



CONDOR

CONsumer Decision making on ORganic products

CONDOR Newsletter 4

CONDOR Project

The market for organically produced foods remains relatively small. If it is to increase then there needs to be a systematic and scientific examination of the consumer decision-making processes involved in the choice between organic and non-organic foods.

This project brings together a multidisciplinary team across eight EU member states to examine this topic. It combines the development of methods for the segmentation of consumers based upon values and the elicitation of affective (emotional) associations and moral concerns. It involves the development of a theoretically based consumer decision-making model and the testing of this model in eight EU member states and in identified consumer segments.

The aim is to provide information on the role played by values and by affective associations and moral concerns in consumer decision-making on organic foods and provide novel insights into the marketing of organic foods in the future.

Objectives:

- To provide a basic understanding of the processes involved in consumer decision-making on the purchase and consumption of processed and fresh organic foods.
- To model consumer choice of organic foods based on attitudes, values, affective and moral concerns over eight EU member states.

Deliverables:

- Novel methods for uncovering emotional and moral concerns which might influence the choice of organic foods.
- Methods for segmenting consumers based on their values.
- Databases of consumer attitudes, values, emotional and moral concerns in relation to organic foods.
- An understanding of cross-European differences in the impact of emotional and moral influences on the choice of organic foods.
- Dissemination to stakeholders, including industry, consumer groups and NGOs, via a website and through brochures and workshops targeted at particular stakeholder groups.
- A synthesis of the implications for the European marketing of organic foods.

Progress on the Project

The project is now complete. Results from the project have been presented at various academic and stakeholder meetings. There are some academic papers available and results are being written up in further academic papers.

The first workpackage investigated the usefulness of four methods (focus group, traditional method, word association and an open-ended method for both beliefs and emotions) for eliciting beliefs about organic foods. A wide variety of organic foods was investigated including, both fresh and processed, in the UK, Finland and Italy.

The results from this first workpackage showed that although there were minor differences between the countries, the four methods all elicited similar categories with comparable frequencies. The fresh organic foods were considered to be more natural and the participants expressed more positive feelings towards them and also mentioned the shelf life of these foods. Processed foods brought out more negative responses along with 'no feelings' and issues of trust. Quality, health issues, expense and chemicals in foods were mentioned for both fresh and processed foods. Moral categories were elicited by both the traditional task and open-ended beliefs in equal measure.

As the traditional method has been used widely in previous research, the use of the traditional method with the addition of open-ended emotion section was decided upon as a good method to use in WP2.

WP2 has been completed. The beliefs, including moral and affective qualities that influence organic buying, were elicited using the methods from WP1 and then used in a theory of planned behaviour (TPB) questionnaire on two foods (organic apples and organic pizza) in the UK, Finland and Italy.

Overall the results support the inclusion of the measure of positive moral attitudes and affective attitudes into the TPB model for predicting intentions to purchase organic foods. Although the beliefs about the two foods differed, with the organic pizza seen as less natural and less healthy than the organic apples, the relationships between the variables in the TPB did not differ between the foods. In both cases intention to buy was most strongly influenced by attitude and moral issues in the UK and Italy and by attitudes and perceived social pressure in Finland. Moreover the affective (feeling) part of attitude was more important than the cognitive (thinking) part of attitude. The differences for the Finnish results may be due to differences in the sample composition, with more men and more heavy users of organic food in the Finnish sample. In addition, the measures perceived social pressure and moral attitude are interrelated and both reflect social norms in favour of organic foods.

WP3 has been completed with 100 laddering conducted interviews in each of Denmark, Germany, Spain and the UK on the choice of different forms of pizza, including two organic alternatives. Participants were chosen on the basis of belonging to particular segments of consumers. Results point to marked differences in the structure of knowledge about organic foods among consumer segments, both at product-knowledge level and at self-knowledge level. The exact values associated with self-relevant consequences do not appear to discriminate clearly among

segments, however. Generally, organic origin has significant links to personal values among segments of adventurous, enthusiastic, hedonistic and eco-healthy food consumers while it appears a dysfunctional means of achieving important personal values among segments of snacking, impulsive and, partly also, rational food consumers. Similarly, regular consumers of organic foods exhibit more complex knowledge structures than non-organic consumers.

The results from WP1, WP2 and WP3 were used in developing the methods for WP4. In all eight countries the method developed in WP1 was used to elicit beliefs, moral and affective issues; these were then used together with values items derived from WP3 to develop questionnaires based in the theory of planned behaviour related to both fresh tomatoes and processed tomato sauce (used for example with pasta). Approximately 500 respondents in each of the eight countries completed the questionnaire for each type of food. The questionnaires included measures of values, beliefs, attitude, subjective norm, perceived behavioural control, moral attitudes and intention to purchase.

