



# NutraSweet® in Dry Mixes

## ADVANTAGES OF NUTRASWEET® IN DRY MIXES

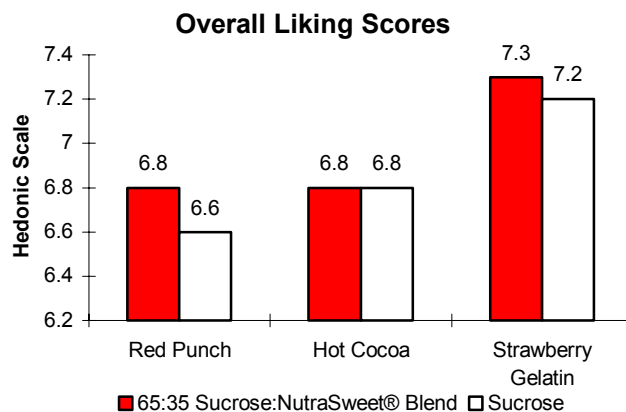
NutraSweet® brand sweetener offers many advantages for manufacturers of dry mixes. First, it allows product developers to formulate powdered soft drink, dessert, tea, and hot cocoa mixes that are sugar-free or no sugar added and reduced in calories with a sweetness similar to sucrose.<sup>§</sup> Second, it is economical. On an isosweetness basis, NutraSweet costs less than sugar, thus providing ample sweetness at reduced overall ingredient costs. Product bulk in products sweetened with NutraSweet is also less, providing the potential for additional savings in packaging and transportation costs.

NutraSweet® brand sweetener, generically known as aspartame, is a high-potency sweetener manufactured and marketed by The NutraSweet Company. Aspartame is the methyl ester of the dipeptide L-aspartyl-L-phenylalanine. Its components are identical to those that occur naturally in many common foods.

NutraSweet consistently meets or exceeds Food Chemical Codex (current edition) and USP/NF Standards for aspartame. The foundation for the high quality of NutraSweet lies in the many years of experience that the NutraSweet Company has in aspartame production. With this experience come technical expertise and ample production capacity to ensure customers a steady supply of high-quality product at competitive prices. In addition, ongoing efforts of the R&D staff focus on providing product formulation guidance to food and beverage manufacturers.

Most products sweetened 100% with NutraSweet® brand sweetener provide comparable sweetness to sugar-sweetened products at maximal cost savings. Products sweetened with a 65:35 sucrose: NutraSweet® brand sweetener blend (based on sweetness equivalency) also have reduced ingredient costs and comparable product quality with 100% sugar-sweetened products. For example, a powdered soft drink sweetened with 65:35 sucrose: NutraSweet blend and one sweetened with 100% NutraSweet save approximately 10% and 27%, respectively, in ingredient costs from a 100% sugar-sweetened formula (based on U.S. sugar prices).<sup>§</sup> It is best to consult with a regulatory or legal consultant to determine the appropriate claims and final labeling requirements for your products.

**FIGURE 1: SENSORY COMPARISON OF PRODUCTS SWEETENED WITH A 65:35 SUCROSE:NUTRASWEET® BLEND AND PRODUCTS SWEETENED WITH 100% SUCROSE**



In numerous sensory studies, NutraSweet® brand sweetener has been shown to have a flavor and taste profile that is comparable to sugar. NutraSweet can also extend and complement flavors. Recent sensory studies done with products sweetened with 65:35 sucrose: NutraSweet showed acceptance parity with 100% sugar-sweetened products. (See Figure 1.)

## WORKING WITH NUTRASWEET® IN DRY MIXES

NutraSweet® brand sweetener can be used in standard manufacturing processes. It is available in several forms: powder, granular, liquid, and blended with other commonly used food ingredients. NutraSweet® powder and Custom Granular 100™ can be used in dry mixes. The particle characteristics of Custom Granular 100™ result in reduced dusting and improved flow ability during manufacture, as well as quick dissolution when used by consumers. When formulating dry mixes with NutraSweet®, pre-blending with minor ingredients and a portion of a major ingredient is recommended for achieving adequate distribution in the mix.

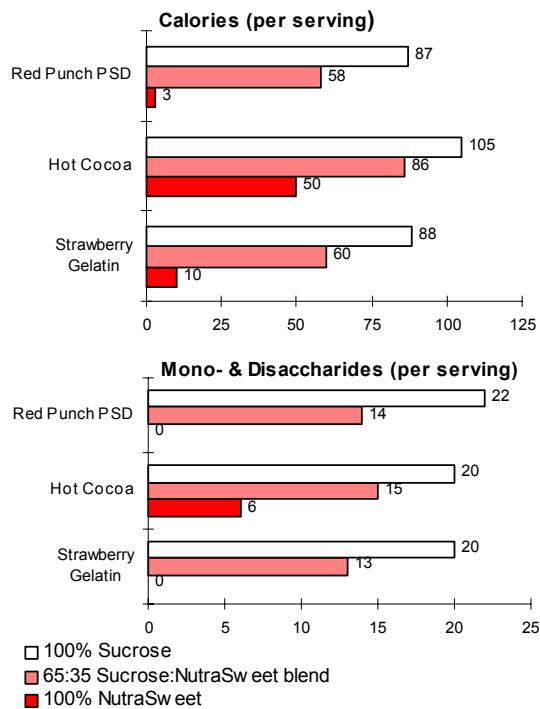
As a dry ingredient, the stability of NutraSweet® brand sweetener is excellent. When used in dry mixes, proper processing, packaging, and storage conditions ensure its stability. Manufacturing

operations should be conducted with minimum exposure to high humidity, as with any other powder or dry ingredients. Packages with a tight seal and storage under dry, moderate temperatures result in a long shelf-life for these products.

### **NUTRITION/HEALTH ASPECTS**

Depending on product formulation, dry mixes with NutraSweet® brand sweetener may qualify for sugar-free, no sugar added, reduced calorie, and light labeling claims. Products sweetened with 100% NutraSweet achieve the greatest reduction in calories and sugar. Products with a 65:35 sucrose: NutraSweet blend provide calorie reductions of 18-33% with sugar reductions of 25-36%. (See Figure 2.) It is best to consult with a regulatory or legal consultant to determine the appropriate claims and final labeling requirements for your product.

**FIGURE 2: DRY MIX PRODUCTS MADE WITH NUTRASWEET®**



Dental research has confirmed the non-cariogenicity of NutraSweet. Formulating products with NutraSweet gives manufacturers the opportunity to market great-tasting, sweet products that do not promote plaque formation or dental caries.

Individuals with diabetes or with weight control problems generally find the use of products

made with NutraSweet a useful adjunct to their basic diet. Research has shown that aspartame does not interfere with blood glucose control in diabetics, making it an acceptable sweetener. However, the total caloric contribution of products containing NutraSweet must be considered a part of the total daily diet. Manufacturers concerned with conveying comprehensive information for those on special diets can include diet exchange guidance on the package label.

### **MORE INFORMATION IS AVAILABLE TO YOU**

This bulletin is intended to be general in nature. We are eager to work with you in the development of new products and processes. For additional information about our products, please call **1-800-323-5321 (USA/Canada)**



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