Questionnaire Survey Results on Chewing of 90 People Who Participated in the Health Class

By Naomi Katayama

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We conducted a questionnaire survey of 90 participants on chewing to understand the current situation. I cmpleted a 20-item questionnaire survey on chewing and swallowing. The results of the questionnaire are as follows.1) 4.4% with a removable partial denture, 2) 0.0% with complete dentures, 3) Currently attending a dentist 13.3%, 4) 36.7% undergoing regular dental examinations, 5) There are teeth currently being treated 6.7%, 6) The gums have been swollen 34.4%, 7) Blood comes out of the gums 38.9%, 8)34.4% who are usually interested in teeth, 9) Have heard the name of xylitol 97.8%, 10) Have listened to the name of mutants bacteria 36.7%, 11) Can bite apples with their skin 85.6%, 12) Confident in my teeth 20.0%, 13) My teeth are strong 41.1% 14) 8020 I am exercising 46.7%.

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Keywords: questionnaire survey, chewing, time to eat.

I. Introduction

In Japan, the 8020 campaign has been widely publicized by peoples. This campaign is that you should have 20 teeth and chew your teeth to eat enough to maintain your nutrition and health. If we finish eating in a shorter time than the signal reaches the satiety center, you may overeat. And our blood sugar level will rise sharply, and excess sugar will accumulate in our body as fat, resulting in obesity.

II. Materials and Methods

a) Participants

Participants were informed about the study, signed a consent form, and voluntarily participated in this study. A chewing questionnaire Survey was conducted on 90 people who participated in the health class. Participants voluntarily participated in the chewing questionnaire.

b) Chewing questionnaire survey

Participants completed a self-administered questionnaire about twenty items related to chewing. Table 1 shows the contents of each item.

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Table 1. Chewing questionnaire

20-item
Using removable partial dentures
Using full dentures
Currently attending a dentist
Have regular dental examinations
Have a tooth that is currently being treated
Have swollen gums
Blood comes out of the gums
Always interested in teeth
Heard the name of xylitol, which usually chews gum
Heard the name of Mutans bacteria, which usually chews gum
Can bite an apple with its skin
Have confidence in teeth
Think teeth are strong
Know the 8020 movement
There is a tooth that is an imsert tooth
Think I am chewing on food
Chew a bite of food more than 30 times
Do you brush your teeth after a snack?
Did you do fluoridation of your teeth when you were in elementary school?
habit of chewing gum

c) *Questionnaire survey results regarding time spent on meals*

Participants filled in a self-administered questionnaire for the time spent on the three meals.

d) *Ethical review board*

This study was conducted with the approval of the Ethical Review Board (Nagoya women's university 'hito wo mochii ta kennkyuu nikansuru iinnkai'). The approval number is 2020-26.

III. RESULTS

a) *Participant results*

There were 90 participants, fourmales and 86 females. The age distribution is shown in Table 2.

Table 2. Age distribution of participants

	10s	20s	30s	40s	50s	60s
Maie	0	2	0	1	1	0
Female	25	42	4	7	6	2

Show the basic information of the participants in Table 3. The Average± standard deviation of age for 86 females is 26.8 ± 12.3. The Average± standard deviation of the age for four males is 35.8 ± 18.3.

Table 3. Basic information of participants (n=90)

	Female (n=86)			Male (n=4)		
	Age	Height	Weight	Age	Height	Weight
Average	26.8	157.0	50.7	35.8	172.0	66.3
Atandard diviation	12.3	5.4	6.8	18.3	5.7	5.3
Median	20	157.75	50	34.5	173.5	66.5
Maximum	69	169.6	80	54	177	72
Minimum	12	147	39	20	164	60

b) Questionnaire survey results

Table 4 shows the results of a questionnaire survey on mastication for 90 participants. Of the participants, 4.4% had partial dentures, and none had complete dentures. 36.7% of the participants went to the dentist regularly. Of the participants, 97.8% knew the name of Xylitol, and 46.7% knew the 8020 campaign (keeping 20 teeth at age 80). Among the participants, 47.8% felt they could chew food well, and 41.1% felt that their teeth were strong. Among the participants, 67.8% had their teeth treated with fluoride in elementary school, and 22.2% had the habit of chewing gum.

c) Questionnaire survey results regarding time spent on meals results

Most the participants spent 10 minutes on breakfast, 15 minutes on lunch, and 20 or 30 minutes on dinner.

The average time of participants was 12.8 minutes for breakfast, 18.6 minutes for lunch, and 24.8 minutes for dinner.

IV. Discussion

Most participants who attended the health class this time did not have a habit of chewing gum. However, almost everyone knew the word xylitol. But about half of the participants knew the talk of the 8020 campaign. Participants could bite the apple with the skin, but were less confident in the teeth. Participants replied that they chew food, but did not chew 30 times. If participants can prevented by eating the food bite little over time, the blood glucose level after a meal can moderate. Many researchers have reported the relationship between rumination and cognition/dementia risk[1], and other effects on brain functions[2]. Masticatory force is measured by device development and computational model[3,4], and research to clarify occlusal ofrce[3,4,5,6] reports. Studies have also reported that chewing gum increases bite force[7]. The authors reported that high school students, university students, and middle-aged adults ate a meal less than 30 minutes per meal[8]. In addition, the authors reported the results of training chewing power by chewing gum every day before meals

for 30 days[9]. Furthermore, the authors reported whether or not chewing gum improves masticatory strength[10]. We want to convey the importance of chewing through these educational activities.

V. Conclusions

We reported the results of a self-administered questionnaire survey on mastication performed on 90 participants who voluntarily consented to the study. As a result, less than half of the participants answered that they consciously had solid teeth and could chew food well. The average time taken by the participants to eat every three meal was less than 30 minutes. Many of the participants had no habit of chewing gum.

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