## Contents

### Part I: Food

**Introduction**  
*Hendrik N. J. Schifferstein, Lynn Frewer, Einar Risvik*  
3

1. **Development and Acquisition of Food Likes**  
*David J. Mela*  
9

1.1 What do we Mean by “Liking” and “Preference”? 9
1.2 “Innate” Aspects and Early Acquisition of Likes 11
1.3 Mere Exposure of More Exposure? 13
1.3.1 Mere Exposure? 14
1.3.2 Associative Conditioning? 14
1.3.3 Liking, Desire and Boredom 16
1.3.4 Short-Term Effects on Food Acceptance 16
1.3.5 Food Desire, “Boredom” and Monotony 17
1.4 Conclusions: HOW do we Acquire Specific Food Likes? 19

References 19

2. **The Food and I**  
*Sensory Perception as Revealed by Multivariate Methods*  
*Einar Risvik*  
23

2.1 Introduction 23
2.2 Brief Introduction to Perception 23
2.3 Sensory Science 24
2.4 Descriptive Sensory Analysis 26
2.5 Sensory Profiling of Whole Meat as an Example 26
2.6 Sensory Profiling of Coffee as an Example 27
2.7 Affective Sensory Analysis 27
2.8 The Role of the Product 28
2.9 Multivariate Analysis 30
2.10 Consumer Preferences .................................................. 31
2.11 A Strategy for Segmenting Consumers –
    Segmentation by Taste Preference .......................... 31
2.11.1 Apples as an Example .............................................. 31
2.11.2 Future Perspectives ................................................. 35
2.12 Conclusions .......................................................... 36
References ............................................................... 36

3 Beliefs About Fat
Why do we Hold Beliefs About Fat and why and how do we
Study these Beliefs?
Johannes Brug, Patricia van Assema ............................... 39
3.1 Introduction: Beliefs About Foods or Nutrients? ............ 39
3.2 Why Fat? .................................................................. 40
3.2.1 How Concerned are we About Fat ................. 41
3.3 Investigating Beliefs About Fat in Order to Design Planned
    Nutrition Education Aimed at Fat Reduction .......... 42
3.4 Theories that have Been Used to Study Beliefs as Determinants
    of Fat Intake ................................................................. 44
3.5 Four Belief Categories Related to Fat Intake ................. 46
3.5.1 Health Beliefs and Risk Perception ...................... 47
3.5.2 A Weighing of Pros and Cons .................................. 47
3.5.3 What we Think Others Would Like us to do and what we
    Think Others Do .......................................................... 48
3.5.4 What we Think we can Do ................................. 48
3.6 Are These Beliefs Really Important? ......................... 49
3.6.1 Environmental Factors ........................................... 50
3.6.2 Awareness of our Personal Intake of Fat ............ 50
3.7 Summary .................................................................. 51
References ............................................................... 52

4 Product Packaging and Branding
Rosira Deliza, Hal MacFie ............................................. 55
4.1 Introduction .......................................................... 55
4.2 General Packaging Effects on the Expected Sensory Attributes .. 56
4.3 Packaging Effects and Labelled Product Perception ......... 61
4.4 Branding Effect on Consumers' Intention to Purchase
    Vegetable Oil .......................................................... 67
References ............................................................... 71

5 Effects of Product Beliefs on Product Perception and Liking
Hendrik N. J. Schifferstein ............................................ 73
<table>
<thead>
<tr>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 Introduction</td>
</tr>
<tr>
<td>5.1.1 Expectations in the Sensory Evaluation of Foods</td>
</tr>
<tr>
<td>5.2 Theories</td>
</tr>
<tr>
<td>5.2.1 Information Integration</td>
</tr>
<tr>
<td>5.2.2 Assimilation and Contrast</td>
</tr>
<tr>
<td>5.2.3 Asymmetrical Assimilation</td>
</tr>
<tr>
<td>5.2.4 Processing Affect</td>
</tr>
<tr>
<td>5.2.5 Variations of the Expectancy-Disconfirmation Model</td>
</tr>
<tr>
<td>5.3 Moderating Variables</td>
</tr>
<tr>
<td>5.4 Methodological Issues</td>
</tr>
<tr>
<td>5.5 Conclusion</td>
</tr>
<tr>
<td>References</td>
</tr>
</tbody>
</table>

