

20 TREND INSIGHT 14 REPORT



THE SALT PROBLEM & THE TASTE SOLUTION

Too much salt is bad for us. But darn it — it tastes good! 16 food companies including Kraft, Heinz, Subway and Starbucks agreed to cut the amount of salt in their products as part of a national effort to reduce sodium consumption by 20%. They committed to the National Salt Reduction Initiative in response to increased focus on the high amount of salt in Americans' diets — 2.3 the recommended amount according to the Center for Disease Control.

SALT REDUCTION & TASTE PERCEPTION

“Salt, at the levels present in the diets of most people around the world, is probably the single most harmful substance in the food supply.” - Center for Science in the Public Interest

When surveyed, consumers seem to be on board the salt reduction train:

- 53% of U.S. adults are concerned about the amount of salt/sodium in their diet.
- 59% claim to usually or always limit sodium intake at home by cutting back on snacks and processed foods.

But, even with more than half of respondents voicing concerns about salt, many products with low sodium claims don't last on grocery store shelves. It's not a mystery why this train hasn't left the station: taste. People are reaching for what they like, rather than what is better for them. And people like the taste of salt.

“A large percentage of the global food industry remains wary of the

commercial impacts of reducing salt in their products,” says Chris Brockman, Mintel global food and drink analyst. “Consumers are concerned about salt intake, but are not willing to compromise on taste.



TECHNOLOGY TASTE SOLUTIONS

Two main ways companies have attempted to meet consumer demand for lower sodium with full flavor are gradual reductions in salt perception in their products, and by attempting to maintain the saltiness perception through alternative ingredients and technology solutions.

Robert Sobel, FONA's VP of Research, Quality & Innovation, researches and presents technical symposia on technology solutions for sodium reduction. Here he shares two methods for modifying taste perception of lower sodium products through technology.

1. Physical Structure

One possible route for salt reduction is to change the physical structure of the salt itself or the salted food; this can alter how the salt interacts with the tongue. One area that seems promising is the addition of tasteless, safe materials to the salt in order to allow for a smaller salt particle size without agglomeration of the salt during storage. These smaller particles dissolve more rapidly in saliva and are able to be sensed more rapidly and with greater initial intensity as a result.

2. Phantom Aromas

Another possibility is the use of phantom aromas — odors at or below the detection threshold — to enhance the perception of salty taste. This has been well-established for sweet taste, but has only recently been investigated

for saltiness. Research has shown that some odors, specifically sardine and ham, increased saltiness perception in a salt-free water solution. Sardine aroma was again found to enhance saltiness when it was applied in a more complex food matrix, a model cheese system. This increase has recently been shown to be dependent on salt concentration — meaning that products with low and moderate salt concentrations are more significantly enhanced by phantom aromas than those with more salt.



Read More!

Bob Sobel's complete white paper on taste modification for sodium reduction, including a look at umami compounds and plant salt substitutes, is available in the Resource Center on our website at bit.ly/1pHzR5n, or scan the QR code.



EXPERTISE YOU CAN TRUST

Let FONA's flavor and product development experts help you find the solution that works best for your particular product while working through the unique set of characteristics and challenges presented. We understand how to integrate the complexities of flavor with your brand development, technical requirements and regulatory needs to deliver a complete taste solution.

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at 630.578.8600 to request a flavor sample or visit www.fona.com.