



REAGENICS

Press Release

ReaGenics Revolutionizes Potato Protein Production with Plant Cell Culture Technology

Tel Aviv, Israel – DATE – ReaGenics, a biotech startup from Tel Aviv, has made a breakthrough in alternative protein technology by using plant cell culture to develop potato biomass with a protein content of 31%. Potatoes generally contain only 2% protein and are not typically considered a protein source. However, ReaGenics' innovative approach could change that, turning potatoes into a valuable plant-based protein option.

New Potential for Plant-Based Proteins

ReaGenics grows plant cells in controlled environments known as bioreactors rather than relying on traditional farming methods. These cells are provided with a balanced mix of sugars, vitamins, minerals, and nutrients, ensuring a consistent supply of plant compounds. This method also addresses challenges like climate change and soil contamination.

“We’ve refined the process to boost the protein content in potato cells significantly,” said Dr. Michael Kagan, co-founder and chairman of ReaGenics. “Our protein is non-GMO, includes all essential amino acids, and is highly digestible with a protein digestibility-corrected amino acid score (PDCAAS) of 0.99, making it suitable for many food products.”

Super Potato Milk

Specifically, ReaGenics has introduced Super Potato Milk, a non-dairy milk alternative made from its potato protein. Unlike dairy milk, which has a high environmental impact, Super Potato Milk offers a more sustainable option. Moreover, it has no allergens, color, or bitterness often found in plant-based milk. Finally, it has high protein efficiency (BV of 80).

“We believe Super Potato Milk has the potential to be a game-changer in the plant-based milk market,” Kagan said.

Market Potential and Environmental Impact

The global dairy alternatives market is projected to reach \$43.6 billion by 2028. ReaGenics is well-positioned to capture a significant share of that market. Its functional properties, such as solubility, gelling, foaming, and emulsification, make it appealing to food developers.

Beyond the milk, leading food and beverage companies are already exploring the potential of ReaGenics' potato protein in various products, from plant-based meats to high-protein snacks.

ReaGenics also sees potential for its potato biomass to address acute malnutrition by providing protein and carbohydrates without common allergens like peanuts and whey.

Scalability and Future Plans

ReaGenics has successfully tested its production process in bioreactors from 4,000 to 10,000 liters and plans to license its technology to those interested in large-scale production.

The company is also working on increasing the protein concentration in its potato biomass and developing other plant-based ingredients, such as cannabinoids, coffee, resveratrol, and anthocyanins from purple maize.

Regulatory Outlook

In the U.S., ReaGenics expects an easy regulatory process through the GRAS (Generally Recognized As Safe) system; potato protein is already a known ingredient, and the company does not use genetic engineering. In Europe, the product will require approval as a novel food.

About ReaGenics

ReaGenics is a biotech company based in Tel Aviv, Israel. It specializes in developing high-value ingredients through plant cell culture technology. Using controlled environments, ReaGenics sets new standards in the alternative protein industry and drives sustainable innovation.