

Sensory Evaluation of Foods 3(2-1)

Theory

Introduction: overview, physiological and psychological foundations. General requirements for sensory testing. Organization and evaluation of sensory evaluation program. Measurement: difference, discrimination testing, scaling, threshold methods, descriptive analysis. Effective texture evaluation. Color and flavor evaluation. Special problems related to sensory science. Consumer field tests and questionnaire design. Statistical procedures.

Practical

Taste, odor identification, trigeminal sensations, taste modifiers. Use of sequential testing in selecting judges. Training of panelists by difference tests such as triangle test, paired comparison test, duo-trio test. Color, threshold determination, just noticeable difference. R-Index rating and ranking. Category scaling, determining an ideal level of an ingredient. Magnitude estimation. Descriptive analysis of different foods. Consumer test and analysis.

Books Recommended

1. Kemp, S.E., Hollywood, T and Hort, J. 2009. Sensory evaluation: a practical handbook. John Wiley & Sons Inc., New York, USA.
2. Chambers, E. and Wolf, M.B. 2005. Sensory testing methods. American Society for Testing and Materials, West Conshohocken, Pennsylvania, USA.
3. Stone, H. and Sidel, J.L. 2004. Sensory evaluation practices. Elsevier Academic Press, California, USA.
4. Carpenter, R.P., Hasdell, T.A. and Lyon, D.H. (Eds). 2000. Guidelines for sensory analysis in food product development and quality control. Aspen Publishers, Inc., Gaithersburg, Maryland, USA.
5. Lawless, H.T. and Heymann, H. 1998. Sensory evaluation of food: principles and practices. Kluwer Academic Publishers, Massachusetts, USA.

Website: www.foodscienceuniverse.com