

LEARNING MADE EASY



6th Edition

Diabetes

for
dummies[®]
A Wiley Brand



Manage and live well
with diabetes

Discover the latest options for
monitoring blood sugar

Reduce your risk of diabetes
complications

Dr. Simon Poole
Amy Riolo

Bestselling author, chef, Mediterranean
Lifestyle Ambassador

Alan L. Rubin, MD



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**by Dr. Simon Poole
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Introduction

Neither one of us began our career knowing that we'd become so involved in supporting people with diabetes. Our shared passion has always been to help people lead their best lives. We both wanted to support people through illness and lead them to better health. As medical and culinary professionals with decades of experience, we soon realized how healthful lifestyle components that could powerfully and positively influence well-being and prevent illness were often missing from people's lives. On a daily basis, we recommend the Mediterranean diet and lifestyle for people in our care and influence to live better and longer. Fortunately, even though we're based in the United States and England, countless principles of this ancient way of living can still be enjoyed today anywhere on the planet.

According to the American Diabetes Association, 1.4 million Americans are diagnosed with diabetes each year. In 2019, 37.3 million Americans, or 11.3 percent of the population, had diabetes. Many nations around the world aren't far behind. There's a need to offer positive, easy-to-implement practices that can prevent people from developing diabetes in the first place, as well as help them reverse, or at a very minimum, live their best life while dealing with it.

You're reading the 6th edition of *Diabetes For Dummies*, and you may be wondering why another edition is necessary. The Centers for Disease Control and Prevention recently suggested that as many as one in three adults in the United States will have diabetes by the year 2050. The International Diabetes Federation reports that 387 million people had diabetes in 2014 and that 552 million will have the disease by 2030 — that's one in every ten people. There has never been a better time to reverse those grim statistics. At the time of writing this book, the amount of free references and information on diabetes, availability of healthful food choices, and information on powerful lifestyle medicine are better than ever. Our intention is to present them in a palatable manner that will enable you or your patients or loved ones to put them to good use.



FROM THE
AUTHORS

From Dr. Simon Poole: My journey to combine medical practice with writing and speaking on the subject of diet and lifestyle began several years ago when emerging evidence began to show how powerfully the way we live affects our chances of becoming ill or flourishing in good health. As physicians, we're generally trained

to approach our medical careers with the emphasis on using medicines to reverse established illness. However, I soon realized that the most rewarding approach to medicine was to combine the application of modern medical therapies with a broader paradigm to encourage and inspire people to take control of their health as much as possible through the ways they live their lives.

Many of my patients in Cambridge, England, at first perceived that the journey to an improved lifestyle would be one of pain and misery, but they soon found the opposite to be true. Equipped with a greater understanding of the ways in which exercise and diet (in the form of positive nutrition) can dramatically improve well-being was key to their success. Soon patients who were following a Mediterranean lifestyle were showing powerfully improving results, mirroring as individuals the evidence that was being documented in scientific research. During my career, I've seen rates of obesity, diabetes, and the illnesses associated with these conditions soar. It's become clear that a compelling need exists to look after growing numbers of people with diabetes in our communities with the best possible medical care but also to be empowered to choose the route to optimum health and well-being through wise and enjoyable lifestyle decisions.

Though science and medicine can be complex and sometimes difficult to fully grasp, it's also true that when communicated in a clear and concise way, the stories they tell and the secrets they can reveal may be understood by all. This is the journey on which we have the privilege to be your guides.



FROM THE
AUTHORS

From Amy Riolo: My entire career was unintentionally based on diabetes. Had it not been for my mother's diagnosis with type 2 diabetes when I was 15, I'd probably have never thought about it. But I had the responsibility of cooking for my mom and our family, and I chose to use it as an opportunity to help heal her while creating delicious meals that the rest of us would enjoy as well. In those days, my actions were a simple labor of love that I never dreamed would lead to a career. I painfully witnessed my mother and others suffer complications from diabetes that I would love to eradicate forever.

For that reason, I decided to dedicate my life to help others nourish not only their bodies but their minds and spirits as well. I am now a Mediterranean Lifestyle Ambassador because I witnessed my family members living in Calabria, Italy, with relatively few major health complications and enjoying their lives much longer than most people do in the United States. It's not only their diet but also their mentality and lifestyle that makes the difference. Nowadays, each of my cookbooks attempts to capture those often unspoken "secrets" of the Mediterranean diet that make it so successful, while "translating" them in a manner that could be interpreted and followed anywhere.

