

# Contents at a Glance

---

<b><i>Introduction</i></b> .....	<b>1</b>
<b><i>Part I: Understanding High Blood Pressure</i></b> .....	<b>7</b>
Chapter 1: Introducing High Blood Pressure .....	9
Chapter 2: Detecting High Blood Pressure .....	15
Chapter 3: Determining Whether You're at Risk .....	31
Chapter 4: Dealing with Secondary High Blood Pressure .....	45
<b><i>Part II: Considering the Medical Consequences</i></b> .....	<b>67</b>
Chapter 5: Defending Your Heart .....	69
Chapter 6: Shielding Your Kidneys .....	89
Chapter 7: Protecting Your Brain .....	107
<b><i>Part III: Treating (Or Preventing) High Blood Pressure</i></b> .....	<b>123</b>
Chapter 8: Developing a Successful Treatment Plan .....	125
Chapter 9: Choosing Foods that Lower High Blood Pressure .....	135
Chapter 10: Keeping Salt Out of Your Diet .....	151
Chapter 11: Avoiding Tobacco, Alcohol, and Caffeine .....	161
Chapter 12: Lowering Blood Pressure with Exercise .....	183
Chapter 13: Adding Drug Therapy .....	199
<b><i>Part IV: Taking Care of Special Populations</i></b> .....	<b>241</b>
Chapter 14: Helping the Elderly .....	243
Chapter 15: Handling High Blood Pressure in Children .....	257
Chapter 16: Treating High Blood Pressure in Women .....	269
<b><i>Part V: The Part of Tens</i></b> .....	<b>281</b>
Chapter 17: Ten Simple Ways to Prevent or Reduce High Blood Pressure .....	283
Chapter 18: Ten (Or So) Myths about High Blood Pressure .....	293
Chapter 19: Ten New Discoveries about High Blood Pressure .....	303
<b><i>Appendix: Resources for the Latest Information</i></b> .....	<b>311</b>
<b><i>Index</i></b> .....	<b>321</b>



# Table of Contents

---

## ***Introduction* ..... 1**

About This Book.....	2
Conventions Used in This Book .....	3
What You're Not to Read.....	4
Foolish Assumptions .....	4
How This Book Is Organized.....	4
Part I: Understanding High Blood Pressure .....	4
Part II: Considering the Medical Consequences.....	4
Part III: Treating (Or Preventing) High Blood Pressure.....	5
Part IV: Taking Care of Special Populations .....	5
Part V: The Part of Tens.....	5
Appendix .....	5
Icons Used in This Book.....	6
Where to Go from Here.....	6

## ***Part 1: Understanding High Blood Pressure* ..... 7**

### **Chapter 1: Introducing High Blood Pressure ..... 9**

Understanding Your Cardiovascular System.....	10
Measuring Your Pressure and Understanding the Measurement .....	10
Looking at the Risk Factors for High Blood Pressure.....	11
Focusing on the Consequences of High Blood Pressure.....	12
Lowering High Blood Pressure with Different Treatments .....	12
Protecting Children, Pregnant Women, and the Elderly .....	13
Staying Informed .....	14

### **Chapter 2: Detecting High Blood Pressure ..... 15**

Focusing on Blood Pressure Gauge Fundamentals.....	15
Taking Your Blood Pressure Correctly .....	17
Avoiding an Inaccurate Reading.....	19
Steering clear of equipment problems .....	20
Sidestepping faulty observation and patient problems .....	20
Understanding the Numbers .....	21
Clarifying what qualifies as “high blood pressure”.....	22
Checking out the updated “Classification of Blood Pressure for Adults” .....	22

Lowering Blood Pressure Too Much.....	23
Recognizing the White Coat Effect and Other Causes of Variable Readings.....	24
Taking Your Blood Pressure at Home .....	26
Taking an Ambulatory Reading .....	27
Getting the Right Assessment .....	28
Assessing your history .....	28
Evaluating your physical exam.....	29
Using lab tests.....	29

### **Chapter 3: Determining Whether You're at Risk . . . . . 31**

Clarifying What You Can't Control .....	32
Looking at the global picture.....	32
Accounting for the contribution of your genes .....	33
Estimating the effects of ethnicity .....	35
Focusing on gender .....	37
Rising in stages with age .....	39
Preventing High Blood Pressure with Lifestyle Changes .....	40
Reducing tension.....	40
Controlling your weight.....	41
Using less salt .....	43
Cutting out smoking and excessive drinking.....	44

