Napoleon's Buttons: How 17 Molecules Changed History

Penny Le Couteur, Jay Burreson
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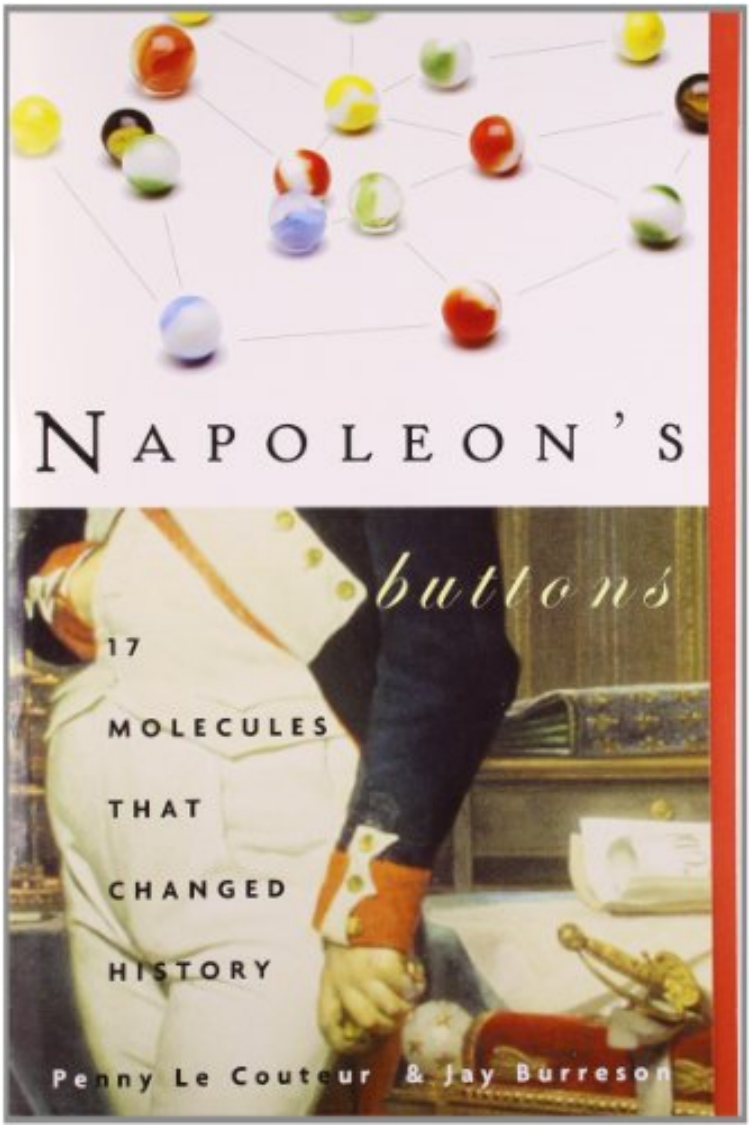

#30158 in Books Tarcher 2004-05-24 2004-05-24Original language:EnglishPDF # 1 8.96 x .95 x 6.00l, .92 #File Name: 1585423319384 pages | File size: 19.Mb

Penny Le Couteur, Jay Burreson : Napoleon's Buttons: How 17 Molecules Changed History before purchasing it in order to gage whether or not it would be worth my time, and all praised Napoleon's Buttons: How 17 Molecules Changed History:

2 of 2 people found the following review helpful. Very interesting and informativeBy Kevin SlatteryGood opening story, drawing in the significance of chemicals and their impact on world events. However, the narratives gets pretty technical after that and the book needed a few more example stories to keep the relevance going. Overall, I did enjoy the book and learned a tremendous amount about several chemicals and elements and their impact on the history of

