

What's driving America's epidemic of violence and criminality?



The recent attempt on candidate Trump's life merely highlights a long-standing problem: America is in the throes of a mental health crisis.

It seems not a week goes by that we don't learn of another mass-shooting incident. We've come to expect them, like tornadoes and floods.

I experience heightened apprehension daily in my hometown of New York City, where it's advisable to walk around with your head on a swivel and maintain the situational awareness to instinctively duck like Trump if random gunfire should break out. Or not fall victim to a sucker punch delivered by a deranged individual whose sport is to target the vulnerable.

Many factors have been invoked to explain the carnage: deinstitutionalization of the mentally ill, poverty, racism, breakdown of the nuclear family, lenient prosecution of criminals, the erosion of religious values, open borders, pernicious impact of social media, lack of green spaces, sedentary lifestyle, violent video games, the proliferation of high-powered weapons . . .

Not to mention that our political discourse has devolved to the level of a Punch and Judy puppet show.

I hate it when a tragic event prompts people with agendas to exploit it to advance their personal cause du jour, but . . .

I believe it's time to consider the culpability of some less-acknowledged factors when it comes to America's epidemic of violence and criminality.

A recent study demonstrated that ultra-processed food makes up almost two-thirds of the calorie intake of UK adolescents; not to be outdone, stateside that percentage is estimated to be 60-90%.

That means that our young people, and people without the means to access healthy foods, are relentlessly exposed to food bereft of key nutrients for brain health, laced with chemicals that damage the microbiome and undermine the gut-brain axis, and with deleterious impacts on brain energy because of their refined carbohydrate predominance.

No wonder our kids are distracted, anxious, depressed, sometimes suicidal and violent.

Let me lay out the evidence.

Among the most crucial nutrients linked to aggression and violent behavior are the Omega-3 fatty acids. Ultra-processed foods deliver negligible amounts of EPA, DHA, and their precursor, ALA.

In 2006, the British newspaper the *The Guardian* headlined: "Omega-3, junk food and the link between violence and what we eat". The article profiles reformed career criminal Russell Demar:

"Demar has been taking part in a clinical trial at the U.S. government's National Institutes for Health, near Washington. The study is investigating the effects of omega-3 fatty acid supplements on the brain, and the pills that have effected Demar's 'miracle' are doses of fish oil."

Demar is quoted in the article:

"My dome is working. They gave me some kind of pill and I changed. Me, myself and I, I changed."

A trial at the UK prison at Aylesbury showed:

". . . when young men there were fed multivitamins, minerals and essential fatty acids, the number of violent offenses they committed in the prison fell by 37%."

As a result, researchers have been granted ethical approval to give Omega-3 to inmates in five Australian prisons to see if the supplement can help curb violence and improve mental health.

And this year, a meta-analysis verified that:

" . . . omega-3 could reduce 'reactive aggression,' which is manifested by impulsive responses to provocation, and 'proactive aggression,' which is predetermined or 'predatory,' as the study says."

And, in fact, blood tests confirm a relationship between deficits of Omega-3s in prisoners and levels of aggression and attention deficit disorder; inmates with lower omega-3 index were more aggressive and had higher ADD scores.

People make light of the “Twinkie Defense” which has become synonymous with frivolous legal arguments. It was invoked by the assassin of San Francisco Supervisor Harvey Milk and Mayor George Moscone in 1979. Dan White’s attorney called as a witness for the defense a psychiatrist who testified that the shooter was depressed at the time of murders; previously a fitness fanatic and health food acolyte, he had lapsed into consumption of junk food and sugar-laden sodas. This was to support a defense of “diminished capacity”, a legal term for temporary insanity.

Despite the disrepute of the Twinkie Defense, **diabetic rage** is a thing:

“Numerous physical functions underlie the violent nature of diabetes . . . Diabetic rage can lead to violence against property and people.”

Fluctuations in blood sugar can raise cortisol, damage the amygdala—the brain’s emotional control center—and impair the functioning of the forebrain, which is responsible for impulse control.

