



Consumer consciousness on meat and the environment — Exploring differences



Pasi Pohjolainen ^{a,*,1}, Petri Tapio ^{a,1}, Markus Vinnari ^b, Pekka Jokinen ^b, Pekka Räsänen ^c

^a Finland Futures Research Centre, University of Turku, Helsinki, Finland

^b School of Management, University of Tampere, Tampere, Finland

^c Department of Social Research, University of Turku, Turku, Finland

ARTICLE INFO

Article history:

Received 21 September 2014

Received in revised form

18 December 2015

Accepted 8 February 2016

Available online 9 February 2016

Keywords:

Environment

Consciousness

Meat

Consumption

Cluster analysis

ABSTRACT

Global environmental challenges require changes in both the production and the consumption of goods. In this paper we analyse how consumers perceive the high environmental burden of meat. We analysed consumer *environmental consciousness*, including *problem awareness* and a *support to action* dimensions, latter including perceived self-efficacy as well as solutions to problems. The solutions were positioned on a continuum from increasing the efficiency of production to discussing sufficiency levels in consumption practices (techno-optimism, local meat, organic meat and meat reduction, respectively). We used a statistically representative survey sample ($n = 1890$) from the population of Finland and cluster analysis to explore differences among consumers. The analysis revealed that most Finns seem to be rather unsure of the study topic. At the same time they tend to have a comparably high level of self-efficacy (55 per cent of respondents) and endorsement of particularly local meat solution type (55%), followed by organic meat (35%), meat reduction (25%) and techno-optimism (15%), though the neutral stand was the most common one across the data. We also identified six consumer groups that reveal not only a high number of *Highly unsure* consumers (40%), but also some *Rather conscious* (20%) and a relatively small number of *Highly conscious* (8%). In addition, there were also easily observable groups of *Careless conscious* (14%), *Rather unsure* (9%) and *Resistant* (8%). The results highlight the need for a multitude of political actions to guide meat consumption, as there are groups that may benefit from practical tools for making dietary changes as well as groups in need for more comprehensive selection of measures, including environmental information.

© 2016 Elsevier Ltd. All rights reserved.

1. Introduction

The modern food system lacks many elements that would ensure long-term sustainability (Fresco, 2009; Lang, Barling, & Caraher, 2009). This is especially evident in the case of meat, which has become a highly-consumed food in the West during the last century (The Statistics Division of the Food and Agricultural Division of the United Nations [FAOSTAT], 2009). The modern meat production sector contributes profusely to various pressing

environmental problems, such as climate change (Garnett, 2009; Herrero et al., 2011), changes in the nutrient cycle and the eutrophication of aquatic ecosystems (Bouwman et al., 2011; Westhoek et al., 2014) as well as the loss of arable land and biodiversity (Steinfeld et al., 2006). In addition, the high level of meat consumption is causing challenges in other sustainability dimensions (Vinnari & Vinnari, 2014), such as public health (Friel et al., 2009; McEvoy, Temple, & Woodside, 2012) and animal welfare issues (D'Silva & Webster, 2010; Pluhar, 2010). In other words, changes in meat consumption would have a remarkable net synergic effect on sustainability.

Some studies have suggested that consumers are the actors in the food system that still seem to be rather unfamiliar with the topic (e.g. Cole et al., 2009; Tobler, Visschers, & Siegrist, 2011; Vanhonacker, Loo, Gellynck, & Verbeke, 2013). However, relatively little attention has been paid to consumer understanding of

* Corresponding author.

E-mail addresses: pasi.j.pohjolainen@utu.fi (P. Pohjolainen), petri.tapio@utu.fi (P. Tapio), markus.vinnari@uta.fi (M. Vinnari), pekka.t.jokinen@uta.fi (P. Jokinen), pekka.rasanen@utu.fi (P. Räsänen).

¹ FIDEA research group www.fidea.fi.

the externalities of meat eating as a whole. This paper explores the differences between consumers with respect to environmental consciousness of meat. We will begin by evaluating the possible strategies to achieving an environmentally sustainable meat sector. Secondly, we will review relevant literature on environmental consciousness and related concepts. Thirdly, we will report the results based on a nationally representative survey of the adult population of Finland. Finally, we will discuss the theoretical and policy implications of key findings.

1.1. Sustainability strategies: efficiency and sufficiency

Sustainability strategies can roughly be divided into two realms: efficiency and sufficiency. Efficiency is the more popular of the two, and it is usually defined as the output per unit of input (Princen, 2005). Improvements for example in production methods for generating certain services and goods with decreased energy and material input belong to efficiency measures (Fuchs & Lorek, 2005). Efficiency strategy has been very effective in the agricultural sector in the past, but the looming environmental crises and other sustainability concerns have, however, given rise to the question whether the efficiency gains are enough to reach sustainability (Vinnari & Vinnari, 2014).

Sufficiency as a sustainability strategy puts more emphasis on the responsibilities of the individual. The critical questions is “the enoughness” of consumption and the possibility of “too muchness” of consumption (Princen, 2005). When the emphasis is on evaluating the quantity and quality of current consumption practices from the sustainability perspective, the sufficiency discussion is inherently outlined. In the case of food consumption, the sufficiency strategy highlights the vast amounts of meat consumed in the Western world and the question becomes whether the average consumer should learn new consumption practices (Allievi, Vinnari, & Luukkanen, 2015; de Boer, Schösler, & Aiking, 2014).

