Sounds Healthy: Cross-cultural auditory associations with healthy eating for UK, US, and Chinese Consumers

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Introduction and Aims

- Crossmodal correspondences between basic tastes and sound attributes have been well-documented (e.g., low pitch and bitterness, high pitch and sweetness).
- Next step in sound-food research: Uncover sonic associations with more abstract food-related concepts such as craving, satiation, and healthfulness.
- Study goal: To identify sound parameters that correspond to the experience of eating a healthy or unhealthy meal across three different cultures (UK, USA, China).

Study Design

- 315 participants from the UK (110, 78 F), US (100, 49 F), and China (105, 77 F) took part in an online study.
- Participants imagined eating a healthy or unhealthy meal and chose sound clips that best matched the experience.
- Participants were asked what healthy eating signified for them.

Results

- Chi-squared tests of independence uncovered certain sound attributes which were matched with healthy/unhealthy eating experiences at rates significantly higher than chance.
- Cross-cultural similarities and differences in healthy eating perceptions.

Discussion and Conclusion

- Across the three cultures, healthy eating was consistently associated with high pitch, lack of distortion, and consonant harmony.
- On the other hand, unhealthy eating was associated with low pitch, distorted notes, dissonant harmony, and loud volume.
- The three cultures differed somewhat in the perception of healthy eating: Chinese consumers associated organic and environmentally sustainable eating more than US and UK consumers.
- Future directions: composing healthy and unhealthy soundtracks. Can such soundtracks influence food choice, preference, and eating behaviour (e.g., eating speed, quantity)?

References


