



Diabetes Centre of St Vincent's Hospital, Sydney

Australian Edition

Type 2 Diabetes

FOR
DUMMIES®

Learn to:

- Manage type 2 diabetes and live life to the full
- Eat a balanced diet and exercise for a healthier life
- Keep an eye on your glucose levels and manage your medications
- Access the best online support

Professor Lesley Campbell
and the Diabetes Centre of
St Vincent's Hospital

Alan L Rubin, MD





Diabetes Centre of St Vincent's Hospital, Sydney

Australian Edition

Type 2 Diabetes

FOR
DUMMIES[®]

Learn to:

- Manage type 2 diabetes and live life to the full
- Eat a balanced diet and exercise for a healthier life
- Keep an eye on your glucose levels and manage your medications
- Access the best online support

Professor Lesley Campbell
and the Diabetes Centre of
St Vincent's Hospital

Alan L Rubin, MD



Type 2 Diabetes For Dummies[®], Australian Edition

Visit

www.dummies.com/cheatsheet/diabetesau to
view this book's cheat sheet.

Table of Contents

[Introduction](#)

[About This Book](#)

[Conventions Used in this Book](#)

[What You Don't Have to Read](#)

[Foolish Assumptions](#)

[How This Book Is Organised](#)

[Part I: Dealing with the Onset of Type 2
Diabetes](#)

[Part II: How Type 2 Diabetes Affects Your Body](#)

[Part III: Living with Type 2 Diabetes: Your
Physical Health](#)

[Part IV: The Part of Tens](#)

[Icons Used in This Book](#)

[Part I: Dealing with the Onset of Type 2 Diabetes](#)

Chapter 1: Dealing with Type 2 Diabetes

Living with Type 2 Diabetes

Adjusting to the Diagnosis

Working On Your Mental Health

Dealing with depression

Getting through your anger

When you're having trouble coping

The Way Forward After Diagnosis

Chapter 2: It's the Glucose

Recognising Diabetes

Testing for diabetes

Controlling glucose

Losing control of glucose

Getting to Know Your Pancreas

Discovering Ways to Treat Diabetes

Telling a Typical Patient Story

Chapter 3: Understanding the Transition to Type 2 Diabetes

Knowing What Puts You at Risk of Prediabetes

Diagnosing Prediabetes

Testing for prediabetes

Deciphering the diagnosis

Turning Back the Clock

Modifying the lifestyle risk factors: 'The triad'

Getting the family involved

Considering medications

Discovering You Have Type 2 Diabetes

Identifying the symptoms of type 2 diabetes

Investigating the causes of type 2 diabetes

Part II: How Type 2 Diabetes Affects Your Body

Chapter 4: Managing Short-Term Ailments

Solving Short-Term Problems

Coping With Colds and Other Nasties

Being prepared for sick days

Monitoring glucose

Knowing what to eat and drink

Contacting important people

Understanding Hypoglycaemia

Getting acquainted with the signs and symptoms

Knowing the causes

Treating the problem

Managing Hyperglycaemic Hyperosmolar State

Seeing the symptoms

Finding the causes

Remediating hyperglycaemic hyperosmolar state

Chapter 5: Preventing Long-Term Complications

Fighting Heart Disease

Risks of heart disease to people with diabetes

Keeping a finger on the pulse

Other Diseases of the Vascular System

Peripheral vascular disease

Cerebrovascular disease

Tracking Cholesterol and Other Fats

Measuring Blood Pressure

Controlling Kidney Disease

Progressive changes

Getting treatment

Having a Look at Eye Disease

Reining in Neuropathy, or Nerve Disease

Diagnosing neuropathy

Symptoms of neuropathy

Fabulous Feet

Caring for your feet — prevention is better than cure

Identifying common foot problems

Treating foot problems

Sexual Problems in Diabetes

Male sexual problems

Female sexual problems

Skin Disease in Diabetes

Part III: Living with Type 2 Diabetes: Your Physical Health

Chapter 6: Glucose Monitoring and Other Tests

Testing, Testing: Tests You Need to Stay Healthy

Monitoring Your Blood Glucose

How often should you test?

How do you perform the test?

