

WHAT IS SALT?

The secret behind that *zing!* can be explained by some basic chemistry. Salt is a mineral: sodium chloride. It's one of several dozen essential nutrients without which we cannot survive. The human body can't store much salt, so we need to consume it regularly in order to be able to carry out basic biological processes, such as maintaining proper blood pressure and water distribution in the body, delivering nutrients to and from cells, nerve transmission, and muscle movement. In fact, we're hardwired to crave salt to ensure we get enough of it. The lucky consequence of this is that salt makes almost everything taste better to us, so it's hardly a chore to add it to our food. In fact, by enhancing flavour, salt increases the pleasure we experience as we eat.

All salt comes from the ocean, be it the Atlantic or a long-forgotten sea like the giant prehistoric Lake Minchin of Bolivia, home of the earth's largest salt flat. Salt that is left behind when seawater evaporates is *sea salt*, whereas *rock salt* is mined from ancient lakes and seas, some of which now lie far underground.

The primary role that salt plays in cooking is to amplify flavour. Though salt also affects texture and helps modify other flavours, nearly every decision you'll make about salt will involve enhancing and deepening flavour.

Does this mean you should simply use *more* salt? No. It means use salt *better*. Add it in the right amount, at the right time, in the right form. A smaller amount of salt applied while cooking will often do more to improve flavour than a larger amount added at the table. And unless you have been specifically told by your doctor to limit your salt consumption, you can relax about your sodium intake from homecooked food. When students balk at the palmfuls of salt I add to pots of water for boiling vegetables, I gently point out that most of the salt will end up going down the drain with the cooking water. In almost every case, anything you cook for yourself at home is more nutritious, and lower in sodium, than processed, prepared, or restaurant food.

SALT AND FLAVOUR

James Beard, the father of modern American cookery, once asked, “Where would we be without salt?” I know the answer: adrift in a sea of blandness. If only one lesson from this book stays with you, let it be this: *Salt has a greater impact on flavour than any other ingredient.* Learn to use it well, and your food will taste good.

Salt’s relationship to flavour is multidimensional: it has its own particular taste, and it enhances the flavour of *other* ingredients. Used properly, salt minimises bitterness, balances out sweetness, and enhances aromas, heightening our experience of eating. Imagine taking a bite of a rich espresso brownie sprinkled with flaky sea salt. Besides providing the delightful experience of its delicate flakes crunching on the tongue, the salt minimises the espresso’s bitterness, intensifies the flavour of the chocolate, and offers a welcome savoury contrast to the sugar’s sweetness.

The Flavour of Salt

Salt should taste clean, free of any unpleasant flavours. Start by tasting it all on its own. Dip your finger into your salt cellar and let a few grains dissolve on your tongue. What do they taste like? Hopefully like the summer sea.

Types of Salt

Chefs all have their saline allegiances and will offer lengthy, impassioned arguments about why one variety of salt is superior to another. But honestly, what matters most is that you’re familiar with whichever salt you use. Is it coarse or fine? How long does it take to dissolve in a pot of boiling water? How much does it take to make a roast chicken taste just right? If you add your salt to a batch of cookie dough, will it melt away or make itself known, announcing its presence with a pleasant crunch?

Though all salt crystals are produced by evaporating water from saltwater brine, the

pace of evaporation will determine the shape those crystals take. Rock salts are mined by flooding salt deposits with water and then rapidly evaporating that water from the resulting brine. Refined sea salt is similarly produced through the rapid evaporation of seawater. When formed as a result of rapid evaporation in a closed container, salt crystals become small, dense cubes—granular salt. On the other hand, salt produced slowly through solar methods at the surface of an open container will crystallise into light, hollow flakes. If water splashes into the hollow of the flake before it's scooped off the surface, it will sink into the brine and transform into a large, dense crystal. This is unrefined, or minimally processed, sea salt.

These varying shapes and sizes can make a big difference in your cooking. A tablespoon of fine salt will pack more tightly, and can be two or three times “saltier” than a tablespoon of coarser salt. This is why it makes sense to measure salts by weight rather than by volume. Better yet, learn to salt to taste.

