

## Nutrition facts:

<b>Nutrition Facts</b>	
Serving Size 8 g(1 teaspoon)	
Amount Per Serving	
<b>Calories</b> 15	Calories from Fat 0
% Daily Value*	
<b>Total Fat</b> 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
<b>Cholesterol</b> 0mg	0%
<b>Sodium</b> 9mg	0%
<b>Potassium</b> 35mg	1%
<b>Total Carbohydrate</b> 4g	1%
Dietary Fiber 0g	0%
Sugars 3g	
<b>Protein</b> 0g	
Vitamin A	0% • Vitamin C
Calcium	1% • Iron
Phosphorus	• Magnesium

\*Percent Daily Values are based on a 2,000 calorie diet.

## Thai Coconut Blossom Sugar Profile

### Major Nutrients in Thai Coconut Sugar compared with Brown Sugar

Nutrient (ppm or mg/L)	Coconut Sugar	Brown Cane Sugar
Nitrogen (N)	2,020	100
Phosphorous (P)	790	30
Potassium (K)	10,300	650
Magnesium (Mg)	390	70
Chloride (Cl)	4,700	180
Zinc (Zn)	21.2	2
Iron (Fe)	21.9	12.6

### Functions of Selected Nutrients in Human Body

<i>P</i>	<i>needed for bone growth, kidney function and cell growth</i>
<i>K</i>	<i>helpful in treating high blood pressure</i>
<i>Mg</i>	<i>essential for enzyme activity for Ca and K uptake</i>
<i>Ca</i>	<i>vital for strong bone and teeth for muscle growth and contraction</i>
<i>Zn</i>	<i>called "intelligence mineral" required for mental development and healthy reproductive organs (prostate gland)</i>

Fe	vital for healthy blood, its deficiency is associated with mental development, problem with immune system
Cl ions	provides electrical neutrality (acid-based body balance) and correct pressure of body fluids; balance electric charges in human nervous system

Source: Cruz et. al. 2006 as cited by Secretaria et. al. 2006

Coconut sap sample: sweet, oyster-white, translucent and **neutral** in pH (Ticzon et. al. 1997) As analyzed, coconut sap has sucrose content of 165g per liter; each tree can yield up to 1.38 liters of coconut sap per day (Magat, 1991). The physical and chemical composition of coconut sap (Table 1) indicate it is rich in amino acids, specifically glutamic acid (Table 2), and vitamins (Table 3) (PCCARD, 1993)

**Table 1. Physical and chemical characteristics of coconut sap.**

Parameter	Range of Value
Specific gravity	1.06 - 1.07
Total solids (%)	17.4 - 18.7
Sucrose (%)	14.8 - 16.6
Reducing sugar (%)	Trace - 0.3
Crude protein (%)	Trace - 0.4
Ash (%)	0.3 - 0.4
Acidity (%)	Trace - 0.1
pH	6.0 - 6.4

Source: PCCARD, 1993

**Table 2. Amino acid content of freshly-gathered coconut sap.**

Amino Acid	Value (g/100g)
Histidine	1.19
Arginine	0.35
<b>Aspartic Acid</b>	<b>11.22</b>
<b>Threonine</b>	<b>15.36</b>
<b>Serine</b>	<b>8.24</b>
<b>Glutamic Acid</b>	<b>34.20</b>
Proline	3.52
Glycine	0.47
Alanine	2.56
Valine	2.11
Methionine	-
Isoleucine	0.48
Tyrocine	0.31
Phenylalanine	0.78

\*dominant amino acids

Source: Kozaki, 1974 as cited in PCCARD, 1993.

**Table 3. Vitamin content of freshly-gathered coconut sap**

<b>Vitamin</b>	<b>Value (mg / dl)</b>
Thiamine	77.00
Riboflavin	12.20
Pyridoxine	38.40
Para-aminobenzoic acid	47.10
Pyridoxal	38.40
Pantothenic acid	5.20
Nicotinic acid	40.60
Biotin	0.17
Folic acid	0.24
Inositol	127.70
Choline	9.00
Vitamin B12	trace

*dominant vitamins*

*Source: Kozaki, 1974 as cited in PCCARD, 1993.*