

Cancer Association of South Africa (CANSA)



CANSA Fact Sheet And Position Statement on Soursop (Graviola)

Introduction

Soursop is the fruit of *Annona muricata*, a broad leaf, flowering, evergreen tree native to Mexico, Cuba, Central America, the Caribbean, and northern South America, primarily Colombia, Brazil, Peru, Ecuador, and Venezuela.

[Picture Credit: Soursop Tree and Fruit]



Today, it is also grown in some areas of Southeast Asia, as well as in some Pacific islands. It was most likely brought from Mexico to the Philippines by way of the Manila-Acapulco Galleon trade. It is in the same genus as the chirimoya and the same family as the pawpaw (Wikipedia).

Soursop is also known as Graviola.

Bueno-Rojas, D.A., Bueno-Rojas, J.A., Rodríguez-Aguayo, C., Calderón-Santoyo, M., Zamora-Gasga, V.M., Montalvo-González, E. & de Lourdes García-Magaña, M. 2025.

“Kombucha is a fermented beverage with health effects, made mainly from green tea and black tea; however, it can also be made from other leaves such as those of jackfruit and soursop, which are not used even though they have been reported to have positive health effects. Due to the above, in this work "kombucha" beverages based on jackfruit and/or soursop leaves were developed and analyzed to take advantage of these by-products. It was found that fermentation produced significant changes, being the optimal kombucha formulation green tea with soursop leaves (GTKS), obtaining a higher content of antioxidant compounds (mainly catechin, rutin and shikimic acid) and greater ferric reducing antioxidant power (FRAP) (1.62 ± 0.03 mg TE/mL), increasing acidity and decreasing pH and total soluble solids (TSS), having a better sensory acceptance than a commercial kombucha; in addition to demonstrating safe conditions for human consumption.”

Conflict of interest statement

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Yoo, B.G., Hong, J.P., Kang, B.S., Byun, E.B. & Byun, E.H. 2025.

“The purpose of this study was to investigate the antioxidant effects of *Annona muricata* leaf polysaccharide extract (ALPE) against oxidative stress induced by hydrogen peroxide (H₂O₂) in H9c2 myoblasts. The cells showed a cell viability of around 70% following exposure to 150 μM H₂O₂. In addition, ALPE was noncytotoxic to H9c2 myoblasts at 10-1000 μg/mL concentrations. As confirmed by MTT analysis and Annexin V/propidium iodide staining, ALPE treatment was found to protect H9c2 myoblasts exposed to H₂O₂. This protection is achieved by inhibiting reactive oxygen species levels and inducing superoxide dismutase and catalase activity. Furthermore, ALPE downregulated the activation of Bax, caspase-3, -8, and -9 but upregulated Bcl-2, thereby preventing H₂O₂-stimulated cytotoxicity in H9c2 myoblasts. ALPE activated the Nrf2/heme oxygenase-1 signaling cascade. Collectively, ALPE treatment decreased H₂O₂-induced oxidative stress. Therefore, ALPE can potentially be used as a natural resource with antioxidant properties.”

Nutritional Facts of Soursop (Graviola)

[Picture Credit: Soursop Fruit]

Nutritional Facts per 100g

kiloJoules		275kJ
Total Fat		0,3g
Saturated fat		0,1g
Polyunsaturated fat		0,1g
Monounsaturated fat		0,1g
Cholesterol		0mg
Sodium		14mg
Potassium		278mg
Total Carbohydrate	17g	
Dietary fibre		3,3g
Sugar		14g
Protein		1g
Vitamin A*		0%
Vitamin C*		34%
Calcium*	1%	
Iron*		3%
Vitamin B ₆ *		5%
Vitamin B ₁₂ *		0%
Magnesium*		5%



*Per cent Daily Values are based on a 8 000 kj diet. The daily values may be higher or lower depending on a person’s kilojoule needs.

Claims Made in Support of Soursop’s Ability to Treat Cancer

The following anti-cancer claims are listed on various websites regarding Soursop (Graviola):

[Picture Credit: Soursop Juice]

- Cures cancer - by eating the fruit of soursop helps to attack the cancer cells safely and naturally without side effects such as nausea, weight loss or hair loss



Researched and Authored by Prof Michael C Herbst

[D Litt et Phil (Health Studies); D N Ed; M Art et Scien; B A Cur; Dip Occupational Health]

Approved by Ms Elize Joubert, Chief Executive Officer [BA Social Work (cum laude); MA Social Work]

