

A close-up photograph of a young girl with dark hair, smiling broadly with her eyes closed. A single green apple is balanced on top of her head. She is wearing a red top. The background is dark and out of focus.

# Organic food in Danish schools -a contribution to healthier eating at school?

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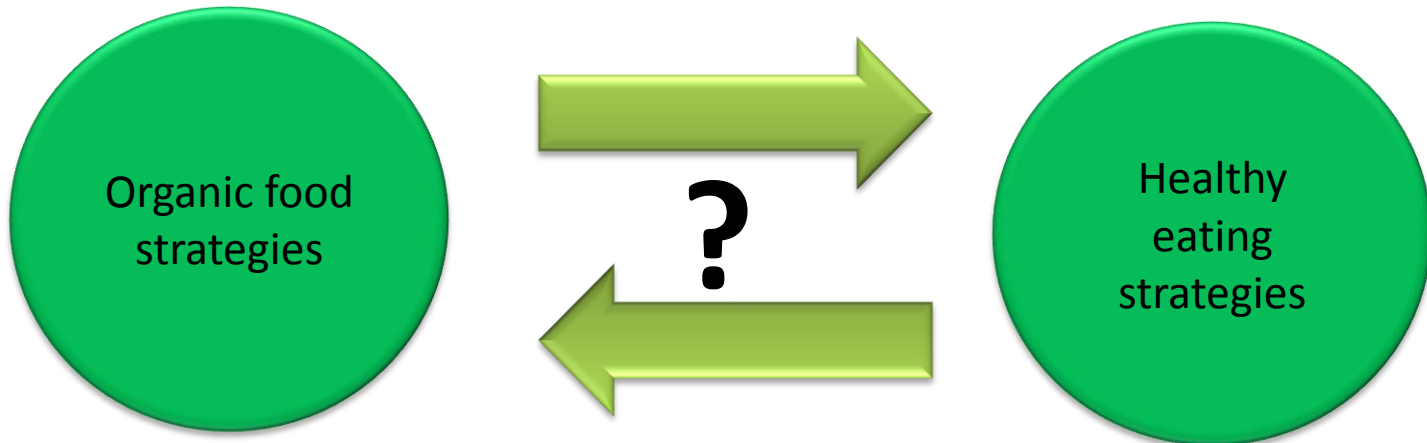
# Abstract

- The European school food system is under transition in what has been called the European school food revolution by Morgan & Sonnino (2008). Two pillars play a major role in that transition. The call for healthier eating and the call for more organic food consumption. This research has been exploring how these two agendas interact. The research hypothesizes that there might be a synergistic interaction between the two. In other words if organic strategies and procurement schemes have the potential to be supportive for healthier eating among young people at school. The research was conducted using school food coordinators in public primary/secondary schools (children age from 6 to 15 years old) in Denmark, Germany, Finland and Italy as respondents from a web based questionnaire. The study was first carried out in Denmark, and subsequently performed in the other three countries. The questionnaire was translated and language and culture adapted. The questionnaire included questions on attitude, policies and serving practices regarding organic food strategies and actions supportive for healthy eating. Findings suggest that schools with organic supply tend to develop organisational environments that is 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 organic change processes.

# Aim of study

## Research question

- What is the interplay between organic food policies and healthy eating strategies



# Research object

Public primary/secondary schools

(children aged 6 – 15)

