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## IRR

The American diet includes a wide variety of foods--some with foreign roots--that have become “Americanized”. “Americanized” food is usually associated with added oils or larger portion sizes to foods, which is usually nominated as unhealthy to our diets, and associated with obesity. But what external factors cause us Americans to eat these “unhealthy foods” when we know the risks? There are two parts to the answer of this question: food science and food marketing/industry. So how can we combat these? Probably the best approach is to simply become better informed and more aware of the behind the scenes workings of our food, as well as all the underlying currents that may seem unnoticeable, but actually have a big impact on our decision-making.

So, starting with the first part of our answer, food science is a very complicated area of scientific study that involves an abundance of faulty connections, unreliable statistics, and biased data. A big part of knowing what to believe and what not to believe is finding credible studies and knowing the limitations. The limitations aspect of this is more thoroughly discussed by Gary Taubes, a diet advocate, journalist, and writer of many nutrition and health-related books and articles. Studies concerning the risk factors of cancer, for example, have regurgitated almost everything we are exposed to everyday, from “hair dyes to coffee to oral contraceptives and other hormone treatments,” (Taubes 1). Because of these “results” from a wide variety of studies that all have contrasting outcomes, people do not know what to believe anymore. A thought to keep

in mind is that correlation does not always equal causation (or the other way around)-- it can be a mere coincidence. Taubes asserts that issues in studies arise from “strong” circumstantial evidence and bias, but also includes that misinterpretation from the press by the public over the latest study is also a factor. This circles back to knowing your facts before believing the claim; a suggestion from a study can be interpreted as a definitive fact by the public and press. This is where nutritionism follows-- the study of food by focusing on one nutrient at a time on a part-by-part basis. Michael Pollan in his book “In Defense of Food”, cites Marion Nestle, a New York University nutritionist, explaining that the problem is, “is that it takes the nutrient out of the context of the food, the food out of the context of the diet, and the diet out of the context of the lifestyle,” (Pollan 62). Basically, we don’t consider the context that the nutrient is in. For example, cheese is a good source of fat and calcium by itself, but when combined with carbohydrates, this results in an unhealthy duo. On the other side, Taubes cites the suggestion that saccharin causes bladder cancer (which was put to rest), however “14 years later (up until this article was written in 1995), television advertisements for NutraSweet, which contains the artificial sweetener aspartame, still tout it as the sweetener that does not have saccharine,” (Taubes 5). So what to believe and what not to believe? Randomized Controlled Trials (RCT), according to a study by PubMed Central (PMC) over a series of evaluations over scientific publications, have been found to be the most effective type of study. RCT studies reduce bias and provide rigorous tools to recognize cause-effect relationships. Cohort, case-control, and intervention studies are one of the most well-known, but they all have their own major flaws. This includes, respectively, “the reliance on food-frequency questionnaires”, reporting too much of one nutrient or of another eaten (personal bias), and unreliable statistics (Pollan 71-73). A major study that turned up unreliable results was the Women's Health Initiative (intervention

study). According to Maryann Napoli in her article “Women’s Health Advice Falls Short”-- over a study of heart disease risk on women assigned with different diets over a course of a few years--, Napoli wrote that the “results were predictively unimpressive: There was no reduction in heart attacks or cardiac deaths, but the few trials that lasted two years hinted at a lower risk of heart disease,” (Napoli 2). Studies that involve people are always subjected to bias and human error. In the study mentioned by Napoli, many factors affected and pushed women with their given diet off track and affected the study altogether. These factors included the present public opinion/trend of what nutrients were healthy, as well as the reporting of nutrients that were considered bad at the time, over other nutrients (not considered) that may have taken a role in heart disease risk.

Moving on to the next part of our answer, food marketing and industry, some important things to remember is that food science is the food industry’s biggest enemy and that the industry is very competitive. Once one food study denounces a nutrient that a food product may have a lot of, people tend to focus (as mentioned earlier) on that nutrient and a downward trend in the purchasing of that product can be seen. To combat this downward trend, food companies will “set about reengineering thousands of popular food products to contain more of the nutrients that science and government had deemed the good ones and fewer of the bad,” (Pollan 37). Foods that only require two or three ingredients, according to Pollan “ballooned with lengthy lists of new additives,” (Pollan 37). Food-labeling soon became a big trend and also a mis-leading sight. This was a new tactic that companies use to prompt more people to buy more of their items. Adjectives like “low-fat, no-cholesterol, high-fiber” were being used more and more as a marketing tactic, which easily changed when public opinion or government guidelines changed. Take for example the soda industry: after 7Up began labeling their drinks “100 percent natural”,

the company experienced backlash from nutritionists who asserted that fructose corn-syrup shouldn't be considered natural-- so the company changed the label to "100 percent natural flavor" (Martin 2). And because of food-engineering, people grew away from organic, fresh food, which may have caused to some degree the U.S. upward trend in obesity. As put by Pollan, "It is a whole lot easier to slap a health claim on a box of sugary cereal than on a raw potato or a carrot," (Pollan 39). Using the soda industry once again, in light of new obesity debates in the U.S. obesity epidemic, "In 2005, the amount of soda sold in this country dropped for the first time in recent history," (Martin 1). This drop was caused by the targeting of the soda industry in the obesity debate. Because of this, soda companies like Coke and 7Up , came out with new low-calorie products (Diet Coke Plus and 7Up Plus) with added vitamins and minerals. With these additives, drinks were to appear more appealing to the public, and they were even pushed to be considered in the health and wellness category.

To pull everything together, by understanding where our information comes from about our food and by understanding how our food is portrayed to us by food marketers and the industry, we can better choose our food when we go grocery shopping. By knowing our way around food labels, health claims, and unreliable information concerning nutrition, we can become healthier as a population and become more educated and aware of our surroundings in the process.

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