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Bake With Low-Calorie Sugar Substitutes, and It'll Cost You

By Bonnie S. Benwick Washington Post Staff Writer Wednesday, May 7, 2008; F07

In the baking universe, comparing sugar substitutes to the real thing may be asking too much of them.

The substitutes allow some people who can't use sugar to enjoy sweet baked goods; fewer people choose to use the substitutes just to reduce calories. Cup for cup, they are considerably more expensive than sugar.



On Tuesday, the Health section <u>looked at the science and nutrition of low-calorie sugar substitutes</u>. Lean Plate Club columnist <u>Sally Squires</u> asked the Food section to evaluate some products, available to home cooks, that are specifically designed to help create baked goods.

Before we began testing, we sent a set of them to Marcy Goldman, a baker and cookbook author in Montreal.

For her, there is no substitute. "Sugar is a carrier of flavor," she says. "A concertmaster. It introduces moisture to a cake as a humectant sweetener."

Even though some of the substitutes recommend equal-measure usage to sugar, they don't act as sugar does, providing the same moisture, browning or flavor, Goldman says. A few that offer brown sugar blends or substitutes do provide more flavor, we found, especially in chocolate chip cookie recipes.

We decided to let the manufacturers put their best foot forward and tested seven brands, using the cake, cookie and quick-bread recipes that were developed for their products.

In general, those that generated a cool aftertaste on the tongue produced that same aftertaste in the baked goods. We detected some aftertaste in almost all the baked goods, in fact. The sugar substitutes with a powdery consistency did not aerate butter as well as sugar does in that usual first step of beating to form a light and fluffy base. Maltodextrin, a thickening agent, can cause a heaviness or sponginess in the batter or dough.

It seems that, even using the equal-measure substitutes, much trial-and-error baking would be required to achieve the right sweetness and texture for baked goods that rise.

Here are our assessments of the products we tested, in order of preference:



• WHEY LOW GRANULAR (an all-natural blend of fructose, sucrose and lactose; 4 calories per teaspoon; 2 pounds, \$9.99 to \$10.99, available at Roots Markets in Olney and Clarksville or order online

at <u>http://www.wheylow.com</u>).

On its own: powdery and cotton-candy sweet on the tongue, with a slightly sour smell.

When mixed with ingredients: slightly sour aftertaste; did not adversely affect batter texture.

Recipe: Chocolate Cake (<u>http://www.wheylow.com</u>).

Results: moist and airy crumb, good rise, shiny cake top.

OKAY

• WHOLESOME SWEETENERS BRAND ORGANIC BLUE AGAVE NECTAR (all-natural fructose extract from the blue agave plant; 15 calories per teaspoon; 23.5 ounces, \$6.19, available at organic food stores and through online purveyors).

On its own: thin and syrupy, not as sweet as honey.

When mixed with ingredients: lends a honeylike taste.

Recipe: Banana Pecan Bread (http://www.wholesomesweeteners.com).

Results: darker bread bakes longer at lower temperature; shiny exterior; moist and overly sweet.

• **DOMINO PURE D'LITE** (sugar, maltodextrin, acesulfame potassium, neotame; 10 calories per teaspoon; 43 ounces, \$7.79, available at <u>Safeway</u>).

On its own: best-tasting, perhaps because it contains real sugar; long sweetness on the tongue.

When mixed with ingredients: initially crumbly dough becomes smooth-textured and quite firm when chilled.

Recipe: Christmas Sugar Cookies, without icing (http://www.dominosugar.com).

Results: makes a firm, crisp cookie; sour aftertaste.

OFF-PUTTING

• **ORGANIC ZERO** (organic erythritol; 0 calories per teaspoon; 12 ounces, \$12.49, available at <u>Whole</u> Foods Markets).

On its own: crunchy, with an odd coolness and fruitiness.

When mixed with ingredients: retains its crunch; sour aftertaste.

Recipe: Organic Zero Crunchy Shortbreads (http://www.wholesomesweeteners.com).

Results: not sweet; sprinkling on top during baking prevents shortbread from becoming crisp; prevalent aftertaste.

• **Z SWEET ALL-NATURAL ZERO CALORIE SWEETENER** (erythritol, natural flavors; 0 calories per teaspoon; 1.5 pounds, \$13.39, available at Whole Foods Markets).

On its own: cool, powdery taste on the tongue; cleaning-product smell.

When mixed with ingredients: strange taste overwhelmed chocolate chips; called for 1/2 cup regular light brown sugar.

Recipe: Healthy Chocolate Chip Cookies (http://www.zsweet.com).

Results: spongy, caky cookies.

• **SWEET SIMPLICITY** (erythritol, fructose, natural flavors; 0 calories per teaspoon; 1.75 pounds, \$11.99, available at Whole Foods Markets).

On its own: crunchy granules with an icy aftertaste.

When mixed with ingredients: lent a characteristic flavor of sugarless mint gum.

Recipe: Key Lime Shortbread Cookies (http://www.sweetsimplicitysweetener.com).

Results: citrus flavor masks some of the aftertaste, but not all of it.

• SPLENDA NO CALORIE GRANULATED SWEETENER (maltodextrin and sucralose; 0 calories per teaspoon; 9.7 ounces, \$9.59, available at larger grocery stores).

On its own: smells like a carpet-cleaning product; overly sweet and powdery.

When mixed with ingredients: created strangely stiff peaks in meringue batter; strong, artificially sweet flavor.

Recipe: Angel Bites (<u>http://www.splenda.com</u>).

Results: fake flavor, oddly textured interior.