The main conclusion from the analyses of the WP4 data was that models fitted did not differ substantially between countries or between the two types of foods and therefore a common model could be fitted for both the fresh tomatoes and for the processed tomato sauce and for the different countries. Cognitive and affective attitudes and moral norms all loaded on the same component of attitude and were not separate. Overall the models provided a high level of prediction with attitude, subjective norm and perceived behavioural control predicting intention to buy, and beliefs predicting attitudes, as predicted by the theory of planned behaviour. Thus it can be concluded that the reasons why consumers buy, and the reasoning behind their purchases, are very similar across all the countries within the project, despite the obvious differences between the countries in terms of the sales of organic foods and the maturity of the markets.

The major differences between organic consumers and non-organic consumers were what they think and feel about organic foods and the belief in the benefits that these foods provide, rather than demographic variables such as age, gender, education and income. Users of organic foods have more positive beliefs than nonusers. For example, improved taste, being more 'natural', making a contribution to a longer healthier life, creating beneficial outcomes for the environment and society as a whole, are seen as the key benefits. However, users and non-users were unanimous about possible negative aspects of organic foods, such as higher price and lower shelf-life. Further, whether consumers trusted in organic food or not was independent of the use of organic foods. Additionally, organic consumers believe that by following their organic purchasing habits they are doing the right thing, and are seen to be doing so by friends, family and neighbours. The more people thought that organic was healthier, was better for the environment and tasted better, the more positive they felt about buying it. Negative beliefs towards buying organic food, overall, were less important. Attitudes towards fresh as well as processed organic foods were mostly positive.

Management Meetings

24-25 February 2003 – University of Surrey, Guildford, UK

5-6 June 2003 - Agricultural University of Athens, Greece

19-20 January 2004 – MAPP, Aarhus, Denmark

17-18 June 2004 - Federal Research Centre for Nutrition and Food, Karlsruhe, Germany

20-21 January 2005 – University of Murcia, Spain

9-10 June 2005 – VTT, Helsinki, Finland

1-2 December 2005 – INRAN, Rome, Italy

Stakeholder Workshops

In the last year, several CONDOR stakeholder dissemination events were organised. The first was attached to the management meeting held in Helsinki on 9 June 2005. This consisted of an afternoon meeting with speakers from the CONDOR project, along with a presentation by Minna Kantén of Finfood LUOMU on the position of organic foods in the Finnish market.

CONDOR Helsinki Dissemination Event

9 June 2005

PROGRAM

14.30 Coffee

What is CONDOR? Overview of the research program,

Program coordinator Richard Shepherd, University of Surrey, UK

The current state of organic markets in Finland,

Minna Kantén, Finfood LUOMU

Discussion

EXAMPLES OF PROJECT RESULTS

Consumer reactions to processed organic foods - results and implications of a study in four European countries,

Lone Bredahl, Aarhus School of Business, Denmark

Moral feelings and purchase of organic products

Anne Arvola, VTT Biotechnology, Finland

Advance tasting of forthcoming results from the survey in 8 countries,

Anna Saba, INRAN, Italy

Discussion

17.00 Conclusion

A second dissemination meeting was organised in London at the Royal Horticultural Halls on Friday 18 November 2005. There were four talks by members of the CONDOR consortium on results from across the CONDOR project. The main aim was to provide accessible talks which covered the results and implications from the CONDOR project rather than detailed academic results.

**CONDOR Dissemination Event
London 18 November 2005
Agenda**

10.30	Coffee and welcome
11.00	Richard Shepherd: CONDOR project aims and objectives
11.40	Anne Arvola: What consumers think about organic foods
12.30	Lunch
13.30	Salvador Ruiz: Who are the organic consumers?
14.10	John Thogersen: What predicts consumer choices of organic food?
14.50	General discussion
15.15	Close and Tea

As part of the London dissemination event a webcast was developed. Interviews were recorded with the four speakers at the London meeting. Videos of these were then placed on the CONDOR website, along with transcripts, the slides from the presentations, biographies of the speakers and press releases (<http://www.condor-organic.org/researchresults/>). This webcast went live on 1 December 2005.

Website and Brochure

The website for the project has been set up at <http://www.condor-organic.org/>. This includes a description of the project, the partners and the individual workpackages. It also includes links to other relevant websites including other EU-funded projects on organic foods. There is a members area on the website where information from the project, including agendas and minutes from management meetings, reports, papers in progress, questionnaires, data files, etc. can all be placed. Each of the partners on the project has access to this section of the website and there are separate folders for each WP and for each partner within each WP.

