

**Does Introduction of Food Innovations in the Out-Of-Home Market Affect
Consumers' Acceptance of New Food Products?**

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Abstract

This study explains how introducing new food products in food facilities or company restaurants might help to create awareness and adoption intention towards these products for use in the home situation. As such, we argue that the out-of-home situation can be used to introduce food innovations and facilitate their acceptance when offered in retail locations. The conceptual model shows the importance of marketing communications, the social environment, as well as the match between the out-of-home situation and the situation in-home. An experimental study is used to test the hypotheses.

Keywords: Acceptance of New Food Products, Out-of-Home, Company Restaurants, Contextual Influences, Product Involvement, Domain Specific Innovativeness

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INTRODUCTION AND OBJECTIVES

There are several examples of food innovations that are first introduced within food facility sites such as canteens or company restaurants before offering them within the retail for in-home consumption. Two recent examples of successful products that followed this strategy are sushi and fresh fruit juice. These examples show that introduction of new products in food facility sites can help to boost the individual acceptance of new products for use at home, because consumers get in direct contact with the new product in the company restaurant. In the end, this would stimulate demand for the new product within the retail. Moreover, from the point of view of food companies, first launching new products within the out-of-home market provides the opportunity to market the product on a relatively limited scale and keeping production and introduction costs restricted. Notice that in this study, the out-of-home situation refers to food facility sites such as canteens or company restaurants. We do not focus on regular restaurants, bars, and other catering industries.

As mentioned, introducing new products in food facility sites before introducing them in the retail seems a plausible and relatively safe introduction strategy for food companies. However, although common practice, to the best of our knowledge there are no studies that examined from a consumer point of view how the introduction of new food products out-of-home might help to facilitate the individual acceptance of new food products in-home. Therefore, the main objective of this study is to investigate the relationship between the introduction of new food products out-of-home and the acceptance of these food products in the home situation. In addition, this study shows to what extent this relationship might be influenced by actively promoting the new product in food facility sites. Furthermore, in this study we will show that the social context in the out-of-home situation and the situation in-home influences this transfer mechanism between the out of home experience and the acceptance of the new product. Finally, in this study we will take into account individual consumer characteristics that have shown to play a role in predicting individual adoption behavior of new products. More specifically, we investigate whether consumer involvement

and innovativeness with new food products further affects product awareness and adoption of new food products. A conceptual framework is offered in which these main variables are identified.

In addition to its managerial relevance, the contributions of this study to the academic literature are threefold. First, although there are a lot of studies on the acceptance and trial of new food products (e.g., Hollebeek et al. 2007; Steenkamp and Gielens 2003; Tuorila et al. 1998), there is no research in how trial of a new food product out-of-home might affect the decision of a consumer to use and buy this new food product in their home situation. Second, the influence of contextual factors in product evaluation and acceptance is scarcely investigated and there is an increasing call for research on these factors (Meiselman 2007). In this study we examine the role of marketing communication, the social context and the home situation in transferring consumption experience in the out-of-home situation to individual acceptance. Finally, although there is a vast body of literature that devotes attention to individual consumer characteristics that play a role in predicting individual adoption behavior of new products (e.g., Goldsmith and Hofacker 1991; Hirschman 1980; Im et al. 2003, 2007; Steenkamp and Gielens 2003), more detailed insight in whether these consumer traits also have a reinforcing effect in the transfer between the out-of-home situation and individual acceptance behavior seems to be absent.

CONCEPTUAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

The conceptual model (see Figure 1) is captured by four hypotheses that relate trial of new food products in the out-of-home situation to the acceptance of these products. In addition, these hypotheses address the effects of marketing communication of the new product, contextual influences (e.g., the social context and the home situation) and consumer characteristics. The bases for these hypotheses are explained next.