Respondent: School food coordinators

➤ Organic schools

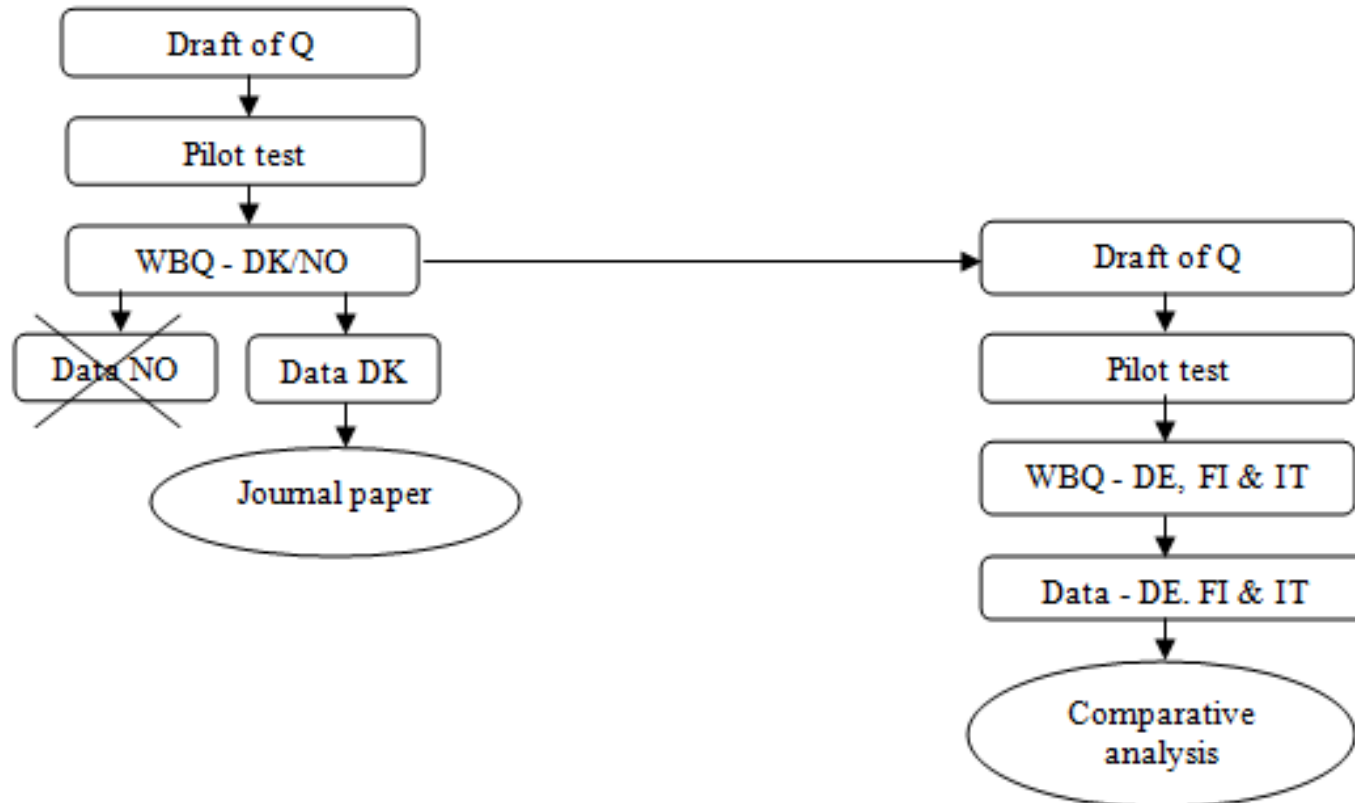
➤ Non organic schools

***Independant variable : Having an organic food procurement policy ?***

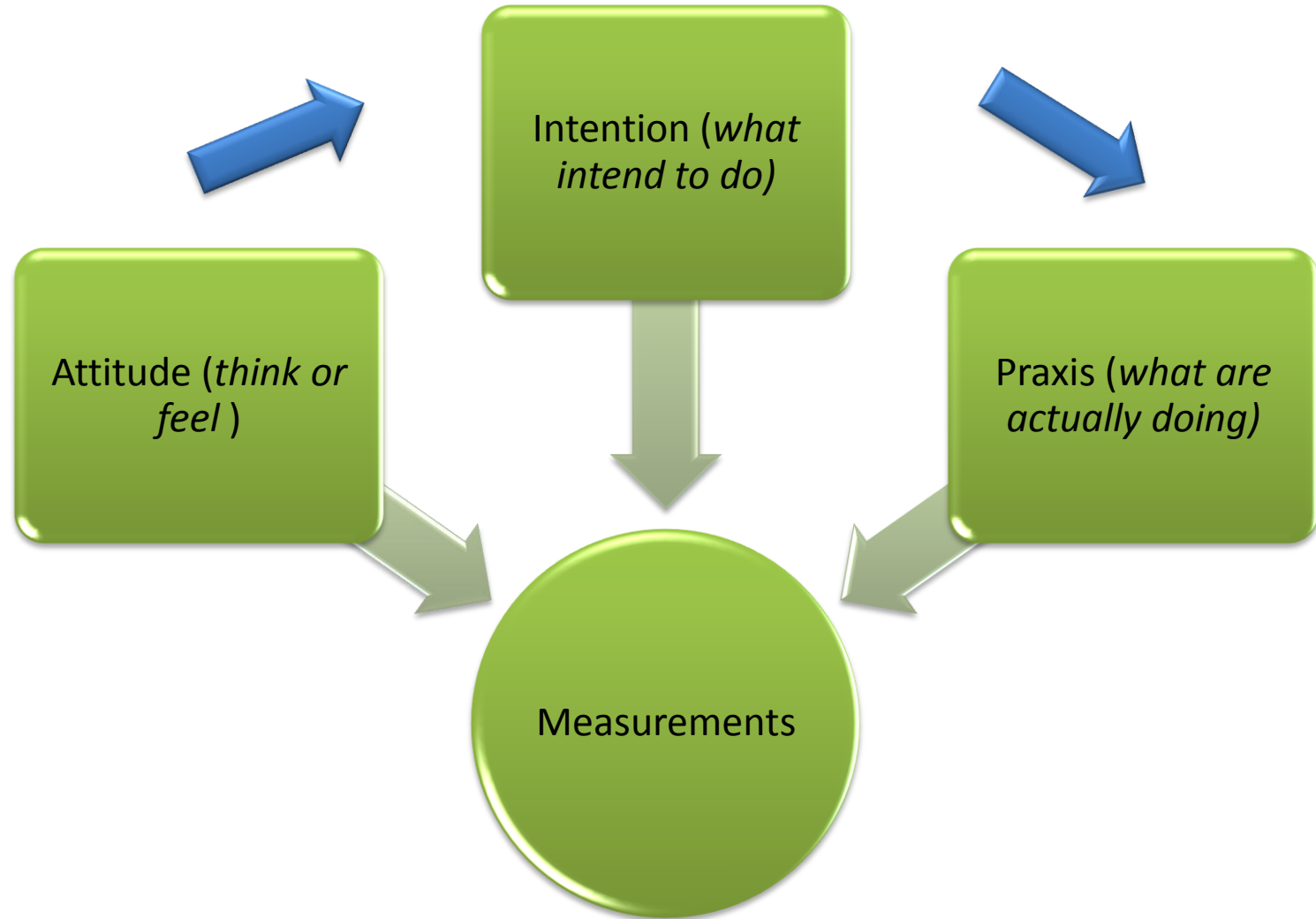
# Why do we think there is a link between *organic consumption* and *health behaviour*?

- 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)

# Study design




# Web Based Questionnaire



# Indicators

## Proxies for healthy eating

- Attitude with regard to promote organic among children
- Attitude with regard to promote healthy eating habit among children

- 
- Having a Food and Nutrition Policy (FNP)
  - Integrating nutrition in pedagogical activities
  - Enforcing nutritional recommendations
  - Meeting nutritional guidelines

- Availability of FV
- Availability of water
- Non availability of fizzy drinks
- Non availability of cocoa milk

