

# Table of Contents

<b>Author's Preface</b> .....	<b>ix</b>
Do You Need Another Book About Weight Loss and Weight Control?.....	x
Writing a Book .....	xii
Publishing the Book .....	xv
<b>Chapter 1</b> .....	<b>1</b>
How Obesity Changed a Young Boy's Life .....	1
Structure of This Book .....	12
<b>Chapter 2</b> .....	<b>16</b>
Ultimate Secret of Weight Control .....	16
Purported Success From Weight Loss	
Programs is a Myth; It's Actually a Great Failure .....	21
The Energy Balance Equation.....	28
Calories Do Count .....	29
Factors Affecting the Energy Balance Equation.....	30
<b>Chapter 3</b> .....	<b>32</b>
Discarding the Mounds of Flesh .....	32
<b>Chapter 4</b> .....	<b>54</b>
Establishing the Basic Numbers .....	54
What's a Calorie? How Do We Measure It?.....	55
Determining Metabolic Rate .....	57
Resting Metabolic Rate.....	57
Calculating Your Own Resting Metabolic Rate .....	59
Thermic Effect of Food .....	61
Total Daily Energy Expenditure (TDEE).....	62
Let's Make Some Advanced Calculations .....	64
Accurate Determination of Total Daily Energy Expenditure (TDEE) .....	69
Calculating Calorie Needs by Eating Food .....	69
Two More Calculations .....	73
Homeostasis and Adaptation .....	74
Bodyweight Regulation is a Function of Homeostasis.....	75
Energy-In/Energy-Out .....	75
<b>Chapter 5</b> .....	<b>79</b>
Growing Up in the Fitness Revolution.....	79

**Chapter 6 ..... 98**  
 Plumbing the Depths of Academia: Cholesterol and Heart Disease ..... 98  
 Researching the Relationship Between  
 Cholesterol/Fat and Heart Disease ..... 100  
 The Opponents ..... 102  
 The Human Studies Begin..... 105  
 Techniques to Obscure the Truth ..... 108  
 How to Lie with Statistics ..... 108  
 Problems with Relative Risk Analysis ..... 110  
 Relative Risk is the Primary Epidemiological  
 Statistic Used in the Scientific Literature Today ..... 113  
 How Other Relative Risk Studies Report  
 Results: Modern Nutritional Epidemiology ..... 116  
 What’s the Motivation Behind the Continued  
 Promotion of a Failed Theory? ..... 119  
 Can Blood Cholesterol Levels Actually Be Reduced? ..... 120  
 Final Conclusions ..... 122

**Chapter 7 ..... 124**  
 Learning How to Take Control of My Body ..... 124

**Chapter 8 ..... 146**  
 How Weight Loss (and Gain) Affect Body Composition..... 146  
 What Does "Working" Actually Mean? ..... 148  
 Body Composition ..... 150  
 Weight Gain..... 154  
 Does Becoming Overweight or Obese Increase Calorie Needs? ..... 155  
 Weight Loss..... 156  
 Lean Body Mass Changes ..... 157  
 The Nation is Chronically Over-fed ..... 160  
 Water Losses..... 160  
 The Incredible Shrinking Body ..... 162  
 Dr. Tanner Goes Head to Head With Dr. Hammond..... 162  
 Changes in Body Composition ..... 164  
 Metabolic Adaptations ..... 169

**Chapter 9 ..... 170**  
 How the Body’s Metabolism Adapts to Dieting and Weight Loss ..... 170  
 The Scientific History of the Discovery of Metabolic Adaptations ..... 174  
 What are the Effects of Overfeeding..... 178  
 Set-Point Theory of Bodyweight ..... 180

