Abstract: Meal programs in Danish preschool has undergone a rapid change over the past years and the new educational opportunities that meal provision offers have fuelled a new interest from the research community. Institutions for preschoolers offers a good infrastructure and skilled human resources that might contribute positively to active learning about life & health skills if food provision is linked to curricular activities in a creative way. The paper is departing theoretically from Bourdieu's notion of cultural capital. The idea was translated into a food and nutrition heuristic using a typology of embodied, objectified and institutionalized cultural capital. The heuristic was then used to analyze the relation between the Dagmar intervention and the cultural capital as a proxy for food & nutrition literacy. The paper is based on the case of the Dagmar intervention (Dannelse og sundhed gennem bedre madrammer i børnehaver: www.dagmar.plan.aau.dk). A protocol for the intervention emphasizing the food related hands-on learning activities was developed on the foundation of the meal and learning program running in the Fuglsang kindergarten in Aalborg. The intervention was developed using an action research approach was then evaluated formatively. Data collection was done using individual open ended interviews combined with focus group interviews. Interviews was transcribed and thematic analysis was carried out leading to identification of important constraints and perspectives for action. The study found that meal programs in preschool offer a well suited opportunity for building active learning components into the preschool foodscape. The study further found that the commitment of the workforce involved in both curricular activities and food activities is crucial and that the inter-professional understanding between the teaching and the food & nutrition profession needs to be reinforced if coherent foodscape are to develop in preschool. The study finally showed that the whole school approach provides a good framework for developing the important links between food praxis and curricular activities. The paper concludes that there are promising opportunities for developing the learning opportunities in regards to food, nutrition and health in preschool and kindergarten. The paper further concludes that the idea of food and nutrition related cultural capital seems to be a well suited theoretical framework for capturing the effect of the food, nutrition and health related learning processes that can evolve around the meal programs that more and more preschool and kindergarten are experiencing and food literacy can be used to provide health among preschoolers.
Drivers for new kindergarten foodscapes

• Since 2004 kindergartens are subject to adopting individual curricula
• The food in kindergarten bill passed 2011
• Increased focus on institutions as protected places
• Increased focus on responsibility of mediators & intermediaries
Learning cycle
Kindergarten foodscapes in transition

- Collective
  - Institution with meals for all (Example: SE & FI)
- Semi-Collective
  - Institution with meals for some (Example: Kindergarten, DK)
- Non-Collective
  - Institution with no meals for all (Example: Schools, DK)
Foodscapes as Learningscapes?

Hands on Food Activities, HOFA*

• Taste education
• Farm2School links
• Roof gardens

• Edible school gardens
• Cooking classes
• School gardens

*EU language= accompanying measures
Research question

From passive feeding to active learning

What is the potential in terms of accumulation of cultural capital
Theoretical framing

How can we capture learning as outcome?

- **Food & Nutrition Literacy**
  - the ability to organise one’s everyday nutrition and food in a self-determined, responsible and enjoyable way.

- **Cultural Capital**
  - a non-financial social asset that can be “saved” and foodwise can be “spent on a healthy life”
    - Embodied. Experiences you bring, “inherited”
    - Objectified. For instance cook books, utensils
    - Institutionalized. The “degrees you got”

Bourdieu, P. 1986, Forms of Capital
Dyg, PM 2012
Theoretical framing
The kindergarten foodscape

Kapitel 6, Mad og måltider i børneinstitutioner, Sanne Sansolios og Bent Egberg Mikkelsen
http://munks.gyldendal-uddannelse.dk/Books/Ernaering_og_sundhed/9788762811683
Methods
Sample Image questionnaire

1. Er du en dreng eller en pige?

2. Hvor gammel er du?
Intervention

Individual book of season
In nature

Intervention
Is nature edible?
Potato project

Intervention
The kinder garten garden

Intervention
From planting to harvest
End of season: preserving for winter

Intervention
Taste shop (Sapere)

Intervention
Results:
Preferences, veggies

- Baseline image-based questionnaire
- Follow up image questionnaire

Bar chart showing preferences for various veggies, comparing baseline and follow-up image questionnaires.
Results:
Knowledge, F+V

Wrong answer in the baseline image-based questionnaire
Wrong answer in the follow up image-based questionnaire
Conclusion

• Foodcapes are potential powerful learningscapes
• SFS accompanying measures offers new avenues
• Need for evidence based outcome measures incl effect on determinants and uptake
• Need for long term tracking measures
• Need for a participatory approach
• Work force development (WFD) is key
AAU-MENU kindergarten foodscape research

• Dagmar (www.dagmar.plan.aau.dk)

• FRIDA (www.frida.plan.aau.dk)

• SoL project (www.sol-bornholm.dk)

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