My greatest goal is to have my readers enjoy as much “sweetness from life” as possible. I believe that time spent with a loved one, a good laugh, holding someone’s hand, hugs, watching sunsets, and whatever your daily pleasures happen to be are the glue that anchors a healthful diet and lifestyle together. These events give us the inspiration to continue and to make positive choices. I created the recipes in the appendix with a desire to provide as many nutrients, vitamins, and minerals as possible while ensuring flavor and variety as well. I hope they’re as fun for you to make as they are delicious to eat.

May you enjoy each of my recipes with pleasure and health!

About This Book

This new and revised edition of *Diabetes For Dummies* builds on the widely respected and successful previous editions with a new approach.

We describe the latest medical treatments in their relevant chapters. There continues to be considerable progress made toward understanding the underlying causes of diabetes, and in particular, there’s a greater understanding of the links between diabetes, the chronic diseases that complicate diabetes, and the role of chronic inflammation. Diet, exercise, and perhaps other aspects of the way we live can certainly affect the degree to which chronic inflammation impacts our bodies, and so we certainly have some control over our lives, whether diagnosed with any of these conditions or are apparently healthy.

This book takes a much more holistic look at diabetes, not just as an illness that may have medical treatments but also as it relates to our lives and communities. We also embrace ideas of health being integral to our mind and spirit as well as our bodies and discuss therapies and ways of living that are often omitted from books about medical conditions.

The new edition can be used as a general resource for anyone desiring to understand the latest on diabetes or as a faithful companion to someone who is living with the disease or newly diagnosed. We recommend flipping through the chapters to read what is most beneficial to you. If you’re newly diagnosed, have been misinformed, or are just learning about diabetes, it would be beneficial to read it from cover to cover at your leisure.

Most importantly, remember that as you make a decision to take care of your health, once you get started, it will be easier than you may think. The emotional and psychological benefits of fresh air, exercise, eating well, and so on soon become addictive, and you’ll find yourself craving more. There’s no need to do

everything all at once. We recommend starting slowly and implementing new, positive actions as often as is comfortable for you. You may choose to swap out some unhealthy food choices for better ones from this book. Let that be your only change for a week. The following week, you may choose to add exercise, and the week after that, you may commit to learning to cook so that you can make more nutritious meals for yourself.

The good news is, the more you do, the more empowered you'll feel. Every good change, no matter how small, will add up over time. We can't stress enough the importance of learning how to cook at home, or in committing to cook more if you don't already do so. Cooking skills are the foundation of a healthful diet because they give you the tools to create nutritious food for yourself when you need it. Most importantly, try to use this, and your diagnosis, as an excuse as well as a guide to living your best life. Many modern societies aren't created to keep people in top shape, and it's easy to become consumed in work, commitments, and schedules. Sometimes an illness can help you prioritize yourself and your needs. Let this book inspire you to give yourself the gift of good health. You and everyone around you will benefit from this courageous commitment.

Foolish Assumptions

This book assumes that you know nothing about diabetes, so you won't have to face a term that you've never heard of before and that isn't explained. For those who already know a lot about diabetes, you can find more in-depth explanations in this book as well. You can pick and choose how much you want to know about a subject, but the key points are clearly marked.

You may assume that if you or a loved one has been diagnosed with diabetes that there is not much you can do about it. Each chapter will help you to develop a positive and proactive approach to living, and flourishing, with diabetes.

Icons Used in This Book

The icons alert you to information you must know, information you should know, and information you may find interesting but can live without.



REMEMBER

When you see this icon, it means the information is essential and you should be aware of it.



TIP

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



FROM THE
AUTHORS

We use this icon whenever we tell a story based on our personal experience.



ASK THE
DOCTOR

This icon is used to help you with medical advice about the choices you have to optimize your treatment.



TECHNICAL
STUFF

This icon gives you technical information or terminology that may be helpful, but not necessary, to your understanding of the topic.



WARNING

This icon warns against potential problems (for example, if you don't treat a complication of diabetes properly).

