

## Study of Space Foods - Taste and smell -

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### Purpose

Space foods must be safety food. And the space food is not only safety food but also the nourishment food. In addition, the space foods are demanded to make mental stability. A long-term stay in the space was enabled now. From this, the importance of space foods rises more and more. Therefore it was decided that this study studied taste and the smell that were important to space foods.

### Method

We did examination of taste and olfactometry for 14 elderly people (65 years or older: 2 male, 12 female). We did examination of taste by using taste disc (Sanwa Kagaku Laboratory Corporation). Disc include 0.3%, 1.25%, 5%, 10% and 20% of salinities in the filter paper. We did examination of smell by using smell stick (Daiichi Yakuhin Kogyo corporation). 12 different kind of smell (India ink, Hinoki, perfume, menthol, rose, mandarin orange, home gas, sweat socks, wood, curry, condensed milk and fried garlic) were examed.

### Result

The average age of 14 people was 73.6+/-3.9 years old (66 years old - 78 years old). The average of the weight was 53.6+/-8.2 kg, the mean of the percent of body fat was 33.0+/-6.0%, the BMI level was 22.3+/-3.4 kg/m/m. Four subjects were identify 0.3% of salinities and ten subjects were identify 1.25% of salinities.

### Discussion

During the long-term stay in space, our body mass index is changing. Percent of our body muscle is decrease and percent of our body fat is increase. Our result shows, long-term stay in space, we worry about our sense of smell decline. And also, we want to collect data more and examine aging in the sense of taste. In future, we hope to make more delicious and more fragrances space food.

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