

NATURAL SWEETENERS

Why do we crave sweets? Are there times when you absolutely crave chocolates, candies, or cakes? The average American consumes well over 20 teaspoons of added sugar on a daily basis, which adds up to an average of 142 pounds of sugar per person, per year!¹ That's more than two times what the USDA recommends.

Below is information on natural sweeteners, all of which are less processed than refined white sugar and create fewer fluctuations in blood sugar levels. Although these sweeteners are generally safer alternatives to white sugar, they should still be used in moderation.

AGAVE NECTAR

Agave nectar, or agave syrup, is a natural liquid sweetener made from the juice of the agave cactus. Agave nectars are sold in light, amber, dark, and raw varieties. Many diabetics use agave nectar as an alternative to refined sugars and artificial sweeteners because of its relatively low effect on blood glucose levels.² However, agave is high in fructose and has been under much scrutiny due to possible manufacturing processes which are similar to that of high fructose corn syrup. Some research suggests that fructose affects the hormone leptin, which controls your appetite and satiety. Too much fructose may result in overeating and weight gain, so it's important to consume agave nectar in reasonable moderation.³

BARLEY MALT SYRUP

Barley malt syrup is a thick, sticky, brown sweetener and is about half as sweet as refined white sugar. It is made from the soaking, sprouting, mashing, cooking, and roasting of barley. Many consumers prefer this natural sweetener because it moves through the digestive system slower than other refined sugars.⁴ It contains approximately 65% maltose, 30% complex carbohydrate, and 3% protein. Barley malt can also come in the form of powder.

BIRCH SUGAR

Also referred to as xylitol, this natural sugar substitute is derived from birch tree fiber and occurs naturally in many fruits and vegetables. There have been many reported benefits of xylitol. Research suggests that this natural sweetener prevents tooth decay and prevents ear infections.⁵ Birch sugar is also deemed safe for diabetics because it is not easily converted to fat.⁶ As with most sugar alcohols, consumption may result in bloating, diarrhea, and gas.

BIRCH SYRUP

Birch syrup is made from the concentrated sap of birch trees; it takes 100 gallons of sap to make one gallon of syrup. It used in much the same way as maple syrup and is rich in vitamins and minerals, including vitamin C, potassium, manganese, thiamine, and calcium. Unlike maple syrup, which is composed of the disaccharide sucrose, this syrup is composed of fructose – a monosaccharide. Monosaccharides digest faster because they are simpler sugar units.⁷ However, as previously mentioned, fructose is controversial.



1. *Cut back, way back, on sugar, says heart group* <http://geti.in/HrewLY>

2. *Agave Nectar Benefits* <http://geti.in/1hdOhZQ>

3. *Fructose-induced leptin resistance exacerbates weight gain in response to subsequent high-fat feeding* <http://geti.in/171InbA>

4. *What's the Deal With: Barley Malt* <http://geti.in/171IsW31>

5. *Xylitol Overview* <http://geti.in/1bSFgy9>

6. *Effects of xylitol on metabolic parameters and visceral fat accumulation* <http://geti.in/1hdOwvx>

BROWN RICE SYRUP

This product consists of brown rice that has been ground and cooked, converting the starches to maltose. Brown rice syrup tastes like moderately sweet butterscotch and is quite delicious. In recipes, replace each cup of white sugar with 1/4 cup brown rice syrup, and reduce the amount of other liquids. Brown rice syrup is roughly 50% complex carbohydrates, 45% maltose, and 3% glucose. The small amount of glucose is absorbed into the bloodstream immediately, but the complex carbohydrates and maltose are much more slowly absorbed, providing a steady supply of energy.⁸

COCONUT SUGAR

Coconut sugar, also known as coconut palm sugar or coco sap sugar, is made from the sweet nectar of flower buds of the coconut palm.

The coconut nectar is heated until the water evaporates and then the caramelized nectar is dried and ground into granules. Coconut sugar is a good source of potassium, iron, and vitamins. Although it provides the same amount of calories and carbohydrates as regular sugar, it has a lower glycemic index, providing a more stable release of glucose into the blood.⁹

DATE SUGAR

Date sugar consists of finely ground dehydrated dates, utilizing this fruit's vitamin, mineral, and fiber content. If you like the taste of dates, this will definitely appeal to you. Date sugar can be used as a direct replacement for sugar and comes in a granulated form; however, it can clump and doesn't melt, making it an impractical substitution for certain baked goods and beverages.

ERYTHRITOL

This sugar alcohol is a sweetener available in a powdered form. It is formed from the breaking down, fermenting, and filtering of sugar cane or corn starch. It has a cool taste that works well in coffee and tea. Erythritol doesn't affect your blood sugar or cause tooth decay, though it may cause gas, bloating, and diarrhea if consumed in excess.

