

McDonald's mulling embrace of Simplot's bruise-reducing Innate GMO potato

What will McDonald's do?

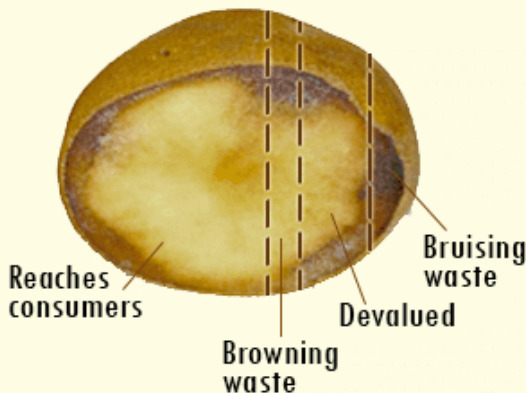
What Are The Differences Between A Conventional Potato And A Simplot Innate™ Potato?

The U.S. produces over 40 billion pounds of potatoes a year.

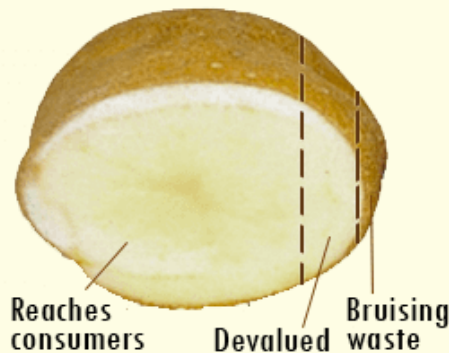


Simplot Innate potatoes are genetically modified using only potato genes to resist wasteful potato bruising and browning without affecting taste or nutrition.

Conventional



Simplot Innate



If all Fresh Russet potatoes were Simplot Innate potatoes, the U.S. would have saved **400 million lbs** of potato waste each year.

That means also saving:



\$90 million in producer costs



60 million lbs of CO₂ emissions



6.7 billion gallons of water



170,000 acres from pesticide sprayings



ered potato with two
otato resists bruising, which
es not impact the quality of the
acrylamide when fried.
dence that it poses harm to

ventional potatoes:

The Innate is, in theory, perfect

for food giants that use a lot of potatoes, particularly fast food giants and chip companies, but history and the ongoing controversy over GMOs suggests that McDonald's will move cautiously.

As the Genetic Literacy Project previously [noted](#), the Innate is one of numerous GMO potatoes in development. Farmers could benefit from the results of a three-year trial on genetically modified potatoes resistant to blight released earlier this year. The results were published in the journal [Philosophical Transactions of the Royal Society B](#) and was part of an EU-wide investigation into the potential for biotechnology to protect crops, led by scientists at the John Innes Centre and the Sainsbury Laboratory. Researchers added a gene to Desiree potatoes, from a South American wild relative of potato, which triggers the plant's natural defense mechanisms by enabling it to recognize the pathogen.

In 1998, Monsanto introduced NewLeaf potatoes, which were engineered to repel a pest called the Colorado potato beetle. But NGOs launched a demonization campaign, [persuading](#) McDonald's and Frito-Lay to tell their suppliers, including Simplot, not to grow the NewLeaf potatoes. Monsanto subsequently withdrew from the potato business, and the first GM potato died. This time, Simplot, a long-established power in the potato business, is the prime mover and presumably would not have moved forward without positive signals from McDonald's and others. We'll see.

"The potato is one of a new wave of [genetically modified crops](#) that aim to provide benefits to consumers, not just to farmers as the widely grown biotech crops like herbicide-tolerant soybeans and corn do," notes [The New York Times](#).

"The non-browning aspect of the potato is similar to that of genetically engineered [non-browning apples](#), developed by Okanagan Specialty Fruits, which are awaiting regulatory approval. These consumer focused innovations have anti-GMO campaigners on the defensive, as one of their central talking points is that GM has focused on commodity crops, like corn and soybeans.

Food and Water Watch and the Center for Food Safety (CFS) have led the attack against Innate and Arctic Apple, alleging unknown possible health risks that no study or science oversight agency has found. Neither the new GMO potato nor the nonbrowning apple were modified using so-called "foreign genes"—genes from another species. Because all life share common ancestors, scientists put no stock into "foreign gene" scaremongering, but it's a popular talking point for anti-GMO activists.

"We think this is a really premature approval of a technology that is not being adequately regulated," said CFS' Doug Gurian-Sherman, adding that his group might try to get a court to reverse the approval of the potato.

Arctic apple uses what's called an apple-to-apple transformation," turning down the expression of the genes that turn the apple brown in a process called gene silencing—a natural process that all plants (and animals too) use to control expression of their genes. Similarly, the Innate contains fragments of potato DNA that silences genes involved in the production of certain enzymes.

“We are trying to use genes from the potato plant back in the potato plant,” Haven Baker, who is in charge of the potato development at Simplot, told the *Times*. “We believe there’s some more comfort in that.”

Both crops offer considerable sustainability advantages, reducing food waste, purportedly a goal of food and consumer based NGOs:

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