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CASE STUDY OF DIETARY HABITS AND ACCULTURATION IN CHINESE INTERNATIONAL STUDENTS IN JAPAN: PROBLEMS AND NECESSITY OF INTERCULTURAL DIETARY EDUCATION

Kaori Hatanaka

Doshisha Women's College of Liberal Arts, Kyoto, Japan yukilunarmisty@yahoo.co.jp

Tomoko Tanaka

Okayama University, Okayama, Japan tomo@cc.okayama-u.ac.jp

Abstract

Japan is known as one of the world's healthiest food country; however, the question has been raised if foreign students in Japan are truly living a healthy dietary life. Dietary education is common for Japanese citizens; however, it has been undeveloped for foreign students. In this study, we focused on Chinese students, who accounted for approximately 60% of the international students in Japan. Participants were twenty-one Chinese students who attended a university in Japan. Semi-structured interviews were conducted and informants were asked to talk about their dietary life and the changes after coming to Japan. We determined their cross-cultural adjustment and dietary behavior in cross-cultural environment in Japan, and considered whether cross-cultural dietary education was necessary.

Keywords

Cross-Cultural Dietary Education, Chinese International Students in Japan, Studying Abroad, Dietary Behavior, Health Consciousness

1. Introduction

Many studies have revealed that cross-cultural residents face difficulties in their diet. In Western industrialized countries, it has been noted that immigrants and foreign students struggle with the transition from their native diet to the diet of their new location, which is not always as healthy as they expected (Brittan & Obeisant, 2011; Kremmyda et al., 2008). Cross-cultural adjustment progression does not lead to positive changes in health and may contain negative aspects. It is necessary to consider the health management of students' environmental transition to an international society. Regarding diet, Japan is known as one of the world's healthiest country; however, the question has been raised if foreign students in Japan are truly living a healthy dietary life. Due to a lack of research and an increasing number of international students, students' health is of interest. It is necessary to understand if international students acquire healthy dietary habits or if they struggle to solve the dietary problems associated with their environmental transition to Japan. For example, a nutritional survey of Japanese college students indicated a disturbance of diet in young people (Otake & Ishikawa, 2010). There are some suggestions that foreign students are also under its influence (Yasutomo & Nishino, 2008; Isozaki et al., 2011). However, a nutritional standards report in Japan indicated that there is a lack of health management information for cross-cultural residents. While adjusting cross- culturally, residents discover their new society's food, and this affects their daily diet. Meanwhile, it can be assumed that both the Japanese and Chinese diets are selected or are mixed. In other words, along with the environmental transition, cross-cultural residents change their own knowledge, taste, values, changes, and behavioral patterns when experiencing a selection of meals. This means that they are facing challenges with health management. It can be assumed that their food choices are more complex than the public's. It is necessary to investigate physical condition and health management based on the case studies of cross-cultural residents using a health psychology perspective for health management and a social psychological perspective for cross-cultural adjustment. Dietary education is common for Japanese citizens; however, it has been undeveloped for foreign students. In this study, we focused on Chinese students, who accounted for approximately 60% of the international students in Japan. We determined their cultural awareness and dietary behavior since they came to Japan, and considered whether dietary education was necessary. Consequently, this study provided exploratory research on the dietary education of foreign students in Japan.

2. Methods

Participants were twenty-one Chinese students (11 males, 10 females) who attended a university in Japan. The average age was 23.7 years old (SD = 2.33). The educational duration mean was 21.9 months (SD = 20.02, range = 1–69 months). All participants were able to carry out a daily conversation in Japanese.

Investigation period was from June to December 2011. Semi-structured interviews of approximately 20 minutes in duration were conducted with each of the 21 participants, who were asked to talk freely about their dietary changes after coming to Japan. In addition, information concerning physical condition, especially weight change, was asked. Typically, a one—on-one interview was conducted; however, in some cases the participant brought a Chinese friend, in which case, the interview was conducted with two or three individuals. The contents of interviews were recorded with the approval of research collaborators. Verbatim records were created for analysis.

