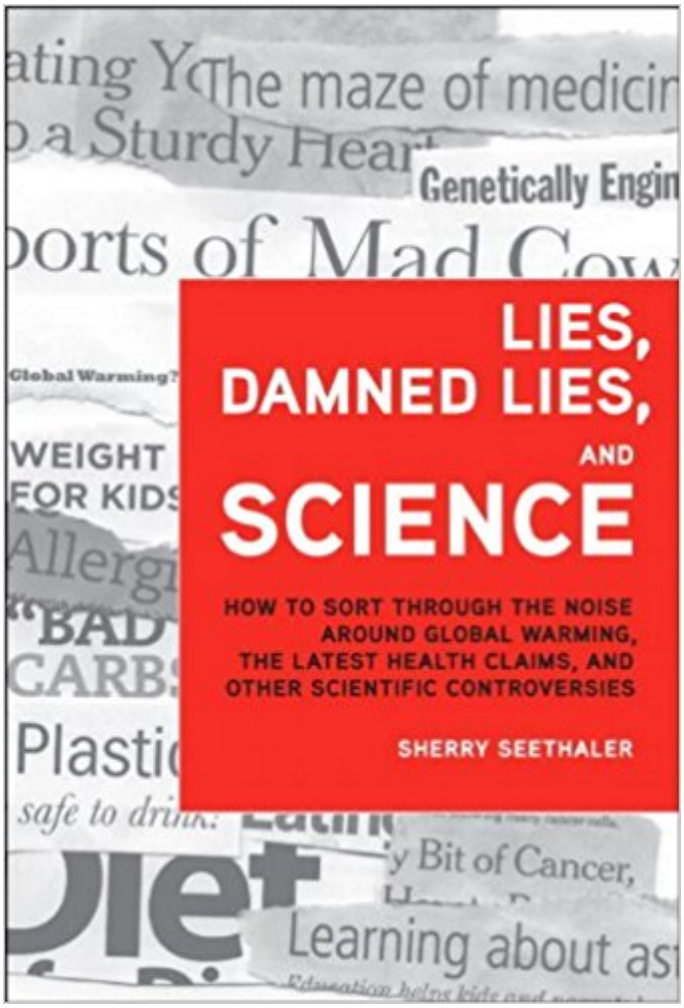
Lies, Damned Lies, And Science: How To Sort Through The Noise Around Global Warming, The Latest Health Claims, And Other Scientific Controversies (FT Press Science)




PDF
Adobe
DOWNLOAD EBOOK

Synopsis

What's healthy? What's unhealthy? What's safe? What's dangerous? Watch the news, and it's easy to be overwhelmed by snippets of badly presented science: information that's incomplete, confusing, contradictory, out-of-context, wrong, or flat-out dishonest. In this book, Dr. Sherry Seethaler provides a "bag of tricks" for making sense of science in the news. You'll learn how to think more sensibly about everything from mad cow disease to global warming and make better science-related decisions in both your personal life and as a citizen. You'll begin by understanding how science really works and progresses, and why scientists sometimes disagree. Seethaler helps you assess the possible biases of those who make scientific claims in the media, and place scientific issues in appropriate context, so you can intelligently assess tradeoffs. You'll learn how to determine whether a new study is really meaningful; uncover the difference between cause and mere coincidence; figure out which statistics mean something, and which don't. Finally, drawing on her extensive experience as a science journalist, she reveals the tricks self-interested players use to mislead and confuse you, and points you to sources of information you can actually rely upon. Seethaler's many examples range from genetic engineering of crops to drug treatments for depression, but the techniques she teaches you will be invaluable in understanding any scientific controversy, in any area of science or health.

Customer Reviews

Sherry Seethaler, a science writer and educator at the University of California, San Diego, works with scientists to explain their discoveries to the public. She also writes a column for the San Diego Union-Tribune answering readersÃ¢â ¬â„¢ questions about science. Seethaler holds an M.S. and Master of Philosophy in biology from Yale, and a Ph.D. in science and math education from UC Berkeley.

Praise for Lies, Damned Lies, and Science: How to Sort through the Noise around Global Warming, the Latest Health Claims, and OPraise for Lies, Damned Lies, and Science
Ã¢â ¬Å“Comprehensive, readable, and replete with current, useful examples, this book provides a much-needed explanation of how to be a critical consumer of the scientific claims we encounter in our everyday lives.Ã¢â ¬Â• Ã¢â ¬â •April Cordero Maskiewicz, Department of Biology, Point Loma Nazarene University Ã¢â ¬Å“SeethalerÃ¢â ¬â„¢s book helps the reader look inside the workings of science and gain a deeper understanding of the pathway that is followed by a scientific findingÃ¢â ¬â •from its beginnings in a research lab to its appearance on the nightly

