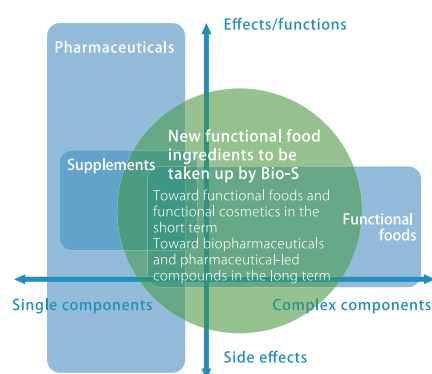


Research and Development Concept

Research and development concept

- Establishment of an all-Hokkaido industry-academia-government cooperation system for activities from basic to applied research
- Commercialization of beneficial food ingredients and components from Hokkaido's agricultural, fisheries and livestock products
- Identification of prime biomarkers using cutting-edge analysis technologies and evaluation systems
- Development of foods and substances based on scientific evidence collected in clinical settings
- Application to preventive medicine for intractable diseases through the development of highly functional foods



A Hokkaido-born health sciences industry cluster for scientific development related to food and health – nurturing potential through collaboration with businesses and regions

Carrying the potential of a health sciences industry

As part of the national government's Biotechnology Strategy Guidelines, Hokkaido has been designated, along with the Kanto and Kinki regions, as one of three major areas in which the formation of biotechnology industry clusters is to be promoted. The Sapporo Bio Cluster "Bio-S" project is attracting attention from Japan and overseas as a pioneering approach in the field. Toward its major objective of developing a health sciences industry cluster, steadfast progress has been made through a variety of research programs over the past three years. These advanced programs on food and human health have fuelled the expansion of our academic and personnel networks across a wide variety of fields and created a host of new possibilities. Such expansion suggests the maturity of a cluster, like a bunch of grapes growing on a single branch, as envisaged from the beginning. As practical examples, a variety of health sciences industries forming a cluster in Hokkaido could emerge in the creation of health support industries such as personnel development business (e.g., health care, food and nutrition education and health consulting), in the creation of next-generation-style medical industries (e.g., future drug development), and in the sophistication of the food processing industry (e.g., functional food and functional cosmetics businesses).

Social contribution through science

To achieve the targeted growth of health sciences industries, it is essential to create a foundation for the scientific evaluation of new raw materials, to obtain intellectual property through the procurement of patents that allow commercialization, and to ensure that industry, academia and government join forces to develop related skills and foster outstanding individuals in relevant fields. These efforts to create and introduce products based on scientific evidence are expected to result in a new set of standards for the food and health industry, which is all too often at the mercy of imagery and fads. This would be of huge benefit to consumers and the future biotechnology industry, and would also lead to the re-establishment of a healthy industrial structure. In line with ever-increasing expectations for concrete instances of commercialization and product realization through cooperation with businesses and regions, Bio-S will strive to fulfill its role as an innovative platform and contribute to society and the industrial sector through cutting-edge science.