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Factors Affecting Viscosity; Types of Viscous Behavior; The General Equation for Viscosity; Other Flow Equations; Time Dependency; Weissenberg Effect (Normal Force); Viscoelasticity; Small Amplitude Oscillatory Testing (SAOT); Mechanical Models; Fracture; Isotropy and Anisotropy; Units of Measurement; Suggestions for Further Reading; Chapter 4. Principles of Objective Texture Measurement; Introduction; Force Measuring Instruments; Distance Measuring Instruments; Time Measuring Instruments; Work, Energy and Power Measuring Instruments; Ratio Measuring Techniques; Multiple Variable Instruments  
Chemical Analysis; Miscellaneous Methods; Universal Testing Machines (UTM); Texture Profile Analysis (TPA); Accuracy and Precision of Measurement; Chapter 5. Practice of Objective Texture Measurement; Introduction; Force Measuring Instruments; Distance Measuring Instruments; Volume Measuring Instruments; Time Measuring Instruments; Miscellaneous Methods; Multiple Measuring Instruments; Chapter 6. Viscosity Measurement; Introduction; Capillary Type; Tube Viscometry; Orifice Type; Coaxial Rotational Viscometers; Cone and Plate and Parallel Plate Viscometers  
Modes of Operation of Rotational Viscometers; Other Rotational Viscometers; Paddle Viscometry; Falling-Ball Viscometers; Oscillation Viscometry; Imperfect Lubricated Squeezing Flow; Back Extrusion Viscometry; Imitative Viscometers; Use of One-Point Measurements for Non-Newtonian Fluids; Suppliers of Rotational Viscometers; Chapter 7. Sensory Methods of Texture and Viscosity Measurement; Introduction; Importance of Sensory Evaluation; Sensory Texture Profiling; Variations on Sensory Texture Profile Analysis; Sensory TPA by Consumer Panels; Repeatability  
The Texture Profile as an Objective Method

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Sommario/riassunto

Drawing together literature from a variety of fields, *Food Texture and Viscosity, 2E*, includes a brief history of this area and its basic principles. It reviews how texture and viscosity are measured, including the physical interactions between the human body and food, objective methods of texture measurements, the latest advances in texture-measuring instruments, various types of liquid flow, and more. This revised edition contains approximately 30% new material, including two new chapters on physics and texture and the correlation between physical measurements and sensory asse

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