



Value Addition: Method of Preparation of Aonla Toffee

(*Ashwini Uikey¹, Bhavna² and Mrinalini Uikey³)

¹Dept. of Horticulture, College of Agriculture, RVSKVV, Gwalior

²Dept. of Horticulture, RVSKVV, Gwalior

³Dept. of Agriculture, PDKV, Akola

*Corresponding Author's email: ashwiniuikey@gmail.com

Value-added is the difference between the price of a product or service and the cost of producing it. The price is determined by what customers are willing to pay based on their perceived value. Value is added or created in different ways. Value-added agriculture may also refer to increasing the economic value of a commodity through particular production processes, e.g., organic produce, or through regionally branded products that increase consumer appeal and willingness to pay a premium over similar but undifferentiated products. According to the USDA definition, value-added agricultural products are characterized by one or more of the following criteria: a change in the physical state or form of the product; the production of a product in a manner that enhances its value, as demonstrated through a business plan; the physical segregation of a commodity or product in a manner that results in the enhancement of the value of that commodity.

Aonla (*Emblica officinalis* Gaertn) known as Indian Gooseberry, belongs to family among the indigenous fruits of India. It is one of the most important minor fruits which has also some commercial importance. The plant is quite hardy, and prolific returns, although it is the most neglected crop. The fruit has probably originated in tropical south eastern Asia, in central and southern India. Some workers report that it is native of India, Ceylon, Malaysia and China. The wild relatives can be found every where in India. It also grows at the foot hills of the Himalayas and at elevation from 1250- 1500 meters . Nowadays, it is grown as a commercial crop in many parts of the world.

Fruits are acrid, cooling, refrigerant, diurectic and laxative. The fruit is very nutritive as well as good source of Vitamin-C (46% of the Daily value). The fruit has also fair amount of iron, calcium and lysine. Aonla fruit is not popularly known as table fruit due to its sour and astringent in taste. It is very perishable in nature, but the excellent not only nutritive but also therapeutic values of fruit have great potentiality for processing into quality products which can get position in national and international market.

The high nutritive value of aonla fruit indicated good potential for exploration and value addition different food products. These are low in calories as well as fat. Meanwhile, these are rich in citric acid, phenols and antioxidants, very small, nutritional fruits that offer many health benefits.

Health benefits of Aonla

1. Highly nutritious
2. High in fiber and low in calories
3. Rich in antioxidants
4. Control blood sugar

5. Protect your brain
6. Anticancer effects
7. Good for heart
8. Easy to add in diet

Aonla are a wonderful, healthy fruit to include in our diet as a snack or flavourful addition to meals. These include low blood sugar, cholesterol, and blood pressure levels as well as a reduced risk of cancer, diabetes, heart disease and age-related illnesses of the brain. Through various research on aonla especially is limited, many of the nutrients in these fruits have been linked to significant health benefits.

Mineral composition of Aonla fruits

Minerals	Available quantity (mg/ 100 gm)
Phosphorus	28.2
Calcium	27.6
Iron	16.6
Copper	1.8
Manganese	1.1
Zinc	0.28

Aonla have antiscorbulic, diuretic, laxative and antibiotic properties used in treating jaundice and cough. It is one of the richest source of Vitamin C and of polyphenols, and these polyphenols are considered to be a high medicinal value. Therefore, this fruit has reached an important therapeutic role in the Ayurvedic systems of medicine. Generally aonla fruit has sour and astringent taste, utilized raw, cooked or in the form of pickle, murrabas (preserve), juices, jam, cheese, candy, chutney, powder, sauce, beverages are the richest source of Vitamin C and antioxidants.

Pulpy foods have great potential and offer lot of opportunities for preparing diversified products. Many groups of products are prepared from pulpy fruits. They are highly nutritive products compared to sugar boiled confectioneries available in the market. Therefore, these products have scope for cottage and small scale industry.

Toffee can be prepared from various fruits such as aonla, bael, mango, guava, banana, papaya, etc. Ingredients for toffee are fruit pulp, sugar, glucose, skimmed milk powder and butter. Essence and colour also be added. Recipe and technique for preparation of toffee different the fruits are as follows.

Recipe


Aonla pulp	1 kg
Sugar	750 g
Glucose	100 g
Skim milk powder	150 g
Butter	50 g



Fresh Aonla Fruits



Boiling for pulping

	
Removal of seeds	Mixing with Grinder
	
Pulp preparation	Addition of sugar, glucose, butter and some drops of colour
	
Preparation of Aonla Toffee	

Method for the preparation of Aonla Toffee

- Pulping
- Heating
- Concentrating upto one - third volume
- Addition of preservatives (at 20 ppm)
- Cooking pulp for the method of preparation of toffee
- Addition with sugar, glucose, butter as per concentration of ingredients.
- Heating (at medium range).
- Concentrating upto one - third volume.
- Removing from fire.
- Adding colour and essence .
- Mixing gently .

- Spreading mass Uniformly (0.5- 0.75 cm thickness) on a table with stainless steel top/ tray smeared with butter .
- Allow to cool and set 2 - 4 hours
- Cutting into cubes
- Wrapping in butter paper
- Storage

To improve the profitability of farmers. To empower the farmers and other weaker sections of society especially women through gainful employment opportunities and revitalize rural communities. To provide better quality, safe and branded foods to the consumers.