



The naturalness of food products – a multimedia approach for better understanding consumers' perceptions and behaviours

Duration: 2019–2022

Highlights

- In recent years, consumers have shown a growing interest in so-called natural products (Amos et al., 2014; Rozin, 2005; Siipi, 2013), which are associated with health and healthy food.
- Since the concept of naturalness is not clearly defined, it is important to understand how businesses operating in the food industry convey information on naturalness to consumers, how consumers perceive it, what factors influence those perceptions, and what effects these processes have on their behaviour.
- To answer these questions, a scale for measuring naturalness was created. An experimental study of 120 participants was then conducted to identify the primary determiners of the perceived naturalness of 20 products from 4 different categories: milk products and alternatives, meat, grain products, and fruits and vegetables.
- To measure the effect of various information on perceived naturalness that is placed on packaging, the number of visual or written references to “natural, organic, authentic, fresh, local, quality, (organic, non-GMO, local) certifications, and claims,” as well as to the number of ingredients resonating as chemical or non-chemical were noted for each instance of packaging in the study.
- The regression analysis indicates that the number of references to organic nature and certifications has a positive effect on perceived naturalness, whereas the number of ingredients with chemical resonance has a negative effect, regardless of the product category.
- The results also show that for a positive effect on perceptions of a product's naturalness, consumers must find the information credible and logical.

Objectives

The study's three major objectives are as follows:

- 1) Study the psychological processes that occur when consumers are exposed, through the information on packaging, to food products associated with naturalness
- 2) Understand the relationships between strategies for communicating the naturalness of food products through packaging, the psychological processes involved when consumers are exposed to such information, and the behaviours that result
- 3) Assess the effect of Health Canada's new labelling regulation on perceptions related to the naturalness and health value of products

Results and potential benefits

The study results have led to a number of benefits:

- 1) Creation of a scale for measuring naturalness that is easy for suppliers to use to assess the perceived naturalness of a product prototype or to compare the perceived naturalness of various products from competitors
- 2) Identification of informational attributes that matter most for perceived naturalness—organic nature, certifications, and ingredients that resonate as chemicals—can guide suppliers when creating their products, but above all, it can inform how that information is conveyed on packaging. The communication of information on packaging is increasingly important in a pandemic when more consumers are shopping online
- 3) Regression analyses show that responsible packaging—that is recyclable, reusable, or compostable—positively influences the perceived naturalness of a product, which in turn influences the perceived healthiness of the product and ultimately consumers' intent to buy the product

As a result, better alignment between the information about naturalness that is conveyed by packaging and products' ingredients may have a positive effect on sales and ultimately encourage consumers to adopt behaviours that will improve their health.

Innovative aspects

- Creation of a scale for measuring the perceived naturalness of products
- Experimental study in a store where participants can handle products to assess them based on various aspects (e.g., quality, naturalness and healthiness). A comparison was then made with same participants' assessments based on photos of the same products' packaging
- Identification of key information on packaging that relates to the perceived naturalness of products

Professionals trained

- **Clara Dutrevis**, M.Sc., ESSEC Business School (ESSEC): Master's thesis on the development of a scale measuring the naturalness of food products
- **Stéphanie Lessard**, Ph.D. student, Université Laval: Supervised the collection of data from the experimental part of the study
- **Geneviève Groleau**, M.Sc., HEC: Literature review on naturalness, codification of information related to naturalness on product packaging, and statistical analyses
- **Helena Armengau-Ribeiro**, M.Sc., HEC L: Supervised M.Sc. project on the evolution of perceptions of different categories of products (dairy, meat, breads and cereals, fruits and vegetables) and the evolution of attitudes (e.g., health and the environment) (new data collected last December) and will conduct comparative analyses using the data from the first collection in November-December 2019. This will show how perceptions of product categories have evolved since the beginning of the pandemic.

For further information

Transfer to industry partners: The results were presented to corporate partners of the research project on December 9 and 10, 2020. Some businesses asked for personalized presentations. In addition, a talk will be given at Novolait's Forum Techno. The students involved in the project will write articles.

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