3. Results

Table 1show the informant details (age, gender, the number of months staying in Japan, type of residence, and place of origin), their narrative, and portions of interest are underlined. The following numbers were provided for the topics that were frequently discussed regarding prepared meals: 1) self-catering, 2) eating-out, 3) sweets, 4) changes and concern about being unhealthy, and 5) changes in health. Self-catering is desirable; however, they were often eating out. Sweets were frequently an attractive topic in Japan. Regarding diet, the inconvenience and problems revolved around awareness; however, health awareness was not remarkable, and there were no comments about education or improving one's diet.

Table 1: *Outline of the informant's response*

| Informant details: | Outline of the informant's response | | |
|--------------------------|---|--|--|
| A. | I cook for two now because my roommate does not cook very much. 2) <u>I usually take my</u> | | |
| 21 years old, female, 14 | lunch at the student cafeteria. | | |
| months, | 3) Since I began eating Japanese sweet cakes, which taste delicious, I have gained 10 | | |
| room share, Dalian | kilos. 2) I began to eat out and drink more often starting a part-time job. Except for when | | |
| (Liaoning) | I am drinking, 2) I often go to cheap chain restaurants to eat. When I cook my own | | |
| | meals, I buy supplies from the cheap supermarket with that is located father away rather | | |
| | than shopping at the nearer and more expensive supermarket. | | |

| B. 21 years old, female, 20 months, room share, Dalian (Liaoning) | I gained 5 kilos after I came to Japan. The Japanese sweet cake is very famous in China. 3) I would come home late at night after a part-time job and eat cake, which caused me to gain weight. I work part time in a restaurant and often eat the meals provided for the workers. I cover the cost of living with the pay from my own part time job, and I do not receive financial support from my parents. I feel that contending with living costs is stressful. |
|--|---|
| C. 20 years old, female, 9 months, Dormitory, Dalian (Liaoning) | I did not experience a remarkable change in weight after I came to Japan. 3) <u>Japanese</u> sweet cakes are delicious. I live in the dormitory and cook my own meals. I am not in charge of part time job now. However I worked part-time before in a ramen shop. I often ate the meals provided for the workers. Japanese ramen is delicious. In Japan, portions are smaller than in Chinese. |
| D. 27 years old, male, 8 months, dormitory, Xinjiang Uygur Autonomous Region | 1) I continued cooking food for myself after going on duty in Japan, but now my time is Imited , and I am hardly able cook. We would eat many dishes with noodles in my hometown. I made udon, a Japanese noodle, with the seasoning of my hometown when I cooked. 2) If I am with a friend, I eat out at a cheap neighboring chain restaurant. Because of differences in the environment between Japan and my home country, I got thinner right after coming to Japan, but I gained weight steadily afterwards. Traditional Japanese cuisine is healthy. 4) However , there are a lot of greasy foods in the dining rooms of the school, and I am anxious about my body. I worked part time before, but I do not work now because school is busy. Writing a thesis to graduate is stress. |
| E. 25 years old, female, 2 months, Dormitory, Shanxi | 1) Only two months have passed since I came to Japan, and I still cook my own meals. I frequently invite a Japanese friend to the dormitory and often serve gyoza, a Chinese dish. 3) Because there are many sweets in Japan, I feel that I have gotten fat. 2) When I eat out, I often go to a school cafeteria or cheap chain restaurant. 4) Traditional Japanese cuisine is healthy, but I am anxious about the amounts of greasy food available in the dining room of the school. One month had passed since I began a part-time job, and I am tired from balancing work with study. Fruit and vegetables are expensive in Japan. |
| F. 24 years old, female, 2 months, Dormitory, (the northeastern part) | 1) After two months in Japan, I still cook my own meals in the dormitory. Because the school canteen is expensive, I do not go very often. Traditional Japanese food, which is light, is not my familiar taste. 3) The Japanese chocolate is cheap and delicious. I already felt fat and I am anxious about gaining more weight. However, since it is delicious, I cannot stand that I eat chocolate. My studies keep me busy every day and are very stressful. I have some anxiousness; 4) The amount of vegetables I eat had decreased since arriving in Japan, the price of fruit is high, and we might have effects of radioactivity on fruit. |
| G. 23 years old, female, 2 months, dormitory, (the southern part) | 1) I came to Japan just two month ago. I do not touch Japanese meals, and I still cook my own. 1) I cook my own meals because they are palatable and cheap. 3) Japanese sweet cakes are delicious, and have a feeling that my weight has increased because of them. I work part time in a restaurant. 4) I am anxious about amount of mayonnaise, with its many calories, that is used in the dished provided for the workers. In Japan, there are fewer kinds of vegetables. 1) The use of a lot of vegetables is new for me, and I am puzzled about what I should make when I cook for myself. The price of fruit is high. The presentation requirements for the university seminar I attend are stressful. |

