



Children's University
School of Nutrition and Health
Department of Home Science
Gandhinagar

**ACADEMIC
 YEAR
 2020-21**

M.Sc. – FN

YEAR	II	Course Type: Core Compulsory Course No: CCFN 302 Course Title: Food Science- II	Credits	4
Semester	III		Hours/wk	4
Objectives		<ol style="list-style-type: none"> 1. To provides an understanding of composition of various foodstuff 2. To familiarize students with changes occurring in various foodstuffs as a result of processing and cooking 3. To enable students to use the theoretical knowledge in various applications and food preparations 		
COURSE CONTENT / SYLLABUS - THEORY				
Unit I	Milk and Milk Products <ul style="list-style-type: none"> • Composition, • Physical and functional properties. • Denaturation, • Effects of processing and storage. • Dairy products. • Milk substitutes 			
Unit II	Nuts and Oilseeds and Fats and Oils <ul style="list-style-type: none"> • Nuts and Oilseeds <ul style="list-style-type: none"> • Nutritive value • Properties • Composition, selection(Specific nuts and oil seeds), • Protein concentrates and Toxins • Fats and Oils <ul style="list-style-type: none"> • Sources, composition, • effect of composition on fat, • classification, • physical and chemical properties, • Rancidity changes, anti-oxidants and 			
Unit III	Fruits and Vegetables <ul style="list-style-type: none"> • Classification, • Composition structural features. • Enzymes in fruits and vegetables, browning reactions. • Pigments : constituents, • Effect of cooking, acid, alkali, etc. on pigments. • Texture of fruits and vegetables during ripening. 			

Unit IV	<p>Spices and Herbs and Evaluation of food Quality</p> <ul style="list-style-type: none"> • Spices and Herbs <ul style="list-style-type: none"> • Specific Spices • Herbs • Evaluation of food Quality <ul style="list-style-type: none"> • Sensory properties of foods • Sensory Evaluation of food • Types of tests • Objective evaluation • Food Adulteration <ul style="list-style-type: none"> • Types of adulteration • Food standards and regulation in India
References	
<ol style="list-style-type: none"> 1. Food Science (fifth Edition) By B.Srilakshmi 2. Charley H (1982). Food Science (2nded.). John Wiley & Sons, New York. 3. Potter N and Hotchkiss JH (1996). Foods Science (5thed.). CBS Publication & Distributors, New Delhi. 4. Pomeranz Y (1991). Functional properties of food components (2nded.). Academic Press, New York. 5. Park Pauline G and Palmer H (1972). Food theory and applications. John Wiley & Sons, New York. 6. Goel RK (1979). Technology of Food Products Series No. 29. Small Business Publications, New Delhi. 7. Swaminathan M(1979).Food Science and Experimental Foods.Ganeshand Co. Madras. 8. Bowers J (1992). Food Theory and Applications (2nded.). MacMillan Publishing Co., New York. 9. Food Science and Technology Series of Monographs. 10. Annual Reports of CFTRI. 11. Journal of Food Science. 12. Journal of Food Science and Technology. 13. Indian Food Packer 	