Beyond This Book

In addition to the content of this book, you can access some related material online. We've posted the Cheat Sheet at www.dummies.com. It contains important information that you may want to refer to on a regular basis. To find the Cheat Sheet, simply visit www.dummies.com and search for **Diabetes For Dummies cheat sheet**.

On the website, you can find many other articles related to healthy living and diabetes that can help you navigate this medical condition. Just search for the topic that interests you, and the results will return all related content.

Where to Go from Here

Where you go from here depends on your needs. If you already have basic knowledge of diabetes and want to know more about complications, go to Chapter 3. If you're a novice, start at Chapter 1. If you want to know more about the medications you're taking, go to Chapter 8. Chapter 11 helps you determine the

type of exercise you should be doing. Each chapter title clearly tells you what you can find there, so check the table of contents to find what you need rapidly.



REMEMBER

As you'll find out, keeping a positive attitude and finding some humor in your diabetes can help you a great deal. At times, you may feel like doing anything but laughing, but scientific studies are clear about the benefits of a positive attitude. In a very few words: Those who laugh, last. Another point is that people learn more and retain more when humor is part of the process.

If you'd like helpful, general information fast, head to Part 5 to check out the "Ten Commandments for Excellent Diabetes Care" and the "Ten Myths about Diabetes That You Can Forget." Refer to Chapters 8, 9, and 10 for diet, nutrition, and meal-planning strategies. The appendix contains recipes that will help keep your glucose levels under control while providing flavorful inspiration for meal time.

1

Understanding Diabetes

IN THIS PART . . .

Find out how diabetes affects the person living with diabetes as well as other people in that person's life.

Deal with the diagnosis of diabetes so you can take appropriate action with your doctor to create a treatment and plan.

Obtain an in-depth understanding of the definition of diabetes so you can determine the severity of your condition.

Clarify the types of diabetes to form a foundation for your understanding of the various treatment options.

Understand the role of glucose and hemoglobin A1C.

IN THIS CHAPTER

- » Reducing the stigma of diabetes
- » Understanding how diabetes affects us
- » Coping with the initial diagnosis
- » Living your best life

Chapter **1**

How Diabetes Affects Us All

Today, 415 million people worldwide are living with diabetes. By 2040, more than half a billion people are expected to have diabetes. Despite the fact that diabetes rates continue to spike around the world, the topic is often avoided due to stigmas associated with having the condition. In the United States, it's estimated that one in two adults currently have either diabetes or prediabetes. So this book is relevant not only to health care professionals, or those with diabetes and their caregivers, but to everyone.

This chapter discusses the importance of reducing the stigma of diabetes in society. If you've been diagnosed with diabetes, it doesn't affect just you. How you deal with the disease affects your family, friends, and coworkers. This chapter also shows you how to cope with diabetes and how to understand its impact on your important relationships. Best of all, we share easy and effective tips for living your best life.

Finding Hope and Success Amid a Diabetes Diagnosis

With diabetes rates as high as they are, everyone you know will likely be affected by it in some form at some point in their life. Many of us have close personal ties with people with diabetes but aren't involved with their care on a daily basis. Even though the diabetes statistics are startling and the topic conjures up all kinds of horrible images for many, there is hope.

KNOWING YOU'RE NOT ALONE

If you have diabetes, you're not alone. You may not even be aware of some of the world-renowned figures who live with diabetes every day, just like you. Their success on the world stage exemplifies why diabetes doesn't need to prevent you from accomplishing your goals.

Here are just a few celebrities that you may recognize:

- **Halle Berry:** The American model turned actress was diagnosed with diabetes at the age of 22 and, at the time of writing this book, is now 55 years old and enjoying the time of her life, thanks to diet and exercise.
- **Tom Hanks:** This actor has played numerous roles, including *Captain Phillips* and *Saving Mr. Banks*, since he was diagnosed with type 2 diabetes in 2013. Diabetes hasn't slowed his career at all. In addition to acting, he also produces, directs, and writes screenplays.
- **Patti LaBelle:** This American soul singer and actress has won two Grammy awards during her career — the first for her tenth album, *Burnin'*, and the second for her *Live! One Night Only* album in 1998. She was diagnosed with type 2 diabetes in 1995 after she passed out on stage during a performance in New York City. LaBelle's mother died from diabetes-related complications, so LaBelle adopted a healthful lifestyle after her diagnosis.
- **Wendell Pierce:** If you enjoyed *The Wire* on TV, you enjoyed watching this actor, who played Detective Bunk Moreland. He has been in more than 30 movies and has played many roles on TV, including *Treme*. Pierce has tried to help others with his disease by starting a chain of groceries that sell quality food in low-income areas.
- **Sharon Stone:** No one could say that this actress with type 1 diabetes has failed to obtain any roles or to play them with the greatest skill.

