

SODIUM REDUCTION SUCCESS & CHALLENGES

In 2009 the Baking Association of Canada assessed baseline sodium levels in pantry breads. Since the release of the report, the members of the Association have voluntarily reduced the sodium levels of white pantry breads by almost 11%, wheat pantry breads by almost 14% and are at the target level of Phase 2 for grain breads.

Bread Types	2009 (mg Na/100 g bread)	2013 (mg Na/100 g bread)	% change
White	506.7	452.7	10.7 ↓
Wheat	493.6	424.9	13.9 ↓
Whole Grain	386.9	380.4	1.0 ↓

In addition, white pantry bread sodium values in 2009 ranged between 418 and 648 mg per 100 grams. In 2013 the range of values was between 284 and 579 mg/100g. There are now a number of breads under 400 mg/100 g and none above 600 mg/100 g with similar shifts seen in the other categories.

CHALLENGES OF SODIUM REDUCTION

The industry has been working on voluntarily reducing sodium in baked products; however, a recent survey of members on their sodium reduction efforts identified a number of challenges. Results from the survey indicated that the most significant challenge is on product taste, texture and/or quality. Two concerns identified by members include the crumble quality of the bread and the shortened lifespan of the product resulting in earlier development of mould. Another issue is consumer acceptance; demonstrated by the introduction of new products with a low sodium that did not result in expected sales and were subsequently removed from the market. Most members have been reducing the sodium content gradually and without replacers in order to maintain a clean label.

A challenge in reducing sodium is that one solution does not fit the diverse offerings of styles of baked products. Sodium reduction strategies

need to address all the possible sources of sodium. The first step may be in the reduction of sodium chloride which can be done by identifying a minimum level of sodium chloride that has acceptable flavour and functionality. Once a salt level is established, other sources of sodium can be systematically reduced based on correlating the importance of a specific attribute as it relates to the specific sodium ingredient.

Although the task may be quite achievable, it may be accomplished at the compromise of ingredient cost, processing efficiency, organoleptic attributes and ultimately product shelf life. The extent to which some products are able to reduce the sodium content in order to meet Health Canada's guidance benchmark levels is unknown and requires further discussion.