

## Two weeks stay in Mars Desert Research Station(MDRS)

KATAYAMA, Naomi<sup>1\*</sup>

<sup>1</sup>Nagoya Women's University

I obtained an opportunity to participate in MDRS137. I cooked food for crew in MDRS137.

I made a menu using the commercial article that long-term preservation was possible as space foods. The basic meal was that, rice of the freeze dry, vegetables of the freeze dry, soup of the freeze dry, a retort pouch, canned food, dried fruit, a cookie and a candy. I can keep that food during long time.

Three women and five men participated in this study. The nutrient and the energy of the meal calculated it in consideration of the age, sex and active mass of the subject. I provided a meal of 1600kcal to woman 53 years old. I provided a meal of 1750kcal to woman 21 years old. I provided a meal of 1800kcal to male 50 years old. I provided a meal of 2000kcal to male 41 years old.

The significance of this study is the point that not only the use of the commercial preservation food as space foods but also the food problem at the time of the disaster can solve. It is necessary to make 42 kinds of menus to spend 14 days in MDRS. I thought about a combination of the commercial freeze dry rice and canned food of the fish. In addition, I thought about the combination of freeze dry soup and freeze dry vegetables.

Because 42 menus were gathered up as a booklet, I want to distribute this result widely in future. I hope that people will have interest in the space after to read that booklet. And I can enlighten people about combination of commercial food for the disaster.

Keywords: Closedown space, Life-support system, Space foods