

Ajinomoto Co. Develops New Technology to Reduce Culture Media Costs for Cultivated Meat* Production Utilizing Plant-derived Components

Toward the Practical Adoption of Safe, Reliable, and Affordable Cultivated meat

*Term used by the Good Food Institute (GFI) to refer to cultured meat

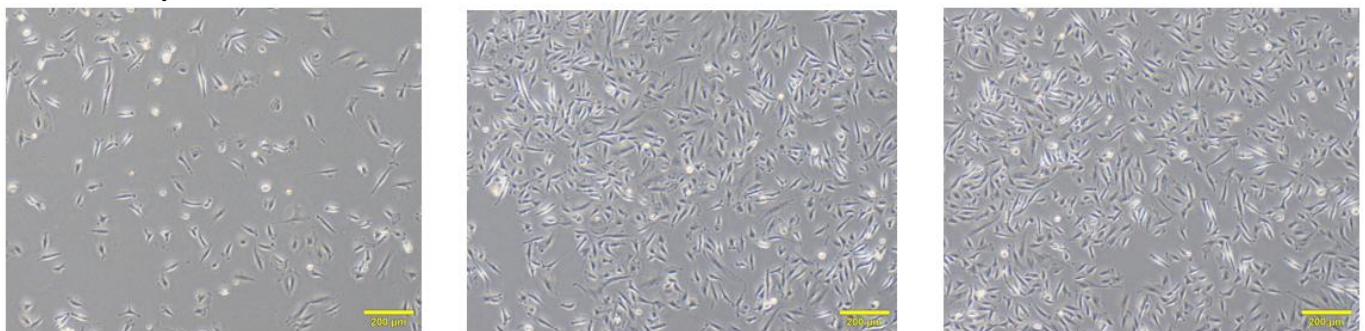
(source: <https://gfi-india.org/cultivated-meat-why-gfi-is-embracing-new-language/>)

TOKYO, April 16, 2026 – Ajinomoto Co., Inc. (“Ajinomoto Co.”) has developed a new technology for cultivated meat production that eliminates the need for expensive serum components required in conventional cell culture processes. The technology is based on a formulation using hinokitiol, a plant-derived component. By offering this technology to cultivated meat manufacturers, Ajinomoto Co. will contribute to significantly reducing the cost of culture media, which is essential for producing cultivated meat. Going forward, Ajinomoto Co. will work to bring this technology to market at the earliest opportunity, aiming to build a sustainable agri-food system by supporting the establishment of a business environment that makes cultivated meat more accessible to consumers.

Cultivated meat is attracting global attention as a next-generation protein source that can help reduce the environmental impact and contribute to solving food-related challenges. The market is projected to reach several trillion yen by 2032 (source: [Statistics Market Research Consulting report, September 2025](#)). However, the high cost of culture media required for manufacturing cultivated meat remains a major barrier to widespread adoption. In particular, transferrin, a cell growth-supporting factor found in serum components, is difficult to manufacture and a significant driver of culture media costs. Ajinomoto Co. focused on this challenge and successfully developed an alternative to transferrin using hinokitiol, a low-molecular weight natural component.

Hinokitiol is a naturally occurring component found in plants that binds to iron and delivers it into cells. By harnessing this property, Ajinomoto Co. confirmed that the function conventionally performed by transferrin can be substituted, maintaining high cell proliferation rates in serum-free media (Figure 1). These findings were presented at the International Scientific Conference on Cultured Meat (ISCCM), held in November 2025.

This proprietary technology (patent pending) enables a significant reduction in culture media costs by replacing expensive transferrin with affordable hinokitiol. Unlike high-molecular-weight transferrin, which is prone to quality fluctuation between production batches, low-molecular weight hinokitiol is chemically stable, and is expected to help stabilize the quality of serum-free media. In addition, naturally derived hinokitiol is listed on Japan’s List of Existing Food Additives, confirming its safety for human consumption. The technology has already undergone verification with prototypes, and Ajinomoto Co. aims for its market introduction within the next several years.



(a) Transferrin –
Hinokitiol –

(b) Transferrin +
Hinokitiol –

(c) Transferrin –
Hinokitiol +

Figure 1. Comparison of the cell proliferation-enhancing effects in serum-free media:
 (b) and (c) yielded approximately three times the cell volume of (a)

Under its purpose of contributing to the well-being of all human beings, our society and our planet with “AminoScience,” Ajinomoto Co. has put forth a basic policy in its Medium-Term ASV Initiatives 2030 Roadmap to achieve dramatic growth in four priority growth areas with high market growth potential and social value. The development of this technology is positioned as an initiative to develop low-environmental impact food ingredients that will accelerate the Green Food business, a core component of the Green domain, which is one of the four priority growth areas (Figure 2). The cultivated meat value chain encompasses multiple processes, from the sale of cells themselves, sales of culture media and media components such as growth factors, to the development of culture technologies and production support services using those substrates, as well as food processing and the manufacture and sale of cultivated meat products, presenting Ajinomoto Co. with a wide range of business opportunities. All of these are fields where Ajinomoto Co.’s strength in AminoScience can be fully leveraged. As an initial step, Ajinomoto Co. will draw on the technology and expertise accumulated through its biopharmaceutical and regenerative medicine culture media business to pursue entry into the media component sale, culture technology development, and production support segments (Figure 3). Ajinomoto Co. will continue to support the real-world implementation of cultivated meat and contribute to building a sustainable agri-food system.