Table Salt

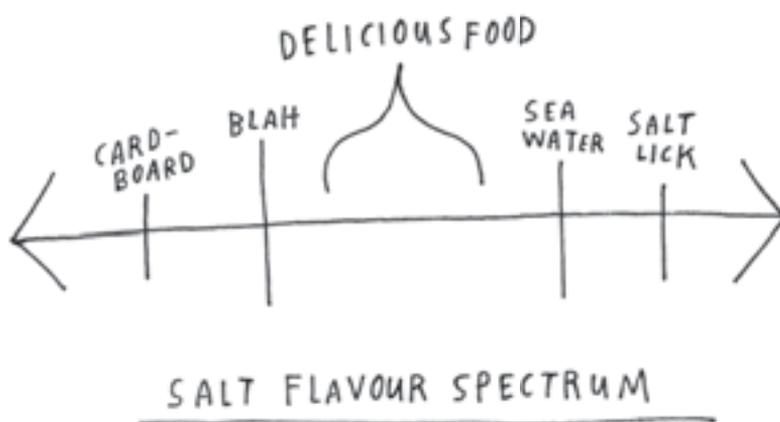
Common table salt, or granular salt, is found in salt shakers everywhere. Shake some out into your palm and its distinct cubic shape—the result of crystallising in a closed vacuum chamber—will be apparent. Table salt is small and dense, making it very salty. Unless otherwise noted, iodine has been added to it.

I don't recommend using iodised salt as it makes everything taste slightly metallic. In 1924, when iodine deficiency was a common health problem, Morton Salt began iodising salt to help prevent goitres, leading to great strides in public health. These days, we can get sufficient amounts of iodine from natural sources. As long as your diet is diverse and full of iodine-rich foods such as seafood and dairy, there's no need to suffer through metallic-tasting food.

Table salt also often contains anticaking agents to prevent clumps from forming, or dextrose, a form of sugar, to stabilise the iodine. Though neither of these additives is harmful, there's no reason to add them to your food. The only thing you should be adding to your food when you're salting it is salt! This is one of the few times I'll insist on anything in this book: if you've got only table salt at home, go get yourself some kosher or sea salt right away.

Seasoning

Anything that heightens flavour is a **seasoning**, but the term generally refers to salt since it's the most powerful flavour enhancer and modifier. If food isn't salted properly, no amount of fancy cooking techniques or garnishes will make up for it. Without salt, unpleasant tastes are more perceptible and pleasant ones less so. Though in general the absence of salt in food is deeply regrettable, its overt presence is equally unwelcome: food shouldn't be *salty*, it should be *salted*.



Salting isn't something to do once and then check off your list; be constantly aware of how a dish tastes *as it cooks*, and how you want it to taste at the table. At San Francisco's legendary Zuni Café, chef Judy Rodgers often told her cooks that a dish might need "seven more grains of salt." Sometimes it really is that subtle; just seven grains can mean the difference between satisfactory and sublime. Other times, your polenta might require a handful. The only way to know is to taste and adjust.

Tasting and adjusting—over and over again as you add ingredients and they transform throughout the cooking process—will yield the most flavourful food. Getting the seasoning right is about getting it right at every level—bite, component, dish, and meal. This is **seasoning food from within**.

On the global spectrum of salt use, there's a range, rather than a single point, of proper seasoning. Some cultures use less salt; others use more. Tuscans don't add salt to their bread but more than make up for it with the copious handfuls they add to everything else. The French salt baguettes and *pain au levain* perfectly, in turn seasoning everything else a little more conservatively.

In Japan, steamed rice is left unseasoned to act as the foil for the flavourful fishes, meats, curries, and pickles served alongside it. In India, *biryani*, a flavourful rice dish layered with vegetables, meat, spices, and eggs, is never left unsalted. There is no universal rule other than that salt use must be carefully considered at every point in the cooking process. This is seasoning to taste.

When food tastes flat, the most common culprit is underseasoning. If you're not sure salt will fix the problem, take a spoonful or small bite and sprinkle it with a little salt, then taste again. If something shifts and you sense the *zing!*, then go ahead and add salt to the entire batch. Your palate will become more discerning with this sort of thoughtful cooking and tasting. Like a jazz musician's ear, with use it will grow more sensitive, more refined, and more skilled at improvisation.

