Consumer Acceptance of Sugar Derived from Genetically Modified Sugarcane in South Africa

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The study investigated the perceptions of and acceptance by South African consumers regarding sugar derived from genetically modified sugarcane ('GM sugar'). The results are based on a demographically representative consumer survey in the Gauteng Province of South Africa, conducted in 2017. Logistic regression models indicated that socio-economic group and age were the most significant factors explaining consumers' willingness to purchase 'GM sugar.' Product acceptance decreased with socio-economic status and age. Additional information on the potential benefits of sugar derived from GM cane increased middle-income and more affluent consumers' willingness to purchase, with the opposite effect on low income consumers. Pro-GM consumers were willing to pay an 8.7% premium for 'GM sugar,' motivated by the environmental benefits argument. Positive marketing messages focusing on the potential role of 'GM sugar' in food security improvement, food affordability, and ensuring the future of the local sugar industry should be disseminated through appropriate marketing channels as presented in this paper.

Key words: GM sugarcane, GM sugar, willingness to accept, South Africa, consumer, information, education, multinomial logistic regression, African cane borer (Eldana saccharina), insect resistant, herbicide tolerant.

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