Are Organic Consumers Healthier than Others?

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Abstract

Recent research results indicate that organic consumers have a healthier diet than other consumers. This suggests that there might be a positive relationship between organic consumption and a healthy lifestyle. One aim of an ongoing research project is to analyse whether consumers with a high organic consumption have a higher interest in nutrition and a healthy living than other consumers. In order to test whether such a causal relationship exists, purchase data from Danish households are combined with information on these households' perception of organic food and their health concerns.

Introduction

Denmark has experienced a boost in the consumption of organic foods in recent years. In order to maintain the growing demand for organic food it is of importance to understand the reasons for this increased demand. Some might be explained by the general income increase, but recent research indicates that consumers buy organic foods due to a concern for animal welfare, a clean environment, trust in the organic production and taste. Also health concerns are drivers of organic consumption.

In this paper we will analyse whether there is a relationship between a high consumption of organic food and health concerns. Moreover, we will analyse whether consumers with a high organic consumption perceive organic food to be healthier than conventional food and in general have a higher interest in nutrition and a healthier living than other consumers. This description will be followed by a socio-demographic description of the different types of consumer groups.

Materials and methods

In order to analyse the relationship between actual purchasing behaviour and consumer values, two types of data are used, namely a postal questionnaire and a household panel data set, which includes more than 2000 Danish households (GfK ConsumerScan household panel). The panel data include information on daily purchases of a large variety of organic and conventional foods, as from 1997 and thereafter. The information includes prices, quantities, labelling, brand, store choice etc. In addition, background variables such as socio-demographic characteristics and media habits are registered for each household member. A questionnaire was sent to all 2376 households in the GfK panel and completed by 2022 households in the period from 24 April to 15 May 2007 implying a response rate of 85%. The questionnaire

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aims at revealing concepts, values and attitudes that can be subsequently analysed in relation to data regarding behaviour. By merging the GfK panel data set with the data from the questionnaire it is possible to classify and group panel members according to purchasing behaviour, perceptions of the organic products, interest in a healthy living and consumer characteristics.

Results

Consumption patterns of different user groups

We analyse the purchasing pattern of organic as well as non-organic food in the GfK panel of the four different consumer groups. To construct these groups we take advantage of the household-specific character of the data which allows us to divide households into groups according to organic budget shares (defined as the shares of the expenditures on 32 products with organic varieties). Households with no organic consumption are categorised as non-users, households with an organic budget share less than 2.5% are light users, households spending between 2.5-10% are medium users and households spending more than 10% of their food budgets on organic varieties are denoted heavy users. Around 9% of the households did not buy any organic products in 2006 and could thereby be categorised as non-users. In 2006, approximately half of the panel was light users and one out of four was medium user. 15% of the households spent more than 10% of the food expenditures on organic varieties.

Next, we look at the product-specific organic consumption by the four consumer groups in 2006 by dividing the 32 products into 11 categories (bread, eggs, fruits, vegetables, coffee, meat, flour, milk, butter, fermented milk + a rest-category denoted 'others'). Heavy users hold the highest organic budget share for all product categories whereas medium and light users can be heavy, medium or light users of the different product groups. Heavy and medium users have a remarkably high demand for organic milk and eggs – 80% of the milk purchased by heavy users is organic and 40% of the milk bought by medium users is organic. Similar, 65% of the eggs demanded by heavy users is organically produced against 30% for the medium users. The organic share for the product group *other* is below 5% indicating that the most frequently purchased organic products are captured by the ten product categories included. In particular, it is worth noticing that medium and light users have much higher organic budget shares in vegetables than in fruits despite the fact that those categories often are recommended jointly in public health campaigns etc. An analysis of the price premiums indicates that the price premiums for fruits are 35-70% while for vegetables 20-45% (Denver et al. 2007) which might indicate that medium and light users are more sensitive to price premiums than heavy users are, but further research is necessary to validate this interpretation.

Knowing that organic food varieties are more expensive, it was surprising to see that while differences in organic expenditures exist across user groups the overall food budget is approximately the same for all consumers. This raises the question of whether the four user groups differ with respect to their general diet. Figure 1 reveals to some extent differences in diets across consumer groups.