### **Chapter 4: Dealing with Secondary High Blood Pressure . . . . . 45**

Finding Secondary High Blood Pressure Early.....	46
Evaluating the Role of Your Kidneys in Secondary High Blood Pressure.....	47
Discovering damaged kidney tissue .....	47
Handling blocked kidney arteries .....	50
Discovering Hormone-Secreting Tumors That Elevate Blood Pressure.....	52
Finding an epinephrine-producing tumor .....	52
Detecting a tumor that produces aldosterone .....	55
Managing Cushing's syndrome .....	59
Recognizing a Genetic Disease as the Cause for High Blood Pressure.....	61
Checking Out Other Causes of Secondary High Blood Pressure .....	62
Coarctation of the aorta .....	62
Too much or too little thyroid hormone .....	63
Acromegaly .....	64
Sleep apnea .....	65
Brain tumor .....	65
Burns.....	65

---

**Part II: Considering the Medical Consequences.....67**
**Chapter 5: Defending Your Heart .....69**

Introducing the Mighty Pump.....	70
Blocking Blood Flow to the Heart Muscle.....	71
Examining arteriosclerosis.....	72
Managing stable heart pain.....	73
Treating a heart attack.....	79
Developing Heart Failure.....	81
Noticing the telltale signs.....	82
Understanding what the doctor looks for.....	82
Treating heart failure.....	84
Avoiding the Risk Factors.....	85
Curbing high cholesterol.....	85
Cutting tobacco use.....	86
Controlling diabetes.....	86
Stepping up physical activity.....	87

**Chapter 6: Shielding Your Kidneys .....89**

Examining the Role of Your Kidneys.....	90
Focusing on the filtering function.....	91
Understanding other kidney functions.....	93
Damaging the Kidney.....	94
Managing Malignant High Blood Pressure.....	96
Coping with End-Stage Renal Disease.....	98
Lifesaving dialysis.....	100
Kidney transplantation.....	104

**Chapter 7: Protecting Your Brain .....107**

Understanding the Causes of Brain Attacks.....	108
Atherosclerosis.....	109
Cerebral embolus.....	110
Brain hemorrhage.....	110
Avoiding Brain Attacks by Reducing High Blood Pressure.....	111
Surveying Additional Predisposing Conditions.....	111
The hand you're dealt: Uncontrolled factors.....	112
The hand you play: Risk factors you control.....	112
Working some miracles with preventive drugs.....	114
Moving Fast When You See Symptoms of a Brain Attack.....	114
Capturing Brain Function on Film.....	115
Multiplying the Treatments for Brain Attacks.....	117
Making Your Way Back through Rehabilitation.....	118
Regaining movement following a brain attack.....	119
Checking out rehabilitation locations.....	119
Meeting rehabilitation specialists.....	120
Finding help after a brain attack.....	121

## ***Part III: Treating (Or Preventing) High Blood Pressure* ..... 123**

### **Chapter 8: Developing a Successful Treatment Plan ..... 125**

Achieving Your Treatment Goal .....	126
Outlining Lifestyle Modifications .....	129
Altering your lifestyle for the better .....	129
Using laughter to lower blood pressure .....	131

### **Chapter 9: Choosing Foods that Lower High Blood Pressure ..... 135**

DASHing Down Your Blood Pressure .....	135
Leading up to DASH .....	136
Proving the value of DASH .....	137
Getting with the program .....	138
Reducing salt as you DASH .....	142
Reducing Your Weight to Lower Blood Pressure .....	143
Calculating your ideal weight .....	143
Determining your daily caloric needs.....	145
Adjusting your DASH diet.....	146
Trying Other Diets .....	148
Using Outside Help .....	149

### **Chapter 10: Keeping Salt Out of Your Diet ..... 151**

Making the Connection between Salt and High Blood Pressure .....	152
Proving the Salt-Blood Pressure Connection.....	153
Examining early experiments .....	153
Considering chloride's effects on blood pressure .....	154
Reviewing recent studies.....	155
Determining Whether You're Salt Sensitive.....	156
Lowering Your Salt Intake .....	157
Buying low-salt foods.....	157
Avoiding high-salt foods .....	158
Going on a low-salt diet .....	158

