

Thyroid

DUMIES

Alan L. Rubin, MD Co-author of Diabetes For Dummies

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Co-author of Arthritis For Dummies

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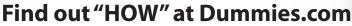
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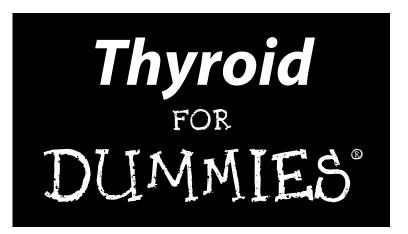
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Alan L. Rubin, MD, is one of the US's foremost experts on the thyroid gland in health and disease. He is a member of the Endocrine Society and has been in private practice specialising in thyroid disease and diabetes for over 30 years. Dr. Rubin was Assistant Clinical Professor of Medicine at UC Medical Center in San Francisco for 20 years. He has spoken about the thyroid to professional medical audiences and non-medical audiences around the world. He is a consultant to many pharmaceutical companies and companies that make thyroid products.

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Dedication

From Alan: This book is dedicated to my wife, Enid, who was there for every page. She smilingly let me do my work, sometimes into the wee hours of the morning, and missed many an opportunity to go out to dinner or a movie so that I could produce this book for you. If you have a fraction of the support in your life that she has given me, you are a lucky person, indeed.

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My teachers are too numerous to mention, but one person deserves special attention. Dr. Francis Greenspan at the University of California Medical Center gave me the sound foundation in thyroid function and disease upon which this book is based.

Finally, there are my patients over the last 28 years, the people whose trials and tribulations caused me to seek the knowledge that you will find in this book.

This book is written on the shoulders of thousands of men and women who made the discoveries, tried the medications, and held the committee meetings. Their accomplishments cannot possibly be given adequate acclaim. We owe them big time.

From Sarah: Thanks to Alan L. Rubin, MD, author of the original US version of *Thyroid For Dummies*. The quality of his original script made my job easy, as I had so very little to do when adapting his excellent book for the UK market.

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Contents at a Glance

Introduction	1
Part 1: Understanding the Thyroid	7
Chapter 1: Bigging It Up: The Huge Role of a Little Gland	
Chapter 2: Feeling Fragile: The Emotional Effects of Thyroid Problems	
Chapter 3: Discovering How Your Thyroid Works	
Chapter 4: Testing Your Thyroid	
Part II: Treating Thyroid Problems	51
Chapter 5: Dealing with an Underactive Thyroid	
Chapter 6: Taming an Overactive Thyroid	
Chapter 7: Getting the Low-Down on Thyroid Nodules	81
Chapter 8: Coping with Thyroid Cancer	89
Chapter 9: Learning about Multinodular Goitres	101
Part III: Managing Your Thyroid	107
Chapter 10: Taking Care with Drugs That Affect Your Thyroid	109
Chapter 11: Spotting Thyroid Infections and Inflammation	123
Chapter 12: Overcoming Iodine Deficiency Disease	133
Chapter 13: Going In: Surgery on the Thyroid Gland	147
Chapter 14: Exciting New Approaches in Thyroid Treatment	157
Chapter 15: Living with Thyroid Problems: Diet and Exercise	173
Chapter 16: Helping Yourself: Herbs and Homeopathy	197
Part IV: Special Considerations in Thyroid Health	205
Chapter 17: Examining the Genetic Link to Thyroid Disease	207
Chapter 18: Controlling Thyroid Disease during Pregnancy	221
Chapter 19: Developing Thyroid Conditions in Childhood	233
Chapter 20: Maturing: Thyroid Disease in Later Life	247
Part V: The Part of Tens	257
Chapter 21: Ten Myths about Thyroid Health	259
Chapter 22: Ten Ways to Maximise Thyroid Health	269

Part VI: Appendixes	277
Appendix A: Glossary of Terms	
Appendix B: Sources of More Information	283
Index	285