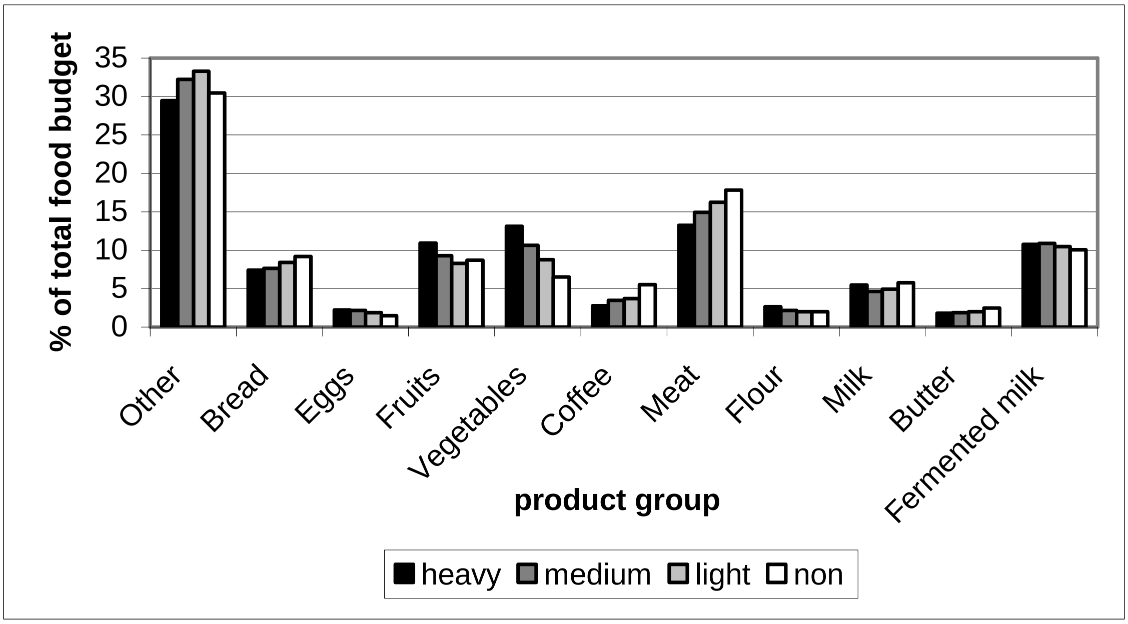

Figure 1: Distribution of the total food budget.

Source: GfK ConsumerScan, Denmark.

It seems from figure 1 that there is a positive relationship between the organic budget share and the consumption of fruits and vegetables. This indicates that heavy users consume more fruit and vegetables than other types of consumers. In addition, a negative relationship between the organic budget share and the consumption of meat, coffee and butter can be seen. The data therefore indicate that heavy users have a healthier diet than other consumers.

As a supplement to this healthier allocation of the budget by heavy users, we apply a healthy eating index (HEI) (Smed 2007). The HEI links nutrition data to the products and volumes purchased by the panel members. This initiative makes it possible to evaluate the state of nutrition across households. When linking the HEI to user group affiliation, we found a clear and positive relation between organic budget shares and a good state of nutrition.

Organic consumers' health perceptions

The aim of the second part of our analysis is to test whether heavy users perceive organic food as healthier than other consumer groups and whether heavy users in general have a more healthy living than others. The results from the questionnaire show many signs of heavy users being more concerned and aware of a healthy life style. Firstly, we found that own and children's health is a major argument for heavy users for buying organic food and it is perceived much more important than for other organic buyers. Secondly, for two thirds of the heavy users as opposed to only one third of non-users, it is vital that their diet is healthy. Besides, more than half of the heavy users answered that they do not prefer tasty food to healthy food (if they had to trade off). Thirdly, it is significant that heavy users know what to eat to have a healthy diet as opposed to only one third of non-users. This shows, that many consumers think that healthy eating is important – and in particular heavy users. More than 80% of heavy users relate healthy eating to organic food as opposed to only 20% of non-users.

Discussion & Conclusion

To our knowledge no other studies exist that analyse the relationship between actual (organic) consumption and consumers' concern for a healthy living. However, some studies exist that find organic consumers to be more concerned with health and perceive organic foods as healthier than conventional food, cf. Williams & Hammit (2000), Torjusen et al. (2004) and Wier & Calverley (2002). Also Magnusson et al. (2003) find that health concern is the best predictor of attitudes towards organic foods and actual purchase of some organic products. Shepherd et al. (2005) find that perceived health benefits from consuming organic food are strongly correlated with attitudes towards organic food and buying intentions. This is supported by Huang (1996) who finds that organic consumers are more nutritionally conscious than others. It therefore seems as if it is generally agreed that consumers buy organic foods at least to some extent because it is perceived to be healthier.

Another angle, which we have merely touched upon in the present paper, is why organic consumers have a healthier diet – is it because of their attitudes towards healthier eating or is it for budgetary reasons? With our future analyses we hope to shed some light upon these potential relationships.

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