How Do Changes in Food Intake Affect the Two Main Parts of Calorie Burn? .....	182
What are the Effects of Decreases in Food Intake on the Physical Activity Level (PAL) Part of the Total Daily Energy Expenditure (TDEE) .....	187
<b>Chapter 10 .....</b>	<b>189</b>
You Must Make Adjustments When Losing Weight .....	189
What Type of Adjustments Must We Make in Response to Metabolic Adaptations from Weight Loss? .....	189
What is the Mechanism Behind this Common Finding of "Post-Starvation Obesity?" .....	197
<b>Chapter 11 .....</b>	<b>208</b>
The Power of Eating the Right Type of Food .....	208
How We Define Diet Composition .....	210
Unraveling the Diet Composition Mystery .....	211
My Conversion .....	213
Carbohydrate-to-Fat Conversion .....	214
Interest in the Low-Carbohydrate Diet Ebbs While Low-Fat Eating Becomes the New Dietary Darling .....	217
The Lack of Rigid Standards for Defining Diet Composition .....	218
<b>Chapter 12 .....</b>	<b>221</b>
Why Low-Fat Diets Don't Work .....	221
The Argument Intensifies .....	222
Evidence About Low-fat Diets and Weight Loss .....	224
Low-fat Mania Overtakes the Country .....	230
Complex Carbohydrates .....	231
Energy Density .....	232
Satisfaction of Hunger: Fats vs. Carbohydrates .....	233
"But Fat Has Twice as Many Calories per Gram vs. Carbohydrate. Eat Fat and You Eat Two Times More Calories," say the Low-fat Proponents .....	234
<b>Chapter 13 .....</b>	<b>236</b>
The Complete Scoop on the Low-Carbohydrate Diet .....	236
History of the Low-Carbohydrate Diet .....	237
The Ketone Story .....	237
Fat is the Preferred Fuel of the Body -- Not Carbohydrate .....	239
How the Body "Burns" Food .....	240
How Enzymes Control Food Use .....	241

## Table of Contents

Body Composition Changes: Low-Carbohydrate vs. Low-Fat .....	242
Why Do Low-Carbohydrate Dieters Lose More <u>Bodyweight</u> than High-Carbohydrate Dieters?.....	245
Insulin Increases Eating and Fat Storage .....	248
How Low Do Carbohydrate Grams Have to Go? .....	249
Low-Carbohydrate Eating: The Key to Health and Fitness .....	251
How the Low-Carbohydrate Diet Works Metabolically .....	252
The Science Behind the Fat .....	253
Control of Carbohydrate-to-Fat Conversion .....	255
<b>Chapter 14 .....</b>	<b>258</b>
Dietary Control of Appetite and Hunger .....	258
Energy-Partitioning and Food Intake .....	259
How the Body Controls Food Intake .....	260
The Relationship Between Fat and Carbohydrate Metabolism Determines Food Intake .....	262
Why the Low-fat Diet Isn't Quite as Fat Making as the Super-market Diet .....	262
Carbohydrates Drive Fuel Into Fat Storage and Lock the Stored Fat Into the Fat Cell .....	263
Summary .....	266
<b>Chapter 15 .....</b>	<b>269</b>
Crushing the Criticism Against the Low-Carbohydrate Diet.....	269
Challenges to the Low-Carbohydrate Diet.....	269
The First Major Attacks .....	271
The Critics' Claims .....	271
Criticism: Calories Don't Count.....	272
Weight Loss, Appetite, and Hunger.....	273
The Nutrition Council's Complaints .....	275
Saturated Fats, Cholesterol, Triglycerides, and Coronary Heart Disease .....	276
Ketosis .....	276
Uric Acid .....	277
Fatigue .....	277
Dizziness .....	279
Obesity: Diet Composition .....	279
Low Blood Sugar (Hypoglycemia).....	280
Eggs .....	281
The Council Bangs the Gavel .....	282
The National Dairy Council Chimes In .....	284

