

Tamarillo

Solanum betaceum



The tamarillo is a **small, duck egg-sized fruit in the nightshade family that grows on trees in warm climates**. It's originally from South America and was first cultivated in Peru, Bolivia, Ecuador, Chile, and Argentina. Tamarillo **offers vitamins A, C and E to ensure your skin stays healthy and radiant**. Anthocyanin, phenols and flavonoids protect the skin from oxidative stress, pollution. Tamarillo also helps in anti-aging. Just as regular tomatoes, these can be used in home remedies for various skin problems.

Solanum betaceum also known as tree tomato or tamarillo is the fruit which has the similar appearance of tomato. The fruit could be found in two colors of yellow and red. Red one is well-known than yellow. Fruit is egg shaped bearing yellow to orange flesh and black seeds that is surrounded by purple gelatin. Red color found in tamarillo is due to the pigment named anthocyanins and yellow color is from carotenoids pigment.

The fruit tamarillo is found in tree with short life span. The plant prefers subtropical climate with 600 and 4000 millimeters rainfall and annual temperatures in between 15 and 20°C. It is not tolerable to drought stress and frost. It does well in deep, light and fertile soils. It possess fragrant flower in many colors. The tree is

shallow rooted and grow up to the height of 5 meters. The trees are short lived which could survive from 12 to 15 years. Leaves are heart shaped which measures a foot long and 5 inches in width. Flowers are light blue, pink and white measuring ½ inch in diameter and are borne in tips of branches. Flowers are replaced by orange, yellow, red or purple fruit which is long stemmed measuring 3 inches long and 1 1/2 inches wide. Seeds are flat, thin and hard.

The word tamarillo is derivative in New Zealand in 1967. Later tamarillo is recognized as a tropical fruit which is grown in tropical climates. The plant was originated from South America, Peru, Ecuador and Chile. Fruit appears from May to October. Fruit is cultivated in Hawaii and plant survives till 15 years old there. After grown out from a flower, fruit requires 25 weeks to reach maturity. Today New Zealand is the high producer of tamarillo fruits worldwide.

Health Benefits of Tamarillo

Tamarillo provides a great amount of dietary fiber, protein, minerals and vitamins. It has high content of carotenoid pigments such as β -carotene, ζ -carotene, β -cryptoxanthin, zeaxanthin and lutein. Besides this, it also includes vitamins such as Vitamin B6, Vitamin C and Vitamin E. Vitamin A and Vitamin C content found in tamarillo makes a very good antioxidant. It also contains phytonutrient such as anthocyanin, phenolics, flavonoids and carotenoid. Fruit color varies according to the presence of phytochemicals. The variety of red provides more anthocyanins and variety yellow have high content of carotenoid. Besides these, tamarillo possesses malic acid and citric acid that promote its acidic tangy flavor.



1. **Acts as antioxidant**

Oxidative stress and free radicals are the main cause for diseases. Tamarillo has phytonutrients that offers antioxidant activity and lowers the chances of degenerative diseases such as cancer, cataracts, Parkinson's disease, heart disease, diabetes and Alzheimer's disease. Antioxidant properties are attributed by Vitamin E, Vitamin C, Vitamin A and other phytonutrients. Antioxidants are found in abundant source in peel as well as flesh. Studies shows that peel have higher activity due to flavonoids and phenols.

1. **Eye health**

Tomatoes are known for its benefit to improve vision and eye health. Tamarillo is also beneficial for maintaining eyesight. Tamarillo has Vitamin A that maintains healthy eyes. It also moistens eye membranes and acts as a barrier for virus and bacteria. It lowers the chances of eye infections. It possesses various nutrients which prevents oxidative stress and degenerative eye disorders including macular degeneration and cataracts.

1. **Heart health**

Potassium is found in ample amounts in tamarillo which assist in controlling heart rate as well as blood pressure. It balances harmful effects of sodium on heart. It also provides magnesium as well as other minerals that are essential for proper functioning of cardiovascular system. Tamarillo has high content of dietary fiber which assists in inhibition of bad cholesterol absorption. The antioxidant activity prevents heart from oxidative stress and lowers the chances of heart stroke and other cardiac problems.