Investigating Blood Glucose Meters

Tracking Your Glucose over Time with Glycosylated Haemoglobin

Understanding how a HbA1c works

Looking at factors that affect HbA1c results

Acting on a HbA1c result

Chapter 7: Medications: What You Should Know

Taking Drugs by Mouth: Oral Agents

Metformin

Sulphonylureas

Acarbose

Thiazolidinediones (the glitazones)

Repaglinide

Dipeptidyl peptidase-IV inhibitors

Combining oral agents

Getting Under Your Skin: Injecting Incretin

Mimetics

Introducing Insulin

Reviewing the types of insulin

Understanding common features of all insulins

Travelling with diabetes

Delivering insulin with a syringe or a pen

Other Common Medications

Antihypertensives (medicines for lowering blood pressure)

Drugs for dyslipidemia (abnormal levels of fats in the blood)

Antiplatelet medication

Weight-loss medication

[Avoiding Drug Interactions](#)
[Getting Help with the Costs of Diabetes](#)

[Chapter 8: Healthy Eating in Diabetes](#)

[Examining Your Kilojoule Intake](#)
[Considering Carbohydrates](#)

[Checking the glycaemic index](#)
[Spreading out your carbohydrate choices](#)

[Choosing Proteins](#)
[Monitoring the Fat in Your Diet](#)
[Getting Enough Vitamins, Minerals and Water](#)
[Considering the Effect of Alcohol](#)
[Putting It All Together: Planning Meals](#)
[Losing Weight](#)

[Checking your weight](#)
[Reducing your weight](#)

[Chapter 9 : Keeping It Moving: Exercise Plan](#)

[Why Exercise Is Important](#)
[Getting Started: Exercising When You Have Diabetes](#)
[Getting Your Heart Pumping](#)
[Is Golf a Sport? Choosing Your Activity](#)

[Picking an activity that suits you over the long term](#)
[Taking your current physical condition into account](#)

Lifting Weights and Getting Fit

Part IV: The Part of Tens

Chapter 10: Ten Ways to Prevent or Reverse Diabetes

Monitoring Your Blood Glucose

Being Careful with What You Eat

Having Tests Regularly

Keeping Active

Educating Yourself

Heeding the Doctor's Advice

Maintaining a Positive Outlook

Being Prepared

Examining Your Feet

Focusing On Your Eyes

Chapter 11: Ten Myths about Diabetes That You Can Forget

Following Treatment Perfectly Yields Perfect Glucose Levels

Eating a Slice of Cake Can Kill You

You Can Tell the Level of Your Blood Glucose by How You Feel

Finding a Cure in Unorthodox Methods

Diabetes Ends Spontaneously

Needing Insulin Means You're Doomed

People with Diabetes Shouldn't Exercise

Getting Life and Health Insurance Is Impossible

[Most Diabetes Is Inherited](#)
[Diabetes Wrecks Your Sense of Humour](#)

[Glossary](#)
[Cheat Sheet](#)

***Type 2 Diabetes For Dummies[®],
Australian Edition***

**Professor Lesley Campbell and
The Diabetes Centre of St
Vincent's Hospital, Sydney
Alan L Rubin, MD**



Wiley Publishing Australia Pty Ltd

Type 2 Diabetes For Dummies[®], Australian Edition

Published by
Wiley Publishing Australia Pty Ltd
42 McDougall Street
Milton, Qld 4064

www.dummies.com

Copyright © 2012 Wiley Publishing Australia Pty Ltd

The moral rights of the authors have been asserted.

National Library of Australia Cataloguing-in-Publication data:

Author: Campbell, Lesley

Title: Type 2 Diabetes For Dummies / Lesley Campbell

Edition: Australian ed

ISBN: 978 1 11830 362 7 (pbk.)

Notes: Includes index

Subjects: Non-insulin-dependent diabetes — Treatment —
Popular works
Diabetes — Diet therapy
Patient education

Dewey Number: 616.4624

All rights reserved. No part of this book, including interior design, cover design and icons, may be reproduced or transmitted in any form, by any means (electronic, photocopying, recording or otherwise) without the prior written permission of the Publisher. Requests to the Publisher for permission should be addressed to the Contracts & Licensing section of John Wiley & Sons Australia, Ltd, 42 McDougall Street, Milton, Qld 4064, or email auspermissions@wiley.com.