At the Turn of the Century, 2000-2001 .....	285
Correcting the Errors -- On Both Sides .....	287
Kidney Harm.....	289
Loss of Calcium and Osteoporosis.....	289
Point vs. Counterpoint .....	290
Insulin-Blocking Theory .....	291
Another Institution Draws a Blank .....	292
Summary .....	293
<b>Chapter 16 .....</b>	<b>294</b>
Completing My Understanding of the Energy Balance Equation and the Pemmican Wars.....	294
The Eskimo Diet and Vilhjalmur Stefansson .....	298
My Own Experiments with Pemmican and the All-Meat Diet.....	301
Manufacturing My Own Pemmican .....	302
The Caltrac.....	304
The Final "Imprinting" of the Energy Balance Equation.....	307
<b>Chapter 17 .....</b>	<b>310</b>
The Importance of Physical Activity to Bodyweight Control.....	310
Do Physical Activity and Exercise Contribute to Reducing Bodyweight and Body Fat? .....	311
The Roundtable's Conclusions and Other Reviewers Put in Their Two Cents .....	312
Low Levels of Physical Activity Contribute to Overweight.....	313
Settling the Confusion .....	314
What are the Effects on Weight Loss of Dieting or Exercise Alone? How Does Exercise or Dieting Affect Resting Metabolic Rate?.....	316
Description of the Exercise Prescription.....	318
What Type of Exercise Should You Do? .....	319
How Exercise and Activity Affect What You Weigh and What You Eat.....	321
What's the Minimum Level of Physical Activity to Keep You Out of the Inactive Zone? .....	325
How Many Calories Must We Burn to Control Bodyweight?.....	326
Reviewing the Modern-Day Re-Examination of the Mayer Hypothesis.....	331
How Much Physical Activity Do We Need to Lose Weight and Maintain the Loss? .....	333
What's the Cause of Obesity?.....	335
What to Do About Metabolic Adaptations .....	336

**Chapter 18** ..... **337**

    What Changes Can You Expect From Increased Physical Activity? ..... 337

    What Type of Exercise Should You Do? ..... 340

    Resistance Training ..... 340

    What Changes Can We Expect from Resistance Training? ..... 341

    Physiological Benefits of Resistance Exercise: Body Composition ..... 346

    Cardiovascular Conditioning and Reduction  
    of Heart Disease Risk Factors (Watch Out for that Word Risk)..... 346

**Chapter 19** ..... **348**

    Exercise Increases Metabolic Rates: Myth’s Triumph Over Truth ..... 348

    The Differences in Metabolism Between Fat and Muscle ..... 354

    What’s the Danger of Holding Onto This Mistaken Idea? ..... 358

    Even the "Experts" Don’t Know ..... 359

**Chapter 20** ..... **361**

    Putting the Program Together & Dr. Ellis’s 100/100 Plan ..... 361

    Dr. Ellis’s 100/100 Plan..... 363

    Why Dr. Ellis’s 100/100 Plan Works Where Others Won’t ..... 365

    Step by Step Approach to Using Dr. Ellis’s 100/100 Plan ..... 365

    One More Point ..... 370

    Non-Dieting Programs ..... 370

    Very Low Calorie Dieting (VLCD) ..... 371

    Behavior Modification ..... 372

    Maintenance of Weight Loss..... 374

    Portion Control ..... 378

    Spontaneous Physical Activity ..... 379

**Chapter 21** ..... **381**

    Evaluating the Popular Weight Control Programs ..... 381

    The Atkins Diet Revolution ..... 383

    The Atkins’ "Facts" ..... 383

    The Metabolic Advantage of Dr. Atkins ..... 386

    Atkins’ Heroes: Drs. Kekwick and Pawan ..... 387

    Atkins Lashes Back..... 389

    Critical Ketone Levels..... 392

    Eat More Calories and Lose Weight  
    -- the Failed Theory of Dr. Atkins ..... 393

    Misinterpretations of Scientific Studies Send  
    You Down the Wrong Road ..... 394

