

## Guava-A wonder Fruit **Priyanka Verma\***

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### Abstract

Guava is the most important tropical fruit which originated in Central America. It has been found that it is a very rich source of fibre, vitamin A, iron, phosphorous as well as calcium. Guava is a rich source of antioxidants due to presence of compounds like flavonoids which help in curing cancerous cells and control skin aging. Studies have shown that guava as well as its leaf extract has many medicinal properties like it help in curing diseases like diarrhoe, reducing fever, dysentery, gastroenteritis, hypertension, diabetes, caries, pain, wounds, menstruation, digestion, weight loss and boost immunity. Guavas also have activities like antimicrobial, ant mutagenic as well as relaxing, so it can be said that consumption of guava is very important in our daily diet.

**Keywords:** Guava; Diseases; Antioxidants; Fiber

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### Introduction

#### Guava also called as Psidium Guajana belongs to the family Myrtaceae

Guava is small tropical tree or shrub which is native of tropical america, which grows in tropical and subtropical areas throughout the world. Guavas are very good source of dietary fibre, which may further aid to healthy bowel movement as it prevent constipation. It has been seen that one guava provide 12 % of recommended daily intake of fibre apart of this guava leaves extract have digestive action. One [1] serving of guava in a day is safe for consumption .Eating more than this won't be good idea. Avoid having fruit at right may lead to cough and cold.

It has seen that guava fruit without peel is very effective in lowering blood glucose level along with serum total cholesterol, triglycerides and LDL-C. It also increases HDL-C levels also. Best time to eat guava is at any time except on empty stomach. This goes for banana also; this is because the body needs reap benefits of these fruits, so should not to be eaten raw.

Consumption of guava should be [2] avoided if you are allergic, pregnant or breast feeding or have any other gastrointestinal issues. It has been found that grapefruit and guava have similar nutritional properties. They are rich in vitamins, minerals and antioxidants which can play protective role for the kidneys and have positive impact on the overall health of kidney patients. It has been seen that guava is one of the important fruit which

is sugar free in nature. It has the capacity to fight against free radicals, damage insulin cells.. It also have contribution in making skin glow ,make them free from premature lines and wrinkles as they are rich in Vitamin A,B,C and potassium. That is why this is called as important detoxifier.

Eating guava is good for gut health. It lubricates intestines and eases constipation, its soluble dietary fibre act as a laxative. That's why most nutrients recommend guava before meals. Guava leaf extract helps in fighting eczema .Its leaf contains chemicals that help in fighting skin condition like eczema. There is no serious side effect of eating too much guava, but overeating it many times may lead to constipation.

Guava is heavily loaded with Vitamin C which provides immunity to the body, which further help in fighting infection and help in [3] strengthen of body .Eating guava help in fighting diseases like cancer, arthritis, diabetes and heart diseases. Guavas are better than apples .Guava have a higher concentration of vitamins, especially vitamin A and vitamin E when compared with apples. Guava is found to be rich in many vitamins like E,K, B1,B2,B3,B5 and B6.

It was seen that eating banana with guava together may cause problems. Guava have acidic nature while banana is sweet in taste, eating both the fruits causes acidosis making feel nausea and increase chances of headache. It has been found that sugar content in guava is high around 4.9 grams of sugar per unit and consumption of guava help in relieving colic pain as well as help in passing gas easily . Guava helps in relaxing and calming overactive

nerves which further lead to sleep state for longer time.

Guava fruit contains natural antioxidants like flavonoids and polyphenols, which can reduce uric acid levels as it function as antioxidants and prevent the formation of free radicals. Guava leaf extract alleviate fatty liver via expression of adiponectin in SHRSP. Both apples and guava are rich in fibre and water and they ate low in fats and water and they are low in fats, sugar and calories. Thus it is considered best for loosing weight .On the other hand guava leaves have important role on the scalp. Guava help to boost collagen production along with vitamin C content inside them. It has been found that collagen production in guava improves hair growth, helps in smoothing of hairs shafts, so that hair locks appear frizz free and smoothen.

Fresh guava leaves help in treating pimple; they have excellent medicinal property in treating inflammatory acne, scars, spots, pigmentation and uneven skin tones. Guava leaves have antimicrobial action due to presence of active ingredients like flavonoids, gallic acid , ascorbic acid ,carotenoids which help to fight skin infections and inflammations. There is a wrong myth regarding consumption of oranges, guava in winters, because they are considered as cold fruits which can further lead to cough related issues in winters. But the fact is these are rich in vitamin C, which increases absorption of nutrients, and boost immune system and eventually help in treating cough and cold.

