

## Gustatory Threshold in Human; Relationship to Aging

Toshimi Mizunuma ( Department of Regional and Family Life, Saga University )

Kentaro Sakai ( Department of Nutrition, School of Medicine, The University of Tokushima)

Sachinobu Manabe ( Department of Domestic Science, Kobe Women's University Seto Junior College)

### Summary

To elucidate higher gustatory thresholds or decreased gustatory sensitivity in elderly were studied on four basic tastes ( sweetness, saltness, sourness and bitterness) on lingua-tip using filter-paper-disk method.

Gustatory threshold were measured in human aged from 20 to 79 ( 472 males; 20~29 yr, n=155, 30~39 yr, n=53, 40~49 yr, n=49, 50~59 yr, n=144, 60~69 yr, n=20, 70~79 yr, n=51 and 363 females; 20~29 yr, n=60, 30~39 yr, n=55, 40~49 yr, n=58, 50~59 yr, n=84, 60~69 yr, n=79, 70~79 yr, n=27) who are living in Saga prefecture in Japan.

Thirty graduated concentrations of each sucrose, sodium chloride, tartaric acid and quinine chloride were prepared on paper disks and used for taste substances as sweetness, saltness, sourness and bitterness, respectively.

Aging in both sexes decreased gustatory threshold of all the four tastes, and gustation of the four tastes in females was more sensitive than that in males in same age points.

Urinary sodium excretion examined in 61 males and 14 females among the subjects showed a no significant correlation to gustatory threshold of saltness.

These results indicate that gustatory sensitivity is higher in female than in male and aging decreases the gustatory threshold in both sexes.