| ** | |
|-----------------------|--|
| Н. | 1) When I first arrived in Japan, I cooked my own meals. The seasoning of Japanese |
| 23 years old, female, | cuisine was not what I was used to, and I often had to force myself to eat in the |
| 48 months, | beginning. Gradually, I got used to Japanese food, and I came to feel that it was |
| lodging house, | delicious. My weight increased by a minimum 5 kilos and a maximum 10 kilos. 3) Sweet |
| Shangdong | snacks are delicious in Japan, and eating sweets instead of a proper meal may be a cause |
| | of the weight gain. I work part time in a restaurant, and I sometime eat the meals |
| | provided to the workers. 2) I now eat out more than I cook my own meals. When I am |
| | short on time, I go to the school canteen or buy a bento, a Japanese lunch box. 4) After |
| | coming to Japan, I lived alone for the first time. It increased to pull breakfast. My |
| | dietary life become unhealthy. |
| I. | 1) In the three months since I arrived in Japan, I have cooked my own meals. Because I |
| 23 years old, male, | use the seasoning of my home country when I cook for myself, my meals are almost |
| 3 months, | identical to the ones I ate in China. I work part time. I feel thin. 1) When I cook my own |
| dormitory, | meals, I cannot organize time very well. It may be a cause of my becoming thin. When I |
| · | |
| Inner Mongolia | am tired, I may feel that I am not willing to cook my own meals. I still continue jogging, |
| Autonomous Region | something that has been a habit of mine since I was a junior high student. About once a |
| | week, the international students gather together to cook and share a meal. 2) When I eat |
| | out, I often go to cheap chain restaurants and bars. |
| J. | 1) When I finish arrived in Japan, I cooked my own food. I did this because it was less |
| 24 years old, male, | <u>expensive than eating out.</u> My weight decreased a little. <u>5) This may be because Japanese</u> |
| 22 months, | food is less greasy than Chinese food. The embarrassing thing is the high prices in Japan. |
| lodging house, | 2) I have gradually started to eat out more because I worked two part-time jobs and came |
| Liaoning | to make money. I sometime cannot understand the Japanese language in class, I am busy |
| | with a part-time job, and then stress piles up. 2) Because eating out is convenient in this |
| | country, Japan, I eat out more when I am busy. I cook my meals three or four times a |
| | week now. |
| K. | I used home stay for my first year in Japan and did a room share for the next four years, |
| 24 years old, female, | living with three friends. Now I use home stay again. My host mother and father say that |
| 65 months, | I should challenge anything because much effort was required for me to come to Japan. I |
| home stay, | successfully approached Japanese cuisine, and there is now almost nothing for me to hate |
| Zhejiang | about Japanese food. 1) I cook meals with my host mother or alone. 1) When I did a |
| | room share, I tried cook food only for myself, if possible, because prices were high in |
| | Japan. 2) When I eat out, I go to the reasonably priced restaurants, like a "family |
| | restaurant," which is a popular Japanese chain restaurant. My weight increased, either |
| | because dinner time is later than it is in China, or because I tried to eat all the food I was |
| | served, in accordance with Japanese culture. When I did a room share, because I was |
| | living with three girls who were sensitive to evidence of weight gain, a sense of rivalry |
| | was initiated, and we were careful not to overeat. In order to pay for living expenses and |
| | |
| T | Japanese language training, I worked at many part-time jobs. |
| L. | Because I ate much spicier dishes in my hometown, I do not like the mild seasonings of |
| 25 years old, male, | Japanese cuisine much. 1) I do not cook for myself very often, because laboratory studies |
| 31 months, | and part-time job keep me very busy. I often buy some lunch or take lunch in the |
| dormitory → lodging | cafeteria. My weight decreased for the first week I was in Japan, then it increased during |
| house, | school vacation, and it decreased again when school resumed. This is because I think too |
| Konan province | much while I am at school. 6) I tried to take meals three times a day, take vegetables in |
| | the form of salad, and so on, in order to eat well every day and keep my parents from |
| | worrying. |
| | |

