

NEWS RELEASE

November 21, 2023

News Release

Dear members of the media

High percentage of Japanese consumers ready to try alternative protein products

NH Foods Ltd. (Headquarters: Kita-ku, Osaka, President and Representative Director: Nobuhisa Ikawa) conducted a nationwide opinion survey, which focused on alternative protein products, such as plant-based foods^{*1}, microorganism-derived products (e.g., rice malt)^{*2}, algae^{*3}, and cellular foods (cultured meat)^{*4}.

Survey method: The Lifestyle Research Office of NH Foods conducted a nationwide Internet survey, which yielded valid responses from 6,424 males and females aged 20 and older.

Findings: The survey explored levels of awareness about four types of alternative protein products. Participants were asked to indicate (1) if they knew about a product or (2) if they had heard of the product. The scores were, respectively, 16.4% and 21.9% for plant-based foods, 24.8% and 30.0% for microorganism-derived products (e.g., rice malt), 24.3% and 32.1% for algae, and 9.7% and 28.9% for cellular foods (cultured meat). Around 50% of participants indicated that they had not eaten alternative protein products other than cellular foods (cultured meat) over the past year.

Of the participants who indicated that they knew about the four types of alternative protein products, the percentages that indicated that they were inclined to try or somewhat inclined to try each type of product were 57.1% for plant-based foods, 64.3% for microorganism-derived products (e.g., rice malt), 69.4% for algae, and 45.3% for cellular foods (cultured meat).

Participants who indicated that they knew about the four types of alternative protein products were also asked to rank their top three expectations toward each product. When these results were aggregated, it was found that the most important expectations were “delicious taste,” “high protein content,” and “low price” for plant-based foods, “high nutritional value,” “delicious taste,” and “high safety level” for microorganism-derived products (e.g., rice malt), “high nutritional value,” “delicious taste,” and “low calories” for algae, and “high safety level,” “delicious taste,” and “low price” for cellular foods (cultured meat). For all product types, the main concerns were that the products would not taste good, would be expensive, or would have an unpleasant texture.

*1 Plant-based foods are foods made from plants, especially soybeans and wheat, that resemble meat or fish in terms of flavor and texture. Examples include soy meat, plant-based meat, or meat substitutes.

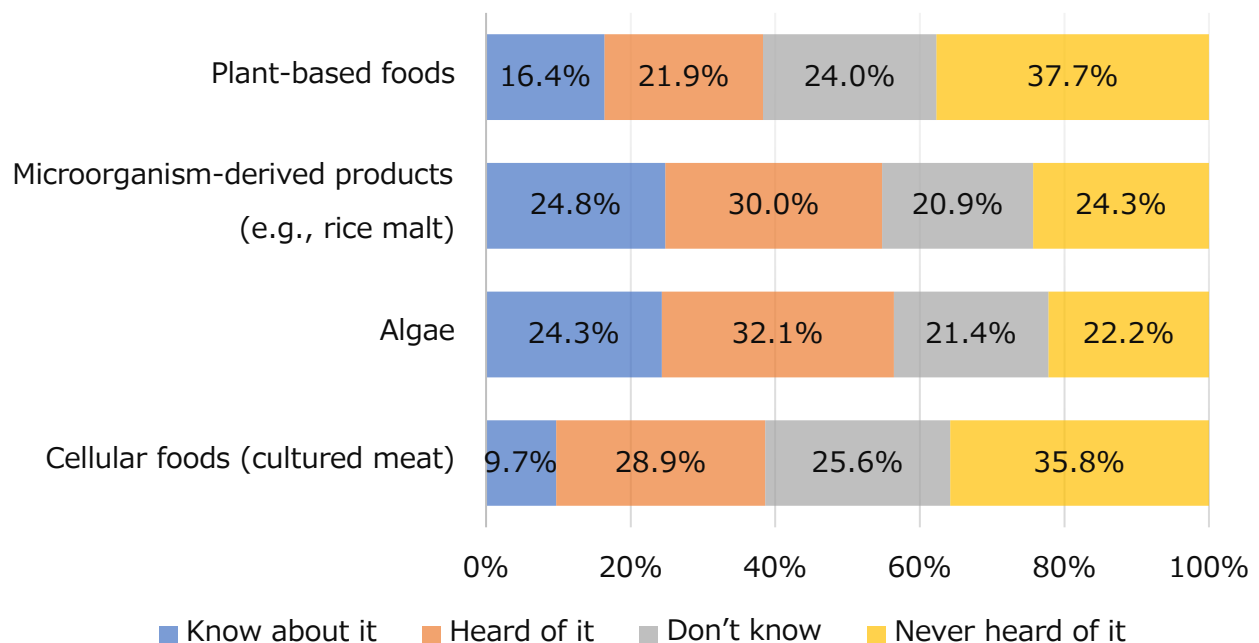
*2 Microorganism-derived products are the result of initiatives to use various products, such as rice malt, as food ingredients. These products contain large amounts of protein and dietary fiber, etc. Because they are produced under controlled environmental conditions, including temperatures, it is believed that they can be manufactured reliably.