6 Consumers’ Quality Perception
Anne C. Bech, Klaus G. Grunert, Lone Bredahl, Hans J. Juhl, Carsten S. Poulsen | 97 |

6.1 Introduction | 97 |
6.1.1 The Importance of Quality | 97 |
6.2 Quality from a Means-End Perspective | 98 |
6.3 Types of Quality Dimensions | 99 |
6.4 Quality Expectations, Quality Experience and Physical Product Characteristics | 100 |
6.5 Perspectives and Future Research | 111 |
References | 111 |

Part II: People

7 Does Taste Determine Consumption? Understanding the Psychology of Food Choice
Richard Shepherd | 117 |

7.1 Introduction | 117 |
7.2 The Impact of Taste on Intake | 118 |
7.3 Questionnaire Studies | 120 |
7.4 Relative Importance of Taste in Questionnaire Studies | 121 |
7.5 Influences on Choice Beyond Belief-Based Attitudes | 123 |
7.5.1 The Role of Self-Identity | 123 |
7.5.2 Moral and Ethical Concerns | 125 |
7.6 Conclusions | 128 |
References | 129 |

8 Food Choice, Phytochemicals and Cancer Prevention
Nigel Lambert | 131 |
8.1 Cancer Incidence and Mortality 131
  8.1.1 Cancer Rates in Europe 133
8.2 Phytochemicals and Cancer Prevention 134
  8.2.1 Problems Currently Facing Researchers 137
8.3 Psycho-Social Determinants of Fruit and Vegetable Consumption 140
  8.3.1 Barriers to Eating Fruits and Vegetables 141
8.4 How to get “us” to Eat more Fruit and Veg! 142
  8.4.1 Theoretical Models 143
  8.4.2 Individual Level 143
  8.4.3 Environmental Level 143
8.5 Nutritional Intervention Strategies 143
8.6 Interventions to Specifically Increase Fruit and Vegetable Consumption 145
  8.6.1 Problems Associated with 5 — a—Day Campaigns 146
  8.6.2 Why F+V interventions are not working 147
8.7 Summary 148
  8.7.1 Considerations for the Future 149
  8.7.2 Addendum 150
References 150

9 Private Body Consciousness
  Øydis Ueland 155
  9.1 Private Body Consciousness 155
  9.2 The Private Body Consciousness Scale 156
  9.3 Application of the Private Body Consciousness Scale 157
  9.4 Conclusion 158
References 158

10 Food Neophobia and Variety Seeking – Consumer Fear or Demand for New Food Products
  Liisa Lähteenmäki, Anne Arvola 161
  10.1 Novelty and Variety in Food Choices 161
  10.2 Food Neophobia and Variety Seeking Tendency as Individual Traits 162
    10.2.1 What is Food Neophobia 162
    10.2.2 What is Variety Seeking Tendency 163
    10.2.3 Scales to Measure Food Neophobia and Variety Seeking Tendency in Food Choices 164
      10.2.3.1 Food Neophobia Scale (FNS) 164
      10.2.3.2 The VARSEEK-scale 166
    10.4 Stability of the Measurements 166
10.2.5 Relations of Food Neophobia, Variety Seeking and Other Behavioural Tendencies ............................................ 167
10.2.6 Food Neophobia and Variety Seeking—Opposite Ends of One Dimension or Separate Dimension? ................. 167
10.3 Factors Influencing Expression of Food Neophobia .......... 168
10.3.1 Type of Food .......................................................... 168
10.3.2 Contextual Factors and Mood Influencing Food Neophobia .... 168
10.3.3 Decreasing Neophobia ............................................. 169
10.4 Expressing Variety Seeking in Food Choices .................... 170
10.5 Sticking with the Familiar or Exploring New Territories— Scheme for Integrating New Foods into Diet .................. 171

