

NUTRITION

Dominions of fizz

David Katz applauds an analysis of the carbonated-drinks industry and public health.

If any one name evokes unfettered truths about the sociopolitical machinations of 'Big Food', it is that of Marion Nestle, professor of nutrition, food studies and public health at New York University. Author of Food Politics (Univ. California Press, 2002) and the blog of the same name, she held senior positions in US food policy in the 1980s and 1990s, sitting, for example, on the 1995 US Dietary Guidelines Advisory Committee. Her writing exerts a powerful influence on almost all other contributors in this realm.

Nestle's latest, *Soda Politics*, addresses carbonated, non-alcoholic, sweetened beverages as an emblem of modern wars focused on food, politics, policy, personal choice and culture. This concentrated source of sucrose, high-fructose corn syrup and

calories, free of any nutritional attributes, accounts for one-third of all US sugar intake. *Soda Politics* is what those who know Nestle and her work would expect. It is thorough and thoughtful, careful and comprehensive, exacting and erudite — and only rarely surprising. She elaborates opposing views before rendering her generally moderate verdicts, such as: "Sugar is neither a poison nor entirely harmless."

After defining her terms, Nestle distils what is agreed and what is contentious regarding the health effects of soft drinks, and provides an overview of the industry (valued at anything from US\$200 billion to \$800 billion globally) and its characteristic responses to public health. She covers the scientific evidence on health effects, the industry's impact

on the environment and the preferential marketing of soft drinks to children, specific ethnic groups and poor people, for instance at sporting and cultural events — strategies that Nestle characterizes as "softball".

A prominent theme in *Soda Politics* is the correspondence between the tactics of the soft-drinks and tobacco industries. Both use "hardball" strategies such as litigation, lobbying of Congress, and front groups such as New Yorkers Against Unfair Taxes, established by the beverage industry to oppose a soft-drinks levy. Nestle asserts that these interests "forge alliances with health organizations and researchers to make the science appear confusing and to silence criticism" — tactics that stretch back to the 1970s and beyond. She cites the work of beverage-industry-funded



researchers who examine the effects of softdrink consumption on health, and highlights how their results consistently diverge from findings of studies with unconflicted funders. She backs up every argument abundantly; this is a hefty, well-researched book.

Nestle's blunt assessment of current interactions between the soft-drink industry and certain luminaries of public health and public policy is provocative. She tells us about the Alliance for a Healthier Generation — founded jointly by the American Heart

Association and the Clinton Foundation (a non-profit group set up by former US president Bill Clinton to help people meet "challenges of global interdependence"). It was, she writes, formed to negotiate policies on selling soft drinks in schools with the beverage industry. The deal reached, and announced with



Soda Politics: Taking on Big Soda (and Winning) MARION NESTLE Oxford University Press; 2015. fanfare, Nestle relates, "rescued sports drinks, sugar-sweetened waters, and the machines that sold them", while helping soft-drink companies to sidestep a class-action lawsuit. As Nestle shows, this lawsuit was abandoned with Clinton's encouragement when the beverage industry agreed to the terms brokered by the Alliance.

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leadership of the Robert Wood Johnson Foundation, a philanthropic body focusing on many aspects of health and health care, and that of Pepsico. Nestle writes that the foundation's president and Pepsico's chief executive routinely sit together at public events. We are told that as much as \$4 billion in food stamps under the Supplemental Nutrition Assistance Program is spent each year on soft drinks. And we learn of the unexpected alliance of entities that oppose

remedying this with policy, such as food retailers that profit from the programme. We get a bracing reality check regarding front groups. For instance, the non-profit education and advocacy organization the American Council on Science and Health, Nestle tells us, "depends heavily on funding from corporations that have a financial stake in the scientific debate it aims to shape". CocaCola is a significant sponsor.

Nestle's decisive opinions slice through a number of polarized controversies in public health. She asserts that "it is so well established that sodas and other sugary drinks contribute to higher calorie intake, weight gain, obesity, and type-2 diabetes that stopping drinking them is the first line of defense against any of these conditions". Amen. She states that diet drinks, which now account for 30% of US soft-drink sales, have not been shown to help most people to control their weight. And she points out that although high-fructose corn syrup and sucrose differ in how they deliver free fructose and in their specific metabolic effects, it is unclear that the differences matter much to public health in light of the overall excess. My own work in this area has led me to the same conclusion.

Occasionally, *Soda Politics* serves up genuine surprises. Coca-Cola, for instance, markets 3,500 products under 500 brand names in more than 200 countries. Yet despite fierce brand loyalties, the products of the leading manufacturers are consistently

indistinguishable in blind taste tests. As a result of industry obfuscation, which keeps relevant data proprietary and shielded from public view, researchers are not sure how much the modern citizen drinks, only that it is a lot (average per capita US intake has been estimated at nearly 170 litres per year). Each 350-millilitre portion contains 10 teaspoons of sugar — other ingredients may serve prin-

cipally to mask this extreme sweetness. Nestle also briefly discusses 4-methylimidazole, a by-product of the caramel colouring used in some soft drinks, which has been deemed a potential carcinogen by the US National Toxicology Program following thus-far equivocal findings in a two-year rodent study. The US Food and Drug Administration is currently reviewing the range of data available on the compound.

For me, the single most stunning and appalling revelation

comes in the section about environmental impact and industry responses to it. It is that between 340 and 620 litres of water are used for every litre of soft drink produced, about 20% of that related to packaging. Despite such disturbing revelations, Soda Politics is not discouraging. The parallels between the practices of the soft-drink and the tobacco industries can inform strategies for winning this public-health battle, pointing to moves such as banning television advertising. Throughout the book, Nestle provides tactics for practical, local advocacy, such as working with school wellness committees and engaging local policymakers. And since 2002, the proportion of US citizens who say that they avoid soft drinks has risen by 20%, reaching nearly two-thirds of the population.

Nestle cannot attribute that trend to any one action; it is the aggregate effect of many, and of increasing awareness. The soft-drink industry is, however, vast and shrewd, profitable, pervasive and powerful. For public health to prevail over soda politics as usual, we have miles to go. This book is the richly drawn map of how to get there, from here.

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