The project leaflet has been printed and copies have been distributed to the project partners and subcontractor members of the management committee for wider distribution. Copies have been sent to people expressing an interest in the project and have been distributed at a number of conferences and meetings. A pdf version of the leaflet is available on the website.

The results brochures from the project have been produced and these will be sent to people on the mailing list. A copy of the brochure has also been placed on the CONDOR website.

Conference Presentations and Papers

Papers

Bredahl, L., Thøgeren, J., Dean, M., Pemartin, M. & Stiebel, J. (2004). Consumer knowledge structures with regard to organic foods. MAPP project paper; no. 04.

Lampila, P. & Arvola, A. (2005). Luomun valinta antaa hyvän mielen. Kehittyvä Elintarvike 5/05. CONDOR seminaari sidosryhmille Espoossa 9.6.2005.

Munuera, J.L. (2005). Proyecto CONDOR - Consumer Decision Making on Organic Products. Chapter in RAERM (Ed) "La Red de Agroecología y Ecodesarrollo de la Región de Murcia", pp.179-184. ISBN: 84-609-4562-6.

Shepherd, R., Magnusson, M. & Sjöden, P.-O. (2005). Determinants of consumer behaviour related to organic foods. *Ambio*, 34, 352-359.

Stiebel, J. & Claupein, E. (2006). Was bewegt Konsumenten zum Kauf von Bio-Produkten? Bericht über das EU-Projekt CONDOR (Consumer Decision Making on Organic Products); Jahresbericht 2005 der Bundesforschungsanstalt für Ernährung und Lebensmittel, Karlsruhe 2006 (Annual report of the FRCNF).

Several other papers are submitted or in preparation.

Conference presentations

- Arcas, N., Ruiz, S. & Pemartín, M. (2005). Consumer Trust in Food Security. The case of Organic Products. Paper presented at I Congreso Internacional de Seguridad Alimentaria, Murcia, 17-18 November 2005.
- Arvola, A. (2005). Eurooppalaiset kuluttajat ja luomutuotteiden valinta. Paper presented at CONDOR dissemination meeting, Espoo, Finland, 9 June 2005.
- Arvola, A., Vassallo, M., Dean, M., Saba, A., Lähteenmäki, L. & Shepherd, R. (2005). Purchase intentions of organic apples and pizza. Including affective and moral attitude into the Theory of Planned Behaviour. Poster to be presented at the 6th Pangborn Sensory Science Symposium, Harrogate, UK, 7-11 August 2005.
- Arvola, A. (2005). What consumers think about organic foods. Paper presented at CONDOR dissemination meeting, London, 18 November 2005.
- Bredahl, L. (2005). Consumer reactions to processed organic foods - results and implications of a study in four European countries. Paper presented at CONDOR dissemination meeting, Helsinki, 9 June 2005.
- Claupein, E. (2004). Participation at the podium discussion "Sustainability and foods industry" (with a short presentation of CONDOR project), organized from ECOZEPT at BioFach 2004, Nürnberg, Germany.
- Claupein, E. (2005). CONsumer Decision-making on Organic products (CONDOR). Poster presented at 42th Scientific Congress of the German Nutrition Society, Kiel, Germany, 17-18 March 2005.
- Dean, M. & Shepherd, R. (2003). Including affect and moral concerns in attitudes towards organic food. *Appetite*, 41, 344. Poster presented at the 11th Food Choice Conference, Philadelphia, 26 July 2003.
- McCrea, D. (2006). Consumer decision making on organic products. Paper presented at the Soil Association Conference 'Feeding Our Cities in the 21st Century', London, 6-7 January 2006.
- Munuera, J.L. (2005). El Consumidor Europeo de Productos Ecológicos. Paper presented at Regional Conference about Organic Food and Agriculture in Murcia "I Jornada de Agroecología y Ecodesarrollo de la Región de Murcia. Progresos y Problemas", Bullas, Spain, 3-6 March 2005.
- Munuera, J.L., Pemartín, M. & Shepherd, R. (2005). The European consumer of organic products. First results of a qualitative research about the Spanish consumer. Paper presented at the V International PENSA Conference on Agri-food Chains/ Networks Economics and Management, Brazil, 27-29 July 2005.

