The Sugar Wars and Splenda®

Washington, DC — February 14, 2005 — www.motherlindas.com —The sugar wars have been going on for centuries with big sugar companies vying for bigger shares of the profits generated by the world's insatiable sweet tooth. In the past, these wars have gone on in regards to white sugar, but they have slowly been shifting to the world of artificial sweeteners.

The demerits of white sugar, defined as 99.9% sucrose, have been widely discussed, including its relative high calorie content, links to tooth decay and diabetes, and nutrient deficiency. In spite of this, white sugar remains a favorite of chefs and home cooks alike due to its flavor neutrality and amazing versatility. It caramelizes and is prized in the sugar arts where it is spun, blown, pulled, and sculpted into confections.

Over the years, sugar's minuses combined with low-calorie and low–carbohydrate food philosophies, helped spawned artificial sweeteners including aspartame, saccharin, cyclamate, and sucralose—chemically known as 1,6-dichloro-1,6-dideoxy-BETA-D-fructofuranosyl-4-chloro-4-deoxy-alpha-D-galactopyranoside. Sucralose was discovered by accident in 1976 when a foreign graduate student in England misunderstood a request for "testing" of a chlorinated sugar as a request for "tasting." This led to the discovery that "chlorinated" sugars are hundreds of times sweeter than sucrose. Chlorinating sugar involves chemically changing the structure of the sugar molecules by substituting three chlorine atoms for three hydroxyl groups. This restructuring of sugar makes it non-absorbable by the human body, and hence, considered low calorie, and makes it 600 times sweeter than sucrose. Following its discovery, Tate & Lyle arranged for Johnson & Johnson to develop and test sucralose. Today it is marketed as Splenda®, the newest player in the "artificial" sugar wars.

Unfortunately, like all other artificial sweeteners, sucralose does not possess all the attributes chefs and home cooks demand of their sugars. Most importantly, it lacks volume, a defect that drastically alters recipes. This has been partially rectified through making Splenda® Sugar Blend for baking—where ½ cup Splenda Sugar Blend replaces 1 cup sugar. The biggest use of Splenda® is to sweeten beverages, where it only needs to dissolve—and volume doesn't matter.

Although Splenda® has FDA approval, a quick Web search turns up concerns over its "chlorinated" status (some chlorinated molecules serve as the basis for pesticides such as DDT, and accumulate in body fat), the lack of long-term human studies, and challenges to its claims of non-absorption and suitability for diabetics.

Misguided food philosophies and the chase for corporate profits have contributed to the creation of Splenda®, a fake sugar. Sadly, it joins Crisco®, imitation lard, and Cool Whip®, imitation whipped cream, in the growing category of patented fake foods.

For more information, see, http://www.westonaprice.org/modernfood/sugarfree_blues.html
http://www.mercola.com/2000/dec/3/sucralose_dangers.htm#