Cover image: © Akirastock / iStockphoto

Typeset by diacriTech, Chennai, India

Printed in China by

Printplus Limited

10 9 8 7 6 5 4 3 2 1

Limit of Liability/Disclaimer of Warranty: THE PUBLISHER AND THE AUTHORS MAKE NO REPRESENTATIONS OR WARRANTIES WITH RESPECT TO THE ACCURACY OR COMPLETENESS OF THE CONTENTS OF THIS WORK AND SPECIFICALLY DISCLAIM ALL WARRANTIES, INCLUDING WITHOUT LIMITATION, WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE. NO WARRANTY MAY BE CREATED OR EXTENDED BY SALES OR PROMOTIONAL MATERIALS. THE ADVICE AND STRATEGIES CONTAINED HEREIN MAY NOT BE SUITABLE FOR EVERY SITUATION. THIS WORK IS SOLD WITH THE UNDERSTANDING

THAT THE PUBLISHER IS NOT ENGAGED IN RENDERING LEGAL, ACCOUNTING, OR OTHER PROFESSIONAL SERVICES. IF PROFESSIONAL ASSISTANCE IS REQUIRED, THE SERVICES OF A COMPETENT PROFESSIONAL PERSON SHOULD BE SOUGHT. NEITHER THE PUBLISHER NOR THE AUTHORS SHALL BE LIABLE FOR DAMAGES ARISING HEREFROM. THE FACT THAT AN ORGANISATION OR WEBSITE IS REFERRED TO IN THIS WORK AS A CITATION AND/OR A POTENTIAL SOURCE OF FURTHER INFORMATION DOES NOT MEAN THAT THE AUTHORS OR THE PUBLISHER ENDORSES THE INFORMATION THE ORGANISATION OR WEBSITE MAY PROVIDE OR RECOMMENDATIONS IT MAY MAKE. FURTHER, READERS SHOULD BE AWARE THAT INTERNET WEBSITES LISTED IN THIS WORK MAY HAVE CHANGED OR DISAPPEARED BETWEEN WHEN THIS WORK WAS WRITTEN AND WHEN IT IS READ.

Trademarks: Wiley, the Wiley logo, For Dummies, the Dummies Man logo, A Reference for the Rest of Us!, The Dummies Way, Making Everything Easier, dummies.com and related trade dress are trademarks or registered trademarks of John Wiley & Sons, Inc. and/or its affiliates in the United States and other countries, and may not be used without written permission. All other trademarks are the property of their respective owners. Wiley Publishing Australia Pty Ltd is not associated with any product or vendor mentioned in this book.

About the Authors

Professor Lesley Campbell, MBBS FRCP (UK) FRACP AM, is the Director of the Diabetes Centre and Services at St Vincent's Hospital, a Professor of Medicine at the University of NSW, a Senior Researcher at the Garvan Institute of Medical Research and a Senior Physician in clinical practice at St Vincent's Hospital. Her research focuses on type 2 diabetes mellitus and obesity. She's specifically interested in the role of central body fat and the genetic factors predisposing to insulin resistance syndrome and type 2 diabetes.

The **Diabetes Centre** at St Vincent's Hospital in Sydney was established in 1982 to promote greater knowledge about diabetes and optimise its management. The centre is a public specialist health service, staffed by a diabetes specialist, a registrar, diabetes educators and dietitian. It also draws on services including private diabetes specialists, general practitioners, podiatrists, ophthalmologists, psychologists and other health professionals. The aim of the Diabetes Centre's multidisciplinary approach is to help people with diabetes manage their diabetes on a day-to-day basis and facilitate and coordinate the medical, educational and nutritional resources that they need.

Alan L Rubin, MD, is one of America's foremost experts on diabetes. He's a professional member of the American Diabetes Association and the Endocrine Society and has been in private practice specialising in diabetes and thyroid disease for over 25 years.

Authors' Acknowledgements

Acknowledgments from Professor Lesley Campbell

I want to take this opportunity to thank all those who have contributed to this book. My gratitude goes to Melissa Armstrong, who was the main driver in getting this book into production and finally to print. I also want to thank the following people who helped with certain sections of the book: Professor Don Chisholm from the Garvan Institute for Medical Research, Sydney; Dr Jerry Greenfield, Chairman of the Department of Endocrinology at St Vincent's Hospital, Sydney; Dr Paul Lee, Endocrinology Doctoral Candidate from the Garvan Institute for Medical Research; Jane Ludington, Clinical Pharmacist from St Vincent's Hospital and the University of Sydney; Dr Louise Maple-Brown from the Menzies School of Health Research in Darwin; Dr Gabrielle O'Kane, Microbiologist/Registrar in Diabetes at St Vincent's Hospital; Dr Ann Poynton, Endocrinologist from Prince of Wales Hospital, Sydney; Dr Vanessa Tsang from Royal North Shore Hospital, Sydney; Dr Daniel Chen, Registrar in Endocrinology at St Vincent's Hospital; Dr Kay Wilhelm and Joanna Crawford from the Urban Mental Health Research Institute St Vincent's Hospital; Dr Weng Sam, Visiting Medical Officer, Department of Endocrinology at St Vincent's Hospital; and Karen Jameson, Diabetes Educator at Royal North Shore Hospital in Sydney.

