, higher levels lead to osmotic stress, as the sugar withholds water from the yeast cells and inhibits their metabolism. This slows down both the production of gas and the rise. Sourdough is even more sensitive because wild yeasts and lactic acid bacteria are less able to withstand a dry cell environment.

Sweet doughs, therefore, require adjustments. Higher quantities of yeast, sometimes even two or three times more, are not unusual. A sweet starter can be the solution because the microorganisms are able to adjust to high concentrations of sugar; other bacteria and yeasts become dominant or even activate a different digestive system.

Maillard reaction

The dark colour and aromas of a breadcrust are largely the work of Maillard reactions: a series of reactions that occur between sugars and free amino acids when heated. It occurs starting from 140–160°C in the final phase of baking. In sweet doughs (>10–15% sugar), this happens sooner and more vigorously. The result is faster browning, sometimes before the crumb is even done. In the case of doughs with a lot of mass or filling, such as brioche baked in a baking tin, the risk of excessive colouring and bitter flavours is even greater.

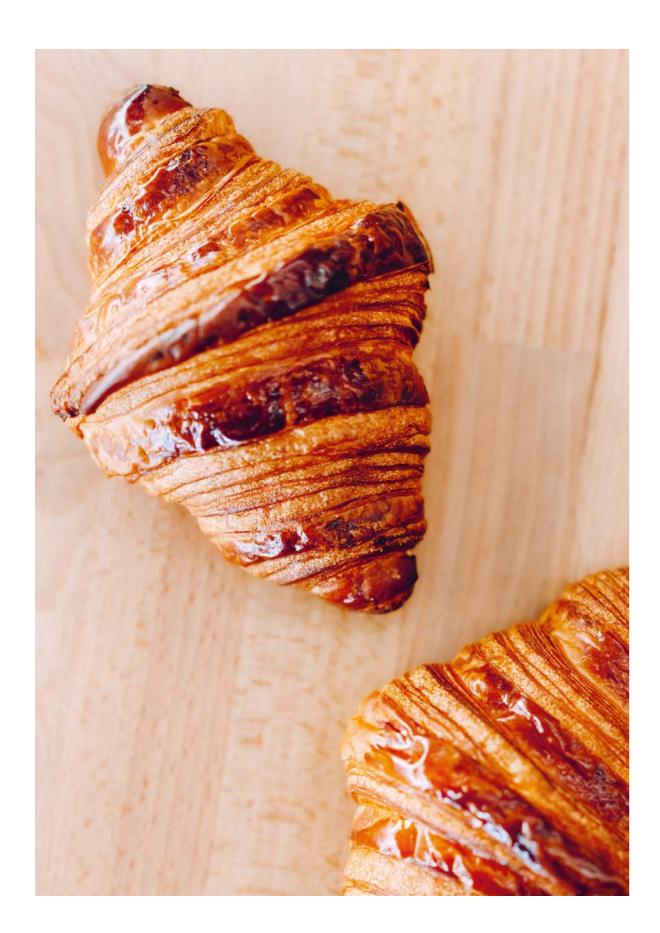
Lowering the temperature by 10 to 20 degrees can help, as can adding steam at the start of the baking process to temporarily reduce the surface temperature. Brushing the dough with egg or milk can help regulate the heat transfer and produce a more even colour.

Sweetness

Each sugar has a different level of sweetness that is expressed in terms of the value for sucrose (100). The score for fructose is around 130, glucose 70, maltose 50 and lactose only 20. This value tell you nothing about calories or texture but only about the perceived intensity of the sweetness. Fructose, for example, colours much quicker than sucrose and is more prone to burning. Glucose is less sweet but extremely reactive, while lactose adds almost nothing to flavour but a lot to colour formation, particularly in dairy-rich products.

Refined and unrefined

Refined sugars are made almost entirely of sucrose. They are stable, consistent and neutral



Croissants

makes about 15 preparation: 50 minutes waiting: 3 days baking: 20 minutes

Ingredients

for the dough 500 g type 55 flour 140 g water 140 g whole milk 60 g sugar 40 g unsalted butter 11 g fresh yeast 12 g salt

also needed 280 g cold, unsalted butter 20 g egg yolk + 5 g milk or water

DAY 1 - make the dough

In the bowl of a stand mixer with dough hook attached, mix all the ingredients for the dough for 6 minutes at low to medium speed. Turn up the speed and knead for another 8 minutes, until you have smooth dough. Shape it into a flat disk (not a ball), wrap in cling film and keep in the fridge until ready to use.