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- Increases immune response - substances contained in soursop fruit such as acetogenins, annocatalin, annocatalin, anno-hexocin, annonacin, annomuricin, anomurine, anonol, cacourine, gentisic acid, gigantetronin, linoleic acid, muricapentocin, make the body kill malignant cancer cells
- Soursop leaf can kill malignant cells for 12 types of cancer, including colon, breast, prostate, lung and pancreatic cancer
- Soursop is 10 000 times stronger in slowing the growth of cancer cells compared to adriamycin and chemotherapy
- [Picture Credit: Soursop Leaves]
- Soursop leaves is very effective for cancer of the prostate, pancreas and lung
- Soursop attacks cancer cells effectively because it does not harm healthy cells
- Soursop does not cause extreme nausea, weight loss and hair loss



Warnings Against Graviola

The following warnings against graviola have been made recently by reputable scientists, scientific groups and institutions:

- Cancer Research UK does not support the use of graviola to treat cancer. Their advice is to be very cautious about believing information or paying for any type of alternative cancer therapy on the internet (Cancer Research UK).
- Extracts of graviola show antiviral, antiparasitic, antirheumatic, astringent, emetic, antileishmanial and cytotoxic, antinociceptive, anti-inflammatory, antihyperglycemic and anticancer effects in vitro and in vivo. However, human data are lacking. Alkaloids extracted from graviola may cause neuronal dysfunction and degeneration leading to symptoms of Parkinson's disease.
- Some side effects follow from graviola's areas of bioactivity. Studies on animal subjects have demonstrated that the plant can dilate blood vessels and lower blood pressure, so those whose blood pressure is already low, or are already on medication to reduce hypertension, should consult their physician before taking graviola (Wright). Also, a large dose taken at one time can cause nausea and vomiting.
- Graviola's purported anti-cancer potency comes largely from its ability to reduce the supply of adenosine triphosphate (ATP) to cancer cells. ATP often provides metabolic energy to healthy cells as well, and some nutritional supplements, notably Coenzyme Q10, are known for increasing ATP. For this reason, CoQ10 may neutralize the effect of graviola and they should not be taken together.

FDA Warns Against Soursop (Graviola)

In 2020, the Food and Drug Association (FDA) sent out warnings against claims regarding Graviola. The FDA forwarded warning letters to all companies selling/distributing Graviola because unsubstantiated claims are made that Graviola can cure cancer.

The FDA warned that if the companies do not comply, the FDA may take further legal action to prevent their products from reaching consumers.

The Position of the Cancer Association of South Africa (CANSAs)

While CANSAs does not dispute the fact that Soursop (Graviola) may demonstrate anti-cancer properties in laboratory tests, that it may have a protective effect for women against EGFR-overexpressing breast cancer and that it shows promising characteristics of fighting cancer cells and providing protection against prostate cancer (*in vitro*), it cannot at present, advance or promote the use of Soursop (Graviola) in any form for the treatment of cancer until there is sufficient scientific evidence of its safety and efficacy in this regard until such time as additional peer-reviewed research has been published in support of the anti-cancer properties of Graviola.

Soursop is a fruit that may help fight cancer, but human studies are lacking to prove this. It also has some safety concerns.

CANSAs further believes that individuals who intend to use Graviola, in whatever form, should discuss this with their treating physician or oncologist prior to using Graviola.

Medical Disclaimer

This Fact Sheet and Position Statement is intended to provide general information only and as such, should not be considered as a substitute for advice, medically or otherwise, covering any specific situation. Users should seek appropriate advice before taking or refraining from taking any action in reliance on any information contained in this Fact Sheet and Position Statement. So far as permissible by law, the Cancer Association of South Africa (CANSAs) does not accept any liability to any person (or his/her dependants/estate/heirs) relating to the use of any information contained in this Fact Sheet and Position Statement.

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Soursop Juice

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Soursop Fruit

https://www.google.co.za/search?q=soursop&source=Inms&tbm=isch&sa=X&ei=Zxf5UfrkBC6ZhQeWkoGIBw&ved=0CAcQ_AUoAQ&biw=1366&bih=614#facrc=_&imgdii=_&imgrc=7VuU4w6bFuZgxM%3A%3BJJVtQAKbILTJYM%3Bhttp%253A%252F%252Fwww.frutti-mundo.com%252Fwp-content%252Fuploads%252Fet_temp%252Fguanabana1-73152_621x320.jpg%3Bhttp%253A%252F%252Fwww.frutti-mundo.com%252Fen%252Fguanabana%252F%3B621%3B320

Soursop Leaves

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Soursop Tree and Fruit

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