Table of Contents

Introduction	1
About This Book	2
Conventions Used in This Book	2
What You Don't Have to Read	
Assumptions	
How This Book Is Organised	
Part I: Understanding Your Thyroid	
Part II: Treating Thyroid Problems	
Part III: Managing Your Thyroid	
Part IV: Considering Special Aspects of Thyroid Health	4
Part V: The Part of Tens	
Part VI: Appendices	4
Icons Used in This Book	4
Where to Go from Here	5
Part 1: Understanding the Thyroid	
Discovering the Extent of the Problem	10
Identifying an Unhappy Thyroid	11
Identifying an Unhappy ThyroidRecognising Who's at Risk	11 11
Identifying an Unhappy ThyroidRecognising Who's at RiskRealising the Importance of a Healthy Thyroid	11 11 12
Identifying an Unhappy Thyroid	11 11 12
Identifying an Unhappy Thyroid	11 12 12 14
Identifying an Unhappy Thyroid	11 12 12 14
Identifying an Unhappy Thyroid	11 12 12 14
Identifying an Unhappy Thyroid	1112121414
Identifying an Unhappy Thyroid	1112121414
Identifying an Unhappy Thyroid	1112121414
Identifying an Unhappy Thyroid	11 12 12 14 14 15
Identifying an Unhappy Thyroid Recognising Who's at Risk Realising the Importance of a Healthy Thyroid Treating What Ails You Understanding the Consequences of Delaying Treatment Giving Your Thyroid a Hand: Healthy Lifestyle Choices Paying Special Attention: Pregnant Women, Children, and Older People Staying Informed Chapter 2: Feeling Fragile: The Emotional Effects of Thyroid Problems	11 12 12 14 14 15
Identifying an Unhappy Thyroid	11 12 14 15 16
Identifying an Unhappy Thyroid	11 12 14 15 16 17
Identifying an Unhappy Thyroid	11 12 14 15 16 17 18 19

Chapt	er 3: Discovering How Your Thyroid Works	25
L	ocating the Thyroid	26
	roducing Thyroid Hormones	
	Identifying the importance of iodine	
	Regulating thyroid hormones	
	Moving thyroid hormones around	30
U	nderstanding the Function of Thyroid Hormones	
	General functions	
	Specific functions	
Chapt	er 4: Testing Your Thyroid	
C	hecking Blood Levels of Thyroid Hormones	38
	Total thyroxine	
	Resin T3 uptake	
	Free thyroxine index	
	Free thyroxine (FT4)	
	Free triiodothyronine (FT3)	
	Thyroid-stimulating hormone (TSH)	
Т	aking Non-Hormonal Blood Tests	
	Thyroid autoantibodies	
	Serum thyroglobulin	
D	etermining the Size, Shape, and Content of Your Thyroid	
	Radioactive iodine uptake and scan	46
	Thyroid ultrasound	
	Fine needle aspiration biopsy (FNAB)	
	reating Thyroid Problemser 5: Dealing with an Underactive Thyroid	
	iving with Autoimmune Thyroiditis	
L	The extent of the problem	
	Symptoms of chronic thyroiditis	
	Approach to treatment	
I	lentifying Hypothyroidism	
IC	Signs and symptoms of hypothyroidism	
	Confusing conditions	
	Pinpointing the Causes of Hypothyroidism	
	Removal of the thyroid	
	Absence of brain hormones	50 58
	Foods that cause hypothyroidism	
	Drugs that cause hypothyroidism	
	Coexisting autoimmune diseases	
Г	iagnosing Severe Hypothyroidism	
	reating Hypothyroidism	
1	Taking the right hormones	
	Getting the right amount	
	Testing hormone levels	

Chapter 6: Taming an Overactive Thyroid	65
Picturing Hyperthyroidism	
Listing the Signs and Symptoms of Hyperthyroidism	
The body generally	
The thyroid	
The skin and hair	67
The heart	
The nervous system and muscles	
The reproductive system	
The stomach and intestines	
The urinary system	
The eyes	
Confirming a Diagnosis of Hyperthyroidism	
Determining Whether Graves' Disease Is the Culprit	
Causes of Graves' disease	
Signs and symptoms specific to Graves' disease	
Recognising Other Causes of Hyperthyroidism	
Choosing the Best Treatment for Graves' Disease	
Thyroid surgery	
Radioactive iodine treatment	76
Antithyroid pills	
Other helpful medications	
Treating Other Causes of Hyperthyroidism	
Surviving Thyroid Storm	80
Chapter 7: Getting the Low-Down on Thyroid Nodules	
Discovering a Thyroid Nodule	
Evaluating Cancer Risks	
Securing a Diagnosis	
The fine needle aspiration cytology	
The thyroid ultrasound scan	
Treating Cancerous Nodules	
Dealing with Nodules That Are Non-Cancerous	86
Hot nodules	
Benign cysts	
Warm or cold nodules	
Ignoring Small Nodules	
Chapter 8: Coping with Thyroid Cancer	
Determining What Causes Thyroid Cancer	
Identifying the Types of Thyroid Cancer	
Papillary thyroid cancer	
Follicular thyroid cancer	
Medullary thyroid cancer	
Undifferentiated (anaplastic) thyroid cancer	
Staging Thursid Canaar	

