

COOPERATIVE EXTENSION SERVICE UNIVERSITY OF HAWAII CIRCULAR 418



## **BANANA PUREE**

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Banana puree suitable for use in bakery products can be produced from locally-grown fruit. In the procedure described here regular fruit processing equipment is used in preparing the puree. The product is held at  $35^{\circ}$  to  $40^{\circ}$  F. and retains its original high quality for several weeks. The peeled bananas are dipped in a sulfur dioxide solution to inhibit discoloration and gelling. Small amounts of citric acid and food preservative are added to increase the storage life and stability of the product. Brazilian (apple) bananas have much more tendency to gel than do Bluefield and Chinese bananas. Consequently the apple banana puree is treated with a pectic enzyme to prevent the formation of a gel.

The flow sheet (Figure 1) shows the steps in the manufacture of this puree product. Bananas are peeled and immersed for 3 minutes in a 2.0-percent solution of sodium bisulfite, which introduces about 200 ppm of SO<sub>2</sub> to the fruit. They are drained several minutes, then milled through a  $\frac{1}{8}$ -inch screen to give a coarse puree. For apple bananas, about 0.2-percent by weight of Pectinol 10-M is added and the puree is allowed to stand for 30 minutes. This step is not required for Bluefield

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Figure 1. BANANA PUREE PROCESSING FLOW SHEET

and Chinese bananas. The puree is pumped to a plate heat exchanger where it is heated very rapidly to  $190^{\circ}$  F. and after about 1 minute is cooled rapidly to  $85^{\circ}$  F. It then goes to a finisher with a .033 screen which removes seeds and some fibrous material. Citric acid is stirred in to bring the puree to pH 4.2; about 100 grams of citric acid is required for 100 pounds of puree. A preservative agent such as potassium sorbate (250 ppm) can be added to increase resistance to spoilage by yeasts, molds or bacteria. The puree is filled into 30-pound tins with plastic film bag liners, sealed and placed in cool storage ( $35^{\circ}$  to  $40^{\circ}$  F.)

The product retains the natural color and flavor of banana and resists spoilage for several weeks. It is not frozen nor is it heat sterilized. Samples of puree made from Bluefield bananas have remained unspoiled for 10 weeks; Chinese and Apple banana purees are somewhat less stable but retain good quality for 7 to 8 weeks. A processor or baker can prepare a large quantity of the puree only four or five times a year and hold it in cool storage until it is used.

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