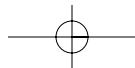
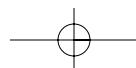


# Contents

<i>Preface</i> .....	i
<i>Acknowledgements</i> .....	iii
<i>Contents</i> .....	ix
<b>Chapter 1: Public Health Implications of Changes in Cigarette Design and Marketing</b> .....	<b>1</b>
Introduction .....	1
How Did It Happen? .....	1
Compensation in Smokers .....	3
Elasticity of Demand in the Cigarette .....	4
Marketing of Low-Yield Cigarettes .....	5
Disease Risks .....	6
Conclusions .....	9
References .....	10
<b>Chapter 2: Cigarette Design</b> .....	<b>13</b>
Cigarette-Yield Testing by Smoking Machine Using the FTC Protocol .....	13
Changes in FTC Machine-Smoked Yields Over Time .....	13
Design Changes That Reduce Standard Yields .....	14
Compensation and Cigarette Design: Difference in Yield with Different Smoking Patterns .....	18
More Evidence from Industry Documents Related to Compensation, Cigarette Design, and the FTC Testing Method .....	33
Summary .....	34
Conclusions .....	34
References .....	35
<b>Chapter 3: Compensatory Smoking of Low-Yield Cigarettes</b> .....	<b>39</b>
Introduction .....	39
Role of Nicotine in Maintaining Tobacco Addiction .....	39
Biomarkers of Tobacco Smoke Exposure .....	41
Nicotine Absorption from Cigarette Smoking .....	42
Estimating the Extent of Compensation .....	44
Studies of Smoking Cigarettes with Different Machine- Determined Yields: Methodological Considerations .....	44
Short-Term Experimental Switching Studies .....	45
Long-Term Experimental Switching Studies .....	47
Studies of Smokers Smoking Self-Selected Brands .....	49
Spontaneous Brand Switching .....	56
Summary .....	58
Conclusions .....	60
References .....	60

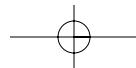


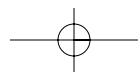


*Smoking and Tobacco Control Monograph No. 13*

---

<b>Chapter 4: Smoking Lower Yield Cigarettes and Disease Risks . . . . .</b>	<b>65</b>
Introduction . . . . .	65
Historical Development of the Lower Yield Cigarette Issue . . . . .	68
Limitations of Epidemiological Studies in Examining the Risks of Low-Yield Cigarette Use . . . . .	72
Published Epidemiological Studies of Health Endpoints . . . . .	81
Biologic Implications of Compensation for Changes in Cigarette Design . . . . .	109
Correlation of Cigarette Brand Choice with Number of Cigarettes Smoked per Day and Duration of Smoking . . . . .	111
Temporal Trends in Lung Cancer and Other Diseases in Major Cohort Studies . . . . .	119
Temporal Trends in National Lung Cancer Death Rates and Smoking Behaviors . . . . .	123
Summary . . . . .	145
Conclusions . . . . .	146
Appendix . . . . .	147
References . . . . .	152
<b>Chapter 5: The Changing Cigarette: Chemical Studies and Bioassays . . . . .</b>	<b>159</b>
Introduction . . . . .	159
Identification of Carcinogens, Tumor Promoters, and Carcinogens in Tobacco Smoke . . . . .	160
Smoking Conditions . . . . .	165
Changes in Cigarette Smoke Composition with Various Design Changes . . . . .	166
Observations on Cigarette Smokers . . . . .	181
Summary . . . . .	182
Conclusions . . . . .	184
Appendix . . . . .	185
References . . . . .	185
<b>Chapter 6: Public Understanding of Risk and Reasons for Smoking Low-Yield Products . . . . .</b>	<b>193</b>
Introduction . . . . .	193
Perceptions of Light Cigarettes . . . . .	193
Reasons for Smoking or Switching to Light Cigarettes . . . . .	194
The Relationship of Switching to Quitting . . . . .	195
Summary . . . . .	196
Conclusions . . . . .	196
References . . . . .	197
<b>Chapter 7: Marketing Cigarettes with Low Machine- Measured Yields . . . . .</b>	<b>199</b>
Introduction . . . . .	199
The 1950s . . . . .	199
The 1960s . . . . .	204
The 1970s . . . . .	207



*Contents*

---

The 1980s .....	223
Discussion .....	228
Summary .....	231
Conclusions .....	233
References .....	233

