Dietary changes among Japanese adults since the spread of COVID-19

Misa SHIMPO, RD, PhD, The University of Nagano; Rie AKAMATSU, RD, DrPH, Ochanomizu University; Yui KOJIMA, RD, PhD, University of Niigata Prefecture

**OBJECTIVE**

Dietary habits have changed to become both healthier and unhealthier.

**BACKGROUND**

Our lifestyle, including diet, exercise habits, and work style, are required to change to prevent the spread of COVID-19.

**METHODS**

Study and design subjects:

- A cross-sectional study involving 6,000 individuals aged 20–64 years was conducted in November 2020 via an internet survey developed by a Japanese research company. The participants were individuals who agreed to answer the questionnaire and chosen randomly in accordance with the population composition of prefectures in Japan considering the deviation of age and sex.

**MEASURES**

- The change of dietary habits from before the spread of COVID-19 (November 2019 to November 2020) Question: “Have you changed your dietary habits healthily compared with before the spread of COVID-19 (one year ago, November, 2019)?”

Responses: “My dietary habits have become healthier,” “My dietary habits have become un-healthier,” and “My dietary habits have not changed.”

**RESULTS**

Table 1. Comparison of variables by dietary habits change (only in part)

<table>
<thead>
<tr>
<th>Age*</th>
<th>Total n = 6,000</th>
<th>Healthy diet n = 1,235 (20.3%)</th>
<th>Unhealthy diet n = 1,441 (24.0%)</th>
<th>Unchanged diet n = 3,324 (55.7%)</th>
<th>χ2-test p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-29 years</td>
<td>1,099 (18.3)</td>
<td>250 (23.0)</td>
<td>120 (24.4)</td>
<td>729 (70.7)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>30-39 years</td>
<td>1,256 (20.9)</td>
<td>246 (20.0)</td>
<td>108 (22.0)</td>
<td>902 (21.0)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>40-49 years</td>
<td>1,602 (26.7)</td>
<td>300 (24.7)</td>
<td>127 (25.9)</td>
<td>1,175 (27.4)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>50-59 years</td>
<td>1,405 (23.4)</td>
<td>298 (24.5)</td>
<td>103 (21.0)</td>
<td>1,004 (23.4)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>60-64 years</td>
<td>638 (10.6)</td>
<td>121 (10.0)</td>
<td>33 (6.7)</td>
<td>484 (11.3)</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

**CONCLUSION**

This study suggested the factors determining healthy and unhealthy dietary changes since the spread of COVID-19.

**FUNDING**

This work was supported by MHLW Special Research Program Grant Number JPMMH20CA2040.