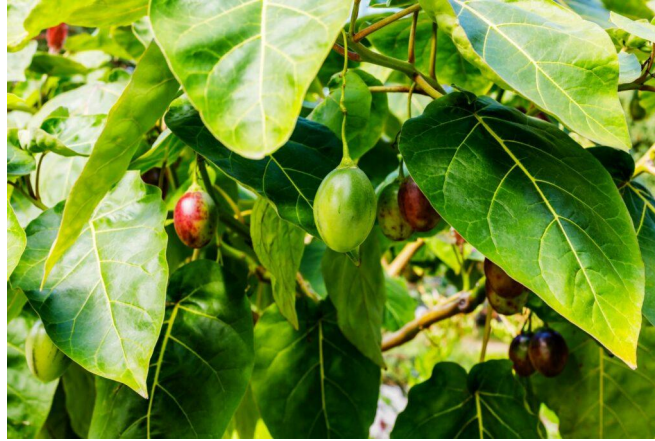
1. **Prevent kidney stones**

Citric acid helps to avoid the growth and development of kidney stones. It provides protective benefits with the excretion of excess calcium as well as uric acid from the body. The presence of citric acid in Tamarillo causes acidic flavor. Add tamarillo to the diet to lower the chances of kidney stones. But not scientific evidence has been found on benefits provided by tamarillos on kidney stones.

1. **Prevent cancer**

Tamarillo is rich in nutrients which lowers the chances of cancer with its antioxidant properties. Anthocyanins possess anti-cancer

properties. Studies shows that lycopene inhibit the growth of cancer cells. Being an antioxidant food, the consumption of tamarillos protects the body cells from turning cancerous and from oxidative stress.



1. **Skin health**

Tamarillo offers Vitamin E, Vitamin C and Vitamin A which builds blocks of skin. The daily intake of tamarillo assures that the body is not deprived of nutrients and makes the skin healthy. It prevents aging of skin due to UV light and pollution. Tamarillo extracts is used for various skin formulations for its antioxidant properties and benefits to the skin. Phenols, anthocyanins and flavonoids protect skin from oxidative stress. Like tomato, tamarillo could be used for various skin problems. Blend two teaspoon of oatmeal, one tamarillo and one lemon juice. Apply it to the face and let it remain for 15 to 20 minutes. Then rinse this mask with lukewarm water.

1. **Helpful for diabetics**

Scientific studies show that tamarillo is beneficial for diabetic people. Tamarillo has chlorogenic acid which helps to lower blood sugar in Type II diabetes. Moreover, antioxidant activities help to lower oxidative stress on body organs such as liver and pancreas that could result to diabetes.

1. **Antimicrobial activity**

Tamarillos possess wide range of antimicrobial activity which was the result of protein that inhibits action of enzyme invertase. Its protective action was found in study over various plant pathogens. This antioxidant activity assists in preventing infection in humans.

Traditional uses

- For sore throat, warm the leaves and wrap it around neck.
- Cook the pulp in embers and use it as a poultice for inflamed tonsils.

Precautions

- Avoid by the people with known allergy.
- Use it in moderate amounts.
- People with health ailments should consult the doctor before use.

How to Eat

- Consume the fruit by scooping the fresh.
- Flesh could be lightly sugared and cooled which could be used for breakfast.
- In New Zealand, flesh is spread on toast at breakfast.
- It could be added to stews, chutneys, hollandaise and curries.
- Add it to dessert or combine it with apples.
- In Nepal, it is used as tomato for curry.
- In Ecuador, it is blended with chili peppers for making hot sauce.
- It could be added to green salads, fruit salads and sandwiches.
- In South America, it is blended with ice, milk and sugar.
- Tamarillo could be baked, grilled or boiled and serve it with fish, burger or steak.

