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Introduction

Danish children aged 10-17 years only eat 1/3 of the 350 grams of fish per week recommended by health authorities.1 Eating fish, especially fatty fish, as a part of a varied diet, ensures a contribution of the polyunsaturated fatty acid D3 which is important to ensure children’s positive cognitive development and function, and over the life span reduces the risk of developing cardiovascular diseases.2,3,4

In Danish public schools Family and consumer sciences (lit: Madkundskab, similar to Home economics) is mandatory for one year in either 4th, 5th, or 6th grade, which makes the school arena an unique setting for learning about and promoting healthy diverse food habits. Furthermore, according to Larson et al. (2008) young people who help to cook and there by acquire cooking skills early in life tend to consume a healthier diet according to the nutrition recommendations later in life.

The aim of this study is to examine if practical experience, e.g. cooking, in a school setting affects 10-13 year old children’s acceptance of fish.

Methods and Materials

Study population

Students age 10-13 years from 5th - 6th grade. The students in both the main group and the control group came from different public schools on Zealand. The main-group from five schools and the control-group from ten schools respectively.

Study design

This study is an interdisciplinary, quasi-experimental intervention with a main group (MG, n = 270) and a control group (CG, n = 299). Furthermore, the control group was randomly divided into two sub-groups: Control group 1 and 2 (CG1: n = 159; CG2: n = 140).

The main group participated in a five week theme course on fish developed for FCS in 5th – 6th grade (5 x 3 lessons of 45 min). Control group 2 had an oral lecture (2 x 45 min.), based on the same themes: The senses, quality of fresh fish, tastility, filleting, cooking, food history, preservation, food waste, sustainability, nutrition etc.

Results and Discussion

Differences between MG and both control groups at baseline were analyzed, no significant differences were found (p > 0.05). Hence, the groups were considered similar at baseline. Control subgroup 1 and 2 were pooled, as no differences between them were found (p > 0.05) (data not illustrated).

Compared to CG a significant increase in self-evaluated fish cooking skills (table 1, p = 0.0005, mean: illustration 2, top) for participants in the fish cooking course (MG), was demonstrated. In liking of fish, means revealed a tendency to decreased liking compared to baseline, especially in MG (table 1, p = 0.144, mean: illustration 2, bottom).

Conclusions

In conclusion practical experience increases the students’ self-evaluated skills, but even though no increase in liking was observed in the questionnaire, there was an increase in curiosity for trying other fish, for those students that participated in the five week experiential sensory-based theme course. Thus, practical sensory-based experience with fish and gaining a practical skill increase positive views toward eating fish, which can set a direction for future motivation and curiosity to try fish.

References

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2. pedestal (3) views from unpaired and paired t-tests for the following statements in the study at baseline (B) and after (E). Q1: I can cook a fish and Q2: I like fish

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