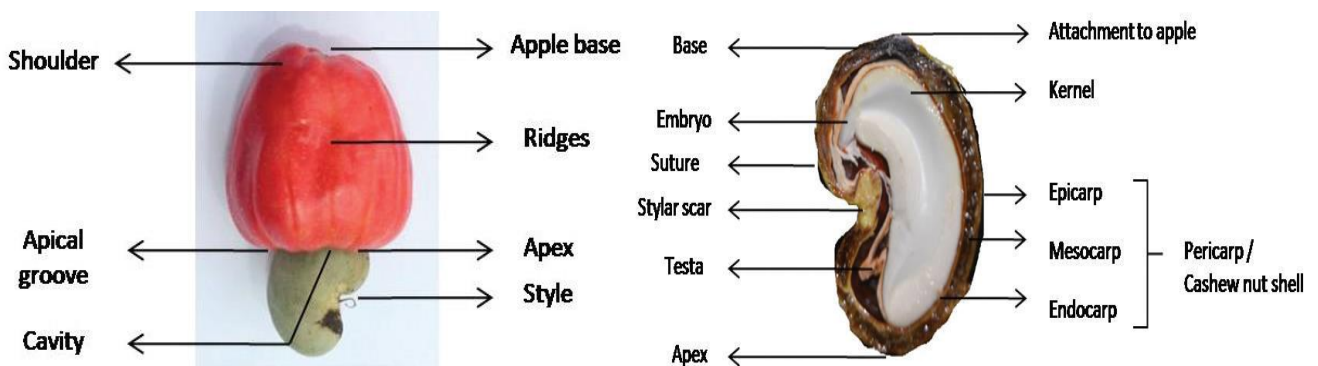


# Cashew apple

## Botany of cashew apple

Cashew belongs to the family Anacardiaceae having drupe fruit type. The drupaceous kidney-shaped fruit is exclusively surrounded by a greyish hard coat and attached outwardly to a swollen fruit stalk (cashew apple) which is misconceptualized as fruit. Cashew apples are derived from a tissue called thalamus or receptacle or stalk present outside the ovary. Hence, the distinct layers like exocarp, meso and endocarp are absent in cashew apple and therefore considered as pseudocarp or false fruit. The fleshy thalamus is attached to the pedicel at dorsal side and astylar end of the actual fruit (derived from the ovary) with a sunken spot (apex groove). The development and maturity of cashew apple are coherent with the nut maturation. The cashew apple can reach up to an average length x breadth of 11 x 5 cm which is 8 to 10 times more than that of respective nut size. The matured cashew apples are spherical or cylindrical in shape without or with medial depression and look like a pyriform shaped hypocarp. During maturation and ripening, the firm, fragile and green, immature cashew apples are turned to soft and juicy with the different outer spectrum (red, orange and yellow) depending on the varieties.



## **Nutritional and medicinal qualities**

The cashew tree is classified under medicinal trees in its place of origin and South American continent. The cashew apple is a fleshy fruit containing 65 to 80% moisture which can be extracted as minerals, sugars, polyphenols and tannins rich juice. Cashew apple juice and their byproducts have potential medicinal value for treatment against various ailments and also can be used as refreshment drink. Cashew apple juice is consumed freshly to get better relief against chronic dysentery, sore throat and bone demineralization. Owing to the unique astringent property, the external rubbing of fresh or distilled cashew apple juice is reported to provide relief from rheumatism and neuralgia. Cashew apple can be very well used as an energy booster to revitalize the body because of high calorific value. Fructose in cashew apple regulates the insulin and stabilizes the blood sugar, whereas glucose in cashew apple acts as an instant energy supplier. The copper in cashew apple facilitates the flexibility of blood vessels and augments the oxygen-carrying capacity. The calcium present in cashew apple helps in bone and joint wellness. The fresh and fermented beverage helps to prevent muscle cramp, macular degeneration and insomnia in old age. Cashew apple is known as a potent antioxidant and oral cleanser. It helps to strengthen the gums, maintain oral freshness and overall dental health. According to the Indian Council of Medical Research, the average requirement of vitamin C for Indians ranges from 40 to 80 mg, and this can be fulfilled by consuming 100 ml of cashew apple juice. The fibre rich cashew apple increases the level of fat oxidation in adipose tissue and cholesterol hence recommended at a moderate level for those looking for weight reduction.