Eggs

Eggs absorb salt easily. As they do, it helps their proteins come together at a lower temperature, which decreases cooking time. The more quickly the proteins set, the less of a chance they will have to expel water they contain. The more water the eggs retain as they cook, the more moist and tender their final texture will be. Add a pinch of salt to eggs destined for scrambling, omelettes, custards, or frittatas before cooking. Lightly season water for poaching eggs. Season eggs cooked in the shell or fried in a pan just before serving.

Vegetables, Fruits, and Fungi

Most vegetables and fruit cells contain an undigestible carbohydrate called **pectin**. Soften the pectin through ripening or applying heat, and you will soften the fruit or vegetable, making it more tender, and often more delicious, to eat. Salt assists in weakening pectin.

When in doubt, salt vegetables before you cook them. Toss vegetables with salt and olive oil for roasting. Salt blanching water generously before adding vegetables. Add salt into the pan along with the vegetables for sautéing. Season vegetables with large, watery cells—tomatoes, courgettes, and aubergines, for example—in advance of grilling or roasting to allow salt the time to do its work. During this time, osmosis will also cause some water loss, so pat the vegetables dry before cooking. Because salt will continue to draw water out of vegetables and fruits and eventually make them rubbery, be wary of salting them *too* early—usually 15 minutes before cooking is sufficient.

While mushrooms don't contain pectin, they are about 80 percent water, which they will begin to release when salted. In order to preserve the texture of mushrooms, wait to add salt until they've just begun to brown in the pan.

Legumes and Grains

Tough beans: a kitchen fiasco so common it's become an idiom. If there's one way to permanently turn people off of legumes, it's serving them undercooked, bland beans that are hard to eat. Contrary to popular belief, salt does not toughen dried beans. In fact, by facilitating the weakening of pectins contained in their cell walls, salt affects beans in the same way it affects vegetables: it softens them. In order to flavour dried beans from within, add salt when you soak them or when you begin to cook them, whichever comes first.

Legumes and grains are dried seeds—the parts of a plant that ensure survival from one season to the next. They've evolved tough exterior shells for protection, and require long, gentle cooking in water to absorb enough water to become tender. The most common

reason for tough beans and grains, then, is undercooking. The solution for most: keep simmering! (Other variables that can lead to tough beans include using old or improperly stored beans, cooking with hard water, and acidic conditions.) Since a long cooking time gives salt a chance to diffuse evenly throughout, the water for boiling grains such as rice, farro, or quinoa can be salted less aggressively than the water for blanching vegetables. In preparations where all of the cooking water will be absorbed, and hence all of the salt, be particularly careful not to overseason.

Doughs and Batters

The first paid job I had in the kitchen at Chez Panisse was called Pasta/Lettuce. I spent about a year washing lettuces and making every kind of pasta dough imaginable. I'd also start the pizza dough every morning, adding yeast, water, and flour into the bowl of the gigantic stand mixer and tending to it throughout the day. Once the water and flour brought the dormant yeast back to life, I'd add more flour and salt. Then, after kneading and proofing, I'd finish the dough by adding in some olive oil. One day, when it was time to add the flour and salt, I realised the salt bin was empty. I didn't have the time right then to go down to the storage shed to get another bag of salt, so I figured I'd just wait to add the salt at the end, along with the oil. As I kneaded the dough, I noticed that it came together much more quickly than usual, but I didn't really give it a second thought. When I returned a couple of hours later to finish the dough, something unbelievable happened. I turned on the machine and let it deflate and knead the dough, like I always did, and then I added the salt. As it dissolved into the dough, I could actually *see* the machine begin to strain. The salt was making the dough tougher—the difference was remarkable! I had no idea what was happening. I was worried that I'd done something terribly wrong.

It was no big deal. It turns out that the dough tightened immediately because salt aids in strengthening **gluten**, the protein that makes dough chewy and elastic. As soon as I allowed the dough to rest, the gluten relaxed, and the pizzas that night emerged from the oven as delicious as always.

Salt can take a while to dissolve in foods that are low in water, so add it to bread dough early. Leave it out of Italian pasta dough altogether, allowing the salted water to do the work of seasoning as it cooks. Add it early to ramen and udon doughs to strengthen their gluten, as this will result in the desired chewiness. Add salt later to batters and doughs for cakes, pancakes, and delicate pastries to keep them tender, but make sure to whisk these mixes thoroughly so that the salt is evenly distributed before cooking.

