Contents

Preface			vii
Author biographies			
Αç	knov	wledgements	xi
1	Introduction		
	1.1	What is sensory evaluation?	1
		What is the role of sensory evaluation?	2
	1.3	What drives successful sensory testing?	3
2	Sensory perception		
	2.1	The human senses	4
	2.2	Factors affecting sensory measurements	6
3	Planning your sensory project		
	3.1	Setting objectives	11
	3.2	Product type	11
	3.3	Budget	12
	3.4	Timings	12
	3.5	Selecting the test method	12
	3.6	Setting action standards	13
	3.7	Experimental design	14
	3.8	Data analysis	19
4	Rec	uirements for sensory testing	30
	4.1	Professional conduct in sensory testing: health, safety,	
		ethical and legal considerations	30
	4.2	Good working and laboratory practices	37
	4.3	Resources needed for sensory testing	41
	4.4	Samples	49
	4.5	Assessors	54
	4.6	Data capture	63

vi Contents

5	Sensory test methods	66		
	5.1 Selecting the test			
	5.2 Discrimination tests			
	5.3 Descriptive analysis tests			
	5.4 Affective/consumer tests	118		
	5.5 Linking consumer, sensory and product data	136		
6	Completing the project			
	6.1 Reporting	138		
	6.2 Documentation and data storage	140		
	6.3 Dos and don'ts	141		
7	Appendices			
	Appendix 1: Examples of Latin Square and Williams Latin			
	Square designs for selected number of samples	142		
	Appendix 2: IFST PFSG professional code of conduct for			
	sensory professionals	143		
	Appendix 3: Critical values table for triangle test	147		
	Appendix 4: Critical values table for duo-trio test and paired			
	comparison test for difference (one tailed)	149		
	Appendix 5: ANOVA explained	151		
	Appendix 6: Critical values table for chi-squared	156		
	Appendix 7: Critical values table for paired comparison and			
	paired difference test (two tailed)	157		
	Appendix 8: Critical values table for Friedman test	159		
	Appendix 9: Types of scales	160		
	Appendix 10: Case study: modified quantitative descriptive	1.0		
	analysis of chocolate texture	163		
	Appendix 11: R index explained	174		
8	Glossary	178		
9	References	185		
In	dex	189		