Japan Geoscience Union Meeting 2014
(28 April - 02 May 2014 at Pacifico YOKOHAMA, Kanagawa, Japan)

MSD40-P01 Room:Poster Time:April 29 18:15-19:30

The recommendation of using the commercial disaster food as Breakfast -To consider it as space foods-

KAJIWARA, Satomi[1*] ; WAKITA, Mari[1] ; TAKASE, Yoshimi[1] ; KAWAI, Mika[1] ; HAYASHI, Yoshino[1] ; KOBAYASHI, Mizuki[1] ; KATAYAMA, Naomi[1]

[1]Nagoya Women's University

Purpose

At the present, the people who do not eat breakfast increase in Japan.

The Japanese Government recommends that we have breakfast well. As same as, the importance of the meal in the space rise more. Development of the space food which can store for a long term is urgent business. Because, we think about an exploration and emigration to Mars. Delicious space food is very important for the astronaut to keep their appetite. We perform questionary survey about the breakfast. I clarify the frequency of the breakfast intake. In addition, I clarify what kind of breakfast was eaten. Therefore in this study, we examined sensuality of the commercially food which can keep for a long term. And based on the result, we thought about the taste and smell in future space foods.

Methods

Fifty female college students(20-21 years old) answered the questionnaire about breakfast intake frequency and about contents of breakfast. Fifty female college students (20-21 years old), they eat some commercially available rice things (eight kinds) which can store for ?ve years. And we performed to do sensuality examination for them. Students carried out the sensory examination and scoring (Perfect score is 10) of food. The marketing products are cooked with hot water in 15 minutes and cold water in 60 minutes. Vegetable rice, shrimp pilaff, perilla and seaweed rice, chirashi-sushi, white rice, fried rice, beef rice, dry curry of the magic rice (product made in Satake Corporation) .

Results

The contents of breakfast were one or two kind of food. People have no time to make breakfast because of busy. An evaluation was high in the taste in order of vegetable rice, dry curry, beef rice, chirashi- sushi, fried rice, perill and seaweed rice, and white rice.

Conclusion

Because people were busy in the morning, a balanced meal to be able to make in a short time was required. This disaster food is just fit as breakfast very much. As for both the taste and the incense, five vegetable rice, fried rice with meat, vegetables and curry rice, stewed beef rice occupied the high rank. Space foods passing globally are necessary. This commercially available disaster food is suitable for both space foods and breakfast very much. We want to examine not only the rice but also the side dish in future.

Keywords: Breakfast, th ecommercial disaster food, Space food

Japan Geoscience Union Meeting 2014
(28 April - 02 May 2014 at Pacifico YOKOHAMA, Kanagawa, Japan)

MSD40-P02 Room:Poster Time:April 29 18:15-19:30

The need of the lactic acid veverage in space foods

HAYASHI, Yoshino[1] ; KOBAYASHI, Mizuki[1*] ; KAJIWARA, Satomi[1] ; WAKITA, Mari[1] ; TAKASE, Yoshimi[1] ; KAWAI, Mika[1] ; KATAYAMA, Naomi[1]

[1]Nagoya Women's University

Purpose

The long-term space stay makes it possible to perform many studies. We think that the development of space foods will develop more in future. The meal management to maintain the health of an astronaut working busily is important. With lactic acid bacterium beverage, we thought that we want to perform the health care of the astronaut. Therefore we decided to check the effect on bowel movement of the lactic acid bacterium beverage.

Method

We assumed towenty adult women (average age 20.5 years old) as subjects. Before experiment start, during two weeks , we took the bowel movement record.Townty students participated in an experiment. We divided it into two groups of ten students of the constipation and ten students of the non-constipation. We boiled Y Company lactic acid bacterium beverage (40% of calorie off) at 100 degrees during three minutes. During two weeks, we let the ten constipaton consume the lactic acid bacterium beverage which we boiled and recorded the state of the bowel movement. Another two weeks, we let them consume the lactic acid bacterium beverage which we did not boil and recorded the situation of the bowel movement afterwards. Ten students of the non-constipation tested it in order to reverse-turn with ten students of the constipation. After the experiment end, we recorded the situation of the bowel movement during two weeks. The record contents were the stool frequency, smell, shape and number of times of the gas.

Result

Stool frequency was improved in the constipation group by the lactic acid bacterium intake. In the case of the non-constipation group, the big change was not seen in stool frequency. However, in both groups, the degree of smell was improved clearly.

Discussion

In constipation group, stool frequency was increased after drinking of the lactic acid beverage.A bowel movement state might be improved by an oligosaccharide and the lactic acid included in the lactic acid bacterium drink.However, when constipation group stopped the intake of the lactic acid beverage, their stool frequency was not good as before. It is necessary to consume the lactic acid bacterium drink continuously

Keywords: Lactic acid, Beverage, Space foods