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leadership book series

"Move to Health" Book Summary "Why We Get Fat"

by Gary Taubes

At the current pace that Americans are ignoring their basic health behaviors, many experts predict that as many as 50% of all Americans will be obese by the year 2030. Have we misunderstood why so many of us and our fellow citizens are moving into the condition that Dr. Mark Hyman calls "Diabesity?" And if our understanding of the cause of the Obesity epidemic is wrong, are we destined to fail at helping our patients change the course of their shortening health spans?

Gary Taubes, an award-winning Science Journalist from UC Berkeley School of Public Health, had previously written an extensive, data-dense description of the research into obesity in his book "Good Calories, Bad Calories," but many of his readers wanted a book that could be simpler to understand and useful for sharing with non-medically trained people. "Why We Get Fat" is a superb argument against merely accepting the "calories in/calories out" dogma that many of us learned in our medical training, and to consider the more likely concept that excessive unhealthy carbohydrates/refined sugars are the culprit in disturbing our body's hormonal control of fat deposition.

Mr. Taubes uses the first 8 chapters to debunk the Calories in/Out theory, and none of his arguments are more compelling than his description of the effects of overweight individuals training for their first marathon. In a Danish study, sedentary individuals trained to complete a marathon, with "underwhelming results" in weight loss. While men lost an average of 5 pounds of fat over 6 months, women lost no weight. Along with the increased activity came a significant increase in appetite; our overweight runners "worked up" a substantial appetite, which offset all the calories burned training 30+ miles per week. Another study of 13,000 Runner's World magazine subscribers found that, although the runners that ran the most weighed the least, ALL runners tended to get fatter each year, many despite running up to 40 miles per week.

For their joint 2007 guideline on Physical Activity, the American Heart Association (AHA) and American College of Sports Medicine (ACSM) made their activity recommendations based on "not particularly compelling evidence." Two Finnish exercise physiologists evaluated the dozen best-constructed experimental trials that addressed weight maintenance (successful dieters that were trying to keep off the pounds that they shed). They found that EVERYONE in these studies regained weight; depending on the type of trial, exercise would either decrease the rate of that gain (by 3.2 ounces/month) or increase its rate (by 0.8 ounces per month). While exercise is essential for good overall health, it appears unlikely that increasing exercise by itself will lead to significant weight loss.

So, if the "calories in/calories out" theory is not the answer, what do we advise our patients seeking to lose weight? Mr. Taubes gives an excellent historical review of the knowledge learned by European (primarily German) researchers prior to World War 2. Their theories that excessive carbohydrates are the true culprit were discredited, mainly due to strong anti-German sentiment following the war. In fact, American obesity thought experts began to blame the consumption of fats as the cause of weight gain, and their advice to avoid fats led to an increase in consumption of carbohydrates and, inadvertently, an acceleration of the rate of obesity in America during the 1980s and beyond.

Mr. Taubes spends the rest of the book making a strong argument that excessive refined carbohydrates lead to insulin resistance and the ensuing hormonal changes that cause obesity. His chapter entitled "Adiposity 101" is a must read for all healthcare professionals, to fully understand the finely tuned hormonal regulation of fat in our bodies.

So, what can we do to decrease obesity? We first need to recognize that all Carbohydrates are NOT equally fattening; the most fattening foods are the ones that have the greatest impact on our blood sugar and insulin levels. These are concentrated sources of carbohydrates that we can digest quickly:

-anything made of refined flour (bread,

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cereals, pasta)

-liquid carbohydrates (beer, fruit juices, soda)

-starches (potatoes, rice, corn)

Healthier carbohydrates like those found in leafy green vegetables are bound up with indigestible fiber, and take much longer to be digested and enter the bloodstream, and thus have less of an effect on raising insulin levels. The carbohydrates in fruits, though easier to digest, are diluted by more water so these "carbs" are less concentrated.

The very worst foods for us are sugars: sucrose and high-fructose corn syrup (HFCS). Sucrose is broken down into 50% glucose and 50% fructose; HFCS is 55% fructose, thus the name "high fructose"... When sugar is digested, the glucose raises insulin levels, while the fructose goes to the liver, essentially the only organ able to metabolize it. In nature, fructose occurs in relatively small quantities, primarily in fruits. Our liver does not have the capacity to metabolize the massive loads of fructose that comes from the American diet which AVERAGES 150 pounds of sugar per year (equivalent to 36 teaspoons of sugar/day); many Americans consume much larger quantities than this! Our liver responds

by converting much of the fructose to fat and shipping it off to our fat cells, while the elevated blood glucose levels that come with the breakdown of sucrose put our fat cells in the mode to store whatever calories come their way. Biochemists consider fructose to be the most "lipogenic carbohydrate."

I strongly recommend Primary Care medical personnel become familiar with Mr. Taubes' evidence for "Why We Get Fat," and advise their patients to reverse the current trends in the excessive consumption of refined carbohydrates, liquid carbohydrates and sugar in all its varieties.