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PhD research - provisional title: The consumer perception of nutritional risk

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Abstract

We start from a paradoxical situation: nutritional marketing is booming; yet, consumers are increasingly worried about what is on their plate. Marketing efforts seem therefore unable to allay their fears. While research on the topic is scarce, a better understanding of perceived nutritional risk and its behavioral consequences on food consumption is a major challenge for the food industry. In our PhD research, we shed light on the pivotal role of perceived nutritional risk and its implications for marketing. A literature review and 18 consumer interviews enabled us to formulate proposals on:

- the existence of a negative correlation between nutritional risk and food safety risk,
- the preeminence of naturality on nutritional claims to alleviate this perception,
- the power of local, more reassuring than standardized international brands.

At a later stage, we aim to check our hypotheses through experiments in order to come up with solutions for marketing teams to control their food products' perceived nutritional risk.

Key-words

Consumer behavior, food consumption, food risk, nutritional risk, nutritional marketing

Academic and managerial marketing issues

Nutrition and healthy eating are high on the authorities' agenda because of the increasing cost of obesity and related-chronic illnesses such as type II-diabetes, certain types of cancer, or cardiovascular diseases. This justifies the substantial amount of academic research on obesity.

As for food marketers, they are more and more concerned with these questions since they are frequently accused of contributing to obesity and bad eating habits. Public perception of nutritional risk is high and receives much media coverage. Therefore, when developing a new product, it is now usual to specify at brief stage which nutritional or health claims should be met, so that they can be advertised on the packaging and other communication tools.

Still, according to our literature review, research on perceived nutritional risk is scarce. The effects of such nutritional marketing strategies on consumers' perception are not well understood. We suspect they may be inefficient or even counter-productive, hence our research.

Research questions

These academic and managerial issues lead us to explore 3 main questions:

- Why do many consumers not believe in nutritional marketing information?
- Which factors explain consumers' perceived nutritional risk?
- In particular, how does marketer-generated information affect consumers' perception of nutritional risk and how can marketing bring it down (in the case of food companies) or increase it (possibly in the case of public policies)?

Literature review

To better understand the perception of nutritional risk by consumers, we went through a literature review on the following themes:

- Food sociology, with e.g. Fischler or Rozin. They show the particularity of food in the
 world of fast-moving consumer goods, because of the "principle of incorporation" and
 the inherent risk associated with food consumption.
- Perception of risk, with e.g. Tversky & Kahneman or Kasperson, Slovic & al. Their theories (respectively prospect theory and social amplification of risk framework) underline that perceived risk is both objective and subjective. This explains the difference of perception between experts and the public and in our case, between marketers or nutritionists and consumers.
- Food risks, with e.g. Aurier & Sirieix or Ferreira. They show that food risks mainly consist of two physical risks: food safety risk (short-term poisoning risk) and nutritional risk (long-term impact on our health and well-being).
- Nutritional marketing, with e.g. Keller & al., Kozup & al., Nestle, Verbeke, Wansink
 & Chandon. They study the impact of nutritional claims or communication on consumer behavior.
- Marketing credibility, with authors like Singh & Sirdehmukh, Brownell & Warner,
 Arora & Arora. They explain why marketing can lack credibility as a source of information.

Theoretical framework and hypotheses

We propose to use two main theories:

- Prospect theory (Tversky and Kahneman): it shows in particular the importance of framing and source on risk perception.
- Source credibility: because of marketers' ulterior motive, nutritional claims per se raise consumers' suspicion. The latter are now more and more educated and fully aware of marketing vested interest.

Based on these theories and on our literature review, we propose that marketers-generated nutritional information is less efficient than third-parties-generated information and can even be counter-efficient. This leads us to the following hypotheses:

- ⇒ H1: The more nutritional claims on a product, the higher its perceived nutritional risk.
- ⇒ H2: The more natural a food product is considered, the lower its perceived nutritional risk.
- ⇒ *H3*: Local food products have a lower perceived nutritional risk than products from internationally-renowned brands.

