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Nutritional implications of organic conversion in large scale food service
preliminary results from Core Organic research
Abstract

• The discussion about nutritional advantages of organic consumption has traditionally focused on the properties of the food itself. Studies have shown however that change of consumption patterns towards organic food seems to induce changed dietary patterns. The current research was a part of the iPOPY study and was conducted to investigate if such changes can be found in school food settings. In other words does organic food schemes at school and related curricular activities help to create environments that are supportive for healthier eating among children? The research was carried out among school food coordinators in public schools in Denmark, Finland, Germany, and Italy. A questionnaire was adapted to fit the different languages and food cultures in the countries. The data suggest that schools with organic supply tend to develop organisational environments that are more supportive for healthy eating than their non organic counterparts. However the results were only significant for Denmark and Italy. In Germany results were significant in some cases whereas as for Finland there were no differences or results were contradictory. The findings suggest the changes in school food services seems to be driven by different agendas but that awareness raising on nutrition and sustainability issues seems to be an important feature of many change processes. Findings also suggest that the two agendas although separated in the scientific literature is more integrated in the everyday life perspective of school practitioners.
Hypothesis

Attitude (school)

Environment/policy/praxis (school)

Behaviour (students)
Methodology

- Cross sectional, stratified sampling
- WBQ methodology
- Respondents: school food coordinators (SFC)
- Selfreporting of praxis, attitude & intention
- 1st study Denmark
- 2nd study
  - IT: 174 completed the WBQ/39 partially completed/ 1153 distributed
  - FI : 205 completed/46 partially completed/ 999 distributed
  - DE survey respondent: 45 completed/ 61 partially completed/ 133 distributed
What do we already know

Previous studies

- **Health reasons** are the one most important reason for consumers to buy **organic**. Torjusen et al (2004)
- **Health reasons** are more important than **concerns for environment and nature**. Beckmann (2002)
- **Introduction of organic foods** seems to **induce a changed dietary pattern**. O’Doherty et al (2001)
- **Consumption of meat and meat products**, **sweets & alcoholic beverages** was **lower among heavy-users** (compared to the average of the German population). (Brombacher & Hamm 1990)
- **Consumption of vegetables and cereals** was **higher among heavy-users**. (Brombacher & Hamm 1990)
- **Green caterers** serve **more healthy meals** than their non green counterparts. (Mikkelsen et al, 2007)


Outcome measures - the proxies “close to the real thing”

- Meeting nutritional guidelines?
- Having a nutrition committee?
- Integrating nutrition in curricula?
- Having a food and nutrition policy?
- Providing eating facilities?
- Availability of FV
- Availability of water
- Non availability of fizzy drinks
- Non availability of cocoa milk
Do organic schools provide better eating environments?

Figure 3. Having a school canteen.
Are organic schools more efficient in using nutritional recommendations?

**Figure 4.** The comparisons between the organic/non organic schools in regard to the issues of using nutritional recommendations for pupils.
Are organic schools better in performing nutrient calculation?

**Figure 5.** The comparison between POP schools and non POP schools with regard to the nutritionally calculated school meals.
Are organic schools better in food & nutrition policies (FNP)

Figure 1. The share of organic and non-organic schools with a food and nutrition policy, including organic food in the curriculum, (and more items).
Are organic schools better in food & nutrition policies (FNP)

Figure 8. Food and nutrition policy. The figure shows the percentage of organic/non organic schools with the food and nutrition policy.
Are organic schools better in integrating food & nutrition in curricula?

**Figure 2.** Teaching food and nutrition through pedagogical activities.
Are organic schools better in integrating food & nutrition in curricula?

Figure 9. Nutrition knowledge. The figure shows the schools involved food and nutrition policy in teaching activities.
Conclusion

• Organic provision seems to be interrelated with opportunities for healthy eating.
• Healthy eating is not only a matter of healthy foods but of healthy environments.
• "Settings" seems to be able to provide environments for healthy eating.
• "Settings" seems to be able to provide a good field lab for a "triangle experiment".
Next stop`?

Environment

Physical
Social
Organisational

Individual
Genotype, Phenotype

Behaviour

Health outcome

SCT, model adapted from Bandura
Read more:
http://ipopy.coreportal.org/

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