

## Name of the subcommittee

**Wellbeing Subcommittee on Aspergillus (National fungi)**

## Social Issues Area

**Lifestyle modification healthcare**

## Content of Efforts

**Elucidation of health and cosmetic effects of *Aspergillus oryzae***

- Leadership organization:Gekkeikan Sake Co., Ltd.
- Name of Representative:President Haruhiko Okura
- Leader Name:Hiroki Ishida, Director of Research Institute



# What is Wellbeing Subcommittee on Aspergillus?

## Background

- Japanese national fungi
- Sake, Shochu, Miso, Soy Sauce, Amazake, Mirin, etc., are all highly safe and safe (GRAS certification).

## Issue

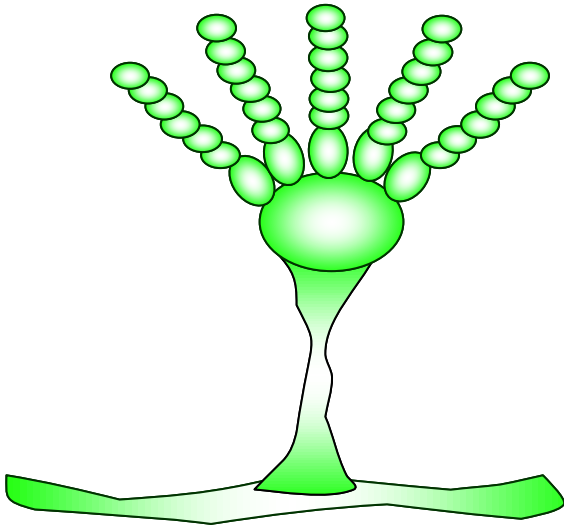
- Compared to lactobacilli and bifidobacteria, the functionality of oral intake is not well recognized by consumers.
- There are not so many non-genetically modified breeding technologies

## Recent Research Reports

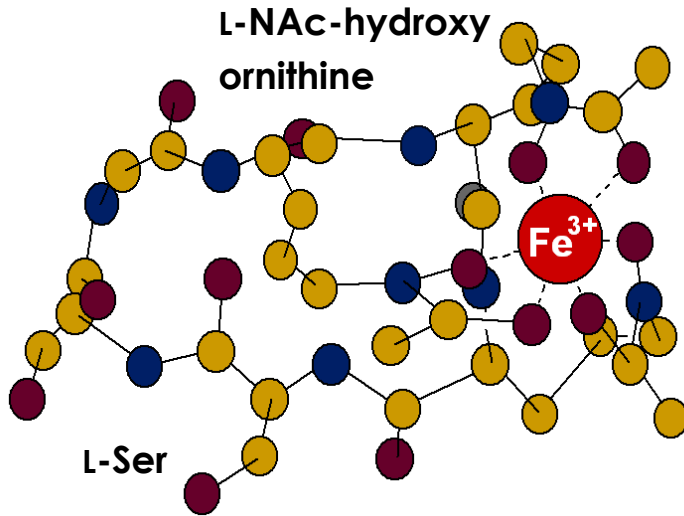
- Intake of fungi increased Bifidobacterium sp. in the intestines of mice.
- Glycosylceramide from *Aspergillus oryzae* improves the intestinal environment.

## Hypothesis

- Are there any koji molds that are useful for "health" and "beauty" as prebiotics or probiotics?
- Are there any koji molds that are optimal for "health" and "beauty" (types, differences in culture, mutant strains)?



# Siderophore of *Aspergillus oryzae*.



L-NAc-hydroxy  
ornithine

## Predominance

Breeding Non-GMO Siderophore High-Producing Koji fungi for Use in Foods

## Application

- Suppresses unpleasant odors when cooking meat
- Moisturizing effect (filaggrin induction)
- Whitening effect
- Colitis Prevention
- Uric acid level reduction
- Anticancer

## Hypothesis

Deferriferricin, which chelates iron ions, may contribute to health by affecting intestinal and oral bacteria?

# Plan of the Koji (National Fungus) Well-Being Subcommittee



Year	2022	2023	2024	2025	2026
Issue Selection Subcommittee Members					
Competitive Funding Proposal					
R & D					
Social implementation					