



# EnginZyme

## **EnginZyme and Tetra Pak join forces to advance sustainable food & beverage production**

**Stockholm, Sweden, 2 June 2022 – EnginZyme, a leading developer of cell-free biomanufacturing processes, has joined forces with the global processing and packaging company Tetra Pak to bring sustainable and economically sound solutions to the food and beverage industry. In this close and enduring collaboration, the companies are leveraging their respective strengths to find new ways to improve food and beverage production by, for example, turning food waste into valuable ingredients.**

EnginZyme and Tetra Pak are developing cutting-edge processes using enzymes. These are naturally occurring, non-toxic biological molecules that have the potential to replace or improve upon energy-intensive chemical catalysts in food production. Enzymes can be unstable and unpredictable and thus difficult to control. But with EnginZyme's patented, cell-free biomanufacturing platform, enzymes can be transformed into a solid heterogeneous material, making it easier to handle.

As a first project, Tetra Pak and EnginZyme are exploring transforming acid whey, a by-product from the manufacture of dairy foods like greek yoghurt or cream cheese, into valuable ingredients that can go into healthy food products.

Currently, acid whey must be disposed of carefully because it can damage ecosystems if too much of it goes into waterways. Tetra Pak and EnginZyme aim to demonstrate with acid whey the potential of enzyme technology to reduce waste streams and generate revenue from by-products.

"This collaboration really puts our two companies' strengths into play," said Karim Engelman Cassimjee, CEO and co-founder of EnginZyme. "By combining Tetra Pak's broad food processing expertise and deep market knowledge with EnginZyme's biomanufacturing innovation, we are working to solve huge challenges while creating the food products of the future. We're creating a modern process environment that is low-energy, low-waste and truly sustainable."

Tetra Pak is working to integrate EnginZyme's biotechnology directly into product or waste-stream lines, meaning the solution could be easily scaled.

"EnginZyme's ability to control and adapt enzymes to suit our manufacturing processes has great potential for many of our food applications," said Lidia Garcia Pou, Head of Project Management and External innovation at Tetra Pak. "Together we can crack the code to maximise our use of raw ingredients, reduce industrial waste, and improve efficiencies, which we believe will be revolutionary for the food processing industry."

Instead of adding enzymes directly to food, which is expensive and results in loss of control, EnginZyme's technology fixes enzymes inside a reactor's solid support material. The food passes through the reactor, allowing just enough enzymatic reactions to happen. As the enzymes are fixed and the food goes in and out of the reactor, the enzymes can be reused – and don't end up in the finished product. This gives manufacturers better control of the production process. What is more, the technology can be used with many enzyme types, making it a versatile, transferable solution for the food industry.

“In the future we see the EnginZyme-Tetra Pak partnership being synonymous with high-tech novel food processing solutions solving key challenges across the food industry such as improving health and reducing waste,” Karim Engelmark Cassimjee said. “This close collaboration has shown that efficient use of enzymes opens previously impossible avenues for the production of the foods and beverages of the future.”

### **About EnginZyme**

EnginZyme's vision is to play a key role in solving one of the fundamental challenges of our time: how to produce better, greener, and more affordable products for everyone. The company, founded in 2014, has created a patented, cell-free biomanufacturing platform that combines the breadth and power of biology with the efficiencies of the chemical industry. EnginZyme is recognised as a Technology Pioneer by the World Economic Forum and is backed by Sofinnova Partners, Industrifonden and SEB Greentech VC. To learn more, go to [www.enginzyme.com](http://www.enginzyme.com).

### **About Tetra Pak**

Tetra Pak is a world-leading food processing and packaging solutions company. Working closely with our customers and suppliers, we provide safe, innovative and environmentally sound products that each day meet the needs of hundreds of millions of people in more than 160 countries. With more than 25,000 employees around the world, we believe in responsible industry leadership and a sustainable approach to business.

Our promise, “PROTECTS WHAT'S GOOD™,” reflects our vision to commit to making food safe and available, everywhere. More information about Tetra Pak is available at [www.tetrapak.com](http://www.tetrapak.com)

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