Salt is Salt - Or Is It?

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It began as a casual conversation with my wife as we drove to Goderich, Ontario to do some genealogical research into her father's family. Goderich is home to what is claimed to be the "world's largest salt mine" which extends two miles under Lake Huron and produces almost half of Canada's salt. The question had been gnawing at me for a while, and it seemed like an appropriate time to raise it.

Basically, I was wondering what the difference was between common table salt and sea salt. To me, having a Chemical Engineering background, salt was always just a compound composed of sodium and chloride ions linked together by an ionic bond. It also didn't seem to matter whether the salt came from a deposit in a salt mine or from sea water - salt is salt, right? Then, I started listening to what people were saying about all the virtues of sea salt compared to the less exotic common table salt.

Some people said that sea salt was better for me because it didn't have a much sodium in it. As a result, it wouldn't raise my blood pressure as much as table salt. Others said that table salt was "processed" and this had to have some sort of negative impact on it because, after all, processing has to be bad for anything. Still other sources said that there were additives in table salt, but there were no such additives in sea salt. There were even those that felt that the coarse crystals of sea salt made them better than table salt.

After a while, this all became rather mind-numbing. After digging into the subject and trying to mine some facts from all the information (pun totally intended), my confusion eased but did not disappear entirely.

The table salt from Goderich is produced using a relatively straight-forward process. Essentially, a solution of salt in water (which we know as brine) is sent through an evaporator unit that removes the water leaving crystals of salt behind. The resulting crystals are of very high purity, and there is nothing apparently mysterious about the evaporation process itself.

I already knew about the additives in table salt, and even did an article a year or so ago about sugar being in our salt. This didn't bother me at all, since the amount of sugar was so small as to be insignificant. It also was there to protect the iodine that was added to help prevent the formation of goiters. The anti-caking additive was not stressful to me either, and had no emotional effects that would raise my blood pressure.

As for the coarseness of the crystals, this seemed like a real non-issue, even though there can be something to be said for the more coarse texture when used with some foods. If desired, there are coarse crystals of table salt, or even pickling salt, available at the grocery store. Still, there seemed to be no real reasons for sea salt being the better choice over table salt.

Nutritionists to whom I spoke just shook their heads, rolled their eyes, and smiled, saying that the source of salt made no real difference to the body. This was borne out in an on-line article in "Fooducate" written by Claire Harrison entitled "Sea Salt vs Table Salt - The Truth".

In the "Fooducate" article and others, what seems to be the real difference between the two types of salts lies in the traces of various compounds that sea salt brings along for the ride- ones that are not found in table salt. Since the evaporation process for table salt creates such a high purity product, these compounds are not found in it. Some of the trace compounds which are not removed in the evaporation of sea water to make sea salt may give it a bit of flavour or colour. However, the sodium content is still essentially the same on a weight basis.

After checking all this out, I am still of the opinion that salt is indeed salt, but it's really up to you how you want to get it. So enjoy it - but do so in moderation.



Table Salt (on the left) and Sea Salt (on the right) have basically the same sodium content.