

Food Science and Human **Nutrition**

Utilization of jelly food for poor swallowing function



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keywords Poor swallowing function, Commercial gelling agent Dysphagia diet, Nursing food, Functional food, Swallowing and chewing assessment

Research summary

Background

- When swallowing function declines, food intake decreases, leading to malnutrition and causing aspiration pneumonia.
- It is necessary to eat a meal according to the swallowing function.
- The blender diet has a bad appearance, texture, and taste, and the appetite is reduced.
- The composition of the commercially available gelling agent used in the serie diet is unknown.
- Many jelly dishes are cold and difficult to serve as hot dishes.

Purpose

- The commercially available gelling agent used in the jelly diet was clarified.
- The effect of the heating temperature of the commercially available gelling agent was clarified.
- The knowledge will be applied to the development of new longterm care foods.

Main achievements

- The components of the commercially available gelling agent could be roughly classified into a mixture of xanthan gum and locust bean gum and a native gellan gum.
- By clarifying the main raw materials of the commercially available gelling agent and considering the influences of the ingredients, seasonings, and temperature, it was possible to prepare a jelly food having stable physical characteristics and good palatability.

Prospects for collaboration

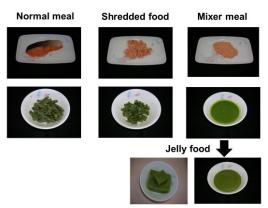
[Collaboration with food companies]

We would like to connect our knowledge of food functionality and cooking technology to the development of new long-term care foods. [Contribution to the elderly in the community] We would like to cooperate with local medical institutions and facilities to provide food information on the improvement and

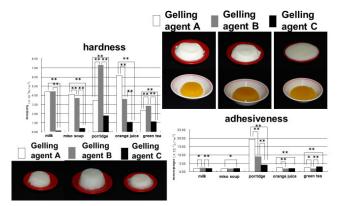
Cooperation with the community

prevention of Frere and sarcopenia.

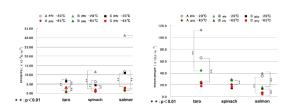
We would like to cooperate with local medical institutions and facilities to provide food information on the improvement and prevention of Frere and sarcopenia.



Dietary patterns in hospitals and geriatric care facilities



Texture properties in each food product using a commercially available gelling agent Comparison of (hardness and adhesion)



Texture characteristics due to temperature in each food Comparison of (hardness and adhesion)



appeal point

Utilizing the qualifications of the Japan Society for Eating and Swallowing Rehabilitation Certified Dietitian, Home-visit Registered Dietitian, and Intravenous Enteral Nutrition (TNT-D) Registered Dietitian, I would like to make efforts to develop nursing care foods and improve nutrition for the elderly at home in the community.