Sodium Reduction: Tortillas Case Study



Summary

One of the UK's leading tortilla manufacturers reached out to Kudos Blends with the aim of reducing sodium in their products. Without the need for recipe reformulation, it was possible to drastically reduce sodium levels and maintain the same quality finished goods using one of our patented KODA[™] potassium bicarbonates.

We offer three grades with a particle size distribution developed specifically for the application. For tortillas and this case study, KODA[™] 50 was used. This grade of KODA[™] is best used in dough-based products to ensure full solubility and prevent any bicarbonate 'spotting'.

What KODA[™] 50 Can Do For You

- Reduce sodium in tortillas by up to 20% without compromising end-product texture and shape.
- Provide the same colour profile, blistering and rollability that customers expect.
- Provide a tortilla dough that is suitable for both tortilla presses and cutting.
- Replace sodium with the essential mineral potassium to improve the nutritional profileand prevent any bicarbonate 'spotting'.

Our KODA[™] technology is also available for applications such as cakes, cookies, crackers, crumpets, muffins, pancakes, doughnuts, premixes and many more. To find out more about how to improve the nutritional profile of your baked goods, contact our experts.

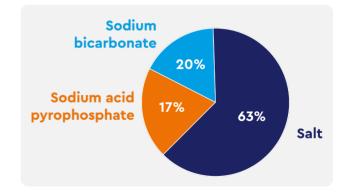
Background

The tortilla market in the United States is experiencing steady growth, with projections indicating a compound annual growth rate (CAGR) of 5.25% from 2024 to 2028.

This expansion is driven by the introduction of new products that cater to evolving consumer preferences. In the U.S., flour tortillas are particularly popular, especially in regions like Texas, where they are commonly used in dishes such as breakfast tacos.

Challenge

Historically, a high level of salt was required to enhance shelf-life by discouraging microbial growth and dry-staling. Salt is also critical in maintaining the flavour profile and textural properties of the tortilla. It acts to strengthen gluten bonding, increasing the tortilla's robustness and rollability. Removing salt adversely impacts taste and longevity, meaning that the focus has to be shifted to reducing sodium from other sources.





Sodium Reduction: Tortillas

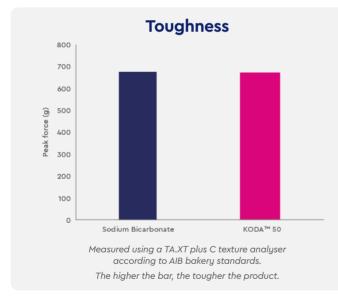
Case Study

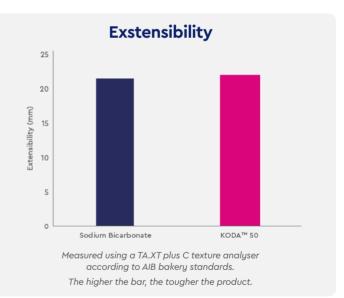
The Solution

Our patented KODA[™] potassium bicarbonate technology provides consistently impressive end-product results, with the physical characteristics, flavour and handleability that customers expect. When used in combination with a leavening acid, it grants the ability to dramatically reduce sodium and supplement it with potassium, an essential mineral.



Replacing the sodium bicarbonate with KODA[™] 50 resulted in tortillas that were a match to the control both visually and texturally, providing the consumer with the same end product characteristics, as well as a sizable reduction in sodium.





KODA[™] is available in both complete baking powders, or as an individual ingredient and comes in three patented grades that are suitable for a wide range of bakery applications.



ARM & HAMMER[™] Performance Products *Proud Distributor of KODA[™] 50 and KODA[™] 100 Products in the US* Visit our website to request a sample or contact a member of our team to hear more about our versatile solutions:

ahperformance.com | spdahperformance@churchdwight.com





the chemistry behind baking