

## Acknowledgements

*When we previously read the acknowledgements sections of books we always thought the line “this book would not have been written if it wasn’t for the help of the following people.....”, was so corny and clichéd. Ideally in our acknowledgements we wanted to gloat that it was all us and that no one could take credit for anything. But alas it is not to be and we became painfully aware of the fact that a book really is a team effort with the people cheering you on from the sidelines being as important as the people getting their hands dirty.*

*Thanks to all the friends and family who encouraged us and listened to our hissy fits with a truckload of empathy. Special thanks to our wonderful models Dougie and Di. Your support and love humble us every day.*

*To our marvellous proof readers, Sharon Armarego and Deborah McClay, thanks for your comments and insights. Also special thanks to Dr Stephen Thornley, for his contributions and proof reading. Steve we admire your positiveness, compassion and belief in the impact of lifestyle on people’s quality of life. You’re a credit to your chosen field.*

*Thanks to our brilliant editor Patricia Cree. Your keen eye, experience and words of advice were a fantastic source of inspiration for us and certainly kept us on track and on deadline. We can’t thank you enough!*

*Thanks to Sue Lindsay for your constant support and continual prodding to help us raise the bar higher. When you speak the world is forever changed.*

*Finally to all the members of The Glucose Club who teach us more about diabetes than any text book, journal article or lecture. Through you we get to live our company mission “Any day that a family is without one of its members because of type 2 diabetes is one day too many”.*

# Foreword

The diabetes and obesity epidemics are amongst the biggest health challenges facing the world today, carrying with them the potential for adverse consequences such as high blood pressure, heart and other vascular disease, sleep apnoea, arthritis, fertility issues as well as depression and other mood disorders. Why has this epidemic developed? There are 4 fundamental reasons. Firstly, increasing affluence, leading to increased food intake and reduced physical activity. Secondly, the development of convenience food that requires minimal or no preparation. This type of food tends to be energy dense, high in fat and sugar and not at all what our bodies actually need to remain healthy. Thirdly, the demise of “incidental” exercise, the simple act of walking to the corner shop for a carton of milk, walking to the station, walking to the movies. Australian urban design has catered for the dream of the quarter acre block and the shopping mall, making incidental exercise impractical. Research has demonstrated a direct linear relationship between how often we use the motor car and the rate of obesity. Finally, we are time poor; people work longer hours, associated with more stress, even children have many more commitments that was the case 20 years ago. With the advent of Sunday trading, we no longer have a day of forced rest. All this leads to a lifestyle of eating convenience food and not exercising.

“*Sugar Daddy*” is a bold and unique approach to reversing the shackles of modern lifestyle and breaking out of the vicious cycle of obesity and diabetes. It looks at all the issues that are relevant in minimising the impact of diabetes and obesity upon the individual, from diet, exercise, physical and psychological issues and does so in a way which is practical and above all fun. I commend this book to you as a valuable tool to reduce the impact of obesity and diabetes and above all improve quality of life.

Dr Stephen Thornley  
Endocrinologist Miranda NSW  
October 2008

First Printed 2008

Copyright © Dr Adam Fraser & Christine Armarego

All Rights reserved. No part of this book may be reproduced or transmitted in any form by any means, electronic or mechanical, including photocopying, recording or by any information storage or retrieval system, without prior permission in writing from the author. The Australian Copyright Act 1968 (the Act) allows a maximum of one chapter or 10 per cent of the book, whichever is the greater, to be photocopied by any educational institution for its educational purposes provided that the educational institution (or body that administers it) has given a remuneration to Copyright Agency Limited (CAL) under the Act.

National Library of Australia

Armarego, Christine  
Fraser, Adam

Sugar Daddy

The safe, simple and effective way to prevent and control diabetes  
ISBN: 978-0-646-50328-8

1. Health. 2. Physical Fitness. 3. Nutrition and Dietetics

Typesetting: DKC Graphic Design and Publishing Services  
Printed in Australia by McPherson's Printing Group

# Contents

## **The Science Section**

### **Chapter 1**

|   |    |
|---|----|
| Where does <i>Sugar Daddy</i> come from?      |    |
| The what, how and why of type 2 diabetes..... | 13 |
| What is type 2 diabetes? .....                | 14 |
| How does type 2 diabetes develop? .....       | 17 |
| What diabetes does to your body.....          | 29 |

### **Chapter 2**

|   |    |
|---|----|
| What's your exercise profile? Where is the <i>Sugar Daddy</i> in you? ..... | 33 |
|---|----|

