## PRODUCT DESCRIPTION



**Coconut sap spread** is a product produced by cooking coconut milk and coconut sap syrup, which has a low glycemic index (GI) of  $39 \pm 4$  (DOST-FNRI, 2003), to a very thick consistency at low heat with constant stirring.

It differs from the coco jam which is traditionally prepared using sugar cane (sangkaka).

#### 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 products (≤ 55) are more slowly absorbed and produce a less pronounced rise in blood sugar





### COCONUT SAP SPREAD PRODUCTION

#### **INGREDIENTS:**

- $\Rightarrow$  700 g coconut milk
- ⇒ 300 g coconut sap syrup
- $\Rightarrow$  250 g coconut protein
- $\Rightarrow$  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:** Check the endpoint indicated by the formation of a soft ball when a drop of mixture is placed in cold or tap water (65-68 °Brix).



**STEP 5:** Pour the mixture while hot in clean bottles/jar, cover and immediately invert the jar.



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



## NUTRIENT COMPOSITION

Table 1. Nutritional Composition of Coconut Sap Spread

PARAMETER	VALUE (per 100g serving)
Total Calories	530 kcal
Calories from Fat	379 kcal
Total Carbohydrates	32.2 g
Protein	5.6 g
Total Fat	42.1 g

Source: PCA-FPDD

# USES OF COCONUT SAP SPREAD

Coconut sap spread can be used as:

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



#### **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
- $\Rightarrow$  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

#### FOOD PRODUCT DEVELOPMENT DIVISION

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FPDD Guide No. 6 - Rev. 3, Series of 2019

PHILIPPINE COCONUT AUTHORITY



ALBAY RESEARCH CENTER



COCONUT PROCESSING TECHNOLOGIES

### COCONUT SAP SPREAD