References ............................................................................. 173

11 Convenience-Oriented Shopping: A Model from the Perspective of Consumer Research
Bernhard Swoboda, Dirk Morschett ........................................ 177

11.1 Introduction and a Descriptive Analysis Model for the Convenience Phenomenon ............................................. 177
11.2 Types of Convenience Offers ........................................... 179
11.2.1 Convenience Products ............................................. 179
11.2.2 Convenience Retail Formats ...................................... 179
11.2.3 Convenience Services ............................................. 180
11.2.4 Fusing of Convenience Products, Retail Formats and Services . 181
11.3 Convenience as an Underlying Social Trend In Europe ........ 181
11.3.1 Factors that Influence Convenience Orientation ............... 181
11.3.2 Empirical Findings on Social Determining Factors ........... 182
11.4 Convenience-Oriented Purchasing Behaviour .................... 185
11.4.1 Synopsis of Approaches ........................................... 185
11.4.2 Gratification Approach as Heuristics ............................ 187
11.4.3 Empirical Findings ................................................ 189
11.5 Summary and Outlook ................................................ 193
11.5.1 Systematically with an Overview of the Types of Convenience Offers ......................................................... 193
11.5.2 Initial Approaches to Describe the Social Phenomenon ..... 194
11.5.3 Analysis of Purchasing Behaviour ................................. 194
References ............................................................................. 194

12 Food Intake and the Elderly – Social Aspects
Christina Fjellström, Birgitta Sidevall, Margaretha Nydahl .... 197

12.1 The Ageing Society ..................................................... 197
12.2 Food and Culture ....................................................... 198
12.3 Social Theory and Old Age ........................................... 199
12.4 Nutrition and Health ................................................... 200
12.5 Shopping, Cooking and Serving Food ................................. 200
12.6 Food Intake and Meal Patterns ......................................... 202
12.7 Social Aspects on Nutrition and Taste ................................. 203
12.8 Attitudes to Food in Everyday Life .................................... 205
12.9 Food in Old Age and Gender ............................................ 205
12.10 The Future ............................................................... 206
References ............................................................................. 208

13 Food-Related Lifestyle: A Segmentation Approach to European Food Consumers
Klaus G. Grunert, Karen Brunso, Lone Bredahl, Anne C. Bech ... 211

13.1 Cross-European Segmentation and International Food Marketing ....................................................... 211
13.2 The Food-Related Lifestyle Concept ............................... 212
13.3 Food-Related Lifestyle Segments in European Countries .... 215
13.4 Food-Related Lifestyle And Food Choice ......................... 224
13.5 Applications in Product Development and Market Communication ...................................................... 226
13.6 Future Perspectives .......................................................... 229
References ............................................................................. 229

Part III: Society

14 Cross-Cultural Differences in Food Choice
Saba Anna .................................................................................. 233

14.1 Dietary Patterns in Europe .................................................. 233
14.2 Factors Influencing Consumers Food Choice ...................... 234
14.3 Attitudes and Beliefs in Food Choice of Europeans .......... 243
14.4 Conclusions ................................................................. 245
References ............................................................................. 245

15 Appropriateness as a Cognitive-Contextual Measure of Food Attitudes
Howard G. Schutz, Magni Martens ............................................. 247

15.1 Introduction ...................................................................... 247
15.2 Description of Procedures for Appropriateness, Item by use Technique .................................................. 248
15.2.1 Selection of Stimuli ...................................................... 249
15.2.1.1 Foods ................................................................ 249
15.2.1.2 Uses ............................................................... 251
15.2.2 Format of the Questionnaire ................................. 252
15.2.3 Selection of Respondents ............................................ 253
15.2.4 Collection of Non-Appropriateness Data ........................................ 254
15.2.5 Data Collection ................................................................. 254
15.2.6 Analysis of Appropriateness Data .............................................. 255
15.2.6.1 Use of Principal Component Analysis ..................................... 256
15.2.6.2 Use of Partial Least Squares Regression (PLSR) ......................... 262
15.2.6.3 Analyses with Non-Appropriateness Data .................................. 264
15.3 Conclusions ............................................................................. 265

