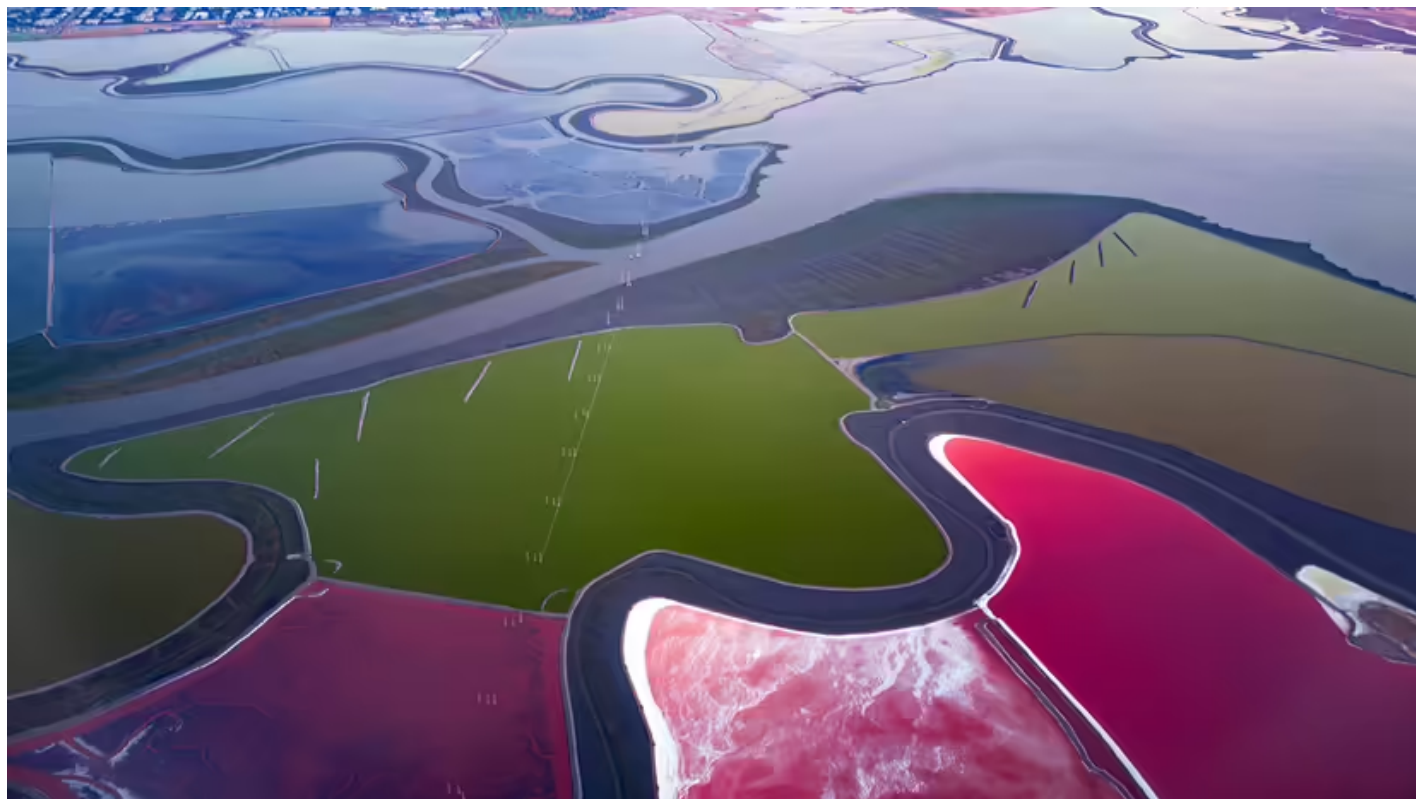


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All Salt Is Not the Same

By: [Shaun Chavis](#)



This aerial view shows the multicolored salt ponds at the southern end of Silicon Valley, in the town of Fremont, California. [SMITH COLLECTION/GADO/GETTY IMAGES](#)

Most of us use it every day without even thinking twice about it. We're talking about [salt](#). Chemically, salt is NaCl. But walk into a spice store and you'll see there's a lot of variety in NaCl: Online retailer and New York's famous spice store [Kalustyan's](#), for instance, has more than 80 varieties of sea salt alone. What makes them all different?

A lot of things. First, just like *terroir* makes a difference in how [wine tastes](#), place and source explain why salts have different flavors and colors — and uses. So, just like all

wine is fruity (it comes from grapes, after all), all salt is salty, but there's more to the way we perceive what we eat than that.