This book wouldn't have been possible without the help of the staff at the Diabetes Centre at St Vincent's Hospital in Sydney. I again thank Melissa Armstrong and also Kylie Alexander,

Jan Alford, Wendy Bryant, Cathy Carty, Josie Maguire and Penny Morris.

Acknowledgments from Doctor Alan Rubin

I want to thank ophthalmologist Dr John Norris of Pacific Eye Associates in San Francisco for helping me to see the place of the eye physician in diabetes care. I also want to thank podiatrist Dr Mark Pinter for helping me get a leg-up on his specialty. Librarians Mary Ann Zaremska and Nancy Phelps at St Francis Memorial Hospital were tremendously helpful in providing the articles and books upon which the information in the book is based.

My teachers are too numerous to mention, but one group deserves special attention. They are my patients over the last 26 years, the people whose trials and tribulations caused me to seek the knowledge that you find in this book.

Dedication

We dedicate this book to the people with diabetes we've met over the years who have taught us so much and from whom we are still learning — Prof Lesley Campbell and the St Vincent's Hospital Diabetes Team.

This book is dedicated to my wife, Enid, and my children, Renee and Larry. Their patience, enthusiasm, and encouragement helped to make the writing a real pleasure — Alan L Rubin.

Publisher's Acknowledgements

We're proud of this book; please send us your comments through our online registration form located at <http://dummies.custhelp.com>.

Some of the people who helped bring this book to market include the following:

Acquisitions, Editorial and Media Development

Project Editors: Dani Karvess, Elizabeth Whiley

Acquisitions Editor: Rebecca Crisp

Editorial Manager: Hannah Bennett

Production

Cartoons: Glenn Lumsden

Proofreader: Charlotte Duff

Indexer: Don Jordan, Antipodes Indexing

Every effort has been made to trace the ownership of copyright material. Information that enables the publisher to rectify any error or omission in subsequent editions is welcome. In such cases, please contact the Permissions Section of John Wiley & Sons Australia, Ltd.

Introduction

You may be thinking nothing is lucky about being diagnosed with type 2 diabetes; after all, it's a disease, isn't it? And you're right, nothing is lucky about the diagnosis, but the people who are diagnosed with diabetes early on in the 21st century are the luckiest group in history.

Those of you with diabetes have a decade or more in which to avoid the long-term complications of this disease. In a sense, a diagnosis of diabetes is both good news and bad news. It's bad news because you have a disease you would happily do without. It's good news if you use it to make some changes in your lifestyle that can not only prevent complications but also help you to live a longer and higher quality of life.

As for developing a sense of humour about it, at times you'll feel like doing anything but laughing. But scientific studies are clear about the benefits of a positive attitude. In a very few words: He who laughs, lasts. Another point is that people learn more and retain more when humour is part of the process.

Our goal isn't to trivialise human suffering by being comic about it, but to lighten the burden of a chronic disease by showing that it's not all gloom and doom.

About This Book

The book isn't meant to be read from cover to cover — although if you know nothing about diabetes, doing so might be a good approach. This book is your source of information on diabetes and the medical research under way at the time of writing into new drugs and techniques. So that you may stay

abreast of the latest developments in diabetes care, the book also directs you to the best sources of reliable information on any medical advances that may occur after the publication of this edition.

We only cover type 2 diabetes in this book. If you're curious about other types of diabetes, including type 1 and gestational diabetes, *Diabetes For Dummies*, 3rd Australian Edition (published by Wiley Publishing Australia Pty Ltd), is a good resource for you.

We've tried to provide you with enough information so that you can make informed decisions about how you can care for yourself when you have type 2 diabetes, but always remember that you have your GP and members of your diabetes care team to help you through. You're not alone!

Conventions Used in this Book

Diabetes, as you know, is all about sugar. But sugars come in many types. So health professionals avoid using the words sugar and glucose interchangeably. In this book (unless we slip up), we use the word glucose rather than sugar.

What You Don't Have to Read

Throughout the book, shaded areas, called sidebars, appear. These sidebars contain material that's interesting but not