

CANDIED, CRYSTALLIZED AND GLAZED FRUITS

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PREPARATION OF CANDIED FRUITS / VEGETABLES

A fruit /vegetable impregnated with cane sugar or glucose syrup and subsequently drained free of syrup and dried is known as candied fruit / vegetable. The most suitable fruits for candying are amla, kranda, pineapple, cherry, papaya, apple, peels of orange, lemon, grape fruit and ginger etc. The FPO specifications for candied fruits are TSS -75%, total sugar-70% and reducing sugar-25%.

The process for making candied fruit is practically similar to that for preserves. The only difference is that the fruit impregnated with syrup having a higher percentage of sugar – 75 degree brix. The syrup left over from the candying process can be used for candying another batch of the same kind of fruit after suitable dilution, for sweetening chutneys, sauces and pickles and vinegar making.

Example: Candied citrus peels, Petha (Candied ash gourd)

PREPARATION OF CRYSTALLIZED FRUITS /VEGETABLES

Candied fruits /vegetables coated with crystals of sugar, either by rolling in finely powdered sugar or by allowing sugar crystals from dense syrup to deposit on them are called crystallized fruit / vegetable.

The candied fruits are placed on a wire mesh tray which is placed in a deep vessel. Cooled syrup (70% TSS) is gently poured over the fruit so as to cover it entirely. The whole mass is left undisturbed for 12-18 hours during which a thin coating of crystallized sugar is formed. The tray is then taken out carefully from the vessel and the surplus syrup dried off. The fruits are then placed in a single layer on wire mesh trays and drained at room temperature or at about 49 degree C in driers.

PREPARATION OF GLAZED FRUITS /VEGETABLES

Covering of candied fruits / vegetables with a thin transparent coating of sugar, which imparts them a glossy appearance is known as glazing.

Cane sugar and water (2:1 by weight) are boiled in a steam pan at 113-114 degree C and the scum is removed as it comes up. Thereafter the syrup is cooled to 93 degree C and rubbed with a wooden laddle on the side of the pan when granulated sugar is obtained. Dried candied fruits are passed through this granulated portion of the sugar solution, one by one, by means of fork and then placed on trays in a warm dry room. They may also be dried in a drier at 49 degree C for 2-3 hours when they become crisp, they are packed in airtight containers for storage.

PROBLEMS IN PREPARATION OF CANDIED, CRYSTALLIZED AND GLAZED FRUITS

- 1) **FERMENTATION:** It is due to low concentration of sugar used in the initial stages of preparation of candy or preserve. Sometimes fermentation also occurs during storage due to low concentration of sugar and insufficient cooking. This can be prevented by boiling the product at suitable intervals, by adding the required quantity of sugar and by storage in a cool and dry place.
- 2) **FLOATING OF FRUITS IN JAR:** It is mainly due to filling the preserve without cooling and can be avoided by cooling the preserve prior to filling.
- 3) **TOUGHENING OF FRUIT SKIN OR PEEL:** It may be due to inadequate blanching or cooking of fruits hence blanching till tender is necessary. Toughness may develop when cooking is done in a large shallow pan with only a small quantity of syrup.
- 4) **FRUIT SHRINKAGE:** Cooking of fruits in heavy syrup greatly reduces absorption of sugar and causes shrinkage. Therefore, fruits should be blanched first or cooked in low sugar syrup.
- 5) **STICKINESS:** It may develop after drying or during storage due to insufficient consistency of the syrup, poor quality packing and damp storage conditions.

- 6) **STORAGE:** If candied and crystallized fruits are stored under humid conditions, they lose some of their sugar due to absorption of moisture from the air. They also become mouldy if they are not sufficiently dried and are packed in wet containers.
- 7) **PACKAGING:** These products are hygroscopic, therefore water-proof packaging like metal and glass containers which are impermeable to water vapour should be used. Use of newer flexible plastic films would be cheap and highly effective for packaging purposes.

REFERENCES-

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- 2) Lal, G., Siddhapa, G.S., & Tandon, G.L. (2009). Preservation of fruits and vegetables. New Delhi: Indian Council of Agriculture Research, Chapter 12.