### **Chapter 3**

|  |    |
|--|----|
| Get your <i>Sugar Daddy</i> physical! .....                              | 47 |
| The effect exercise has on our blood glucose and insulin action.....     | 49 |
| Principle 1. Move more during the day .....                              | 50 |
| Principle 2. Increase your lung fitness.....                             | 52 |
| Principle 3. Empty your muscles and liver of glucose .....               | 53 |
| Principle 4. Build some muscle.....                                      | 58 |
| Principle 5. Don't be really sore the next day .....                     | 62 |
| Principle 6. Exercise every day – and don't let more than 48 hours ..... | 64 |

### **Chapter 4**

|   |    |
|---|----|
| Keeping <i>Sugar Daddy</i> safe                       |    |
| – medications, complications and investigations ..... | 71 |
| Diabetic complications and exercise .....             | 72 |
| Diabetes medication and exercise .....                | 79 |

### **Chapter 5**

|   |    |
|---|----|
| Food Fabulous Food :                                  |    |
| Feeding your <i>Sugar Daddy</i> .....                 | 91 |
| The three key principles about diet and diabetes..... | 93 |
| The seven rules for every day good eating .....       | 96 |

### **Chapter 6**

|   |     |
|---|-----|
| Ten principles to changing <i>Sugar Daddy's</i> lifestyle ..... | 105 |
| Why do we avoid change?.....                                    | 107 |
| Understanding change .....                                      | 109 |
| Ten steps to change a habit.....                                | 110 |

### **Chapter 7**

|                                      |     |
|--------------------------------------|-----|
| <i>Sugar Daddy's</i> entourage ..... | 125 |
|--------------------------------------|-----|

### **Chapter 8**

|                                  |     |
|----------------------------------|-----|
| Super <i>Sugar Daddies</i> ..... | 131 |
|----------------------------------|-----|

## **The Sugar Daddy in Action Section**

|  |     |
|--|-----|
| Section One - <i>Sugar Daddy</i> gets Intense! .....                       | 144 |
| Section Two - <i>Sugar Daddy</i> gets startedwith resistance training..... | 151 |
| Section Three - <i>Sugar Daddy's</i> sample programs.....                  | 194 |
| Section 4 -What goes in! .....   | 199 |
| Section 5 -The <i>Sugar Daddy</i> Ranking .....                            | 215 |
| References:.....   | 217 |

# Introduction

## Who's your Sugar Daddy?

*“Having diabetes is like always forgetting to pull the plug out of the bath – the water keeps overflowing and eventually rots your floors!” (Dr Adam Fraser)*

*“Type 2 Diabetes, a metabolic disease also known as non-insulin dependent diabetes, typically occurs after the age of 40 years. Stems from a resistance to insulin, often exacerbated by excess weight, leaving the pancreas unable to produce enough insulin to compensate.” (Stuffey Scientists)*

As you'll see in this book, we like a colourful explanation.

When we started The Glucose Club in Australia in 2006 to help people with diabetes get started with exercise, we found that most people didn't really understand how diabetes was affecting their bodies. They needed to understand more so they would be motivated to stick with exercise and diet programs. So we tried to think of better ways to explain it.

That's how we came up with the glucose bath, the warehouse guy whose boxes pile up on the conveyor belt, and even *Sugar Daddy* himself! You'll have to read on to find out what these are! So if you thought this book would tell you how to find a rich, older man, we're sorry. In our twisted imaginations, a *Sugar Daddy* is that negative voice that offers us the easy life, but forgets to mention the painful consequences (hey, maybe this is about dating after all).

During more than 23 years of combined experience as exercise physiologists working with people with diabetes, thousands of people have told us about that negative voice in their heads.

*"I've been exercising all week and it's just not working...so I'm going out for bacon and eggs."*

*"I'm a busy person – I don't have time to exercise."*

*"Is that rain I can hear – best I stay in bed?"*

That's your *Sugar Daddy* talking. Sure, he may sound appealing, but he doesn't have your best interests at heart. One of the biggest challenges for anyone contemplating a change, such as starting to exercise, is to deal with *Sugar Daddy's* negative voice. If you've been diagnosed with diabetes, or been told you are heading towards it, you've probably been advised to lose weight and exercise more. You may be trying hard to do the right thing, but it's not working. Or, you'd really like to give exercise and eating healthier a go, but you don't know where to start. Or, you've heard about diet and exercise, but don't most diets fail and don't most people stop exercising not long after they start?

In recent years, diabetes research has turned up some amazing findings about just how effective the right exercise and eating plan can be in controlling diabetes. Unfortunately, this information isn't getting to those who need it the most. This book fills that gap. We also know a lot more about how to help people succeed with exercise and healthy eating. Forget diet fads. It's all about changing habits. This book will help and support you as you gradually introduce good habits to replace the habits that are harming your health.

