

What to **measure** in **exposure** studies ?

– Liking, Wanting and Intake does not tell the same story in a bread study

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Introduction

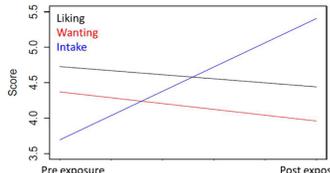
Increasing children's consumption of whole grains is of interest as the health benefits track into adulthood. However, many parents do not serve whole-grain bread to their children as they have experienced that the children have rejected whole-grain bread out of hand. Exposure has been shown to alter children's preferences.

Procedure

Rye buns used in the exposure study	
Bun A	Reference rye bun
Bun B	Reference rye bun + oat fibers
Bun C	Reference rye bun + oat fibers + oatmeal flakes
Bun D	Reference rye bun + carrot fibers
Bun E	Reference rye bun + carrot fibers + grated carrot

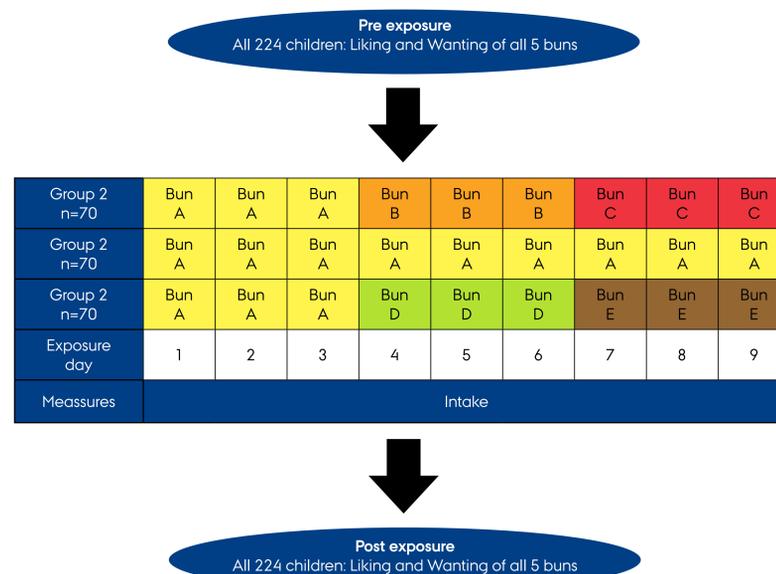


Results

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Groups	Buns	Liking wanting and intake across exposure
No significant effects with regards to liking, wanting and intake	Significant differences in liking and wanting as rye buns containing carrot were less liked and less wanted than the reference buns and the buns containing oats.	Significant decrease in both liking and wanting across exposures. However, intake increased markedly across exposures and in particular from exposure four to nine. 

Aim

To investigate the effect of whole-grain rye bread liking and intake gained from exposing children to servings of whole-grain rye buns with a gradual increase in fiber content.



Conclusion and perspectives

Liking and wanting decreased significantly across exposures. Surprisingly though, intake increased markedly across exposures and in particular from exposure four to nine. These results are valuable as the general belief supported by results from previous studies is that liking and wanting is positively correlated with intake. The present study stresses the importance of the awareness of which responses to measure in exposure studies and not simply rely on general assumptions on relationships between measures.

