4-8 November 2013 IMRP 17 Food Irradiation sessions
Food Irradiation 1 Wednesday 6 November 08:30-10:00 / Salon 3

FI-1 Food Irradiation is safe: why is it so hard to believe?

FI1-02 09:00 – 09:15 Ms. Mariko Ichikawa, Roundtable for Food Communication, Japan

Views of a Japanese Consumers' Association on food irradiation

The Japanese Government indicates that there is little consumer interest in the use of food irradiation. The fact is there is almost no opportunity to see irradiated food in Japan, and consumers don't know much about food irradiation.

When Japanese consumers hear that "The food is treated with radiation", most of them feel resistance towards it, or think that it might be harmful to human health. We, therefore, decided to learn about what food irradiation is and examine the benefits for consumers.

Since April 2007, we have visited the Takasaki Advanced Radiation Research Institute, JAEA to tour the irradiation facility to learn and observe the actual effects of irradiation on food, as well as the impact of unnecessarily high doses of irradiation. By observing the experiments with experts at the facility, we were able to understand following points among others about food irradiation:

- Food irradiation makes it possible to sterilize foods at low temperature,
- It works better for some foods, and
- The dose should not be too high or too low.

In 2009, we made two batches of curry, one using radiation-processed spices and the other, using heat-processed spices, and compared the taste of each. The results convinced us that the spices were better when processed without heat.

In 2012, food poisoning cases attributed to eating raw meat stirred up a social debate as to whether raw meat should be eaten. We performed a sensory evaluation of irradiated frozen beef liver and obtained the results showing the potential application of irradiation to beef livers, as we found no adverse effect on the flavor of irradiated samples. Our activities caught the attention of the media and our experimental results were reported in a number of newspapers. These articles stimulated interest in food irradiation among many people in Japan.

Like many other people, at first we also had a feeling of uneasiness and rejection about food irradiation.

However, by leaning about food irradiation and benefits which we can receive from the technology, our feeling and attitude toward it changed. We came to feel that we would like to share what we learned and observed about food irradiation and benefits for us with other people who are not familiar with the technology.

All the findings presented here were outcome of experiments conducted by an amateur group. Even though we are not experts of irradiation of food, conducting our own experiments help us to understand the results reported in scientific papers, for instance, we were able to observe the effect of irradiation on the texture of food.

We truly enjoyed learning about food irradiation in particular through conducting experiments.

For us, it was a stimulating and exciting experience that we did not expect.

From this experience, we believe that if consumers are given chances to learn and experience, negative bias toward food irradiation could be overcome. I believe that with efforts by experts and food companies, consumers' understanding on food irradiation will deepen.