

### **ScienceDirect**



# Sensory and consumer research in culinary approaches to food

### Agnes Giboreau



Encouraging food scientists to cooperate with culinary experts opens ways for optimized food offers as well as innovative products and services. Knowing better the work of professionals from the food service and gastronomy sectors brings a holistic vision enriching methodological questions of sensory and consumer scientists. It is proposed to make links between foodservice research on meal experience, mainly exploring human sciences, and sensory and consumer science. Three disciplines were selected to complement current sensory and consumer practices: semantics and the study of food culture, cognitive psychology and multisensory perception, and linguistics and dish label. Moreover, a greater basic knowledge is still needed to model the various factors influencing consumer perception, choice and preference in real-life situations, opening new avenues for further research and the modeling of the meal experience.

#### Address

Institut Paul Bocuse, The Center for Food and Hospitality Research, BP 25, 69131 Ecully, France

Corresponding author: Giboreau, Agnes (agnes.giboreau@institutpaulbocuse.com)

#### Current Opinion in Food Science 2017, 15:87-92

This review comes from a themed issue on **Sensory science and consumer perception** 

Edited by Herb Meiselman

For a complete overview see the Issue and the Editorial

Available online 9th June 2017

http://dx.doi.org/10.1016/j.cofs.2017.06.001

2214-7993/© 2017 Elsevier Ltd. All rights reserved.

#### Introduction

Eating out of home is a global common practice which surpasses eating in within some countries [1]. Not only do consumers build their opinion about food from what they choose and consume out of home, should it be at the workplace, on vacation, for a party with friends but it also influences what they prepare and consume themselves. As a consequence, knowledge from the foodservice world is a source of inspiration for food industry people to identify key factors that make a good meal.

Making food scientists cooperate with culinary experts opens ways for optimized food offers as well as innovative products and services. The major current contribution of food service professionals is the design of 'tasty and healthy' offers. 'Tasty' means building on chefs' creativity to deliver more pleasurable food keeping the given nutrition, cost and production constraints. 'Healthy' is more of a challenge. It is well-known that a healthy diet is a sum of components, including physical activity and overall food and drink intake over the day—or even the week. Thus, offering a healthy diet means formulating balanced products to help consumers in their food choice at a given moment, for instance by designing favorable architecture of choice [2]. Culinary professionals work in teams who design products and environments to create the most excellent meal experience for all their very diverse customers.

Knowing better the work of professionals from the food service and gastronomy sectors brings a holistic vision enriching methodological questions of sensory and consumer scientists.

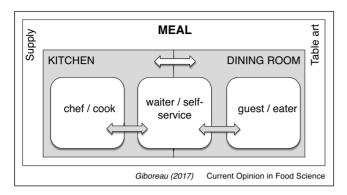
In the hospitality domain, the management of 'Food and Beverage' is a business operation per se (F&B management, as commonly abbreviated in the sector). Within F&B operations, logistics for food supply and preparation is a crucial element having a major impact on clients' satisfaction. Purchasing, storing and preparing food impacts the quality both from a hygiene aspect and a sensory one. Moreover, food logistics also impact the profitability through the cost of raw materials and their processing but also through the ratio of waste, that is not utilized or consumed food, and hence the sustainability of the activity. It could also be part of the information given to the clients through the dish label (provenance). Beyond logistics, the F&B manager has to orchestrate between the culinary offer, the service design (menu and table art) and the prediction of customers' expectations. These three levels of actors – chef/waiter/consumer – interact to create the meal experience as shown in Figure 1 and are central to raise questions for sensory and consumer scientists whose attention is mainly centered on the product perception.

Let us now consider decisions made by professionals in the culinary world that contribute to the product experience during the meal.

## The culinary world: the chef, the headwaiter and the meal experience

The given context of a restaurant (institutional or commercial) sets the business and economic model,

Figure 1



Factors contributing to the meal experience.

the targeted customers (socio-economic status and demographics). It determines the range of possible actions for the professionals to fit the budget, operational constraints and clients' expectations.

#### The chef

Within the possibilities set by the market positioning and the economic model, chefs handle sourcing, storing, processing and nutritional specification to create an adequate offer for the guests. The design of a fully satisfactory meal experience relies on their estimation of consumers' expectations. Chefs need to anticipate what will please their guests and ensure a good match between experience and expectation [3], the latter being built from the knowledge and beliefs consumers have about the restaurant, their perception of the context and their evaluation from the menu list (information and price). Chefs do not have precise measures of guests' expectations but they know by experience the type of clients who come for dining-their culture, their education, their economic status, their age, and so on. With this empirical knowledge and their own vision of the menu to be offered, chefs decide on the type of recipe to be prepared, the ingredients to be bought, the production process to be followed and finally the whole composition to be created. This includes the way to create a multisensory experience. It concerns the container in which the food is served, plates and cutlery, the visual dressing on the plate [4–6], the order of list ingredients, the dish name on the menu, and other presentational factors. To achieve successful results, they consider all five senses and the whole meal event, from the appetizer to the dessert (if any), throughout the dynamics of the complete consumption duration, also integrating interactions between meal components such as the role of the seasoning, the side dishes or the drinks.

#### The headwaiter and waiters

In restaurant environments headwaiters and restaurant managers make decisions about space and service organization. They decide upon light and music fitting best with the time of day and the variability of meal contexts (professional, family or festive occasions of eating together in the restaurant). Moreover, the interaction between guests and waiters is essential to bring a customized approach to foodservice and ensure a good meal experience [7,8]. Closer to the food itself, professionals operating the dining room contribute to the tasting experience in the way that they dress the table [9], using paper or fabric cloth, put flowers on the table or not, select cutlery and other key factors leading to improved consumer appreciation. Not only do headwaiters and waiters contribute to design of the physical environment of the meal, creating the appropriate environment in line with the food offer, but they are also part of the experience itself through the social interaction that they build with the guests. They play an important role to guide customers on their choice, answering questions of the composition or the source of ingredients, giving personalized information depending on the guests' interest, and enriching the experience to improve satisfaction. Such social interaction has been shown a useful tool in institutional foodservice, where this interaction helps patients enjoy their meal more [10] and is an interesting route to help children accept new foods in school canteens.

#### The guest

Modeling the potential success of a foodservice offer would be very useful, both for chefs and waiters but also for the food industry through parallels between in home and out of home meals. Several meal experience models have been developed [11]. For instance, the FAMM Five Aspects Meal Model [12] considers: the room (environment), the meeting (social aspect), the product (dishes and drinks), the management system (rules, laws, resources), the atmosphere (including all other factors). At the Centre for Food and Hospitality Research of the Institut Paul Bocuse, a four-level approach is followed to acquire scientific knowledge on the components of the meal experience: i) a sociocultural level, ii) a behavioral level, iii) a cognitive level, and iv) a physiological level. These levels are combined to better understand the guests and help foodservice operations and innovation processes.

Our objective here is to make links between foodservice research on meal experience, mainly exploring human sciences, and sensory and consumer science, mainly focused on products.

## A multidisciplinary human science approach of food

From the above description of the foodservice professionals' role in the meal experience, three disciplines can be considered central and complementary to

### Download English Version:

## https://daneshyari.com/en/article/8409258

Download Persian Version:

https://daneshyari.com/article/8409258

<u>Daneshyari.com</u>