



More chilli means less chewing

Cong Lyu, a PhD candidate in Sensory Science and Eating Behaviour, studied the effect of eating hot food. The results may not be that surprising, but they give new clues on how the sensory qualities of food affect our eating behaviour.

‘In contrast to food texture, we don’t know much at all about how our eating behaviour is affected by hot and spicy food,’ says Lyu. ‘We wanted to find out how the burning sensation in your mouth when

you eat spicy food influences the way you eat.’

‘Participants chew less per mouthful when eating spicy rice and hamburgers’

Lyu served meals to the participants in his study, with varying degrees of spiciness due to variations in the amount of chilli powder. ‘We prepared tomato soup, curry

rice and hamburgers ranging from slightly spicy to very hot.’

‘When participants ate the tomato soup with a hot and spicy taste, they drank twice as much water, and the time between mouthfuls of soup became longer,’ says Lyu. ‘We saw the same effect with the hot curry rice and hamburgers, only the participants made fewer chewing motions per mouthful and they did not keep the food so long in the mouth. They were probably doing this to reduce the discomfort of the burning mouthfeel.’

New line of research

‘This study is the start of a new line of research. The results may not be very surprising, but they give new insights into how sensory signals from the food influence our chewing behaviour.’

Lyu also sees potential applications.

‘The underlying idea is to increase the spiciness of food slightly as a way of getting consumers to eat more slowly and eat less. Future studies should show whether this can work. Spicier food might also be a way of getting people to drink more during a meal.’ DV