man. I would recommend to others who like to delve into the details a bit more than the average reader.1 of 1 people found the following review helpful. As always with great books like this oneBy CustomerDelightful reading. As always with great books like this one, I wish I had heard these stories ages ago. I recall how distasteful I found studying organic chemistry as a young college student. These authors turn an otherwise noxious subject for me into a wonderful, creative, and entertaining journey into reasons and rationales for the various paths of history, knowledge, and culture. Fascinating. I'm sure when students walk into their lecture halls they are met with incredible and knowledgeable professors of organic chemistry, and the stories they can tell. Wow!47 of 47 people found the following review helpful. Lots of interesting factoidsBy W. GrossI enjoyed this book very much. Each chapter is devoted to a particular molecule, e.g., glucose, silk, phenol, salt, etc., and discusses both its chemical structure and its significance to civilization. To a former engineer who somehow escaped even a smattering of organic chemistry, this book explained a lot in an easy-to-follow manner. The authors illustrate each molecule schematically, and in many cases show how a subtle difference in structure can lead to dramatic differences in chemical behavior. Makes me wish I had studied organic chemistry in college.The chapter on oleic acid (olive oil) was particularly interesting. I now understand what is meant by "saturated fat", "monounsaturated fat" and "trans-fat", and why soap works. A lot of information, easily absorbed.My only quibble is that the authors thought they had to conclude each chapter with a few paragraphs about "how this molecule changed history". That got tiresome, fast.

Napoleon's Buttons is the fascinating account of seventeen groups of molecules that have greatly influenced the course of history. These molecules provided the impetus for early exploration, and made possible the voyages of discovery that ensued. The molecules resulted in grand feats of engineering and spurred advances in medicine and law; they determined what we now eat, drink, and wear. A change as small as the position of an atom can lead to enormous alterations in the properties of a substance-which, in turn, can result in great historical shifts. With lively prose and an eye for colorful and unusual details, Le Couteur and Burreson offer a novel way to understand the shaping of civilization and the workings of our contemporary world.

From BooklistWomen who use birth control pills probably care more about their effectiveness than about how they actually work, and although ignorance here may be bliss, it also cheats one of a good science story, involving a driven chemist making a serendipitous discovery about cortisone. Le Couteur and Burreson roll out 17 episodes selected for their salience in affecting health as well as history at large. This pair of chemists doesn't overinterpret a particular chemical as a historical influence but makes speculating on, say, piperene, a sporting diversion. Piperene is the molecule that causes taste buds to sting from pepper. Venice had a monopoly on the pepper trade, which rivals wished to break, motivating the voyages of discovery. Although connections frame the authors' tales (the title refers to tin buttons, which contributed to Napoleon's defeat in Russia), each story dwells on its molecular protagonist. The authors diagram the formula and shape of each, from the polymer behind the sheen in silk to the ionic bonds in the taste of salt. Well-conceived, well-done popular science. Gilbert TaylorCopyright American Library Association. All rights reserved "Most of us never give a thought to ... the chemicals that have changed the world. This is brought out beautifully in Napoleon's Buttons, with its brilliant blending of chemistry and culture. I found it engrossing, and a delight to read.""Well-conceived, well-done popular science." --Booklist"Well-conceived, well-done popular science."--Booklist "The authors unearth a wealth of anecdotes from all parts of the world and use them effectively to illustrate the technological underpinnings of modern society. Thoughtful, often surprising, smoothly written."--Kirkus s "Entertaining accounts of how various objects' chemical properties might have changed history."--Library Journal "What does the fiery compound C17H19O3N have to do with the discovery of North America? Plenty, according to this remarkable collection of scientific sleuthings. The book's cases -- especially the chapter blaming Napoleon's disastrous Russian campaign on the eponymous tin fasteners that failed to hold French uniforms together -- unfold like CSI meets the History Channel. A splendid example of better reading through chemistry. B+"--Entertainment Weekly "This book is both original and fascinating; I was quickly absorbed by this refreshing mix of science and history; I learned a lot of both and read this book quite quickly for a science book."--The Literary FlaneurAbout the AuthorJay Burreson, Ph.D., has worked as an industrial chemist and held a National Institutes of Health special fellowship for research on chemical compounds in marine life. He is also the general manager of a high-tech company.