Treating Thyroid Cancer	97
Papillary thyroid cancer	98
Follicular thyroid cancer	99
Medullary thyroid cancer	
Undifferentiated (anaplastic) thyroid cancer	
Following Up Cancer Treatment	
Chapter 9: Learning about Multinodular Goitres	101
Exploring How a Multinodular Goitre Grows Up Choosing to Treat It or Ignore It	102
Making a Diagnosis	
Treating a Multinodular Goitre	
Part III: Managing Your Thyroid	107
Chapter 10: Taking Care with Drugs That Affect Your Thyroid	109
Revealing the Drug-Food-Thyroid Connection	109
Identifying the Effects of Specific Substances	
Initiating or aggravating hypothyroidism	
Creating false test results	117
Causing an increase in thyroid activity	
Preventing Harmful Drug Interactions	119
Discovering Whether You're at Risk	119
Chapter 11: Spotting Thyroid Infections and Inflammation	123
Putting a Face on Subacute Thyroiditis	
Causes and effects	
Laboratory findings	
Treatment options	126
Coping with Postpartum and Silent Thyroiditis	
Understanding the disease	
Interpreting lab results	
Getting treatment	
Identifying Acute Thyroiditis	
Describing the disease	
Confirming the diagnosis with lab tests	
Treating acute thyroiditis	
Diagnosing a Rare Form of Thyroiditis	
Chapter 12: Overcoming lodine Deficiency Disease	133
Realising the Vastness of the Problem	
Facing the Consequences of Iodine Lack	
Pregnancy	
Infancy	
Childhood	
Adulthood	136

Endomic Crotiniem		127
	ographic distribution	
Collerbuting facto	ors	1 40
	s defence	
Neurologic cretini	sm	141
Myxoedematous o	cretinism	141
	of Iodine Deficiency	
	r cup of water	
Drawbacks of lodisation	n	145
Chapter 13: Going In: Surg	ery on the Thyroid Gland	147
Deciding When Surgery	Is Necessary	147
Talking Things Over		149
	burgery	
	S	
Considering a New App	roach	154
Possible Complications		155
	Operation	
recuperating rater the	operation	100
Chapter 14: Exciting New	Approaches in Thyroid Treatment .	157
Preventing Ill Effects of	Large Doses of Iodine	157
Finding Out More about	t Hypothyroidism	158
Treating (or not to	reating) subclinical hypothyroidism	158
Finding the right of	dose of hormone	159
Determining the p	revalence of hypothyroidism	160
Linking heart dise	ease and hypothyroidism	160
	oidism	
	n levels	
	t gain	
	nyroid surgery	
Revolutionising tr	iyroid surgery	
Gathering clues to	o hyperthyroid eye diseaseodules	163
Gathering clues to Treating Goitres and No	hyperthyroid eye disease	163 164
Gathering clues to Treating Goitres and No Performing surger	o hyperthyroid eye diseaseodulesry after ethanol injections	163 164 164
Gathering clues to Treating Goitres and No Performing surger Shrinking goitres.	hyperthyroid eye diseaseodules	163 164 164
Gathering clues to Treating Goitres and No Performing surger Shrinking goitres. Developing New Appro	o hyperthyroid eye diseaseodulesry after ethanol injections	163 164 164 165
Gathering clues to Treating Goitres and No Performing surger Shrinking goitres. Developing New Appro- Understanding the	o hyperthyroid eye diseaseodulesry after ethanol injectionsaches in Thyroid Cancer	163 164 164 165
Gathering clues to Treating Goitres and No Performing surger Shrinking goitres. Developing New Appro- Understanding the Blocking oestroge	o hyperthyroid eye diseaseodulesory after ethanol injectionsaches in Thyroid Cancere impact of radioiodine exposure	163 164 164 165 165
Gathering clues to Treating Goitres and No Performing surger Shrinking goitres. Developing New Approx Understanding the Blocking oestroge Predicting thyroic	o hyperthyroid eye diseaseodules	163 164 164 165 165 166
Gathering clues to Treating Goitres and No Performing surger Shrinking goitres. Developing New Approx Understanding the Blocking oestroge Predicting thyroic Detecting residua	o hyperthyroid eye disease	163 164 164 165 165 166 166
Gathering clues to Treating Goitres and No Performing surger Shrinking goitres. Developing New Approx Understanding the Blocking oestroge Predicting thyroic Detecting residua Following up thyr	o hyperthyroid eye disease	163 164 165 165 166 166 166
Gathering clues to Treating Goitres and No Performing surger Shrinking goitres. Developing New Approx Understanding the Blocking oestroge Predicting thyroic Detecting residua Following up thyr Knowing what to	o hyperthyroid eye disease	163 164 165 165 166 166 166 167