People with diabetes also successfully perform in every professional sport. (To read about the role of sports and exercise in your life, see Chapter 10.)

- **Football:** Kyle Love of the Carolina Panthers and Jake Byrne, who played with the San Diego Chargers, are football players who don't let their diabetes slow them down. Love has type 2 diabetes, and Byrne has type 1 diabetes.
- **Baseball:** Sam Fuld plays baseball for the Oakland Athletics, and Brandon Marrow plays baseball with the San Diego Padres.
- **Basketball:** Gary Forbes plays basketball for the Toronto Raptors, and Adam Morrison recently retired from professional basketball after playing for the Los Angeles Lakers and the Charlotte Bobcats.

If you think that diabetes may prevent you from a career in the sciences, just consider these modern-day researchers with diabetes who perform at the highest level in every field:

- **David Cummings, MD:** A professor at the University of Washington, he is exploring the place of metabolic surgery in type 2 diabetes.
- **Martin Gillis, DDS:** He is clarifying the effect of diabetes on the oral cavity.
- **Nicholas Mayall:** He added to science's knowledge of nebulae, supernovae, spiral galaxies, and the age of the universe, and he's in no way limited by his diabetes.



REMEMBER

The very good news is that diabetes, especially type 2 diabetes, can be reversed. The body can heal itself with the proper treatment. A delicious and diabetes-friendly diet, pleasurable physical activity, lifestyle enhancements, and (at times) pharmaceutical drugs can help someone who has just been diagnosed feel better than before. Each person's body, mind, and consciousness works differently, so finding the right formula to keep you and your loved ones healthy may require different levels or types of effort.

Changing attitudes about diabetes



FROM THE
AUTHORS

From Dr. Simon Poole: A patient recounted the following: "The hardest thing about having diabetes is having to deal with doctors who do not respect me." Several times over the years, she had followed her doctor's recommendations exactly, but her glucose control hadn't been satisfactory. The doctor blamed her for this "failure."

Shame, and even blame, are a common experience for patients diagnosed with diabetes. These ideas are made worse by a perception of an ideal body image that

has been promoted by media and advertising. This can create significant barriers to patients looking for help and support. Often when people disengage from treatment, doctors interpret the situation as a lack of self-care or an “irresponsible” disregard for the consequences, but it’s much more likely because of an unspoken and complex fear of judgment. People who feel less able to express themselves in a confident way may be disproportionately affected by the stigma surrounding the disease, which perpetuates health inequalities. Doctors, therapists, friends, and colleagues can help by being aware of these issues and also considering their own sometimes unconscious biases and prejudices.



FROM THE
AUTHORS

From Amy Riolo: If I had a magic wand, I’d remove all the negative connotations associated with people with diabetes as well as the misconceptions and the myths that are obstacles to healing. Over decades of educating both doctors and patients about functional and behavioral strategies to help reduce diabetes rates and transform the health of those afflicted with it, I find that the same stigma exists today as when I started.

Ten years ago, I was a part of a panel discussion with endocrinologists who were trying to address the issue, but little has changed since then, despite our efforts. As a result, I’d like to remind everyone that diabetes is no more a part of a poor diet or lifestyle than any other disease or illness is. Many conditions (heart disease, high blood pressure, cholesterol levels, strokes, and so on) can be helped or avoided with the proper lifestyle and diet. Thankfully, most people don’t judge those who have been victims of heart attacks or strokes. Unfortunately, those with diabetes aren’t given the same consideration, and they face a lot of judgment and shame.

This deep embarrassment that diabetes-sufferers have toward their condition prevents them from speaking about it. When I proposed an idea during the panel discussion to have restaurant menus and food packaging contain diabetes-friendly info, diabetes patients told me that they wouldn’t order those menu items, even if they were available. They said they would be ashamed to discuss their diagnosis with “well-meaning” diners who would start giving them advice on how they should change their life.