| M | 4\X 2\ 1.1\(\frac{1}{2}\) \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ |
|-------------------------------------|--|
| M. | 1) My eating habits have not changed much since I came to Japan one month ago |
| 24 years old, female, | because I have been cooking my own meals. 1) I do this because eating out is expensive. |
| 1 months, | I am currently looking for a part-time job and want to be able to eat out after becoming |
| lodging house, | able making some money. 5) There is nothing in particular that I keep in mind for health. |
| Jilin | I do not know how to be conscientious about my health, even if I should desire to be. I |
| | went shopping in a supermarket, but I was surprised at the high prices of vegetables and |
| | fruit. Curiously, items such as cake and meat, which are expensive in China, are |
| | considerably cheaper in Japan. I am close to the other Chinese students who came to |
| | Japan for the same time period and who may adopt home-cooking habits. When I was in |
| | China, I lived full time at my parents' house, but I did the cooking there as well. When I |
| | came to Japan, it was the first time I had live alone. I have not experienced any changes |
| | in my physical condition or weight. |
| N. | 1) I have continued cooking with myself in mind ever since I came to Japan. The primary |
| 31 years old, male, | reason for this is that I can regulate how things taste and make them palatable for myself. |
| 13 months, | My weight has decreased a little. The cause of this may be the stress of studying. 5) I |
| dormitory, | always very conscious about health. When I was in China, I participated in major sports |
| Shangdong | like basketball, and I took advantage of the sports facilities in the nearby park, but I am |
| Shangdong | not as active recently. I don't see many basketball courts in Japan. I lived in a dormitory |
| | since I was in junior high school. The Chinese dormitories did not have facilities such as |
| | kitchens. I began to do the cooking for myself after I came to Japan. |
| 0. | |
| | 1) I continue cooking for myself because of the high price of eating out, 2) but I began to |
| 22 years old, female, 25 months, | eat out more frequently after I started working part time. I became busy, and I was able |
| · · | to earn money. The place I go to eat out include a school canteen, a fast food restaurant, |
| dormitory → lodging | and a sushi bar. 5) I am not particularly health conscious. The Japanese may be more |
| house, | conscious of their health than the Chinese. Many Japanese people check the calorie count |
| Dalian (Liaoning) | that is written on the back of product packages. My weight decreased when I first arrived |
| | because I was not familiar with the Japanese atmosphere. 3) However, I started working |
| | part time and I have begun to gain weight again because Japanese sweet cakes are |
| | delicious. When I cannot eat main dishes because I do not like the unfamiliar seasonings, |
| | I can eat the dessert. The rhythm of my life significantly changed after I came to Japan. |
| | In the Chinese dormitory, we turned the light off at 11:00 pm and got up at half past six. |
| | Now I go to bed at 2:00 am and get up in time for a class that begins at 9:00, because my |
| | part-time job ends at midnight. |
| P. | Originally there were not many likes and dislikes of the food. After I came to Japan, I |
| 21 years old, male, | lived in the house of my relative for the first one month, then there was not the resistance |
| 32 months, | for meals in Japan. There is a feeling to challenge the thing which I have not eaten. I like |
| $dormitory \rightarrow lodging$ | sashimi, raw fish, and the sushi, too and sometimes eat the natto, fermented food of the |
| house, | soybean. I am familiar with a Japanese dish. 2) I often eat lunch in a school canteen, but |
| Sichuan | eat well at night and in the morning in a house. 1) I cook own meals every day. I often |
| | cook Chinese style stir-flying dishes with the seasoning which brought from China. |
| | There is no change of the weight after the visit to Japan. As the exercise, sometimes I |
| | plays soccer. There are table tennis tables, basketball ring and so on in outdoors in the |
| | Chinese school. We are able to have exercise outdoors. However there are few such |
| | facilities in Japan. It is mysterious why an average life span in Japan is so long though |
| | there are many oil foods. |
| | there are many oil foods. |