### **Chapter 11: Avoiding Tobacco, Alcohol, and Caffeine ..... 161**

Playing with Fire: Tobacco and High Blood Pressure.....	162
Examining the extent of the problem .....	163
Putting one foot in the grave .....	164
Combating secondhand smoke .....	164
Turning a cheek to smokeless tobacco .....	165
Giving up tobacco: All wins, no losses .....	165
Kicking the habit .....	167
Tapping into resources .....	170

Relating Alcohol to High Blood Pressure .....170  
     Surveying the symptoms of alcoholism .....171  
     Looking at who’s drinking .....172  
     Understanding alcohol’s medical consequences .....173  
     Undergoing treatment .....174  
     Locating useful resources .....178  
 Getting High on Caffeine.....179  
     Knowing how much is too much .....179  
     Considering caffeine’s health consequences.....180  
     Recognizing the gains in giving up caffeine .....181  
     Avoiding the beans, chocolate, and soda.....181  
     Using resources .....182

**Chapter 12: Lowering Blood Pressure with Exercise .....183**

Understanding the Benefits of Physical Activity .....184  
 Preparing for Exercise .....184  
     Checking your physical condition .....185  
     Choosing exercises.....186  
     Getting the right equipment.....188  
 Knowing the Right Levels of Exercise.....189  
 Exercising to Lose Weight .....190  
 Exercising for Strength .....191  
     Upper-body exercises .....192  
     Leg-strengthening exercises.....194  
 Lowering Your Blood Pressure with Alternative Therapies .....194  
     Yoga.....194  
     Meditation .....195  
     Hypnosis .....196  
     Biofeedback.....196

**Chapter 13: Adding Drug Therapy .....199**

Establishing Drug Characteristics .....200  
     How effective is it? .....201  
     How much can it lower blood pressure  
         as compared to another drug?.....201  
     Do drugs that lower blood pressure to the same extent  
         have the same effect on disease and death?.....201  
 Presenting the Classes of Drugs.....202  
 Diuretics .....202  
     Thiazide and thiazidelike diuretic group.....203  
     Loop diuretics .....207  
     Potassium-sparing diuretics .....209  
     Aldosterone-antagonist diuretics .....210  
     Diuretic combinations .....211

Drugs That Act on the Nervous System .....	212
Methyldopa .....	212
Clonidine, guanabenz, and guanfacine .....	214
Beta-adrenergic receptor blockers.....	215
Alpha-1 adrenergic receptor antagonists .....	219
Vasodilators .....	220
Hydralazine .....	220
Minoxidil.....	221
Calcium Channel Blocking Agents .....	222
Verapamil and diltiazem .....	224
Other calcium channel blockers .....	224
Angiotensin-Converting Enzyme Inhibitors .....	225
Angiotensin II Receptor Blockers.....	229
Choosing a Drug.....	231
Treating uncomplicated high blood pressure .....	231
Treating complicated high blood pressure.....	232
Moving ahead when the first choice fails.....	233
Making sure you take your medicine.....	234
Recognizing Drug Side Effects .....	234
Identifying Brand Names.....	236

## ***Part IV: Taking Care of Special Populations* .....241**

### **Chapter 14: Helping the Elderly** ..... **243**

Evaluating Mental Ability .....	244
Assessing Blood Pressure .....	245
Dealing with essential high blood pressure.....	245
Considering secondary high blood pressure.....	246
Examining the meds that elevate blood pressure in the elderly ...	247
Improving Nutrition to Lower Blood Pressure .....	249
Assessing diet .....	249
Following the DASH diet .....	250
Reducing salt intake.....	250
Changing the Lifestyle to Lower Blood Pressure .....	251
Taking Drugs to Lower Blood Pressure.....	252
Primary drug therapy: Thiazide diuretic .....	253
Second choice: Beta blocker.....	254
Third-choice drugs.....	254
Special situations .....	255
Avoiding Dangerous Falls in Blood Pressure.....	255

### **Chapter 15: Handling High Blood Pressure in Children** ..... **257**

Measuring Blood Pressure Correctly.....	258
Using Doppler ultrasound on tiny arms .....	258
Selecting the proper cuff size .....	259
Using proper technique.....	259
Interpreting the Results of the Measurement.....	259

