

Learn about taste through experience

~ Food science program with special tasting at multiple local science museums ~

How to approach the decreasing number of people interested in science?

Today, science and technology are closely related to modern society, and are indispensable in life. However, interest in science is declining among young people in particular. What kinds of efforts are required by local science museums whose mission is to "arouse interest in and understanding of science among citizens?"

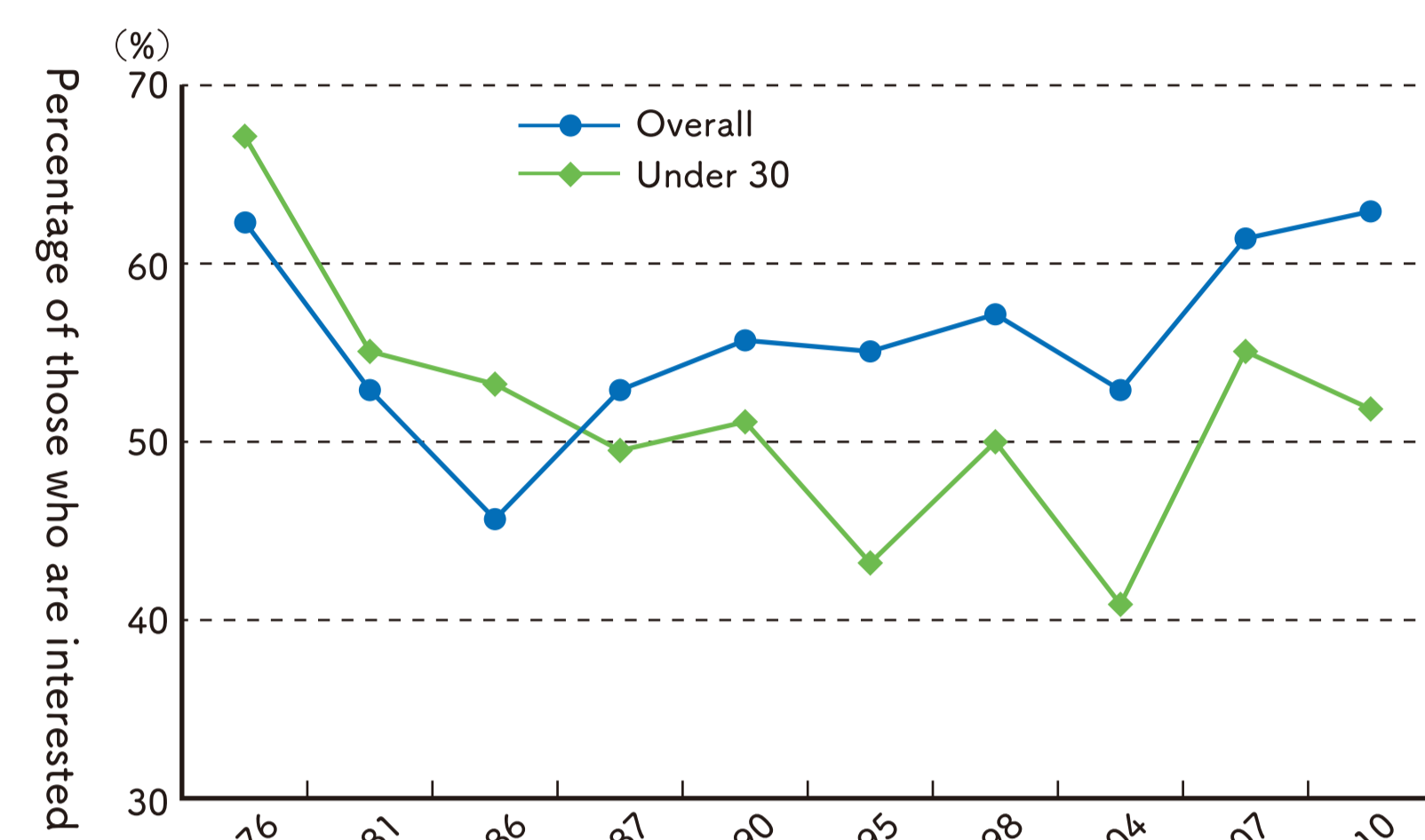
Develop a program with familiar themes

The feelings of "surprise, inspiration and familiarity" strongly arouse an interest in science. In particular, "familiarity" is very effective in enhancing the social value of science learning and science. So, we chose the familiar theme of "taste", and developed the content of an experience-based program to learn about taste, especially umami, with Ajinomoto Co., Inc. a leading company in world umami research.

Learn Japanese traditional umami and eating habits

The program proceeds interactively. Each science museum arranges and localizes the environment and cultural elements of the area so that participants can feel more familiar with them.

Interest in news and topics about science and technology



Reference: Cabinet Office, Government of Japan
"Public opinion survey on science technology and society"

【Program composition】

What is "taste"?

First of all, let participants know how "basic tastes" feel with the tongue. After showing participants photographs of things such as candy and salt and letting them think about the basic tastes, such as sweet taste and salty taste, we explain that there is a "basic taste" which is not normally noticed besides the four tastes. We then clarify this through a "Special tasting".



STEP 1
Learn about basic tastes

Let's feel differences in taste!

① Distribute a tasting cup containing a special soup made for the experiment to the participants, ask them to drink half of the soup and hear their impressions of the taste.

② Add umami seasoning to the soup remaining in the cup, and ask the participants to drink it after it has dissolved, and then to compare it with the taste of the soup they drank at the beginning of this program and make comments.

STEP 2
Special tasting

What is the identity of this taste?

Most participants who experienced this experiment noticed a change in the taste of the soup, and at the same time were surprised by the difference. The experimenter explained that the identity of the seasoning which changed the taste is the fifth basic taste, called "umami". We introduce representative umami ingredients (glutamic acid, inosinic acid, guanylic acid) along with foods rich in umami, and explain that umami is an important element of taste discovered by people in Japan about a century ago.

Impressions of participants

I did not think there were such differences in taste.

I found out that umami is amazing.

The experience was interesting, so I would like to try it even after I return home.

As we heard explanations while actually experiencing it, we had a great time as a family parent and learnt how to understand taste.

【Features of each region】

- 1 Niigata Science Museum (Niigata)**
Explained traditional foods such as miso and soy sauce and local dishes because Niigata is rich in rice and soybean cultivation
- 2 Gunma Museum of Natural History (Gunma)**
Implemented a workshop utilizing this program within the exhibition "eat."
- 3 Science Museum (Tokyo)**
People from overseas who visited during sightseeing have also had an opportunity to know about the existence of "umami" for the first time.
- 4 OSAKA Science & Technology Center (Osaka)**
Since Osaka is a region with a high awareness of food, we created a rule in which people are not allowed to repeat the same impressions to elicit various comments from participants.

We hope that this program arouses interest in science and also helps more people learn about "umami", a discovery made in Japan, and think about the taste and food culture of Japanese tradition.