

**Sylvia R. Karasu M.D.**

The Gravity of Weight

# From the Frying Pan into the Fire? Saturated Fat and Health

Have we been misled about the evils of eating saturated fat for all these years?

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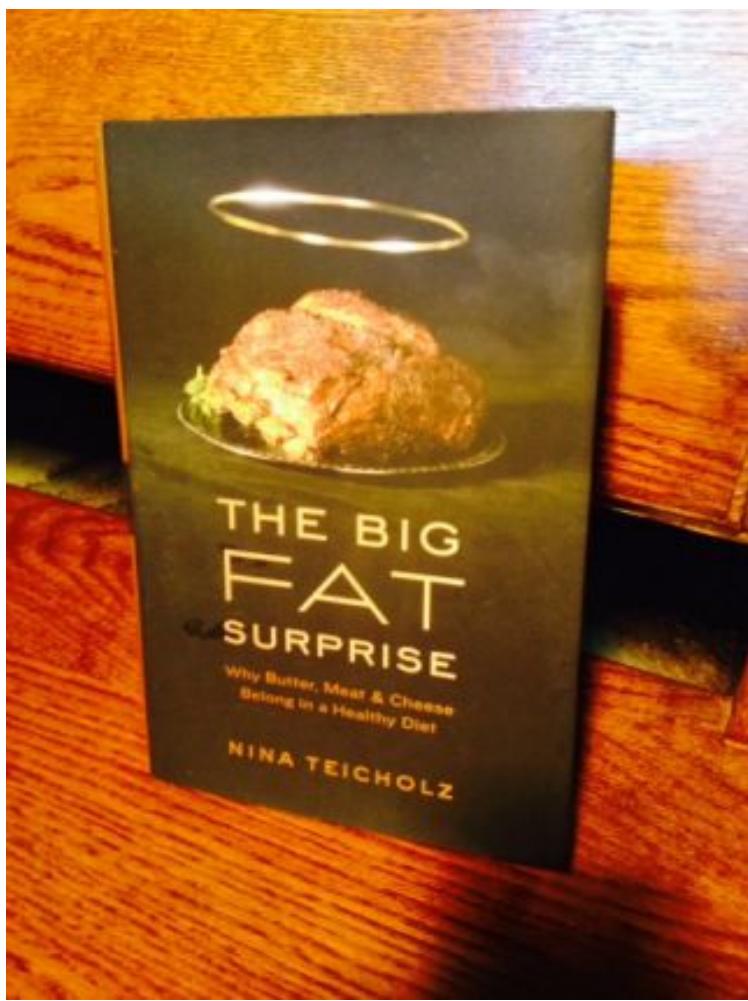
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“Jack Sprat could eat no fat. His wife could eat no lean. And so betwixt the two of them, they licked the platter clean.” So goes the children’s nursery rhyme. Poor Jack Sprat. He may have had it wrong all along. This is the conclusion of Nina Teicholz in her provocative and extremely well-researched new book, *The Big Fat Surprise: Why Butter, Meat, and Cheese Belong in a Healthy Diet*.

Teicholz, who is a journalist and not a scientist, explains she can bring a fresh perspective to the field of nutrition, without any axe to grind. Her thesis is that we have all been seriously misled for the past fifty years about the so-called dangers of saturated fat (e.g. the fat found in red meat, whole milk, cheese, eggs, butter, lard, etc) in causing heart disease. Her story has both heroes and villains but the chief villain who started and perpetuated this myth was Ancel Keys, one of the leaders in the field of nutrition. Keys is known for several important contributions, including K rations in the military (“K” standing for Keys); his semi-



Source: photo by Sylvia R. Karasu, M.D.

starvation experiments on conscientious objectors during World War II that produced a two-volume tome; and his first using the term body mass index (BMI) to popularize the formula (weight in kilograms over height in meters squared) devised by the statistician Quetelet centuries earlier that we use today as a rough and imprecise but standardized measure of overweight and obesity.