Tackling Iodine Deficiency Disease	170
Recognising the importance of selenium	
Using iodised oil for goitres	
Increasing the intelligence of babies born to hypothyroid mothers	
Chapter 15: Living with Thyroid Problems: Diet and Exercise	173
Guaranteeing Your Best Nutrition	173
Maintaining a Healthy Weight	
Calculating your body mass index	
Measuring your waist size	
Losing excess weight	
Selecting a variety of foods	
Choosing your fats wisely	
Checking out your cholesterol	
Moderating your sugar intake	
Sifting the salt	
Drinking alcohol in moderation	
Going Organic	
Thinking about food safety	
Clarifying the Thyroid–Weight Connection	
Does my metabolism slow when I lose weight?	
If I'm treated for hyperthyroidism, am I doomed	
to gain weight?	187
Considering Iodine in Your Diet	189
Getting enough iodine in a vegetarian diet	
Exercising for Your Thyroid	190
Recognising the natural consequences of ageing	190
Working out with hypothyroidism	
Exercising with hyperthyroidism	192
Meeting your minimal exercise needs	193
Introducing Leptin: The New Hormone on the Block	194
Understanding the functions of leptin	
Interacting with thyroid hormone	195
Chapter 16: Helping Yourself: Herbs and Homeopathy	197
Finding a Reputable Practitioner	198
Digging into Medicinal Herbs	199
Bladderwrack	
Bugleweed	
Korean ginseng	
Motherwort	
Oats	
Siberian ginseng	
Turmeric	
Valerian	
Understanding Homeopathy	
Discovering homeopathic remedies	
Taking a remedy	

Arsenicum album	203
lodum	
Belladonna	
Natrum Mur	204
Part IV: Special Considerations in Thyroid Health	205
Chapter 17: Examining the Genetic Link to Thyroid Disease .	207
Genetics for Beginners	
A monk and his pea plants	
Talk the talk	
The great divide	
Genes, chromosomes, and the traits they create	
The secret lives of genes	
Shall I form a liver or a brain?	
The Origins of Genetic Thyroid Diseases	
Inheriting a disease through a single geneInheriting a disease through multiple genes	
Inheriting a disease through multiple genesInheriting a chromosome abnormality	
The Future of Managing Hereditary Thyroid Disease	112 218
Genetic engineering	
The ethics of germline gene therapy	
Chapter 18: Controlling Thyroid Disease during Pregnancy	
Looking at Normal Thyroid during Pregnancy	
Pregnancy and Hypothyroidism	
Decreased fertility	
lodine deficiency	
Autoimmune hypothyroidism	
Hyperthyroidism in Pregnancy	
Postpartum Graves' disease	
Gestational transient thyrotoxicosis	
Hydatidiform mole and choriocarcinoma	231
Finding New Thyroid Nodules during Pregnancy	231
Chapter 19: Developing Thyroid Conditions in Childhood	233
Understanding the Onset of Thyroid Function	233
Screening the Newborn	235
Coping with Hypothyroidism in Children	
Transient congenital hypothyroidism	
Congenital hypothyroidism	
Acquired hypothyroidism	
Dealing with Hyperthyroidism in Children	
Laboratory confirmation	
Signs and symptoms	241
Treatment	2/2

