

Detailed Table of Contents

Chapter 1 Prevalence of Obesity and Related Mortality	11
Prevalence	11
Obesity and Mortality	13
All-Cause Mortality	14
Cause-Specific Mortality	15
Chapter 2 The Pathophysiology of Obesity	23
Energy Balance/Homeostatic Regulation of Food Intake	23
Hypothalamus as Key Regulator	24
Peripheral Signaling	26
Humoral Signaling	28
Gastrointestinal Signals	28
Adipose Signals	28
Pancreatic Signals	30
Reward or “Hedonic” Pathway	30
Role of Obesity Pharmacotherapy	31
Genetic and Environmental Factors	34
Genetics	34
Epigenetics	36
Environmental Factors	37
Genetics vs Environment	37
Gut Microbes	38
Medical Conditions	39
Cushing’s Syndrome	40
Hypothyroidism	40
PCOS	40
Growth Hormone Deficiency	40
Binge-Eating Disorder	40
Night-Eating Syndrome	41
Sleep	41
Hypothalamic Obesity	41
Adaptive Responses and Hormonal Changes to Weight Loss	42
Summary	43
Chapter 3 Obesity-Related Comorbidities	47
Introduction	47
Obesity and Inflammation	47
Prevalence of Major Comorbidities	50
Diabetes	50
Dyslipidemia	53
Hypertension	54
Other Coronary Heart Disease Risk Factors	54
Obstructive Sleep Apnea	56
Additional Comorbidities	57
Osteoarthritis	58
Cancer	59
Depression	60
Anxiety	61
Gallbladder Disease	61
Non-alcoholic Fatty Liver Disease (NAFLD)	63
Polycystic Ovarian Syndrome (PCOS)	63
Chronic Renal Failure (CRF)	64
GERD	65
Stress Urinary Incontinence (SUI)	65
Infertility	66
Pregnancy Complications	66
Lower Limb Venous Disease (LLVD)	66
Metabolic syndrome	67
Metabolically Healthy Obesity	67
Chapter 4 Benefits of Weight Loss	75
Introduction	75
DPP and DPPOS	75
Objectives and Design	75
Prevention/Delay of Diabetes	76
Reduction in Cardiovascular Risk Factors	80
Incidence and Resolution of Metabolic Syndrome	81
Look AHEAD	84
Objectives and Design	84
Reduction in Cardiovascular Events and Risk Factors	84
Remission of Diabetes	85
Magnitude of Weight Loss and Clinical Benefits	87
Weight Loss in Patients with Class III Obesity	93
Depression	93
Obstructive Sleep Apnea	96
Look AHEAD-E	100
ADAPT	100
Osteoarthritis	100
Summary	101
Chapter 5 Approach to Patients With Obesity	105
Introduction	105
Weight-Specific History	105
Review of Weight-Promoting Medications	107
Diagnosing Overweight and Obesity	107
BMI	107
Waist Circumference and Waist-Hip Ratio	109
Percent Body Fat	111
Office Equipment and Atmosphere	113
Physical Examination	113
Laboratory Evaluation	114
Baseline Laboratory Evaluation	114
Evaluation for Weight-Related Comorbidities	114
Disease Staging and Risk Assessment	117
Assessment of Motivation	117
Realistic Goal Setting	118
Creating a Treatment Plan	118
Chapter 6 A Complications-Centric Approach to the Treatment of Obesity	123
A Holistic Perspective	123
Obesity as a Disease	123

From Weight Loss to Risk Reduction	127	Safety	197
The Premise: Weight Loss Reduces Comorbidity and		Prescribing and Administration	197
Mortality Risk	128	Orlistat (Xenical).....	198
Evaluation, Risk Assessment, and Disease Staging	129	Efficacy	198
Edmonton Obesity Staging System (EOSS)	129	Safety	198
Metabolic Syndrome	130	Prescribing and Administration	199
Cardiometabolic Disease Staging System	131	Phentermine/Topiramate ER (Qsymia)	199
A Medical Model for Management of Patients with		Efficacy	200
Overweight/Obesity	135	Long-Term Efficacy.....	205
Chapter 7 Drug-Induced Weight Gain	143	Secondary Efficacy Endpoints	206
Treatment Selection to Prevent Drug-Induced Weight Gain.....	143	Safety	210
Antidiabetic Medications.....	144	Prescribing and Administration	213
Antihypertensive Medications	149	Naltrexone SR/Bupropion SR (Contrave)	213
Anticonvulsant Medications	150	Efficacy	214
Contraceptives, Hormones, and Steroids.....	150	Safety	222
Antipsychotic and Antidepressive Medications	152	Prescribing and Administration	223
Other Medications That May Induce Weight Gain.....	153	Liraglutide (Saxenda).....	223
Chapter 8 Dietary Interventions, Physical Activity,		Efficacy	227
and Behavioral Approaches to the Treatment of Obesity	159	Liraglutide for Treatment of Obesity in Adolescents	230
Dietary Interventions	159	Safety	231
Very Low Calorie Diets (VLCDs).....	159	Prescribing and Administration	237
Protein-Sparing Modified Fast (PSMF)	160	Semaglutide (Wegovy).....	238
Low Calorie Diets (LCDs)	161	Efficacy	238
Low Carbohydrate Diets	161	STEP-1	239
Low Energy Density Diets.....	161	STEP-2	239
Low Glycemic Index Diets	162	STEP-3	242
Mediterranean Diet.....	162	STEP-4	243
Intermittent Fasting	163	Safety	248
Meal Replacements.....	164	Prescribing and Administration	248
Comparison of Macronutrient Content.....	165	Summary.....	249
Limiting Consumption of Ultra-Processed Foods.....	166	Chapter 10 Bariatric Interventions	257
Considering Food Order	167	Introduction.....	257
Diet Composition Relative to Changes in Cardiometabolic		Bariatric Devices and Endoscopic Procedures	257
Parameters.....	167	Intra-gastric Balloons.....	259
Physical Activity.....	168	Endoscopic Sleeve Gastroplasty (ESG)	261
Behavioral Modification	171	Primary Obesity Surgery Endolumenal (POSE)	262
Self-Monitoring of Dietary Intake	171	Orally-Administered Gastric Hydrogel.....	264
Trigger or Stimulus Control	172	Aspiration Therapy (AT)	268
Problem-Solving Techniques	172	EndoBarrier.....	270
Cognitive Restructuring	172	vBloc.....	271
Relapse Prevention	172	Transpyloric Shuttle	272
Intensive Lifestyle Intervention	173	Conclusion.....	274
Commercially Available Lifestyle Interventions with		Candidates and Qualifications for Bariatric Surgery	274
Evidence-Based Findings	174	Bariatric Surgical Procedures	276
Use of Remote and Mobile Technologies in Behavioral		Roux-En Y Gastric Bypass (RYGB)	277
Weight-Loss Programs.....	176	Laparoscopic Sleeve Gastrectomy (LSG).....	279
Comprehensive Lifestyle Interventions	178	Biliopancreatic Diversion With Duodenal Switch	
Chapter 9 Pharmacologic Treatment	183	(BPD/DS).....	280
Phentermine.....	196	Single Anastomosis Duodeno-Ileal Switch (SADI-S)	282
Efficacy	196	Adjustable Gastric Band (AGB).....	284

Clinical Experience.....286
 Systematic Reviews and Meta-analyses.....286
 Individual Studies.....288
 The Swedish Obese Subjects Study292
 Safety292
Surgery as Diabetes Treatment.....294
Bariatric Surgery and Obstructive Sleep Apnea.....298
Bariatric Surgery in Adolescents299
Postsurgical Care300
Summary.....301