



**PROBLEM:** How can I replace the functionality of sodium without sacrificing flavor in my baked products?

**SOLUTION:** Move to sodium-free leaveners and maintain the salt content.

**S**alt often gets a bad rap among consumers looking to reduce sodium in their diets. But salt is not the only contributor of sodium in baked products.

Many people don't realize how much sodium baking powder contributes to total sodium. In fact, even without reducing salt in a formulation, a reduction in sodium in the baking powder impacts the overall sodium level of the finished product. In some instances, baking powders contribute as much sodium as salt, depending on the formulation. By using a reduced sodium baking powder, and keeping the salt at the same level, the consumer doesn't have to sacrifice flavor in order to achieve a reduction in sodium and maintain product performance.

But changing an ingredient with as many functional properties as baking soda isn't always so easy. The difficulty really depends on the kind of leavening formulation utilized in the product. Typically, baking applications use a SAPP (sodium acid pyrophosphate) or SAS (sodium aluminum sulfate) leavening formulation. The changes in leavening performance in relation to sodium reduction are unique to each, based on the amount of sodium being reduced in the formula. The ideal replacement scenario (product) for a baker is a leavening solution with a 1:1 replacement ratio for their current formula that offers a significant reduction in sodium, resulting in the same performance and flavor.

Often, and especially with SAPP formulas, this can be achieved with reduced sodium leavening solutions now available. Some formulas need more testing to achieve the desired result and may require slight adjustments in the other formula ingredients to maintain the same performance. Understanding the role that sodium plays in the leavening in your formula is key to selecting a low-sodium or sodium-free leavening solution.



"For bakeries seeking solutions to lower sodium but maintain flavor, Clabber Girl can help" says Mark Rice, senior national sales manager for Clabber Girl Corporation. "Clabber Girl's InnoVaFree Sodium-Free Baking Powder with CalRise and InnoVaFree Reduced Sodium Baking Powder with CalRise are a 1:1 replacement for any SAPP based baking powders. There is no need to lower the salt in the formulation when using InnoVaFree sodium reduction baking powders. The finished baked products will result in the same quality, color and flavor as is seen in a typical baking powder."

If SAS- or MCP (monocalcium phosphate)-based baking powders are used, a formula could require some changes. Noticeable differences in browning, crowning, height, density or color would be an indication that other ingredients in the formula would need to be adjusted (such as MCP) to maintain performance.

Such formula adjustments for sodium can sometimes require additional expertise to maintain performance. Clabber Girl sales representatives have the technical knowledge to assist in evaluating leavening performance problems for large-scale operations and are supported by a skilled R&D staff.

Clabber Girl is the nation's leading manufacturer of baking powder. For more than 160 years, it has earned the trust of home cooks and culinary professionals alike. Today, Clabber Girl is more than just baking powder; it is a leader in the food industry providing baking solutions. Visit [www.clabbergirl.com/innovafree](http://www.clabbergirl.com/innovafree) for more information on how to reduce sodium in your baked products.

