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Study on the attenuation of oral fat sensations with Oolong Tea

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Oolong tea is one of the fermented teas made from the leaves of Camellia sinensis. This tea is widely drunk in Asia, especially in Japan where it is often consumed unsweetened during meals. This practice is believed to lie in its "refreshing" effects during the course of a meal. It is hypothesized that Oolong tea presents a cleansing effect on oral fat sensations during meals, but so far no studies have established this phenomenon. Here we show through several sensory studies that Oolong tea consumption significantly reduces oral fat sensations compared to water. However, tea drinking with meals is not popular worldwide: many people drink water or carbonated beverages with fatty meals. Presently, we compared the effects of Oolong tea to those of different beverages on oral fat sensation. More specifically, the study focused on the modulation by beverage consumption of perceived oral fattiness elicited by diverse edible oils. Oolong tea and carbonated beverages were used as drinking solutions and water as a control. Subjects exposed their mouth alternately to fat stimuli and drinking solutions, as would occur in a real meal situation. Oral sensations of fattiness, astringency and bitterness were evaluated on a 20 point scale after tasting fat stimuli and drinking the solution. Results are discussed in terms of oral fat sensation attenuation and also cultural differences associated with the perception of Oolong tea.