

## Ajinomoto Co., Inc. Releases *Mankai*®, a Next-Generation Vegetable Drink Made with a Next-Generation Food Resource

Packed with 60 nutrients, including proteins, vitamins, minerals, and dietary fiber<sup>1</sup>  
Set to Launch on July 30, 2021 (Fri.), Exclusively via Mail-Order Site

TOKYO, July 27, 2021 -- Ajinomoto Co., Inc. (“Ajinomoto Co.”) will launch sales of *Mankai*® a next-generation vegetable drink consisting primarily of Mankai plant (*Wolffia*)—the world’s smallest vegetable<sup>2</sup> and a promising next-generation food resource—on July 30, 2021 (Fri.). In addition to delivering a diverse mix of vitamins, minerals, and dietary fiber, *Mankai*® contains a total of 60 nutrients, including quality vegetable proteins crucial to muscles and blood. It all combines into a brand-new, next-generation vegetable drink that lets consumers get plenty of protein and at least one-third of their recommended daily vegetable intake<sup>3</sup> in a single package.



*Mankai*®  
30-stick  
(an approximately 30-day supply)

1. A variety of nutrients contained in vegetable proteins, meat, vegetables, and fish
2. Source: Skillicorn et al., 1993, Tsukuba Botanical Garden Illustrated Plant Guide (available via the Tsukuba Botanical Garden website)
3. Per stick; the product contains approximately 117 g of Mankai plant (*Wolffia*), roughly equivalent to one-third of the target 350g of vegetable intake stipulated in the Ministry of Health, Labour and Welfare’s “Healthy Japan 21” guidelines.

In recent years, Japan has seen an increase in the numbers of people taking a stronger interest in getting enough protein to maintain healthy lives and a growing demand for “green-charge” (health-oriented) products that make it easier to get vegetable nutrients. (The green-charge market has a value of roughly 80 billion yen<sup>4</sup>.)

In March 2017, Ajinomoto Co. signed an agreement with Hinoman Ltd. (CEO: Ron Salpeter; Headquarters: Tel Aviv, State of Israel; hereinafter “Hinoman”), an Israel-based bioventure, to secure the exclusive sales rights for Hinoman’s high-protein, high-nutritional-value Mankai plant (*Wolffia*) in Japan. Ajinomoto Co. is now pleased to announce the launch of the next-generation *Mankai*® vegetable drink made with the Mankai plant.

4. Source: Fuji Keizai, “H/B Food Marketing Handbook No. 2” (2020)

Packing at least one-third of the recommended daily vegetable intake into a single stick, *Mankai*® features a matcha (powdered green tea) flavor and mixes easily into water, milk, and other liquids for a tasty drinking experience. The Mankai plant at the heart of the product is also garnering attention as a sustainable source of proteins with a minimal environmental footprint, as the production process utilizes hydroponic cultivation via water, light, and fertilizer for relatively quick harvest times.

Ajinomoto Co. is working toward its goal of becoming a “solution-providing group of companies for food and health issues,” a core vision in the company’s 2020–2025 Medium-Term Management Plan, by tackling climate change and other global sustainability issues, developing sustainable food resources, and taking other steps to help consumers get healthy and live longer, healthier lives.

The sales target for *Mankai*® in FY2021 is approximately 300 million yen (in consumer purchases).

## 1. Product overview

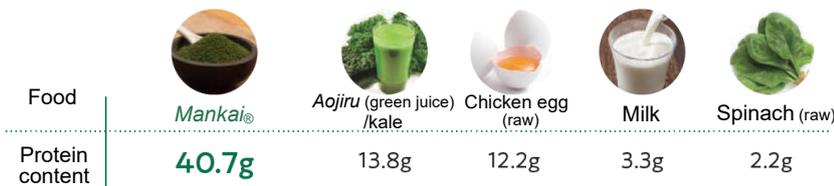
- (1) Product name: **Mankai® 30-stick** (an approximately 30-day supply)
- (2) Features:
- Made with 4.8 g of Mankai plant (*Wolffia*) (at least one-third of the recommended daily vegetable intake, calculated based on uncooked vegetable intake)
  - Bright-green powder type
  - Aluminum-foil stick packaging for easy handling and optimal portability
- (3) Volume/packaging: 5.4 g/stick
- (4) Price: 4,500 yen (tax included)
- (5) Target: Consumers hoping to get more vegetables and proteins in their diet/Health-conscious consumers aiming to maintain healthy patterns of day-to-day living
- (6) Preparation method: Mixed with water, milk, etc.; 1–3 sticks per day
- (7) Best-before date: Displayed in MM/YY format
2. Launch date: July 30, 2021 (Fri.)
3. Launch region: Japan (nationwide)
4. Sales method: Mail-order (Ajinomoto Direct Co., Inc.: via phone, internet, etc.)

