

Junk science report card

By Gil Ross — August 4, 2015

The American Council on Science and Health (ACSH) has since 1978 been single-mindedly devoted to debunking health and science nonsense purveyed by agenda-driven activists and demagogue politicians, eagerly abetted by the sensation-seeking media. We call such tripe "junk science."

Over the past two years, we have published major peer-reviewed studies on three important topics: agricultural biotechnology (commonly referred to as "GMOs"); nicotine and health, an understanding of which is key to figuring out how to deal with our nation's #1 public health problem, smoking; and high-volume hydraulic shale fracturing to harvest the huge volume of natural gas (and other "fossil fuels") contained therein: commonly known as "fracking." This will be an overview of how we're doing, message-wise.



[1]

Frankenfood: Is there any reason for concern?

The "GMO controversy": this is possibly the [most scientifically clear-cut](#) [2] of the topics at hand. The lack of health threat underlying this technology is simplistically obvious to anyone with a high-school knowledge of biology and genetics, and an open mind: microscopically precise gene-transfer is orders of magnitude more predictable than the age-old process of plant breeding. Further, empirically, the near-twenty years of planting, harvesting and consuming genetically-engineered food and products derived therefrom have led to exactly zero instances of GMO-related harm to man nor beast. The good news: almost all the mainstream media have acquiesced in the consensus endorsed by every authoritative scientific body: GMO products are safe, for humans, animals and the environment.

The bad news: agenda-driven anti-technology groups, helpfully encouraged and often funded by the rent-seeking Big Organic trade groups and a stubbornly-luddite group of media "experts" (Mark Bittman and a certain TV doctor-pitchman come to mind) have persuaded a significant number of Americans that GMOs are not to be trusted. They warn of insidious health effects from GMOs (covered up by Big Ag Chemical and the USDA-FDA conspiracy), animal species destruction, super-weed overgrowth; or they resort to simple-minded "anti-Monsanto" rhetoric. Their

Frankenfood mantra has maintained traction in much of Europe, where consumer fears run deeper than here: the anti-GMO "concerns" in America are wide but not deep, and survey responses do not reflect most Americans' shopping patterns. That might have changed somewhat if the "Just Label It" movement had won any of the three statewide referenda (they didn't), and now the so-called DARK Act may well have precluded that skull-and-crossbones message.

E-cigarettes. Cessation aid or "Gateway" to smoking?



[3] On to another phony controversy: tobacco harm reduction, with

"e-cigarettes" as the shorthand, to include vapor products. Three-quarters of our nation's 43 million smokers wish to quit but only a tiny fraction succeed; almost half a million die prematurely, over half of all regular smokers succumb from smoking-related ailments. The FDA-approved cessation aids patches, gum and drugs fail 9 times out of 10. Yet, the low-risk nicotine-delivery products e-cigs and vapor devices have been routinely demonized by an entrenched "tobacco control industry" working hand-in-hand with governments raking in billions of cigarette tax dollars and academic centers and NGOs on the Big Pharma take.

What's the scorecard in this high-stakes area of public health? Officially, bleak: the FDA, CDC, NGOs all denounce reduced-harm products, and the proposed FDA regulations would devastate the nascent industry, if enacted as drafted. The facts on the ground tell a [more optimistic tale](#) [4]: sales of e-cigs and vapor products continue to escalate while cigarette sales decline. The exaggerated concerns of officials are daily shown to be baseless, especially the "gateway to smoking" myth, as teen smoking plummets to levels never before recorded. If they escape hyper-regulation, these products will underwrite a major improvement in public health as the smoking rate and its attendant toll declines. In essence, the horse has departed the barn: even if "tobacco control", the FDA, and the EU's regulatory maze tries to impede progress in this area, smokers worldwide have gotten the message: there is no need to get your nicotine mixed with deadly addictive smoke. They will find a way to purchase or craft e-cigarette/vapor devices one way or another, legally or on the black market.



[5] **What the frack? How come shale gas exploration is**

dangerous--only in New York?

Fracking, the "shale gas revolution," is less significant as an urgent public health issue than smoking. But the distortion of science in service to political ideology is representative of so many other issues ACSH takes on, and public health parameters often rise and fall in tandem with overall economic health, this topic is clearly within our purview.

Thanks to the exploitation of the vast quantities of natural gas (and other fossil fuels) previously trapped within two-mile deep shale deposits, our nation now produces more natural gas than anyone else except Russia and we will soon surpass those Putinistas too. While the geopolitical benefits of loosening the hold petro-despots have had on our economy for decades (remember the gas lines of the 1970s?), the economic benefits in terms of resurrecting downtrodden rust belts and rural regions are a godsend to those regions with shale deposits. One major exception, of course, has been the refusal of [New York State's "leadership"](#) ^[6]to allow hydraulic shale fracturing within its borders despite the clear need for and desire for such investment among the depressed Southern tier and Appalachian residents. The governor and his elitist left-wing base stand in the way of progress and economic rebound, basing (to a large degree) their regressive stance on imaginary health concerns. These were dutifully reported by the governor's puppet Commissioner of Health Zucker, invoking the precautionary principle at every opportunity as pseudo-justification, and then the coffin was recently sealed by the NRDC's contribution to New York's environmental oversight, when Joe Martens signed the ban and went back to his pals.

Thankfully, wiser heads have generally prevailed on this subject: despite ongoing demonstrations fomented occasionally by the likes of NRDC and similar "environmental" activists, and confirmed low-grade earthquake activity (mainly in Oklahoma) linked to wastewater injection, fracking technology continues apace in many states, pumping out much-needed, clean energy (remember, until fracking approached New York, natural gas was the greenies' poster child). The recently-released EPA report absolving fracking of groundwater contamination the other ostensible concern voices by "fractavists" would be helpful in a world where ideologues gave any credence to sound science as a basis for public health policy. I should note that the EPA assessment comports nicely with our ACSH publication on "Fracking and Health", which documents the lack of official reports of water contamination in any of the states (in the northeast Marcellus shale region) where fracking is going on.



**THE BOTTOM LINE
REPORT CARD**

ISSUE	ISSUES	GRADE	COMMENTS
AGRICULTURE	AGRICULTURE	A-	SEE THE BOTTOM LINE
AIR	AIR	A-	SEE THE BOTTOM LINE
BIOTECHNOLOGY	BIOTECHNOLOGY	A-	SEE THE BOTTOM LINE
ENERGY	ENERGY	A-	SEE THE BOTTOM LINE
FOOD	FOOD	A-	SEE THE BOTTOM LINE

[7] **The Bottom Line:** While the fringe activists continue to rail

against a spectrum of allegedly deadly chemicals in our environment, and the media seems to be always warning us of imminent doom, in areas where it really matters, there has been slow but steady, incremental progress in several areas of science-based public health policy. The American people the consumer if you will has caught on at last to the "sky is falling" manipulations of the scaremongers and seems to be paying less and less attention to the repetitive alarms emanating from well-known "consumer" groups. Nevertheless, one thing is certain: they will not go away not as long as there is publicity to be garnered from science-free press releases and donations to be collected from frightened folks demanding to be led to "safety" in a chemical- and risk-free world, that will never exist. That's what we here at ACSH are for, to remind them.

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