| Q. | Two years ago, I studied in Japan for one year, and I went back to China afterwards. I am |
|---------------------------------|--|
| 25 years old, male, | now in Japan again to study abroad. 1) I often cook my own meals. I do not frequently |
| 3 months, | go to the dining room of the school, because the food is tasteless, there is little quantity, |
| dormitory, | and the price is high. 2) However, after spending time studying, I lose the energy that is |
| Shangdong | necessary to make a dish, even if I have time, so I go to the dining room.5) I am not |
| | always conscious about my health when I have a meal.1) I cook for myself because of |
| | <u>financial considerations.</u> There are only two dishes that I am able to cook. I did not |
| | experience a change in weight after I came to Japan. However, after I returned China and |
| | graduated school, I gained 10 kilos in three months while on a vacation. I often eat meals |
| | alone in my room of the dormitory. |
| R. | 4) When I first come to Japan I did not consume breakfast. When I was in China, my |
| | |
| 24 years old, male, | parents prepared the meals. However, after coming to Japan, I run out of time because I |
| 69 months, | immediately go to my part-time job or to class after getting up in the morning. 2) I |
| $dormitory \rightarrow lodging$ | cooked my own meals in the beginning, but eating out has become more frequent. I often |
| house, | go to the beef bowl chain restaurant near the school. 4) I eat fewer meals than I did when |
| Capital (Konan | <u>I was in China</u> . I work part time to pay living expenses. My weight decreased for the first |
| province) | year, but when I moved to a university in the country, it increased by 30 kilos. I fell into |
| | playing an online game. I play at night after I return home.4) <u>I eat midnight snacks</u> . |
| | These are the causes of my getting fat. |
| S. | 1) Because prices are high in Japan, I cook my meals. 4) When I was in China, I ate three |
| 24 years old, male, | meals every day, but this became two meals, lunch and dinner, after I came to Japan. |
| 26 months, | This is because I get up one hour before a class, and running out of time. 1) When I cook |
| lodging house, | my own meals, I cook Chinese dishes, but they do not taste very good. My weight has |
| Jiangxi | increased a little. |
| T. | I do a room share. 1) 2) I sometimes eat out, but cook my own meals if I am free. There |
| 22 years old, male, | has been no change in my weight. 5) Being conscious of my health, I always exercise. |
| 32 months, | This includes basketball and weightlifting routine. I would sometimes go out to eat |
| room share, | Japanese cuisine when I was in China, and I love sashimi, sliced raw fish, and sushi. |
| Liaoning | |
| U. | I came to Japan and I marry. I live together with my wife. Whichever person has time is |
| 25 years old, male, | responsible for cooking the meals. 2) I go out to eat as well. I feel the prices are high, but |
| 32 months, | I do not worry much because I work part time now to get money. My weight has |
| lodging house with | decreased. Because a lot of male international students cannot make many dishes for |
| roommate. | themselves and do not eat cakes like the female students do, their weight generally |
| Jilin | decreases. I play basketball well. However, in Japan there are not many free outdoor |
| 311111 | facilities. When I was in China, I often ate meals in a school canteen. The meal time |
| | there are fixed, unlike in Japan, where a popular dish may disappear if I go late. 4) When |
| | |
| | I was in China, it was rare for me to stay up until midnight, but I began to work part time |
| | after coming to Japan and started to stay up late. There is no chance to eat together with |
| | international student friends, since each one has a class and part-time job, and it is |
| | difficult to match their schedules. |

