

PRODUCT DESCRIPTION



Coconut sap syrup is a natural sweetener obtained by boiling the pure and fresh coconut sap under moderate to very low heat until it becomes sticky. It has a rich and sweet taste with a distinct coconut fruity flavour. Coconut sap syrup is rich in nutrients and has a low Glycemic Index (GI) of 39 ± 4 (DOST-FNRI, 2003).



Coconut sap - also known as "tuba" or toddy; the liquid oozing out from the tapped unopened inflorescence of the coconut palm (PNS/BAFPS 76:2010)

Glycemic index (GI) - a physiological classification of dietary carbohydrates based on how they raise the blood sugar levels. Low GI foods (≤ 55) are more slowly absorbed and produce a less pronounced rise in blood sugar

pH - a measure of the acidity and basicity of an aqueous solution

Total Soluble Solids (TSS) - the sum of the solids present in a solution

Brix - the weight-to-weight ratio of the sugar content of a solution



GI	GI rating	Effect
HIGH GI	≥ 70	Rapid increase in blood sugar levels
MED GI	56 - 69	Moderate increase in blood sugar levels
LOW GI	0 - 55	Slow increase in blood sugar levels

Glycemic Index classification

COCONUT SAP SYRUP PRODUCTION



Tap the coconut inflorescence and collect the sap/toddy



Filter the sap



Check for pH (5.5-5.9) and total soluble solids (15-20 °Brix)



Boil the coconut sap at 100°C. Concentrate and evaporate until thick at 75-78°Brix or until it forms into soft ball when dropped in cold/tap water



Pack hot in sterilized bottles or plastic containers.

Seal tightly and invert the bottle, then, let it cool.



Store in cool, dry place, not more than 30°C and away from sunlight.

Shelf-life: 6 months if properly processed and stored

USES OF COCO SAP SYRUP

Coconut sap syrup can be used as an ingredient or a low-calorie sweetener in:

- ⇒ pancake, waffle, hot bread, French toast spread
- ⇒ soft and hard candies
- ⇒ beverages (e.g., fruit juice, shakes, tea, coffee)
- ⇒ fruits, snacks, pastries, jams, desserts (e.g., biscuits, donuts, ice cream, hot cereal, corn fritters, baked apples, crème brulee, custards, muffins)
- ⇒ salad dressings, appetizer sauces, soups and cocktails

COMPOSITION OF COCONUT SAP SYRUP

Table 1. Nutritional Composition of Coconut Sap Syrup*

PARAMETER	VALUE** (per 100 grams)
Total Calories	288 kcal
Calories from Fat	0 kcal
Total Carbohydrates	71.2 g
Protein	0.77 g
Fat	<0.10 g

*Sample source: Aroman, Carmen, North Cotabato

** PCA-FPDD

Table 2. Glycemic Index of Common Commercial Syrup

	GI LEVEL	CLASSIFICATION
Coco Sap Syrup ^a	39	Low
Honey ^b	50	Low
Maple Syrup ^b	55	Low
Black Strap Molasses ^b	55	Low
Corn Syrup ^c	75	High
Brown Rice Syrup ^c	85	High
High Fructose Corn Syrup (HFCS) ^c	87	High

^aSource: Trinidad, T.P. and Mellillin, A.C., Glycemic Index of Commonly Consumed Carbohydrate Foods in the Philippines, 2011

^bSource: <http://www.sugar-and-sweetener-guide.com/glycemic-index-for-sweeteners.html>

^cSource: <http://www.natural-health-guide.com/low-glycemic-food-list.html>

HEALTH BENEFITS

Coconut sap syrup food products have the following benefits:

- ⇒ rich in amino acids, specifically glutamic acid, which plays a vital role in the normal function of prostate gland (male reproductive system); used by the body to build protein
- ⇒ good source of carbohydrates, B-vitamins, and minerals such as calcium, sodium and iron, for healthy body
- ⇒ contain substantial amount of calories for energy
- ⇒ has a low Glycemic Index of 39 which makes it good for persons with diabetes when used in moderation

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COCONUT PROCESSING

COCONUT SAP SYRUP