Diagnosing Goitres in Children	
Linking Nodules and Cancer in Children	
Chapter 20: Maturing: Thyroid Disease in Later Life	247
Assessing the Extent of the Problem	248
Understanding Sources of Confusion in Diagnosis	
Acknowledging other diseases	
Taking medications	
Discovering Hypothyroidism in Older People	
Deciphering signs and symptoms	
Getting laboratory confirmation	
Trying thyroid hormone for subclinical patients	
Taking treatment slowly	
Sorting through confusing signs and symptoms	
Securing a diagnosis	
Checking Out Thyroid Nodules in Older People	
Part V: The Part of Tens	2 <i>5</i> 7
Chapter 21: Ten Myths about Thyroid Health	259
I'm Hypothyroid, So I Can't Lose Weight	
I'm Hyperthyroid, So I Can't Gain Weight	
Breastfeeding and Antithyroid Pills Don't Mix	
Brand Name Thyroid Hormone Pills Are Best	261
I Have to Take Thyroid Medication for Life	
Natural Thyroid Hormones Are Better Than Synthetic Hormones	
Thyroid Disease Is Catching	
Iodine Deficiency Is a Medical Problem The Higher My Autoantibody Levels, the Worse My Thyroid	
DiseaseClinical Symptoms Are More Reliable Than Blood Tests	
Chapter 22: Ten Ways to Maximise Thyroid Health	
•	
Screening at Appropriate Intervals	270
Checking Thyroid Function As Your Body Changes	
Performing a 'Neck Check'	
Getting Enough Iodine to Satisfy Your ThyroidStopping Thyroid Medication, If Possible	
Using Both Types of Thyroid Hormone	
Preventing the Regrowth of Thyroid Cancer	
Anticipating Drug Interactions	
Protecting Your Thyroid from Radiation	
Keeping Up-to-Date with Thyroid Discoveries	

Part VI: Appendixes	277
Appendix A: Glossary of Key Terms	
Appendix B: Sources of More Information	
Index	285



Introduction

s part of my medical training, I (Sarah) was taught by an enlightened physician, Dr David Rubenstein of Addenbrooke's Hospital, Cambridge. He encouraged me to do three things when evaluating a patient with puzzling symptoms: Think Drugs (so as not to miss unsuspected side effects), Think Dirty (to exclude syphilis, a disease that mimics so many other conditions) and Think Thyroid – because under and overactive thyroid problems are so often missed, especially in older people.

I went on to make a career out of thinking drugs and thinking thyroid (thinking dirty is no longer as necessary as it was just a generation ago).

For hundreds of years, people understood that a connection exists between a strange looking growth in the neck and certain diseases. Until about 60 years ago, confusion reigned as people with similar growths in their necks often have opposite symptoms. One group shows excessive excitement, nervousness, and shakiness, while the other has depression, sleepiness, and general loss of interest. What the two groups have in common is that they are mostly all women.

As recently as 60 years ago, scientists started to measure the chemicals coming from these growths (enlarged thyroid glands), and suddenly the whole picture began making sense. Now, many of the secrets of the thyroid gland and the hormones it makes are known, although it undoubtedly still has a few surprises up its sleeve.

This book explains that, with very rare exceptions, thyroid diseases, including thyroid cancer, are some of the most easily treated of all disorders. This fact is why many thyroid specialists say, 'If I have to have cancer, let's hope it's a thyroid cancer.'

This book reveals the thyroid in all its glory. As it regulates body temperature, one of the main symptoms of thyroid problems is feeling hot or feeling cold. Unfortunately, this symptom leads to a lot of confusion within the thyroid itself. So much so that the left lobe of the thyroid was once heard to say to the right lobe: 'Now I know it's summer – here comes another swallow.'

About This Book

The good news is that you don't need to read this book from cover to cover. Since the first few chapters are a general introduction to the thyroid, you may find it helpful to start in Part I, but if you prefer to go right to information about the thyroid condition that affects you, off you go to find it. If you run across any terms you don't understand, look for them in the glossary of terms in Appendix A.