References ..................................................................................... 265

16 The Origin of the Spices: The Impact of Geographic Product
Origin on Consumer Decision Making

Peter W. J. Verlegh, Koert van Ittersum ............................................. 267

16.1 Introduction .............................................................................. 267
16.2 The Role of Geographic Origin in Consumer Decision Making:
A Framework .................................................................................. 268
16.2.1 Cognitive Aspects of Geographic Origin ..................................... 270
16.2.1.1 The Predictive Value of Geographic Origin .............................. 270
16.2.1.1.1 Experiential Beliefs ............................................................. 271
16.2.1.2 The Confidence Value of Geographic Origin .......................... 273
16.2.2 Affective Aspects of Geographic Origin ..................................... 274
16.2.2.1 Feelings Attached to Geographic Origin ................................. 274
16.2.2.2 Symbolic and Cultural Meaning of Products .......................... 275
16.2.3 Normative Aspects of Geographic Origin ................................... 276
16.2.4 Discussion: Interrelations Between Cognitive, Affective and Normative Aspects ...................................................... 277

References ..................................................................................... 278

17 Marketing PDO (Products with Denominations of Origin)
and PGI (Products with Geographical Identities)

Luis Guerrero ................................................................................. 281

17.1 Introduction .............................................................................. 281
17.2 Importance of Food Origin and its Functions ............................... 283
17.3 Denominations of Origin ......................................................... 286
17.4 Consumer Attitudes Towards Food Products with Denomination ...................................................... 289
17.4.1 Spain .................................................................................... 291
17.4.2 Germany .............................................................................. 292
17.5 The Future of PDO/PGI Products ............................................... 293

References ..................................................................................... 296
### 18 Effect of Communication (Advertising or News) on Sales of Commodities

*Wim Verbeke, Jacques Viaene*

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>18.1</td>
<td>Introduction</td>
<td>299</td>
</tr>
<tr>
<td>18.2</td>
<td>Role of Communication in Consumer Decision-Making</td>
<td>300</td>
</tr>
<tr>
<td>18.3</td>
<td>Specificity of Generic Advertising</td>
<td>301</td>
</tr>
<tr>
<td>18.4</td>
<td>Evaluation of Communication Effects</td>
<td>303</td>
</tr>
<tr>
<td>18.4.1</td>
<td>Defining Effectiveness</td>
<td>304</td>
</tr>
<tr>
<td>18.4.2</td>
<td>Data and Measurement</td>
<td>305</td>
</tr>
<tr>
<td>18.4.3</td>
<td>Modelling Issues</td>
<td>307</td>
</tr>
<tr>
<td>18.5</td>
<td>Selected Case Study: Beef in Belgium</td>
<td>308</td>
</tr>
<tr>
<td>18.5.1</td>
<td>Rationale and Research Method</td>
<td>308</td>
</tr>
<tr>
<td>18.5.2</td>
<td>Perception of Meat Attributes</td>
<td>310</td>
</tr>
<tr>
<td>18.5.3</td>
<td>Impact of Communication</td>
<td>310</td>
</tr>
<tr>
<td>18.6</td>
<td>Conclusions and Research Challenges</td>
<td>313</td>
</tr>
<tr>
<td>18.7</td>
<td>Suggestions for Further Reading</td>
<td>313</td>
</tr>
<tr>
<td>References</td>
<td>314</td>
<td></td>
</tr>
</tbody>
</table>