Considering the Causes of Elevated Blood Pressure.....	261
Surveying hereditary influences .....	261
Factoring in weight.....	262
Resulting from disease.....	262
Pinpointing the Cause of Your Child's Elevated Blood Pressure .....	263
Noting key points in the child's history .....	263
Uncovering clues during the physical examination.....	263
Getting help from the laboratory .....	264
Beginning Treatment with Lifestyle Changes .....	265
Advising Your Child about Strenuous Exercise.....	266
Using Drug Therapy .....	267
<b>Chapter 16: Treating High Blood Pressure in Women .....</b>	<b>269</b>
Understanding How a Woman's Blood Pressure Responds to Pregnancy .....	270
Recognizing What Causes High Blood Pressure during Pregnancy.....	271
Chronic high blood pressure .....	271
Preeclampsia.....	272
Preeclampsia on top of chronic high blood pressure .....	277
Gestational high blood pressure .....	278
Dealing with High Blood Pressure after Delivery.....	278
Using Female Hormone Treatment in the Presence of High Blood Pressure .....	279
Hormones for oral contraception .....	279
Hormones for estrogen replacement .....	280
 <b>Part V: The Part of Tens .....</b>	 <b>281</b>
 <b>Chapter 17: Ten Simple Ways to Prevent or Reduce High Blood Pressure .....</b>	 <b>283</b>
Making Sure You Have High Blood Pressure .....	283
Determining Whether You Have Secondary High Blood Pressure.....	284
Adopting the DASH Diet .....	285
Losing Weight by Reducing Kilocalorie Intake .....	286
Reducing Salt in Your Diet.....	286
Giving Up Tobacco and Excess Alcohol.....	287
Starting an Exercise Program .....	288
Enhancing Your Treatment with Mind-Body Techniques .....	288
Using Drugs to Lower Blood Pressure.....	289
Avoiding Drugs That Raise Blood Pressure .....	291
 <b>Chapter 18: Ten (Or So) Myths about High Blood Pressure .....</b>	 <b>293</b>
High Blood Pressure Is an Inevitable Result of Aging.....	293
The Treatment Is Worse Than the Disease .....	294
You Must Restrict Your Life Because You Have High Blood Pressure.....	295

You Need Treatment Only for a High Diastolic Blood Pressure .....	295
High Blood Pressure Means Pills for the Rest of Your Life .....	296
You Can Give Up Treatment after a Heart or Brain Attack .....	297
You Can Avoid Exercise Because of High Blood Pressure .....	297
If You Feel Fine, You Can Skip Your Blood Pressure Medications .....	298
High Blood Pressure Can't Be Controlled .....	299
Treatment Is Limited to Nervous, Anxious People .....	300
The Elderly Don't Need to Be Treated.....	301
High Blood Pressure Is Less Dangerous in Women .....	301
<b>Chapter 19: Ten New Discoveries about High Blood Pressure . . . .</b>	<b>303</b>
Gauging the Effect of Lowering Blood Pressure .....	304
Realizing that Prehypertension Isn't Benign .....	304
Predicting (And Preventing) High Blood Pressure .....	305
Predicting Adult High Blood Pressure by Measuring Childhood Blood Pressure .....	306
Determining Whether All Stroke Patients Have High Blood Pressure.....	306
Evaluating the Effect of Job Strain .....	307
Knowing Whether Alcohol Is Good or Bad if You Have High Blood Pressure.....	307
Using Gastric Bypass to Lower Weight and Blood Pressure .....	308
Checking Whether Your Blood Pressure Drug Affects Diabetes .....	308
Considering the Significance of the ALLHAT Study .....	309
 <b>Appendix: Resources for the Latest Information .....</b>	 <b>311</b>
National Heart, Lung, and Blood Institute .....	312
American Society of Hypertension .....	312
National Kidney Foundation .....	313
National Institute of Diabetes and Digestive and Kidney Diseases .....	313
American Heart and Stroke Associations .....	314
American Heart Association .....	314
American Stroke Association.....	315
National Stroke Association.....	315
United States National Library of Medicine.....	316
MedlinePlus.....	316
PubMed.....	317
The Mayo Clinic.....	317
Lifeclinic Health Management Systems.....	318
Other Sites .....	318
 <b>Index.....</b>	 <b>321</b>