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Nota di contenuto	Front Cover; Oxidative Stability and Shelf Life of Foods Containing Oils and Fats; Copyright; Contents; List of Contributors; Preface; Introduction; MAIN FOCUS OF THE BOOK; OXIDATION (RANCIDITY) PROCESSES IN OILS/FATS AND OILS/FATS-CONTAINING FOODS AND MEASUREMENTS OF LIPID OXIDATION; WHAT ARE THE OXIDATIVE STABILITY (RANCIDITY) AND SHELF-LIFE OF OILS/FATS AND OILS/FATS-CONTAINING FOODS?; WHAT IS CRITICAL ABOUT EVALUATING OXIDATIVE STABILITY AND SHELF-LIFE?; WHY IS EVALUATING THE OXIDATIVE STABILITY AND SHELF-LIFE OF FOODS AND FOOD INGREDIENTS A BIG CHALLENGE FOR THE FOOD AND PET FOOD... COMMON METHODS FOR EVALUATING OXIDATIVE STABILITY AND SHELF-LIFE IN THE FOOD AND PET FOOD INDUSTRIES: ADVANTAGES AND DISADVANTAG...HOW TO EVALUATE THE OXIDATIVE STABILITY AND SHELF-LIFE OF OILS/FATS AND OILS/FATS-CONTAINING FOODS; CHALLENGES POSED BY HETEROGENEOUS, MULTIPHASE FOOD SYSTEMS; FACTORS INFLUENCING AND DETERMINING OXIDATIVE STABILITY; MINIMIZING LIPID OXIDATION AND EXTENDING SHELF-LIFE OF OILS/FATS AND OILS/FATS-CONTAINING FOOD PRODUCTS; WHAT YOU WILL FIND IN THIS BOOK; REFERENCES; 1 - Analysis of Lipid and Protein Oxidation in Fats, Oils, and Foods; 1.1 INTRODUCTION

1.1.1 Fundamental Processes of Lipid Oxidation
1.2 HANDLING CONSIDERATIONS CRITICAL FOR LIPID OXIDATION ANALYSES; 1.2.1 Glassware Washing; 1.2.2 Solvents; 1.2.2.1 General Solvent Properties and Selectivity; 1.2.2.2 Solvent Stability; 1.2.2.3 Water Solubility in Solvents and Vice Versa; 1.2.3 Gas Solubility in Solvents; 1.2.4 Light; 1.2.5 Handling and Storage; 1.3 EXTRACTION OF LIPIDS FOR OXIDATION ANALYSES; 1.3.1 Pretreatments; 1.3.2 Extraction Methods; 1.3.2.1 Methods that Improve Extraction Yields and Efficiency; 1.3.2.2 Methods that Increase Extraction Efficiency While also Limiting Lipid Oxidation
1.4 CHEMICAL ANALYSES OF OXIDATION PRODUCTS IN OILS AND EXTRACTS; 1.4.1 Conjugated Dienes; 1.4.2 Hydroperoxides; 1.4.2.1 Iodometric Titration (AOCS Cd 8-53); 1.4.2.2 Xylenol Orange (XO); 1.4.2.3 Ferric Thiocyanate (FeSCN); 1.4.3 Epoxide Assays; 1.4.3.1 Hydrobromic Acid Titration (AOCS Standard Method Cd 9-57, 1997); 1.4.3.2 DETC Assay with HPLC Separation and Quantification of Epoxy Adducts; 1.4.4 Carbonyl Assays; 1.4.4.1 Complexation of Carbonyls with 2,4-Dinitrophenylhydrazine (DNPH)
1.5.4 Evaluation of Stability or Resistance to Oxidation