It has been found that pink guava fruit has more water content; less starch and sugar along with Vitamin C as well as less seeds and sometimes they are seedless compared to white guava. On the other hand guava leaves are found rich in flavonoids which have significant action against diabetes and have help to protect liver as well. It has been found that eating guava can cause kidney stones [4], as they contain high amount of oxalates..14 antioxidants contained in red guava juice (Vitamin C, polyphenols and flavonoids) can significantly reduce the level of uric acid and creatinine in mice.

Psidium reaches to height of 6 to 25 feet's; each part has significance whether it is leaves, flowers, fruits, seeds and bark. Guava bark is thin and can be easily removed in long strips. Guava bark has a huge content of antimicrobial and antibacterial components, it has been found that ethanolic extract of guava bark have high anti-diabetic activity.

Guava is a rich source of antioxidants and phytochemicals which include essential oils, polysaccharide, minerals, vitamins, enzymes, triterpheno acid, alkaloids, steroids, glycosides, tannins, flavonoids and saponin as well as guava contains high vitamin C and A. Guava is a good source of fibre or pectins.

## Chemical composition of Guava

Guava is found to be rich source of Vitamin A, C, iron, phosphorous and calcium [5]. Guava fruit contain saponin, olenolic acid, lyxopyransude, arabopyrauoride, guajaharin, quercetine and flavonoids.

## Properties of Guava

**Anti-mutagenic activity:** Presence of ascorbic acid and citric acid plays a major role for this. Skin of the Guava is rich in ascorbic

acid, which is [6] destroyed by the heat. Strong pleasant smell of the fruit is due to carbonyl compounds present in them.

**Relaxation effect:** Due to presence of terpenes, caryophyllene oxide [7] and p-seliene in large quantity. There are lot of essential oils present in leaves of guava which includes alpha pirene.

## Medicinal properties

It is used to cure lot of sickness like diarrhoea, reducing fever, dysentery, gastroenteritis, hypertension, diabetes, caries, pain, relief [8] and wounds.

## Antioxidants

Guava is a rich source of phenol compounds like flavonoids and lycopene which are important disinfectants [9]. It also helps in controlling aging of the skin as well.

## Diabetes

Guava skin extract can control diabetes level after 21 days. During some studies which are done on some animals, study show that leaf extract of guava improves blood sugar, long term blood sugar control as well as insulin resistance. Results are also very impressive on human subjects as well, but the effect lasted for two hours after its [10] consumption while on the other hand consumption of guava tea after meals leads to 10 % decrease in blood sugar.

## Heart health

Guava leaves have higher level of antioxidants and vitamins in them which helps heart from damage by free radicals. While on the [11-13] other hand leaf extract of guava decreases LDL cholesterol and rise HDL cholesterol. Higher levels of potassium and soluble fiber contribute to improvement of heart health. A study has been done on 120 people showing that consumption of ripe guava for 12 weeks lead to decrease in blood pressure by 8 -9 points , which is reduction in total cholesterol by 9.9 % and increase in good HDL cholesterol by 8 %.

## Menstruation

Many female have dysmennorea or they have stomach cramps during menstruation, consumption of guava leaf extract may reduce the pain [14] intensity of the menstrual cramps. A study was done on females having cramps , 6 mg of guava leaf extract resulted in relieving cramps and in some cases it is found more effective than painkillers. Even in some cases it has been found that guava leaves extract relieve uterine cramps as well.

## Digestive system

Guava are the excellent source of the dietary fibres which further lead to healthy bowel movements which further prevents constipation. Consumption [15] of one guava is sufficient to provide 12% recommended daily intake of fibers .While [16, 17] on the other hand guava leaf extract decreases intensity and duration of diarrhoea [18]. Studies also show that guava leaf extract have antimicrobial effect.

## Weight loss

Single fruit has only 37 calories and 12 % recommended dietary

intake [19] of fibre they are filling as well as low calorie snack which is filled with vitamins and minerals.

### Anticancerous effect

Guava leaf extract have anticancer us effect, which can stop the growth of the cancerous cells which is because of antioxidants present in guava [20-22].

### Boost your immunity

Low levels of Vitamin C is very risky, which increases risk of infectious and illness in humans .Guava is a good source of nutrients as well as vitamin C, it has been found that one guava provides about double the reference daily intake for vitamin C [23,24], which is almost twice the amount which we get from orange. As we know that vitamin C is flushed outside the body so it is necessary to get enough from the diet.

### Skin

Vitamins and antioxidants found in guava protect the skin from the damage as well as aging process, help in preventing wrinkles .while on the other hand guava leaf extract can be applied to acne as it is anti-inflammatory and antimicrobial in behaviour [25].

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