- Pemartín, M., Ruiz, S. & Munuera, J.L. (2005). Determinants of ethical consumption. The case of organic products. Paper presented at the XVII Congreso Profesores Marketing, Madrid, 23-24 September.
- Ruiz, S., Pemartín, M. & Arcas, N. (2005). Trust as a quality dimension: Its Influence in the organic product consumption. Paper presented at II Congreso Nacional de Calidad Alimentaria, Cádiz, 16-18 November 2005.
- Ruiz, R. (2005). Who are the organic consumers? Paper presented at CONDOR dissemination meeting, London 18 November 2005.
- Saba, A. (2005). Advance tasting of forthcoming results from the survey in 8 countries. Paper presented at CONDOR dissemination meeting, Helsinki, 9 June 2005.
- Shepherd, R. (2004). Determinants of consumer behaviour related to organic foods. Invited lecture at Food 21 Symposium Towards Sustainable Production and Consumption, Uppsala, Sweden, 26-28 April 2004.
- Shepherd, R. (2004). Methods for assessing the role of moral influences on consumer decision-making on organic foods. Invited lecture at 9th Karlsruhe Nutrition Congress, Consumer & Nutrition. Challenges and Chances for Research and Society, Karlsruhe, Germany, 10-12 October 2004.
- Shepherd, R. (2005). What is CONDOR? Overview of the research program. Paper presented at CONDOR dissemination meeting, Helsinki, 9 June 2005.
- Shepherd, R. (2005). CONDOR project aims and objectives. Paper presented at CONDOR dissemination meeting, London, 18 November 2005.
- Shepherd, R. & Dean, M. (2003). The role of values and moral concerns in organic food choice. Poster presented at the 5th Pangborn Sensory Science Symposium, Boston, 20-24 July 2003.
- Shepherd, R. & Dean, M. (2003). The role of values and moral concerns in organic food choice. Poster at the BCPC International Congress, Crop Science and Technology 2003, 10-12 November 2003, Glasgow.
- Shepherd, R. & Dean, M. (2005). Affective and moral influences on consumer choice of organic foods. Poster at the European Experimental Social Psychology Conference, Wurzburg, Germany, 19-23 July 2005.
- Shepherd, R. & Dean, M. (2005). Moral concerns and consumer choice of fresh and processed organic foods. Paper to be presented at the 6th Pangborn Sensory Science Symposium, Harrogate, UK, 7-11 August 2005.
- Shepherd, R., Dean, M., Arvola, A., Lähteenmäki, L., Saba, A. & Vassallo, M. (2005). Methods for eliciting consumer beliefs about fresh and processed organic foods. Paper presented at the Soil Association's 17th Annual

Conference 'Organic farming, food quality and health', Newcastle, 6 - 9 January 2005.

Stiebel, J. & Claupein, E. (2004). CONSUMER Decision-making on Organic products (CONDOR). Poster presented at 9th Karlsruhe Nutrition Congress, Consumer & Nutrition. Challenges and Chances for Research and Society, Karlsruhe, Germany, 10-12 October 2004.

Stiebel, J. & Claupein, E. (2005). CONDOR: CONSUMER Decision making on ORGANIC products. In: Oltersdorf, U., Claupein, E., Pfau, C. & Stiebel, J. (eds.): Consumer & Nutrition: Challenges and Chances for Research and Society, Berichte der Bundesforschungsanstalt für Ernährung und Lebensmittel, Band 2, Karlsruhe 2005, S. 233-234.

Thøgersen, J. (2006). The cross-cultural validity of the values-attitude-behavior hierarchy for consumer purchase of organic food products. Workshop by Department of Marketing and Statistics, The Aarhus School of Business, Aarhus, Denmark, 30 January 2006.

Thøgersen, J. (2005). What predicts consumer choices of organic food? Paper presented at CONDOR dissemination meeting, London, 18 November 2005.

Thøgersen, J. (2005). Forbrugernes Forventninger og Reaktioner - Økologi som Eksempel (Consumers' expectations and reactions – the case of organic food). Levnedsmiddelselskabet's Seminar about Sustainability in the Food Industry, Copenhagen, 24 November 2005.

Future conference presentations

Thøgersen, J. & Bredahl, L. (2006). Cross-national and lifestyle differences in consumer choice criteria and motives with regard to organic food. ACR-Asia Pacific 2006 in Sydney, Australia, and the Asia Pacific Advances in Consumer Research 2006.

Thøgersen J. & Jørgensen, B. (2006). The value basis of consumer everyday purchases: organic food in a cross-cultural context. ICAP 2006 conference in Athens (Div. 4: environmental psychology).

Thøgersen, J. (2006). Predicting Consumer Choices of Organic Food: Results from the CONDOR Project. Joint Organic Congress, Odense, Denmark, 30-31 May 2006.

Stiebel, J. & Claupein, E. (2006). Was wissen Konsumenten über Bio-Produkte und was schätzen sie an ihnen? Eine Untersuchung im Rahmen des EU-Projektes CONDOR (Consumer Decision Making on Organic Products); Poster at the 43. Scientific Congress of the German Society for Nutrition, Stuttgart-Hohenheim 9-10 March 2006.

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