

Why studies linking diet to health are almost always flawed.

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Whatever you're worried about, there's no shortage of diets or foods purported to help you. Linking dietary habits and individual foods to health factors is easy — ridiculously so — as you'll soon see from the little experiment we conducted.

Our foray into nutrition science demonstrated that studies examining how foods influence health are inherently fraught. . . nearly all nutrition studies rely on measures of food consumption that require people to remember and report what they ate. . .

The Food frequency questionnaire we used produced 1,066 variables, and the additional questions we asked sorted survey-takers according to 26 possible characteristics. . . This vast data set allowed us to do 27,716 regressions in just a few hours. Using a [p-value](#) of 0.05 or less as the metric for statistical significance (as is common) equates to an error rate of 5 percent. . . And with 27,716 regressions, that means we should expect about 1,386 false positives. . .

Nearly every nutrient you can think of has been linked to some health outcome in the peer-reviewed scientific literature using tools like the FFQ, said [John Ioannidis](#), an expert on the reliability of research findings at the [Meta-Research Innovation Center at Stanford](#). . . . Some of those studies pointed to an increased risk of cancer, others suggested a decreased risk, but the size of the reported effects were “implausibly large,” Ioannidis said, while the evidence was weak. . .

So we're left with our original question: What is a healthy diet? We know the basics — we need sufficient calories and protein to keep our bodies alive. We need nutrients like vitamin C and iron. Beyond that, we may be overthinking it. . .

**Read full, original post:** [You Can't Trust What You Read About Nutrition](#)