

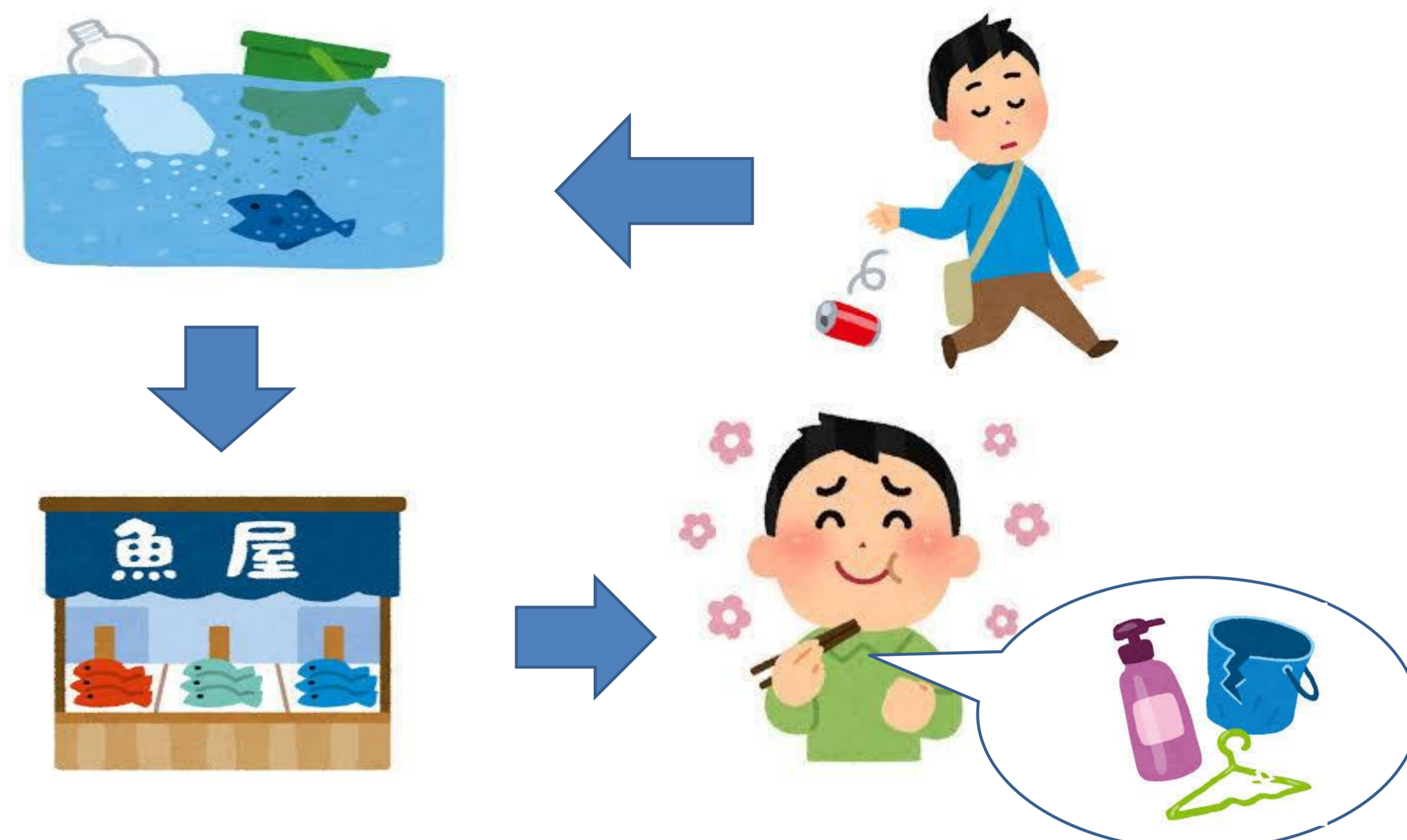
# Microplastics : Effects and countermeasures Whose responsibility?



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## Introduction

In recent years, marine pollution, especially the problem of microplastics (hereinafter referred to as MP), has attracted attention. Some literature states that MP has already entered the Earth's food chain, including the human one, and that we may be eating a lot of MP. However, no specific data on the effects of MP directly on humans was found in the data we examined.



## [1] Influence

We decided to investigate after hearing from senior club members that there was MP in food.

<Method>

- ① Remove the internal organs from Japanese anchovy.
- ② Grind them with water, put one on a slide and observe it with a microscope.



<Result>

We were able to confirm the existence of MP.

We researched the effects of MP in the published literature.

Plastics themselves contains many additives, and some chemical substances dissolve in seawater.

Plastics have the property of absorbing pollutants from seawater, and they tend to concentrate in our body and cause health problems.

An environmental hormone that causes breast cancer and reduced fertility can be detected in the caps of plastic bottles.



## [2] Countermeasure

Oyster is famous as a special product of Hiroshima Prefecture. However, the outflow of plastic from rafts used for oyster farming is a problem. Therefore, we interviewed those who are developing a farming method to solve the problem with a new type of raft.

<Interview Extract>



Q. What are the merits of the new raft?

A. It is stronger than a bamboo raft, so plastic doesn't break off and go into the sea. And we are testing the use of GPS to check the location of the raft from the office.



Q. What are the practical applications?

A. It may be a solution to the problem of plastic waste from oyster farming. And we can use it for a long time, so the costs may be decreased.



## Future

We would like to inform local people about the effects of this research and possible countermeasures, and think about whose responsibility they are, while continuing this research.

## Acknowledgments

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## Reference

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