

## NEW TOOLS TO PROMOTE VEGETABLE CONSUMPTION OF COLLEGE STUDENTS - Participatory food development and sensory-based activities for adolescents

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### Abstract

Diet rich in fruits and vegetables is associated with a decreased risk for many chronic diseases such as cardiovascular disease and type 2 diabetes. WHO recommends eating  $\geq 400$  g per day of fruits and vegetables, not including potatoes and other starchy tubers. In Finland the national recommendations for vegetable, fruit and berry (VFB) consumption is 5 portions per day.

The aim of this 3-year study is to promote VFB consumption to adolescents in three different approach: health education, sensory-based and participatory food development workshops. The objective is to motivate young people to eat more VFB, provide information about healthy diet and activate them to take part of planning and preparing food based on they own preferences.

The current study sample consist of 233 freshman students in four different colleges in Finland whose average age is 17 (between 16-31). Participants' knowledge and attitudes toward VFB, their own estimate of consumption and food neophobia scale are studied by questionnaires before and after each intervention.

The results indicate that adolescents consume VFB less than recommended in Finland. 50 % of study participants consumed only 1-2 portions FVB per day. The results also indicate that during school meals the hot vegetables are commonly disliked and discarded.

The two novel promotion (sensory-based and food development) activities have been designed using service design methods. In the food development workshop students choose 3-4 dishes to develop by using more vegetable protein based new products. Some students participated guided sensory-based activities and created also a tailored salad dish from the ingredients provided. The aim was to focus on taste, colors, texture, shapes of salad components via personal perception. The developed tools are shown to increase interest in VFB among adolescents.

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