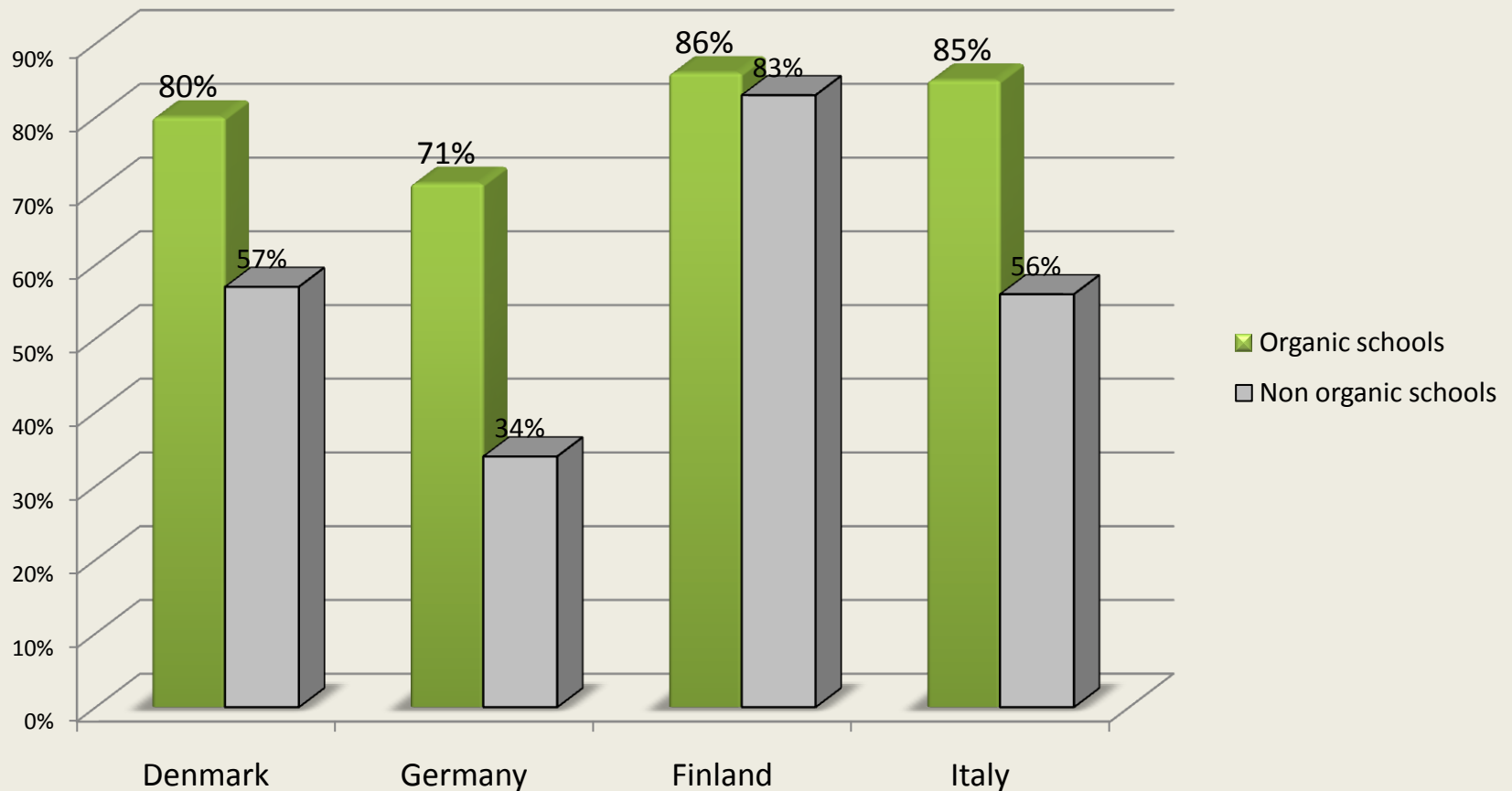


# Sampling schools

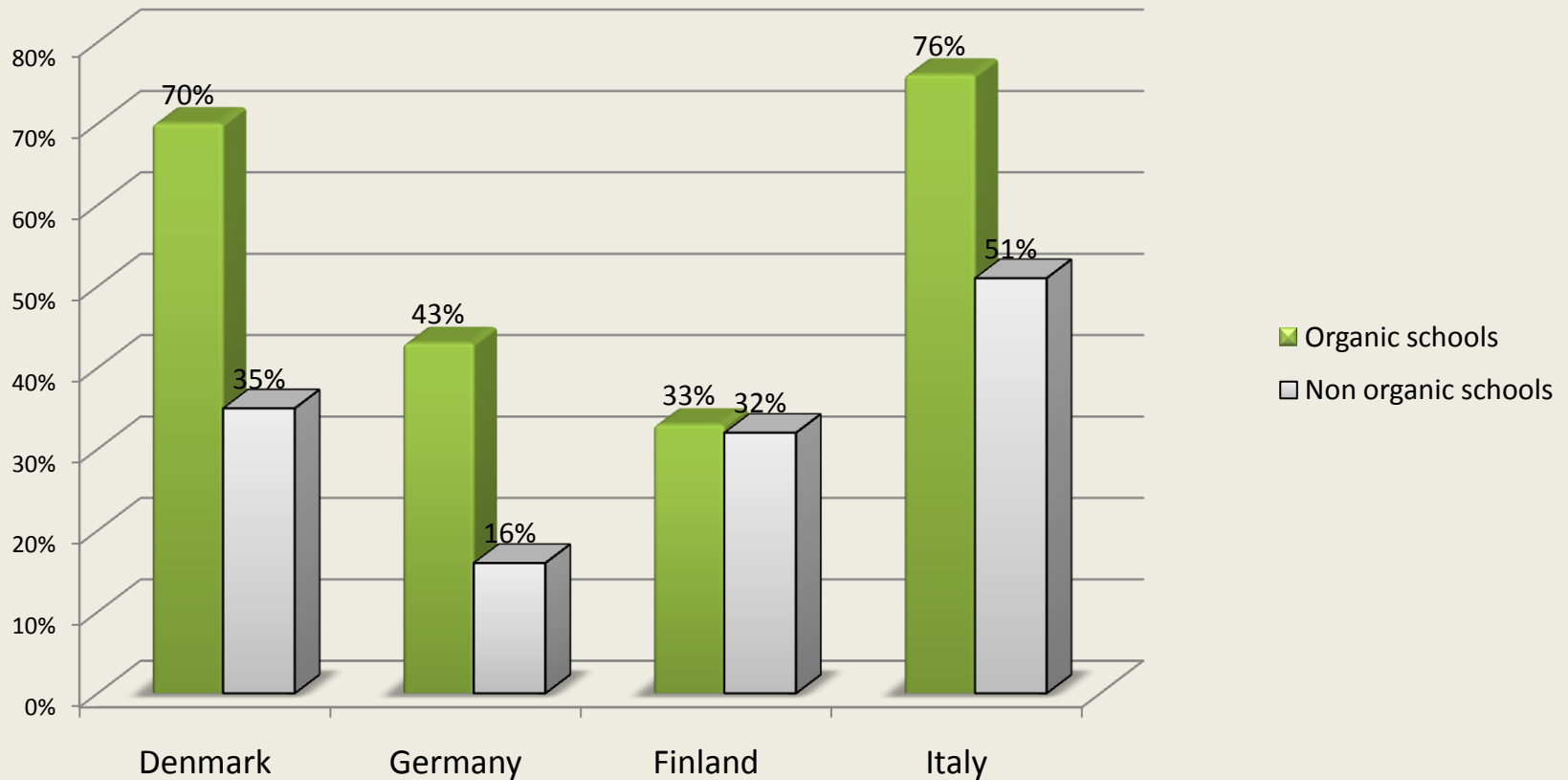
Status of distribution and response of WBQ

	Denmark		Germany		Finland		Italy	
	Respondents	Percent	Respondents	Percent	Respondents	Percent	Respondents	Percent
<b>Complete</b>	79	44,1%	57	37,5%	205	20,5%	176	18,7%
<b>Partially complete</b>	13	7,3%	65	42,8%	45	4,5%	39	4,2%
<b>No responding</b>	87	48,6%	30	19,7%	748	74,9%	725	77,1%
<b>Distributed</b>	<b>179</b>	<b>100,0%</b>	<b>152</b>	<b>100,0%</b>	<b>998</b>	<b>100,0%</b>	<b>940</b>	<b>100,0%</b>

