

POST HARVEST RESEARCH CENTRE

DEHYDRATION OF FRUITS & VEGETABLES

TECHNOLOGY BRIEF



FOOD TECHNOLOGY SECTION
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DEHYDRATION OF FRUITS AND VEGETABLES

Introduction



Dehydration is one of the oldest forms of food preservation techniques known to man and offers an economical and satisfactory means of preservation and cutting down the spoilage of fruits and vegetables. The moisture content of most dehydrated foods are below 20 percent. The fruits & vegetables has a good export potential and serve as good stand by products for daily preparing dishes and for off-season consumption. The main advantages of dehydrated products are

- ❖ Long shelf life
- ❖ Uniform quality
- ❖ Low packaging cost
- ❖ Economical shipping cost
- ❖ Non-refrigerated transportation
- ❖ Ambient storage conditions



Raw Materials

Almost all types of fresh vegetables and fruits are abundantly available in a particular season.

Process

The process consist of operations like

- ❖ Sorting
- ❖ Washing
- ❖ Peeling
- ❖ Cutting
- ❖ Chemicals treatment
- ❖ Blanching
- ❖ Dehydration
- ❖ Packaging

Major types of Dehydrator

- ❖ Drum dehydrator
- ❖ Tunnel dehydrator
- ❖ Cabinet dehydrator

Recommended Design

A twin tunnel dehydrator with trolleys, washing, peeling and blanching units (PCSIR design).

Training Facilities

Training can be provided by PHRC & PCSIR Laboratories Complex, Lahore for material handling, processing, packaging and quality control.

Plant Economics

1. Land required: 2000 sq.ft.
2. Plant capacity: 3 tons/day fresh fruits/vegetables
3. Shift 8 hrs/day: 1
4. Working days: 300per year
5. Profit on sales revenue : 20–25% approx.

