What are sugar substitutes and how do they compare?

- **Aspartame (Equal and Nutrasweet)**- low calorie; 220 times sweeter than sugar; no aftertaste; and tends to lose its sweet taste when baked- so not recommended to cook. People who have phenylketonuria (PKU) cannot consume. It is the most researched sugar substitute available in the U.S. and no unsafe health consequences of aspartame have been identified.

- **Acesulfame K (Sunett and Sweet One)**- no-calories; 200 times sweeter than sugar; no aftertaste; and does not lose sweet taste when baked at high temperatures. Studies shown it’s safe for people to consume in moderation. For substitution for sugar, use 6, 1-gram packets for ¼c sugar.

- **Saccharin (Sweet ‘N Low and Sweet Twin)**- low-calorie; 200-700 times sweeter than sugar depending on how it’s used; can have aftertaste and ok in baking. After extensive research in 2000, the U.S. government confirms it’s safety.

- **Sucralose (Splenda)**- no calories; 600 times sweeter than sugar; no aftertaste; and the most heat-stable of all the sugar substitutes. All studies indicated that it is safe for people to consume in moderation. For substitution, use 1:1 in place of sugar and less cooking time.

- **Stevia (PureVia, Truvia and SweetLeaf Sweetener)**- no calories; all natural; 250-300 times sweeter than sugar; may have aftertaste; and can be used in baking. Several studies show it is safe for people in moderation.

- **Agave nectar**- syrup made from agave plant, main sweetener is fructose, same calories as table sugar, but it’s sweeter, thus less is needed. In recipes cut down amount of agave by about ¼ and reduce the liquid in the recipe by ¼ as well. American Diabetes Association lumps agave along with table sugar and high fructose corn syrup based on carbohydrate content.

- **Nectresse**- no-calories; made from monk fruit blended with erythritol (sugar alcohol), sugar and molasses, which adds about 1-2g carb per serving. Monk fruit extract is about 150 times sweeter than sugar. To substitute for sugar, use 1/4tsp of Nectresse for 1 tsp sugar.

Is it worth using sugar substitutes?

It is best to use a sugar substitute when foods and recipes call for a high amount of sugar. Although, when small amounts of sugar are used in a recipe, it may not make a big difference in the overall carbohydrates in a recipe. For instance, when one sugar-free spice cookie recipe contains about 13g carbs per cookie and a regular spice cookie has about 16g carbs per cookie, it may not make a big difference. On the other hand, one 12oz can of regular Pepsi has 41g carbs, while a diet Pepsi has 0g, which actually does make a big difference when counting carbohydrates.

Sugar substitutes are non-nutritious and should be used in moderation as mentioned above. There are studies linking them to increased calorie intake and weight gain, however additional research is needed to determine exact action on food intake.

Rachel VanGrunsven, RD CDE  
See Following Pumpkin Pie Recipe using Splenda-
Pumpkin Pie Recipe using Splenda

Serves: 8, Prep:10 min, Cook Time: 1hr

INGREDIENTS:

- 1/2 (15 ounce) package refrigerated piecrust
- 1 (15 ounce) can pumpkin
- 3/4 cup SPLENDA® No Calorie Sweetener, Granulated
- 1/3 cup brown sugar
- 2 teaspoons ground cinnamon
- 2 teaspoons ground ginger
- 1/2 teaspoon salt
- 1/8 teaspoon ground cloves
- 3/4 cup half-and-half
- 3 large eggs, lightly beaten
- 1 teaspoon vanilla extract

DIRECTIONS:

1. Preheat oven to 375 degrees F.
2. Unfold piecrust; press out fold lines. Fit piecrust into a 9-inch pie plate according to package directions; fold edges under and crimp.
3. Stir together pumpkin and next 7 ingredients until blended. Add eggs and vanilla, stirring until blended. Pour filling into piecrust.
4. Bake for 50 to 60 minutes or until set in the center. Cool completely on a wire rack.

NUTRITION FACTS: Servings Per Recipe: 8 - Serving Size: 1 slice (1/8 pie)

Calories: 240    Sodium: 280mg
Calories from Fat: 100  Total Carbs: 30g
Total Fat: 12g  Dietary Fiber: 2g
Saturated Fat: 5g  Sugars: 14g
Cholesterol: 95mg  Protein: 5g