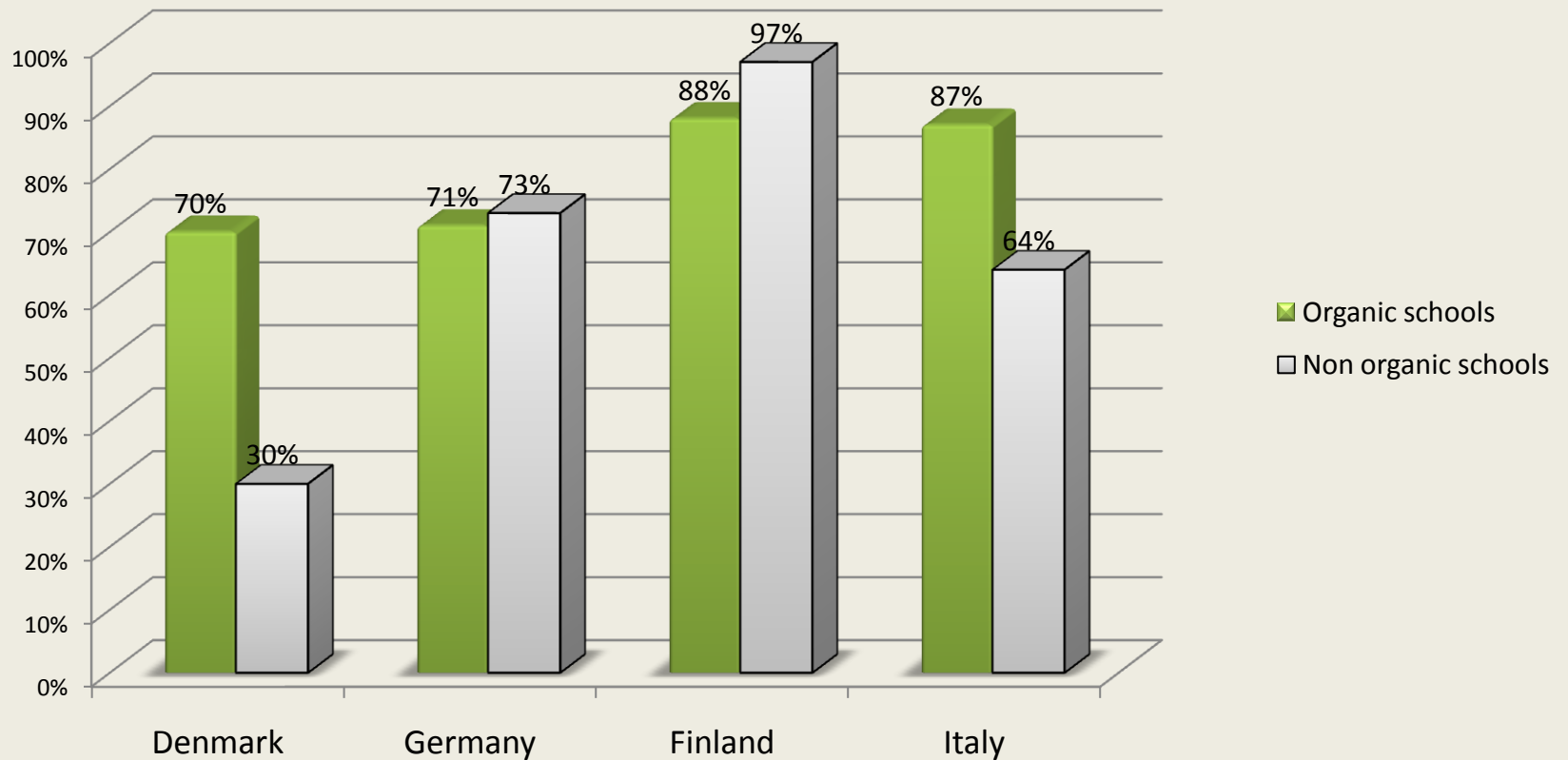
# Action Indicator 1: Having a food and nutrition policy