After coming to Japan, participants gradually changed the form and content of their diets, eating-out increased, and self-catering decreased. Figure 1 shows students' dietary style changes after coming to Japan.

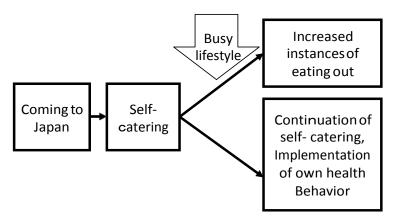


Figure 1: *Dietary changes after coming to Japan*

Although 9 of 21 students continued self-catering, only 2 informants (E and P) were aware of their health. The reasons for self-catering were economical and preferential. The following narratives are examples.

- A. "I cook by myself because it costs less than eating out."
- G. "My cooking is palatable to myself."
- N. "The biggest reason is not health but taste."

The following is a narrative concerning the increased use of eating-out.

- D. "Yes, I cooked well when I first came here. I am getting used to the food here now. I am busier with studying, and there is no time. Then, I am not able to cook for myself as often."
- O. "Just after I arrived in Japan, I often made dishes for myself. Generally, the dishes have not changed. However, I later began a part-time job. I started making money by myself, and there was the chance of eating out, too."

The places they ate out were simple, inexpensive restaurants or university campus cafés. They rarely went to expensive, traditional Japanese restaurants. Only one informant (K), who did homestay, learned Japanese home cooking. Most Japanese foods that international students ate were sold in handy shops.

Next, we examined the demographic changes. Six students, whose duration of stay was 1–3 months, continued self-catering. The eating of vegetables and fruits decreased; however, there were no significant changes in lifestyle (Table 2). Therefore, I thought there was not a significant problem with the food. However, the students who stayed in Japan eight months or more were discussing various changes (Table 3). 15 out of 21 students reported an increase in eating-out and 5 students mentioned a negative lifestyle change.

Table 2: The abstract of maintenance and change in daily life in Japan for informants who stayed less than three months in Japan

| Infor- | Things to be | Things to be changed | | | | | |
|--------|------------------|----------------------|------------------|---------------|------------------|-------------|------------------|
| mant | maintained | Weight | Intake of sweets | Eating out | Part-time job | Life habits | Others |
| Е | Cooking | Increase | Increase | _ | Working | _ | _ |
| | food for | | | | | | |
| | oneself | | | | | | |
| F | Cooking | Increase | Increase | _ | _ | _ | Decrease in |
| | food for | | | | | | intake of |
| | oneself | | | | | | vegetables |
| G | Cooking | Increase | Increase | _ | Working | _ | Decrease in |
| | food for | | | | | | intake of |
| | oneself | | | | | | fruit |
| I | Cooking | Decrease | _ | _ | Working | _ | _ |
| | food for | | | | | | |
| | oneself, | | | | | | |
| M | Exercise Cooking | | | | | | Decrease in |
| 141 | food for | _ | _ | _ | _ | _ | intake of |
| | oneself, | | | | | | vegetables |
| | Weight | | | | | | and fruit |
| Q | Weight | _ | _ | Increase | _ | _ | Decrease in |
| | <i>-</i> | | | | | | amount of eating |