HONEY

One of the oldest natural sweeteners, honey is sweeter than sugar. Depending on the plant source, honey can have a range of flavors, from dark and strongly flavored, to light and mildly flavored. Raw honey contains small amounts of enzymes, minerals, and vitamins. It's also said that consuming local honey can help build up your immunity to common allergens in your area by introducing your body to the bee pollen.¹⁰



7. *Sucrose vs. Fructose* <http://www.livestrong.com/article/311336-fructose-vs-sucrose>

8. *The Effects of Brown Rice Syrup on Blood Sugar* <http://geti.in/16Alpnu>

9. *What do you know about coconut palm sugar?* <http://geti.in/1786CN>

10. *Eating Local Honey Cures Allergies* <http://geti.in/173COHI>

MAPLE SUGAR

Maple sugar is created when the sap of the sugar maple is boiled for longer than is needed to create maple syrup. Once most of the water has evaporated, all that is left is the solid sugar. Maple sugar is about twice as sweet as standard granulated sugar, but much less refined, and contains nutrients that white sugar does not.

MAPLE SYRUP

Maple syrup is made from boiled-down maple tree sap and is a great source of manganese and zinc.¹¹ Approximately 40 gallons of sap are needed to make one gallon of maple syrup. Maple syrup has a much lower fructose content than agave. It adds a pleasant flavor to foods and is great for baking. Be sure to buy 100% pure maple syrup and not maple-flavored corn syrup. Grade B maple syrup is stronger in flavor and said to have more minerals than Grade A.

MOLASSES

Organic molasses is one of the most nutritious sweeteners derived from sugar cane or sugar beet, and is made by a process of clarifying and blending the extracted juices. The longer the juice is boiled, the less sweet, more nutritious, and darker the product is. Molasses imparts a very distinct flavor to food. Blackstrap molasses, the most nutritious variety, is a good source of iron, calcium, magnesium, and potassium.

RAPADURA

This brand name product is made from a process of extracting juice from the sugar cane plant, evaporating the water from the juice, and then grinding the results into a fine powdery texture. Rapadura is organic, unrefined, and rich in vitamins and minerals like iron.

STEVIA

This leafy herb also known as honey leaf has been used for centuries by native South Americans. The extract from stevia is approximately 100 to 300 times sweeter than white sugar. It can be used in cooking, baking, and as a sugar substitute in most beverages. Stevia does not have a significant effect on blood sugar levels, making it a preferred choice for diabetics.¹² Stevia is available in a powder or liquid form, but be sure to get the green or brown liquids or powders, as the white and clear versions are highly refined. Some people find that stevia has a bitter or medicinal taste.

SUCANAT

Short for sugar cane natural, this brand name product consists of evaporated organic cane juice made through a mechanical rather than a chemical process. Therefore, it is less refined and retains many of sugar cane's original vitamins and minerals. It has a grainy texture and can be used in place of white sugar.

TURBINADO SUGAR

Turbinado sugar, also known as demerara, is crystallized sugar made from sugar cane extract. It is similar to brown sugar, although paler with larger crystals, and may be used interchangeably. It comes from the initial pressing of sugar cane, where white sugar is further refined. It is often sold in the United States as Sugar in the Raw. Though it is slightly less processed than white sugar, it still has the same negative health effects as white sugar.

VEGETABLE GLYCERIN

Vegetable glycerin is a colorless, odorless liquid with a very sweet taste and the consistency of thick syrup. It is derived from coconut and palm oils. As a sweetener, it is ideal for those afflicted with candida because it does not contain sucrose.

11. *Maple Syrup* <http://geti.in/lbanyKj>

12. *Is stevia a safe sugar alternative for diabetics?* <http://geti.in/18ThC2w>

USING NATURAL SWEETENERS

Natural sweeteners can be used to replace processed sugar in any recipe, including breads, desserts, and sauces. They are a better option to sweeten beverages, breakfast cereal, oatmeal, yogurt, homemade granola, and other foods that you like with a touch of sweet. Here is a guide to substituting these products for processed sugar. The amount indicated is equivalent to 1 cup of white sugar.

SWEETENER	AMOUNT = 1 CUP WHITE SUGAR
agave nectar	2/3 cup
barley malt syrup	1 - 1 1/4 cups
birch sugar	1 cup
birch syrup	1 cup
blackstrap molasses	1 - 1 1/3 cups
brown rice syrup	1 - 1 1/3 cups
coconut sugar	1 cup
date sugar	2/3 cup
erythritol	1 - 1 1/4 cups
honey	1/2 - 2/3 cup
maple sugar	1/2 - 1/3 cup
maple syrup	1/2 - 3/4 cup
molasses	1/3 cup
rapadura	1 cup
stevia	see manufacturer's label for quantity and usage, as they vary
sucanat	1 cup
turbinado sugar	1 cup
vegetable glycerin	4 tablespoons

SELECTION

Natural sweeteners can be found in health food stores and good supermarkets. Having a variety of these sweeteners in your kitchen will ensure that you have one for every need.

Use organic sweeteners when possible. Be a food detective and check labels of processed food to see what type of sweetener is being used. There are many cereals, snack foods, soy and nut milks, and sauces that use these natural sweeteners in place of white sugar.

Each natural sweetener is a preferred choice over white sugar, but nevertheless all sweeteners should be used in moderation.