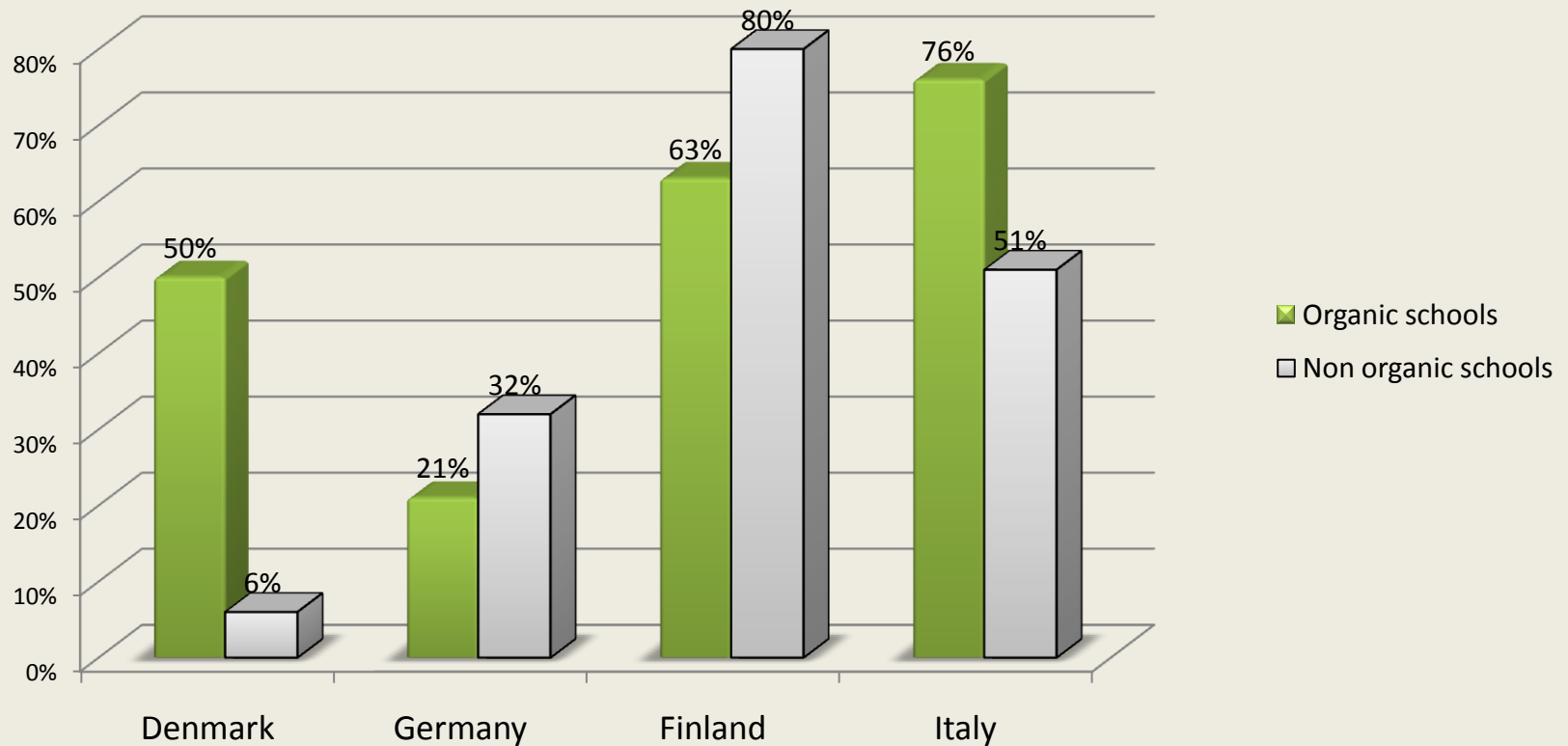
# Action Indicator 2: Integrating nutrition in curricula



# Action Indicator 3: Providing a school canteen



# Action Indicator 4: Enforcing nutritional recommendations



# Future perspectives

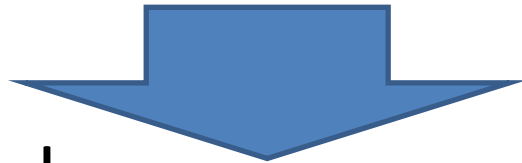
- The pupils are at 5th - 6th grade (age 11-13) in the public primary schools in Denmark.
- Organic schools + non organic school
- Daily intake
- Dietary assessment tools

# Why this link?

- Municipal council adopts and agenda 21 policy
- Municipal civil servants or politicians suggest an organic policy (POP)
- School head master told to implement POP
- School head master initiate a meeting on school food
- Dissussions go on about the scope of school food

# Why this link?

- Positive lists and negative food lists discussed
- Nutrition, food & health issues debated
- Organic food issues debated
- Organic foods implemented
- Forced menus redesign
- More vegetables, less meat



- Increased awareness







# Conclusion

***Organic schools***

seem to be better at  
creating *good nutritional  
environments* than

***non-organic schools***

# Valid for all countries?

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

➤ *Limitations of study:*

- *Size of sample is small*
- *Drop out rate considerable and needs to be analyzed*

# Why this link?

- Municipal civil servants write the operational procedures
- School head master receives a letter
- School head master initiate a meeting on school food
- Dissussions go on about the shape of school food
- Positive lists and negative lists are discussed

# Why this link?

- Municipal council adopts and agenda 21 policy
- Health issues debated
- Organic food issues debated
- Menus taken to redesign
- More vegetables, less meat
- Increased awareness

# Recommendations

## for policy makers and practitioners

- **Previous studies shows:**  
that consumers in most cases make a link between organic food and individual health
- **This study shows :**
- on the fact that organic supply associates with a healthier environment



- Consider 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**

**Thank you!**  
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**Mia Brandhøj**

