

## PRESS RELEASE

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### **NIZO (The Netherlands) & Yaegaki (Japan): Breakthrough collaboration promises innovative approach in protein transition**

*On May 9, 2023, at the Embassy of the Netherlands in Tokyo, a collaboration agreement between NIZO Food Research (The Netherlands) and Yaegaki Biotechnology (Japan) was signed on the joint research and development of alternative meat products using mushroom mycelium based on traditional Japanese 'koji mould'.*

Food security is one of the world's major challenges, and it is also the driving force for the food industry to constantly find bold alternatives to traditional food sources. Protein transition plays a big role in this global reformation involving a diversity of both materials and methods, an area in which NIZO Food Research (NIZO) is a leading expert. Moreover, NIZO has been the tip of the spear in food and health innovation for 75 years, building expertise and know-how in the areas of the protein transition, smart processing, food safety and health benefits.

Meanwhile in Japan, fermentation has been used for centuries to produce fermented foods such as sake, soy sauce and miso. At the forefront of this field, Yaegaki Biotechnology has more than 50 years of history researching fermentative techniques on various mushroom mycelia (also known as 'koji mould) and its functional properties related to flavor formation. In 2006 the Brewing Society Japan even declared that koji-molds should henceforth be known as the National Fungi of Japan. After discovering that original mushroom mycelium strains are promising candidates for a new type of sustainable alternative proteins, Yaegaki and NIZO have agreed to conduct joint research further developments on this topic. The signing ceremony was held on 9 May 2023 at the Embassy of the Netherlands in Tokyo, Japan.



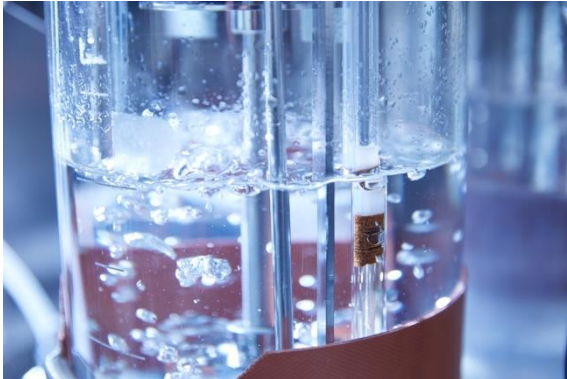
*Agricultural Counsellor Denise Lutz (fourth from left) witnessed the signing ceremony with representatives of NIZO and Yaegaki.*

This event not only strengthens the 420-year relationship between both nations, but also mark the first step of a long term strategic collaboration between Yaegaki and NIZO Food Research. Using innovative alternative protein processing technologies of NIZO and original mushroom mycelium materials of Yaegaki, the two companies will work together in order to enhance a "new food technology culture" between Japan and the Netherlands and to develop a promising solution for global food security.

***Yaegaki Biotechnology, Inc. and its research on mushroom mycelium as an alternative protein.***

*Yaegaki Group has a 350 years' history as a local sake brewery in Japan. Yaegaki Biotechnology, Inc. (Yaegaki below) was established in 1979 as a spin-off company focused on a research and development of functional food ingredients and fermentation processes.*

*Yaegaki possess a deep knowledge and expertise on various technologies for the extraction and purification of food coloring agents, research on yeast and mold strains, basidiomycetes (mushrooms), as well as lactic acid bacteria and other bacteria useful for maintaining human health. Recently, an extensive research and development on "alternative proteins" and "alternative meat substitutes" is being performed as the animal proteins depletion is predicted due to global population increase. However, there are still many challenges to overcome. Yaegaki focused on mushroom mycelium as there is still no mass-production supplier of it in Japan, despite the fact that mushroom mycelium has been already commercialized in Western countries and is known as a strong candidate for alternative meat substitutes. As a result, Yaegaki has screened several hundred species of mushroom mycelia and studied different culturing conditions using own large-scale culture tanks to discover a mushroom mycelium strain that is tasty, quick to grow, and has sufficient protein content. To overcome further commercialization issues on the alternative meat substitute market, a joint research collaboration with NIZO Food Research (The Netherlands) has been reached.*



*Yaegaki Biotechnology was established in 1979, focused on a research and development of functional food ingredients and fermentation processes.*

***NIZO and food technology product development in The Netherlands.***

*NIZO Food Research (NIZO below) was founded in 1948 by the Dutch dairy industries as a cooperative initiative in fundamental research, and process and product development. During 75 years of development, NIZO has always played a pioneering role in the food technology industry, leading revolutionary innovations in areas such as protein technology, fermentation, bioinformatics, food processing, food safety and sensory experiences. Currently, NIZO owns the largest food-grade pilot plant for third-party use in Europe and is a leading company in the field of alternative protein processing, preservation and quality control field. NIZO is involved in research and development of numerous innovative substitute products that provide meat taste and texture, as well as healthy and sustainable food ingredients.*



*NIZO has been the tip of the spear in food and health innovation for 75 years.*



*NIZO currently owns the largest food-grade pilot plant for third-party use in Europe.*