



From
Director's Desk ...



I am extremely happy to present the new edition of the Compendium on **'Home scale Processing and Preservation of Fruits and Vegetables'** which has been proved very useful by Cottage Industries, Women SHGs, Microentrepreneurs and FPOs. The current volume is the 15th edition starting from the first edition in 1950 has undergone time-to-time revisions keeping pace with developments in the processing and regulatory space.

CSIR-Central Food Technological Research Institute (CFTRI) is a premier R&D organisation working in the area of Food Science & Technology over the last seven decades. The Institute has been working very closely with Food Industry MSME sector by making number of affordable technologies for commercialisation and skilling of aspiring entrepreneurs in order to bring quality value added products to the market. Most of these interventions have helped Micro Industries for making their presence felt in the emerging consumer market through ingenuity, innovations and perseverance. Recently, Govt. of India has launched a scheme, Prime Minister Formalisation of Micro Food Processing Enterprises (PMFME) to promote rural microenterprises in the informal food processing sector to the tune of nearly 25 lakh in the country aligning with One District One Product (ODOP) scheme. Hope, the scheme would be one of the vehicle you can earnestly rely upon to get both financial and technical support from various Govt. agencies. The current edition brings up to-date, common processing and preservation techniques for value addition to the selected fruits and vegetables with an eye on market success.

I am confident that this volume would be of great utility in addressing many common problems faced by aspiring entrepreneurs and they can look forward to our continued support in realising their dream of self-reliance.

Finally, I would like to thank the entire generations of S&T personnel along with my current team from CSIR-CFTRI for their commitment and focus for taking the pristine knowledge to the last entrepreneur in the society who aspire to be a 'Celebrity' one day in their journey.

Once again Good Luck to all our Microentrepreneurs including Housewives.

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Sd/-

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1 BASIC PRINCIPLES OF FRUIT AND VEGETABLE PRESERVATION

- Canning
- Reduction in water activity
- Use of chemical preservatives
- pH/Acidity
- Fermentation
- Irradiation
- Low temperature storage

1

2 GENERAL METHODS OF FRUIT PRESERVATION



- Canning and bottling of fruits
- Drying of fruits
- Preparation of jams
- Preparation of fruit syrups
- Preserves and candies
- Fruit toffees

4

3 LIME AND LEMON



- Lime and lemon squash and syrup
- Lime juice cordial
- Lemon or lime barley water
- Lime and green chilli pickle

13

4 ORANGE



- Orange squash and orange syrup
- Ready-to-serve orange beverage
- Orange jam
- Orange marmalade

16

5 TOMATO



- Tomato juice
- Tomato ketchup
- Tomato chutney
- Tomato soup
- Canned tomatoes

20

6 MANGO



- Sweetened mango pulp
- Ready-to-serve mango beverage
- Mango squash
- Mango preserve
- Mango leather
- Mango chutney (sweet)
- Mango pickle in oil
- Canning of mango slices in syrup
- Drying of ripe mango slices
- Dehydration of green mango slices
- Mango toffee

24

7 CASHEW APPLE



- Cashew apple juice
- Cashew apple squash
- Cashew apple jam
- Cashew apple candy

29

8 SAPOTA



- Sapota squash
- Sapota jam
- Canned sapota segments

32

9 APPLE



- Apple juice
- Apple cider
- Apple preserve

34

10 BANANA



- Drying of ripe banana
- Banana chips
- Liquid banana
- Banana toffee

35

11 PINEAPPLE



- Pineapple juice
- Pineapple squash and Pineapple syrup
- Pineapple beverage (ready-to-serve)
- Canned pineapple
- Pineapple jam

37

12 JACK FRUIT



- Jack fruit squash
- Jack fruit jelly
- Canned jack fruit
- Jack fruit pickle

40

13 GUAVA



- Guava jelly
- Guava cheese

44

14 GRAPE



- Grape Juice
- Grape squash and syrup
- Grape beverage

46

15 PAPAYA



- Papaya pickle
- Papaya jelly
- Papaya preserve
- Canned papaya
- Canned papaya pulp
- Canned papaya cocktail
- Papaya nectar

48

16 CARAMBOLA

- Carambola squash
- Carambola jam
- Carambola preserve and candy

51

17 LOQUAT

- Loquat jam
- Loquat jelly
- Canned loquat

52

18 PEAR



- Canned pears
- Pear preserve
- Pear chutney

53

19 MUSK MELON



- Canning

54

20 BILWA FRUIT

- Bilwa preserve

55

21 PALMYRAH PALM KERNEL

- Preparation of kernel
- Canned kernel
- Palm kernel candy

56

22 GENERAL METHODS OF VEGETABLE PRESERVATION



- Canning and bottling of vegetables in brine
- Canning of curried vegetables
- Drying of vegetables

57

23 SWEET TURNIP

- Pickle

63

24 GREEN CHILLI



- Green chilli and lime pickle
- Canned green chillies

64

25 CARROT



- Spiced carrot juice
- Carrot preserve

65

26 GINGER



- Candy

67

27 PEAS



- Canning and bottling of
- processed peas

68

28 CANNING OF BAKED BEANS AND PULSES IN TOMATO SAUCE



- Preparation of tomato sauce
- Pretreatment of beans
- Canning of beans in sauce
- Canning of pulses in sauce

69

29 PETHA (ASH GOURD)

- Candy

71

30 BAMBOO



- Bamboo candy
- Sweet bamboo chutney
- Canning of bamboo in syrup
- Canning of bamboo in brine
- Canning of bamboo in curried vegetables

67

ANNEXURES

- I ABOUT FOOD SAFETY AND STANDARDS ACT (FSSA), 2006
- II CFTRI PROCESSES/KNOW-HOW ON FRUITS AND VEGETABLES
- III GLOSSARY

77

87

91