[insert Figure 1 here]

Transfer between Trial Out-Of-Home and In-Home Acceptance

The out-of-home situation is a suitable environment to facilitate the individual acceptance of new food products. Based on the literature, several reasons underlie this assumption. First,

there has been a significant increase in the number of meals eaten outside the home (Buttriss 2002). The out-of-home market is a growing market segment. As such, it is an increasingly suitable place to introduce product innovations. Second, the display of new products in food facilities and company restaurants builds awareness for the new product (Steenkamp and Gielens 2003), especially because these locations have a relatively limited assortment compared to a retail environment. This is in accordance with recent research that has suggested that increasing the size of the choice set may have adverse consequences on the strength of preferences because it can confuse consumers (Greenleaf and Lehmann 1995; Iyengar and Lepper 2000). Third, company restaurants are very well suited to try new products, i.e., consumers cannot only see the product, like in a supermarket, but even taste it. Product trial evokes cognitive processing of the brand's experiential attributes as well as emotional reactions towards the product (Kempf and Smith 1998; Mano and Oliver 1993), and is a critical factor in determining attitudes and purchase intentions (Kempf and Smith 1998; Kempf 1999). Thus, these arguments consistently suggest that confronting a consumer with a new product in a out-of-home occasions such as company restaurants results in higher awareness of the new products and subsequently a higher adoption intention of the new product. Therefore, the baseline hypotheses of this study are:

H1a: Consumers that are confronted with new food products through company restaurants exhibit higher product awareness of the new product compared to consumers who are not confronted with the product through these out-of-home channels.

H1b: Consumers that are confronted with new food products through company restaurants exhibit higher adoption intention of the new product compared to consumers who are not confronted with the product through these out-of-home channels.

Marketing Communication for the New Product

Steenkamp and Gielens (2003) argue that marketing communication affects the trial of new products. Within food services out-of-home, the way a new product is displayed and presented to customers is relevant. For example, the placement of the new product is important. Placing the product in front of other products or giving it a separate place is more effective than just putting it in between other products (Abratt and Goodey 1990). Furthermore, special point-of-purchase displays generally increase sales of the featured product or brand (McKinnon, Kelly, and Robison 1981). Given the fact that food facility sites have a limited assortment and are conveniently arranged displays will subsequently attract more attention. Therefore, we expect displays to yield more effect than when used in

supermarkets or shops. Use of different marketing promotion instruments in food facility sites thus further enhances the awareness and appreciation of the new product. Therefore, we hypothesize that:

H2a: Product awareness of the new food product is higher when the new product is promoted in company restaurants compared to when the new product is not promoted in these out-of-home situations.

H2b: Adoption intention of the new food product is higher when the new product is promoted in company restaurants compared to when the new product is not promoted in these out-of-home situations.

Contextual Influences

Contextual influences affect how new products are perceived and finally affect the adoption intention of these products in the home situation. A distinction can be made between contextual influences related to the social environment of the out-of-home location and contextual influences that are related to the in-home situation. First, the social environment refers to the number and types of other people that are present during the food consumption experience in the out-of-home situation. Previous research shows that when the number of people in someone's environment increases, people tend to feel insecure and engage in impression management (Argo et al. 2005; Schlenker and Weigold 1992). Furthermore, Fisher and Price (1992) argue that social pressure is highest when someone is surrounded by peers or important others. This may be the case when someone is having lunch with his or her colleagues in a company restaurant. In addition, in the case of new products, people feel less self-confident about making a good judgment, so they tend to seek sources that are ranked high along the criteria of accuracy, trustworthiness, bias and expertise (Jarvis, 1998). Since people have greater confidence in and attribute higher credibility to people similar to themselves, friends and associates are more likely to be solicited for information (Beatty and Smith, 1987). As such, recommendations of colleagues in company restaurants will be noticed easier than advertisements or in-store promotions.

But not only the (social) environment at the out-of-home location plays a role in creating awareness and forming an adoption intention toward the new food product, also the situation at home plays a role. When someone's situation at home differs in comparison with the out-of-home situation (for example, due to household composition), transfer of a new product experience will be hampered regardless positive evaluations the new product. For

example, when someone works in an environment with mainly male colleagues and this person has a wife and two daughters he probably will be confronted with different consumption patterns out-of-home as compared to in-home. A similar situation applies when someone who belongs to an ethnic minority works in a working environment with mainly natives. Therefore, important factors that should be included in this regard are: marital status, having children, cultural or ethnic background, and social class. In sum, the context of the out-of-home situation affects the experienced value of the product. More specifically, we state that:

H3a: The social environment (e.g., the number and type of other people that are present) moderates the positive effect of the out-of-home situation on the adoption intention of the new product in the home situation.

