

## Speaking Of Salt...

Posted by Chuckwagon on [March 30, 2015 at 22:24](#)

Does kosher salt taste better than table salt?

Interestingly, yes, it does. As kosher salt is pressed together by huge rollers, the grains become pyramid-shaped, allowing them to dissolve more easily so it does not linger on the tongue. It's made without additives, by compacting granular salt into larger flakes that tend to draw blood easily from freshly butchered meats. Kosher salt, at about seventy cents a pound, is ideal to cook with as it blends well, is clean tasting, and contains no additives to influence flavors of cooked foods.

How many times have you been tempted to leave out the "pinch" of salt called for in your favorite recipes just because we eat more than 25 times as much salt as is necessary to maintain good health? The fact remains, salt is a flavor enhancer that is just as important in sweet recipes as it is in savory dishes. In sausage making, it is an essential ingredient. Never tamper with the amount of salt given in a sausage-making recipe. It is critical in controlling bacteria, destroying possible spiralis trichinella, assists with binding, and assists with dropping the AW in fermented type sausages. Sweet recipes without salt, taste flat and boring. That little pinch of salt reinforces flavors such as butter and vanilla, and that's not all... it actually masks and suppresses bitter flavors like those of yeast, leavening agents, coffee, eggplant, bittersweet chocolate, vanilla, flour proteins, and many other foodstuffs we consume.

Salt is just salt, right? So why do so many people get excited over the simple seasoning? Although most of us are concerned with its application inside the kitchen, in today's world salt has more than 40,000 applications from manufacturing to medicine! The ancient Greeks traded salt for slaves, originating the phrase "not worth his salt". Roman soldiers were partially paid with garlic and salt, explaining the origin of the word salarium (Latin for salt) meaning salary. Salting fish made long-range explorations possible in the age of sailing ships.

Great chefs have always known the amount of salt in a recipe is important, but the type of salt is crucial. Most of us amateurs are familiar with common table salt (sodium chloride) in granulated form. Mined much the same as coal, rock salt is further processed using water to form small, uniformly shaped cubes. The problem with this type of salt is its inability to dissolve readily, leaving crystals lingering on the tongue. Perhaps you remember when iodine was added to common table salt to prevent medical problems as thyroid disease. Iodized salt is never used in sausage making or meat preservation as it alters the taste of the products.

Today's "trendy" salts are expensive in comparison to kosher salt and their flavors dissipate during cooking. Nevertheless, some folks purchase exotic salts for "finishing" (sprinkling on food) and it is not uncommon to see price tags in excess of thirty dollars per pound. Maldon Sea Salt is an English finishing salt receiving a delicate flavor from boiling sea water to produce hollow, pyramid-shaped crystals. At about eleven dollars a pound, it is light on the tongue and may actually be crushed between the fingers. France's Sel Gris is called "gray salt" and is made along the country's Atlantic coast when shallow basins are flooded with seawater before the month of May when the evaporation process begins and continues through September. Harvested by raking, it picks up its characteristic flavor from minerals in the clay of the basins. A refined by-product of Sel Gris is called Fleur de Sel (flower of salt). On calm, warm, days without wind, the gray Sel Gris "blooms", creating white, lacy, crystals of carefully hand-harvested finishing salt with a high price tag. Hawaiian Sea Salts are either black or red. The red salt

contains the distinct flavor iron, introduced by the soil used to color the substance. The black salt is flavored with purified lava and contains a flavor and aroma of sulfur.

Adding a pinch of salt to cream or egg whites will enable them to whip better, faster and higher. Improve the flavor of any fresh fowl by salt brining or simply rubbing the bird inside and out (beneath the skin) with salt before roasting. Safeguarding preserved foods, salt creates a hostile environment for certain microorganisms by altering osmotic pressure and dehydrating bacterial cells. Historically, meat has required upwards of 8% salt for its preservation. With the widespread use of Prague Powders (sodium nitrates and nitrites), salt levels are now reduced to less than a palatable three percent. As complete elimination of salt is not possible, it is most important to never reduce or increase the prescribed amount of salt in a sausage, ham, or bacon-making recipe, as salt serves as a binder and fine-tunes certain proteins in meat enabling them to hold water.

Salt is amazing! It's an excellent cleaning agent by itself or used in combination with other substances. A paste of salt and vinegar cleans tarnished brass or copper and strong salt brine poured down the kitchen sink prevents grease from collecting and helps eliminate odors. Salt and soda water will clean and sweeten the inside of your refrigerator without scratching the enamel. A thin paste of salt and salad oil removes white marks from wooden tables caused by hot dishes or water. In mild solutions, it makes an excellent mouthwash, throat gargle, or eyewash. It is an effective dentifrice, antiseptic, and it can be extremely helpful as a massage element to improve complexion. Rub your hands with salt and lemon juice to remove fish odors. Peeled apples, pears, and potatoes dropped in cold, lightly salted water, will retain their color. The stuff even helps destroy moths and drives away ants. Salt tossed on a grease fire on the stove or in the oven will smother flames. Remove bitterness from percolators and other coffee pots by filling them with water, adding four tablespoons of salt and percolating or boiling as usual.

