

Yikes! There's Sugar in Our Salt

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While filling the salt shaker a few weeks ago, I happened to glance at the “Nutrition Facts” and ingredient line on the side of the box. Expecting to see only salt and iodine, it came as a bit of a shock to see two other ingredients listed there. Calcium silicate and sugar were the second and third ingredients positioned after salt and ahead of potassium iodide.

Iodine, as you may know, has been added to table salt in the more stable form of potassium iodide for over eighty years. Its purpose is to reduce the occurrence of goiters, which is a swelling in the thyroid gland caused by iodine deficiency. One quarter teaspoon of table salt (about 1.5 grams) contains 70% of our daily iodine requirement.

The presence of calcium silicate was not really surprising. It is used in very small amounts as an anti-caking agent to keep the salt free-flowing. Since it absorbs moisture from the air better than the salt itself, it prevents the salt crystals from sticking together in all but the most humid conditions.

What really piqued my curiosity was the inclusion of “sugar”. After doing a bit of research, it all started to make sense. The “sugar” is actually glucose which is one of the two simple sugars that make up sucrose, or table sugar (the other is fructose). Including only about four one-hundredths of a percent (i.e., 0.04%) of this additive protects or stabilizes the potassium iodide. If no glucose was present, the potassium iodide would eventually break down into its component parts - namely potassium and iodide ions. The iodide ions could then combine to form iodine that could actually vaporize and leave the salt.

When you really think about it, we often use certain additives to protect various attributes of our food. While Vitamin C is important for health reasons, it is frequently used to protect foods from reactions with oxygen in the air that can cause quality to deteriorate. If you are drying apples, you can prevent them from going brown by dipping them in lemon juice, which is rich in Vitamin C. If you are freezing fruits such as peaches, you can sprinkle a powdered form of Vitamin C on the slices to prevent browning. This browning is caused by the reaction of oxygen in the air with various naturally-occurring compounds in the fruit. When Vitamin C is present as an anti-oxidant, it reacts rapidly with the oxygen before the negative browning reactions can take place.

BHT (butylated hydroxytoluene) is an anti-oxidant that can be incorporated into packaging material to help prevent oxygen from getting to the package contents. This

is particularly important when the product contains fats or oils that may go rancid if allowed to come into contact with oxygen in the air.

Most of us like to see “clean” ingredient lines on the food products we purchase. This often means an absence of ingredients with strange chemical-sounding names which we consider to be unnecessary or of unknown importance.

In an ideal world, our foods would be completely natural, contain no additives or preservatives, and stay fresh forever. Unfortunately, this is not the case and there are certain trade-offs which must be made to maintain food safety and quality throughout the shelf-life of any product.

INGREDIENTS: SALT, CALCIUM SILICATE, SUGAR, POTASSIUM IODIDE.

Nutrition Facts	
Per 1/4 tsp (1.5 g)	
Amount	% Daily Value
Calories 0	
Fat 0 g	0 %
Sodium 570 mg	24 %
Carbohydrate 0 g	0 %
Protein 0 g	
Iodide	70 %

Not a significant source of saturated fat, trans fat, cholesterol, fibre, sugars, vitamin A, vitamin C, calcium or iron.

Sugar is third on the ingredient line of iodized table salt