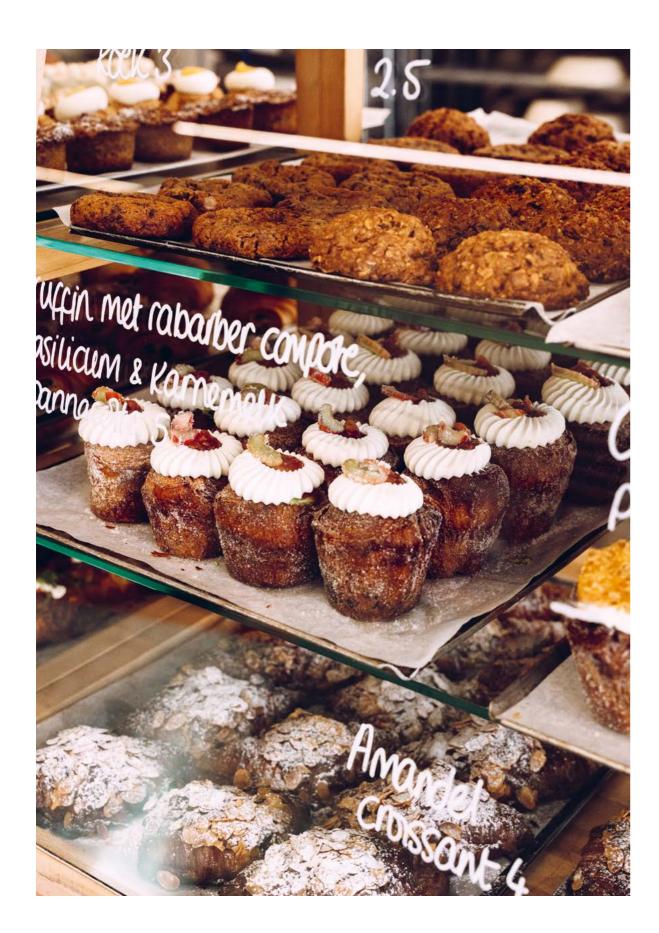
Cut the cold butter in 1.25 cm slices, place them between 2 sheets of baking paper and shape them into a 15 x 15 cm square. Bash the butter with a rolling pin until the square measures 17×17 cm and is about 1 cm thick. Wrap the butter in baking paper and store in the fridge until needed.

DAY 2 - laminate and shape

Roll out the dough to a 26 x 26 cm square. Take the butter from the fridge and loosen it up by rolling it out somewhat. Put the butter on top of the dough, diamond wise, and fold the corners of the dough over the butter so that it is completely covered in dough.

Roll out to a rectangle of 20×60 cm. Fold both ends inwards so that they meet at % of the dough and fold the dough in two book-wise. This way, the two seams won't be on the same spot. Turn the dough 90 degrees and roll it out again to 20×60 cm. Fold % of the dough in half to % and fold the last section over it to create a letter fold.

After laminating, leave the dough to rest in the freezer for 30 minutes and then 30 minutes in the fridge. Roll it out to 20 x 110 cm and cut both sides straight. Lay out the dough with the long side facing you. On the bottom side make a small notch in the dough every 12.5 cm. On the top side, make a small incision after 6.25 cm and then make another small incision every 12.5 cm. Using a ruler, cut out 15 triangles, from notch to notch. Stretch these out carefully until 25 cm long. Roll them up to shape the croissants and keep them in the fridge or freezer. Take into account that yeast loses strength if it's kept in the freezer for too long. This impacts both the rising time and volume of the croissants.



Cruffins

makes 10 preparation: 1 hour waiting: 3 days baking: 25 minutes

Ingredients

1 portion croissant dough (see page 251) 150 g caster sugar butter, for greasing

Make the croissant dough following the recipe on page 251. After laminating and cooling, roll out the dough to a 36 x 36 cm square, 3.5–5 mm thick. Roll it up tightly and cut into 10 slices.