USING SALT

The British food writer Elizabeth David once said, “I do not even bother with a salt spoon. I am not able to see what is unmannerly or wrong with putting one’s fingers into the salt.” I agree. Get rid of the shaker, dump the salt in a bowl, and start using your fingers to season your food. You should be able to fit all five fingers into your salt bowl and easily grab a palmful of salt. This important—but often unsaid—rule of good cooking is so routine for professional cooks that when working in an unfamiliar kitchen, we instinctively hunt for containers to use as salt bowls. When pressed, I’ve even used coconut shells to hold salt. I once taught a class at the national cooking school in Cuba: the state-run kitchen was so barren that I ended up sawing plastic water bottles in half to use for holding salt and other garnishes. It got the job done.

Measuring Salt

Abandoning precise measurements when using salt requires an initial leap of faith. When I was first learning how to cook, I always wondered how I’d know when I’d added enough. I wondered how I’d avoid using way too much. It was discombobulating. And the only way to know how much salt to use was to add it incrementally and taste with each addition. I had to get to know my salt. With time, I learned that a huge pot of pasta water required three handfuls to start. I figured out that when I seasoned chickens for the spit, it should look like a light snowstorm had fallen over the butchering table. It was only with repetition and practice that I found these landmarks. I also found a few exceptions: certain pastry, brine, and sausage recipes where all of the ingredients are precisely weighed out don’t need constant adjusting. But I still salt every other thing I cook to taste.

The next time you’re seasoning a pork loin for roasting, pay attention to how much you use, and then take a moment when you take your first bite to consider if you got the seasoning right. If so, commit to memory the way the salt looked on the surface of the

meat. If not, make a mental note to increase or decrease the amount of salt next time. You already possess the very best tool for evaluating how much salt to use—a tongue. Conditions in the kitchen are rarely, if ever, identical twice. Since we don't use the same pot every time, or the same amount of water, the same size chicken or number of carrots, measurements can be tricky. Instead, rely on your tongue, and taste at every point along the way. With time, you'll learn to use other senses to gauge how much salt to use—touch, sight, and common sense can be just as important as taste. The late, great Marcella Hazan, who authored the indispensable *Essentials of Classic Italian Cooking*, could tell when a dish needed more salt by simply smelling it!

My general ratios for measuring salt are simple: 1 percent salt by weight for meats, vegetables, and grains, and 2 percent salinity for water for blanching vegetables and pasta. To see what these numbers translate to by volume for various salts, take a look at the chart on the next page. If using the amounts of salt I prescribe terrifies you, try a little experiment: set up two pots of water, and season one as you normally would. Season the other to 2 percent salinity, and note what it feels and looks like to use that much salt. Cook half of your green beans, broccoli, asparagus, or pasta in each pot of water, and compare the flavour when you eat them. I suspect the taste test will be enough to convince you to trust me.

Consider these ratios a starting point. Soon—maybe just after one or two pots of pasta—you'll be able to judge how much salt is enough by trusting the way the grains feel as they fall from your palm and whether or not, upon tasting, you're transported to the sea.

CHOOSING TOOLS

Use this list to help you choose the right tool for every task.

Serrated Knife vs. Chef's Knife vs. Paring Knife

There are only a few proper uses for a serrated knife: slicing bread, tomatoes, and layer cakes. For everything else, use a chef's knife—the sharper the better. Use a paring knife whenever a task requires precision.

Wooden Spoon vs. Metal Spoon vs. Rubber Spatula

Stir cooking foods with a wooden spoon, which is soft enough to avoid damaging the pan but strong enough to scrape off all the browned bits that might stick to the bottom. A metal spoon is ideal for browning ground meat for chilli or *ragù*—you can use the edge to break up the pieces. Use a rubber spatula any time you need to scrape every last drop out of the bowl or pan.

Frying Pan vs. Cast Iron Casserole

Use a frying pan for searing, sautéing, or any cooking method where the goal is to brown foods quickly. Use a cast iron casserole, with its taller sides, to entrap steam and encourage tough foods to become tender. As it's deep enough to keep oil from bubbling over, the casserole is also great for deep-frying.

Baking Sheet vs. Bowl

A baking sheet lined with parchment paper is the ideal landing pad for blanched vegetables, browned meats, cooked grains, or anything else that needs to cool off quickly without overcooking. When roasting vegetables, croutons, or anything else, toss them together with oil and salt in a bowl to ensure even coverage, and then lay them out on a baking sheet.

