## Click bait health reporting: I'm calling BS on these 5 health stories

"If you're rational, you don't get to believe whatever you want to believe." — Michael Huemer

News stories on diet and health are so misleading these days. In an effort to gin up circulation, health writers are constantly searching for bizarre new angles on health stories, often jumping to unwarranted conclusions to ensnare readers. One of my top goals with *Intelligent Medicine* is to provide you with accurate interpretations of sometimes dumbed down—or outright wrong—headline news.

1. Sitting is the New Smoking. A couple of years ago stories began to appear with this catchy lead, which rapidly became a popular meme. The research suggested that sitting, per se—even if you had an active lifestyle—could undermine your cardiovascular health, increase your risk for diabetes and cancer, and lead to a premature death.

Sales of standing desks skyrocketed, and even the Apple Watch incorporated a feature to remind you to get up and walk around every 1/2 hr. Water cooler conversations suddenly earned the status of mandatory health breaks. This even translated to a recommendation by the American Academy of Family Physicians that people break up long periods of sitting.

What's the truth of these assertions? Most of the researchers acknowledge that, despite the evidence, there is need for a prospective clinical trial, dividing comparable people into two groups: prolonged sitters and sitters who regularly get up to move around. This would have to take place over a period of many years, perhaps decades, to yield a definitive answer. Obviously, difficult and expensive to do.

But a new wrinkle has been added to the story because of a large study of 5,000 British individuals published in a recent issue of the International Journal of Epidemiology. After a follow up of sixteen years, NO difference was seen whether subjects sat for long periods or not.

The researchers conclude: "The results cast doubt on the benefits of sit-stand work stations, which employers are increasingly providing to promote healthy working environments." It goes without saying, of course, if sitting is part of an overall sedentary lifestyle, it will undermine your health; but you may not need to get up and down at regular intervals like a jumping jack in order to cheat the Grim Reaper.

**2.** The Cat Made Me Do It! Recently an article appeared that detailed an association between exposure to toxoplasmosis, a cat-borne disease, and Intermittent Explosive Disorder (whose acronym, appropriately, is IED) .

This is a bona fide psychiatric disorder, said to be suffered from by 16 million Americans. It is characterized by sudden, unpredictable outbursts of aggressive or violent behavior. The researchers studied 358 adults with IED and found that they were twice as likely to have been exposed to the parasite.

The chain of causation, however, is weak here. Since an estimated 30 percent of adults—with or without cats—show traces of exposure to toxoplasmosis, it's unlikely that very many people "catch" road rage from their pets. IED is likely the result of a combination of factors ranging from genetics, to parental influences, to toxic

exposures to substances like lead, or even lack of essential fatty acids.

Research on the psychology of cat owners doesn't reveal any specific quirks. In general, studies suggest they are less extroverted, perhaps more intelligent and intellectually curious than dog owners, but no study suggests they are especially prone to explosive bouts of anger.

Of interest is that toxo does apparently hijack the brains of mice, changing their personalities to abolish their innate fear of cats, rendering them more likely to get eaten. The organism thus assures its survival and propagation in a cat host, a neat trick of natural selection.

3. Vegetarian Diet May Increase Risk for Cardiovascular Disease and Cancer in Subsequent Generations. And you thought you were doing your future progeny a favor by following a clean diet! Well, the joke's on you, you may be inadvertently dooming them to an early demise, so the story suggests.

Actually, it's not quite so simple. This research supports the power of epigenetics—the shaping of gene expression by environmental factors. The effects can be transgenerational. For example, we know that starvation—say, for example in Holocaust survivors—predisposes children and even grandchildren to obesity and diabetes via activation of a "thrifty gene" that hoards calories and stores them efficiently as fat as a hedge against future famine.

In the vegetarian diet story, it turns out that a diet restricted in EPA/DHA from animal sources of Omega 3 oils amp up a metabolic pathway (chain elongation) that converts plant Omega 3 (linolenic acid) precursors to body-ready EPA and DHA. But the same metabolic pathway accelerates conversion of dietary linoleic acid (an Omega 6 oil plentiful in nuts, seeds and vegetable oils) to pro-inflammatory arachidonic acid.

My vegan Facebook fans hollered when I posted this article, claiming it was just more meat industry propaganda. I disagree, but I'll point out there's an easy workaround. Even if you're a committed vegan, you can forestall the potential hit to your DNA and that of your descendants by avoiding excess polyunsaturated vegetable oil and by taking either a fish oil supplement, or if you're truly an ethical vegetarian, a DHA-rich Omega 3 product derived from algae.

Besides, unless your kids and grandkids do a complete about-face on the healthy diet you adopted, they should be OK. It's only when you overload your meals with unhealthy Omega 6s—something no one should be doing—that this pro-inflammatory effect kicks in.

Incidentally, the gene modification proposed by scientists in this article is purely theoretical, and not confirmed by multi-generational studies in humans, which would be pretty near impossible to do anyway.

**4. Sauerkraut Can Cure Shyness.** College of William and Mary psychologists polled students on their dietary habits and then assessed their degree of social anxiety via a questionnaire. **They discovered a correlation** between consumption of fermented foods and relative freedom from worries over social interaction.

How is this plausible? Animal research has revealed a relationship between the microbiome—the bacterial composition of the GI tract—and behavior. It's been hypothesized that there's a gut-brain connection, and that "happy" bacteria promote stable moods.

The hypothesis is tantalizing, but remember this is simply a survey, subject to recall bias, and correlation isn't causation. It may just be that people who eat sauerkraut are more emotionally balanced and open to new experiences to begin with.

Additionally, concerns have been raised that the diagnosis of "social anxiety"—formerly known as run-of-the-mill shyness—has been hyped by the pharmaceutical industry to juice sales of SSRI anti-depressants. Critics believe that we've pathologized a normal personality trait—introversion—to sell more drugs.

Whatever the case, I'd prefer probiotics over Paxil any day.

**5. Maple Syrup is a Cure for Alzheimer's.** Last month, **Fox News published an article** headlined "Maple syrup isn't just delicious, it could also cure Alzheimer's disease".

The claim is that maple syrup contains a phenolic compound—similar to resveratrol in red wine—that prevents mis-folding of proteins in the brain which produce the neurofibrillary tangles characteristic of Alzheimer's.

Whether or not this preliminary research pans out, it's not a license to guzzle maple syrup, that, while natural, delivers a massive hit of sugar to the brain. This would incrementally raise your chances of developing what has been termed "Type 3 diabetes," a form of insulin resistance in which the brain no longer efficiently utilizes glucose as a fuel and suffers energy brownouts.

Besides, sugar is highly pro-inflammatory. So maple syrup—much of which is actually not true maple syrup, but artificially-flavored and colored high-fructose corn syrup—is definitely not a brain elixir.

Read my good colleague Dr. David Perlmutter's comprehensive take on this story.

In a future issue of this newsletter, I'll tackle another recent example of health journalism malpractice: "Gluten Intolerance is Bullsh\*t!"