Customer support: Ajinomoto Direct Co., Inc. Customer Support (toll-free): 0120-324-324  
 Ajinomoto Direct Co., Inc. Online Shop: <https://direct.ajinomoto.co.jp/>

### Reference

[More about *Mankai®*]

1. Roughly three times richer in proteins than kale *aojiru* (green juice) [Comparisons of protein content per 100 g]<sup>5</sup>



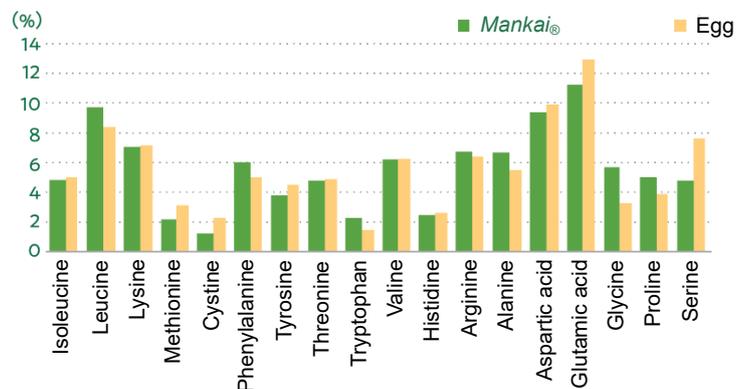
5. Source: *Mankai®* values from Ajinomoto Co. analyses; values for all other items calculated based on *Standard Tables of Food Composition in Japan* (Eighth Revised Version)

## 2. Nutrients in *Mankai®*

- The 60 nutrients in *Mankai®*



- Mankai®* provides an optimal balance of amino acids, comparable to eggs [Comparison of amino acids in *Mankai®* and eggs]<sup>6</sup>



6. Source: *Mankai®* values from Ajinomoto Co. analyses; egg values calculated based on *Standard Tables of Food Composition in Japan* (Eighth Revised Version)

[More about the main ingredient: Mankai plant (*Wolffia*)]

### 1. Basics information on the Mankai plant (*Wolffia*)

- Wolffia globosa*, a variety of duckweed
- The world's smallest "vegetable" (with a leaf diameter of approximately 0.5 mm)
- Rich in 60 nutrients essential to the modern-day diet, including proteins, vitamins, and minerals



### 2. Production of the Mankai plant (*Wolffia*)

- Produced via a hydroponic-cultivation system developed by Hinoman and optimized for plant growth
- Can be harvested three days after planting
- Grown using sustainable cultivation techniques with a small environmental load



## ■ Overview of Hinoman

- (1) Name: Hinoman Ltd.
- (2) Location: Tel Aviv, State of Israel
- (3) Established: August 2010
- (4) Representative: Ron Salpeter, CEO
- (5) Business description: Research/development on and manufacture/sale of the Mankai plant (*Wolffia*)
- (6) Number of employees: 45
- (7) Website: <http://www.hinoman.biz/> <http://www.hinoman.com/> (※revised on July 29, 2021)

\**Mankai*® is a registered trademark of Hinoman Ltd.

Press release from March 23, 2017

“Ajinomoto Co., Inc. Acquires Exclusive Sales Rights in Japan for Mankai, a High-Protein Plant Material with Extraordinary Nutritional Value”

[https://www.ajinomoto.co.jp/company/en/presscenter/press/detail/g2017\\_03\\_23.html](https://www.ajinomoto.co.jp/company/en/presscenter/press/detail/g2017_03_23.html)

The Ajinomoto Group, unlocking the power of amino acids, aims to resolve food and health issues associated with dietary habits and aging, and contribute to greater wellness for people worldwide.

Based on the corporate message “Eat Well, Live Well.”, we have been scientifically pursuing the possibilities of amino acids to aim for future growth by creating new value through sustainable and innovative solutions for communities and society.

The Ajinomoto Group has offices in 35 countries and regions, and sells products in more than 130 countries and regions. In fiscal 2020, sales were 1.0714 trillion yen (10.1 billion U.S. dollars). To learn more, visit [www.ajinomoto.com](http://www.ajinomoto.com).

For further information, please contact: [HERE](#)