This book is written as a sort of medical biography of a family – Toni, Stacy, Linda, Ken, and other members of the clan whom you meet during your reading. These folks illustrate the fact that thyroid disease often runs in families. You meet members of the family, as well as some other fine fictional characters, at the beginning of each chapter that describes a thyroid disease, so you have a good picture of the condition covered in that chapter.

Conventions Used in This Book

Although books such as this are easiest to read if they only use non-scientific terms, you and your doctor would soon find that you're speaking two different languages. Therefore, *Thyroid For Dummies* does use scientific terms, but these terms are explained in everyday English the first time you run across them. Plus, definitions of those difficult terms are available in the Glossary at the back of the book.

Three scientific terms come up over and over again in this book: thyroxine, triiodothyronine, and thyroid-stimulating hormone (also known as thyrotropin). These terms are explained in detail in Chapter 3. For these three words, abbreviations are used for easier reading: Thyroxine is T4, triiodothyronine is T3, and thyroid-stimulating hormone is TSH.

What You Don't Have to Read

Throughout the book, you find shaded boxes of text called sidebars. These contain interesting material but not essential to your understanding. If you don't care to go so deeply into a subject, skip the sidebars; you can still understand everything else.

Assumptions

This book assumes that you or someone you care about has a thyroid condition that is not yet treated or perhaps is not treated to your satisfaction. If this assumption doesn't apply to you, perhaps you suspect that you have a thyroid condition and want to determine whether you should see a doctor. Or perhaps you can't get your doctor to run the necessary tests to determine whether a thyroid problem exists. Regardless of your individual situation, this book has valuable information for you.

The material in the chapters does not make any assumptions about what you know regarding the thyroid and doesn't introduce any new terms without explaining what they are. If you already know a lot about the thyroid and its functions, you can still find new information that adds to your knowledge.

How This Book Is Organised

The book is divided into six parts to help you find out all you want to know about the thyroid gland.

Part 1: Understanding Your Thyroid

So much (right and wrong) is written about the way the thyroid affects your mood that this issue is cleared up at the very beginning of the book. After you understand how the thyroid affects your emotions, you find out just what the thyroid is and what it does. Finally, in this part you learn about the medical tests that help to determine if something is wrong with your thyroid.

Part 11: Treating Thyroid Problems

This part explains each of the conditions that affect the thyroid and how they affect you. After finishing this part of the book, you will know just about everything we know about thyroid disease, how to identify it, and how to treat it.

Part III: Managing Your Thyroid

Here you discover how medications can influence your thyroid function. We also explain thyroid infections, along with the worldwide problem of iodine

deficiency. I also show you why thyroid surgery is rarely done, and look at new treatments coming along. The final two chapters look at ways to improve your thyroid health – and your health in general – using diet, exercise, lifestyle choices, and complementary therapies.

Part IV: Considering Special Aspects of Thyroid Health

Thyroid problems often run in families and this part looks at the genetic basis of some thyroid diseases. Three groups of people also deserve special consideration in this book: pregnant women, children, and those over the age of 65 years. Thyroid conditions take unusual directions in these groups, so the chapters in this part address their unique difficulties.

Part V: The Part of Tens

Misinformation about the thyroid is rampant. This part aims to clear up some of that misinformation – though not all, as it accumulates faster than dust. The information also shows you how you can maximise your thyroid health.

Part VI: Appendices

In Appendix A, you find a glossary of medical terms that relate to the thyroid; you may want to bookmark it so you can go back and forth with ease as you read other chapters. Appendix B directs you to the best-of-the-best Web sites where you can get dependable facts to fill in any blank spots that remain after you've read this book.

Icons Used in This Book

Books in the *For Dummies* series feature icons in the margins, which direct you towards information that may be of particular interest or importance. Here's an explanation of what each icon in this book signifies:



When you see this icon, it means the information is essential. You want to ensure that you understand it.



This icon points out important information that can save you time and energy.



You find this icon next to paragraphs about the family members or other folks with specific thyroid conditions.



This icon alerts you to situations in which you may need to contact your doctor for some help.



This icon warns against potential problems you could encounter, such as the side effects of mixing medications.



