

## **Influence of ingestion frequency of processed food on discriminating ability of saltiness**

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### **Summary**

The processed food became popular in our dietary life, though the most food contains a lot of fat, salt and MSG. In this study, the relation between ingestion frequency of processed food and the discriminating ability of saltiness was investigated with questionnaire survey and sensory evaluation.

Questionnaire survey was conducted for 727 of university students and the ingestion frequency of 38 kind of processed food was asked. Sensory evaluation was carried out for 230 of students using solution sample of saltiness, sweetness, sourness, umami, and also using mentuyu-model and mayonnaise-model as the mixed taste samples.

Data obtained from questionnaire survey was first attempted the factor analysis, and then divided the respondents into four groups by cluster analysis using their factor scores. The discriminating ability of each sample was compared among four groups.

The discriminating ability of respondents in Cluster1, whose ingestion frequency of processed food was lower than the other groups, was not different from the others not only in saltiness but also in sweetness, sourness, umami and mixed taste samples. The discriminating ability of sourness of respondents in Cluster3, who often used the frozen foods and ready-to-eat foods as rice ball or sandwich, was superior to that of respondents in Cluster2, who often used the frozen foods, instant foods and retort pouch foods. The respondents in Cluster4 often used the ready-to-eat food as spring roll or gyoza, whose discriminating ability was not different from the others.

There was no evidence to show the relation between ingestion frequency of processed food and the discriminating ability of saltiness.