

Project owner:	MEDTECH Park Kft.
Project name:	Innovation in hyaluronic acid manufacturing
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Introduction:

We are renewing the production of hyaluronic acid (HA) with our patentable technology, different from the prevailing industry practice. Our process poses a lower biological risk to the environment, reduces production costs and provides a wider opportunity to develop special HA variants.

HA is a natural biopolymer that can be found in human and animal bodies, as well as in microorganisms. Its biological role is significant, it is structural, water-binding, and an active participant in regenerative processes. Depending on its molecular weight, it interacts with cell receptors in different ways and thus behaves in different ways. Its functions and operation are an intensively researched area. The molecule of the present and the future.

Market overview:

The global hyaluronic acid market will grow at a CAGR of 7.58% between 2023 and 2030 and will reach a market size of USD 16.8 billion by the end of this period. The main drivers of growth include a growing population, increasing aesthetic and health awareness, an increase in the proportion of the aging and health-prone population, changing dietary habits and technological advances.

Market segmentation:

The market segments can be divided into three main groups. The PHARMA group includes aesthetic fillers, osteoarthritis (OA) preparations, ophthalmic products, wound treatment materials and materials for urological use. The COSMETICS group contains external products in various formats that can be applied to the skin. The FOOD segment represents dietary supplements taken orally. All of these industries are expected to continue to expand and evolve along with population growth. There is growing research and development activity to come up with new types of HA as well as new ways to use it.

Industrial demand:

Pharmaceutical, cosmetic and dietary supplement companies need stable, high-quality HA that is available on time for continuous production. The industry's demand is driven by the needs of the Pharma, Cosmetics and Food supply chains, as well as the need for continuous product innovation.

Current challenges:

For the industry interested in using HA, the current supplier network poses serious risks and challenges, such as expensive European or American deliveries with long lead times, unreliable Asian manufacturers with occasional quality problems, and unpredictable logistics. Recent disruptions in global supply chains, including Covid shutdowns and incidents on major maritime shipping routes, are limiting continuous HA supply and hampering the operations of manufacturing companies, affecting the entire supply chain of HA products.

Our solution:

To address these challenges, we will create a reliable, qualified production plant in Szeged, Hungary, using our own developed, proprietary manufacturing technology. By using non-pathogenic bacteria to produce HA during fermentation, our manufacturing processes are safer and the end product requires fewer contaminants to be cleaned than industry standard processes. The final product can be delivered to the entire territory of Europe within 24 hours. Thanks to the certifications, the products can also be sold on the global market.

Investment opportunity:

We are looking for investors to finance the scale-up of our operations, focusing on the development of mass production technology and the creation of our future manufacturing facility. By overcoming the industry's main entry barrier (own production technology), we aim to offer a stable and quality-oriented solution to meet the growing demand for HA in various sectors.

Project schedule:

1. Developing mass production technology, scale-up validation (problem/solution fit): 12-18 month with an investment of 1 mEUR.
2. Manufacturing site construction and equipment, licensing and certification (product market): 12-18 months. Costs to be determined.

Conclusion:

Investing in our company offers a unique opportunity to be part of an innovative development in the ever-growing hyaluronic acid market. Join us as we transform the industry with our innovative technology that ensures reliable, high-quality HA supply for the growing needs of pharmaceutical, cosmetic and dietary supplement manufacturers.