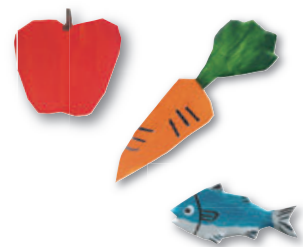




What Are the Benefits of Shokuiku (Food and Nutrition Education)?

What We Know Based on Evidence

Combined Version





Contents

1. Introduction	P1
2. To Promote the Third Basic Plan for the Promotion of Shokuiku	P1-2
3. To Correctly Understand the Messages of This Pamphlet	P3
4. Evidence Useful for Promoting Shokuiku	P4
(1) What Are the Benefits of Kyōshoku (eating with someone)?	P4-8
(2) What Are the Benefits of Having Breakfast Every Morning?	P9-13
(3) What Are the Benefits of Having a Balanced Diet?	P14-18
(4) What Are the Benefits of Having Agriculture, Forestry and Fishery Experience?	P19-24
(Reference) Agriculture, Forestry and Fishery Experience: Findings from Overseas Studies	P25
5. Useful Information for Practicing Shokuiku	P26-27

<How to Use This Pamphlet>

- You can print this pamphlet and distribute it however you like. It can be used on any occasions aimed at promoting shokuiku.
- When using one of the studies covered in this pamphlet, please read the original paper and indicate the information of the paper (author, title, publication year, etc.).



1 Introduction

In accordance with the Third Basic Plan for the Promotion of Shokuiku that took effect in FY2016, Japan has put in efforts to solve the priority issues and achieve goals outlined in said Plan, with a view to deepening public understanding of shokuiku.

Since the Basic Act on Shokuiku (Food and Nutrition Education) was enacted in 2005, communities and schools across the country have taken various initiatives to promote shokuiku. In order to further enhance the effectiveness of such efforts for solving issues and achieving goals, it is important to share information and findings based on evidence.

In this view, the Ministry of Agriculture, Forestry and Fisheries (MAFF) has issued two pamphlets on shokuiku (one in FY2017 and the other in FY2018). Created under collaboration with external food education and PR experts, these pamphlets introduce to the public evidence collected, analyzed, and summarized in an easy-to-understand manner by MAFF that can serve to promote shokuiku. This pamphlet is a combined version of the two pamphlets issued over those two years.

We hope that the message of this pamphlet will be delivered to a wide range of groups in the public through those who are interested in shokuiku and those who are implementing shokuiku initiatives. In addition, the messages in this pamphlet are supported by research studies. If you are interested in learning more details, we recommend you to refer to the evidence tables and cited papers.

2 To Promote the Third Basic Plan for the Promotion of Shokuiku

- Japan adopted the Third Basic Plan for the Promotion of Shokuiku (hereinafter referred to as the “Third Basic Plan”) in March 2016 with a view to advancing shokuiku measures in a comprehensive and strategic manner.
- The Third Basic Plan provides the policies and goals to be aimed for over the five years from FY2016 to FY2020.
- Among the fifteen goals set out in the Third Basic Plan, this pamphlet focuses on the following five goals, which can be categorized into four groups according to their themes, and explains why these goals are important and the benefits of working toward them.

Goals set out in the Third Basic Plan covered in this pamphlet	Theme according to which evidence was collected
Increase the number of kyōshoku occasions [breakfast or dinner with family members] (Goal 2)	What are the benefits of kyōshoku? (Hereinafter, this topic will be referred to as “Kyōshoku.”)
Increase the percentage of citizens participating in kyōshoku in communities as they hope to (Goal 3)	
Decrease the percentage of children skipping breakfast (Goal 4)	What are the benefits of having breakfast every morning? (Hereinafter, this topic will be referred to as “Breakfast.”)
Increase the number of citizens having a balanced diet (Goal 7)	What are the benefits of having a balanced diet? (Hereinafter, this topic will be referred to as “Balanced Diet.”)
Increase the number of citizens who have agriculture, forestry or fishery experience (Goal 11)	What are the benefits of having agriculture, forestry and fishery experience? (Hereinafter, this topic will be referred to as “Agriculture, Forestry or Fishery Experience.”)