Table 3: The abstract of maintenance and change in daily life in Japan for informants who stayed more than eight months

| | or- Things to be | Things to be changed | | | | | |
|----|---|-----------------------|------------------|---------------|------------------|--------------------------------|---|
| ma | ant maintained | Weight | Intake of sweets | Eating out | Part-time job | Life habit O | thers |
| A | <u> </u> | Increase | Increase | Increase | Working | _ | Increase in frequency of drinking session |
| Е | 3 – | Increase | Increase | Increase | Working | _ | |
| | C Cooking food for oneself, Weight | _ | Increase | _ | _ | _ | _ |
| |) – | Decrease →Increase | _ | Increase | _ | _ | - |
| H | н — | Increase | Increase | Increase | Working | I came to omit breakfast | _ |
| J | ī — | Decrease | _ | Increase | Working | - | |
| k | <u> </u> | Increase | - | Increase | Working | Bedtime became late | Adaptation to food culture in Japan, Intake of Japanese food |
| | L - | Decrease ←→ Increase | _ | Increase | Working | _ | Intake of lunch box sold by convenience store |
| N | Cooking food for oneself | Decrease | _ | _ | Working | _ | Decrease in exercise |
| C |) – | Decrease →Increase | Increase | Increase | Working | Bedtime became late | _ |
| F | Cooking food for oneself, Weight | _ | _ | - | Working | _ | _ |
| R | - | Decrease →Increase | - | Increase | Working | I came to omit breakfast | Decrease in exercise, Decrease in number of dishes |
| | S Cooking food for oneself | Increase | _ | _ | Working | I came to omit breakfast | _ |
| | T Weight, Exercise | _ | _ | Increase | Working | _ | _ |
| | U – | Decrease | _ | Increase | Working | _ | _ |

Table 4 shows the important dietary changes, such as an increase in eating sweets (7 students), increase in eating-out (7 students), and a decrease in eating vegetables and fruits (3 students).

Table 4: The talk about change of eating habits and the reason

| Informant | Change of eating habits | Reason for the change |
|-----------|---|--|
| A | Increase in intake of sweets | Because Japanese cakes are delicious. Because, due to studying, stress is high. |
| В | Increase in intake of sweets | Because the Japanese cake is famous in China. I eat after a part-time job. |
| C | Increase in intake of sweets | Because Japanese cakes are delicious. |
| D | Increase in eating out at the chain restaurant or pub | Because I am busy studying. I do not have time to cook my own meals. |
| Е | There is no change, and I cook own meals | I am careful about health. Because my mother was. |
| F | Increase in intake of Japanese sweets, cooking one's own meals, the decrease in intake of vegetables | Because Japanese cakes are cheap and delicious. Since they are delicious, I cannot stand to do without them. Because prices in Japan are high. Because there are fewer kinds of Japanese vegetables. |
| G | Increase in intake of Japanese sweets, cooking one's own meals, the decrease in intake of vegetables and fruit. | Because Japanese sweets are delicious. Because prices of vegetables and fruits are high. Because there are few kinds of vegetables. |
| Н | Increase in eating out,omitting breakfast, eating Japanese sweet cakes as well. | Because I started a single life. Because my parents prepared meals in China. |
| I | No change, I cook my own meals. | Because prices are high. Because I am conscious of health. |
| J | Increase in eating out | Because, in Japan, eating out is convenient. |
| K | Adaptation to Japanese foods. | Because I planned to challenge my tastes because I came to Japan. |
| L | Increase in purchase of Japanese lunch box | Because it is convenient. |
| M | Cookingone's own meals, decrease in consumption of vegetables and fruit | Because prices are high. |
| N | No change, I cook my own meals. | Because the seasoning of Japanese cuisine does not appeal to me. |
| О | Increase in eating out, eating Japanese sweet cakes as well. | Because I do not have time to cook my own meals, because of a part-time job. Because the dessert was delicious and reasy to eat, even if I am not used to Japanese main dishes. |
| P | Cooking one's own meals, I eat Japanese dishes too. | Because I am conscious of my health. Because I planned to challenge my attitude about Japanese meals. |
| Q | Cooking one's own meals, I take meals alone. | Because I am not used to the seasoning of Japanese cuisine. Because prices are high. Because there is little quantity in the Japanese meal. |
| R | Omitting breakfast, Increase in eating out, increase of midnight snacks | Because I am busy with a part-time job and a class. Because I fell into playing a game and came tostay up late at night. |
| S | Cooking one's own meals, omitting breakfast | Because prices are high. Because I get up late. |
| T | Increase in eating out | If I am free, I cook food for myself. |
| U | Either wife or I, whoever has time, makes a dish, increase in eating out | Because I married. Because I worked part time and became able to make money |

In the dietary changes narratives, 8 out of 9 women referred to eating sweet candies.

