

Angelika Wolf
Wegener Center for Climate and Global Change
University of Graz
Brandhofgasse 5, A-8010 Graz, Austria
Phone: +43 316 380 8471
eMail: angelika.wolf@uni-graz.at

Drivers of climate friendly food consumption: comparing the purchase of domestic, organic and meat products

The food sector alone caused 16% of overall greenhouse gas emissions within the EU-27 in 2007 (EEA, 2012). Increasing consumer demand for ecological food may induce a shift towards more ecologically sound production and distribution practices. Therefore, promoting changes in the Western diet has become an interesting option for mitigating climate change. A comprehensive understanding of the causes of ecological food consumption is paramount to promote behavioral change.

Hence, this paper investigates different causes of ecologically sound food consumption. Here, ecological food is understood as products, which cause less greenhouse gas emissions during their production and distribution than conventional products. The study investigates four dimensions of ecological food consumption– the purchase of domestic, seasonal and organic products as well as a low level of meat consumption.

Previous research on ecological food consumption mainly focused on i) single dimensions like organic (e.g. Monier et al., 2009) and vegetal consumption (e.g. Kalof et al., 1999) or ii) on aggregated measures of food consumption, comprised of several dimensions (e.g. packaging, transportation) (e.g. Tanner et al., 2004). There is increasing evidence that environmentally significant behavior is inconsistent between (Welsch & Kühling, 2009) as well as within one behavioral area like food consumption (Loureiro & Lotade, 2005).

Hence, it seems promising not to aggregate different dimensions of ecological food consumption to one single scale, but to apply the same predictors to different types of behaviors to compare their causal structure. In doing so, the study compares the purchase of domestic, seasonal, organic and meat products.

For this purpose, the study employs structural equation models to data drawn from a cross-sectional survey in the city of Graz (Austria), its suburban surroundings and the rural district of Hartberg (N=220). The comparison is based on Stern's (2000) 'Theory of Environmentally Significant Behavior', which applies attitudinal factors, personal capabilities, contextual factors and habits as behavioral determinants.

The findings identify three dimensions of ecological food purchase: i) the purchase of domestic and seasonal products, ii) the purchase of organic products and iii) a low level of meat products.

Different causal factors determine these dimensions: i) Personal norms and age have a significant positive influence on purchasing domestic and seasonal products, whereas price orientation and a tendency towards automatic, non-deliberative food choices have a negative influence on this purchase decision. ii) The purchase of organic products is inhibited by a general price orientation and the lack of knowledge to identify low carbon food. iii) Meat products are favoured by men and older respondents, leaving gender and age as the only significant determinants of this purchase decision.

Personal norms for climate protection are related strongest to domestic and seasonal food consumption - the dimension with the weakest impact on carbon emissions. Interventions and a public discussion on the climate impact of meat consumption could help to slowly change

the public perception of ecological consumption styles. Furthermore, easy to notice and to identify product labels seem promising to foster organic product consumption, because a lack of knowledge still inhibits positive purchase decisions. Finally, habitual consumption with a high level of automaticity could be influenced by environmental cues like a more prominent positioning of ecological food in stores.

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