H3b: The match between the out-of-home situation and the situation in-home moderates the positive effect of the out-of-home situation on the adoption intention of the new product in the home situation.

Individual Consumer Characteristics

Finally, in our study we control for several individual consumer characteristics that have been shown to play a role in the acceptance of new products. First, domain specific innovativeness captures the individual's predisposition toward a specific product class and reflects the tendency to learn about and adopt new products within that specific domain of interest (Goldsmith and Hofacker 1991; Roehrich 2004). We expect domain specific innovativeness to positively affect the acceptance of new food products. Second, product involvement can be defined as the extent to which a consumer finds a specific object personally important, relevant, appealing, boring, or necessary (Zaichkowsky 1985; and Mittal and Lee 1989). Highly involved consumers have a strong interest and commitment for food products, thus we expect that they earlier intend to adopt new food products for consumption in-home. Taken together, we hypothesize that:

H4: The adoption intention of a new product (out-of-home as well as in-home) is higher among consumers who are
(a) higher on domain specific innovativeness;
(b) higher on product involvement.

METHOD

We conducted a quasi-experimental study in a real-life situation to test our hypotheses. In this experiment we test the influence of introducing a new food product in company restaurants on the acceptance of these new products. In executing the experiment, we could make use of a number of different company restaurants of a large food service company within the Netherlands. Next, we will describe the design and procedure of the experiment.

Selection of Innovation Stimuli

To test the proposed hypotheses empirically, subjects must evaluate new products that are offered or are not offered in an out-of-home location. To select appropriate innovations, we employed the following procedure. First, a list of different new food products was identified by two independent researchers by searching the Internet and product magazines. An important search criterion is that the product should be suitable for use in the out-of-home situation as well as the in-home situation. This implies that ready-to-eat or ready-to-drink products are preferred above products that are merely used as an ingredient or component. Moreover, we specifically focused on new organic food products. This allows us to capture consumer involvement and domain-specific innovativeness within a specific product category without being restricted to a single type of product. Previous research showed that organic products. After identifying suitable products, these products were then assessed in terms of availability in regular retail outlets (e.g., supermarkets). Availability of the stimuli was checked by sampling a number of supermarkets in a large Dutch city. As a result, three different new organic food products were selected: a soya-fruit drink and two types of fruit-/nut bars.

Design and Procedure

Our quasi-experimental design consists of three different conditions, i.e., no introduction of the new product at the out-of-home location, introduction at the out-of-home location without marketing promotion and introduction at the out-of-home location with promotion. We used three different company restaurant locations that were served by a food service company. At two out of three locations the three food innovations as mentioned before were introduced. At one location substantial promotion was made for the new food products. The experiment started on March 10th 2008. Two to three weeks later, we asked the users of the company

restaurants to fill out a questionnaire assessing all the other measures with regard to the research model.

Measurements

The main dependent variables (product awareness and adoption intention) were measured by two questions: (1) whether respondents know the product (and how they got acquainted with the product, for example through the supermarket, the company restaurant, advertisements, family and friends, etcetera) and (2) whether they intend to buy the product in the near future.

In addition, product involvement was measured by using two items from the scale of Lastovicka and Gardner (1979). The items were: 'Organic food products are products that interest me', and 'Organic food products are products for which I have no need whatsoever'. In addition, Domain specific innovativeness was measured using a 5-item scale based on Goldsmith and Hofacker (1991). Sample items were: 'In general, I am among the last in my circle of friends to purchase new organic food products', and 'I know more about new organic food products than other people do'. Construct reliability was determined by computing Cronbach's alphas. Preliminary analyses showed alphas of .69 for product involvement and .78 for domain specific innovativeness, which indicates that the scales used in this study are adequate measures.

Furthermore, social context was measured by controlling for the number of other people eating at the different locations as well as type of persons eating there (e.g., gender, age, etcetera). In addition, the situation at-home was measured by asking respondents after their marital status and whether they have children. Also the ethnic background is incorporated.

