## Can psychology explain strident opposition by some to GMOs?

We all know people who have become obsessed with the latest food fad and feel the need to tell everyone about it. With an allergy to GMOs, a wheat belly, a grain brain, sugar shock, a blood type, macrobiotics and self-diagnosed Celiac disease – and those are issues of just the last few years – it can be a struggle to find a place to eat with someone like that. It was only a matter of time before people would take it to extremes in search of a new disorder classification.

There is nothing inherently healthier about a vegetarian, organic, vegan or paleo- diet, but there is nothing necessarily unhealthy about it either, if you are no longer growing—you just have to be willing to pay 200 percent more for your particular intellectual placebo. Since a third of America is obese, clearly a little more interest in healthier eating is welcome. Yet any diet that migrates from a motivational health concern to an obsession is bad.

An obsession is when evidence and rationality no longer govern decision-making. When it comes to food science, it can be evidenced by things like reading Think Progress for its agricultural content. Or insisting one food grown using a certain chemical pesticide is nutritionally superior to one grown using another pesticide.

Dr. Charles Benbrook of Washington State University recently made that claim, and he created an unweighted random-effects meta-analysis of other papers to try and show that organic food was better in all ways than conventional. Though he is lauded by the anti-GMO segment of society for his science, Benbrook is actually an economist, so he knows how statistics work and he knew that including papers with large outlier results in the sample papers of his meta analysis would skew the results in his favor. Yet he did it anyway. In his analysis, Benbrook claimed pesticide residues for organic food were one fourth of that found in conventional foods and that they were a nutritional miracle, with more antioxidants equivalent to two to three more servings of fruit and vegetable per day. Yet he didn't do any actual analysis, he just gathered papers using Web of Knowledge that had terms like 'biodynamic' and 'organic'. No surprise that he included papers claiming organic strawberries even 'felt' better on the tongue.

It's clever advocacy but terrible science. If it were done once, it could be forgiven as intellectual misadventure., but it's a recurring problem, not just for him but for the entire anti-GMO contingent. It may be that they have a food concern that has blossomed into a psychological disorder. In 1997, Steven Bratman, M.D., detailed case studies of people who had taken health food obsession to fetish extremes, where it impacted their daily lives in a negative way. He called it *Orthorexia nervosa*, which is Greek for appetite and Latin for nervousness. Over time, that kind of reinforcing behavior in a group setting became noticed as well. Researchers began to call groups of people obsessed with perfection and achieving it through strange food choices an "Orthorexic Society." Orthorexia pervosaroum On Left: how GMO-obsessed organic food shoppers see themselves. Right How the rest of the world sees them.

As Cristian Rangel, Steven Dukeshire, and Letitia MacDonald <u>described in *Appetite*</u>: "The Orthorexic Society is an accentuation of certain traits, such as individualization and the constant pursuit of a healthy lifestyle, which are present among well-informed segments of the population in the Western World."

Does that sound like "progressive" elites who claim they are allergic to or can taste the difference in genetically modified foods?

In reality, <u>9 billion animals-a-year eat GMOs</u> and there has been no difference in their productivity, their milk or their meat, but some still insist GMOs are changing livestock and plants. Americans have eaten GMOs for 15 years and no one has gotten so much as a stomachache, we certainly have not evolved biologically due to them.

In <u>a recent Psychosomatics paper</u>, Moroze et al. (2014) outlined diagnostic criteria for *Orthorexia Nervosa* that might get it included in a new revision of the Diagnostic and Statistical Manual of Mental Disorders (DSM), the glossary for the psychology field. They broadly introduce it as "a pathologic obsession for biologically pure and healthy nutrition", including shamanistic beliefs about food fads that lack evidence. That certainly sounds like anti-GMO people.

"If you're losing friends because no one wants to go out with you because you're such a horrendous pain in the ass about where and what you'll eat, you have a problem," psychosomatics paper co-author and psychologist Dr. Thomas Dunn from University of Northern Colorado told Sarah Elizabeth Richards of Dailyburn.com.

Let's be honest, if you are buying or writing *Thug Kitchen: The Official Cookbook: Eat Like You Give a F - - k*, you're already not pleasant to be around. Perhaps one day soon, society will recognize the issue and we can get some help for all Whole Foods shoppers.

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