COCONUT CRYSTALS HEALTH INFO



A Truly Healthy, NATURAL Sweetener from the Flower Buds of Fresh Coconuts

For numerous health conscious consumers, *coconut sap sugar crystals* is now considered to be **one of the best natural sweeteners**, a sweet tropical alternative, now touted as a "*wonder sugar*" because of the several health benefits it offers vis a vis other types of sugars or sweeteners.

Coconut Sap Sugar ADVANTAGE:

COCONUT SAP SUGAR IS A NATURAL, WHOLE FOOD

Coconut sap sugar is truly a perfect and healthier substitute for *artificial sweeteners* that are toxic to one's health as well as a better alternative to **other** *natural sweeteners* that are *sugar-cane* based such as: *refined white sugar, brown sugar, turbinado sugar, muscovado sugar, sucanat sugar, molasses* and others.

Coconut sap sugar is **not** a product of chemical laboratories like *artificial sweeteners* are - **coconut sap sugar** is **not** an *artificial* sweetener; it is also **not** a by-product of *sugar cane*, it is **not** brown sugar nor muscuvado sugar.

Coconut sap sugar is a by-product of **coconut**, a **whole food** with 5,000 years of recorded use in food preparation with health benefits. Coconut is well-known to be **devoid** of any **anti-nutrient** factors.

Coconut sap sugar is an all-natural, **whole food** that is made from 100 % sweet watery sap that drips from cut flower buds of organically grown, fresh coconuts. Coconut Republic's coconut sap sugar is pesticide-free, contains no chemicals, no additives, no preservatives, no artificial flavors or colorings, no fermenting agents, no synthetic adulterants are used. It is *unrefined* and *not* highly processed like brown sugar and other sugars.

COCONUT SAP SUGAR IS A LOW-GLYCEMIC FOOD

Coconut sugar is good for both *diabetics* and *non-diabetics*. Coconut sugar does *not* induce hyperglycemia or high blood sugar because it has a**LOW** *glycemic index*. The *glycemic index* (GI) basically measures how fast carbohydrates convert to glucose in the blood or how rapidly a particular *carbohydrate* turns into *sugar*.

The *glycemic index* (GI) is a numerical system of measuring how much of a rise in circulating blood sugar a *carbohydrate* triggers—the *higher* the number, the *greater* the blood sugar response. So a *low* GI food will cause a *small* rise, while a *high* GI food will trigger a dramatic spike. The **glycemic index** (GI) is about the *quality* of the carbohydrates, not the *quantity*.

The **LOW** *glycemic index* of *coconut sap sugar* as based from test results in the Philippines, USA, Japan and Australia is in the range of **35 to 54 Gi** / **serving** as <u>compared with</u> the **HIGH** *glycemic index* rating of sugars that come from *sugar cane* or *cane sugar* (i.e.: *refined white sugar, brown sugar, turbinado sugar, muscovado sugar, molasses, sucanat*) which falls in the range of 65-100 Gi / serving.

Other *natural* sweeteners such as: *date sugar* (100 Gi / serving), *maple syrup* (69+ Gi per serving) and *honey* (upper 70's Gi per serving) are also under the classification of **HIGH glycemic index**.

Increased *glucose* in the bloodstream from sugar and other *high glycemic index* foods causes spikes in insulin, which over time, can lead to insulin-resistance and type II diabetes as well as other health problems such as obesity and cardiovascular problems.

The Classification of the **Glycemic Index of Food** are as follows:

HIGH Glycemic : > 70

MEDIUM Glycemic: 56 to 69

LOW Glycemic : < 55

Coconut Sap Sugar - is one of the *natural, whole food* "good-for-you" *sweeteners* that can satisfy your sweet tooth *without* raising your blood sugar.

COCONUT SAP SUGAR IS RICH IN AMINO ACIDS

Coconut sap sugar which is made from 100 % coconut sap contains sixteen (16) of the amino acids. Amino acids are essential to human metabolism and to making the human body function properly for good health. Out of the twenty (20) amino acids that are needed to build the various proteins used in the growth, repair and maintenance of body tissues, enzymes, hormones and other vital body substances, sixteen (16) of these amino acids are present in the coconut sap.

The *highest* amount of *amino acid* found in the *coconut sap* is *glutamine*. Studies show that the fluid produced by the prostate gland contains significant amounts of *glutamic acid*, and this *amino acid* may play an important role in the normal function of the prostate.

Glutamine is involved in more metabolic processes than any other amino acid. **Glutamine** assists in maintaining the proper acid / alkaline balance in the body, and is the basis of the building blocks for the synthesis of RNA and DNA. In animal research, *glutamine* has anti-inflammatory effects. **Glutamine** also *decreases* the craving for sweets and sugar, which is beneficial to people wishing to lose weight.

Glutamic acid is also a component of folic acid and a precursor of glutathione, an antioxidant. **Glutamic acid** may play a role in the normal function of the heart and the prostate. Under normal circumstances, humans can meet their glutamate requirements directly from the diet.

