Consumers’ Willingness to Pay for New Genetically Modified Food Products: Evidence from Experimental Auctions of Intragenic and Transgenic Foods

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Abstract: Early GM traits were obtained by transferring genes across species, largely from soil bacteria. Part of the consumer resistance to them has been their transgenic nature. Recently, breakthroughs have occurred using intragenic bioengineering where genes are moved long distances within a specie, for example in potato, and without antibiotic markers. The objective of this research is to assess consumers’ acceptance and willingness to pay (WTP) for new intragenic fresh potato, tomato, and broccoli with higher levels of antioxidants and vitamin C, which are consumer traits. To elicit consumer valuations, a new series of experimental auctions were conducted in 2007 that built upon methodology developed in our earlier research. WTP was assessed in a multi-round n-th price auction with seven labeling treatments and five information treatments. We show for the first time that consumers are willing to pay significantly more for intragenic GM vegetables with enhanced levels of antioxidants and vitamin C than for a plain-labeled product and marginally more than for a GM-free product. Supporting earlier research, consumers’ WTP for GM food products is affected by the type of information available to them when they are making their decisions. The findings suggest potential success for future intragenic GM fresh produce.

Key Words: GM foods, consumer attributes, willingness to pay, economics experiments

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