*3 Algae products will contribute to carbon neutrality, since they absorb carbon dioxide while growing. They are being considered for use as food for reasons that include high levels of protein and dietary fiber, etc.

*4 Cellular foods (cultured meat) are being developed with the aim of creating products that are identical to conventional meats by artificially culturing cells from small amounts of tissue taken from cattle or other animals.

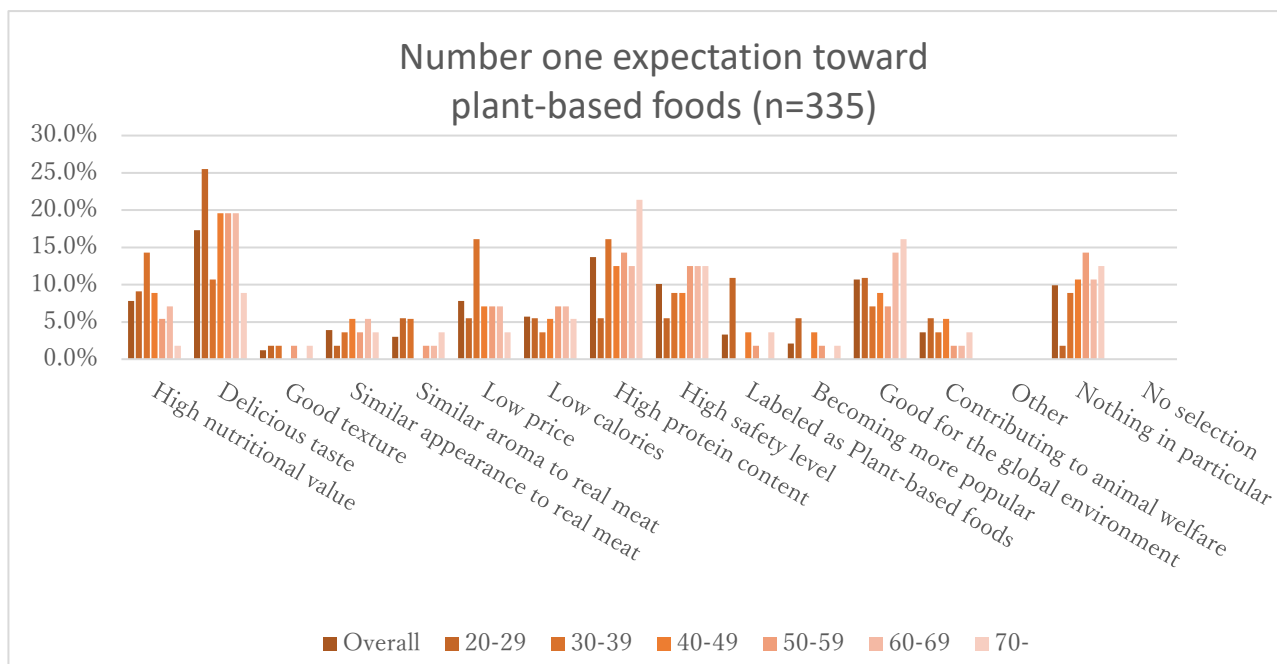
Levels of awareness (“I know about it,” I’ve heard of it”) were just under 40% for cellular foods (cultured meat) and 50–60% for microorganism-derived products (e.g., rice malt) and algae.

Q: From the following, select the response that most applies to you. (n=6,424)

