

Salt by Any Other Name...

By Ann Gerhardt, MD June 2018

Table salt, Kosher salt, pickling salt, sea salt, Himalayan salt – What's a consumer to choose? Since our natural affinity for salty foods bumped up against its demonization by the medical community, people have searched for a reasonable way to accommodate both.

Bottom Line at the Top: Consume the salt you like, in moderate amounts (unless for some medical reason you need more). Spend extra money on your salt for its esthetics or taste, not because one is any healthier than another.

What exactly is salt? Chemically speaking, a salt contains a positively charged and a negatively charged entity bound together to become electrically neutral. The salt that we add to food and is anathema to the American Heart Association is sodium chloride. Epsom salt, with which we soothe our feet or butt, is magnesium sulfate. Baking soda is a salt of sodium and bicarbonate.

For the non-chemistry world, salt is white table salt, or sodium chloride. Most commercial salt comes from salt mines around the world. The rock mineral form (halite) can be mined and ground up for salting roads. Or it can be leached from a salt deposit with water, producing a brine, which is dehydrated to recover salt.

Table salt may or may not have additives and impurities. Much of the table salt in the United States is 'iodized'. It contains iodine to prevent iodine deficiency goiter (swollen thyroid). Since the element iodine is negatively charged, it, too, must be in a chemically stable form of a potassium or sodium salt to be added to food. The U.S. Food and Drug Administration recommends 46-76 mg iodine per kilogram (one million mg) of salt. Labels usually say there are 45 mg iodine per kg

salt, but iodine salts may destabilize in high humidity, reducing iodine content over time. In any case, iodized salt's iodine content is extremely low.

Anti-caking agents are sometimes added to salt to adsorb moisture and keep it from clumping. Companies use a variety of manmade chemicals to do this. Adding rice to a salt shaker achieves the same purpose without the chemicals. As far as I know, none of the anti-caking chemicals have killed anyone.

Sea salt is popular now. People believe that it contains less salt, tastes better, is healthier, or all three. Sea salt is made by evaporating water from sea water. Once the salt concentration in an evaporating pool is very high, it can't stay in solution and crystallizes out. If you make it in a bucket, the crystals will contain other things in seawater, like calcium, magnesium and a little retained sea grunge. If a corporation harvests sea salt for large scale sale, those contaminants are washed out with brine or more seawater. Depending on how well the salt crystals are washed, they may be very close to 100% sodium chloride salt.

A sea salt purveyor might say their salt contains less salt for two reasons. The crystals may be coarse and not fit as neatly into a teaspoon as fine table salt particles do. Thus, *by volume*, there is less salt, but *my weight*, a gram of salt is still a gram of salt. Alternatively, there may be less sodium chloride if the salt hasn't been washed and retained minerals or sea grunge make up part of the weight. It's retained contaminants that might make it taste better or provide some extra nutritional minerals. However, if you believe that purified sea salt (minus contaminants) is healthier, the marketers have duped you well.

Pickling salt is pure sodium chloride - no iodine, no anti-caking substances, no sea contaminants. It's

actually what we think we are getting when we add ‘salt’ to food.

Kosher salt is also iodine-free but may have anti-caking material. It is called Kosher because it is used to Kosher meat – its coarse, large crystals make it perfect for drawing out moisture (and blood) from meat. Fancy cooks like it, because of the non-iodized taste and its large, visible crystals.

Himalayan salt comes from the Pakistan’s Punjab region, far from the Himalayas. Ancient seas in the area became land-locked and dried up, leaving behind deep salt mines. If it’s pink, it’s because the dried-up remains of a pink microorganism that lived in the sea millions of years ago haven’t been washed out.

There is no proof that Himalayan salt is any healthier than any other salt. Purveyors claim it is more pure than other salts, while also asserting that its health benefit and taste derive from the rich non-salt mineral content. Which is it – pure or a mixture of minerals? One double-speak website claims that Himalayan salt is healthy because it is 99 percent pure “sodium chloride, which is defined as a mineral substance of great importance to human and animal health.” Duh. Back to pickling salt, which is 100% sodium chloride.

Speaking of importance to health, many natural foods contain sodium, but usually in the form of salts other than sodium chloride. The American Heart Association equates salt with sodium and demonizes both. The scientific community continues to debate whether it is the sodium or the chloride which is unhealthy.

In any case our bodies can’t function without a normal amount of sodium. When levels are critically low, we have seizures and die. See my article about salt and health in the November 2010 issue of DrG’sMediSense:

http://www.healthychoicesformindandbody.org/MediSense_Articles/10111-How_Much_Salt.pdf ¶