CHOOSING INGREDIENTS

A Note on Salt

I've got a lot to say about salt. So much, in fact, that I wrote an entire chapter on it. While I recommend reading the Salt chapter before heading into the kitchen with these recipes, I certainly understand if you can't help yourself.

If you get to a recipe that doesn't specify the type or amount of salt to use, use what you've got on hand (unless it's iodised table salt, in which case you should throw it out and head straight to the store to buy kosher or sea salt). Start with a pinch or two of salt, then taste early and often in the cooking process to get where you want to go, adjusting the seasoning along the way.

Refer to the **Salting Guidelines** on page 43 to see just how much the weight (and saltiness!) of a single tablespoon of salt will vary depending on the type. Hint: it's a lot. For this reason, I encourage you to start with my guidelines as your benchmarks until you get a feel of how much salt it takes to properly season various foods. I've tested these recipes with both Diamond Crystal brand kosher salt (the red box) and fine sea salt from the grocery store. We can get Diamond Crystal online and Morton's on Amazon. Morton brand kosher salt (the blue box) is almost twice as salty by volume, so if you're cooking with that, use *half as much* kosher salt as the recipes indicate.

Where Not to Skimp

Most of the recipes that follow call for ingredients that can be found in any grocery store. But I splurge on a few items, and I suggest you do too. Good cooking starts with good ingredients. You'll thank me when you're sitting down to the most delicious dinner you've ever cooked.

Buy the best you can afford

- Extra-virgin Olive Oil, pressed in the last calendar year
- Whole chunks of Parmigiano-Reggiano from Italy
- Chocolate and Cocoa Powder

Buy whole and prepare yourself

- Pick and chop **fresh herbs** (and always use Italian or flat-leaf parsley).
- Juice **lemons** and **limes**
- Peel, chop, and pound **garlic**
- Grind **spices**
- Soak, rinse, fillet, and chop **salt-packed anchovies**
- Make **chicken stock** when you can (see page 271 for a recipe). Or buy fresh or frozen stock from your butcher, rather than the boxed or canned stuff (it never tastes as good). Failing that, use water.

For more details about selecting ingredients, flip a few pages back to **What to Cook?**

How to Turn Garlic into a Smooth Paste



1. PEEL A CLOVE OR TWO
AND REMOVE
THE GREEN STEM



2. SLICE
THINLY



3. CHOP
FINELY

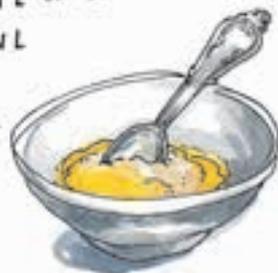


4.
ADD A PINCH
OF SALT TO
CREATE FRICTION

5. USE THE
BLADE OF YOUR
KNIFE TO SMEAR
THE GARLIC AGAINST
THE CUTTING BOARD UNTIL
IT BREAKS DOWN INTO
A SMOOTH PASTE



6. IF NOT USING IT
IMMEDIATELY, PUT THE
GARLIC PASTE INTO
A SMALL BOWL
AND COVER
WITH OLIVE OIL
TO KEEP
FROM
OXIDIZING



Apple and Frangipane Tart

Makes one 35cm tart

For the Frangipane

- 115g almonds, toasted
- 3 tablespoons sugar
- 25g marzipan
- 55g unsalted butter at room temperature
- 1 large egg
- 1 teaspoon kosher salt or ½ teaspoon fine sea salt
- ½ teaspoon vanilla extract
- ½ teaspoon almond extract

For the Tart

- 1 recipe **Aaron's Tart Dough** (page 395), chilled
- Flour for rolling
- 6 tart, crunchy apples such as Honeycrisp, Sierra Beauty, or Pink Lady
- Double cream
- Sugar for sprinkling

To make the frangipane, place the almonds and sugar in a food processor and grind until very fine. Add the marzipan, butter, egg, salt, vanilla, and almond extract and mix until you have a smooth paste.

Flip a rimmed baking sheet upside down and place a piece of parchment paper on top (it'll be easier to shape and fold the tart without the rim of the tin getting in the way). Set aside.