Glutamic acid is also an important *neurotransmitter* involved with the transportation of *potassium* across the *blood-brain barrier* and is important in the metabolism of sugars and fats. Since *glutamine* easily passes through the *blood-brain barrier*, it is also known as a superb brain fuel, and some people refer to it as a "*smart-vitamin*" (but it is not a vitamin).

Glutamine is considered to be nature's "Brain Food" by improving mental capacities; and is used in the treatment of depression, fatigue, alcoholism, epilepsy, muscular dystrophy, mental retardation, and schizophrenia. Glutamine has also been shown to help in the control of alcoholism, shorten the healing time of ulcers and alleviating fatigue, depression, and impotence. It has also been used successfully in the treatment of schizophrenia and senility.

AMINO ACID CONTENT of FRESHLY-GATHERED COCONUT SAP		
Amino Acid	Value (g /100g)	
Trytophan	1.27	
Lysine	0.32	
Histidine	1.19	
Arginine	0.35	
Aspartic Acid	11.22	
Threonine	15.36	
Serine	8.24	
Glutamic Acid	34.20	
Proline	3.52	
Glycine	0.47	
Alanine	2.56	
Valine	2.11	
Methionine	-	
Isoleucine	0.38	
Leucine	0.48	
Tyrosine	0.31	
Phenylalanine	0.78	

COCONUT SAP SUGAR IS RICH IN VITAMINS

Aside from containing *amino acids* - *coconut sap* also contains various *vitamins*, including twelve (12) of the essential *vitamin B complex*.

Inositol, a **nutrient** in the *vitamin B complex* that the body needs in small amounts to function and stay healthy is the *highest* of all vitamins found in the *coconut sap. Inositol* is found to be a component of phospholipids in the brain, skeletal, heart and male reproductive tissues. *Inositol* plays a vital role in nerve transmission, the regulation of enzyme activity and it aids in the redistribution of fats within the body. *Inositol* is now being studied in the prevention of cancer.

Inositol is known to creates a calming effect. It has been used for depression, panic attacks and diabetes. Inositol is known to reduce blood cholesterol and helps prevent hardening of the arteries. Inositol is important in the formation of lecithin and the metabolism of fat and cholesterol. It removes fat from the liver. Inositol is also essential for hair growth. Inositol is also reportedly beneficial for the treatment of eye abnormalities and helps prevent eczema and psoriasis. Inositol is also beneficial for alzheimer's disease, autism and schizophrenia.

VITAMIN CONTENT OF FRESHLY-GATHERED COCONUT SAP		
VITAMIN	VALUE (MG/DL)	
Thiamine	77.00	
Riboflavin	12.20	
Pyridoxine		
Paraaminobenzoic Acid	38.40-47.10	
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	

COCONUT SAP SUGAR IS RICH IN MINERALS

Aside from *vitamins* and *amino acids*, the coconut sap is also rich in *minerals* such as *calcium*, *potassium*, *magnesium*, *phosphorus*, *zinc*, *iron*, *manganese* and more. The human body does *not* produce *minerals* and they must be provided from food sources. Vitamins have little function *without* minerals. Minerals enable the *vitamins* to effectively accomplish its purposes.

The benefits of *minerals* include: prevention of disease and promotion of good health; formation of bones and teeth; plays an important role in

nerve functions; is an essential constituent of body fluids and tissues; and is an important component of enzyme systems.

As seen from the Table below *coconut sap sugar* showed **significantly** *greater* **amounts** of *potassium, zinc, iron* and other *mineral nutrients* than *brown sugar and refined white sugar* from sugar cane.

Potassium has been shown to have a significant role in the maintenance of normal blood pressure thus contributing in the *reduction* of risk of cardiovascular and coronary heart disease.

Comparison of MINERAL Content				
MACRONUTRIENT mg/L(ppm) in Dry Matter	Coconut Sap Sugar	Brown Cane Sugar	Refined Cane Sugar	
Nitrogen (N)	2,020.0	100.0	0.0	
Phosphorus (P)	790.0	30.0	0.7	
Potassium (K)	10,300.0	650.0	25.0	
Calcium (Ca)	60.0	240.0	80.0	
Magnessium (Mg)	290.0	70.0	10.0	
Sodium (Na)	450.0	20.0	10.0	
Chlorine (Cl)	4700.0	180.0	100.0	
Sulfur (S)	260.0	130.0	20.0	
Boron (B)	6.3	0.0	0.0	
Zinc(Zn)	21.2	2.0	1.2	
Manganese (Mn)	1.3	2.0	0.6	
Copper (Cu)	2.3	0.6	0.6	
Iron (Fe)	21.9	12.6	1.2	

SOURCE: Philippine Coconut Authority - Plant Tissue Analysis Laboratory

Functions of Selected Nutrients in Human Body

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

See more information on all the Coconut Sap Products at

www.naturalhealthychoices.weebly.com