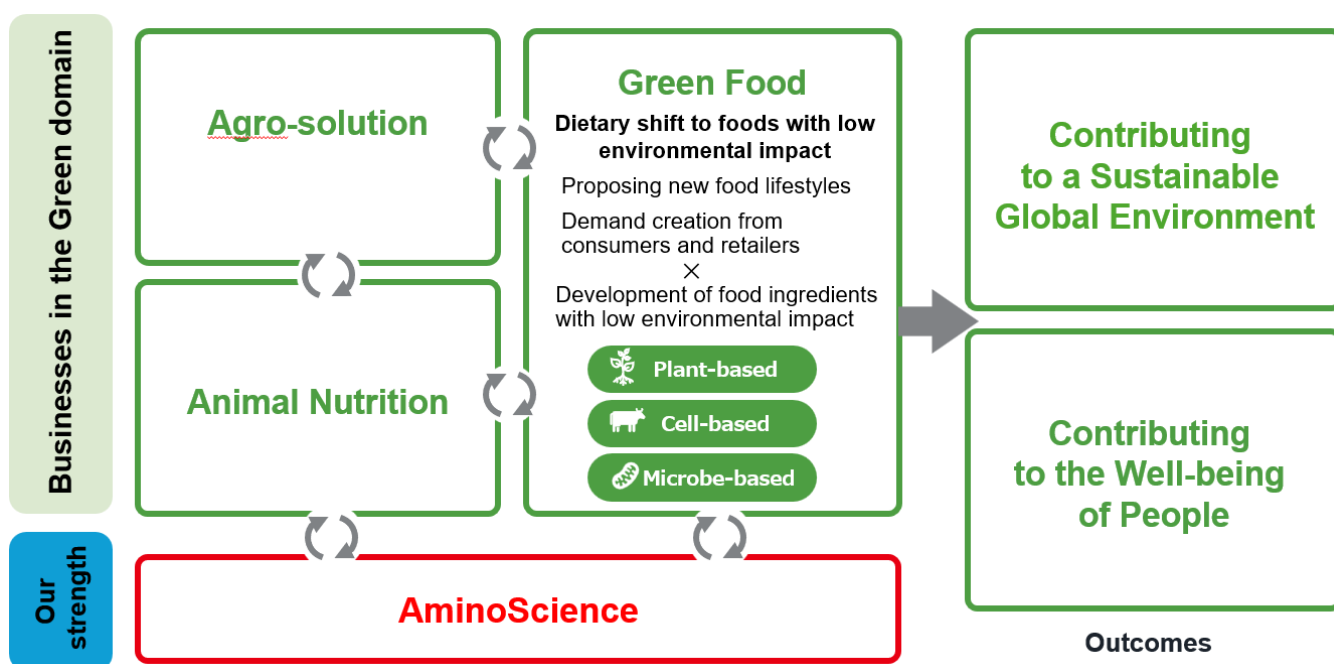


Figure 2. Overview of the Green domain

: Initiative underway

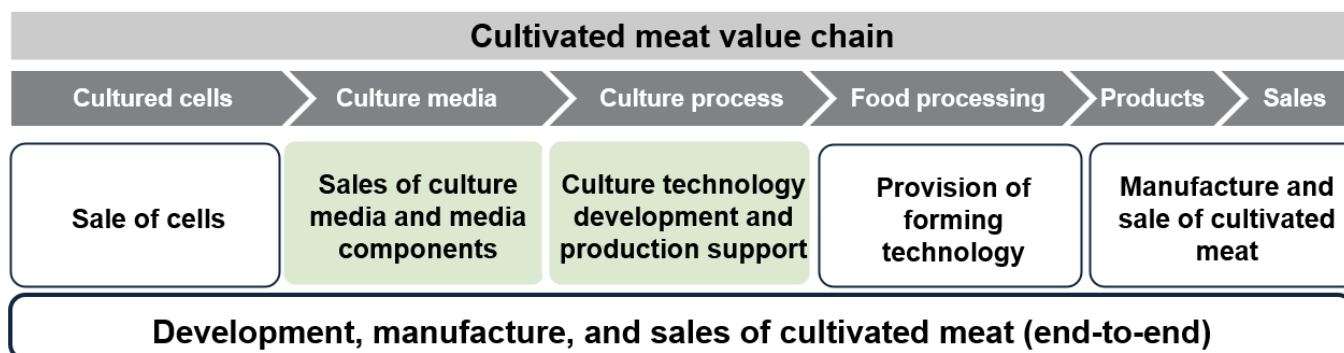


Figure 3. Business model hypothesis and Ajinomoto Co.’s initiatives in cultivated meat

For details on Ajinomoto Co. and the Ajinomoto Group, visit <https://www.ajinomoto.com/>

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