

"Regional Innovation Strategy Support Program (urban-area type) Tokachi area" under Ministry of Education, Culture, Sports, Science and Technology:

Tokachi-ites, get united with Agri-Bio!



Agri-Bio Cluster for

Tokachi Brand Development

Goal: To establish "Agri-Bio Cluster" through enterprises based on cutting-edge technologies on food functionality and safety.

We fortify food industry in Tokachi area by helping local enterprises;

•establish technologies of extraction of novel substances with physical, chemical and physiological functions from agricultural produce in Tokachi area, and

•secure the first-class safety of agricultural produce and processed foods through providing quick assays for detection of food-poisoning bacteria.

We commit to establishing a food inspection laboratory to provide those two functions, a laboratory playing the core role in the Agri-Bio Cluster in Tokachi area.

Tokachi Genkishoku project



We are initiating "Tokachi Genki Shoku" (Tokachi Lively Food) project, through which we propose delicious, wholesome, and easy-to-eat foods using local produce as well as functional ingredients extracted from the produce. This project is aimed to help adults cope with what is called as "metabolic syndrome" and make foods easy for older generation to enjoy. Recently there is an increasing demand for wholesome foods in Japan as many clinical experts point out and report that one out two adult men and one out of five adult women should be diagnosed as metabolic syndrome. On top of that, we are also facing a rapidly aging society in Japan where as much as a quarter of the entire population is over 64. Tokachi Genki Shoku purports to provide solutions for these issues by making full use of locally harvested produce.





Research subjects under project units

(1) Functionality Research Unit

Developing novel functional materials from agricultural produce and by-products from food processing plants:

1. Using agricultural produce:

 Research cultivation method of chicory in Tokachi district and establish extraction technology and research functionality of inulin from chicory.

2. Utilizing by-products:

- Establish technology and research functionality of beet betain.
- Research functionality of animal-derived materials.
- Establish extraction technology and research functionality of Azuki polyphenol.

3.Ongoing subjects:

- Research on functionality of potato starch.
- Research on functionality of button mushrooms.
- Search for agricultural produce with antioxidants.

(2) Safety Research Unit

Securing the first-class safety of produce and foods:

- 1. Establish technology of exhaustive detection of hazardous bacteria.
 - Establish and commercialize a technique of exhaustive detection of hazardous bacteria using PCR cocktail.
 - Develop an immunological identification method of food poisoning bacteria.
- Develop a detection method of VBNC (viable but non-culturable) bacteria.
- Develop a quick identification method of bacteria by mass spectrograph.
- 2. Establish a "food inspection laboratory" to put the research results in practice.
- Operate the food inspection laboratory
- Promote Tokachi Genkishoku project
- Continuously create innovation in Tokachi area through "Agri-Bio Cluster".

"Regional Innovation Strategy Support Program (urban-area type)"

under Ministry of Education, Culture, Sports, Science and Technology:

an initiative designed to create continuous innovation through developing novel products and enterprises by utilizing and connecting local resources in industry, government, and academia.

<Participant organizations>

INDUSTRY: Cosmo Foods, Co., Ltd., Nippon Meat Packers, Inc., Nippon Beet Sugar Manufacturing Co., Ltd., AMR Inc.

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ACADEMIA: Obihiro University of Agriculture and Veterinary Medicine, Hokkaido University, Ehime University, Shizuoka University, Nayoro University, Jyosai University, Asahikawa Medical University, Gifu University

GOVERNMENT: Hokkaido Tokachi Area Resional Food Processing Technology Center, Hokkaido Agricultural Research Center/National Agriculture and Food Research Organization

(COORDINATING ORGANIZATION: Tokachi area Promotion Organization)

