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**“Effects of information on Consumers’ willingness to pay for second-
generation genetically modified food products in Chile”**

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ABSTRACT

Public acceptance of genetically modified (GM) food appears to be highly affected by cultural issues. European consumers are usually reported to be less accepting of GM food products compared to those in the US. Less information about consumer’s acceptance in low-income or developing countries is available. Most of the research regarding consumers’ willingness to pay (WTP) has focused on first-generation GM products, which have little or no direct benefit to consumers. It is believed that consumers will be more accepting of second- generation GM products that offer direct benefits to consumers (e.g., improved nutritional characteristics). Second-generation GM food products will likely have a higher cost, given that traditional non-GM functional foods currently available tend to be more expensive than regular non-enriched food products. Misinformation and/or lack of information are commonly reported to be the main reasons for low consumers’ acceptance of GM food products. Different interest groups, such as biotech companies and environmental groups disseminate information that endorses their own particular interests creating great levels of uncertainty for consumers. This creates an asymmetrical information scenario that can result in market failure. This article examines the effects of information on consumers’ willingness to pay (WTP) for second-generation GM food products in Chile. The data used in this study were collected through in-person surveys conducted in Santiago, Chile, in June of 2004. The survey contained contingent valuation questions regarding the respondents’ willingness to pay a premium or accept a discount to buy GM apples and bread made with GM wheat. Preceding the contingent valuation question, respondents were given a statement

with information regarding second-generation GM apples and bread made with second-generation GM wheat. A third of the sample population was given positive information, a third negative and a third was given no additional information.

A standard double-bounded logit model was used to examine the outcomes of the survey. The questioning sequence isolates for each information treatment the range in which the respondents' true WTP lays, placing it into one of the following four intervals: $(-\infty, B_L)$, $[B_L, B_I)$, $[B_I, B_H)$, or $[B_H, +\infty)$. The second bid, in conjunction with the response to the initial preference decision, allows for both an upper and a lower bound to be placed on the respondent's unobservable true WTP. The WTP function can then be represented as: where B is the ultimate bid amount each consumer faces, z is a column vector of observable characteristics of the individual (education, income level, family size, etc), ϵ is a random variable accounting for unobservable characteristics, and a , β , and γ are unknown parameters to be estimated.

Initial results suggest that the information provided to the respondents significantly affects their WTP. Those respondents receiving the statement with positive information required lower discounts in order to buy GM food products compared to those without information. Correspondingly, those respondents faced with the negative information set, reported to require a significantly higher discount in order to buy GM food products compared to those without information.