They might be satisfied by eating sweets; however, they are at a high-risk of weight gain.

- A. "I want to eat chocolate or ice cream."
- F. "Japanese chocolate is cheap and delicious."
- H. "Yes. Therefore, I eat. I eat only sweets, not proper meals. I feel that I somehow do so."
- A. "10 kilos (I gained weight)." "Almost all girls who came to Japan gained 5 kilos or more."
- B. "Increasing. Around 5 kilos."
- K. "My weight significantly increased" "Around two months, I gained 5 kilos."
- A. "If girls come to Japan, almost all gain around 5 kilos."

4. Discussion

International students face environmental discontinuity when coming to Japan; however, their acculturation gradually progresses. Moreover, their diet can be influenced by individual factors such as lifestyle and values. This research extracted these details. Life expectancy in Japan is the highest in the world and eating fish is considered a healthy diet. The Japanese diet has been studied all around the world (Yoshikawa, 1999).

However, foreign students living alone in Japan have less contact with the Japanese diet. Unless they live at home, they will not have the chance to learn healthy dietary habits. After beginning their life in Japan, students attempted self-catering; however, they were limited by the constraints of a students' life, and soon their utilization of convenient foods increased. It is concerning that the food and drink they intake are typically not healthy.

Not one participant complained about an abnormal physical condition; however, if they continue eating an unbalanced diet, eating-out at convenience stores, and having low self-awareness about their health, there could be an accumulated adverse effect on their future health. Takahama & Tanaka (2013) have proposed that the implementation of dietary education immediately after coming to Japan would be useful as it is important to maintain and improve students' health. However, eating habits have already been formed in their native country. In addition, eating food under different circumstances and a difference in desirable nutritional categories are also possibilities. Maintaining some resemblance of their home country in their

diet is also expected, as a complete transition to Japanese food is unrealistic. It is essential to consider the subject of food education for international students who are in the process of cross-cultural adjustment.

The Ministry of Agriculture, Forestry, and Fisheries recommended utilizing the "Food Guide," which contains necessary nutritional information for the younger generation (Fig.2) (The Ministry of Agriculture, Forestry, and Fisheries). This is the guideline for daily nutritional intake of Japanese foods regardless of self-catering or eating-out. Five items are considered staple foods: side dishes, main dishes, milk, dairy products, and fruit. This guide can be translated into Chinese, and when combined with Japanese food, will suit individuals' taste and lead to balanced diet. If students manage their diet, their health will be improved and maintained, and it will lead to a more meaningful life.



Figure 2: A meal balance guide

The following methods might be considered helpful. Asano (2013) specifically taught how to configure a healthy diet by using convenience stores or restaurants. Initially, he educated students on the connection between food and health. For example, the students understood that there is a respective role and appropriate diet for morning, afternoon, and evening meals. Students must learn what foods they need to eat to achieve the components necessary for their bodies. In addition, they must understand the relationship between calorie intake and body weight. If accomplished, they will acquire the knowledge about what to choose from a convenience store and how to refrain from too much salt, fat, and oil. Moreover, Asano (2013)

teaches students to select a nutritionally desirable menu. With basic knowledge, positive attitude, and proper support, it is possible for students to assemble a proper diet.

This study is part of our food research campaign that seeks to investigate students from several countries. We plan to study other international students and compare them to students from Japan and China. Through this comparison, we will be able to see the characteristics of each population more clearly.

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