It was Keys, though, who initiated the first international epidemiological Seven Countries study that purported to find that diets rich in animal fat more likely led to heart disease. Teicholz went back to the original Keys data and found that of the over 12,000 participants, Keys had evaluated food consumption in less than 4%. She also found there was no consistency among the countries studied in how the data were actually collected. Furthermore, Teicholz found that some of the data collection (e.g. in Crete) occurred during the 48 day period of Lent when most of the population would be consuming considerably less animal

meat. She noted that Keys seemed to choose only those countries that seemed to fit his hypothesis that consumption of animal fats led to heart disease and a diet low in saturated fat could prevent it. Apparently, as well, Keys seemed to ignore the fact that even within certain countries, such as those people living in Eastern Finland, died of heart disease at rates triple that of those living in the west of Finland, despite that their "lifestyles and diets, according to Keys' data, were virtually identical."



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Studies involving food consumption and diet, though, are extraordinary difficult to conduct, especially over time. Participants may be reluctant to tell the investigators the truth of what they eat, may tell them what they think the investigators want to hear, or even change their diet over time, particularly if they think one diet may be healthier than another. Furthermore, diet recall is subject to distortions in memory. And people who adhere to diets may be different in other ways: they may be

more health-conscious, more likely to exercise, less likely to smoke, etc.

Over the years, some, including Rockefeller University researcher E.H. Ahrens, who studied fat and set up the first gas-liquid chromatography lab in the U.S, questioned Keys' diet-heart hypothesis. Ahrens suggested that it was carbohydrate consumption, rather than fat, that more likely led to obesity and heart disease. (Ahrens' view in the late 1970s was prescient as we have now come to believe that excessive carbohydrate intake, particularly in the form of refined sugars and white flour, leads to obesity, type 2 diabetes, and other metabolic abnormalities in those predisposed, a view more recently popularized by science journalist Gary Taubes.) Keys, though, was apparently such an intellectual bully that his influential views managed to hold sway over the scientific and eventually political landscape for decades.

Unfortunately, says Teicholz, Americans, with the support of the American Heart Association and other scientific organizations, came to demonize saturated fat: the gospel became that if we want to remain heart-healthy, that we need to exchange it for polyunsaturated vegetable oils, either in liquid form (e.g. safflower, cottonseed, soybean, peanut, corn, and canola oil) or even as hardened fat such as margarine or Crisco. It was in the hardened form that these fats contained the artificially created (by a process of partial hydrogenation) trans fats that make cakes and cookies moist and increase shelf-life. At one point, says Teicholz, "there were partially hydrogenated oils in some 42,720 packaged food products." We now know, though, that these are particularly dangerous to health. And now that we have eliminated trans fats, we may be using even more harmful substitutes, such as vegetable oils that oxidize when heated and create toxic chemical compounds that remain in our food and body. Teicholz's solution: return to beef tallow and butter and other saturated fats that are stable when heated and do not oxidize.

Teicholz also addressed the questionable science behind the Mediterranean Diet (e.g. olive oil, fish, vegetables, fruits, grains, nuts, red wine), also popularized by Keys and recommended so commonly today. She asks, "Did any single Mediterranean Diet even truly exist? There was so much variation in eating patterns across countries and even within countries that it seemed nearly impossible to define any kind of overarching dietary pattern with any specificity." And, she adds, "What is 'a little meat,' and 'a lot' of vegetables?" Teicholz noted that Keys focused only on certain Mediterranean countries and excluded African and Middle-Eastern countries that also bordered the Mediterranean Sea. Apparently Keys loved Italy (and even purchased a home there). Says, Teicholz, "One has to wonder whether we would know more about the diets of other long-lived peoples, such as the Mongolians or Siberians, if researchers were equally drawn to the landlocked countries with desert steppes and long, freezing winters?" It is also possible, says Teicholz that the "Mediterranean Diet is associated with good health because it is low in sugar."

Bottom line: Teicholz's book is well worth reading. It is an eye-opening dissection of some of the long-held nutrition myths we have accepted as fact. Her conclusions are so "counterintuitive" that many people may

find them hard to digest, even with the evidence she provides. In other words, just as the character says in Woody Allen's *Sleeper*, "Everything we thought to be unhealthy is precisely the opposite..." Time will tell how these new and controversial ideas will hold up.



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## About the Author



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**In Print:** *The Gravity of Weight: A Clinical Guide to Weight Loss and Maintenance*

**Online:** my own website