news.Ã¢â ¬Â•Ã¢â ¬â •Jim Slotta, Ontario Institute for Studies in Education, University of Toronto Ã¢â ¬Å“How I wish science was taught this way! Seethaler builds skills for critical thinking and evaluation. The book is rich with examples that not only illustrate her points beautifully, they also make it very interesting and fun to read.Ã¢â ¬Â•Ã¢â ¬â •Julia R. Brown, Director, Targacept, Inc.PrefaceBe very, very careful what you put into that head, because you will never, ever get it out.Ã¢â ¬â •Thomas Cardinal Wolsey (1471-1530)My goal in writing this book is to help people make sense of the science-related issues that impact their daily lives. Lies, Damned Lies, and Science provides an enlightening approach for contemplating scientific issues, and brings these issues into focus the way new glasses sharpen oneÃ¢â ¬â„¢s vision. In other words, the book is a new lens through which to view the world. Each chapter reveals a unique set of elements that need to be taken into consideration when reasoning about a complex science-related issue. In addition to bringing these elements into focus, the book shows how they fit together into something greater than a sum of parts.Most of the messages that bombard us everyday are carefully selected to present just one of a kaleidoscope of possible perspectives on technological, environmental, economic, and health issues such as global warming, mad cow disease, nanotechnology, genetically engineered food, who should take cholesterol-lowering drugs, and what are the merits of banning plastic bags. Oversimplified black-and-white perspectives of issues come from those who have a vested interest in convincing others of their point of view, or who are simply relaying information without thinking critically about it. This book explores ways to achieve more nuanced and balanced perspectives on a wide range of issues.In a society in which science and technology drive the economy and infiltrate every aspect of daily life, it is dangerous for an elite few to make the decisions about how technology is used, who will be given access to it, and how money is spent to research scientific solutions to societal problems. Ironically, those with the power to make these decisions rarely have any background in science. Therefore, they are especially vulnerable to being hoodwinked by those who hold stake in an issue and have the money to get their voices heard. Yet, we too can make our voices heard through sound, evidence-based political, consumer, and medical decisions. To do this, we need to be armed with the knowledge that makes it difficult for clever stakeholders to deceive us.Too many people lost confidence in their ability to understand science because they did poorly in science class in high school. However, even folks who excelled in high school science classes and majored in a scientific discipline in college are rarely adequately prepared to think critically about the science they encounter in their daily lives. High school and even college science tends to be focused on facts, formulae, and experiments with known outcomes. In the real world, there is much more uncertainty and interpretation. Decisions about

contemporary scientific issues often must be made on the basis of incomplete information, and conflicting viewpoints are the norm rather than the exception. This book unravels the complexity of such issues to help scientists and nonscientists alike identify hogwash and balance tradeoffs to make well- reasoned decisions about science in everyday life. Ã Â© Copyright Pearson Education. All rights reserved.

Lies, Damned Lies, and Science: How to Sort Through the Noise Around Global Warming, the Latest Health Claims, and Other Scientific Controversies (FT Press Science) Global Warming (Current Controversies) Everybody's Guide to Small Claims Court (Everybody's Guide to Small Claims Court. National Edition) Everybody's Guide to Small Claims Court in California (Everybody's Guide to Small Claims Court. California Edition) Small Claims Not Small Brains!: 10 Strategies To Help You Win In Small Claims Court Global Warming and Other Eco Myths: How the Environmental Movement Uses False Science to Scare Us to Death Neurology: Neonatology Questions and Controversies: Expert Consult - Online and Print, 2e (Neonatology: Questions & Controversies) Current Controversies in Experimental Philosophy (Current Controversies in Philosophy) The Global Minotaur: America, Europe and the Future of the Global Economy (Economic Controversies) Health and Disease (Confronting Global Warming) Noise-Induced Hearing Loss: Scientific Advances (Springer Handbook of Auditory Research) Claims Made and Reported: A Journey Through D&O, E&O and Other Professional Lines of Insurance Air Pollution and Global Warming: History, Science, and Solutions Climate Confusion: How Global Warming Hysteria Leads to Bad Science, Pandering Politicians and Misguided Policies That Hurt the Poor A Global Warming Primer: Answering Your Questions About The Science, The Consequences, and The Solutions Global Warming and Climate Change (Science Foundations) Global Warming (Science Concepts Second) Is It Hot Enough for You?: Global Warming Heats Up (24/7: Science Behind the Headlines: Special Edition) Health Communication: From Theory to Practice (J-B Public Health/Health Services Text) - Key words: health communication, public health, health behavior, behavior change communications Giftology: The Art and Science of Using Gifts to Cut Through the Noise, Increase Referrals, and Strengthen Retention