

THE DIET MYTH

The Real Science Behind What We Eat

by Tim Spector

'The Diet Myth is a fascinating and original look at the impact of food on our bodies, underpinned by cutting edge research'

Michael Mosley

'I was both riveted and swayed by this scientific nutrition book... fascinating' **Caroline Sanderson**, *The Bookseller*

'A fascinating and provocative book...Spector is a talented story-teller'

New Scientist on IDENTICALLY DIFFERENT by Tim Spector

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This is not a diet book, but it will change the way you eat forever.

We are all increasingly bewildered by the simple question of what to eat. Despite thousands of diet books, advice from experts and government guidelines, our nutrition – and the global obesity crisis – is getting worse. Why? Dietary advice tells us to eat less fat, less sugar or less protein and yet most diets fail in the long term. The food we consume has a huge impact on our health as well as our weight; however evidence shows that we all respond differently to the same foods. Genes provide only part of the answer to this conundrum. We have been overlooking one vital aspect of diet that lies within us. Thanks to recent breakthroughs scientists have begun to examine the permanent residents in our guts: the trillions of microbes, bacteria and fungi whose job it is to digest our food and keep us alive and healthy.

Microbes generally get bad publicity, but less than a tiny fraction of species are harmful to us and most, in fact, are crucial to our health. Not only essential to how we digest food, they control the calories we absorb and provide vital enzymes and vitamins as well as keeping our immune system healthy. Over millions of years we have evolved in a close inter-dependence with microbes, yet recently this fine tuning and selection has gone wrong. Compared to our recent ancestors who lived outside cities, with rich and varied diets and without antibiotics, we have only a fraction of the diversity of species of microbes living in our guts. Scientists are only now starting to understand the long-lasting impact this has on all of us.

For the first time, in **THE DIET MYTH**, a scientist actively working in the field tackles the subject of diet and nutrition in a comprehensive and holistic way. As Tim Spector unravels the real science behind what we eat and how our bodies digest food, readers will discover many fascinating and surprising truths which will change the way they eat and think about food:

- The living cells in our bodies are 10 per cent human and 90 per cent microbe
- Eating lots of fatty cheese or yoghurt can improve health and weight
- A handful of garden soil holds more microbes than there are stars in the known universe

- Sweeteners in 'diet' fizzy drinks have adverse effects on our metabolism and microbes and can make us gain weight
- Cubans, despite eating on average twice the amount of sugar as Americans, are far healthier
- We evolved from microbes millions of years ago, share their genes and still perform many tasks for them and they perform many more for us.
- Foods advertised as 'low-fat' are actually making us fatter
- Fasting diets such as the 5:2 diet work by beneficially altering our microbes and their metabolism
- Skipping breakfast may be a healthy strategy for many people
- The average twenty-year-old today will have already had eighteen courses of antibiotics and will have abnormal microbes increasing risk of obesity
- The diversity of microbes in our bodies is 30 per cent lower than fifty years ago
- Gut microbes, when disrupted, are a major cause of obesity and diabetes but they are also essential for health
- Thousands of people are now having poo transplants many with significant success
- Microbes in your gut can affect your brain and mental health, and contribute to autism and depression and even the urge to eat more
- Much of our food is contaminated with low levels of antibiotics used in farming, making us fat
- A third of people have genes and microbes that prevent them getting fat
- Microbes enjoy eating the polyphenols in dark chocolate which may keep us slim
- Key nutrients and essential vitamins are extracted from our food only through our gut bacteria
- Babies need microbes for development of their brains and immune systems
- The success of the Mediterranean diet is due largely to providing fertiliser for our microbes
- Unpasteurised cheese is one of the richest sources of living healthy microbes and fungi
- Most probiotics in yoghurt don't work well in humans and may need to be personalised
- Olive oil and nuts are ultimate health foods that nourish our microbes
- Living on a dirty farm or having pets helps microbes and protects you against allergies
- Whether you like to eat salads, broccoli chips or garlic is partly genetic
- Belgian Beer, garlic, coffee, leeks and celery are perfect foods to increase gut microbes
- A diet of junk food can dramatically reduce healthy gut microbes in only two days
- Increasing the diversity of our diet will increase our microbes, our health, happiness and lifespan

Prompted by his own experiences and drawing on the latest cutting-edge science, case studies, and his team's pioneering research, in **THE DIET MYTH** Tim Spector explores the hidden world of the microbiome, and demystifies the common misconceptions about fat, calories, vitamins and nutrients. Only by understanding what makes our own personal microbes tick and interact with our bodies can we overcome the confusion of modern diets and nutrition to regain the correct balance of our ancestors.

Tim Spector is Professor of Genetic Epidemiology at King's College London, Hon Consultant Physician at Guy's and St Thomas' Hospital, and Director of the <u>TwinsUK Registry</u>. He has won several academic awards and published over 700 academic papers, many of which relate directly to nutrition and the causes of obesity. He has appeared in numerous TV documentaries and is often consulted in UK and international media on his team's research. Since 2014 he has been leading the largest UK's largest open-source science project <u>British Gut</u> to understand the microbial diversity of the human gut. Tim Spector's book on epigenetics, *Identically Different*, was longlisted for the Wellcome Trust Prize and shortlisted for the Transmission Prize.

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