HOW CAN INTERDISCIPLINARITY OF FOOD, DESIGN, ARCHITECTURE, ENGINEERING AND PEDAGOGY AFFECT CHILDREN’S EATING HABITS AND FOOD PREFERENCES?

Anna Marie Fisker, Associate Professor, Department of Civil Engineering, Aalborg University
Hafdis Sanna Hermannsdottir, Ph.D. Fellow, Department of Civil Engineering, Aalborg University
Mia Brink Rasmussen, Scientific Assistant, Department of Civil Engineering, Aalborg University

The poster outlines the research on how to affect children’s eating habits and food preferences through interdisciplinary approach involving food specialists, designers, engineers, architects and pedagogues. In order to make evidence in the field an interdisciplinary team consisting of beforementioned disciplines created a carrot pavilion and appurtenant carrot activities that were tested on a group of 25 children at the age of 3-5 years old.

CARROT PAVILION
In order to research on the possibility, if physical architecture affects the children’s eating habits and food preferences, the interdisciplinary team built a 10 x 10 meter carrot pavilion with “walls” and “ceiling” of 5000 carrots hanging in invisible threads was created, making an architecturally defined space allowing various experiences. The aim was to influence the children to interact with the surroundings, the feedstock.

CARROT ACTIVITIES
In order to influence the children to create a positive and strong relationship to the carrot, there were created several activities based on sensory and playfulness, as results show, that sensory education has positive effect on children’s food preferences (Reverdy et al., 2010) and positive reinforcement retrains the brain to learn new patterns of behaviour (Koster, 2004). The activities were situated within the carrot pavilion and were both action based and tranquil activities in order to reach the broad group of children.

INTERDISCIPLINARITY
The diagram explains the different disciplines in the interdisciplinary team, arrows showing the primary interaction within the team.

RESULTS
The results were positive, underpinning the thesis: integrating feedstock in context and activities can affect children’s eating habits and food preferences. This shows that working interdisciplinary involving food specialists, designers, architects, engineers and pedagogues has made it possible to create a solution involving relevant angles regarding the thesis.

The results will be further used as design parameters, as this research is a part of an interdisciplinary research project, FRIDA, involving three different disciplines focusing on design, food and children. The aim of the FRIDA project is to turn lunch-scheme arrangements in Danish day-care institutions from passive to active.