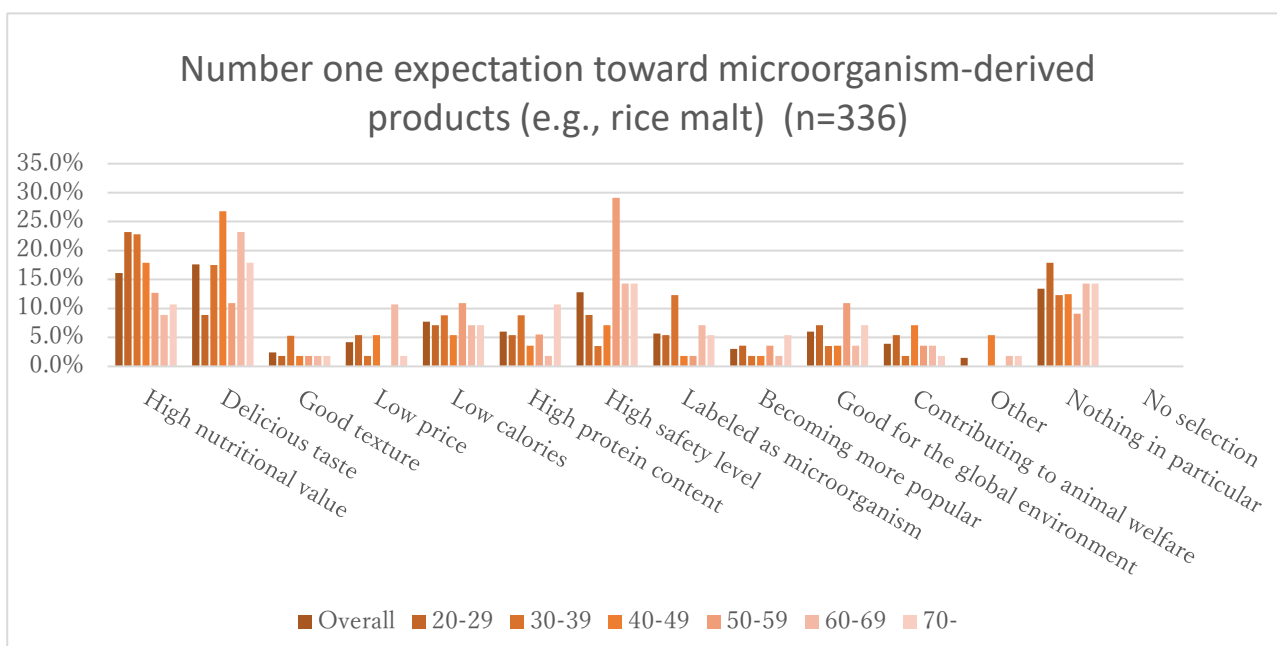


When participants were asked to rank three expectations toward alternative protein products, “delicious taste” was a common response for all product types.

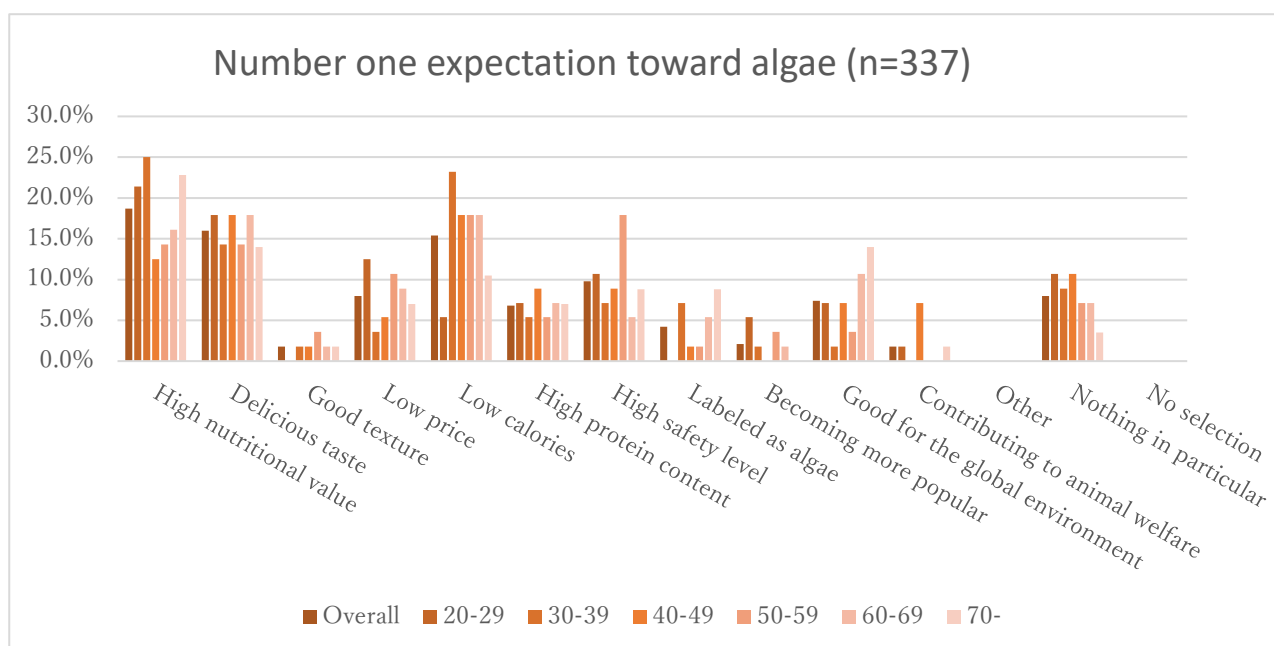
Q: Please select three expectations in order or preference. (First ranked items extracted in each case)