So after further consideration, the first step needs to be to create awareness around diabetes and to foster an environment of respect and understanding around the disease so that those who suffer from it are able to comfortably have their dietary needs met. Any physical symptom or ailment that people experience is just the body’s way of communicating, and because we all are afflicted with different ailments at various times in our lives, we should show compassion and dignity both to ourselves and one another.

Considering key quality-of-life factors

If someone who you care for has been diagnosed with diabetes, this book will provide you with the tools necessary to help them live better, while giving you an understanding of what they're going through. Keep in mind that the following key factors play a great role in the life of someone attempting to balance their blood sugar:

- » **Family support:** People with diabetes greatly benefit from their family's help in dealing with their disease. A review of 26 studies that assessed the effect of family-based interventions was published in the *Annals of New York Academy of Sciences* in 2015 and concluded there were improvements in diabetes knowledge, measurements of parameters of self-care, and also the perception of social support among adults with diabetes. Encouraging the involvement and engagement of family and friends in the care of an individual can make a significant positive contribution to their experience of living with and managing their diabetes. Chapter 13 gives more ideas on this topic in detail.
- » **Quality of life over the long term:** How does a person's perception of quality of life change over time? As they age, do most people with diabetes feel that their quality of life increases, decreases, or persists at a steady level? The consensus of several studies is that most people with diabetes experience an increasing quality of life as they get older. People feel better about themselves and their diabetes after dealing with the disease for a decade or more. This report shows the healing property of time.

Embracing the Opportunity for Change

By the time you're diagnosed with diabetes, you probably have already suffered from insulin resistance for years or even decades, so the onset of diabetes isn't instantaneous. Getting the proper treatment and adjusting your lifestyle accordingly isn't a consequential punishment; it's an opportunity to live and eat in ways that may have you looking and feeling better than ever before. Think of your diagnosis as a permission slip to dedicate more time to yourself and the things that you enjoy in life. Fortunately, many tips, therapies, and strategies that you may have never even heard of can help you enjoy the life that you want.

Understanding is empowerment

How you choose to deal with your health care determines whether you heal, learn to manage your diabetes, or advance to long-term complications. A diabetes

diagnosis can be a warning that can help you get back on track with your health. You may already be incorporating some great habits in your lifestyle. Having a diabetes diagnosis doesn't mean that those aren't working; it's simply a sign that some additional modifications may be required.

If you have diabetes, in the course of a year, you live with that diagnosis for about 8,760 hours. During that time, you spend perhaps only one hour with a physician. In Chapter 12, we introduce you to many of the other people who may help you manage or transform your disease diagnosis. Equipped with these resources, you should feel empowered to make positive progress in your health. Your goal may simply be to balance your blood sugar, but on the path to doing that, you may improve many other conditions that have caused pain and discomfort over the years.

Dealing with the common emotions among diabetes patients

The following sections describe the normal stages of reacting to a diagnosis of a major medical condition such as diabetes. While very normal and typical, these emotions are partly due to fear that is fueled by misinformation about diabetes. Remember that a diagnosis isn't permanent, that blood sugar changes all the time, and you absolutely can still achieve optimal health, if that is your goal.

Experiencing denial

A denial mindset is common among people when they first learn that they have diabetes. Many patients look for any evidence that the diagnosis is a mistake. Perhaps they even neglect to take medication, follow their diet, or perform the exercise that is so important to maintaining a healthy body and mind. But ultimately, if you'd like to thrive, you have to acknowledge the diagnosis and begin to gather the information you need to help yourself.



REMEMBER

There's a difference between acknowledging your diagnosis, informing yourself on what to look for and how to treat yourself, and identifying with the illness. Regardless of what you've been diagnosed with, you can make up your mind that the disease won't define you. You may suffer from diabetes, and you can be highly proactive in doing everything needed to be healthy, but you don't need to define yourself only by the diabetes. Acknowledging the diagnosis, choosing the best treatment, and maintaining the best lifestyle and diet while thinking of yourself as on the road to wellness (or already being healthy) will yield much better results than mentally identifying yourself with an illness will.

Keeping a healthy and positive mindset can be challenging when sharing the news with your family, friends, and people close to you. Having diabetes isn't