

BROWN: You are what you eat, depending on the variables

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I don't know about you, but I'm again attempting to shed a few pounds to keep healthy. I try to work out three to four times per week and watch what I eat. So a recent article in the New England Journal of Medicine caught my eye. Something to read as I snack.

The study was a serious investigation of the influences that affect weight gain as we grow older. There is so much to take into account: the types and amounts of food we eat, the amount of exercise we regularly get, and so on. We acquire pounds surreptitiously as time goes on, a pound this year, a couple pounds the following year, and our lifestyles change over time as well.

It was about time that some in-depth study was carried out to separate the wheat from the chaff (or diners from fast-food outlets).

Of course, we all have heard anecdotal evidence of what is bad for you (sugar, excessive alcohol, smoking, to name a few) and what is good (exercises, fruits and vegetables, etc.). But anecdotes are not science and stories do not convince mathematicians. So proper statistical studies, using proper statistical methods, are the only way to seek the truth.

The study in question is quite extensive, involving over 100,000 participants. Care was taken to eliminate those who might have underlying conditions (medical or age-related) that would affect the collected data. Following standard procedures for ensuring high-quality data is essential.

Weight gains or losses were recorded every four years over a number of four-year periods. The authors of the study then used a mathematical process called multiple linear regression to judge the relationship between the various lifestyle factors and weight gain. As with any proper statistical study, the authors decided ahead of time what would be considered significant (before looking at the data) and settled on what we would only expect to happen at most five per cent of the time, by chance.

Of course, the math devil is in the details, but looking over the article, the statistics seem compelling. The study found a variety of different dietary factors that led to weight gains, to various degrees, ranging from the eating of french fries and potato chips to grains, desserts and red meats. And on the other side, they found that weight loss was related to eating vegetables, fruits, nuts and yogurt.

Beyond eating, increases in exercise level led to smaller weight gain (about 1.75 fewer pounds) over a four-year period, and more interestingly, those who slept more than eight or less than six hours gained more weight.

But what has the beverage industry up in arms (and spilling their sugar-sweetened drinks all over the place) is the finding that sugar pop leads to significant weight gain over the years. And the accumulated weight gain, of course, is associated with disastrous health outcomes, like diabetes and heart disease.

The study overall indicates that when you are trying to control your weight, not all foods are equally bad for you. For example, I was surprised to read that eating more nuts led to less weight gain, even though you are increasing your caloric intake with nuts (the reason lies in what other food groups you eat less of when you increase your intake of nuts). And that is the true beauty of the study — not only the questioning of long-held beliefs, but the mathematically convincing arguments as to where the truth lies.

Something delicious I can fill up on and gain no pounds.

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