

Introducing insect food to the world  
~To endure the population explosion ~

Class of 2019

○Summary of Study

Now, we are in the middle of population explosion. Through the population growth, many kinds of problems occur. This time, I chose food problem because starvation continue to be a global problem.

The solution for this problem is insect food. Insect food is recommended by FAO, and it contains plentiful nutrients, so some people call it “perfect food.” Moreover, meat conversion efficiency is high and it has many environmental benefits.

However, most of Japanese people do not have a good impression on insect food. On the other hand, there are many who think that they can eat if they get used to. Namely, trying would decrease bad impression on insect food.

Now, I would like to introduce the insect food into school meals. By this, children can ask for their parents to cook the meal at home, and they can share insect food with their family.

Now, most of tropic countries have brought insect food to their life styles. I think the method of school meals is effective in countries such as Europa and America, which insect food is not popular yet.

1 Purpose of study

The population of the world is about 7 billion now. We call this rapid increasing, population explosion. Moreover, the United Nations predict that population of the world will become 11.2 billion in 2100.

Many problems occur from population growth. For example, shortage of land and resources will happen. Then I think we should pay attention to shortage of food. The reason is that starvation has already been the world problem. In addition, most of people who suffered from starvation are in Asia, and the highest percentage of population increasing is Asia, too.

Then I picked up the insect food. Insect food contains high quality protein, meat conversion efficiency is high. Moreover, we ca raise insects in small space and we need little water. In addition, insects do not emit methane. Like this, insect is an ideal food because it is low cost, nourishment, and eco-friendly. However, people especially young people have bad impression on insect food. I want to think how I can solve this problem and spread insect food to the world.

2 Method of study

- ; Look into the history and perspective of insect food by the Internet.
- ;Think a way to introduce to Japan
- ;Think a way to introduce to the world
- ;Form this study

### 3 Results of study

According to the United Nations, the population of the world will become 9.3 billion in 2050(Figure 1 )



(Figure 1)

When we look the world map which shows the population of starvation, we can find that it occurs around Asia and Africa (Figure2). Moreover, according to a list witch shows the ranking of percentage of population growth, the top give are Oman, Lebanon, Niger, Kuwait, Sudan. These countries are in Asia or Africa. The starvation will be more serious in these countries.



(Figure 2)

Then insect food appears. I introduce some of its merits. First, as an environmental merit, insect food has high meat conversion efficiency. For instance, we need eight kilograms to produce one kilogram of beef, while we need only two kilograms for insect. Next, as a healthy merit, insect food contains better protein than meat and fish. It contains most of nutrition including fatty acid, so we can also use it for extra nutrition food. Like this, insect food has many merits. However, there are few people who has good impression on it. According to the survey of Uchiyama Shyoich, a cooking researcher, most of people refuse insect food because of its appearance and shape. However, in the same survey, some people answered that they can eat if they get used to. From this, I thought that trying once can solve the bad impression.

Actually, I also did not have good impression on insect food. Nevertheless, through this study, I bought insect food on the Internet and eat. The taste was similar to shell of shrimp.

Through this experience, I could know we can eat insect food if we get used to. Now I can eat unintentionally. However, most of people may not buy insect food all the way. Then, I would like to introduce the insect food into school meals. We have few chances to come into insect food, but we can experience in school which is familiar to us. In addition, children can ask for their parents to cook the meal at home and they can share insect food with their family. To improve the appearance, I do not provide insect food as a school meal. I recommend devising the way. For example, make insect food into powder or mix into other food. And also, we can use this method in all countries with spread school meal. Now, most of tropic countries have brought insect food to their life styles. I think the method of school meals is effective in countries such as Europa and America, which insect food is not popular yet.

★Future school meal★



This meal was suggested by Uchiyama Shyoichi and Kitazima Kana, a nutritionist. Actually, 11 of dishes are insect food, but they look delicious. Maybe you can eat it!

#### 4 Literature

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