Fruits & vegetables are an important nutritional requirement of human beings as these foods not only meet the quantitative needs to some extent but also supply vitamins & minerals which improve the quality of the diet & maintain health. Fruit, vegetables & oil seeds processing is one of the pillars of the food & edible oil industry. India is the second largest producer of both fruits and vegetables. Fruits and vegetables are the reservoir of vital nutrients. Being highly perishable, 20 to 40% of the total production of fruits and vegetables goes waste from the time of harvesting till they reach the consumers. It is, therefore, necessary to make them available for consumption throughout the year in processed or preserved form and to save the sizeable amount of losses. At present, about 2% of the total produce is processed in India mainly for domestic consumption. Fruits and vegetables have great potential for value addition and diversification to give a boost to food industry, create employment opportunities and give better returns to the farmers. Oil seeds also play an important role in the food sector & daily life. Edible oils constitute an important component of Indian households. Domestic edible oil consumption in India is increasing. Self sufficiency in edible oils today stands at in recent years, availabilities of non conventional oil, rice bran oil, soybean oil, palmolein oil and cottonseed have increased. Oils are essential components of all plants. However, commercial oil production facilities only utilize plants that accumulate large amounts of oil and are readily available In order to improve the nutritional status of the people & also to exploit the export potential of processed products there is need to increase the productivity of processed food in the country. Currently, India accounts for 7.0% of world oilseeds output; 7.0% of world oil meal production; 6.0% of world oil meal export; 6.0% of world veg. oil production; 14% of world veg. oil import; and 10 % of the world edible oil consumption.

Some of the fundamentals of the book are preservation of pineapple, mango and papaya chunks by hurdle technology, effect of boiling on beta-carotene content of forest green leafy vegetables consumed by tribals of south India, process development for production of pure apple juice in natural colour of choice, physical refining of rice bran and soybean oils, anti nutrients and protein digestibility of fababean and ricebean as affected by soaking, dehulling and germination, quality changes in banana (musa acuminata) wines on adding pectolase and passion fruit, essential oil composition of fresh and osmotically dehydrated galgal peels, development of cold grinding process, packaging and storage of cumin powder, bakery products and confections, etc.

This book deals completely on the basic principles & methodology of fruits, vegetables, corn & oilseed processing & its preservation. This will be very resourceful to readers especially to technocrats, engineers, upcoming entrepreneurs, scientists, food technologists etc.

Contents
CONTENTS
Chapter 1 : Preservation of Pineapple, Mango and Papaya Chunks by Hurdle Technology
Chapter 2 : Process Development for Production of Pure Apple Juice in Natural Colour of Choice
Chapter 3 : Anthocyanins from Indian Varieties of Grapes
Chapter 4 : Processing Effect on Colour and Vitamins of Green Leafy Vegetables
Chapter 5 : Dissipation of Alphametherin Residues in/on Brinjal and Tomato During Storage and Processing Conditions
Chapter 6 : Effect of Boiling on Beta-carotene Content of Forest Green Leafy Vegetables Consumed by Tribals of South India
Chapter 7 : Physical and Functional Properties of Mucilages from Yellow Mustard (Sinapis alba L.) and Different Varieties of Fenugreek (Trigonella foenum-graecum L.) Seeds
Chapter 8 : Quality Parameters of Selected Mango Cultivars
Chapter 9 : Effect of Stage of Apple Pomace Collection and the Treatment on the Physico-chemical and Sensory Qualities of Pomace Papad (Fruit cloth)
Chapter 10 : Physical Refining of Rice Bran and Soybean Oils
Chapter 11 : Physico-chemical Status of Major Milk Constituents and Minerals at Various Stages of Shrikhand Preparation
Chapter 12 : Studies on the Development of Instant 'Dahi Bhalla'-An Indian Traditional Snack Preparation
Chapter 13 : Quality Characteristics of Freeze Dried Indian White Squid (Loligo duvauceli Orbigny)
Chapter 14 : Antinutrients and Protein Digestibility of Fababean and Ricebean as Affected by Soaking, Dehulling and Germination
Chapter 15 : Nutritional Evaluation of Sorghum Flour on Supplementation with Whey Proteins
Chapter 16 : Nutritional Evaluation of Soy Fortified Biscuits
Chapter 17 : Functional Properties of Defatted Cashew Kernel Flour
Chapter 18 : Glucoamylase Production by Aspergillus Niger in Solid State Fermentation with Paddy Husk as Support
Chapter 19 : Effect of Storage on Physico-chemical & Nutritional Characteristics of Carrot-Beetroot and Carrot-Black Carrot Juice
Chapter 20 : Osmotic Dehydration Characteristics of Button Mushrooms
Chapter 21 : Quality Changes in Banana (Musa acuminata) Wines on Adding Pectolase and Passion Fruit
Chapter 22 : Concentration of Clarified Orange Juice by Reverse Osmosis
Chapter 23 : Studies on the Volatiles of Cardamom

