Dehydrated Apple Slices Processing

Processing dehydrated apple slices

Fruit selection

After harvesting, high quality fresh apples are selected for processing so that color, aroma and taste remains nice and fresh in the final product. Fully ripe apples are preferred and selected for dehydration.

Washing

selected apples are washed to remove dirt, dud, insects, frost, mold, spores and filth that might contaminate or affect color, aroma of the final product.

Preparation

Bruised spots are trimmed and the core is removed and then circular slices are made.slicing is done manually or mechanically. The dried slices dry as apple chips.

Pre- treatment

This prevents fruits from darkening as many light colored fruits like apples darken rapidly when cut and exposed to air. This treatment is done with ascorbic acid mixed with water. Ascorbic acid is available in powder or tablet form and can be got from drug shops or grocery stores.

Dehydration

Drying of sliced apples can be done in the sun, oven or using a food dehydrator. This is achieved using a right combination of warm temperature, low humidity and air current.
In sun drying, fruits are placed on trays in screen made of wooden dowels.
In tray drying, temperatures are set to 62 degrees and after 1 hour, the temperature is reduced to 57-60 degree Celsius to

finish drying of slices. The drying take usually between 6-12 hours depending on moisture level required for final product. Moisture level of sliced apple is usually 20%

Conditioning

Not all slices dry evenly, its necessary to condition. slices are put in glasses or plastic container for several days to evenly distributed moisture.

Packaging and storage

Dehydrated slices are stored in sealed plastic bags, glass bottles, tin jars, pouches. Packaged containers are boxed, packed together and stored at temperatures 20-25 degrees Celsius for 6-8months.
This should be in a well ventilated storage room away from sunlight , in clean, dry and free from pest.
Equipment required in the processing are fruit washer, apple peeling and slicing machine, tray dyers/ dehydrators and packaging machines.