### 19 Food Availability and The European Consumer

*David Marshall*

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>19.1</td>
<td>Food Availability?</td>
<td>318</td>
</tr>
<tr>
<td>19.2</td>
<td>Farmgate: Food Production and Trade Within the EU</td>
<td>321</td>
</tr>
<tr>
<td>19.3</td>
<td>Consumption and Regional Cuisine</td>
<td>324</td>
</tr>
<tr>
<td>19.3.1</td>
<td>Food System: Structural Constraints on Access</td>
<td>326</td>
</tr>
<tr>
<td>19.4</td>
<td>Food Store: The Dominance of the Supermarket</td>
<td>329</td>
</tr>
<tr>
<td>19.4.1</td>
<td>Own Label in Europe</td>
<td>330</td>
</tr>
<tr>
<td>19.4.2</td>
<td>European Retail Format</td>
<td>331</td>
</tr>
<tr>
<td>19.5</td>
<td>Family Home: Domestic Constrains on Access</td>
<td>333</td>
</tr>
<tr>
<td>19.6</td>
<td>Is the Consumer Sovereign?</td>
<td>334</td>
</tr>
<tr>
<td>19.7</td>
<td>Concluding Comments</td>
<td>335</td>
</tr>
<tr>
<td>References</td>
<td>336</td>
<td></td>
</tr>
</tbody>
</table>

### 20 The Economics of Food Choice: Is Price Important?

*Christopher Ritson, Dan Petrovici*

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.1</td>
<td>Introduction: what do we mean by the Economics of Food Choice?</td>
<td>339</td>
</tr>
<tr>
<td>20.2</td>
<td>Economic Factors—Do They Matter?</td>
<td>340</td>
</tr>
<tr>
<td>20.3</td>
<td>Role of Prices as Determinants of Consumer Behaviour: Price Evaluated from the Point of View of What People Say</td>
<td>340</td>
</tr>
<tr>
<td>20.4</td>
<td>Price Sensitivity</td>
<td>343</td>
</tr>
<tr>
<td>20.4.1</td>
<td>Direct Questioning—Purchase Intentions</td>
<td>343</td>
</tr>
<tr>
<td>20.4.2</td>
<td>Price Sensitivity Metre</td>
<td>343</td>
</tr>
</tbody>
</table>

References
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.4.3 Evaluation of Trade-Offs Between Factors</td>
<td>345</td>
</tr>
<tr>
<td>20.5 Role of Price Evaluated from the Point of View of what People do</td>
<td>346</td>
</tr>
<tr>
<td>20.6 Own Price Elasticity Of Demand for Food</td>
<td>347</td>
</tr>
<tr>
<td>20.7 Exceptions to the Normal Law of Demand—Can an Increase in Price Cause an Increase in the Consumption of a Food Product?</td>
<td>349</td>
</tr>
<tr>
<td>20.8 Reference Prices</td>
<td>350</td>
</tr>
<tr>
<td>20.9 Cross-Price Effects</td>
<td>351</td>
</tr>
<tr>
<td>20.10 Role of Income in Food Choice</td>
<td>352</td>
</tr>
<tr>
<td>20.11 Food Consumption Patterns in the CeeCs</td>
<td>357</td>
</tr>
<tr>
<td>20.12 Conclusion: Economic Variables in Context</td>
<td>359</td>
</tr>
<tr>
<td>References</td>
<td>361</td>
</tr>
<tr>
<td>21 Food Choice in Europe – The Consumer Perspective</td>
<td>365</td>
</tr>
<tr>
<td>21.1 Introduction</td>
<td>365</td>
</tr>
<tr>
<td>21.2 Globalisation</td>
<td>365</td>
</tr>
<tr>
<td>21.3 Agricultural Policy</td>
<td>368</td>
</tr>
<tr>
<td>21.4 The Complexity of Food Production</td>
<td>368</td>
</tr>
<tr>
<td>21.5 A Breakdown in Consumer Confidence</td>
<td>369</td>
</tr>
<tr>
<td>21.6 The Role of Science</td>
<td>371</td>
</tr>
<tr>
<td>21.6.1 Choice versus Safety</td>
<td>373</td>
</tr>
<tr>
<td>21.7 Changing Eating Patterns</td>
<td>374</td>
</tr>
<tr>
<td>21.8 Low Income Consumers</td>
<td>375</td>
</tr>
<tr>
<td>21.9 An Informed Choice?</td>
<td>376</td>
</tr>
<tr>
<td>21.9.1 Risk Communication</td>
<td>376</td>
</tr>
<tr>
<td>21.10 The Role of Labelling</td>
<td>377</td>
</tr>
<tr>
<td>21.11 The Future—Making Consumer Choice Integral to Food Policy</td>
<td>378</td>
</tr>
<tr>
<td>21.12 Conclusion</td>
<td>380</td>
</tr>
<tr>
<td>22 Beliefs Associated with Food Production Methods</td>
<td>381</td>
</tr>
<tr>
<td>22.1 Introduction</td>
<td>381</td>
</tr>
<tr>
<td>22.2 Beliefs Associated with Agricultural Production Methods in General</td>
<td>383</td>
</tr>
<tr>
<td>22.2.1 Perceived Naturalness of Food</td>
<td>384</td>
</tr>
<tr>
<td>22.3 Beliefs Associated with Organic Food</td>
<td>384</td>
</tr>
<tr>
<td>22.4 Beliefs Associated with Free-Range Livestock Products</td>
<td>388</td>
</tr>
<tr>
<td>22.5 Beliefs Associated with Functional Food</td>
<td>389</td>
</tr>
<tr>
<td>22.6 Beliefs Associated with GM Food</td>
<td>392</td>
</tr>
<tr>
<td>22.7 Summary and Conclusions</td>
<td>396</td>
</tr>
</tbody>
</table>
References ............................................................... 397