This icon shows where medical terms are defined.

Where to Go from Here

Where you go from here depends upon your needs. If you want to understand how the thyroid works, head to Part I. If you or someone you know has a thyroid condition, you may want to pay particular attention to Part II. For help in maintaining good thyroid health, turn to Part III. If thyroid disease runs in your family, or if you're pregnant or have a child or parent with a thyroid disorder, Part IV is your next stop. In any case, as my mother used to say when she gave me a present, use this book in good health.

Part I Understanding the Thyroid



"When he said he'd got trembling hands, rapid heartbeat, and was breaking out into a nervous sweat, I thought it was love—then he just said it was a thyroid problem!"

In this part . . .

hat, exactly, is the thyroid gland, and what does it do? In this part, you discover how important this little gland in your neck really is, what function it plays in your body, and how to determine if it is functioning properly. We show you that your thyroid affects your mind as well as your body in critical ways.

Chapter 1

Bigging It Up: The Huge Role of a Little Gland

In This Chapter

- ▶ Crunching numbers: The incidence of thyroid disease
- ▶ Recognising signs, symptoms, and risk factors of thyroid disease
- ► Appreciating your thyroid's hard work
- ▶ Giving a sick thyroid some TLC
- ▶ Pinpointing times of life that pose special risks

our thyroid is a little like Victor Meldrew, who often doesn't get the respect he feels he deserves. Anyone who watches prime-time TV knows the importance of other body parts – the heart, lungs, and wedding tackle sure get a lot of press. But unless you come face-to-face with a thyroid problem, chances are you don't hear much about what this little gland does and its vital importance to good health.

The fact that you're reading these words suggests you've encountered a thyroid problem personally. Perhaps you've recently had a thyroid condition diagnosed. Or maybe your husband, wife, mother, or friend is receiving treatment for a thyroid problem. If so, you've probably found out at least a little about this mysterious gland, and now you're looking for answers to the obvious questions that keep popping up in your mind:

- ✓ What causes this condition?
- ✓ What types of symptoms are related to this problem?
- ✓ How is this condition treated?
- ✓ What are the consequences of leaving it untreated?
- ✓ Does treatment end the problem forever?
- ✓ What can I (or my husband, wife, mother, or friend) do to help get back to optimal health?

This book aims to answer most of your questions. As doctors and researchers are constantly discovering new things about the thyroid, however, the information here is only as complete as our current knowledge. But if you're looking for concrete information about how the thyroid functions, and what to do when a problem occurs, you're holding the right paperback.

Discovering the Extent of the Problem

Thyroid disease – which is the collective term used for medical disorders of the thyroid, the majority of which are covered in this book – is one of the most common conditions in the world. Research indicates that thyroid disease affects more than 200 million people around the globe. In the United Kingdom alone, an estimated 4.5 million people have a thyroid problem out of a population of around 60.5 million. And that's just the ones who are properly diagnosed; a further two million people are believed to have over or underactive thyroid glands that remain unrecognised, although these cases are often mild.

The *incidence* of thyroid disease (the number of new cases identified annually) becomes even higher when careful autopsies are carried out on people who did not die of a thyroid condition. As many as 60 per cent of the people autopsied are found to have growths on the thyroid, and 17 per cent have small areas of cancer that were not detected during life.

These numbers are statistics, but thyroid disease affects individuals. You'll be encouraged to know that many people in the public eye have gone on to great accomplishments after being treated successfully for thyroid conditions. Some of the people you may recognise include:

- Olympic gold medal-winning sprinter, Gail Devers, had hyperthyroidism, while runner Carl Lewis had hypothyroidism.
- Author Isaac Asimov had thyroid cancer at the age of 52 and went on to live a further 20 years, eventually dying at the age of 72 from unrelated causes.
- ✓ Singer Rod Stewart had surgery to remove a thyroid growth.
- ✓ World-class golfer Ben Crenshaw had hyperthyroidism.
- ✓ Former United States President George Bush, former first lady Barbara Bush, and even their dog Millie, had hyperthyroidism – an unusual clustering that prompted extensive investigation of their water supply, although no cause was ever found.

While this list is far from exhaustive, it helps to drive home the point that, if diagnosed and treated, thyroid conditions don't need to hamper your lifestyle.