

# UC Merced

## Proceedings of the Annual Meeting of the Cognitive Science Society

### Title

Associations between gustatory imageries and vowel length in Japanese food names

### Permalink

<https://escholarship.org/uc/item/7185x0qw>

### Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 46(0)

### Authors

Kambara, Toshimune

Yoshio, Mizuki

Okada, Nodoka

et al.

### Publication Date

2024

### Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at <https://creativecommons.org/licenses/by/4.0/>

Peer reviewed

# Associations between gustatory imageries and vowel length in Japanese food names

**Toshimune Kambara**

Hiroshima University, Higashihiroshima, Hiroshima, Japan

**Mizuki Yoshio**

Hiroshima University, Higashihiroshima, Japan

**Nodoka Okada**

Hiroshima University, Higashihiroshima, Hiroshima, Japan

**Rea Kawano**

Hiroshima University, Higashihiroshima, Hiroshima, Japan

**Norika Kondo**

Hiroshima University, Higashihiroshima, Hiroshima, Japan

**Sho Tamakawa**

Hiroshima University, Higashihiroshima, Hiroshima, Japan

## Abstract

This study examined how vowel length in words affects the gustatory imageries (i.e., sweetness, saltiness, bitterness, sourness, and spiciness). We presented pseudowords with long and short vowels to native Japanese speakers using different modalities and instructions. The stimuli were presented visually (Studies 1, 3, and 4) or auditorily (Study 2). In addition, half of participants in Study 3 were instructed to subvocalize the stimuli and the other half were instructed not to subvocalize. Words with long vowels were associated with sweetness when presented in katakana characters (Studies 1 and 3). Words with short vowels were associated with saltiness and bitterness when presented in katakana characters (Study 3). Our findings revealed a role of vowel length in taste-sound correspondences in Japanese. It advances the understanding of how people obtain information about the taste expectations from word forms.