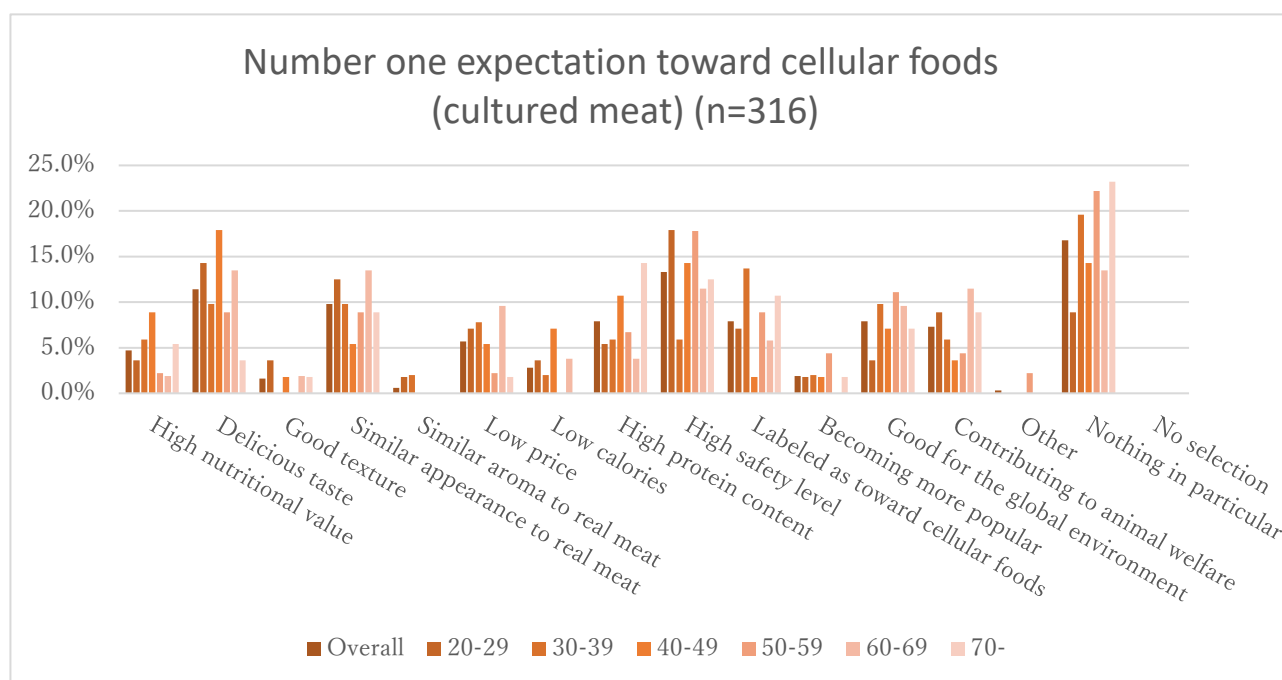
Note: High percentages of participants selected “Delicious taste,” “High protein content,” “High safety level,” and “Good for the global environment” as their number one expectation toward plant-based foods.



Note: High percentages of participants selected “Delicious taste,” “High nutritional value,” and “High safety level” as their number one expectation toward microorganism-derived products (e.g., rice malt)



Note: High percentages of participants selected “High nutritional value,” “Delicious taste,” and “Low calories” as their number one expectation toward algae.



Note: High percentages of participants selected “High safety level,” “Delicious taste,” and “Similar appearance to real meat” as their number one expectation toward cellular foods (cultured meat).

Main survey items		
Screening		
Alternative protein products, such as plant-based foods and microorganism-derived products (e.g., rice malt), algae, and cellular foods (cultured meat) (n=6,424)		
• Awareness of alternative protein products		• Experience of eating alternative protein products other than cellular foods (cultured meat) in the past year
Survey participants who responded “Know about it”		
Plant-based foods (n=335)		Microorganism-derived products (e.g., rice malt)
Algae (n=337)		Cellular foods (cultured meat) (n=316)
• Image	• Expectations	• Concerns
• Willingness to try	• Price tolerance	• Awareness of benefits

Outline of Survey

Name: Survey about meat alternatives
Method: Online questionnaire
Survey subjects: Males and females aged 20 and over nationwide

Area: 47 prefectures
Period: September 22–29, 2023
Survey organization: The Lifestyle Research Office of NH Foods Ltd.

About the NH Foods Group

Since its founding in 1942, the NH Foods Group has used the bounties of life to develop a business centered on animal protein. As a supplier of protein, which makes up one-fifth of the human body and is essential for life, we have made “Unleash new potentials for protein” the theme for Vision2030, which expresses our vision for our role in 2030. We will continue our efforts to ensure the reliable supplies and expand the range of options by exploring new potentials for protein.

About the Lifestyle Research Office

The NH Foods Group established the Lifestyle Research Office in 2018. Its mission is to analyze consumer-related trends and discover consumer needs so that we can enhance customer satisfaction and achieve corporate growth. The Lifestyle Research Office conducts original surveys about food-related aspects of consumer lifestyles and disseminates food-related information.