Third Basic Plan for the Promotion of Shokuiku (MAFF website):<http://www.maff.go.jp/j/syokuiku/kannrenhou.html>

(Reference) Goals for the promotion of shokuiku set out in the Third Basic Plan for the Promotion of Shokuiku

Goal		Criteria	Figures as of the issuance of the Third Basic Plan	Target (FY2020)
1	Increase the number of citizens who are interested in shokuiku	Percentage of citizens who are interested in shokuiku	75.0%	90% or higher
2	Increase the number of kyōshoku occasions [breakfast or dinner with family members]	Number of kyōshoku occasions [breakfast or dinner with family members]	9.7 times a week	11 times a week or more
3	Increase the percentage of citizens participating in kyōshoku in communities as they hope to	Percentage of citizens participating in kyōshoku in communities as they hope to	64.6%	70% or higher
4	Decrease the percentage of children skipping breakfast	Percentage of children skipping breakfast	4.4%	0%
		Percentage of young people skipping breakfast	24.7%	15% or lower
5	Increase the percentage of junior high schools that provide school lunches	Percentage of junior high schools that provide school lunches	87.5% (FY2014)	90% or higher
6	Increase the percentage of use of locally produced food in school lunches	Percentage of use of locally produced food in school lunches	26.9% (FY2014)	30% or higher
		Percentage of use of domestically produced food in school lunches	77.3% (FY2014)	80% or higher
7	Increase the number of citizens having a balanced diet	Percentage of citizens who eat at least two well-balanced meals consisting of staple food, a main dish, and side dishes almost every day	57.7%	70% or higher
		Percentage of young citizens who eat at least two well-balanced meals consisting of staple food, a main dish, and side dishes almost every day	43.2%	55% or higher
8	Increase the percentage of citizens who practice a healthy diet from day to day where they take care to maintain an appropriate weight and limit salt intake in order to prevent or treat lifestyle diseases	Percentage of citizens who practice a healthy diet from day to day where they take care to maintain an appropriate weight and limit salt intake in order to prevent or treat lifestyle diseases	69.4%	75% or higher
		Number of registered companies striving to reduce salt and fat in their food products	67 (FY2014)	100 companies or more
9	Increase the percentage of citizens who take time to eat and chew well	Percentage of citizens who take time to eat and chew well	49.2%	55% or higher
10	Increase the number of volunteers engaging in the promotion of shokuiku	Number of citizens participating in volunteer groups that promote shokuiku	344,000 (FY2014)	370,000 or more
11	Increase the number of citizens who have agriculture, forestry or fishery experience	Percentage of citizens who have agriculture, forestry or fishery experience	36.2%	40% or higher
12	Increase the number of citizens who take action to reduce food loss	Percentage of citizens who take action to reduce food loss	67.4% (FY2014)	80% or higher
13	Increase the percentage of citizens who have received and pass on traditional cuisine and table manners from their communities or families	Percentage of citizens who have received and pass on traditional cuisine and table manners from their communities or families	41.6%	50% or higher
		Percentage of young citizens who have received and pass on traditional cuisine and table manners from their communities or families	49.3%	60% or higher
14	Increase the percentage of citizens who have basic knowledge on food safety and are able to make appropriate decisions based on it	Percentage of citizens who have basic knowledge on food safety and are able to make appropriate decisions based on it	72.0%	80% or higher
		Percentage of young citizens who have basic knowledge on food safety and are able to make appropriate decisions based on it	56.8%	65% or higher
15	Increase the percentage of municipalities that have created and implemented the Municipal Plan for the Promotion of Shokuiku	Percentage of municipalities that have created and implemented the Municipal Plan for the Promotion of Shokuiku	76.7%	100%

To Correctly Understand the Messages of This Pamphlet

The evidence included in this pamphlet is based on papers that MAFF collected with cooperation of researchers specializing in the field of shokuiku. All the papers meet the following criteria.

- The study was conducted with healthy Japanese subjects excluding babies. (As for overseas review articles concerning the topic “Agriculture, Forestry or Fishery Experience,” the study was conducted with healthy subjects excluding babies. Studies whose main subjects are people with injury, disease, or disabilities are excluded.)
- The study was subject to an expert review when posted (bulletins do not qualify).
- For the topics “Breakfast,” “Balanced Diet,” “Agriculture, Forestry or Fishery Experience (1),” the study was published between January 1, 2000, and September 30, 2017.
- For the topics “Kyōshoku,” “Balanced Diet,” “Agriculture, Forestry or Fishery Experience (2) and (3),” the study was published between January 1, 2000 and September 30, 2017.