Proposed methodology

After our literature review and prior to testing the above theory-based hypotheses, we chose to explore the perception of nutritional risk among consumers through a qualitative research. Such a study anchors our research in the real world and will provide new exploratory hypotheses. Indeed, we believe in the advantages of using a dialectical approach as recommended by Bachelard, based on both rationalism and empiricism. Rationalism enables scientific validation, while empiricism ensures the research is applicable to the real world.

For this qualitative research, we interviewed 18 consumers. We are now (in September 2011) in the process of analyzing their transcription, first transversally through "free-floating attention" (Hervé Dumez quoting Erikson), and then through systematic coding using In-Vivo.

The question of nutritional risk is complex and confronts people with taboos, such as illness, death, body appearance, compulsive food consumption, etc... As a result, we chose to interview consumers individually in their own kitchen for them to feel as relaxed and at ease as possible. This also enabled us to double-check their declarations. Indeed, we asked them to show us the content of their fridge and cupboards, and to give us the food shopping receipts they gathered for a few weeks. Each interview lasted for about one hour and a half. We ensured we interviewed men as well as women, of different ages, work and social conditions, living in cities and in the countryside. The first part was non directive on the theme of food fears. The second part was semi-directive and used projective technics showing photographs of famous totemic dishes such as cassoulet or sauerkraut, and illustrating different situations (health, illness, overweight, conviviality, anxiety, joie de vivre, etc...). This methodology enabled us to go beyond a cognitive approach and get a feel of the emic, i.e. the meaning consumers give to their behavior (Arnould & Wallendorf 1994).

In a third stage, we will test our theoretical and exploratory hypotheses through experiments using a quantitative approach.

Anticipated results and preliminary findings

Our first results confirm the above mentioned hypotheses so far. In particular, a natural positioning seems to efficiently reduce perceived nutritional risk:

- Indeed, most of the time, the interviewed associated pictures of local dishes with photographs expressing positive situations. They mainly picked up conviviality, taste or joie de vivre.
- On the opposite side, the presence of nutritional and health claims on a food product, and generally speaking a technical / scientific marketing positioning raised suspicions: "this product is transformed and unnatural"; "the company has things to hide".

Another key-learning of our qualitative research is that people perceive a higher nutritional risk for food products when they eat them alone rather than sitting together with family or friends. Conviviality seems to decrease the perception of nutritional risk. Conviviality seems to include both the pleasure of eating and the fact of sharing the food – commensality. This generates 2 new hypotheses:

- \Rightarrow H4: The more pleasure people find in eating, the lower the food's perceived nutritional risk.
- ⇒ H5: People perceive a lower nutritional risk when they share a product with table companions rather than when they eat alone.

Moreover, home-made seems to decrease the nutritional risk perception. For instance, the interviewed who thought the chocolate pudding shown on the picture was industrial gave it high nutritional risk, whereas those who thought it was home-made associated it with positive feelings.

⇒ H6: The more home-made a product is judged, the lower its perceived nutritional risk.

Another finding is that consumers do not think of nutritional risk when they have little food choice. For instance, those who lived during Second World War have no worry about the nu-

tritional aspect of their food, even today. On the contrary, people mentioned that when they are confronted with a broad choice of brands for one type of product, they come to compare them and wonder about the nutritional aspect.

 \Rightarrow H7: The broader food choice available, the higher perception of nutritional risk.

Conclusion

Our literature review and qualitative research confirm our suspicions that nutritional claims or communication raise perceived nutritional risk instead of diminishing it. Indeed, they point to transformation processes and presence of ingredients which may be seen as unnatural. If our quantitative experiments support these findings, we expect to come up with a striking counter-intuitive theoretical and managerial contribution.

Expected theoretical and managerial implication and anticipated contribution to knowledge

From a theoretical standpoint, such a research contributes to consumer behavior knowledge. It will better define perceived nutritional risk and its implications on food consumption behavior.

On the managerial side, we believe that this research will reveal new creative solutions for marketers to reduce the perception of nutritional risk by consumers. It will also help authorities to design more efficient campaigns on nutrition.

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