

BOOK REVIEW: *AROUSSED*

Randi Hutter Epstein, *Aroused: The History of Hormones and How They Control Just About Everything*, New York and London: W.W. Norton & Company, 2018, ISBN 978-0-393-23960-7

Lest the title of the book, *Aroused*, with its front cover's red neon glare surrounding the word, lead you to believe it's a hot sex novel, know that the book is a serious history of the scientific discoveries of hormones, originally labeled "internal secretions," which led to the development of the modern field of endocrinology. Written by a physician, Randi Hutter Epstein, the book has you in its grip from prologue to epilogue. Scholarly, well-conceived, witty, and written for all audiences, the book is organized into 15 chapters with catchy titles such as *The Fat Bride*, *Pickled Brains*, *The Virile Vasectomy*, and *Testosterone Endopreneurs*.

Where did the inspiration for this book come from? Personal experience. The author's grandmother, Grandma Martha, not a sunbather, always appeared to be "spectacularly bronzed," a look Dr. Epstein and her sisters had trouble achieving, even with reflectors. In time, Grandma Martha was diagnosed with Addison's disease, an endocrine disorder of the adrenal glands which, among other manifestations, darkens the skin, increases thirst, and keeps the body from producing cortisol. Diagnosed by her father, a pathologist, Epstein's grandmother was effectively treated with hydrocortisone in the 1970s.

Understanding the mechanisms that control hunger, thirst, growth, weight, sexuality, and gender and their associated diseases constituted the research of many prominent physicians and scientists of the first half of the 20th century. In *Pickled Brains*, we learn in a most lively manner about Harvey Cushing, the famed neurosurgeon, who was to lend his name to a disease of the pituitary gland, in which an ACTH-producing tumor "arouses" the adrenal cortex to produce excessive cortisol. Fascinated not only by the pituitary gland, but by the brain's control over multiple substances that inform the body's functions, Cushing collected bits and pieces of brains for future study from the patients he operated on, placing them in jars. Rediscovered, in the late 1960s, by a Yale neuropathologist—in a filing cabinet, along with some empty whiskey bottles—the jars had been forgotten for years. Eventually, in 1994, an inebriated medical student wandered into the basement of the Yale medical students' dorm, where he chanced upon Cushing's hoard. At present, a large portion of the vast collection, restored and cleaned, is housed on shelves in the Cushing/Whitney Yale Medical School library. The collection offers an excellent opportunity for a most interesting excursion to New Haven.

Dr. Epstein has the extraordinary knack of bringing to life the interrelation of personalities and theories; the atmosphere in which scientists labored; the experiments which succeeded, as well as those that failed; the quacks, who peddled treatments; and the patients who longed for cures. The *Virile Vasectomy*, or the search for rejuvenation and eternal libido, brings together a Viennese physiologist, Eugen Steinach, and a Viennese physician, a certain Sigmund Freud, linked by a procedure that Steinach claimed would "block the exit of manly juices,"

thereby prolonging life and enhancing intellect. The vasectomy was an immediate success on the world stage for those who could pay. In fact, it was so popular that the name Steinach became a verb. Freud, an eager customer, was “steinached.” One can only speculate if the procedure contributed to a lifelong obsession with male castration....

Randi Hutter Epstein has done for the history of hormones what Siddhartha Mukherjee did for cancer in *The Emperor of all Maladies*. A rousing, intellectually provocative, meticulously researched, and fascinating read for scientist and non-scientist alike, *Aroused* is a welcome addition to the corpus of literature on the medical history of the 20th century.

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