The Effects of Labeling Cues on Sensory and Affective Responses of Consumers to Categories of Functional Food Carriers: A Mixed Factorial ANOVA Design

Authors: Hedia El Ourabi, Marc Alexandre Tomiuk, Ahmed Khalil Ben Ayed

Abstract: The aim of this study is to investigate the effects of the labeling cues traceability (T), health claim (HC), and verification of health claim (VHC) on consumer affective response and sensory appeal toward a wide array of functional food carriers (FFC). Predominantly, research in the food area has tended to examine the effects of these information cues independently on cognitive responses to food product offerings. Investigations and findings of potential interaction effects among these factors on effective response and sensory appeal are therefore scant. Moreover, previous studies have typically emphasized single or limited sets of functional food products and categories. In turn, this study considers five food product categories enriched with omega-3 fatty acids, namely: meat products, eggs, cereal products, dairy products and processed fruits and vegetables. It is, therefore, exhaustive in scope rather than exclusive. An investigation of the potential simultaneous effects of these information cues on the affective responses and sensory appeal of consumers should give rise to important insights to both functional food manufacturers and policymakers. A mixed (2 x 3) x (2 x 5) between-within subjects factorial ANOVA design was implemented in this study. T (two levels: completely traceable or non-traceable) and HC (three levels: functional health claim, or disease risk reduction health claim, or disease prevention health claim) were treated as betweensubjects factors whereas VHC (two levels: by a government agency and by a non-government agency) and FFC (five food categories) were modeled as within-subjects factors. Subjects were randomly assigned to one of the six between-subjects conditions. A total of 463 questionnaires were obtained from a convenience sample of undergraduate students at various universities in the Montreal and Ottawa areas (in Canada). Consumer affective response and sensory appeal were respectively measured via the following statements assessed on seven-point semantic differential scales: 'Your evaluation of [food product category] enriched with omega-3 fatty acids is Unlikeable (1) / Likeable (7)' and 'Your evaluation of [food product category] enriched with omega-3 fatty acids is Unappetizing (1) / Appetizing (7).' Results revealed a significant interaction effect between HC and VHC on consumer affective response as well as on sensory appeal toward foods enriched with omega-3 fatty acids. On the other hand, the three-way interaction effect between T, HC, and VHC on either of the two dependent variables was not significant. However, the triple interaction effect among T, VHC, and FFC was significant on consumer effective response and the interaction effect among T, HC, and FFC was significant on consumer sensory appeal. Findings of this study should serve as impetus for functional food manufacturers to closely cooperate with policymakers in order to improve on and legitimize the use of health claims in their marketing efforts through credible verification practices and protocols put in place by trusted government agencies. Finally, both functional food manufacturers and retailers may benefit from the socially-responsible image which is conveyed by product offerings whose ingredients remain traceable from farm to kitchen table.

Keywords: functional foods, labeling cues, effective appeal, sensory appeal

Conference Title: ICMMS 2018: International Conference on Marketing and Management Sciences

Conference Location : Dublin, Ireland **Conference Dates :** July 23-24, 2018