Put the slices in the hollows of a greased muffin tin. Leave the dough to rise and bake the dough following the recipe on page 252, but give them 4 minutes extra, or until they're nicely golden brown.

After baking, take the croissant muffins from the tin immediately and roll them through the sugar until they're coated all around. Put them on a rack to cool.

You can fill the cruffins with anything you like: cream, compote or jam. Fill the pastries from the top or bottom with a piping bag. You could garnish them with a dollop of cream, a spoonful of compote or another topping.

Danishes

makes 8 preparation: 1 hour waiting: 3 days baking: 20 minutes

Ingredients

1/2 portion croissant dough (see page 251)
400 g pastry cream (see page 214)
1 egg, whisked
30 g milk
fruit compote of your choice
fresh fruit of your choice

Make the croissant dough following the recipe on page 251. After laminating and cooling, roll out the dough to a 36 x 36 cm square, 3.5-5 mm thick. Fold it double so that there are 2 layers and you have a rectangle of 36 x 18 cm. Carefully press together.

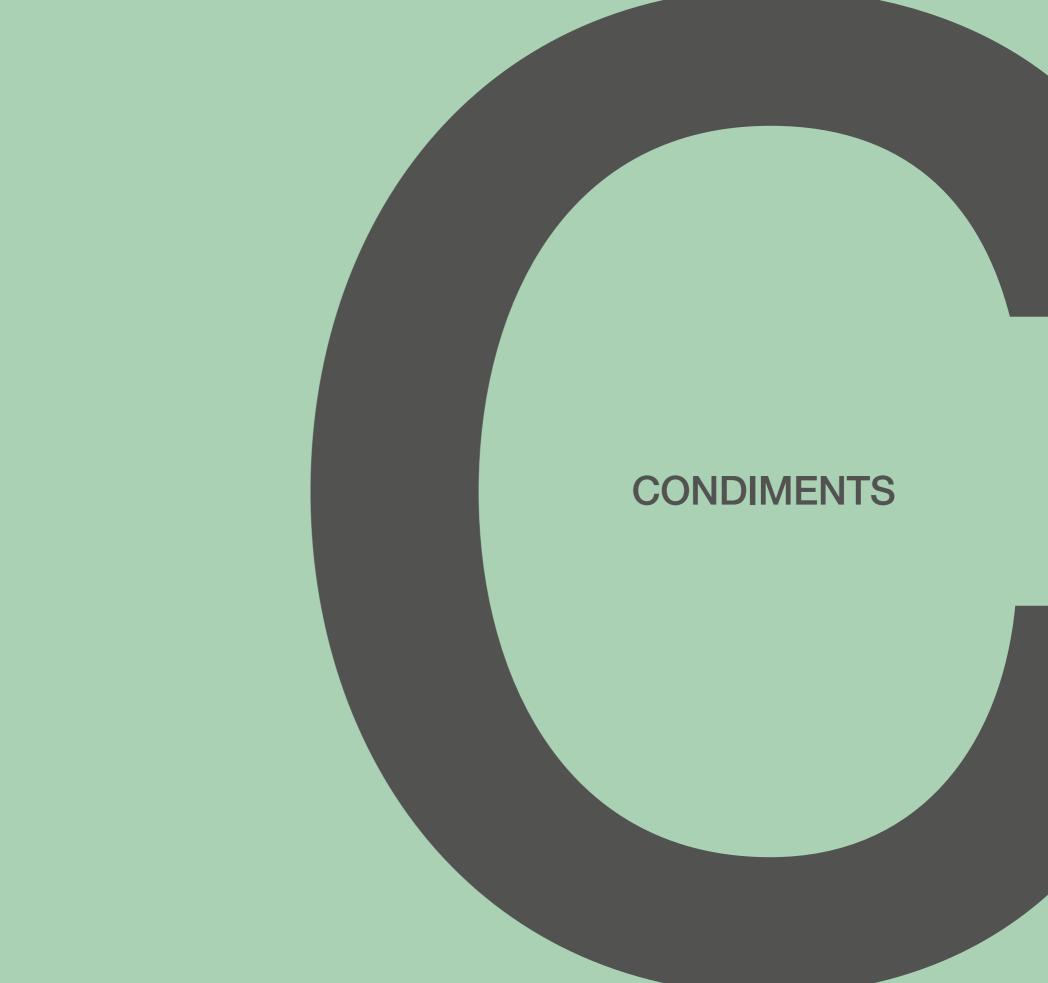
Cut the rectangle in 8 squares of 9 x 9 cm. Leave the squares to rise following the recipe on page 252.

