

What can Coconut Vinegar do for you?

Helps prevent obesity and liver damage and delays breast cancer progression

It alters the gut microbiota due to the increase in population of *Bacteroides* and *Akkermansia* genera which may help reduce obesity-induced inflammation that often lead to chronic diseases such as diabetes, cardiovascular disease, hypertension, and even cancer.

Coconut vinegar may help reduce paracetamol induced liver damage by restoring antioxidant activity and suppression of inflammation.

Coconut water vinegar may delay breast cancer progression by inducing apoptosis (death of cells) in breast cancer cells, suppressing metastasis (spread of cancer) and activating anti-tumour immunity (Mohamad et al).

Helps fight infection

Diluted vinegar solution which restores the natural acidic vaginal pH was found effective as a home remedy for bacterial vaginosis (BV), which is the leading vaginal disorder in women of reproductive age.

Coconut vinegar exhibits antibacterial and antibiofilm activity against ***Gardnerella vaginalis***, a microaerophilic bacterium associated with BV and a pathogen that causes infections on genitals (Nisha and Antony, 2017).

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Spice Up
with

NATURAL and HEALTHY
**COCONUT
VINEGAR**



COCONUT VINEGAR

It refers to a product made from alcoholic and subsequent acetous fermentation of the sap of coconut palm (DOH A.O. No 134 s. 1970) and alternatively coconut water augmented with little sugar or combination thereof.

Flavoring may be used, provided the nature is declared on the label. Among the optional ingredients blended for spicy flavor are "*labuyo*" chilis, garlic, onions, and ginger.

Acidity shall not be less than 4% by weight of absolute acetic acid.

In its natural formulation, it does not contain any artificial matter such as synthetic acetic acid or cloudifying agent that shall deem it adulterated.

Usually packed on tightly sealed glass bottles for adequate protection from contamination and other external hazards.

Nutritional Contents

Coconut vinegar contains high amount of macro and micronutrients.

● *Phosphorus and Proteins*

Coconut water vinegar contains 19.63g of phosphorus and 2.5g of proteins per 100g (Fatima and Mishra, 2015). Proteins are energy source for the body and helps produce lymphocytes, the cells in human lymph fluid and bloodstream that are vital to immune system defenses (E. Reddy & T. Lakshmi, 2014). On the other hand, phosphorus works with calcium to build healthy bones and teeth.

● *Vitamin and Phenolic*

Naturally fermented coconut sap vinegar contains Vitamin C and phenolic compounds such as gallic, protocatechuic, caffeic, p-Coumaric acids and galangin which are important antioxidant agents that protect biomacromolecule from the damage induced by free radicals (Q. Xia and R. Li, 2011).

Coconut water vinegar also contains phenolic compounds such a gallic and vanillic acid (Mohamad et.al. 2017)

Culinary Uses

- Preservative in pickling vegetables, seafood and meats (Hosking , 2006)
- Dipping sauce for all kinds of fried, broiled and boiled dishes (Hosking , 2006)
- Flavor enhancer extensively used in Southeast Asian cuisine especially in the Philippines (Sangamithra, et. al., 2013)

Ingredient to Sports Drink

- Used in the formulation of sports drink to achieve optimum acidity to facilitate the repletion of muscle glycogen during post exercise (Aziz & Sharifudin, et. al., 2016)
- Used to achieve appropriate sodium level that would stimulate sugar and water uptake in the small intestine and helps maintain extracellular fluid volume as well as maintaining the drive to drink by keeping plasma osmolality high (Aziz & Sharifudin, et. al., 2016)