Are cross-modal interactions in sweet beverages influenced by demographic factors?

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Introduction
Cross-modal interactions are the influences of other modalities on the perception of one modality e.g. taste. How cross-modal interactions influence sweetness perception could potentially depend on different demographic factors, such as age. The aim was to investigate the effect of aroma and colour on sweetness perception and how this was affected by adolescents of different age groups.

Methods

Results
Adolescents in the age group of 11-14 years old, perceived no significant differences in sweetness in the samples, whereas 15-18 years olds perceived the samples significantly sweeter when pomegranate aroma was added.

Conclusion
The older age group (15-18 years old) of adolescents was more susceptible to the addition of pomegranate aroma in elderberry/apple juice as they perceived the samples significantly sweeter when the aroma was added. On the other hand, the younger age group (11-14 years) was not affected. The difference in the influence of aroma on perception of sweetness between age groups should be considered important by industry in new product innovation processes and marketing. More studies should be performed to further study age differences in cross-modal interaction effects.