And you don’t have to be diabetic to experience it. Peaks and valleys of glucose can cause mood swings in ordinary folks—hence the famous “Hangry” campaign for Snickers. But the solution isn’t to reach for a candy bar that only perpetuates roller-coaster glucose.

When it comes to convoluted rationalizations for murder, the Twinkie Defense doesn’t even take the cake (sorry!). There’s **the wrongful death suit** brought by the widow of shooter James Huberty, who killed 21 and wounded 15 in a 1984 rampage:

“Huberty’s widow and children unsuccessfully sued his former employer and McDonald’s, claiming that the MSG in its food, which Huberty regularly ate, and several heavy metals he was exposed to as a welder ‘combined to cause the violent outburst’.”

Not surprisingly, they lost the suit.

It’s a stretch to claim that MSG turns people into homicidal maniacs, but there’s substantial evidence that lead exposure alters mental performance—it was thought to have contributed to the murderous escapades of Roman emperors who preferred their wine leaded.

And indeed, a 2023 meta-analysis concludes:

“Our review, in conjunction with the available biological evidence, suggests that an excess risk for criminal behavior in adulthood exists when an individual is exposed to lead in utero or in the early years of childhood.”

We’ve long been cognizant of the gut-brain axis; this has led to the concept of “psychobiotics”, or feel-good probiotics that can alter mood. New research suggests that the propensity to depression, anxiety, Parkinson’s Disease and autism may be predicted by comprehensive microbiome analysis.

But is there a gut link to aggression? Surprisingly, **pre-clinical research** in animal models suggests *there is*. Deficits of certain beneficial bacteria can be found in the intestines of aggressive animals. Use of antibiotics appears to deplete intestinal flora supportive of critical neurotransmitters like dopamine, with adverse impacts on behavior. So, too, with ultra-processed foods. It’s no coincidence the acronym for the Standard American Diet is “SAD”.

Finally, there’s the persistent theme that many mass-shooters have been found to

have been under the influence of psychiatric medication. It's obvious that correlation is not causation; while the vast majority of persons with psychiatric disabilities are non-violent, a minority lack the restraint to curb aggressive impulses—on or off drugs.

But it's been argued that anti-depressants, which blunt emotions, have the ability to turn off people's normal reticence to take lives. Adolescents with psychiatric problems whose feelings are blunted by meds can be transformed into conscience-less stone-cold killers.

A 2015 study found, *"there was a significant association between SSRIs and violent crime convictions for males aged 15 to 24."*

A 2006 review opined on the biological plausibility of violence facilitation by psychiatric drugs:

"Mechanisms linking antidepressant treatment, rather than the condition, to adverse behavioral outcomes include akathisia, emotional disinhibition, emotional blunting, and manic or psychotic reactions to treatment. There is good evidence that antidepressant treatment can induce problems such as these and a prima facie case that akathisia, emotional blunting, and manic or psychotic reactions might lead to violence."

There's a medical discipline called forensic psychiatry. Some mental health professionals specialize in psychological postmortems—investigations to assess the mental states and antecedents driving the deaths of suicide victims or mass-shooters.

I maintain that a thorough-going bio-medical and nutritional "autopsy" should be brought to bear in cases like that of the dead would-be Trump assassin. What was he eating? What secrets do blood tests or tissue samples reveal about his nutritional status? Were his lead levels high? Was he on psychiatric medication?

None of this absolves the moral depravity—or dark political motives—that would prompt an individual to attempt to kill a presidential candidate, while inflicting grievous collateral damage on innocents in the crowd. But insights gained from a comprehensive analysis would help in a multi-pronged effort to address the root causes of America's epidemic of violence.

Pioneering nutritional scientist Alex Schauss was prescient when he authored a monograph in 1980 entitled *"Diet, Crime and Delinquency"* under the auspices of the U.S. Department of Justice:

"Thus, a substantial body of evidence indicates that diet, toxic metals, food additives, insufficient nutrients, food allergy, lack of exercise, and malillumination can all contribute to criminal behavior. Evidence is mounting that a good diet makes a positive difference when working with some offenders. The book recommends that, in all criminal cases, the offender's diet and metabolism should be examined before treatment is chosen, particularly for juvenile first offenders."