NIIR Project Consultancy Services (NPCS) 2/5
(Elleteria cardamomum)
Chapter 24 : Effect of Level of Juice Extraction on Physico-chemical Characteristics and Bitterness of Heat Processed Kinnow Juice
Chapter 25 : Nutritive Value of Malted Flours of Finger Millet Genotypes and Their Use in the Preparation of Burfi
Chapter 26 : Effect of Storage on Rice Yield Recovery
Chapter 27 : Studies on the Processing and Evaluation of Instant Idli Mixes
Chapter 28 : Vermicelli Noodles and Their Quality Assessment
Chapter 29 : Composition and Functional Properties of Fermented Soybean Flour (Kinema)
Chapter 30 : Biscuit Making Quality of Advance Lines of Wheat in India
Chapter 31 : Effect of Incorporation of Defatted Soyflour on the Quality of Sweet Biscuits
Chapter 32 : Effect of Supplementation of Processed Maize Germ Cake on Nutritional Quality of Maize
Chapter 33 : Studies on the Stability of Some Edible Oils and Their Blends During Storage
Chapter 34 : Reversed-Phase HPLC of Methyl Esters of Fatty Acids in Soybean Oil
Chapter 35 : Functional Properties and Nutritive Composition of Maize (zea mays) as Affected by Heat Treatments
Chapter 36 : Effect of Non-enzymatic Browning on Quality of Lime Juice
Chapter 37 : Essential Oil Composition of Fresh and Osmotically Dehydrated Galgal Peels
Chapter 38 : Solar Drying of Coriander and Methi Leaves
Chapter 39 : Supercritical Co2 Extraction of Sesame Oil from Raw Seeds
Chapter 40 : Studies on Juice Extraction of Aonla (Emblica officinalis Gaertn,) cv. 'Chakaiya'
Chapter 41 : Anti-nutritional and Flatulence Factors at Various Stages of Vegetative Growth of Fenugreek (Trigonella Foenum Graecum L.) Leaves
Chapter 42 : Processing and Quality Evaluation of Banana (Musa acuminata) Cheese
Chapter 43 : Effect of Primary Processing on Microbial Load of Cauliflower and Fenugreek
Chapter 44 : Utilisation of Peel in Plantain Wine Production
Chapter 45 : Optimization of Processing Conditions for Cottage Scale Production of Hurum
Chapter 46 : Sugarcane Juice Concentrate Preparation, Preservation and Storage
Chapter 47 : Nutritive Value of Dehydrated Green Leafy Vegetable Powders
Chapter 48 : Optimization of Process Parameters for Absorption of Milk by Makhana
Chapter 49 : Development of Nutritious Supplementary
Biscuits from Greengram Dhal
Chapter 50 : Vitamin A Fortification of Cottage Cheese
Chapter 51 : Biochemical Composition of Cashew
(Anacardium occidentale L.) Kernel Testa
Chapter 52 : Microbiological Quality of Milk, Vegetables and Fruit Juices
Chapter 53 : Bacteriological Examination of Pasteurized Milk and Milk Products, Sold in Harare, Zimbabwe
Chapter 54 : Effect of Different Thermal Treatments on Vitamin C and Microbial Sterility of Canned Drumstick (Moringa oleifera)
Chapter 55 : Solar Tunnel Drying of Red Chillies (Capsicum annum L.)
Chapter 56 : Studies on Nitrogen Extractability of Defatted Sunflower Meal
Chapter 57 : Development of Cold Grinding Process, Packaging and Storage of Cumin Powder
Chapter 58 : Determination of Residual Hexane and Microbiological Status in De-oiled Soybean Meal
Chapter 59 : Oligosaccharide Levels of Processed Redgram (Cajanus cajan L.)
Chapter 60 : Impact of Drying on Quality of Betel Leaf (Piper betle L.)
Chapter 61 : Chemical Composition, Anti-nutritional Factors and Shelf-life of Oyster Mushroom (Pleurotus ostreatus)
Chapter 62 : Effect of Milk Protein Modification on Physico-chemical Changes During Ripening of Cheddar Cheese
Chapter 63 : Simple Tests for Differentiating Raw-Old and New and Steamed Rice in a Mixture
Chapter 64 : Effect of Chhana and Paneer Whey on the Manufacturing Time and Loaf Volume of Bread
Chapter 65 : Glucose Lowering Effects of Pre-cooked Instant Preparations Containing Alfalfa Seeds in Non-insulin Dependent Diabetic Subjects
Chapter 66 : Modelling of Visual Shelf-life of Pearl Millet (Pennisetum glaucum) Dough (Fura)
Chapter 67 : Effect of Blanching on Pickled Bitter Gourd (Momordica charantia)
Chapter 68 : Testing of A Convection Type Cylindrical Dryer for Production of Instant Soy dosa Mix
Chapter 69 : Antinutrient Profile and Chemical Composition of Custard Powder Produced in Nigeria
Chapter 70 : Evaluation of Performance of Shea Fat as a Shortening in Breadmaking
Chapter 71 : Microbiological and Biochemical Changes During Fermentation of Kanji
Chapter 72 : Bakery Products and Confections
Chapter 73 : Adverse Reactions to Food Additives and Colours
Chapter 74 : Inhibitory Action of Cinnamon on Listeria Monocytogenes in Meat and Cheese
About NIIR

NIIR PROJECT CONSULTANCY SERVICES (NPCS) is a reliable name in the industrial world for offering integrated technical consultancy services. NPCS is manned by engineers, planners, specialists, financial experts, economic analysts and design specialists with extensive experience in the related industries.


NPCS also publishes varies process technology, technical, reference, self employment and startup books, directory, business and industry database, bankable detailed project report, market research report on various industries, small scale industry and profit making business. Besides being used by manufacturers, industrialists and entrepreneurs, our publications are also used by professionals including project engineers, information services bureau, consultants and project consultancy firms as one of the input in their research.