### **What will I find in *Sugar Daddy*?**

*Sugar Daddy* takes the latest advances in diabetes research and turns them into practical, easy to understand actions that anyone can do.

*Sugar Daddy* will help you understand what may be preventing you from making healthy changes, and how to break through those barriers.

*Sugar Daddy* tells inspiring stories about people from all walks of life who have taken control of their diabetes and turned their health around, from bad to good.

Unfortunately, *Sugar Daddy* also contains our special brand of humour.

### **What won't I find in *Sugar Daddy*?**

Well, you won't find any celebrity-style, fad diets, weird herbal supplements, lists of bizarre or expensive ingredients, or 'boot camp' style exercise regimes.

### **Do I really need to know this much about diabetes?**

Research shows that people who understand how diabetes is affecting their bodies do better at controlling the condition than those who don't.

That certainly seems to be true for The Glucose Club members and our exercise physiology clients for the last three years. Knowing what's going on in our bodies seems to give us the motivation to take action.

### **Is this book only for people with type 2 diabetes?**

The number of people with type 2 diabetes, and people heading towards it, is increasing very rapidly in Western Society. This book does focus on type 2 diabetes as it is the one that is affected by lifestyle to most. However, the exercise and nutrition information works just as well for people with type 1 diabetes to help them get their blood glucose levels under control and improve their health. Also if you don't have diabetes but you just want to know about using exercise and nutrition to prevent diabetes – this book is for you, too.

### **Do I need to read the whole book?**

The short answer is YES! But some of it will be more relevant to you than others. The first section is the Science Section. Here you'll find all the science and information you need to understand diabetes and what you can do to improve your diabetes control or even prevent. Then the *Sugar Daddy* in Action section helps you put the science into practice.

How you read it is important too. To make it simple, in chapter 2 we have customised the best reading order for you depending on your current exercise profile. This order will address your most pressing needs – getting you the best possible results.

### **The Science Section**

Chapter 1 is about how your body is affected by diabetes, including:

- How you find out if you have diabetes
- What diabetes does to your body and your life expectancy
- What happens if you don't control diabetes
- What to expect if you have been told you are heading towards diabetes
- Why exercise and what you eat are so important in controlling diabetes

We're not all the same. Chapter 2 starts by helping you find out your current exercise profile. This is where you find out where you are starting from and some realistic help to move ahead with exercise.

Chapter 3 explains why exercise is the 'magic pill' in controlling glucose levels. It outlines the six key principles to get the most out of every precious minute you spend exercising. Did you know it's healthier to be a fit, overweight person than an unfit, thin one? (Of course, it's even better to be fit AND in the healthy weight range.)

Chapter 4 is important if you are on diabetes medications, and/or you have developed any complications. Some medications may have an effect on how your body responds to exercise. You can still exercise, of course – you just need to keep a few simple points in mind.

We've found that people whose diabetes has progressed to complications often think it's too late for them to get benefits from exercising, or that exercise isn't safe. Not true and not true. So this chapter also covers how to work your exercise program around any complications.

Chapter 5 covers the wonderful world of food. Diet advice for people with diabetes is basically the sort of healthy diet everyone should be eating, with a few tips and tricks to help keep blood glucose levels under control.

Chapter 6 is our favourite chapter. We can have all the top advice in the world, but in the end, it's up to us to make the changes. There, there, dry your tears. Our extensive research on behaviour change is at your disposal to help you get started, stay on track and stick to it. It's all about making gradual changes so that good new habits become routine – and even enjoyable!

Chapter 7 tells you a little about what to expect from the various health professionals that you may come into contact with, ranging from your doctor to endocrinologists, dietitians, exercise physiologists and psychologists. This chapter will also help you find one of these folk if your doctor hasn't already referred you.

In Chapter 8, a selection of people of all ages and from all walks of life talk about how they reacted to finding out they had diabetes and how they approached dealing with it. This is the chapter to read if you're feeling low, or need a bit of motivation to keep going.

### **The Sugar Daddy in Action Section**

The last five sections of the book get down to basics and give you a tool kit to get your own activity and nutrition plan together. Want a few new ideas for a healthy breakfast, lunch or dinner? Going out to eat and wondering what the best choices are? The answers are all here.

Wondering how to use those torture machines at the gym? Or how to vary your exercise program? Want to learn how to do a dead lift? And, most importantly, are dumbbells really dumb? This exercise section, complete with pictures, has everything you need to know.

And that's it. If you have diabetes, or have been told you are heading towards this condition, you **CAN** take control and have a long, happy, healthy life. The sooner you start, the better the result. Equally, it's never too late to start and to obtain health benefits.