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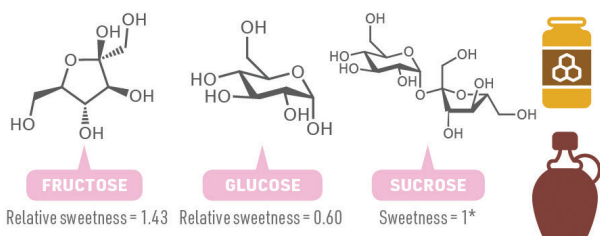
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A collaboration between C&EN and
Andy Brunning, author of the popular
graphics blog *Compound Interest*

A GUIDE TO NATURAL SWEETENERS

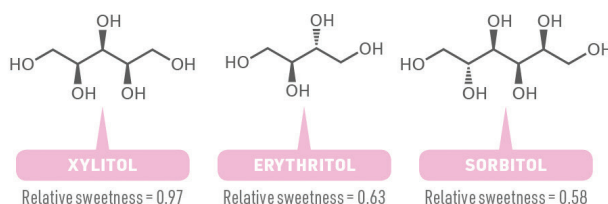
Sugars aren't the only plant compounds you can use as sweeteners. Here, we look at the molecules in some natural sweeteners that people add to their food to get a sweet kick without the sugary calories.

NATURAL SUGARS



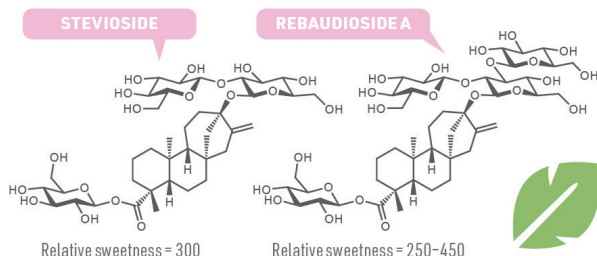
Many natural sweeteners contain sugars. Fructose is commonly found in fruits. It's found mixed with glucose in other products, including honey and agave syrup. Some syrups, such as maple syrup, contain sucrose, which is a compound that combines one glucose and one fructose molecule.

SUGAR ALCOHOLS



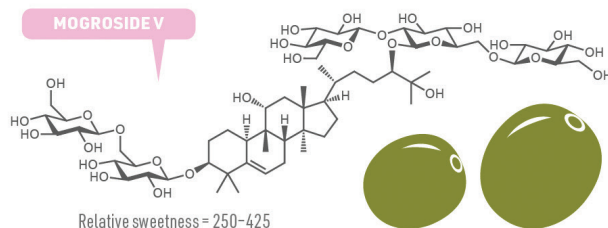
Sugar alcohols are sugar substitutes widely used in the food industry. They occur naturally, but they are often produced by the hydrogenation of sugars. The alcohols have a lower sweetness than sugars, but also have a lower caloric content. Often, food makers mix the compounds with other natural or artificial sweeteners to mask those sweeteners' aftertastes.

STEVIA



Stevia (*Stevia rebaudiana*) is a plant native to South America with sweet-tasting leaves containing steviol glycosides, including stevioside and rebaudioside A. Rebaudioside A lacks the strong bitter aftertaste of stevioside.

MONK FRUIT



Monk fruit (*Siraitia grosvenorii*) is native to Southeast Asia and contains triterpenoid glycosides called mogrosides. The sweetest of these compounds, mogroside V, is up to 425 times as sweet as sucrose. However, mogrosides also have a licorice aftertaste, which has limited their use to date.