HEALTH BENEFITS AND VALUE ADDED PRODUCTS **OF PEACH**

Seerat Gupta, Neeraj Gupta and Daman Preet Kour Division of Food Science and Technology, SKUAST, Jammu *Prunus persica* (peach) is a common and valuable temperate fruit. Peaches are among the most popular tree fruits widely consumed. They are fleshy fruit with one seed enclosed in a pericarp. Due to cell wall formation and lignin decomposition, endocarp's hardening occurs and the fruit is categorized as a drupe. The three layers of the pericarp are the endocarp, mesocarp and exocarp, and among the three layers mesocarp is one that is made up of the fruit's soft edible part. Peaches are crucial part of a healthy diet as they are enriched with phenols and vitamins (such as vitamin C). The peach is a fruit that is particularly nutrient-dense and high in both macronutrients and micronutrients. Peaches can be consumed either in fresh, tinned, or dried form.

NUTRITIONAL COMPOSITION OF PEACH

It has a minimal lipid content, is mostly water, and has very little sugar and organic acids like malic, citric, and folic acid. Peach is composed of 88.10% moisture, 11.20° Brix Total Soluble Solids (TSS), 9.30% total sugar, 0.76% malic acid. Additionally, it has 6.57% reducing sugar, 9.76% total sugars, 7.26 mg/100g ascorbic acid, and 100 µg/100g carotenoids.

HEALTH BENEFITS

- Fiber in peaches helps with a smoother digestion and a reduced risk of gastrointestinal diseases.
- Certain components are present in peach that may help lower triglyceride and cholesterol levels as well as risk factors for heart disease.
- Peaches may help in alleviating the allergy symptoms by minimizing the immune system's reaction to allergens.
- Chemicals found in peaches and peach blooms may help in preserving the skin condition by preventing sun damage and retaining moisture.
 - Peach-derived substances may provide some cancer protection by preventing the development, proliferation, and dissemination of malignant cells.
 - Antioxidants, which can help shield the body from disease and ageing, are another advantageous plant compound found in peaches. Antioxidants and immune-supporting elements abound in peaches.

VALUE ADDED PEACH PRODUCTS

Peaches can be used to make a variety of goods with additional value, such as jam, pickles, puree, dehydrated peaches, juice, nectar, etc. These goods are very nutritious and generally healthy.

1. Peach Pickle: Pickling is a classic way to preserve food. Pickle developed from peach improves the shelf life of this fruit. Pickles can be made more delicious by adding additional spices such asafetida, mustard, clove, and turmeric.

Fig. 1: Flow Chart of Preparation of Pickle from Peach

Firm Peaches

Washing

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Immediately washing in water

Destoning, halving and pricking

Heating of peach halves in water with sugar for about 10 minutes

Mixing of common salt, citric acid and spice extracts

Addition of acetic acid and sodium benzoate

Cooling of pickle

Filling in pre-sterilized glass jars

Sealing

Storage in cool and dry place

2. Peach Nectar: Fruit nectar is a drink that is developed by mixing water with juice or concentrated juice, or a mixture of those products, with or without honey, sugar, syrups, or other sweeteners. Products can either be based on mixture of fruits or just one fruit.

Fig. 2: Flow Chart of Preparation of Peach Nectar Selection of Peach

↓ Pulping by hot break method (82±2°C) for 10 minutes

Sorting and Washing

Pulp Preparation of syrup and addition of citric acid Mixing of syrup with pulp Heating at $85\pm5^{\circ}C$ Hot filling in pre-sterilized bottles Crown corking Pasteurization at $85\pm5^{\circ}C$ for 30-35 min.

Labelling and Storage of peach nectar

Cooling

3. Peach Puree: Fruit that has been mechanically sieved, screened, or otherwise finely chopped is referred to as fruit puree. Puree concentrates are being utilized more frequently as ingredients in a variety of foods, including yoghurt, bakery goods, and infant foods. Thermal processes like pasteurization and concentration are used to produce fruit purees in order to maintain microbiological stability and extend shelf life.

Fig. 3: Flow Chart of Preparation of Peach Puree

Selection of Peach Washing/ Sorting Destoning Crushing Heating at 90-95°C Finisher Evaporation at 60-75°C Deaeration Sterilization (105-120°C) Peach puree Storage

CONCLUSION

The majority of Prunus fruits and seeds are frequently processed, include making of jam, canning, roasting, or drying, and are consumed throughout the year. Peaches are now produced more widely, with Asia accounting for about half of that production. Peaches are the stone fruit that contributes the most phenolics to the diet. Due to their high nutritional content and the therapeutic compounds present in their phytochemicals, peaches are crucial for human health.