

PRODUCT DESCRIPTION



Coconut sap spread is a product traditionally prepared by cooking coconut milk and sugar to a very thick consistency at low heat with constant stirring. Housewives and small scale producers generally use brown sugar or muscovado sugar as sweetener.

- ⇒ Using coconut sap syrup, which has a low glycemic index of 39, a new and improved coconut spread was developed, in contrast to the commercial coconut jam with brown sugar and glucose that have higher glycemic index value.

WHAT IS....?

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)



Coconut sap syrup - a thick free-flowing mixture obtained by boiling slightly fermented coconut sap (pH 5.5-5.9) until it becomes sticky under moderate to very low heat

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



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 SPREAD PRODUCTION

INGREDIENTS:

- ⇒ 700 g coconut milk
- ⇒ 300 g coconut sap syrup
- ⇒ 250 g coconut protein
- ⇒ 0.25 g xanthan gum



STEP 1: Produce the coconut protein curd by cooking the coconut milk in low heat until the oil separates from the white curd. Remove the oil by filtering the mixture using a cheesecloth. Set aside.



STEP 2: Add half of the coconut milk in coconut syrup and heat slowly (78-80°C) for 10 minutes with continuous stirring.



STEP 3: When already thick, add the remaining half of the coconut milk, xanthan gum and protein curd and boil for another 35 minutes until the temperature reaches 100 to 102°C.



STEP 4: The endpoint is reached when a drop of mixture forms a soft ball in cold or tap water (65-68 °Brix).



STEP 5: The mixture is poured while hot in clean bottles/jar, inverted.



STEP 6: Store in cool, dry place, not more than 30°C and away from sunlight.



NUTRIENT COMPOSITION

Table 1. Nutrient Composition of Coconut Sap Spread

PARAMETERS (per 100g servings)	COCONUT SAP SPREAD
Total Calories	530 kcal
Calories from Fat	379 kcal
Total Carbohydrates	32.2 g
Ash	2.3 g
Moisture	17.8 g
Protein	5.6 g
Total Fat	42.1 g

Source: FPDD-PCA

USES OF COCONUT SAP SPREAD

Coconut sap spread can be used as:

- ⇒ filling/spread for breads and crackers
- ⇒ sweetener for kalamay
- ⇒ fruit dip/fondue
- ⇒ candies
- ⇒ frostings, pie fillings, smoothies, cheesecakes and other desserts



HEALTH BENEFITS

Coconut sap-based 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, sugar, B vitamins, and minerals such as calcium, sodium, and iron
- ⇒ 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

MARKET POTENTIAL

Coconut sap spread was developed to utilize coconut sap syrup which has low Glycemic Index. There is an increasing demand for reduced sugar products for both local and export market. This product has a market potential especially for Filipinos working abroad. They are looking for ethnic and healthy foods with distinct Filipino taste particularly coconut flavour that is less sweet.

FOOD PRODUCT DEVELOPMENT DIVISION

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COCONUT PROCESSING
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COCONUT SPREAD

