

Don't eat your organic veggies

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Any shopper can tell that organic fruits and vegetables are expensive. Now a peer-reviewed academic study tells us that they're no more healthful than conventional products.

Researchers at Stanford University's Center for Health Policy analyzed 237 studies in the scientific literature for evidence that organic foods are safer or healthier. They found that fruits and vegetables that met the criteria for "organic" are on average neither more nutritious than their far cheaper conventional counterparts nor less likely to be contaminated by pathogenic bacteria like *E. coli* or *Salmonella*.

Many folks buy organic to avoid exposure to harmful levels of pesticides. Bad idea: Yes, nonorganic fruits and vegetables had more pesticide residue, but more than 99 percent of the time the levels are below the permissible, very conservative safety limits set by regulators.

Ironically, the designation "organic" is itself a *synthetic* bureaucratic construct that makes little sense. It prohibits the use of synthetic chemical pesticides — *except* for a long list of **exceptions** detailed in the Organic Foods Production Act.

Moreover, the definition permits most "natural" pesticides (and also OKs the use of pathogen-laden animal excreta as fertilizer).

These permitted pesticides can be toxic. As evolutionary biologist Christie Wilcox explained in September in a *Scientific American*

article: “Organic pesticides pose the same health risks as non-organic ones. No matter what anyone tells you, organic pesticides don’t just disappear. Rotenone [a common organic pesticide] is notorious for its lack of degradation, and copper [another one] sticks around for a long, long time.

“Studies have shown that copper sulfate, pyrethrins, and rotenone all can be detected on plants after harvest — for copper sulfate and rotenone, those levels exceeded safe limits.”

In fact, there is a well-known association between rotenone exposure and Parkinson’s Disease.

Another issue: The vast majority of pesticidal substances that we consume occur in our diets “naturally,” and are present in organic foods as well as conventional ones. UC/Berkeley biochemist Bruce Ames and his colleagues found that “99.99 percent (by weight) of the pesticides in the American diet are chemicals that plants produce to defend themselves.” And: “Natural and synthetic chemicals are equally likely to be positive in animal cancer tests.”

Thus, consumers who buy organic to avoid pesticide exposure are focusing their attention on just a one-hundredth of a percent of the pesticides they consume. And the animal testing that causes concern about man-made pesticides should raise as much worry about far more common, and fully “organic,” natural pesticides.

But isn’t buying organic better for the environment? Nope. The low yields of organic agriculture — typically 20 percent to 50 percent lower per acre than conventional agriculture — impose various stresses on farmland, and especially on water consumption.

The government definition of “organic” isn’t focused on the composition, quality or safety of the actual food; it is essentially a set of acceptable practices and procedures that a farmer *intends* to use. So, for example, chemical pesticide or pollen from genetically engineered plants wafting onto an organic crop on an adjacent field doesn’t cause the harvest to lose its organic status.

Organic imports also carry a human toll. As Missouri farmer Blake Hurst **notes**, “In the many places around the world where organic

farming is the norm, a large proportion of the population is involved in farming. Not because they choose to do so, but because they must. Without pesticides, hand weeding is the only way to protect a crop.” And, the back-breaking drudgery of hand-weeding typically falls largely to women and children.

Save your money. It's more cost-effective, environmentally responsible and humane to buy conventional food than the high-priced organic stuff.

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