

Bland-tasting food? It could be the background noise

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Photo credit: mr kathika, Flickr

(PhysOrg.com) -- Air travelers have long complained of the blandness of airline food, but new research suggests the aircraft noise may be the problem rather than the chefs or the menu.

The study, published in the journal [Food Quality and Preference](#), reported that the presence of high levels of [background noise](#) diminished the sensitivity of the palate in volunteers, making food taste bland and flavorless, while pleasant sounds could increase the sensitivity and enjoyment of the food.

Researcher Andy Woods and colleagues from the University of Manchester in the UK and Unilever blindfolded 48 volunteers and gave them a range of foods while exposing them to different levels of white

[noise](#) via headphones. Foods used in the trials included cheese crackers and flapjacks, and the results showed that the louder the white noise, the less the subjects were able to sense and enjoy the saltiness or sweetness of the foods, and the less they tended to like them. One thing that did increase in the presence of loud noise was the sense of the crunchiness of the foods tested. In another experiment they found a relationship between liking of music being played while they ate, and liking of the food.

Woods said there is a general opinion that airline foods "aren't fantastic," but since they do their best, he wondered if there were other factors at play. Airline catering companies tend to season their meals strongly to counteract the perceived blandness, and NASA does the same to its foods for astronauts because they also have a reduced perception of flavor. It is also a common phenomenon for people to eat more if they eat while watching TV.

To Woods' knowledge no one had ever researched the effect of background noise on the enjoyment of food, but one thing that is common to all airlines is the ambient noise of the aircraft, so he and his colleagues decided to test the hypothesis that the noise may have an effect.

The research clearly showed that the presence of loud noise dulled the perception of taste, but enjoyable music could enhance the eating experience. Woods said the findings suggested for example, that salad bar serving crunchy salads might benefit from louder music, but a restaurant serving salty food should turn the music down.

The findings could help restaurateurs select the best music and ambient sounds to maximize their customers' enjoyment of their meals. Unilever intends to continue the research to try to find the explanation for the effects found. One possibility is that the noise might distort the brain's

ability to interpret the sense of taste, or it might simply distract the diner from the flavors of the meal.

More information: Effect of background noise on food perception, A.T. Woods et al., *Food Quality and Preference*, [doi:10.1016/j.foodqual.2010.07.003](https://doi.org/10.1016/j.foodqual.2010.07.003)

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