# Polyols (Sugar Alcohols) Fact Sheet

<table>
<thead>
<tr>
<th>Polyol Name</th>
<th>Sweetness vs. Sugar (%)</th>
<th>Calories per Gram</th>
<th>Impact on Gastric System</th>
<th>Recommended Daily Intake</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erythritol</td>
<td>70</td>
<td>0.2</td>
<td>Rapidly absorbed in the small intestine, eliminated by the body within 24 hours which drastically reduces any laxative effect (excessive use may result in gastric issues)</td>
<td>1 gram per kilogram of body weight</td>
</tr>
<tr>
<td>Isomalt</td>
<td>50</td>
<td>2.0</td>
<td>High laxative effect</td>
<td>30 grams</td>
</tr>
<tr>
<td>Lactitol</td>
<td>40</td>
<td>2.0</td>
<td>Made from whey, a lactose rich by-product which may cause cramping and diarrhea in some individuals who are lactose intolerant</td>
<td>20 grams</td>
</tr>
<tr>
<td>Maltitol</td>
<td>90</td>
<td>2.1</td>
<td>Due to its similarity to sugar, used in large quantities by manufacturers, so people may ingest significant amounts which can cause gastric issues</td>
<td>Not specified: the safest category in which the JECFA (Joint Expert Committee on Food Additives) can place a food additive</td>
</tr>
<tr>
<td>Mannitol</td>
<td>50</td>
<td>1.6</td>
<td>Nutrition label warning required: excessive consumption may have a laxative effect</td>
<td>&lt;20 grams</td>
</tr>
<tr>
<td>Sorbitol</td>
<td>60</td>
<td>2.6</td>
<td>Nutrition label warning required: excessive consumption may have a laxative effect</td>
<td>&lt;50 grams</td>
</tr>
<tr>
<td>Xylitol</td>
<td>100</td>
<td>2.4</td>
<td>Can have a laxative effect for some people when consumed in large doses</td>
<td>Not specified: the safest category in which the JECFA (Joint Expert Committee on Food Additives) can place a food additive</td>
</tr>
<tr>
<td>Compare with: Sucrose</td>
<td>100</td>
<td>4.0</td>
<td>Obesity trends indicate that high intake may lead to weight gain which is a risk factor for heart disease, diabetes and cancer</td>
<td>Recommended intake: 40g per 2000 calories</td>
</tr>
</tbody>
</table>

**Main ingredient is xylitol**

**Xylitol proven to prevent tooth decay**

**Taste of Ideal is preferred over sugar**

**Ideal provides sweetness, volume, and texture during baking**

*Preferred for sweetness, flavor and overall liking vs. sugar in independent university taste tests.*

For more information, visit: [www.idealsweet.com](http://www.idealsweet.com)

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**Information sources:**
- Food and Drug Administration, GRAS Substances Database. October 2006; www.fda.gov.
- Food and Drug Administration, Office of Food Additive Safety. Cumulative estimated daily intakes (CEDIs) and acceptable daily intakes (ADIs) Database. June 30, 2009; www.fda.gov.
**Sucralose**

- Sucralose is the only low calorie sweetener made from sugar
- Produced by changing alcohol groups on the sugar molecule, resulting in stable sweetener that tastes like sugar without the calories
- 600 times sweeter than sugar
- Not recognized by the body as a carbohydrate
- Safe for nursing and pregnant women
- No short or long term effect on blood glucose or on serum insulin levels, meaning it is safe for diabetics
- Does not promote tooth decay
- Not toxic and had no adverse effects in test animals
- Sucralose is heat stable and can be used for cooking and baking
- Used as a sweetener in over 80 countries

**Xylitol**

- Same sweetness as sugar with fewer calories
- Naturally found in many fruits and vegetables and is produced by the human body in metabolism
- Studies tend to show that xylitol has a more beneficial effect on dental health than other sugar alcohols
- Other oral health benefits include reducing plaque, remineralizing tooth enamel, and relieving dry mouth
- Safe for pregnant women and children
- Endorsed by dental associations and other medical professions
- There are additional studies showing a wide field of the benefits of xylitol use
- Far less laxative effect than other sugar alcohols
- Not safe for pets, especially dogs

**Stevia**

- Stevia is a small wild shrub found widely in South America and Asia
- Sweeteners are extracted from leaves of the stevia plant; 100% natural
- Refined stevioside and rebaudioside (Reb-A) powders are the sweetest forms of stevia
- Stevioside can impart a bitter (or licorice-like) aftertaste, so manufacturers try to use higher amounts of Reb-A to reduce bitterness and aftertaste
- Only certain forms can be used in baking, and stevia loses volume in baking
- Sweeter than sugar (processed forms of stevia can be more than 100 times sweeter), so if improperly measured, a severely sweet taste can result
- More costly than other sugar substitutes
- Stevia-based sweeteners use different measures, so can be difficult to measure accurately for recipes

**No Calorie Sweetener Fact Sheet**

**Information sources:**
- www.americanpregnancy.org
- www.sucralose.org
- www.steviazone.org