    Manipulating the Science of Mathematics ..... 397

Finally, Someone Tests the Eat-All-You-Want and Lose Weight Theory .....	401
More Confirmation that the Early, Increased Bodyweight Losses from Eating a Low-Carbohydrate Diet are Water .....	401
Summarizing the Failure of the Atkins' Claims .....	402
The Other "Diet" Programs .....	405
<u>Protein Power</u> by Drs. Michael and Mary Dan Eades .....	406
Dr. Barry Sears "Zone Program" .....	409
<u>The Carbohydrate Addict's Diet</u> by the Drs. Heller .....	410
Glycemic Index .....	411
<u>Sugar Busters!</u> .....	415
Suzanne Somers' <u>Eat, Cheat, and Melt the Fat Away</u> .....	418
The High-Carbohydrate Diets .....	422
Dr. Weil Discusses Weight Control .....	425
Cliff Sheats' <u>Lean Bodies</u> .....	426
The "Balanced Diets" or "So-Called Healthy Diets": Weight Watchers, Richard Simmons, Slim Fast, Etc. ....	433
<u>Volumetrics</u> by Dr. Barbara Rolls .....	434
<u>The Glucose Revolution</u> by Drs. Wolever, Jenkins, Brand-Miller, and Colagiuri .....	441
The Vegetarians .....	444
The Ornish Program .....	448
The Non-Diet Programs Emphasizing Exercise .....	450
The "Typing" Plans .....	452
Summary .....	453
<b>Chapter 22</b> .....	<b>457</b>
Dr. Ellis's Version of the Low-Carbohydrate Diet .....	457
How Much Carbohydrate? .....	458
What to Do After Reaching Your Weight Loss Goal .....	460
Limitations of Current Low-Carbohydrate Diets .....	461
"Hitting-the-Wall" or Reaching a Plateau in Weight Loss Before Reaching Your Weight Loss Goals .....	464
More Analysis and Details About the Atkins Version of the Low-Carbohydrate Diet .....	467
How the Other Low-Carbohydrate Programs Deal with the Inevitable Plateaus in Weight Loss .....	470
There is a <u>Big</u> Missing Ingredient in the Dietary Approach to Weight Loss: for both Low-Fat <u>and</u> Low-Carbohydrate Dietary Protocols .....	472
Why Follow the Ellis Version of the Low-Carbohydrate Diet? .....	472

## Table of Contents

How to Follow the Ellis Version of the Low-Carbohydrate Diet .....	478
Carbohydrate Grams in Foods and a Sample One Week Menu .....	481
Carbohydrate Content of Common Foods .....	483
<b>Chapter 23 .....</b>	<b>490</b>
The Science Underlying Dr. Ellis's 100/100 Plan .....	490
Predictability of Changes in Bodyweight and Its Functions .....	493
Changes in Body Composition .....	495
Why the Focus on Diet, Alone, Doesn't Work.....	497
What's the First Response of the Body to Calorie Restriction? .....	497
Metabolic Control of Food Intake and How Diet Composition Drives It .....	500
Metabolic Adaptations .....	501
<b>Chapter 24 .....</b>	<b>503</b>
Refined Foods: Sugar and White Flour .....	503
Pure Food is Poor Food.....	505
<b>Chapter 25 .....</b>	<b>509</b>
Unearthing the Roots of Vegetarianism .....	509
The Growth of Vegetarianism .....	513
The Vegetarian Beliefs .....	517
<b>Chapter 26 .....</b>	<b>521</b>
How I Put All the Elements Together for the Winning Plan .....	521
The Bodyweight Changes Continue .....	522
Writing the Book .....	523
Those Damned Metabolic Adaptations Strike.....	525
I Go Off the Edge Once Again.....	528
How to Meet My Goals Was Becoming a Problem .....	531
Off I Go Again .....	532
I Increased My Carbohydrate Intake and It Led to Fat Increases .....	533
Decreasing Calorie Needs From Metabolic Adaptations .....	535
Nutritional Supplements and Weight Loss and Weight Control.....	538
Stimulating Thermogenesis Through Everyday Drugs .....	541
All the Tools I Put Together .....	544
Where Do I Go From Here?.....	545
<b>Epilogue .....</b>	<b>547</b>
<b>Index .....</b>	<b>579</b>