Scoop 8 piles of pastry cream, each with a diameter of 5 cm, into a plate or baking sheet and put in the freezer.

In a bowl, mix the egg and milk. Brush the top of the risen dough squares with this egg glaze and put a frozen disk of pastry cream on top. Lightly press.

Bake the Danishes following the recipe on page 252, until they're golden brown and crispy. Leave to cool on a rack.

Fill up the dimples of the Danishes with fruit compote and decorate with fresh fruit. Serve at room temperature.



Pickled shallot

Pickled red onion and cucumber with sumac

makes about 200 g preparation: 15 minutes waiting: 3 hours

Ingredients

100 g quick pickle (see page 322)20 g beetroot juice (ready made, or use the beetroot juice from page 312)200 g shallots, in thin rings

Bring the brine and beetroot juice to a simmer in a saucepan. Pour this mixture over the shallots in a heat-resistant bowl and leave to cool in the fridge. makes about 300 g preparation: 15 minutes waiting: 2 hours

Ingredients

200 g cucumber, thinly sliced 120 g red onions, in thin rings 10 g sumac 10 g sushi vinegar (see page 335) 10 g organic vinegar

Mix all the ingredients well in a bowl. Leave to rest for 2 hours and stir every 30 minutes.

Coleslaw

makes about 500 g preparation: 15 minutes waiting: 20 minutes

Ingredients

250 g white cabbage, thinly sliced 100 g carrot, thinly sliced 35 g shallot, thinly sliced 50 g mayo de luxe (see page 334) 20 g sushi vinegar (see page 335) 8 g lemon juice 5 g salt

Mix all the ingredients in a bowl and leave to rest for at least 20 minutes.

Kosho

makes about 50 g preparation: 20 minutes

Ingredients

20 g chilli peppers of your choice, finely chopped 20 g grated zest of 7–8 citrus fruit of your choice 10 g salt

Mix all the ingredients in a pestle and grind to a puree.

You can use the kosho straight away but you could also leave it to ferment at room temperature for 3 months in order for the taste to develop more. Put in the fridge as soon as it reaches your desired taste.







Sandwich with smoked beetroot

Kimchi hotdog

makes 1

preparation: 10 minutes

Ingredients

2 slices potato brioche (see page 188)

60 g beurre blanc spread (see page 338)

90 g fermented smoked beetroots (see page 312), sliced

10 g hazelnuts, roasted, roughly chopped

2 leaves butter lettuce

5 g mixed chives and chervil

5 g lemon juice

5 g olive oil

15 g Parmesan cheese, grated

pepper

butter, for frying

Heat some butter in a frying pan and fry the brioche until both sides are golden brown. Leave to cool a bit.

Spread the beurre blanc over both slices of brioche and add the beetroot, hazelnuts, lettuce, chives and chervil. Finish with lemon juice and olive oil and sprinkle with parmesan and some pepper. Put the other slice of brioche on top.

makes 1

preparation: 15 minutes

Ingredients

1 hotdog (see page 308)

1 portion of tamago (see page 318)

1 hotdog bun (see page 191)

60 g fried kimchi (see page 328)

10 g fried onions (see page 317)

10 g coriander and basil leaves

mayo de luxe (see page 334) and mustard

(see page 335), to taste

neutral oil, for frying

Heat some oil in a frying pan and fry the hotdog until brown on all sides. Heat the tamago in the same pan.

Cut open the hotdog bun and put it in the pan, cut side down. Roast until the cut sides are golden brown.

Fill the hotdog bun with the kimchi, tamago, hotdog and zigzag over the mayo de luxe and mustard.

Sprinkle with the fried onions, coriander and basil.