"The key components of flavor are taste, aroma, mouthfeel (e.g., texture + temperature), and what we term in 'The Flavor Bible' as the 'X Factor,'" Karen Page, author of "[The Flavor Bible](#)," said in an email. Her book (she co-authored it with Andrew Dornenburg) is a go-to index that helps chefs and other culinary professionals pair ingredients in dishes and meals.

Salts of the World

Salt comes from all over the world and is either mined or evaporated from seas, oceans and salt lakes.

Table salt — perhaps the most common variety — is also the most processed. It's mined, and either brought up as rocks (rock salt) or dissolved underground and then evaporated later. Table salt is treated to have fine grains and avoid caking. It's also often fortified with iodine, a chemical our bodies don't make that's essential for proper thyroid function.

But many food lovers skip table salt; some because they think the taste is altered by iodine and prefer kosher salt or sea salt. Kosher salt doesn't have any additives, and its name comes from the fact that it meets Jewish dietary guidelines. Kosher salt is also coarser than table salt.

There's a wide variety of sea salt, and flavors of salt vary based on where the saltwater is. Most grocery store sea salt is evaporated through man-made means, instead of naturally. But more expensive sea salts come from shallow pits or pans of sea salt that are allowed to evaporate naturally, and the salt crystals are harvested. Salt from the top of the pans is usually white and neutral in flavor, such as "*fleur de sel*," or flower of the salt.

Salt from the bottom of the pans usually has some color and more nuanced flavor picked up from the pan, such as "*sel gris*," or gray sea salt. Sea salt produced via natural

evaporation can have a variety of textures. **Maldon Sea Salt**, which comes from England's east coast, is known for its wide, flat, fragile, crunchy flake.

Mined salt also can have different colors and flavors based on where it comes from. For example, Himalayan pink salt comes from the **Khewra salt mine** in Pakistan, the second largest salt mine in the world, and one of the oldest (it's believed that Alexander the Great discovered Khewra salt mines in 320 B.C.E.). The pink color comes from traces of rust in the salt.



Waterfalls carry saltwater down steep slopes at the Salineras de Maras salt evaporation pans, a working salt mine and popular tourist attraction in Cusco region, Peru.

ANNA GORIN/GETTY IMAGES

Size and Texture Matters

But, as author Page points out, there's more to salt's flavor than taste alone. "Texture is a key aspect of mouthfeel, which is often a function of the size of the salt grain," she said. "Very fine grains will 'melt' into a dish more easily, while crunchy, coarse grains will add texture to the dish. Think about how the coarse salt adds to the crunchiness and deliciousness of a hard pretzel."

The size of the salt grain also makes a difference in how the salt is used. Fine salt is more often used during the cooking process, while larger grain salt is sometimes used just before serving — what chefs call "finishing salt."

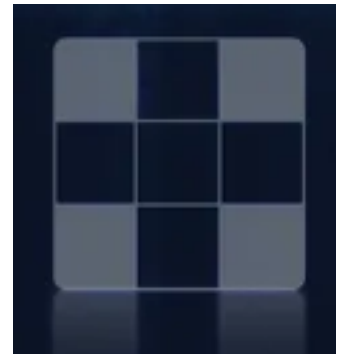
"Certain ingredients should be salted early on, while others should be salted later in the cooking process," Page said. "And some dishes should simply be finished with a sprinkling of salt before serving, allowing you to maximize both flavor and texture. Finishing salts are those whose flavor and texture are not enhanced via the cooking process and should be added at the very last minute to a dish."

Many cooks and chefs — including Page — keep a variety of salts on hand. Page and her co-author Andrew Dornenburg always have smoked salt in their pantry. "It's great to have both a [sea salt](#) and kosher salt on hand, plus a variety of finishing salts for different effects," she said. "Smoked salt is great as a finishing touch to Andrew's vegetarian split pea soup. Some vegetarian friends have turned it away, thinking there was ham in it! But it's just the salt adding its smoky savoriness to the soup."

Now That's Crazy

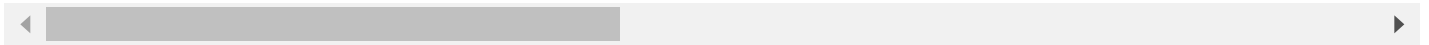
Scientists have discovered that there's more than sodium chloride in salt today. A study published in the [Journal of Environmental Science and Technology](#) led by Incheon University in South Korea and Greenpeace Asia evaluated 39 salt samples from 21 countries across five continents. The study found that 90 percent of the table salts were contaminated with microplastics.

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