• Content of the paper

- Kyōshoku: The study examines matters related to kyōshoku or koshoku (eating alone) and includes a statistical analysis of factors*1 that can help increase kyōshoku or decrease koshoku.
- Breakfast: The paper examines matters related to having or skipping breakfast and includes descriptions of factors that can help increase the number of people who have breakfast or decrease the number of those who skip breakfast (relationship between health and nutritious condition and the intake of nutrients and food).
- Balanced Diet:
 - (1) The paper includes descriptions about the relationship between health and nutritional condition and a diet that combines staple food, a main dish, and side dishes.
 - (2) The paper examines matters related to dietary patterns and food quality scores and includes descriptions about their relationship with the total mortality and non-infectious diseases, such as cancer and cardiovascular disease.
- Agriculture, Forestry or Fishery Experience:
 - (1) The paper studies farming or food and agricultural experience and includes descriptions related to consciousness about diet or eating behavior.
 - (2) (Studies using Japanese subjects) The paper examines how agricultural, forestry, or fishery experience*2 is related to dietary knowledge, dietary attitude, eating behavior, physical activity, or health.
 - (3) (Overseas review articles) The main purpose of the paper is to examine how agricultural, forestry, or fishery experience*2 is related to dietary knowledge, dietary attitude, eating behavior, physical activity, or health.

*1 This term refers to quality of life (QOL), health and nutritional condition, food intake, eating behavior, and lifestyle habits. Food knowledge and eating attitude are excluded.

*2 This term also includes the cultivation of crops consumed in day-to-day life (such as home gardens). It excludes experience opportunities for professional farmers and programs whose main focus is something other than food.

As for the topics “Kyōshoku,” “Breakfast,” and “Balanced Diet,” this pamphlet only uses observational studies, in which lifestyle habits and diseases of research subjects are observed and compared. The papers used in relation to the topic “Agriculture, Forestry or Fishery Experience” include some interventional studies, in which participants receive some kind of intervention and the effect of such intervention is examined. However, attention must be paid when interpreting the results of such studies, as some of them were conducted only with a small number of subjects.

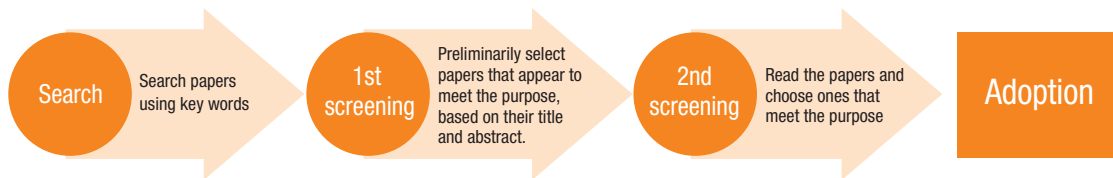
MAFF selected from among many papers ones that matched the purpose and fulfilled all the criteria. The list of the selected papers is publicized as an evidence table. The papers used in this pamphlet include not only those where a relationship between subject matters was shown, but also those where a lack of a relationship was shown and those where a relationship was not confirmed.

This pamphlet mainly covers study results from papers that fulfilled the abovementioned criteria, which can contribute to the promotion of shokuiku. This means that it only covers a part of the research results. If you are interested in learning more details, please download the evidence table from MAFF website.

MAFF website:<http://www.maff.go.jp/j/syokuiku/evidence/index.html>

The article numbers shown in the footnotes on each page correspond to the numbers in the evidence table.

Figure. Paper Screening Process



Kyōshoku	Search results: 967 papers	115 papers were preliminarily selected.	62 papers were selected.
Breakfast	Search results: 2,058 papers	510 papers were preliminarily selected.	156 papers were selected.
Balanced Diet	Search results: 881 papers	61 papers were preliminarily selected.	35 papers were selected.
Agriculture, Forestry or Fishery Experience (1)	Search results: 206 papers	45 papers were preliminarily selected.	12 papers were selected.*3
Agriculture, Forestry or Fishery Experience (2)	Search results: 3,332 papers	148 papers were preliminarily selected.	19 papers were selected.*3
Agriculture, Forestry or Fishery Experience (3)	Search results: 258 papers	29 papers were preliminarily selected.	14 papers were selected.

The evidence table includes details on papers selected through the secondary screening, indicated in the red box.

*3 Six papers are used for both Agriculture, Forestry or Fishery Experience (1) and (2).