Promoting sustainable consumption and healthy eating:
A comparative study among public schools in Denmark, Germany, Finland & Italy

Chen He & Bent Egberg Mikkelsen
Food, People & Design
Aalborg University Copenhagen, Denmark

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Abstract

Since the Ottawa charter on the importance of health promotion in settings the school has been named as one of the most important arenas for interventions to promote physical activity and healthy eating. Especially the school food service has been the object of a change agenda that has been named the European school food revolution. This revolution is characterized not only attempts to promote healthy eating but also by attempts to make food supply and consumption more sustainable by integrating organic procurement policies. The current study aims at investigating how these two agendas work together. Do they compete or do they go hand in hand as previous studies suggest? And if this is the case does organic food schemes at school and related curricular activities then induce healthier eating behaviours among children? The research that is part of the iPOPY study was conducted among school food coordinators in public primary/secondary schools (children age from 6 to 15 years old) in Denmark, Germany, Finland and Italy. The study was initiated in Denmark, and subsequently performed in the other three countries through a web-based questionnaire. The questionnaire was translated and adapted to fit the different languages and food cultures. The questionnaire researched the attitude, policies and serving practices regarding promoting organic foods and healthy eating habits through school food service and classroom activities. The data suggest that schools with organic supply tend to develop organisational environments that a 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 where as for Finland there were no differences or results were contradictory. The findings suggest the school food revolution is 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 much more integrated in the everyday life perspective of school practitioners.
Organic consumption and health behaviour

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 **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)

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Aim/Objective

Organic food procurement policy

Environment supportiveness for healthy eating
Hypothesis

Attitude (school)

Environment/policy/praxis (school)

Behaviour (students)
Study design

- Cross sectional, stratified sampling
- WBQ methodology
- Respondents: school food coordinators (SFC)
- Selfreporting of praxis, attitude & intention
Sampling schools

Status of distribution and response of WBQ

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<th>Germany</th>
<th>Finland</th>
<th>Italy</th>
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The indicators

Organizational environment

• Having a Food and Nutrition Policy (FNP)

• Integrating nutrition in class activities

• Providing school canteen

• Enforcing nutritional recommendations

• Meeting nutritional guidelines

  • Availability of FV
  • Availability of water
  • Non availability of fizzy drinks
  • Non availability of cocoa milk
Having a food and nutrition policy

- Denmark: 80%
- Germany: 71%
- Finland: 86%
- Italy: 85%

Organic schools vs. Non-organic schools.
Integrating nutrition in curricula

![Bar chart showing the percentage of organic and non-organic schools integrating nutrition in curricula across Denmark, Germany, Finland, and Italy. The chart indicates that Italy leads with 76% organic schools and 51% non-organic schools, followed by Denmark with 35% and 32%, Germany with 43% and 16%, and Finland with 33% and 32%.](chart.png)
Providing school canteen

![Bar chart showing the percentage of organic and non-organic schools providing school canteen in Denmark, Germany, Finland, and Italy.]

- Denmark: 70% organic, 30% non-organic
- Germany: 71% organic, 73% non-organic
- Finland: 88% organic, 12% non-organic
- Italy: 87% organic, 13% non-organic
Enforcing nutritional recommendations

![Bar chart showing percentage of organic schools compared to non-organic schools in different countries: Denmark, Germany, Finland, Italy. The chart indicates varying percentages across countries.](chart.png)
Performing nutrition calculation

- Denmark: 50% Organic, 13% Non-Organic
- Germany: 43% Organic, 18% Non-Organic
- Finland: 54% Organic, 80% Non-Organic
- Italy: 87% Organic, 57% Non-Organic

Organic schools vs Non-Organic schools in Denmark, Germany, Finland, and Italy.
Results

Do organic schools provide better environment for healthy eating?

- In all cases
- In some cases
- No differences or contradictory

Limitations:
- Size of sample is small
- Drop out rate considerable and needs to be analysed
- Further research
  - Is differences manifest at foodservice availability level
  - Can differences be found at student intake level
Discussion

- There is ample evidence that consumers in most cases make a link between organic food and individual health
- Some evidence on the fact that organic supply associates with a healthier environment

- Include a position on organic food in your food and nutrition policy
- Integrate organic supply with curricula activity - apply the whole school approach
- Integrate education for sustainability with education for healthy eating
- Theoretically based teaching should go hand in hand with hands on learning
Read more:
http://ipopy.coreportal.org/

Co-workers

Chen He

Ann-Kristin Løes

Melanie Lukas

Carola Strassner

Roberto Spigarolo

Minna Mikkola