Before unwrapping the dough, roll the disc on its edge on the worktop to form it into a uniform circle. Unwrap the dough and sprinkle the worktop, the rolling pin, and the dough with flour to prevent sticking. Working quickly, roll the dough out into a 35cm circle, to a thickness of about 3mm.

To roll the dough into a circle more easily, turn the dough a quarter turn with every roll. If the dough does begin to stick, lift it carefully from the worktop and use more flour as needed.

Roll the dough onto the rolling pin, and gingerly pick it up off the worktop. Carefully unroll it onto the upside-down, parchment-lined baking sheet. Refrigerate for 20 minutes.

In the meantime, work on the fruit. Peel, core, and cut the apples into 5mm slices. Taste a slice. If the apples are really tart, place them in a large bowl, sprinkle them with 1 to 2 tablespoons of sugar, and toss to coat.

Use a rubber or offset spatula to spread a 3mm thick layer of frangipane all over the surface of the chilled dough, leaving the outer 5cm uncovered.

Layer the apples onto the frangipane, making sure there is plenty of overlap. As the fruit cooks it will shrink and you don't want to end up with any naked parts on your tart. To make a herringbone design, lay two rows of apple slices at a 45-degree angle (make sure they are all pointing the same way), then reverse the angle of the next two rows to 135 degrees. Continue the pattern until the dough is covered in fruit. Use two different colours of fruits for a particularly visually striking tart. Green and purple plums, poached quince, or pears poached in red or white wine can also offer beautiful colours for you to work with. (If using more than one colour, the pattern becomes 45 degrees colour A, 45 degrees colour B, 135 degrees colour B, 135 degrees colour A to achieve stripes.)

To create a pleated crust, fold the outer dough up and over itself at 4cm-ish intervals while rotating the tart. With each pleat, crimp the dough tightly and push it up against the outer circle of fruit. For a more rustic look, simply fold the dough over the fruit at regular intervals. Leaving it on the parchment paper, return the tart to the baking sheet, now on the top side, and refrigerate for 20 minutes.

Preheat the oven to 220°C, and set a rack to the middle position of the oven. Just before baking, brush the crust generously with double cream and sprinkle generously with sugar. Sprinkle some sugar onto the fruit as well. (Brush savoury tarts with a lightly whisked egg and omit the sugar. When working with very juicy fruits, such as rhubarb or apricots, bake the tart for 15 minutes before sprinkling the fruit with sugar, which will encourage osmosis and cause it to weep. Give the crust a head start so it can stand up to the fruit.)

Bake on the middle rack of the oven at 220°C for 20 minutes. Then reduce the heat to 200°C for another 15 to 20 minutes. Then reduce the heat to 180 to 190°C (based on how dark the crust is) and cook until done, about another 20 minutes. Rotate the tart as it bakes to ensure even browning. If the crust browns too quickly, loosely place a piece of parchment paper over the tart and continue baking.

The tart will be done when the fruit is tender, the crust is a deep, golden brown, and you can stick a paring knife under the tart and lift it off the pan with ease. The underside should also be golden-hued.

Remove from the oven and allow to cool on a wire rack for 45 minutes before slicing. Serve warm or cooled, with ice cream, **Scented Cream** (page 422), or **crème fraîche** (page 113).

Cover and refrigerate unused frangipane for up to 1 week. Keep any uneaten tart wrapped at room temperature, for up to 1 day.

Variations

- 🍷 When working with really juicy fruits, such as apricots, rhubarb, berries, peaches, or plums, sprinkle a little **Magic Dust** over the frangipane to help absorb the juices and prevent a soggy crust. To make the Magic Dust, simply combine 2 tablespoons each toasted almonds, sugar, and flour in a food processor and grind into a fine dust. Use 4 to 6 tablespoons Magic Dust per juicy tart.
- 🍷 For savoury tarts, sprinkle about 2 tablespoons flour onto the rolled dough, and then spread on drained, cooled **Caramelised Onions** (page 254), or Parmesan, or both, to create a similar protective layer.
- 🍷 For tarts made with precooked ingredients, such as roasted potatoes, radicchio, or butternut squash, adjust the baking time to 20 minutes at 220°C, plus 15 minutes at 200°C. Then check the tart for doneness, and continue baking at 180°C if necessary until the crust is golden brown and you can stick a paring knife under the tart and lift it off the pan with ease.