Perceiving these two strategies as parts of a continuum rather than constituting a dichotomy, may further enrich our understanding of various practical environmental solutions of meat production. Hence, *technological development* within the food system would offer an unambiguous efficiency pathway towards more sustainable food practices (e.g. Gerber et al., 2013). A stronger sufficiency emphasis would include places and modes of production in the discussions, examples being *local foods* (Seyfang, 2006) and *organic production* (Thøgersen, 2010). Local food in this context means that the consumer would not need to consume any different product. Organic products can differ in some degree from traditional products, and as such there might be slight “taste-cost” for the consumer, meaning there is a need to learn new tastes. However, a significant decrease in meat consumption, in other words, *meat reduction*, combined with a simultaneous shift towards plant-based protein consumption would represent a substantive sufficiency solution, changing not merely the type of meat, but replacing the whole product with plant-based products. This measure has been suggested as essential for sustainable food practices, particularly in Western nations (e.g. Deckers, 2013; Odegard & van der Voet, 2013).

1.2. Environmental consciousness and the meat issue

Consumers' understanding of environmental questions has been addressed with various concepts (e. g. Gaspar, 2013; Peattie, 2010). A common analytical approach separates environmental thinking into *cognitive*, *affective* and *conative* dimensions (Dunlap & Jones, 2002; Sánchez & Lafuente, 2010). This can be considered a versatile premise, as consumers are not considered to have merely

rational knowledge (cognitive), but are also seen as sentient creatures (affective), potentially worried about the environmental issues and, in addition, having the mind-set to structure action (conative) to create solutions to the perceived problems (Dunlap & Jones, 2002; Sánchez & Lafuente, 2010). However, the cognitive and affective dimensions have been perceived to be closely interlinked, and are in practice typically understood as working together as attitudes or awareness (Dunlap & Jones, 2002; Takács-Sánta, 2007). Hence, looking at consumers' *problem awareness* (cognitive and affective dimensions) as well as *support to action* (conative dimension) could work as a conceptual baseline for *environmental consciousness*.

It is good to acknowledge the famous discrepancy between consciousness and actual behaviour that has traditionally been observed in consumer studies, also known as the “value-action gap” (Bamberg & Möser, 2007; Gaspar, 2013; Kollmuss & Agyeman, 2002). However, a strong environmental consciousness can be supportive of paths towards sustainable lifestyle choices, as well as more general civil activity and acceptance of different policy measures (Bamberg & Möser, 2007; Micheletti & Stolle, 2012; Truelove & Parks, 2012).

As environmental consciousness is typically context specific, it is relevant to be aware of the specific consumption attributes of the product in question, which in this case is meat. Consumers typically associate meat with the attributes of taste, routines, health, preparation methods, availability, quality and price (Font-i-Furnols & Guerrero, 2014; Korzen & Lassen, 2010). Regarding more political topics, animal welfare is an increasingly recognised and discussed matter among consumers, but environmental issues are seldom connected to the choice between meat and vegetarian foods (de Boer, Schösler, & Boersema, 2013; Cole et al., 2009; Lea, Crawford, & Worsley, 2006). Even though previous research has not extensively analysed the environmental consciousness of consumers regarding meat in particular, the theme is increasingly featured within general studies on environmental consciousness.

From a problem awareness perspective, it is known that consumers seem to consider meat production one of the least significant sectors contributing to environmental degradation, compared to, for example, transportation and industry (Truelove & Parks, 2012; Vanhonacker et al., 2013; Whitmarsh, Seyfang, & O'Neill, 2011). However, existing literature has not addressed how specific environmental problems, such as climate change, are perceived by consumers to be related to meat.

Somewhat less is known of other dimensions of environmental consciousness regarding meat. However, in general, consumers tend to have a strong self-efficacy orientation concerning environmental consumption, in other words, a belief that one can make a difference to environmental issues through consumption choices (Autio et al., 2009; Wolf, Brown, & Conway, 2009). Cynical and opposed consumer perspectives also exist in this respect, but to a lesser extent (Autio et al., 2009; Wolf, Brown, & Conway, 2009). Additionally, it has been suggested that self-efficacy may have a significant effect in generating pro-environmental behaviour (Gupta & Odgen, 2009; Peattie, 2010).

Regarding environmental solutions on the efficiency–sufficiency continuum, different studies indicate that techno-optimism does exist among consumers, but its perceived importance and influence tend to vary, also leaving room to an endorsement of more consumption-orientated or indifferent attitudes to environmental solutions (e.g. Kagawa, 2007; Zsóka, Szerényi, Széchy, & Kocsis, 2013). However, to the best of our knowledge, techno-optimism has not been featured in studies on consumer environmental consciousness on food, possibly because this solution type does not require consumer action of any kind.

Download English Version:

<https://daneshyari.com/en/article/939285>

Download Persian Version:

<https://daneshyari.com/article/939285>

[Daneshyari.com](https://daneshyari.com)