FAT SCIENCE

servings per package: approx. 1
serving size: approx. 200g

Why Diets And Exercise Don't Work – And What Does.

Robyn Toomath

ISBN 978-1-87750-550-8

'I don't ask my patients to lose weight,' says endocrinologist Robyn Toomath. This book is explains why.

Drawing on the latest research and twenty years of working with overweight patients, this short and punchy book dispels myths and tells the tough truths about our obesity epidemic. Does dieting work? (No.) Is exercise the answer? (No.) Can we change our genes? (Unfortunately not.) How about pills and surgery? (Sometimes, but we can't operate on everyone.) Why are the rich thinner than the poor? (You'll find out.)

Toomath shows how our modern world is making us fat. And while governments and individuals keep trying things that science shows do not work – from dieting to education campaigns – she outlines what just might make a difference in ending the obesity epidemic.

A thousand books will tell you how to get thin. It looks like they haven't worked. We just keep getting fatter. *Fat Science* – a small book about one of our biggest problems – can change that.

Robyn Toomath is the Clinical Director of General Medicine at Auckland Hospital, former President of the New Zealand Society for the Study of Diabetes, and founder of Fight the Obesity Epidemic.

Contents

Introduction

Part I **We all want to be thin. Why aren't we?**

1. Does dieting work?
2. Is exercise the answer?
3. Can drugs or surgery make us thin?
4. Is fatness inherited?

Part II **Why our modern world makes us fat**

5. How new ways of living have led to new ways of eating
6. How the economics of food puts more of it on our plates
7. How we're sold on junk food
8. How the overweight are stigmatised

Part III **What we can do about it**

9. How governments can flick the switch

Conclusion: Rise up

Introduction

For more than 15 years I ran a private practice in Wellington whose patients included some of the city's most highly motivated and well-resourced individuals—lawyers, diplomats, doctors and bankers. I am an endocrinologist and many of the patients referred to me were suffering from type 2 diabetes. Excess weight was the problem.

My patients were people used to having a high degree of control over their lives and were prepared to pay whatever money and put in whatever effort was required to manage their medical problems. 'Tell me what weight you want me to be, Doc, and I'll get there' was a typical response. Others had spent half their lives on diets and were less optimistic about losing weight, but most were willing to give it another go. They promised to join a gym, get a dog to take walking or play more tennis, and to eat well.

At the end of the initial consultation the patient and I were both filled with purpose and optimism.

Three months later, most patients reported a drop in weight, an improvement in blood sugar levels and an overall feeling of increased health and energy. We celebrated the changes and looked forward to more.

Sometimes things kept going well. But more often my patients' weight started to creep up again. By 12 months most had started to regain weight and some just stopped showing up at the clinic, ashamed of their failure. By two years almost all had returned to their original weight.

What happened next? A few were persuaded to have gastric bypass surgery. Others resigned themselves to the inevitable, and our focus shifted to managing the diabetes, high blood pressure and raised cholesterol with medication.

Over the same period, I ran a diabetes clinic for teenagers. As time went on the numbers of teenagers with type 2 diabetes increased. As with adults, the key for them was to lose excess weight. They were growing children with high energy requirements so losing weight should have been easy. If you keep their energy intake to a certain level, children should become slim.

Well, maybe. One of my teenage patients was a 14-year-old girl who weighed 140 kilograms at the time her diabetes was diagnosed. She was intelligent, engaged and desperately keen to be slim. She wanted to avoid insulin injections, but this paled into insignificance alongside worries about self-esteem and peer pressure. We set up dietician appointments, talked about her physical activity (which was actually very high—she played a lot of sport) and moaned about her big-eating older brothers.

I scheduled follow-up appointments and she attended most of them. Astonishingly, at every appointment she was heavier than at the last—her weight increasing in parallel with her growth in

height. She completed school, and by the time she finished a law degree she was on insulin therapy, anti-hypertensive drugs and cholesterol-lowering drugs. By then we were planning gastric bypass surgery.

Television programmes such as *The Biggest Loser* and thousands of magazine articles tell us that we can lose weight by following this new diet or adopting that exciting exercise regime. When patients came to see me in the clinic I gave them much the same advice.

But my years of experience, treating the same individuals, gradually changed my attitude. I realised that asking people to lose a significant amount of weight and keep it off was about as useful as asking them to change their eye colour. No other therapeutic strategy employed in medicine has such poor results so why was I continuing to prescribe it? Not only was the treatment I was recommending ineffective but it was my patient who was invariably left with the sense of failure. Inducing a sense of guilt or hopelessness doesn't fit with my understanding of the Hippocratic Oath. So, years ago, I made the decision to stop asking patients to lose weight.

This book is for the people (and their spouses, their children, their parents and their doctors too) who try to lose weight but fail. It's for the overweight people who think it's all their fault. If we really want to tackle the problems that come with obesity we first need to understand why most of us can't change our body size. In Part 1 I look at the conventional (and a few unconventional) approaches to weight loss and consider how successful these really are. Scientific study tells us that our own efforts following diets, heading to the gym or taking some new pills are defeated again and again by our genes. Placing responsibility for weight control on individuals suits the food industry, which claims that

their responsibility with regard to the obesity epidemic extends no further than providing choice. And it suits governments, who like to avoid putting in place regulations that restrict the free market. But, as we will learn, the drivers of obesity lie outside the control of individuals.