Table Salt.....	1 cup.....	292 gr. ....	10.3 ounces
Morton (Kosher).....	1-1/2 cups.....	218 gr. ....	7.7 ounces
Diamond-Crystal (Kosher) .....	1 cup.....	142 gr. ....	5.0 ounces

Note that 1 cup of regular table salt weighs more than twice as much as 1 cup of Diamond Crystal (Kosher) salt.

There are 6 grams in ONE flat teaspoon of TABLE SALT.

1 oz. (28.3 gr.) = 1-1/2 Tblspns. (4-1/2 tspns.)

2 oz. (56.7 gr.) = 3 Tblspns. (9 tspns.)

½ cup = 146 gr. (.322 lb.) or (5.15 oz.)

1 cup = 292 gr. (.644 lb.) or (10.3 oz.)

Prague Powder (Instacure) – 1 ounce (28.3 gr.) = 2 tblspns.

1 ounce salt = 1-1/2 tblspns.

The ideal salt content for (fresh) sausage, is about 2 g. per 100 g. meat.

1 lb. salt = 1-1/2 cups

## How Salt Is Measured In Brine

If the salt in the sea could be removed and spread evenly over the Earth's land surface, it would form a layer more than 500 feet thick. Seawater averages 3.5% salt. When a cubic foot of seawater evaporates, it yields about 2.2 pounds of salt. In contrast, the fresh water in Lake Michigan contains only one one-

hundredth (0.01) of a pound of salt in a cubic foot. That's merely one sixth of an ounce. This means that seawater is 220 times saltier than the fresh lake water in Lake Michigan.

The salinity of saltwater is measured in parts per thousand and the symbol 0/00 (parts per thousand), is used. For instance, the salinity of the Dead Sea (the world's most salty endorheic body of water) is 30.4% or 304 0/00 meaning there are 304 pounds of salt in 1,000 pounds of its water. The level remains practically constant, unlike the Great Salt Lake in Utah where the water has a variable salt content between 8 and 27% or 270 0/00 in its heaviest concentration.

Why... my goodness, the water is so buoyant in that ol' lake that I've see horseshoes float on the surface!

## Using A Salinometer

The only way to produce unvarying and consistent hams or other brined products, is to use a salinometer to detect the exact amount of salt in a brine. There is no "universal" or common brine, but there are general, suggested strengths. A floating glass salinometer tube has a stem marked by degrees from 1 to 100. One degree indicates only 0.264% salt and merely 0.022 pounds of salt per gallon. At the far end of the scale, 100 degrees indicates 26.395% salt and 2.986 pounds of salt per gallon. To strengthen the brine, simply add salt. To weaken it, add more water.

There is an old conventional and generally accepted rule that recommends using enough brine water to equal fifty percent of the meat's weight. In other words, for a 12 pound ham, six pounds of brine water will suffice. This means the container must be a bit "snug" and perhaps even shaped like the product.

Some recommended strengths are:

Poultry 21° (salinometer) degrees –	8 hours
Ribs 50° (salinometer) degrees –	3 days
Bacon 50-65° (salinometer) degrees –	1.5 days per lb.
Canadian Bacon Loins 65° (salinometer) degrees –	5 days
Hams & Shoulders 70° (salinometer) degrees –	1 day per lb.
Fish 80° (salinometer) degrees –	2 hours

A U.S. gallon of fresh water weighs 8.33 pounds. The maximum amount of salt it can hold (under normal circumstances at 60°F. (15°C.) is 26.4% (called the "saturation point"). Thus, one gallon of saturated brine contains 2.64 lbs. of salt and weighs 10.03 pounds.

If you unearth a great recipe and wish to know the strength of the brine, find the percent of salt by weight in the solution by weighing the salt and adding the weight of the water. Multiply the sum by 100%. Locate the percentage on a "Salinometer Brine Tables Chart (on the internet or accompanying your salinometer purchase) in the center column – the percent of salt by weight. The corresponding left side column gives us the number of Salinometer DEGREES, and the right side column, the number of pounds of salt per gallon of water.

Yup Pard! Its just like meetin' a bear on a tightrope. There is just no getting around it! If you want consistent results with your meat products, you'll find the use of a salinometer is essential.

Hmmm.... Winchester 12 gauge salt loads! ... keeping kids off your lawn since 1886!

Best wishes,  
Chuckwagon