

# GMO non-browning apples: A risky solution to a non-problem

Hey, food industry—here are some free GMO ideas: pre-salted peanuts; fluorescent, glow-in-the-dark blueberries, hickory-flavored peas, oregano-infused tomatoes . . .

You get the idea. Frivolous things we don't need. But Canadian biotech company Okanagan has just garnered approval for a new GMO "Arctic" apple, which resists browning.

Not that this is the solution to the problem of world hunger, as is sometimes extravagantly claimed as justification for GMO technology.

It's merely to enhance the cosmetic appearance of a consumer staple, and to overcome people's conditioned repugnance for "imperfect" produce.



I get why they're doing it. Producers want to avoid waste; it's about the bottom line. Capitalism and free market economics at work.

But it's not a free market when people can't make informed consumer choices. Referenda in several states to "allow" GMO labeling were recently repulsed by concerted PR campaigns bankrolled by Big Agri-Business.

And while a law allowing GMO labeling was passed in Vermont, the courts are threatening to overturn it.

And now, Federal legislation to prevent labeling of GMO foods (the DARK Act) threatens to deprive consumers of the right to make informed choices.

Regulation impedes the free dissemination of information, which is essential to the operation of a truly "free" market. True to the spirit of American capitalist enterprise, how 'bout some "laissez faire" with truthful disclosure?

The problem is that industry's imperatives diverge from the proper aim of food suppliers: the provision of fresh, healthy, affordable food for the American people. The public is being misled to equate a perfectly symmetrical, unblemished apple with "quality."

Some predict that instead of enhancing apple sales, the introduction of unlabeled GMO apples will confuse consumers, and drive them away from conventional apples altogether. Organic, anyone?

McDonald's and Gerbers, to their credit, have already said no to GMO apples.

And foreign countries, always eager to enact protective trade barriers to buttress domestic producers, will doubtless nix the new apples en masse, curbing US exports.

Call me a contrarian, but I like gnarly, imperfect apples. The scars they bear reflect a plant's normal response to environmental stress. Extremes of temperature, insects, even occasional droughts all rev production of phytoalexins, a family of valuable natural polyphenols that includes resveratrol. That's why organic produce, grown with fewer pesticides, artificial fertilizers and fungicides, packs more nutritional value than conventional produce.

Instead of protecting plants, the mutation that prevents apple browning renders the

plants more susceptible to insect and microbial predators. This necessitates application of even more chemicals during cultivation—residues of which we ingest when we eat the apples.

What might be the effect on the human GI tract of an apple that doesn't decompose normally? Could it resist normal digestion and give rise to proliferation of harmful bacteria? Who knows?

Because, remarkably, the approval of this novel food was not predicated on human safety trials, but rather on the FDA's vague finding that it didn't pose a threat to other plants or agricultural products! You see, ensuring the new GMO apple is safe for actual people to eat is optional, according to arcane Government rules.

Some agricultural scientists have expressed concern that the novel DNA in the apples might not be degraded in the human GI tract, but instead might be incorporated into human or bacterial cells with unknown health consequences.

Farmers are worried about cross-contamination with non-GMO apples (**GMO apples Fact Sheet**). What's the big deal with tarnished apples? When my sliced apples brown, I just peel and boil them, add a dash of cinnamon, run 'em through a Foley food mill or a food processor, and voilà—homemade apple sauce!

Plus, you don't need risky gene manipulation to keep your apples from browning. The Internet **abounds with tips**, including how to make a homemade application of lemon juice with a pinch of added ascorbic acid powder. There's even a safe, natural product that prevents fruit from oxidizing: "Fruit-Fresh" by the canning company, Ball.

So please, don't mess with our apples! At the very least, label the GMO ones so we can avoid them! The GMO apple represents everything that's wrong with our modern food system.