FI SEVIER

Contents lists available at ScienceDirect

Food Research International

journal homepage: www.elsevier.com/locate/foodres



Consumers as co-creators of new product ideas: An application of projective and creative research techniques



Marija Banović ^{a,*}, Athanasios Krystallis ^a, Luis Guerrero ^b, Machiel J. Reinders ^c

- ^a MAPP Center Aarhus University, Bartholins Allé 10, 8000, Aarhus C, Denmark
- ^b IRTA Food Technology Center, Spain
- ^c LEI Wageningen University, The Netherlands

ARTICLE INFO

Article history: Received 8 April 2016 Received in revised form 14 July 2016 Accepted 22 July 2016 Available online 25 July 2016

Keywords: Consumer perception New aquaculture product ideas Projective and creative techniques

ABSTRACT

Involving consumers in the process of modification and creation of new food products has been recently identified as a vital factor for new product development. However, little attention has been devoted to consumergenerated product solutions, and instead, researchers continue to view new product development process as a firm-centred activity. This study uses projective and creative research techniques to involve consumers in the process of modification and creation of new aquaculture product ideas. We provide guidelines for the use of these techniques in the new product development process, as well as managerial and practical implications for the future development of new aquaculture products.

© 2016 Elsevier Ltd. All rights reserved.

1. Introduction

In today's competitive market arena, innovation and ability to generate new or enhanced product ideas is critical to food industries. It is not surprising that understanding consumer's cognitive mechanisms and perceptions, especially during the early stages of new product development and creation of marketing strategies, has been extremely important in food research (Guerrero et al., 2010; Van Kleef, van Trijp, & Luning, 2005; Vidal, Ares, & Giménez, 2013). In addition, recent evidence shows that involving consumers as co-creators of products is positively related to new product development, in relation to increased product creativity, decreased time to market, and reduced development costs (Potts et al., 2008; Von Hippel, 2005). However, little attention has been devoted to consumer-generated product solutions; instead, experts continue to view new product development process as a traditionally firm-centred activity.

Similar to other food sectors, rise in fish demand and aquaculture production, as well as its impact on the markets, has brought forward a pressing need for further insights into possible development of aquaculture products driven by consumer needs (Brunsø et al., 2008; Claret et al., 2014). Recent research has investigated aquaculture product consumption (Altintzoglou, Vanhonacker, Verbeke, & Luten, 2011; Hall & Amberg, 2013), consumer perceptions and preferences in terms of

farmed fish versus wild fish (Claret, Guerrero, Gartzia, Garcia-Quiroga, & Ginés, 2016; Stefani, Scarpa, & Cavicchi, 2012), and relevant environmental attributes in marketing of aquaculture products (Verbeke, Vanhonacker, Sioen, Van Camp & De Henauw, 2007; Young, Brugere, & Muir, 1999). In this respect, research shows that aquaculture products have been subjected to particular scrutiny and negative perceptions by consumers (Hall & Amberg, 2013; Verbeke, Sioen, Brunsø, De Henauw & Van Camp, 2007). These negative perceptions are mainly related to a lower expected intrinsic quality and unnaturalness of aquaculture products, reports on health risks associated to consumption of certain farmed fish species, such as salmon, due to the elevated levels of chemical contaminants and insecticides, as well as environmental risks related to pollution from farms (Hall & Amberg, 2013; Schlag & Ystgaard, 2013; Verbeke, Sioen, et al., 2007; Young et al., 1999).

To be able to answer existing challenges and assure consumer acceptance of new aquaculture products it is important not only to study and quantify a number of quality parameters (Brunsø, Verbeke, Ottar Olsen, & Fruensgaard Jeppesen, 2009; Olsen, Scholderer, Brunsø, & Verbeke, 2007; Pieniak, Verbeke, Scholderer, Brunsø, & Olsen, 2007), but also to incorporate consumer in early stage of new product development process (Van Kleef et al., 2005). This would involve in-depth examination of consumer needs and involvement in the new product development process, which are essential for designing products that will actually meet consumer demand (O'hern & Rindfleisch, 2010; Van Kleef et al., 2005). The transformation of new aquaculture product ideas into commercially successful end-products comes after an exploration of consumer needs and consumer involvement in the product creation that can guide product development and marketing strategies. Recently, it has been recognized that involving consumer in co-creation represents

^{*} Corresponding author. E-mail address: maba@mgmt.au.dk (M. Banović).