

TopSweet Fresh Cake

Optimum shelf life for pastry goods

The innovative enzyme system TopSweet Fresh Cake Plus V prolongs the shelf life of the crumb in plain and Madeira cake doughs rich in sugar and fat. Wrapped cakes stay soft and succulent longer.

Enzymes tailor-made for rich doughs

In the past, the use of enzymes in doughs rich in fat and sugar was restricted, since the high concentration of these ingredients inhibits the activity of the enzymes. With TopSweet Fresh Cake Plus V, DeutscheBack has launched a novel product solution developed for the market with the aid of the long experience of its sister company SternEnzym.

TopSweet Fresh Cake Plus V is based on osmotolerant amylases that keep their functionality even at high levels of sugar and fat. The carefully balanced combination of active substances achieves significantly enhanced tenderness of the crumb and a longer shelf life. TopSweet Fresh Cake Plus V also has a positive effect on the volume of pastry goods.

Practical trials with three recipes

At the Stern Technology Center, a basic recipe for Madeira cake (see Tab. 1) without additional anti-staling components, a recipe containing the standard emulsifier GMS 90 (E 471, > 90% glycerol monostearate) and a variant with TopSweet Fresh Cake Plus V were compared. The consistency of the crumb was determined regularly with the Texture Analyser over a storage period of five weeks, and the cakes were tasted.

Benefits of TopSweet Fresh Cake Plus V

- Reduced hardness of the crumb
- Greater elasticity of the crumb
- Succulent impression when chewed
- Enhanced quality of the baked goods

TopSweet Fresh Cake Plus V was more effective than the emulsifier

The results from the Texture Analyser demonstrated the high efficacy of the enzyme system. The quality of both the basic recipe and the cake with 5.7 % emulsifier (based on the quantity of flour/starch) declined noticeably in the course of storage. By contrast, the recipe with 0.8 % TopSweet Fresh Cake Plus V convinced the testers with remarkably good succulence and freshness even after a month of storage (Fig. 1).



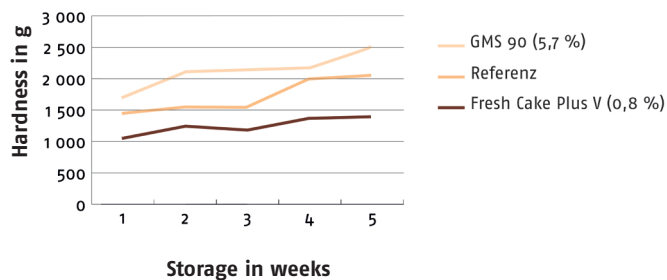


Fig. 1: Change in the hardness of the crumb of plain cake over the storage period

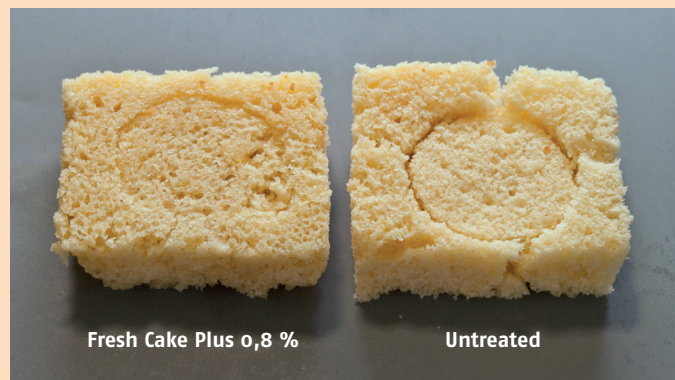


Fig. 2: Effect on the crumb structure of Madeira cake

Fig. 2 shows the difference in the hardness of the crumb. Whereas the product treated with TopSweet Fresh Cake Plus V is elastic, the dry crumb of the other cakes breaks when tested with the Texture Analyser.

TopSweet Fresh Cake Plus V is highly suitable for all plain and Madeira cake doughs rich in sugar and fat. It is not necessary to adjust the preparation or baking process.



Ingredients	Base recipe (g)
Whole egg	420
Margarine	400
Milk or water	60
Wheat flour, 11% protein	250
Wheat starch	150
TopSweet Poundcake 20 %	200
Sugar, fine	400
Total dough	1880

Tab. 1 Basic Madeira cake recipe

The usage level will depend on the recipe and the quality of the raw materials used and is usually between 0.15 and 0.8 percent.

Make use of this new freshness option for your own range, and give your wrapped pastry goods that extra succulence and enjoyment. Our bakery experts will be pleased to advise you on use of the product at your bakery.