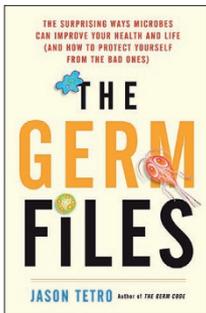


A cure for germophobia



The Germ Files:
The Surprising
Ways Microbes Can
Improve Your Health
and Life (and How
to Protect Yourself
from the Bad Ones)

by Jason Tetro
DOUBLEDAY: 2016.
290PP. £14.69

Several years ago, I sat down in a café to catch up with some friends. I had just started a PhD and was excited to explain that I worked with *Staphylococcus aureus*.

“You know,” I said, “MRSA from the hospitals.”

“Is that the flesh eating virus?” my friend replied.

As shocking and exasperating as such a response can be for a microbiologist, it is hardly uncommon. So, to save our conversation from turning into a lengthy microbiology-101 lesson, I quickly changed the subject. What I really needed at that point was Jason Tetro’s book, *The Germ Files*. If the book had existed back then, I would have picked it up (resisting the urge to throw it at my friend’s head) and given it to them, suggesting that they read it, immediately, from beginning to end.

Aptly named, *The Germ Files* has a simple but noble mission, to educate the reader and convert them from a germophobe into a germophile. The book is entertaining when read cover to cover, but Tetro exhibits considerable skill in the way that he organizes and separates the book into dense nuggets of information that are easy to digest and revisit. It is like a pick-and-mix of anecdotes, research and thoughtful metaphors that allow the reader to see the microbial world through fresh eyes. This comes at a very important

time, when microbiologists all over the world are wondering how to spice up their lectures now that they can no longer say that microorganisms outnumber human cells in the body by 10 to 1. Tetro gives us alternatives in his book and over the course of several months I found myself regularly dipping into the chapters to refresh my memory or to pick out a useful tidbit to share with my colleagues over lunch. An example that surprised most people was when I explained that honey is actually a product of fermentation, and how bacteria from the guts of bees help to transform nectar into the product we love to spread on our toast.

Tetro digs into a wealth of literature in a crusade to convince us not only that microorganisms are an important part of the world in which we live, but are in fact the most important part. There is no apology for this microbe-centric view and no attempt to concede that microbiology might be the most important subject on the planet. You can agree or disagree, but this stance makes the book light and entertaining for experienced researchers, despite being targeted at a lay audience.

As might be expected, Tetro devotes a large proportion of the book to food and the microorganisms in the human gut. Here, he gives a microbiological perspective of broadly popular topics such as diets (paleo, low-carb etc.) as well as enlightening us about the microbial origins of a number of foods including chocolate.

I think Tetro particularly shines when he talks about probiotics. This fast-moving research field is often conveyed as black or white in the popular media. The book delivers an optimistic yet balanced account of how probiotics might be used to promote better health. Tetro’s optimistic approach to the world of microorganisms stands out in the section on antibiotics, especially with respect to resistance. His outlook is refreshing when set against a

media landscape heavily biased towards fear-inducing stories of ‘killer bugs’. As the blurb on the back of the book says, “Some germs are out to get us, but we shouldn’t let a few bad apples influence our feelings about the other 99.9 percent.” Tetro takes this signature positive approach to explore how microorganisms influence our world in unexpected ways, including the environment, beauty, childcare and even sex.

That being said, given the broad subject matter the arguments in the book are not always nuanced or caveated as one would expect in an academic manuscript. Some readers may find this frustrating and, I have to admit, that at times I was yearning for a citation. However, I think Tetro strikes a good balance and is consistent throughout. His goal is to convert the germophobic layperson into a fully-fledged member of the “we love microbes” club, and in this, I think he succeeds. Too much detail would quickly balloon such an information-dense book into an unwieldy tome. As it stands, Tetro accurately delivers key points without overwhelming the reader.

As a microbiologist, I found *The Germ Files* interesting and fun to read. As researchers, it can be difficult to communicate what we do in a way that is interesting and engaging for the public. In his book, Tetro does this expertly time and again, whether he’s discussing fermented food or the microbiology of raising a child. Tetro bravely and deliberately walks a tightrope between overwhelming the reader with information and not giving enough. In modern research, this skill is becoming increasingly important and I would recommend having *The Germ Files* on hand as a reference of how to do it well. □

REVIEWED BY BEN LIBBERTON

Ben Libberton is a Postdoctoral Research Associate in the Swedish Medical Nanoscience Center at the Karolinska Institute, Stockholm 171 77, Sweden.
e-mail: benjamin.libberton@ki.se