23  Risk Perception, Communication and Trust. How Might Consumer Confidence in the Food Supply be Maintained?  
    Lynn J. Frewer, Susan Miles ........................................ 401

23.1 Risk Perception and Food Choice .................................. 401
23.2 Impact of Public Trust and Distrust in Food Risk Information .... 402
23.3 Food Risk and “Food Scares”: The Social Amplification of Risk ................................................................. 403
23.4 The Potential Influence of Pressure Groups on Public Perception of Food Risk ................................................. 405
23.5 Individual Differences in Risk Perceptions ......................... 406
23.5.1 Effective Risk Communication .................................. 407
23.6 Optimistic Bias ........................................................ 408
23.7 Understanding Public Preferences for the Regulation of Food Risk ................................................................. 409
23.8 Conclusions and Future Research ................................... 410

References ....................................................................... 411

24  Public Participation in Developing Policy Related to Food Issues  
    Gene Row, Catherine Reynolds, Lynn J. Frewer .................... 415

24.1 Introduction ............................................................ 415
24.2 Public Participation: What Is It? ..................................... 415
24.3 Participation in the UK: Historical Context ......................... 418
24.4 Public Involvement in Food Policy in the UK ..................... 420
24.5 The Impact of Public Involvement on Food Policy: Myth or Reality? ................................................................. 423
24.5.1 Acceptance of the Exercises by the Public: Issues of Representation and Influence ........................................ 424
24.5.2 Good Process in Participation Exercises ...................... 427
24.5.3 Other Difficulties in the use of Participation Exercises ....... 428
24.6 The Future of Public Participation .................................... 429

References ....................................................................... 430

25  The Future of European Food Choice  
    Lynn J. Frewer, Einar Risvik ....................................... 433

25.1 Some Thoughts on the Future of Food Choice in Europe ....... 433
25.2 Public “Irrationality” and the Politicisation of Science ............ 437
25.3 Some Final Comments ................................................ 441

References ....................................................................... 441

Subject Index ............................................................... 443
Food, People and Society
A European Perspective of Consumers' Food Choices
Frewer, L.J.; Risvik, E.; Schifferstein, H. (Eds.)
2001, XXII, 462 p., Hardcover
ISBN: 978-3-540-41521-3