Finally, we measured respondent's general organic food consumption by using the following two items: 'How often do you buy organic food?' and 'How much money do you spend each month on organic food?' Preliminary analysis showed an alpha of .85. In addition, questions about the respondent's demographic background (e.g., gender, age, education, and income) were asked.

Data Analysis

In this study we conduct analyses of variance to test the hypotheses of the conceptual model. Moreover, relationships between individual characteristics and the dependent variables are captured by using (binomial) regression models.

RESULTS

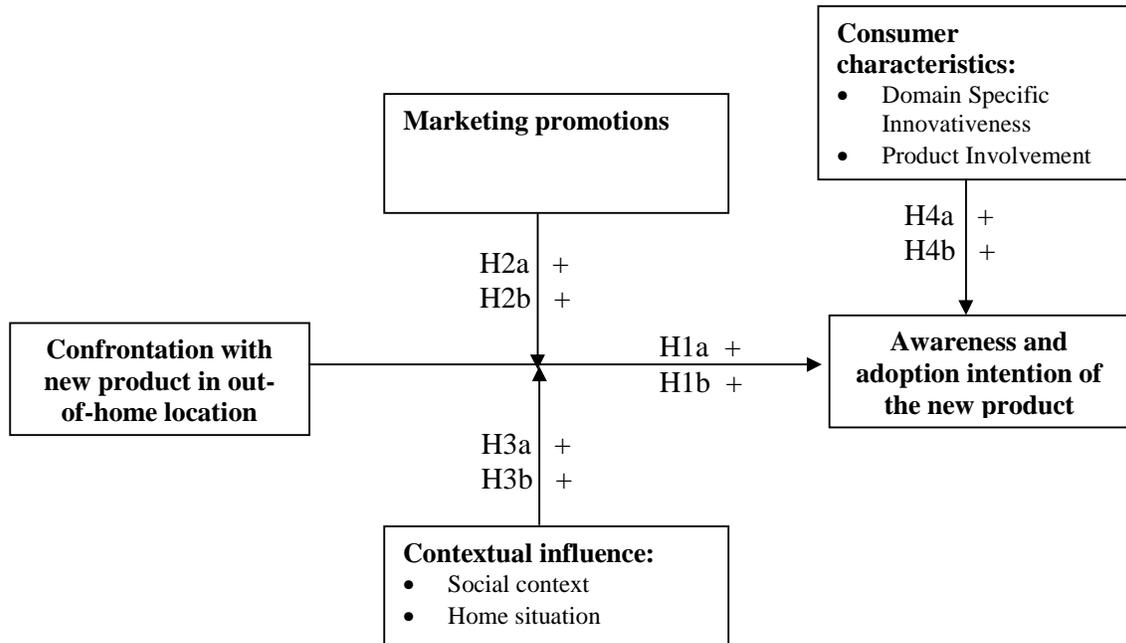
In total, around 250 consumers completed the survey accompanying the experiment. Preliminary analyses already show positive correlations between product involvement and domain specific innovativeness and purchase intention ($p < .05$), as expected in the hypotheses. However, as the experiment is just finished and data processing and analyses are currently in progress, data over the different locations cannot be compared yet. As a result, we are not yet able to formally test the hypotheses and cannot present the results. Full results are definitely presented at the IAMA conference.

DISCUSSION AND CONCLUSIONS

This study explains how introducing new products in food facilities or company restaurants might help to create awareness and strong attitudes towards these products. In a conceptual model we show that marketing communication might further enhance the acceptance of new food products. In addition, the social environment, the situation at home as well as individual characteristics play an additional role in the awareness and adoption intention for new food products introduced in the out-of-home market. An experimental study is used to test the hypotheses.

Although the specific results of the empirical study are yet unknown, a limitation of this study that can be already acknowledged is that we do not measure whether introduction in the out-of-home market indeed leads to increased sales of the focal products in the retail. Stated differently, we use adoption intention as a proxy of acceptance behavior, but we do not look at sales data of retailers. Although the relatively limited scale of the current experimental study does not allow us to check any spill-over effects to the retail, we strongly recommend that future research aims to verify the effects of out-of-home introduction of innovations on retail sales, for example by using a longitudinal design.

Figure 1: Conceptual model



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