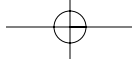


Contents

<i>Preface</i>	i
<i>Acknowledgements</i>	iii
<i>Contents</i>	ix
Chapter 1: Public Health Implications of Changes in Cigarette Design and Marketing	1
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
Chapter 2: Cigarette Design	13
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
Chapter 3: Compensatory Smoking of Low-Yield Cigarettes	39
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

Chapter 4: Smoking Lower Yield Cigarettes and Disease Risks	65
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
Chapter 5: The Changing Cigarette: Chemical Studies and Bioassays	159
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
Chapter 6: Public Understanding of Risk and Reasons for Smoking Low-Yield Products	193
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
Chapter 7: Marketing Cigarettes with Low Machine- Measured Yields	199
Introduction	199
The 1950s	199
The 1960s	204
The 1970s	207



Contents

The 1980s223
Discussion228
Summary231
Conclusions233
References233

