

Sweeteners and Sugar Substitutes

Use this handout as a guide when deciding to try a sweetener or sugar substitute.

Name: _____

Dietitian/Dietetic Assistant: _____

Telephone: _____ **Ext.** _____

What are sweeteners and sugar substitutes?

Sweeteners, also called sugar substitutes, can be used in place of sugar. There are 2 kinds of sweeteners:

- Carbohydrate containing sweeteners (also called Nutritive sweeteners)
- Non-Carbohydrate containing sweeteners (also called Non-nutritive sweeteners)

What are carbohydrate containing sweeteners?

- Carbohydrate containing sweeteners include sugar alcohols (xylitol, maltitol, mannitol, lactitol, isomalt and sorbitol), aspartame and agave syrup.
 - Sugar alcohols may have a slower effect on your blood sugar. Talk to your dietitian about using products that have sugar alcohols.
 - Aspartame is used in very small amounts because it is very sweet. It does not raise your blood sugar. People with diabetes do not need to count it in their meal plans.
 - Agave syrup is sweeter than honey. It has 5 grams carbohydrate per teaspoon. People with diabetes may need to count it in their meal plans. It has a low glycemic index, but contains high amounts of fructose.
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Some common carbohydrate containing sweeteners

Sweetener	Will it affect my blood sugar?	Where is it found?	How is it used?
Aspartame Brand names: Equal™, NutraSweet™, Sugar Twin™ (blue box)	No. People with diabetes do not need to count these sweeteners in meal plans.	Many foods and drinks, also sold in liquid and powder form	Add to drinks and foods that need little or no cooking. It does not “bulk up” or brown during baking like sugar. If overheated it may become bitter.
Sugar alcohols: mannitol, maltitol, xylitol, sorbitol, lactitol, isomalt	Raises blood sugars only minimally	Gum, dietetic candies, cough syrup, fruit spreads, table syrup, chocolate, and ice cream	Only found in commercially made foods. Having more than 10 grams a day can cause diarrhea.
Agave nectar	Yes	Liquid form, baked goods	Substitute for honey or sugars in recipes.

What are non-carbohydrate containing sweeteners?

Non-carbohydrate containing sweeteners do not add any calories. They do not affect blood sugar levels. People with diabetes do not need to count them in meal plans. Some examples are:

- acesulfame potassium (ace-K),
- sucralose,
- cyclamate,
- saccharin and
- stevia.

Some common non-carbohydrate containing sweeteners

Sweetner	Will it affect my blood sugar?	Where is it found?	How is it used?
Acesulfame K (Ace-K)	No.	Diet drinks, ice cream, yogurt, and baked goods.	Often combined with other sweeteners. Can be used as a table top sweetener or in baking.
Cyclamate Brand names: Sugar Twin™, (yellow box), Sweet'n Low™, Sucaryl™	No.	Powder and liquid forms. Available as white or brown.	Not added to products in Canada. Used as a table top sweetener. Can be used in cooking and baking.
Saccharin	No.	Tablets sold in pharmacies only.	Not added to products in Canada. Used as a table top sweetener.
Sucralose Brand name: Splenda™	No.	Found in wide variety of foods including baked goods, gum, beverages, condiments, etc. Powder and granulated form.	Can be used in cooking and baking.
Stevia Brand name: Truvia™ Rebiana™	No.	Breakfast cereal, powder form and liquid.	Can be used in cooking, baking and as table top sweetener.

Are carbohydrate and non-carbohydrate containing sweeteners safe to use?

All sweeteners are tested for safety before the government approves their use in Canada.

Sweetener	What happens to it in my body?
Acesulfame K	Not used by your body. It passes through unchanged in your urine. It does not build up in your body.
Agave	Broken down in your liver.
Aspartame	Broken down and digested like the protein in meat or cheese. It does not build up in your body.
Cyclamate, Saccharin, Sucralose	Not used by your body. It passes through unchanged in your urine or stool. It does not build up in your body.
Sugar Alcohols	Absorbed and used very slowly. It is changed into sugars by your liver.
Stevia	Poorly absorbed. It mostly passes through in your urine, but some passes through your gastrointestinal (GI) tract.

Can pregnant or breastfeeding women use sugar substitutes?

These sweeteners are approved for use during pregnancy and breastfeeding:

- Agave
- Aspartame (as long as the mother does not have PKU)
- Acesulfame K
- Stevia
- Sucralose

Pregnant and breastfeeding women have high caloric and protein needs. Limiting calories is not usually advised. Talk to your dietitian or doctor about using these products.

Cyclamate and saccharin are not recommended during pregnancy and breastfeeding.

Should children use sweeteners?

- Sweeteners are safe to use in small amounts. However, children need a lot of calories to help them grow and give them energy. It is not normally suggested to limit a child's intake of calories. Talk to your dietitian or doctor about using these products.
- Children with diabetes may find that use of sweeteners adds variety to their meals.

Links to recipes ...

Sweetener	Website or Consumer Phone Number
Agave Nectar	www.dominosugar.com
Aspartame	www.nutrasweet.com
Equal Consumer Information Centre	1-800-323-5316
Cyclamate	www.sweetnlow.com
Saccharin	www.hermestas.com
Stevia	www.steviacanada.com/receipes
Sucralose	www.splenda.ca
Splenda Low Calorie Sweetener Information Centre	1-800-561-0070

Websites and phone numbers are correct at time of printing.

If you have any questions please call your dietitian.

Dietitian's suggestions

1. _____
2. _____
3. _____

Notes:



