**A new approach for studying willingness to try unfamiliar foods**

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A common way of studying the development of Willingness To Try (WTT) unfamiliar foods among neophobic children is to perform repeated exposures and study the variation in food intake as the number of exposures increases. However, after multiple exposures a food item is no longer unfamiliar to the subjects. The aim of this study was to test whether frequent one-time exposures to unfamiliar food items increased children’s WTT other unfamiliar foods.

Ninety-six ten-year-old children were recruited from two schools. Pupils in the intervention (n=40) and control (n=56) schools were comparable in terms of self-reported food neophobia and prior food variety exposure at baseline. Children in the intervention group were exposed to one new food item a day during a 3-week intervention conducted at their school. WTT tests were conducted with all children at baseline (T0), following the intervention (T1) and eight weeks later (T2). In each test, bite-size portions of seven presumably unfamiliar food items were served to the children. The children reported their level of familiarity to the food item, hedonic expectation, decision to taste the food item or not, liking (if tasted) and willingness to try the food again in the future. The children could freely eat the whole servings, taste only or leave the servings untasted. Self-reported neophobia was measured at T0 and T1.

Children of both groups showed moderate levels of food neophobia and a high tasting rate already at T0, generally giving little opportunity for decisive WTT improvements. However at T1, the intervention group on average showed higher frequencies of full consumption of test foods than the control group in spite of lower average expectations on presented foods and lower average liking of tasted foods. This consumption effect was not observed any longer at T2. Self-reported neophobia did not vary over time for the intervention group.

Conclusively, frequently exposing preadolescent children to unfamiliar foods may positively impact WTT new unfamiliar foods. However a three-week program of unfamiliar food exposures did not affect food neophobia as a self-reported trait. Future work may test the methodology for a longer period, on specifically neophobic children and/or on preschool children, who are known to be naturally neophobic.