So why are we getting fatter? Why are more young people developing what we used to call maturity onset (type 2) diabetes? In Part 2 I turn my attention to the true drivers of the obesity epidemic—how the world we live in is making us fat. I examine how the changes in our environment—our physical world, the economics of food, the role of marketing, rising inequality—determine what we eat and how much we exercise.

I think we now know what's causing the problem. But do we also know how to fix it? In Part 3, I first look at the role of government—because government does have a key role. Internationally, changes in governmental policy have led to just the sorts of behavioural shifts that will end the obesity epidemic. On the other hand there are many, many examples of governments doing very little. Second, I look at the role of you and me. While it might be easier to get people to rally around a single issue like cycle helmets or gun control, increasingly I think that civil unrest may be the only way to fix obesity.

Yes, it's true that ultimately we decide what to eat, but what is it that makes some of us turn so easily to a packet of chips and others an apple? I would like to put an end to the myth of personal responsibility for body size. And I would like overweight people to feel entitled to an environment which makes it easier, not harder, to remain healthy and slim. Eating healthy food and getting enough exercise should be the default, not something we have to battle for.

5

How new ways of living have led to new ways of eating

While genes provide the best explanation for one person being thin and another being fat, they can't account for the increase in obesity over the last 30 years. Our genes have stayed the same but there has been a dramatic change in the world in which we live. Prior to the technological advances of the last century, work was strenuous and food was expensive. A worker needed to spend much of his income just to replace the calories expended on the job. If he didn't have a job, and lived in a country or time without a welfare system, starvation was a real possibility. Over the decades food has become cheaper to produce to the point where supply exceeds demand. At the same time work has become more sedentary. Today the worker must now *pay* to do physical activity, and not working, with welfare support to provide food, is more likely to result in obesity than starvation.[1]

Where we live changes what we eat

When I was growing up in Te Awamutu the population of the town was 6000. I lived within walking distance of the primary school and local college and biking distance of the intermediate school. Although I wasn't any good at sport I played netball on Saturdays and later hockey. As primary school children we learned to swim in the tiny swimming pool and spent much of the summer hanging out at the town baths. We had television from the time I was six years old (never a colour set) and the two channels were required to have two non-commercial days a week and a minimum of 30% local content. Car ownership was relatively high with one car for every 2.6 people and I sat my driver's licence when I was 15. Census data from 1976 when I was 21 tells us that people married young with 75% of brides being less than 24 and one in three less than 20—requiring parental consent.

But perhaps the biggest difference between now and then was the food we ate. New Zealanders spend a relatively high proportion of total household expenditure on food and this proportion hasn't changed between 1974 (17.6%) and 2013 (17.3%). But back in 1974 we spent a third more of that expenditure on fruit and vegetables and twice as much on meat, poultry and fish.[2] Milk was relatively cheaper at 4 cents for a bottle (delivered) because it was heavily subsidised. There were subsidies on bread and eggs too.

There was no supermarket and my memory of food being available outside normal working hours is that it was limited to what was sold at the petrol station and a few dairies. In November 1975 a restaurant meal of steak and eggs cost $2.39 and a hamburger was 45 cents. Takeaways came from the fish and chip shop and soft drinks were bought by your father in a wooden crate from

the liquor store as a treat at Christmas. When I was a bit older I remember returning from holiday and stopping at a bakery in Huntly that sold hot bread on Sunday evenings. This was a huge novelty given that bread was otherwise delivered to the letter box—along with the bottles of milk—with a strip of white paper around the middle. But by the time I was at intermediate school Coke and Fanta were well established, even if we didn't get to drink them very often, and I remember the first McDonald's opening in Porirua in 1976. Just prior to that, I had a taste of American-style fast food when I spent one summer working in a Big Tex restaurant at Paraparaumu. Chicken was precrumbed and fried and when a new order came in we would throw a piece into the pressurised deep-fryer for another blast. Rock-hard bread rolls became light and fluffy in a microwave—not seen domestically in New Zealand for another decade. The methods of cooking were so novel and outlandish it was almost worthwhile wearing cowgirl outfits to learn these fast food techniques; I still remember chucking frozen peas on to a hot plate and clamping a pot lid on top to create steam.

We adored everything American—especially that portrayed in Coca-Cola advertising. We were intrigued by what we saw on television of their convenience foods (milk in cartons!) but we were being taught to cook food from scratch in our lessons at intermediate school. Meat and three veg prevailed in the homes around New Zealand but my mother is an adventurous cook and I remember her bottling spaghetti with tomato sauce 'Italian style', until one batch exploded in the pantry. There was one restaurant in the town—patronised on birthdays and anniversaries—so dinners were eaten at home, at the table. Hamburgers and milkshakes truly were occasional foods.

AUCKLAND
UNIVERSITY
PRESS

$29.99

190 x 140mm, 200pp, paperback

ISBN: 9781869408534

Published: April 2016