



HabEat

Determining factors and critical periods in food habit formation and breaking in early childhood: a multidisciplinary approach

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Medium-scale Collaborative Project

SEVENTH FRAMEWORK PROGRAMME

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To assess the impact of parental styles and individual differences on acquisition of food habits

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Workpackage concerned: WP2

Concerned workpackage leader: ULeeds

Dissemination level: CO (confidential)

As some of the data contained in this report has not yet been submitted for publication, we changed the dissemination level from Public to confidential until the publications will be accepted. The summary is Public. The present version will remain confidential after publication. However, a public version will be prepared containing the abstracts and the links to the related papers.

Executive summary

It is known that eating habits are established early in life. Habits are formed as a function of a number of different factors most obviously through familiarisation with a new food given repeatedly over time. However, eating habits are also influenced by child characteristics and the experiences shaped by the family including parenting decisions. Thus, various elements which surround the child will influence habit formation, specific family characteristics, as well as those features such as temperament inherent to the child. Early food experiences then are determined in large part by the willingness of children to try new foods and of parents to provide these foods repeatedly. Therefore, in this workpackage the objective was to examine the importance of child and parent characteristics as predictors of how much is eaten within interventions designed to enhance vegetable intake. In this workpackage we have assessed features of the child such as age, previous experience of feeding (breastfeeding, age of weaning), eating traits (e.g. responsiveness to satiety, fussy eating), and characteristics of the family diet such as how often fruits and vegetables are consumed at home. Thus, short term learning studies conducted to promote the acceptance of new foods such as vegetables may be more or less successful depending on these influences on food habit formation. In a series of studies conducted to examine the impact of different learning techniques to promote vegetable intake in weaning age to preschool children, we have modelled various influences which might determine both how much of a new food is accepted and how successful learning is in response to different learning strategies: repeated exposure (also named 'mere exposure'), flavour-flavour learning and flavour-nutrient learning. Overall, age of the child was the best predictor of both initial intake and learning velocity with younger children showing greater intake and speed of learning than older children. Eating traits such as satiety responsiveness also determined to a significant extent the amount eaten and whether children were non-eaters or plate clearers. In conclusion, the formation of eating habits can be shaped by feeding practices including repeated exposure, however, strategies to enhance vegetable liking and intake might consider both the age of the children and their eating traits in order to optimise effects on vegetable consumption.